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THE IMPACT OF ALTERNATIVE INVESTMENT FUNDS ON THE ECONOMY OF
LITHUANIA

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INTRODUCTION

Relevance. Alternative investment funds (hereafter – AIF) are gaining importance, and the capital under their management accounts for an ever-increasing share of the investment market. The relevance of alternative investments, and hence of AIF, is substantiated by the share of alternative investments in the general flow of investments; this sector has demonstrated a continuous tendency to grow, and increased from 7.7% in 2005 to 14.3% in 2011 (The Mainstreaming..., 2012). Furthermore, according to the survey data (Preqin..., 2013), institutional investors intend to enlarge the part of investments directed to alternative investments in the future as well. Investors willingly resort to them in order to exploit the low correlation of investments with conventional investment instruments (stocks or bonds), and thus, to reduce the general fluctuation of the portfolio. Recently, this has become especially relevant since financial markets experience continuous pressure and strain, and global economies encounter crises. Nevertheless, even taking all this into account, the research into the set of issues analysed in the current thesis is still insufficient, which is to an extent determined by the closed character of AIF, their insufficient regulation, and the lack of disseminated information.

Research into the development and activities of AIF is of paramount importance because it is an absolutely new field in the development of the financial system of Lithuania, and therefore, due to the inadequate scope of research, this field is worthy of greater attention. For Lithuanian investors, AIF are rather new investment instruments which enhance the opportunities to choose the fields of investment, and therefore, it is important to properly perceive them, and to assess the risks they pose and the opportunities that they provide. AIF are regulated only slightly and are reluctant to reveal the results of their activities. What is more, these funds are often not even legally obliged to do this.

This thesis is also relevant from the point of view of the legal environment in Lithuania concerning alternative investment funds. On 1 March, 2008, the Law on Collective Investment Undertakings came into force (hereafter – LCIU), which created the conditions for establishing AIF in Lithuania. The data reveal that even though not all attempts to develop the activities of AIF in Lithuania have been successful, it is

important and relevant to analyse the opportunities for their development in Lithuania in accordance with the latest legal acts. Due to the fact that the law on the regulation on AIF has only recently been passed and has been undergoing amendments, the issue of the activities of these funds in Lithuania remains novel and insufficiently analysed.

The subject (object) of the research – the analysis focuses on AIF which are registered in the Republic of Lithuania and operate in compliance with the LCIU. The research does not include those AIF which operate in Lithuania but were established outside the Republic of Lithuania. The funds which invest in other collective investment undertakings (hereafter – CIU) (or funds of funds) are also excluded from the subject of the research because funds of this type hardly comply with the requirements set for AIF. Funds of funds merely allocate capital for AIF, but do not directly invest in the objects in which AIF invest.

Research problem. AIF cannot be treated merely as ordinary funds or analogous to them. AIF operate differently from ordinary funds and in most cases, their activities are related to the real sector, therefore, they affect financial markets and the real sector as well. In this way, AIF are able to affect the national economy faster and on a larger scale. AIF have ample opportunities for diversification and better allocation of resources, as well as the opportunity to operate in the markets where individual investors could only participate with much higher costs; due to this AIF also have the opportunity to operate on a wider scope. In addition, as in their activities, AIF seek increasingly more independence from the general situation in the markets and aim for higher levels of profitability; they can make use of the state-of-the-art tools of financial engineering. However, their advantages, and especially disadvantages, may not have been fully comprehended by their users or by supervising institutions. All this makes it necessary to focus more attention on the activities of AIF and evaluate them not only as investment funds by analysing their profitability or other indicators, but also by researching the direct or indirect impact of their investment activities on the real sector, as well as on the financial market.

The problems that result from the activities of AIF are especially relevant in the case of Lithuania. As AIF are still a novelty in Lithuania, the benefit and potential threats posed by these funds can be underestimated, and consequently, AIF may be granted insufficient attention by supervising institutions, or over-simplified restrictions on the

activities of AIF may be applied. This can result in the increase in risks related to the investment activities conducted by AIF.

The aim of the thesis is related to the problems which result from the activities of AIF – to research the impact of the AIF registered in Lithuania on the economy while revealing the factors affected by different types of AIF, establishing the impact of AIF on the shift of these factors, as well as evaluating the complex impact of AIF on the financial system.

To achieve the goal, the following **objectives** are set:

1. To define the groups of alternative investment and to classify the funds that belong to AIF, to substantiate such a classification, and to establish the characteristic features of AIF;
2. To analyse separate types of AIF, to comprehensively discuss their characteristics and the specificity of their activities, as well as to research the development of AIF and their developmental trends;
3. To analyse the lawmaking processes related to AIF, to research the development of legal acts in recent years, and the planned and enacted amendments in the EU legal system, as well as to research the impact of legal acts on the activities of AIF in Lithuania;
4. On the theoretical level, to analyse the impact of AIF on the economy, and to establish the principal ways and channels of affecting the economy;
5. To comprehensively analyse the establishment of AIF in Lithuania and to evaluate their trends and the key indicators which characterise their activities, as well as to provide the forecast scenario for the nearest future concerning the evolution of the AIF registered in Lithuania;
6. To define concrete factors which are affected by certain types of AIF, whose analysis would make it possible to measure the impact of AIF on the economy of Lithuania;
7. To carry out general research into the feasibility of the AIF registered in Lithuania to affect the Lithuanian economy through the analysis of the indicators of fund activities and other derived indicators;
8. To conduct a feasibility analysis of the impact of certain types of AIF on the economy, and to define their direct and indirect impact;

9. Bearing in mind the insufficiency of available data, to select the most suitable research methods for separate types of AIF, and to make models and propose research vehicles which measure the impact of AIF on the selected variables.

The limitations on the research and availability of data. The problem of data availability stems from the very essence of the activities of AIF – as the funds are not obligated to provide a considerable part of the information concerning their activities, in most cases they do not share such information voluntarily. Recently, the situation has shifted towards greater transparency – especially due to the past global financial and economic crisis – and therefore, in order to continue their activities, AIF are compelled to open up more. These processes, however, are just only starting; furthermore, it is not feasible that AIF will become as accountable as ordinary funds are. Hence, the major part of the data related to the activities of AIF are almost or completely unavailable. The majority of foreign quality data bases are commercial and do not provide information for research purposes. On the other hand, the fragmentary character of such data bases is obvious as they do not encompass the whole market – only those funds that register are included in the data bases.

Research methods. In the theory part of the thesis, the analysis of the phenomena related to AIF is mostly based on scientific literature, statistical data, logical and comparative analysis, as well as on the generalisation method. The regression analysis is used as the main method of research to analyse how AIF registered in Lithuania can affect the economy. Data are processed and regression models are made on the basis of the statistical package GRETL. However, the choice of research methods is restricted by the limited availability of data, and by the scope; therefore, such supplementary methods as statistical data analysis and comparative analysis are also used in the analytical part of the thesis.

Scientific novelty and practical relevance. Due to the fact that AIF have been legitimised in Lithuania relatively recently, and as the activities of AIF in Lithuania have hardly ever been researched, the greater part of the analysis is novel and in many respects is the first study of the activities and development of this market in Lithuania. The study presents a thorough overview of the establishment and development of AIF in Lithuania, and a comprehensive analysis of the phases of their development. This makes it possible to evaluate the current situation in the AIF market and to forecast and estimate

the future prospects. Also, the first scientific analysis of the overall AIF market in Lithuania and overview of the share and significance of these in the financial system and in the investment funds market are presented. The analysis and evaluation of the overall AIF market are presented through the analysis of the concentration of AIF and other investment funds, their interrelation, and other significant characteristics that describe the market.

The thesis is also novel in that it presents a comprehensive review of the legal regulation of AIF in Lithuania, its development, and the impact on the creation of funds. The information concerning the regulation of AIF in Lithuania and the amendments to the regulation is organised into a system, whereas the regulation of AIF at the EU level is related to the alterations in the regulation in Lithuania.

Due to a great variety of separate types of AIF, the studies by other authors are fragmentary and often focus on a concrete type of funds or a specific problem. Therefore, the generalisation and systematisation of research methods applied by foreign and Lithuanian authors in the research into the impact of AIF activities is also new.

Having analysed the research methods employed by other authors, and while taking into account and tackling the problem of the scarcity of the research data, models were created to measure the impact of the AIF registered in Lithuania on concrete sectors of the Lithuanian economy; furthermore, the most suitable methods were proposed for the research into the impact of AIF on certain sectors of the national economy or on certain specific variables. The practical benefit of the created models and the proposed research instruments lies in other Lithuanian or foreign authors being able to utilise the described models and methods while studying the activities of Lithuanian AIF. As these models are the first ones aiming to research the impact of AIF on the economy of Lithuania, it will be possible to use them in future when new data becomes available - as a starting point for further research into this field in Lithuania.

The practical benefit of the conducted research is also obvious as Lithuanian AIF had never been analysed comprehensively. The research provides data concerning the emergence of the AIF market in Lithuania, its evolution, and possible developmental scenarios. This makes it possible to better assess the circumstances in which decisions concerning the supervision of funds are made, as well as to evaluate the necessity and efficiency of the decisions already made.

The practical benefit of the thesis can also be appreciated by potential investors in AIF because they will be able to familiarise themselves with the activities of such funds and potential outcomes, as well as to evaluate the undertaken risk. This will also contribute to the education of investors in Lithuania.

The structure of the thesis. The thesis consists of an introduction, four main parts, conclusions and recommendations, a bibliography, and appendices. The thesis is of 265 pages and contains 24 tables, 58 figures and 25 appendices.

The first main part is focused on the evolution of AIF in the context of the world and of Lithuania, and analyses the classification of AIF and the specific features of concrete funds. Through the research of various characteristics related to AIF, a comprehensive analysis of the appearance of AIF in Lithuania and of their further development is carried out. Firstly, the analysis of the general development of AIF is conducted, and later, concrete types of AIF registered in Lithuania are researched. The activities of AIF registered in Lithuania are compared in the overall context of investment funds market in Lithuania, which is also compared with a foreign country (Estonia), and the study of their similarities and differences is carried out. On the basis of the established trends of the of AIF activities in Lithuania, the developmental phases of AIF in the Lithuanian market are defined.

The second part of the thesis focuses on the legal regulation of AIF. As the regulation of AIF has recently been amended and made more stringent, these trends demand adequate attention; hence, a separate part of the thesis is dedicated to discuss the issue. The trends of AIF regulation are reviewed on the international scale; also, the development of Lithuanian legal acts related to the activities of AIF is analysed; these legal shifts are researched in the context of the AIF activities in the Lithuanian market.

The third part of the thesis deals with the theoretical feasibility of the impact of AIF on the economy. Taking into account the achieved results, the impact is treated either as positive or negative. The great majority of scientific research is related to a possibly negative impact of AIF on the economy, consequently this area in the thesis has been analysed more closely. While reviewing the negative impact of AIF on the economy, special consideration has been paid to hedge funds (HF). The possibility of a negative impact of these funds is categorised into smaller sections, which are reviewed

with reference to the research conducted by other researchers and also using the calculations made by the author of the current thesis.

The fourth main part of the thesis presents the study of how the activities of AIF registered in Lithuania affect the economy. This part is closely linked to the third part because the field and the methods of research are predetermined by the regularities defined in the third part. The research is developed in two principal directions – the general impact of AIF on the Lithuanian economy, and the impact of separate types of AIF.

REVIEW OF THE CONTENT OF DISSERTATION

The classification of AIF and the theoretical feasibility of the impact on the economy

Speaking in general about alternative investments and the funds based on such investments, one should speak about the means of trade and strategies that are relatively novel, unusual, and not frequently applied. Nonetheless, it must be noted that alternative means of trade are in abundance and consequently it is far from easy to present a comprehensive definition which would encompass all those means and the investment itself. Therefore, with slight variations, most authors present the funds which are included in the definition of AIF.

Spangler T., Paisner B. L. (2005) suggest that the following types of funds should be attributed to AIF: HF, PEF and REF. Thorsten D. (2008) points out that alternative investment includes HF, private equity, currencies, and commodities. Another distinctive feature which allows certain types of investment to be attributed to alternative investment is suggested to be the low percentage of correlation with conventional classes of investment (stocks, bonds). In summary of AIF classifications presented by various authors and international organisations (e.g., ECB guidelines concerning the statistics of finance, financial institutions and markets ECB/2007/9)) or the provisions of legal acts (e.g., LCIU) – three types of funds should be attributed to AIF: HF, REF and PEF.

Due to the ever-increasing spread of funds and the expanding scope of investments in the past decade, the issue of the impact of AIF on the economy has acquired a particular relevance. Owing to their size, AIF have opportunities to influence

the economy of a separate country, especially since the institutional control of this sector is relatively negligible. As all the other entities, AIF can affect the economy in two ways – positively and negatively.

The analysis of the positive impact of AIF on the economy demonstrates that at the theoretical level, all AIF are suitable to improve the diversification of the investment portfolio. These funds also provide the opportunities which are more difficult to measure quantitatively – the creation of more effective risk management methods or more efficient allocation of resources. Apart from the positive characteristics common to all AIF, certain types of AIF have a positive impact on the economy due to their specific activities (investments in enterprises or in real estate). Nevertheless, the obvious tendency is that in the case of AIF (except private equity funds - PEF), the positive impact on the economy is studied considerably more seldom, and more attention is paid to the analysis of a possibly negative impact of AIF on the economy. The negative impact of AIF on the economy is more structured and is different in the case of different types of AIF. Figure 1 summarises the positive and negative impact on the economy.

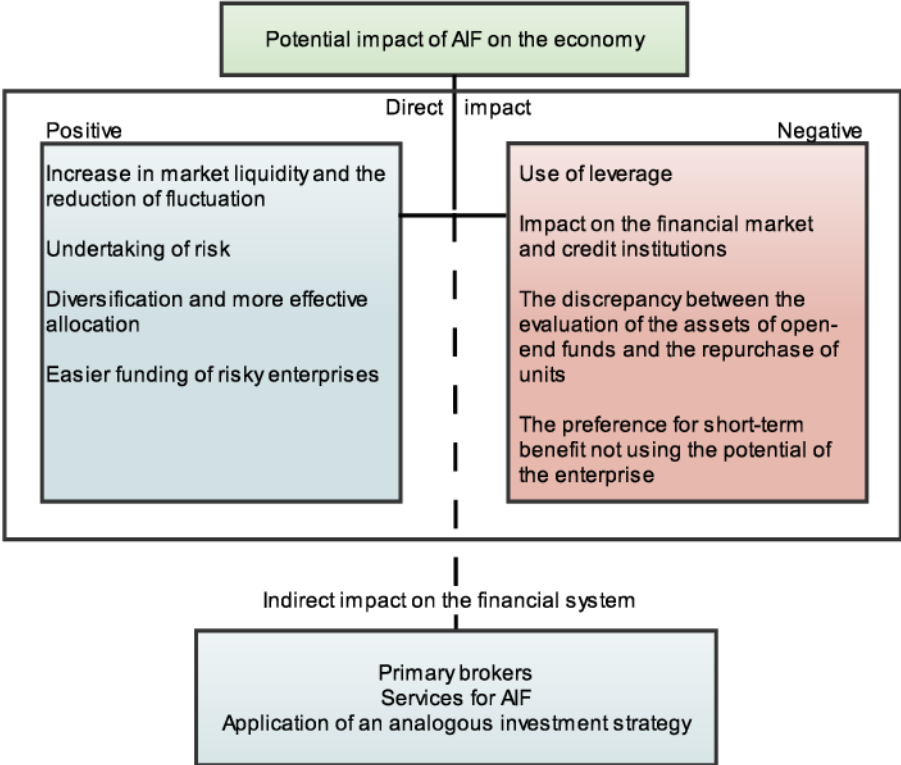


Fig. 1. Areas of the economy affected by AIF

Source: compiled by the author

Better diversification opportunities for investors are characteristic of all AIF because these funds have a low level of correlation with the traditional investment instruments. HF, differently from PEF and REF (real estate funds), are more active in their investment operations, their period of investment and of investment holding is considerably shorter; and in addition, they operate in numerous different markets and employ a variety of investment tools. Therefore, such positive characteristics as the increase in liquidity, reduction of fluctuation, as well as the willingness to operate on risky markets – are mostly attributed to HF. The principal operations of PEF consist in providing finance, under more favourable conditions than other credit sources to enterprises which are only forming or are in the initial stage of their activities. This enables those enterprises to develop successfully and promotes the acquisition of innovations, which has also a positive impact on the national economy.

It is considered that due to the relatively short term of investment and the desire to attain the targeted profit, PEF (especially buyout funds) can have a negative impact of the development of the enterprise and on the shifts in the indicators of employment or other indicators related to company activities. In the case of REF, threats to the economy arise from the prices of net assets of open-end REF and time discrepancy of the repurchase of the fund's investment units. Nevertheless, it is generally agreed that the major risks for the economy are caused by HF. The negative impact of HF on the economy is discussed much more often and is relatively categorised into three groups: threats arising from use of leverage, the impact on credit institutions, and the impact on financial markets. When applying leverage, HF have active positions, which are much more sensitive to price fluctuations; and therefore in the case of sharp fluctuations in the market, they should be urgently liquidated, which in turn can lead to even sharper fluctuations. In their activities, HF resort to the services of intermediaries (borrow from them, act as a counter-party in the transaction) and thus pose risk to credit institutions. Due to the possibility to change positions rapidly and to use leverage, and due to the increasing similarity of HF, they can also have a significant impact on financial markets, especially in the short term.

The indirect impact of AIF is related to their impact on the financial system, and it is to a certain extent, characteristic of all types of AIF. The indirect impact manifests itself through the institutions related to AIF, and through the part of the activities of such

institutions which depends on AIF, as well as through other factors that are only partially determined by AIF and are not measured quantitatively (e.g., the increasing educational level of investors, the development of risk management methods, etc.). Credit institutions and financial intermediaries can be primary brokers of investment funds and can provide loans for funds' activities, or gain income from the performed operations in the form of commission. They can also apply similar investment strategies to those employed by AIF. If the funds managed assets on a large scale and were closely related to credit companies, the problems related to the activities of AIF would, to a certain extent, affect the activities of the related institutions (the share of income gained from operations with AIF would decrease, or due to the liquidation of the portfolio positions executed by AIF, the value of the positions would decrease).

Legal regulation

The beginning of the financial and economic crisis suggested the application of more stringent regulation of the financial sector, including AIF. Both the EU and the USA have adopted new legal acts which aim to regulate AIF in order to make them and their operations in markets more transparent, and consequently, to reduce their impact on markets. The birth of and amendments in the legal regulation of AIF in Lithuania took place in parallel with the EU changes.

Figure 2 presents a systematised view of the changes in AIF regulation within the Lithuanian legal system, as well as the planned changes. Since mid-2013, two legal acts that regulate AIF have been in force. The adoption of the new legal act (LIICIU) is not related to the transfer of the EU directive, as the adoption of this legal act was aimed at creating a more flexible regulation of CIU, and at promoting the development of CIU in Lithuania (Numatomi..., 2012). The latter law was created on the basis of global practice and transferred the current regulation of funds from other European countries (concretely – Luxembourg) that have a well-developed fund market.

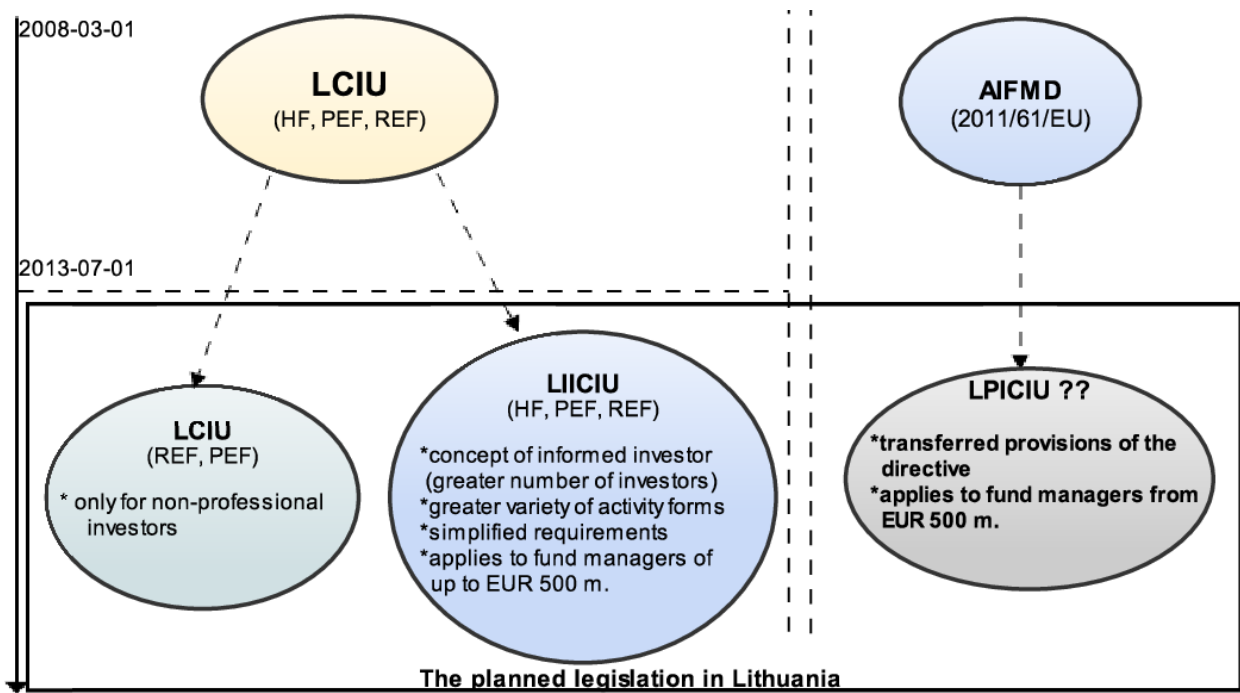


Fig. 2. The development of Lithuanian legal acts on AIF regulation

Source: compiled by the author

The requirements set in the LCIU concerning the provisions of diversification, the dissemination of information for investors, and the legal form are not concretely defined or are simplified in the LIICIU; whereas the prerequisites and other requirements must be defined in compliance with the provisions of the LIICIU by the fund itself, and must be presented in the founding documents of the fund.

Some of the amendments in the legal regulation, as can be seen in the information on the right in Figure 2, are related to the directives adopted at the EU level. The AIF Managers Directive was planned to be transferred to the Lithuanian legal system by 22 July, 2013. During the period under research, this process was lagging behind. However, there are plans to pass a law on collective investment undertakings for professional investors (LPICIU), which would transfer the requirements of the directive and would apply to fund managers who manage the sum exceeding EUR 500 m. It is obvious that in the near future, such a law will not be relevant or be applicable to any fund managers registered in Lithuania. Nevertheless, it will still be important because the managers of AIF that do not meet the minimum threshold requirements will have to provide certain information (investment strategy, applied investment instruments, risk concentration) to the supervising institution.

Having completed the CIU regulation process in the Lithuanian legal system, there will be three legal acts regulating AIF. The AIF founded in accordance with the LCIU will be for non-professional investors and could be referred to as AIF only at the theoretical level, whereas the vast majority of AIF will operate in compliance with LIICIU. In those cases when the assets managed by the fund manager exceed EUR 500 m. (EUR 100 m. if leverage is applied), the fund should operate according to the provisions of LPICIU. The planned regulatory scheme is graphically presented in the quadrangle in the lower part of Figure 2.

In summary of the changes that have taken place in the legal system concerning the regulation of AIF, it can be concluded that in a relatively short period, since the permission to register AIF in Lithuania (Q1 2008), numerous amendments have been adopted in the legal regulation of AIF. This could have influenced the activities and development of AIF due to the possibly weakened trust of investors and fund managers in the government and supervising institutions, and because of emerging doubts concerning the stability, assurance, and integrity of the legal regulatory system of AIF. Nonetheless, summarising the amendments to LCIU and relating them to the dynamics of AIF activities in Lithuania, it is possible to confirm and expand upon the assertion presented by Galinienė B., Jarašius G. (2012) that the amendments to LCIU which were carried out in Lithuania have not had an obvious impact on the growth in the number of AIF or the volume of the managed assets. There are no grounds to assert that separate amendments to LCIU determined essential shifts in the AIF market because the changes did not encompass a wide scope of regulation, and in most cases were not restrictive but were rather slightly simplifying the regulation of AIF.

The development of AIF in Lithuania

Since the permission to register AIF in Lithuania in 2008, these funds have been growing, which also determined the recovery and further development of the overall CIU market. The data presented in Figure 3 make it possible to claim that the recovery of the CIU market was to a considerable extent determined by the evolution of AIF; when observing the growth of the assets managed by CIU (excluding AIF), it becomes obvious that it was substantially slower – in the period of 2008-2013, the assets of CIU (excluding AIF) annually increased on average by 6.8%, whereas the assets of AIF

increased on average by 155.8% each year. As the number of AIF players is small (the numbers in Figure 3 present the number of AIF participants), and the majority of investors take part in CIU activities other than AIF, the abrupt decrease in the number of CIU players in 2010 and the later stabilisation make it possible to assume that without AIF, the Lithuanian CIU market would not have experienced such sudden growth, nor would it have recovered so soon after the slump brought about by the global financial and economic crisis.

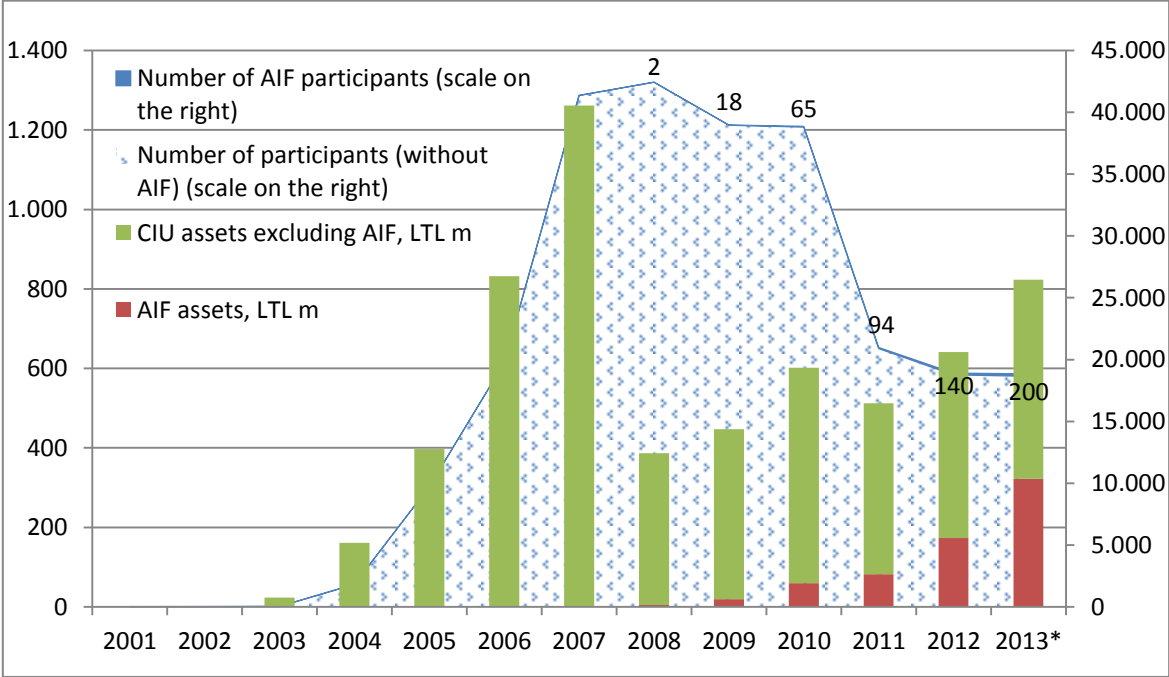


Fig. 3. The development of investment funds (excluding pension funds) in Lithuania 2001 – 2013¹

Source: compiled by the author on the basis of Metinès..., 2013

The legitimisation of AIF in Lithuania created favourable conditions for starting AIF in Lithuania, and it is possible to observe the increasingly faster development of this market. Although during the period under analysis the assets managed by AIF were not substantial on the scale of the whole country (the ratio of AIF managed assets to the GDP of the third quarter of 2013 was 0.36%), the managed assets are continually growing, and it is feasible that in future AIF will become more noticeable and important.

Although AIF were legitimised in Lithuania during the very peak of the past economic and financial crisis, the share of AIF assets reached 39.2 % of the overall CIU

¹ The data on 2013 refer to three quarters of the year; the data prior to 2004 (when the Law on collective investment entities came into force) do not relate to the assets managed by the fund but to its net assets value, which is usually slightly less than the assets of the fund.

assets from the beginning of 2008 until the third quarter of 2013, which is the largest figure since the beginning of AIF activities in Lithuania. The relative share of the assets managed by AIF continually grew, as did concurrently the scope of the AIF managed assets. Only at the juncture of 2010-2011, was a decrease in the analysed characteristic observed, which was determined by the liquidation of PEF and the subsequent decrease in the value of the managed assets (a sharper decrease did not occur due to the increase in the assets managed by REF). The steep growth of AIF managed assets and of their share in the CIU market points to a fast development of AIF which exceeds the growth of the market of other CIU. This substantiates the idea that AIF had been welcome in Lithuania, received recognition, and found a niche in the market for investment in alternative sources.

It is possible to assert that until the middle of 2013, the development of the AIF market had already undergone certain phases and, from the point of view of the fund types and their number, the situation in this market is fairly clear and settled. Nonetheless, as far as the scope of the managed assets is concerned, the market is still experiencing a rapid growth, although this is not always regular. The development of this market during the period under research depended only slightly on the macroeconomic situation in the country, and on the shifts in the legal regulation after AIF were legitimised in Lithuania. That was determined not only by the specificity of AIF and their lesser dependence on the financial markets and the situation in them, but also by the short period of activities. As the activities started from the very beginning and ever-new different types of AIF were founded, the negative situation in the investment market was not felt acutely. The funds that did not prove to be efficient were liquidated and their place was taken over by others (by AIF of a different type), and the development of the market was unhindered. Due to these reasons, the developmental trends of AIF and other CIU experienced significant shifts.

Summary of the research methodology

The summary of the methods used for the research into the impact of AIF on the economy is presented in Table 1. The table reveals the research methods characteristic of individual types of AIF, and the research methods are grouped according to the essence of the execution of the research.

Table 1. The matrix of the methods of research into the impact of AIF on the economy

	PEF	HF	REF
Research groups	Comparative and relative analysis of indicators (Megginson, 2004; Venture..., 2007, 2011; Alemany, Martí, 2005; Beer, Nhleko, 2009)	Comparative and relative analysis of indicators (Garbaravicius, Dierick, 2005; Reca et al., 2013)	Comparative and relative analysis of indicators (Brady, Conlin, 2004; Suarez, Vassallo, 2005; Cannon, Cole, 2010)
	Panel data / cross-sectional regressions (Alemany, Martí, 2005; Cumming, Johan, 2013; Harris et al., 2013)	Case study (Dixon et al., 2012; Aragon, Strahan, 2011; McGuire, Tsatsaronis, 2008; Chan et al., 2005; Rankin, 1999)	Case study (Brady, Conlin, 2004; Cannon, Cole, 2010)
		Survey data analysis (Dixon et al., 2012; Assessing..., 2012)	Equilibrium formation models / Nash equilibrium (Steffen, Marcel, 2006)

Source: compiled by the author

Due to the concrete and clearly structured activities of PEF, the methodology of research into the impact of these funds is perhaps the clearest and most well-established, as compared to other AIF. The analysis of the impact of the PEF activities usually involves collecting indicators from the company data bases, and in processing the data while applying econometric research methods. The distinct trend is that when the PEF investment volumes are low or when the market itself is in the formation stage, the analysis of the PEF activities is based on comparative methods.

Differently from PEF or REF, the investment activities conducted by HF encompass wide areas and the funds can make use of numerous different strategies. This is the principal reason why the research methods concerning the impact of HF on the economy are multifarious and intertwined. In most cases, various research methods are employed, depending on what question is being analysed or the data available. In addition, the impact of HF activities is rarely studied systematically – the authors limit themselves to the research of the consequences of a certain past event and its relation to HF, whereas the research technique is selected and adapted to every concrete situation.

Although the activities of REF are specific and fairly concrete, due to the complicated and rather intricate classification of REF, there are few studies which research REF as a common group and analyse the impact of its activities on the economy, and the rare existing studies employ a huge variety of methods. During the

period under research, there was no well-established basic methodology for the research into the impact of REF on the economy.

It is obvious that currently there are no firmly established methods which could be applied to concrete AIF or the whole AIF sector in general. It is also noteworthy to observe that the general impact of AIF on the economy is not analysed – the impact on the economy is researched through certain economic variables which also have impact on the general macroeconomic situation in the country. The current research into the impact of the AIF registered in Lithuania on the economy also follows this principle. On the basis of the summarised specificity of the activities of AIF and the possible ways of affecting the economy as revealed in Figure 1, Figure 4 presents the factors (according to each type of AIF) whose potentially experienced impact is under research. While evaluating the impact that AIF have on the selected factors, it is possible to draw conclusions concerning the impact of AIF on the economy of Lithuania and on the separate sectors of the national economy.

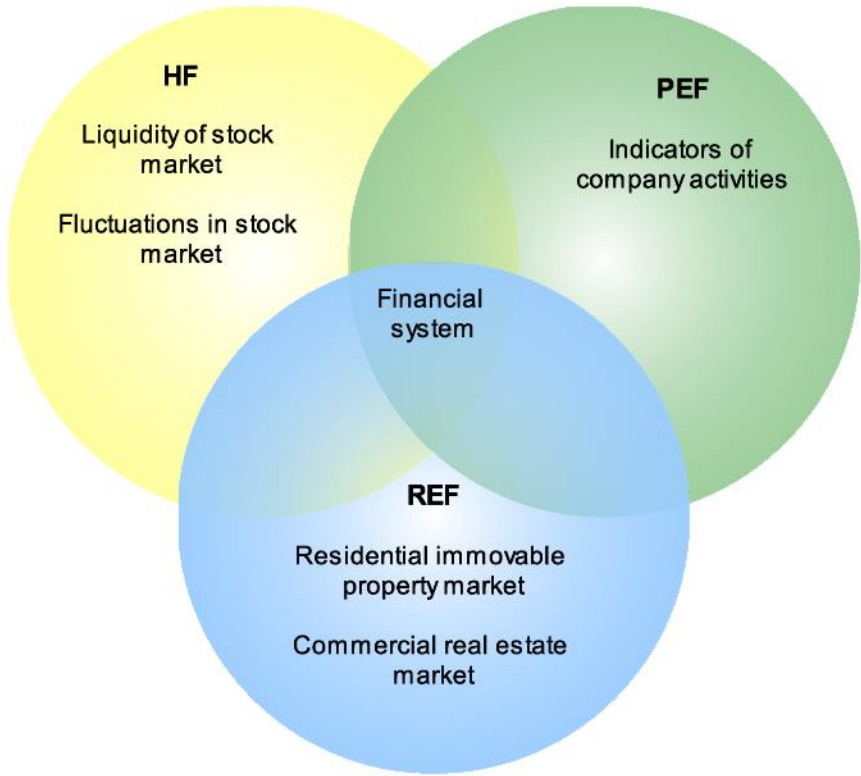


Fig. 4. Factors which are affected by AIF

Source: compiled by the author

In the case of PEF, such indicators were selected which can reveal the impact of PEF on the real sector through the created value added, i.e., under research is the impact

of PEF investment on the indicators of the development and activities of companies; the research also focuses on the weight of such companies in the general context of activities and on their created value added for national economy. The activities of REF are related to investment in the real estate market in already existing objects as well as in the development of new projects. REF operate both in residential and commercial real estate markets, although the characteristics of these markets differ in essence. Therefore, in the analysis of the impact of the activities of REF, those markets were researched separately, taking into account the impact of REF investment on the main indicators which characterise real estate markets.

All AIF can affect the financial system – REF and PEF mostly indirectly, whereas HF directly as well. In the case of HF, as in the case of other types of AIF, the research focuses on the financial system through the analysis of fund reports on their activities and the data that they provide, as well as other derived indicators. The activities of HF are not directly related to investments in the real sector but are rather made in capital markets. Due to this reason, the research into the impact of HF activities is focused on operations in the financial market and on their potential impact on the market. The key indicators through which the impact of HF may be measured are the liquidity of the stock market and the interrelation with other investment funds or among themselves according to the strategies they employ, i.e., the interrelation which can pose liquidity risk or the risk of affecting the financial system.

Feasibility study of the impact of AIF on the economy of Lithuania

In order to evaluate the impact of AIF on the economy of Lithuania, firstly, the overall activities of AIF in Lithuania were researched. Thus, the overall impact of AIF on the financial system was assessed, which in turn, created the conditions to research the impact that concrete types of AIF have. The analysis of the impact of AIF on the development of the financial system, through the scope of the increase in the managed assets, expanded upon the research conducted by the Bank of Lithuania concerning the structure of the growth of the financial system according to its participants. The current research, however, probes deeper by singling out and analysing AIF as a separate participant.

The calculations demonstrate that the absolute share of the shift in the assets managed by AIF fluctuates within the general shift. However, it had a tendency to grow and remained positive during all the phases of the research. The shifts in the assets managed by AIF constitute a relatively sizeable part in the overall shift in the assets of the financial system (in the first half of 2013, the assets of the financial system increased by 1.6%, whereas the growth of AIF reached 0.16%, which accounted for over 10% of the overall increase in the assets of the financial system). When the overall assets of the financial system shift slightly, but the assets managed by AIF increase substantially (as it was observed in the first quarters of 2013), in terms of percentage increase, AIF contribute to the general growth significantly. Nevertheless, taking into account the fact that: the assets managed by AIF are infinitesimal, compared to the assets of the financial system; the banking sector which makes up the bulk of the financial system is recovering; and the volume of the assets it managers is growing; it is possible to assert that during the period of research, the relevance and impact of AIF in the growth of the assets in the financial system was rather insignificant.

During the period under research, the interrelation between AIF and credit companies was insignificant, which was determined by the low number of funds and transactions, and not only in the local market. The share of income received by credit companies from the activities of AIF amounts to about zero, and even though this variable is increasing, it remains insignificant. Therefore, there are no grounds to claim that credit companies in Lithuania are dependent on AIF or on their activities, or that AIF have an impact on the financial system via this segment. AIF use leverage increasingly more actively, however, its average expression has not approached the limit defined by the laws yet; neither has it exceeded the average level of leverage observed globally (in the case of HF, the application of leverage is not limited by the legal acts of Lithuania). Derivatives are not applied in the general context of AIF; they are only applied by HF because for them it is an important tool in implementing their investment strategy. Bearing in mind that the major part of the activities of HF is carried out in foreign markets, the financial system of Lithuania does not face any direct threat due to the application of derivatives either.

Having assessed the application of leverage by AIF and its derivatives transactions, as well as the interrelation between credit companies and other players in

the financial system, and the tendencies and ratios of these variables, in addition to the size, number, relative structure, and the participation in foreign capital markets, it is possible to conclude that during the period under research, AIF registered in Lithuania do not have a real impact on the financial system or its development.

In the further research into the impact of AIF on the economy of Lithuania, the investment activities of all the three types of AIF are analysed separately.

The impact of REF on the real estate market in Lithuania

REF have the longest history of activities among all AIF, and there is a clear and well-established tendency that REF are the most appealing to investors and operate successfully in Lithuania. The analysis of the investment transactions made by REF reveals that such investment was scarce and the transactions were one-offs. The activities of REF registered in Lithuania encompass wide areas – investments include both residential and commercial real estate, selling-purchasing transactions, as well as participation in the construction of new real estate objects. During the period under research, the most significant part of investments were related to commercial real estate.

The impact of REF on the residential immovable property market

In order to evaluate the impact of REF on the residential property market, the model described by Ramanauskas T. (2011) in his research has been applied. The model includes the prices of real estate and the factors which determine them, and it also reveals the interrelation of the variables in the long-term. In order to assess whether REF have an impact on the residential real estate market and whether this impact is reflected in the prices of real estate, the equation of Ramanauskas' model (2011) has been modified by adding one independent variable – the volume of investments by REF in the objects of residential real estate (Equation 1).

$$\overline{HPI} = c + \beta_1 YD + \beta_2 \Delta HCREDIT_{-1} + \beta_3 NTFINV_GPNT, \quad (1)$$

where: HPI – housing price index,

YD – aggregate disposable income,

$\Delta HCREDIT$ – new bank loans to households,

NTFINV_GPNT – NTF investments in residential real estate.

The last independent variable *NTFINV_GPNT* is important to the research – under analysis is the relevance of this variable in the newly formed equation. It is assumed that REF investments in the objects of residential real estate create additional housing supply² and that this has impact on the equilibrium in the market and on housing prices.

The completed calculations produce the following equation:

$$\overline{HPI} = 418,43 - 0,01YD + 0,23\Delta HCREDIT_{-1} + 2,43NTFINV_GPNT \quad (2)$$

The newly formed regression model is correct and meets the requirements of the provisions of regression model, however the null hypothesis concerning the new regressor *NTFINV_GPNT* which was included in the model is not rejected (*p-value* reaches 0.55). It is concluded that the parameter by *NTFINV_GPNT* equals nil and hence does not have an impact on the regression model. The results of the research make it possible to conclude that the scope of investment by REF in residential property should not be treated as having a long-term impact on the housing price index.

According to the data of the Registry Centre, the volume of the housing transactions market reached LTL 2.747 bn., whereas the REF investment transactions during the whole period of their activities accounted for mere 0.28% of this amount. A comparison of the usable floor area of the residential real estate built in the country per year with the useful floor of the flats built by REF reveals a similar ratio (0.5%). Additional investments in this field have not been planned, and even though one residential object of real estate is still being built, it is possible to claim that such investments are inconsistent and small in scope, and on the scale of the country, they are fairly insignificant. Such proportions also support the conclusion that REF activities in the residential real estate market do not have a direct long-term impact on the market, and that this impact cannot be measured quantitatively.

The impact of REF on the commercial real estate market

The bulk of REF investments is related to commercial real estate (hereafter – CRE). Therefore, the other field of research related to REF activities is the analysis of the impact of REF activities on CRE. Taking into account the investment activities performed by REF, only the construction work in process can have an impact on the real

² All REF activities in the field of residential real estate are related to the development and construction of objects, and not to the obtaining of the already existing ones.

sector when REF (via the companies whose blocks of shares they manage) construct buildings for offices or malls. In this way, a new supply of such buildings is created, which in turn, can also have impact on the prices of renting or selling, or on profitability. Therefore, for the research of the impact that REF have on the real sector, the indicator of the CRE supply was selected. The research focusses on the possible impact which this indicator might experience.

The author of the thesis has made an equation which describes the CRE supply:

$$\overline{KNT_PSL} = c + \beta_1 PSK_NAUJ_NEFIN + \beta_2 TUI_S_{-1} + \beta_3 NTF_INV_LT_{-1} \quad (3),$$

where KNT_PSL – the supply of commercial real estate in sq. m.,

PSK_NAUJ_NEFIN – new quarterly credits for non-financial corporations, LTL m,

TUI_S – direct foreign investments in construction, LTL m,

NTF_INV_LT – related to CRE investments in Lithuania by real estate funds, LTL m.

The CRE supply is determined by the investments carried out by property developers (both local and foreign); therefore, it was decided that the equation which describes the CRE supply must include the loans for non-financial corporations, as well as the direct foreign investments in the construction sector. Developers of CRE, while reacting to the market demands or while expanding business, invest in the construction of new objects or reconstruction and expansion of the existing ones; and such investments in most cases are carried out through borrowing. According to Cohen V. (2013), Ramanauskas T. (2005), the financial market is closely related to the CRE market – the increase in the loan portfolio is related to the investment peaks and the development of new projects, which determines the growth of the CRE supply. Unfavourable conditions in markets, and the consequential restrictions on granting credit boost the costs for debt service and place obstacles for funding CRE projects, which in turn affects the CRE supply.

In order to evaluate the possible impact of REF on the CRE market, a variable reflecting the investment by REF was also included. The equation includes only the part of investments which was directly related to the CRE operations concretely – i.e. only the construction of CRE, because purchasing/selling operations do not create a new supply of CRE objects. Having completed the calculations, the following model is formed:

$$\begin{aligned} \overline{KNT_PSL} = & 2118920 - 193,80PSK_NAUJ_NEFIN \\ & + 275,04TUI_S_{-1} + 4024,04NTF_INV_LT_{-1} \end{aligned} \quad (4)$$

Analogous to the model with the residential real estate, the achieved model is correct and is in accordance with the provisions set for the regressive model. Nevertheless, not all the variables of the model are relevant – the null hypothesis concerning the new regressor *NTF_INV_LT* in the model is not rejected (*p-value* reaches 0.82). Hence, it is assumed that the parameter by the same *NTF_INV_LT* equals nil and does not affect the regression model.

The conducted research can be supplemented by the analysis of the impact of the REF investment operations on the sale prices of CRE evolving in the market. The vast majority of transactions made by REF is of the purchase/sale type of the already existing objects, hence, in order to achieve the maximum precision, the impact of REF activities on the sale price of CRE is also analysed. No shifts in prices, which could have been determined by REF activities, can be observed if the shifts in sale prices of offices in Vilnius and of commercial premises in Kaunas are related to the periods when REF made investment purchase/sale transactions in the respective cities. The REF activities during the period under analysis did not reach such value as to have an essential impact on the prices of CRE or to affect the market equilibrium.

Summarising the results of the research, it is possible to conclude that during the period under analysis, REF did not have an impact on the real estate market in Lithuania. The factors which describe the impact of REF investment activities on the markets of residential or commercial real property are not significant in the created models; this demonstrates that during the period under research, REF did not affect the price level of residential property or the supply of CRE, and currently do not have a significant and quantitatively measurably impact on the economy of Lithuania.

The impact of HF on the financial market in Lithuania

The positive impact of HF can manifest itself through the increase in liquidity in the market or elaboration of risk management methods; however, in most cases, such effects are not quantitatively measured. The negative effects of HF activities are easier to monitor and measure, hence they are analysed more often. In this case, risks can be related to applying financial leverage, influence on credit institutions with whom mutual

operations are carried out, and to the impact on financial markets in general (Aragon, Strahan, 2011; Garbaravičius, Dierick, 2005; Stulz, 2007).

The analysis of the HF registered in Lithuania reveals that their activities are mostly related to investment in foreign financial markets. The volume of investments made by HF in Lithuania has a tendency to grow. The sums, however, are negligible, especially when compared to the volume of the capital market in Lithuania. Moreover, research into the nature of concrete transactions makes it obvious that direct investments made in the capital market are even less significant (e.g., repurchase transactions are made with Lithuanian credit institutions, but in the vast majority of transactions underlying securities are not listed on the Lithuanian stock market), and therefore the ratio under analysis becomes even less significant.

HF can affect the financial system by the scope and nature of their activities; however, the analysis and evaluation of the activities of HF registered in Lithuania reveals that there are no grounds to claim that HF have a measurable impact on the Lithuanian financial system due to a small number of HF, the small value of assets managed by separate funds, and the concentration in foreign markets. HF registered in Lithuania do not make full use of the potential available to this type of funds, e.g., especially neglected is leverage – one of the easily available means to achieve higher profitability. Nevertheless, in most cases, HF do not apply leverage at all, and in those cases when this instrument is applied, its level is low in comparison to the value of the net assets (the overall leverage of HF does not exceed 6.0% of the net assets). Such figures are considerably lower than the ones observed in the HF sector globally, where the average value of applied leverage (excluding the period when the global economy experienced a slump) exceed 30.0%.

HF quite actively make use of derivatives transactions; however, taking into account the small commission sums for financial intermediaries in Lithuania, it is possible to conclude that the bulk of derivatives are not made in the Lithuanian market. In order to effectively implement the planned strategy of the fund's activities, HF must always have free liquid assets which could be immediately used when price discrepancies or other investment opportunities are observed in the market. During the period under analysis, HF had substantial cash and deposit balance compared to the funds' net assets. Larger than usual cash balances are formed because new HF are

founded, and in the phase of the attraction of investors' finance, this raised capital has not been invested yet. The observed finance and deposit balances may also point to low efficiency of funds' activities and/or flaws in the methods of risk management. Although the presence of liquid finance contributes to the risk reduction of the fund, and makes it possible to react to market shifts rapidly, this also denies the opportunity to earn a higher return. In the case of the HF under analysis, the balance of the distributed and redeemed investment units is positive (there were only a few cases when investment units were redeemed). Therefore, although most HF are of an open-end type, the demand for cash – on the basis of the trends in previous periods – is not potentially sizeable. In addition, the HF registered in Lithuania apply a low level of leverage, which does not create the prerequisites to have a sizeable cash balance either.

The activities of HF can also pose an indirect threat due to the financial intermediaries' increasing income share, which is related to these funds (Galiniënė, Jarašius, 2013). The HF costs related to various payments to financial intermediaries are fairly small, which is related to the low volume of investments in the Lithuanian market. The comparison of the costs of the HF activities when operating through financial intermediaries and of the incomes of the banking system (including only the incomes from services and commissions) reveals that this ratio is infinitesimally small (at the end of the second quarter of 2013, it reached 0.004%). It is possible to claim that investment banking in Lithuania has not been developed and the activities of HF are not the priority field in the activities of banks. Bearing in mind that the incomes of banks do not only consist of the incomes from rendered services or commissions, valid is the claim that HF do not have an impact on the stable activities of the banking system.

The analysis of HF investment activities leads to the conclusion that the activities of these funds, even though they are registered in Lithuania, are mostly related to foreign markets, whereas in Lithuania they only manage their operations, and employ the services of local financial intermediaries to secure the execution of the operations. Thus, it is possible to argue that in the period under analysis, it is impossible to measure the impact of HF on the economy of Lithuania by quantitative methods. The analysis of the factors which may be affected by HF (Figure 4) reveals that HF do not have a direct impact on the real sector because their activities are focussed exclusively on financial markets. Due to this reason, it is expedient to research the impact of HF on the financial

markets through the evaluation of the liquidity shifts and the shifted scope of market fluctuations caused by HF, as well as through the evaluation of the issue of the interrelation of HF, and the subsequent decreasing liquidity and the destabilising impact on the financial market.

Liquidity shifts caused by HF can be measured by using the Amihud Illiquidity Index, which indicates the part of the shift in the stock price which is determined by one monetary unit of the trade value. This index can also be interpreted as the impact of the trade volume on stock prices (Amihud, 2002). The measured bid-ask spread can be used as an additional indicator which reflects liquidity and is suitable for the comparison and evaluation of results received with the Amihud Illiquidity Index. This indicator can have several expressions; one of them is the relative unit of effective bid-ask spread. The indicator is achieved from the bid-ask spread divided by the average price value. It is also possible to measure the effective bid-ask spread.

In order to evaluate the problem of the interrelationship between HF and the problem of the possible market saturation, it is expedient to apply the pair-wise correlation coefficient of returns which reveals the interrelationship between HF that operate under different strategies. The interrelation of this kind can be best measured by the weighted average correlation (WAC). It is also one of the values which can reveal the situation in the HF market, as well as reflecting the feasibility that they might become similar.

The main goal of the calculation of the weighted average correlation (WAC) is to define the level of correlation and its shift between the different levels of profitability of HF strategies. However, due to the short activity period of HF registered in Lithuania, it is not possible to establish this value between the strategies of HF. The collected data also demonstrate especially high values of the pair-wise correlation of the profitability of Lithuanian investment funds (excluding REF). Taking this into account and seeking to evaluate the relative importance of HF (and of AIF in general) in the financial market, the calculation of WAC encompasses the investment funds of five types, including two types of AIF – REF and HF. PEF are not included because there were only three periods of monitoring, whereas to measure one value of WAC, the data of four periods are necessary. Figure 5 presents the results of the research into WAC conducted under this principle, and include the extended analysis conducted by Galinienės B., Jarašius G. (2014).

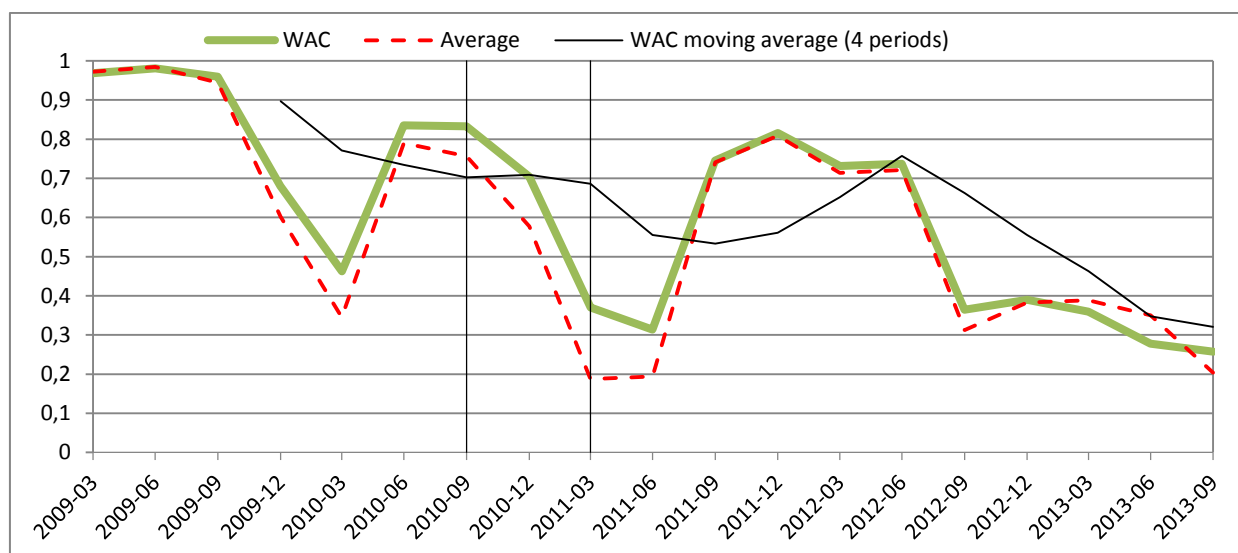


Fig. 5. The weighted average correlation of CIE registered in Lithuania in 2009-2013

Source: compiled by the author on the basis of Galinienė B., Jarašius G., 2014

The emergence of AIF in the market did not increase the values of WAC and according to Galinienė B., Jarašius G., (2014); this was mostly determined by an extremely weak correlation between REF and other groups of CIU. As well as the increasing relative weight of REF in WAC, this had a significant impact on the reduction of WAC and on the stabilisation at the end of the period under analysis. Differently from REF, HF were characteristic of a high level pair-wise correlation of weighted returns with other groups of CIU. Therefore, to some extent, HF caused the values of WAC to increase. Nevertheless, the impact of HF on the increase in WAC was not significant due to the small relative share of the managed assets (the division of WAC according to the groups of CIU by Galinienė B., Jarašius G., (2014) revealed that the share of HF in the overall structure of WAC was smaller than the share of the groups of stock or mixed investment funds). The real risk of market saturation related to the activities of HF also decreases due to the geographical classification of investments by HF – the bulk of the investments made by these funds are performed in foreign capital markets, therefore, the opportunities for these funds to gain analogous securities positions significantly decrease.

The volumes of assets managed by separate HF are not large either, and there are no large funds which could determine the situation in the market. The weak interrelation of HF registered in Lithuania and small relative values of the managed assets do not create a threat of market saturation, and do not have an impact on financial stability in

Lithuania. Nonetheless, as it was also pointed out by Galinienė B., Jarašius G., (2014), the calculated values of the pair-wise correlation of HF (both among separate HF and with other groups of CIU) substantiate the necessity to further monitor the correlation of HF and its influence on the financial market. Furthermore, in order to establish the emerging trends more accurately and earlier, the data of more frequent periods (monthly) should be used. Small volumes of HF investments in Lithuania also determine low operational costs signed to financial intermediaries. It is possible to assert that HF activities are not a priority field among credit institutions or other financial intermediaries; therefore, the threat of the indirect impact on the financial system does not emerge either.

The impact of PEF on business development

In the middle of 2013, two PEF were registered in Lithuania, one of which carried out investment activities. In total, during the period when AIF were legitimised in Lithuania, six PEF were founded, but four of them had to wind up their activities. The PEF market in Lithuania is characteristic of the exceptionally rapid turnover of funds – from the start of PEF activities, 66.7% of all registered PEF underwent liquidation. This almost twice exceeds the overall average of the Lithuanian AIF market, which is 36.4%. Such trends of the development of PEF in Lithuania can be associated with the finance allocated from the EU Structural Funds and with the ever more popular funding of risk capital allocated to small and medium enterprises, mostly under the JEREMIE initiative (Galiniene B., Jarašius G., 2012).

The information concerning the transactions made by PEF in Lithuania is presented in Figure 6. Throughout the period under analysis, two investments were implemented, and the only investment which is still active is that of LLBPEFI in the company UAB 'Ordeta'. The grey colour in Figure 6 presents the investments made by the already liquidated fund.

The first PEF registered in Lithuania, ' Synergos Private Equity Fund' conducted its operations through the investments in those companies which were already successful and profitable. From the middle of 2009 to the beginning of the second quarter of 2011, this PEF held a 100% block of shares of UAB 'Neptūno vandenys' and took over the management of the enterprise. Some time later, the fund invested in a related company

UAB 'Neptūno vandens pristatymas', which was mostly engaged in the delivery of cold drinking water to offices. The latter company was through reorganisation affiliated to a larger Joint Stock Company, UAB 'Eden Springs Lietuva', which executed similar activities in the Baltic States. The PEF participated in the activities of UAB 'Neptūno vandenys' until the end of the first quarter of 2011, which was not related to a planned selling of the investment but to the liquidation of the fund itself – the licence of the PEF was annulled and it had to quit its activities.

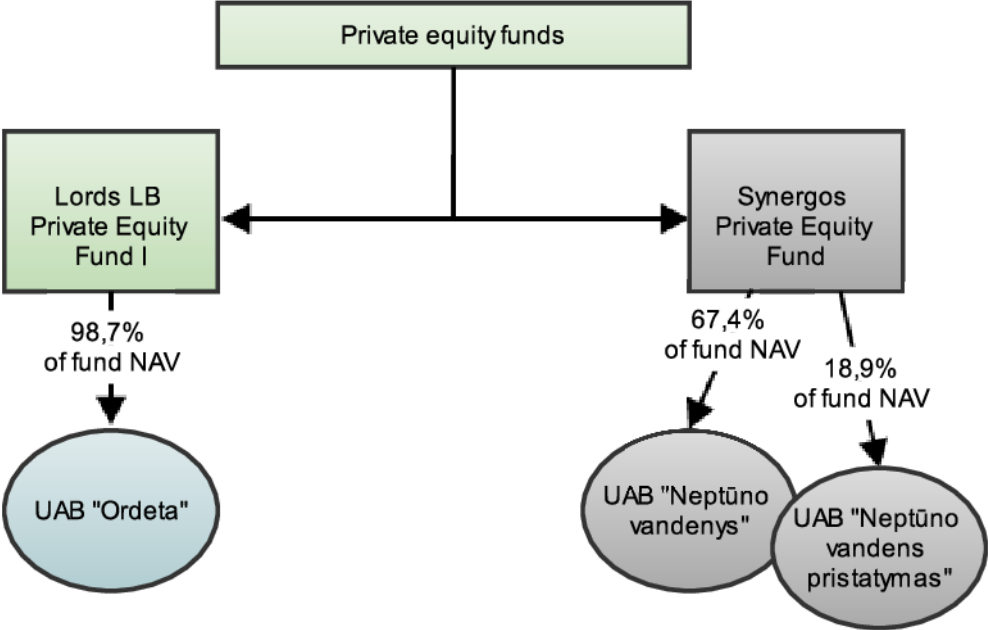


Fig. 6 PEF investments in Lithuania

Source: compiled by the author on the basis of fund activity reports

The analysis of the indicators of company activities makes it possible to claim that the PEF management did not bring the company extra financial benefit, neither did it substantially improve its activities (in the period when the company was managed by PEF, its profitability indicators fell more than on average in the period of 2008-2012; the current liquidity ratio also rose and exceeded the market average during the period of the management of the PEF). Taking into account the absence of staff turnover, it is possible to confirm the assumption that the PEF investment in this and the related company was not aimed to expand or improve the company activities. In this case, PEF sought to receive a positive return from an already profitably operating company, and from a planned sales transaction.

The comparison of the investments made by PEF over the whole period from the end of 2008 with the data of the Department of Statistics concerning the number of

companies (not including personal enterprises or physical persons) and the assets of such companies, it is possible to conclude that the investments made by PEF and the funding of newly-established companies accounted for a minuscule share of this market (e.g., in 2012, PEF invested in a mere 0.002% of Lithuanian companies, which in the structure of assets corresponded to 0.01%). PEF do not operate on a large scale and their activities can be treated as one-off investments. It is feasible that PEF activities may result in advantages and better activities prospects for the company in which it has been invested, because the evaluation of PEF investments at the level of the sector demonstrates that they are already acquiring more significance. Nevertheless, in the general context, it is obvious that in the period under analysis, the investments executed by PEF are still insignificant and do not have an impact on the national economy.

The author of the thesis proposes to evaluate the activities of PEF through the analysis of separate transactions and through the impact of the financial and other support to the company activities. With the expansion of PEF activities and an updated data base, PEF could be evaluated through econometric models, i.e., through the evaluation of the activity indicators of the companies funded by PEF, and through the comparison with other companies which have not received such financing. In order to carry out the latter task, the author proposes to resort to the cross-sectional regression.

CONCLUSIONS AND RECOMMENDATIONS

1. Due to the fairly different and specific characteristics of AIF, three main types of AIF – REF, PEF and HF – can be distinguished. AIF provides additional and better diversification opportunities to investors, because these funds are characteristic of a low-level correlation with conventional investment instruments. At the same time, this is one of the main features which makes it possible to ascribe certain funds to AIF. The diversification effect is especially obvious in the cases of REF and PEF, whose investments are related to the real sector, and furthermore, these types of AIF are characteristic of low level of involvement in the activities of capital markets. AIF also provide other opportunities which are more difficult to measure quantitatively – the elaboration of more effective risk management methods and more efficient allocation of resources. The specificity of HF activities determines the application of more active

investment instruments – these funds take part in numerous various markets and apply a great variety of investment tools. The investment geography of HF registered in Lithuania is wider than that of REF or PEF because the great majority of the investments made by the latter funds are directed to the Lithuanian market. HF are more active in their investment activities and employ various investment instruments and strategies, whereas the wider investment geography contributes to significant diversification of the current investment portfolio and achievement of better results than when operating only in local markets. REF and PEF, due to the specificity of their activities, are forced to operate in local or neighbouring markets. All this determined the rising popularity of AIF in recent decades both among private and institutional investors. However, the expansion and growing complexity of AIF activities and the interrelation with other market players bring about new threats to the economy and its development. Although AIF were legitimised and set up in Lithuania only at the end of 2008, the growing relative share of assets managed by AIF in the overall assets of CIU, as well as the increasing number of new funds and the decreasing number of funds which terminate all confirm the fact that AIF have successfully established themselves in the Lithuanian investment fund market.

2. Due to active operations in capital markets, such positive characteristics as the increase in market liquidity, reduction of fluctuation, and non-avoidance of acting in risky markets are usually associated with HF. The main activities of PEF consist in providing finance to start-up companies or the ones in their early phase of activities on more favourable conditions than by other credit sources. Despite the obvious advantages provided by AIF, more attention is focused on the analysis of the negative impact of AIF. Due to the relatively short investment period and the aspiration to gain the planned profit, PEF (especially buyout funds) can have a negative impact on the development of the enterprise in the long term, as well as on the shifts in employment and other indicators related to company activities. Furthermore, the negative aspects related to REF are due to the time discrepancy between the asset prices of open-end REF and the repurchase of the fund's investment units. However, the general agreement is that the most severe risks to the economy stem from HF. The negative impact of HF on the economy can be split into several groups: the threats that emerge from using leverage, the influence on credit institutions, and the impact on financial markets. Apart from the

direct positive and negative impact on the economy, another separate group of indirect impact can be also observed – the indirect impact on the financial system, which is determined by the interrelation of AIF with credit institutions and financial intermediaries. In the case of their close interrelation with AIF, problems related to AIF activities could to a certain extent affect the related institutions (e.g., the income share from operations with AIF would decrease, or due to the liquidation of the AIF ongoing portfolio positions, the value of the held positions would lessen).

3. Recently, due to the past economic and financial crisis, the regulation of AIF has become more stringent in all main economies across the world. It aims to make AIF activities more public and more transparent. The amendments to the regulation concern only the largest funds which can have a systematic impact; hence, the enacted legal norms will not have a direct subsequent influence on Lithuania, except for the fact that the EU directives will have to be incorporated into the national legal system. Apart from the transfer of the EU directives, additional measures have been taken to popularise funds, including AIF, in Lithuania. The adoption of LIICIU will provide AIF managers with more and wider investment opportunities and will set lesser requirements for potential investors, which will enhance the popularisation of AIF investments, at least as far as the number of participants is concerned. Having completed the CIU regulation process in the Lithuanian legal system, it is planned to have three legal acts regulating AIF. New AIF which will be founded in compliance with LCIU will be for non-professional investors and could consequently only be called AIF in theory. The greater part of AIF will have to operate in accordance with LIICIU, and in those cases when the assets managed by the fund manager exceed EUR 500 m. (EUR 100 m. in the case of leverage), the fund will have to follow the provisions of LPICIU (this legal act has not been enacted yet). Since the permission to register AIF in Lithuania, quite a few alterations in the legal regulation have come into force, and having evaluated the amendments to LCIU and relating them with the dynamics of AIF activities in Lithuania, it is possible to conclude that the amendments to LCIU did not affect the growth of the number of AIF or the volume of the assets managed by them. There are no grounds to claim that separate amendments to LCIU brought about essential shifts in the AIF market because those modifications did not encompass wide areas of regulation, and in most cases were not restrictive but only slightly simplified the regulation applied to AIF.

4. Taking into account the applied methodology for the research of AIF activities and the specificity of AIF, concrete factors were determined and adapted to the Lithuanian situation – the factors affected by AIF and which can contribute to the evaluation of the impact of AIF on the economy of Lithuania. In the case of PEF, the indicators were chosen that reflect the impact of PEF on the real sector through the value added, i.e., through the research into the impact of PEF investments on the indicators of company development and activities, and through the significance of such companies in the general context of the activities. REF activities are related to the investments in the real estate market, both by investing in already existing projects and in the development of new projects. REF operate in both the residential and commercial real estate markets. As the characteristics of these markets differ essentially, in the research of the impact of REF activities on these markets, they are analysed separately by evaluating the impact of REF investments on the main indicators which describe real estate markets. All AIF may affect the financial system (REF and PEF mostly indirectly, whereas HF directly as well), but in the context of AIF, the case of HF is exceptional because the activities of these funds are not directly related to investments in the real sector – HF mostly operate in capital markets. Subsequently, the research into the impact of HF activities concentrates on HF operations in the financial market, and on their feasible impact on that market. The main indicators that were selected to measure the impact brought about by HF are the stock market liquidity and the interrelation of HF with other investment funds on the basis of the strategies they employ, i.e., the interrelation which can pose the risks of liquidity and of an impact on the financial system.

5. The overall research into the activities of AIF registered in Lithuania demonstrated that leverage is applied by AIF increasingly more actively but its average value does not approach the limit established in previous editions of LCIU (leverage for HF is not limited). Individual AIF are not characteristic of high level of leverage, however, the relative value of those AIF is low; therefore, if such a fund failed due to the application of leverage, this would not have significant impact on the general situation in the market. The moderate application of leverage is not detrimental, and in unfavourable conditions would not inflict great damage on the fund, nor would it lead to its liquidation – according to modelling data of the stock markets in the Baltic countries, the leverage of 50% would result in 18% losses in the value of the net assets if share prices fluctuated

up to 10% (in an unlikely scenario). HF usually apply a high level of leverage and these funds also typically keep sufficient cash reserves in their account, hence enabling them to cover the emerging losses. Even when the market fluctuation is low, the groundless application of leverage can lead to substantial losses and cause additional tension in the financial system. Due to the growing volume of the assets managed by HF, the application of leverage is becoming an issue of increasing relevance; therefore, the suggestion would be to reintroduce the previous limitation (in the case of HF, the maximum leverage should not exceed 200% of the value of the net assets). As the number of HF is growing and the competition among the funds of this type is increasing, the application of an unfounded weight of leverage can be used as a tool to improve the financial results more rapidly, which would at that same time increase threats to the fund itself as well as to the financial system. While making the regulation of HF (and of AIF in general) more stringent, a balance must be kept so that AIF do not become similar to ordinary investment funds. Consequently, more stringent regulation and more transparent activities should be sought only in those areas which can have an impact on the emergence of systematic risk, and leverage can be attributed to such an area.

6. AIF constitute an insignificant part in the growth of the assets of the financial system. Therefore, taking into account a very slight relative share of AIF assets in the context of the financial system – where the banking sector prevails – and also due to inactive application of derivatives and leverage, it is possible to claim that the impact of AIF on the financial system is negligible, and that AIF activities do not pose direct threats to the financial system. The small number of funds and of the transactions they make, the small volume of the transactions, and the operations conducted not only in local markets determine the weak interrelation between AIF and credit institutions. This is reflected in the negligible income share received by credit institutions from AIF activities. Even though this relative value is growing, it is still insignificant; and therefore, there are no grounds to claim that credit institutions in Lithuania are dependent on AIF or their activities, or that AIF could have an indirect impact on the financial system. The ratio of commission costs and the fund's net assets is a fairly steady value and depends little on the phase of the fund's activities but the absolute volume of those costs does depend on the value of the fund's net assets and on the type of the fund. As HF are more active in their operations, the ratio between their net assets and commission

costs is higher; hence, as the values of AIF net assets increase, it is HF that should have the greatest potential impact on the related institutions.

7. The specificity of the activities of concrete REF depends on whether the fund's investment strategy is related to commercial real estate or residential property. During the period under analysis, those REF which dealt with CRE proved to be more active and relatively more important but in general the overall number of all types of investment transactions was small (seven in total, including the construction of buildings). The research into the potential impact of REF on the market of residential property contributed to the extension of the equation in the econometric model proposed by Ramanauskas T. (2011) by including an additional independent variable – the values of REF investments in the objects of residential property. After the equation was formed and the null hypothesis of the newly included factor was verified, the hypothesis was not rejected, which makes it possible to claim with a feasibility of 95% that the parameter of the newly included variable equals nil and does not affect the shifts in housing price index. Additional analysis confirms the validity of this claim because the investments made by REF are not significant in the general context of the residential property market – the aggregate value of REF transactions during the whole period accounts for mere 0.28% of housing transactions made in 2012, and the usable space of the residential real property being built by those funds in 2012 accounted for 0.5% of the usable space of the flats built. Taking into account the REF activities related to CRE, it was decided to research into the impact of REF on the supply of CRE. A model was formed in which the dependent variable is the CRE supply, and the independent variables are new loans for non-financial corporations, direct foreign investments related to construction, and REF investments in Lithuania related to CRE. While researching the impact of REF on the supply of CRE, the relevance of the factor of the REF investments in CRE in Lithuania was measured. It was established that the suggested null hypothesis as to the parameter being equal to nil cannot be rejected and that the above factor, with the feasibility of 95%, equals nil. It is possible to argue that the factor of REF investments in the construction of CRE is negligible and in the period under analysis had no impact on the supply of CRE. The additional analysis of the shifts in the CRE sales prices reveals that in the periods when REF made investments, the CRE sales prices did not change. It

is possible to claim that the REF activities in the researched period did not reach the volume of values which could affect the prices of CRE or market equilibrium.

8. The volumes of assets managed by separate HF are not high, and therefore there are no large funds which could determine the situation in the market. Nevertheless, even small HF could have a certain impact on the market and the financial system if they were interrelated and if they were all affected by an external shock. Due to the fact that HF actively participate in capital markets, their impact on the financial market should be researched through the evaluation of the liquidity and illiquidity indicators related to HF activities and to concrete securities, as well as through the interrelation of HF among themselves and with other market players, which is reflected in the calculated WAC. During the period under analysis, HF were not closely related – their profitability pair-correlations were multifarious, with the average expression of -0.06; hence, the threats to the stability of financial markets due to the possible market saturation are only theoretical. As a group of investment funds, HF are characteristic of the positive profitability correlation with other CIU groups, and only the pair-wise correlation of profitability with REF is close to nil. The high level of the pair-wise correlation of HF profitability is determined by the globalisation of the financial market, because other investment funds also mostly participate in foreign capital markets, where the profitability of REF is not directly affected by shifts in capital markets. Due to the small relative size of HF, even high HF profitability, the interrelation with other CIU do not determine the growing overall value of the market WAC. Taking into account the established values of pair-wise correlation coefficients between returns of separate HF, it a recommendation would be to monitor the HF pair-wise-correlation and how it affects the overall situation in the market. Also, the data of more frequent periods (monthly) should be used in order to reflect the emerging trends more accurately. When in the future enough data becomes available, it is recommended to conduct additional research into the impact of HF on the financial market in Lithuania through the analysis of the impact of these funds on the liquidity shifts of the market or concrete securities. In order to carry out this task, it is recommended to apply the Amihud Illiquidity Index, as well as the effective bid-ask spread.

9. AIF registered in Lithuania (among them HF) do not actively apply leverage or derivatives transactions, which does not allow HF to achieve positive investment returns

unrelated to shifts in the market. HF do not have a competitive advantage over investment funds in the Lithuanian market, because they cannot offer results that would differ from the ones offered by other investment funds, despite the fact that they are potentially riskier. In addition, lower requirements for the protection of investors are applied to the participants of such funds. HF, differently from PEF or REF, do not invest in specific areas which are less accessible to ordinary investors; and therefore, HF should provide investors with the opportunity to earn, irrespective of fluctuations in the market. As the HF which were analysed do not create the opportunity to receive investment results independent from the market field, it is possible to conclude that they are not attractive to investors, which can be one of the reasons why HF only constitute a small market share in Lithuania. The overall indicators describing the AIF market demonstrate that REF prevail in the market, which affects both AIF and the general concentration on the CIU market – due to huge volumes of assets managed by REF, the market still remains highly concentrated. Nonetheless, the analysis of the WAC, which reflects the interrelation of investment fund groups, reveals that the emergence of AIF in Lithuania reduced the values of WAC. Therefore, despite even the great concentration in the AIF market, and the high level of interrelation of HF with other CIU groups, AIF in Lithuania have a positive impact towards the reduction of the interrelation of investment funds and contribute to the consolidation of financial stability.

10. The PEF market in Lithuania is characterised by an unprecedentedly rapid turnover of funds – since the beginning of their activities, 66.7% of all the registered PEF have undergone liquidation. This is almost double the overall average of the AIF market in Lithuania, which reaches 36.4%. Such development trends of PEF in Lithuania can be related with the financing provided by the EU Structural Funds, as well as the funding of risk capital provided to small and medium sized enterprises, which is gaining popularity. PEF are characteristic of activity concentration in the local market; however, during the analysed period, the activities of PEF registered in Lithuania were not widely implemented, and can merely be treated as one-off investments. The analysis of the investments made by PEF (one completed transaction) reveals that the financing by PEF did not provide an advantage to the enterprise, neither did it improve the indicators of its performance. Nevertheless, it is possible that PEF activities can provide an advantage and better activity prospects to the enterprise in which it has been invested, especially in

certain specific sectors of the economy in which great information asymmetry and risk prevail. The general context makes it obvious that during the period under analysis, the investments made by PEF are insignificant, the companies which were funded do not demonstrate better results than the market average, and such enterprises create an infinitesimal part of the GDP (0.004%) – hence, during the analysed period, PEF did not have an impact on the national economy. Taking into account the generalised research methods on PEF activities, during the period under analysis, while the PEF market in Lithuania remains small and still in a phase of development, the impact of PEF activities on business development should be researched through relative indicators. In the future, however, when the data concerning PEF become more available, it is reasonable to use the cross-sectional regression as the primary research method.

In the analysed period, mostly due to the relatively small volumes of assets managed by AIF; and due to a fairly conservative method of activities; and because the period of activities is still short and unstable – neither all AIF together nor any separate type of these funds had a quantitatively measurable impact on the economy of Lithuania.

Further research fields and recommendations

Even though during the period under analysis, AIF do not have a direct or indirect impact on the national economy, the developmental trends of AIF demonstrate that in the future the theoretical threats can become real. Although it is still impossible to define how the latest legal acts will affect the development of the AIF market, it is feasible that the simplified restrictions will encourage investors to choose these funds more actively, especially since fund managers have been granted more favourable conditions to found new AIF. In addition to the above factors, both the current growth of REF assets and the subsequent increasing level of concentration in the market, the close interrelation of HF give grounds to continue the further monitoring of the development of the AIF market.

Special attention must be paid to the monitoring of the investment activities of HF because these funds actively operate in capital markets. The increasing scope of the application of derivatives and leverage lead to the conclusion that in the future, the trade in such instruments will potentially be one of the areas which – if stringent risk management models are not applied, and conditions develop unfavourably – will pose a threat to the stability of the fund itself, as well as to the financial system. Therefore, in the future it is recommended that: the investment activities of HF and their structure and

fields of investment are monitored; the indicators of their interrelation and relation with other investment funds should be measured; and these data used more frequently (preferably monthly) for such measurement.

One of the further fields of research is undoubtedly related to the elaboration of the already existing models which measure the impact of AIF on the economy. The current models were formed in the climate of a scarcity of data; as the period of AIF activity becomes longer, and there are consequently more sessions of monitoring and observation, it will be possible to develop and update the existing models with the additionally available data.

Approbation and dissemination of the scientific research results. Statements and results of the scientific research were published in 6 academic publications and presented in 2 international scientific conferences.

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REZIUME

Aktualumas. Alternatyvaus investavimo fondai (toliau – AIF) įgyja vis didesnę svarbą, jų valdomas kapitalas sudaro vis didesnę dalį bendrame investicijų sraute. Alternatyvių investicijų ir tuo pačiu AIF svarbą pagrindžia alternatyvių investicijų dalis bendrame investicijų sraute. Šis dydis pasižymėjo nuolatiniu augimu ir išaugo nuo 7,7% 2005 m. iki 14,3% 2011 m. (The Mainstreaming..., 2012), taip pat remiantis apklausų duomenimis (Preĳin..., 2013), instituciniai investuotojai yra linkę ir ateityje didinti investicijų nukreipiamų į alternatyvias investicijas dalį. Investuotojai noriai jomis naudojasi, siekdami išnaudoti tokių investicijų menką koreliaciją su įprastiniais investavimo instrumentais (akcijomis, obligacijomis) ir taip sumažinti bendrą portfelio svyravimą. Tai tapo ypač aktualu pastaraisiais metais, finansų rinkoms patiriant nuolatinį spaudimą ir įtampą, bei pasaulio ekonomikoms susiduriant su krizėmis. Tačiau net ir atsižvelgiant į tai vis dar jaučiamas tyrimų, susijusių su darbe nagrinėjama tematika, stygius, kuris tam tikra dalimi nulemtas ir AIF uždarmo, menko reguliavimo ir informacijos sklaidos.

AIF raidos ir veiklos tyrimai itin svarbūs ir aktualūs, nes tai visiškai nauja Lietuvos finansų sistemos vystymosi kryptis, kuri dėl itin menko ištyrimo laipsnio reikalauja daug dėmesio. AIF Lietuvos investuotojams yra pakankamai naujos investicinės priemonės, išplečiančios investavimo kryptių pasirinkimo galimybes, todėl svarbu tinkamai jas suprasti, įvertinti jų keliamus pavojus bei teikiamas galimybes. AIF reguliuojami menkai ir nenoriai atskleidžia savo veiklos rezultatus, dažnai šie fondai net nėra įstatymiškai įpareigoti to daryti.

Šis darbas aktualus ir dėl nagrinėjamos teisinės aplinkos Lietuvoje alternatyvaus investavimo fondų požiūriu. Nuo 2008 m. kovo 1 d. įsigaliojo Kolektyvinio investavimo subjektų įstatymas (toliau – KISĮ), kuris sudarė sąlygas Lietuvoje steigti AIF. Nors duomenys rodo, kad ne visi mėginimai plėtoti AIF veiklą Lietuvoje yra sėkmingi, tačiau svarbu ir aktualu išanalizuoti jų plėtros Lietuvoje galimybes, remiantis naujausiais teisės aktais. Dėl santykinai neseniai įsigaliojusio ir vis atnaujinamo įstatymo, reglamentuojančio AIF, šių fondų veiklos Lietuvoje tema dar yra nauja ir nepakankamai išnagrinėta.

Tyrimo objektas – nagrinėjami AIF, registruoti Lietuvos Respublikoje ir veikiančys pagal KISĮ. Nėra nagrinėjami AIF, kurie vykdo veiklą Lietuvoje, tačiau jų įsteigimo vieta yra ne Lietuvos Respublika. Taip pat ir fondai, investuojantys į kitus kolektyvinio investavimo subjektus (toliau – KIS) (arba fondų fondai), nėra įtraukiami į tyrimo objektą, kadangi tokio tipo fondai menkai atitinka AIF keliamus reikalavimus. Fondų fondai dažniausiai tėra tik kapitalo teikėjai AIF ir nedalyvauja vykdydami tiesiogines investicijas į objektus, į kuriuos investuoja AIF.

Mokslinė problema. AIF negali būti traktuojami vien tik kaip įprastiniai fondai ir prilyginami jiems. AIF veikia ne kaip įprasti fondai, daugeliu atvejų jų veikla siejasi su realiuoju sektoriumi, todėl ir jų įtaka gali būti juntama ne tik finansų rinkoms, bet ir realiajam sektoriui. Tokiu būdu AIF gali greičiau ir didesne apimtimi paveikti šalies ekonomiką. Dėl suteikiamų diversifikacijos ir geresnės išteklių alokacijos galimybių, taip pat dėl galimybės dalyvauti rinkose, kuriose pavienis investuotojas galėtų dalyvauti tik su ženkliai didesnėmis išlaidomis, AIF gali pasiekti dideles apimtis. Taip pat AIF, vykdydami veiklą ir siekdami kuo didesnės nepriklausomybės nuo bendros situacijos rinkose ar norėdami pasiekti didesnę pelningumą lygį, gali pasitelkti naujausias finansų inžinerijos priemones, kurių privalumai ir ypač trūkumai, dar gali būti ne iki galo suprantami, tiek pačių jų naudotojų, tiek ir priežiūros institucijų. Visa tai lemia būtinybę kreipti didesnę dėmesį į AIF veiklą ir vertinti juos ne tik kaip investicinius fondus, analizuojant jų pelningumą ar kitus investicinius rodiklius, bet ir tirti jų atliekamų investicinių veiksmų tiesioginę ar netiesioginę įtaką realiajam sektoriui bei finansų rinkai.

Iš AIF veiklos kylančios problemos itin aktualios Lietuvos atveju. AIF vis dar yra finansinė naujovė Lietuvoje, todėl šių fondų teikiamos naudos ir potencialiai keliamų grėsmių balansas gali būti įvertintas nepakankamai tiksliai ir AIF gali būti skiriamas nepakankamas priežiūros institucijų dėmesys ar taikomi pernelyg supaprastinti veiklos apribojimai. Tai gali lemti augančią riziką, susijusią su AIF vykdomais investiciniais veiksmais, tikimybę.

Su iš AIF veiklos kylančiomis problemomis susijęs ir disertacijos **tikslas** – Lietuvoje registruotų AIF įtakos ekonomikai ištyrimas, atskleidžiant veiksnius, kuriems įtaką daro skirtingų rūšių AIF, ir nustatant AIF poveikį šių veiksmų kitimui, kartu vertinant kompleksinę AIF įtaką finansų sistemai.

Tikslui pasiekti formuluojami tokie **uždaviniai**:

1. Apibrėžti alternatyvių investicijų grupes ir išskirti fondus, priklausančius AIF, pagrindžiant tokį skirstymą ir išskiriant AIF charakterizuojančius požymius;
2. Išanalizuoti atskiras AIF rūšis, išsamiai aptarti jų pobūdį, veiklos ypatybes bei iširti AIF raidą ir vystymosi tendencijas;
3. Išanalizuoti su AIF susijusius teisėkūros procesus, iširti teisės aktų raidą pastaraisiais metais bei planuojamus ir įvykdytus pakeitimus ES teisinėje sistemoje, tiriant teisės aktų poveikį AIF veiklai Lietuvoje;
4. Teoriniu lygmeniu išanalizuoti AIF daromą įtaką ekonomikai ir išskirti pagrindinius poveikio perdavimo ekonomikai būdus ir kanalus;
5. Išsamiai išanalizuoti AIF steigimąsi Lietuvoje, įvertinti jų raidos tendencijas ir pagrindinius veiklą apibūdinančius rodiklius bei pateikti prognozuojamą AIF, registruotų Lietuvoje, vystymosi scenarijų artimiausiam laikotarpiui;
6. Išskirti konkrečius veiksnius, kuriems įtaką turi atskiros AIF rūšys, ir kuriuos analizuojant būtų vertinama AIF įtaka Lietuvos ekonomikai;
7. Atlikti bendrą AIF, registruotų Lietuvoje, galimybių paveikti Lietuvos ekonomiką tyrimą, analizuojant fondų veiklos ir kitus išvestinius rodiklius;
8. Atlikti atskirų AIF rūšių poveikio ekonomikai galimybių analizę, išskiriant tiesioginį ir netiesioginį poveikio būdus;
9. Atsižvelgiant į turimų duomenų ribotumą, parinkti atskiroms AIF rūšims tinkamiausius tyrimo metodus ir sudaryti modelius ar pasiūlyti tyrimo būdus, vertinančius AIF poveikį pasirinktiems kintamiesiems.

Tyrimo apribojimai ir duomenų prieinamumas. Duomenų problema kyla iš pačios AIF veiklos esmės – neprivaldami atskleisti didelės dalies su veikla susijusios informacijos, fondai tokios informacijos savanoriškai dažniausiai ir neteikia. Pastaruoju metu tendencijos gerėja skaidrumo link, ypač tam pasitarnavo vykusi pasaulinė finansų ir ekonomikos krizė, todėl AIF, norėdami ir toliau vykdyti savo veiklą, yra priversti labiau atsiverti. Vis dėlto šie procesai dar tik vyksta, be to neverta tikėtis, kad AIF taps tokie patys atskaitingi kaip ir įprasti fondai, todėl vis dar didelė dalis duomenų, susijusių su AIF veikla yra sunkiai arba visiškai neprieinami. Dauguma kokybiškų užsienio duomenų bazių yra komercinės ir neteikia informacijos moksliniais tikslais, be to

akivaizdus ir tokių duomenų bazių fragmentiškumas, kadangi nėra aprėpiama visa rinka, į duomenų bazes patenka tik fondai, kurie jose užsiregistravę.

Tyrimo metodai. Teorinėje disertacijos dalyje, analizuojant su AIF susijusius reiškinius, daugiausia naudojama mokslinės literatūros, statistinių duomenų, lyginamoji ir loginė analizė, apibendrinimo metodai. Atliekant Lietuvoje registruotų AIF įtakos ekonomikai tyrimą, kaip pagrindinis tyrimo metodas naudojamas koreliacinė – regresinė analizė. Duomenys apdorojami ir regresiniai modeliai sudaromi pasitelkiant statistinį paketą GRETL. Vis dėlto tyrimo metodų pasirinkimą apriboja duomenų prieinamumas ir imties dydis, todėl analitinėje dalyje naudojami ir papildantys tyrimo metodai, tokie kaip statistinių duomenų ir lyginamoji analizė.

Mokslinis naujumas ir praktinis reikšmingumas. Dėl sąlyginai neseno AIF įteisinimo Lietuvoje, ir su tuo susijusio menko AIF veiklos Lietuvoje ištyrimo laipsnio, didžioji dalis analizės pasižymi naujumu ir daugeliu atvejų yra pirmasis žvilgsnis į šios rinkos veiklą ir vystymąsi Lietuvoje. Disertacijoje išsamiai aptartas AIF steigimasis ir raida Lietuvoje, išskirtos konkrečios AIF raidos fazės. Tai leidžia įvertinti dabartinę situaciją AIF rinkoje, prognozuoti ir vertinti ateities perspektyvas. Taip pat atlikta pirmoji mokslinė bendros AIF rinkos Lietuvoje analizė, aptarta šių fondų vieta ir reikšmė finansų sistemoje ir investicinių fondų rinkoje. Įvertinta ir ištirta bendra AIF rinka Lietuvoje, analizuojant AIF ir kitų investicinių fondų koncentraciją, tarpusavio susietumą ir kitus svarbius, rinką apibūdinančius požymius.

Disertacija pasižymi naujumu ir tuo, kad joje išsamiai aptartas teisinis AIF reguliavimas Lietuvoje, jo kitimas ir įtaka fondų steigimuisi. Susisteminta informacija, susijusi su AIF reguliavimu Lietuvoje ir jo pasikeitimais, susietas ES lygiu taikomas AIF reguliavimas su reguliavimo pokyčiais Lietuvoje.

Dėl didelės atskirų AIF rūšių įvairovės, kitų autorių tyrimai yra fragmentuoti ir dažnai pritaikyti konkrečiai fondų rūšiai ar problemai spręsti. Dėl šios priežasties atliktas tyrimo būdų, užsienio ir Lietuvos autorių naudojamų tirti AIF veiklos įtakai, apibendrinimas ir susisteminimas taip pat turi naujumo požymių.

Išnagrinėjus kitų autorių naudojamą tyrimo metodiką ir įvertinant bei sprendžiant tyrimo duomenų ribotumo problemą, buvo sudaryti AIF, registruotų Lietuvoje, įtakos konkretiems Lietuvos ekonomikos sektoriams vertinimo modeliai arba pasiūlyti tinkamiausi metodai, kuriais būtų galima tirti AIF poveikį šalies ekonomikos

sektoriams ar tam tikriems apibrėžtiems kintamiesiems. Sudarytų modelių ir tyrimo instrumentų praktinė nauda pasireiškia tuo, kad kiti Lietuvos ar užsienio autoriai galės pasitelkti aprašytus modelius ir metodus ateityje tiriant Lietuvos AIF veiklą. Kadangi tai yra pirmieji modeliai, tiriantys AIF įtaką Lietuvos ekonomikai, atsirandant naujiems duomenims, sudaryti modeliai galės būti atspirties tašku, tobulinant šios krypties tyrimus Lietuvoje.

Bendru atveju atliktų tyrimų praktinė nauda pasireiškia ir tuo, kad Lietuvos AIF dar nebuvo išsamiai ir kompleksiškai tirta. Atlikti tyrimai suteikia duomenų apie AIF rinkos Lietuvoje atsiradimą, vystymąsi ir galimus plėtros scenarijus. Tai leidžia turėti geresnį kontekstą priimant su fondų priežiūra susijusius sprendimus bei leidžia įvertinti jau priimtų sprendimų reikalingumą ir efektyvumą.

Disertacijos praktinė nauda galėtų pasireikšti ir potencialiems investuotojams į AIF, kadangi jie galėtų geriau susipažinti su tokių fondų veikla ir galimais rezultatais ir tinkamai įvertinti prisiimamą riziką. Kartu tai prisidėtų ir prie investuotojų švietimo gerinimo Lietuvoje.

Disertacijos struktūra. Disertacija susideda iš įvado, keturių dalių, išvadų ir pasiūlymų, literatūros sąrašo ir priedų. Disertacijos apimtis – 265 puslapiai, joje pateiktos 24 lentelės, 58 paveikslai ir 25 priedai.

Išvados.

1. Dėl pakankamai skirtingų ir specifinių atskirų AIF požymių galima išskirti tris pagrindines AIF rūšis – NTF, PKF ir RDF. AIF suteikia papildomų, geresnių diversifikacijos galimybių investuotojams, kadangi šiems fondams būdinga žemo lygio koreliacija su įprastiniais investiciniais instrumentais. Tai kartu yra vienas iš pagrindinių požymių, padedančių priskirti tam tikrus fondus prie AIF. Ypač akivaizdžiai diversifikacijos efektas pasireiškia NTF ir PKF atveju, kurių investicijos susijusios su realiuoju sektoriumi ir šių rūšių AIF pasižymi mažu įsitraukimu į kapitalo rinkų veiklą. AIF suteikia ir kitų, sunkiau kiekybiškai įvertinamų, galimybių – efektyvesnių rizikos valdymo metodų kūrimo, efektyvesnės išteklių alokacijos. RDF veiklos specifika lemia aktyvesnį investicinių veiksnių naudojimą, jų investavimo ir investicijų laikymo periodas yra gerokai trumpesnis, jie dalyvauja daugelyje įvairių rinkų ir naudojami didele investicinių priemonių įvairove. RDF, registruotų Lietuvoje, investicijų geografija yra platesnė, o NTF ir PKF didesnę investicijų dalį nukreipia į Lietuvos rinką. RDF aktyviau

vykdo investicinę veiklą, tam naudoja įvairias investicines priemones ir strategijas, o platesnė investicijų geografija padeda geriau diversifikuoti turimą investicinį portfelį bei pasiekti geresnių rezultatų nei vien tik veikiant vietinėje rinkoje. NTF ir PKF dėl savo veiklos specifikos yra priversti veikti vietinėje arba artimose kaimyninėse rinkose. Visa tai pastaraisiais dešimtmečiais lėmė AIF populiarėjimą tiek tarp privačių, tiek ir tarp institucinių investuotojų. Tačiau kartu plečiantis ir sudėtingėjant AIF veiklai ir sąsajoms su kitais rinkų dalyviais, atsiranda ir papildomų grėsmių ekonomikai ir jos vystymuisi. AIF įteisinti ir Lietuvoje pradėti steigti tik 2008 m. pabaigoje, tačiau auganti AIF valdomo turto santykinė dalis visų KIS turte, augantis fondų skaičius ir mažėjantis veiklą nutraukiančių fondų skaičiaus patvirtina, kad AIF sėkmingai įsitvirtino Lietuvos investicinių fondų rinkoje.

2. Dėl aktyvių veiksmų kapitalo rinkose tokie teigiami bruožai, kaip rinkos likvidumo didinimas, svyravimų mažinimas bei nevangimas dalyvauti rizikingose rinkose daugiausia yra priskiriami RDF. Finansavimo palankesnėmis sąlygomis nei kiti kredito šaltiniai teikimas naujai besikuriančioms ar ankstyvojoje veiklos fazėje esančioms įmonėms yra pagrindinė PKF veikla. Nepaisant teikiamų AIF privalumų, didesnis dėmesys skiriamas neigiamam AIF poveikiui nagrinėti. Nors PKF (ypač išpirkimo kapitalo fondai) dėl santykinai trumpo investavimo laikotarpio ir siekio gauti užsibrėžtą pelną ilgalaikėje perspektyvoje gali turėti neigiamą įtaką įmonės vystymuisi ir užimtumo ar kitų su įmonių veikla susijusių rodiklių kitimui, o NTF atveju ekonomikai kyla grėsmės dėl atviro tipo NTF aktyvų kainų ir fondo investicinių vienetų išpirkimo neatitikimo laike, sutariama, kad didžiausios rizikos ekonomikai kyla iš RDF. RDF neigiamą poveikį ekonomikai galima skirstyti į keletą grupių: dėl sverto naudojimo atsirandančios grėsmės, įtaka kredito institucijoms ir poveikis finansų rinkoms. Be tiesioginio pobūdžio teigiamo ir neigiamo poveikio ekonomikai pavyzdžių, kaip atskira poveikio grupė gali būti išskirtas ir netiesioginis poveikis, kuris pasireiškia per poveikį finansų sistemai ir yra nulemtas AIF sąsajų su kredito įstaigomis ir finansų tarpininkais. Išsivysčius glaudiems santykiams su AIF, problemos, susijusios su AIF veikla, tam tikru mastu atsilieptų ir susijusių įstaigų veiklai (pvz. mažėtų pajamų dalis, uždirbama iš operacijų su AIF, ar nukentėtų turimų pozicijų vertė dėl AIF vykdomų portfelio pozicijų likvidavimo).

3. Pastaruoju metu, dėl įvykusių ekonomikos ir finansų krizių, AIF reguliavimas sugriežtėjo visose pagrindinėse pasaulio ekonomikose, siekiama labiau viešinti jų veiklą ir padaryti ją skaidresne. Reguliavimo pakeitimai susiję tik su didelių apimčių fondais, kurie gali turėti sistemine įtaka, todėl priimtos teisinės normos Lietuvai tiesioginės įtakos neturės, išskyrus tai, jog ES direktyvos turės būti perkeltos į nacionalinę teisės sistemą. Be ES direktyvų perkėlimo į nacionalinę teisę, imtasi ir papildomų veiksmų, siekiant populiarinti fondus, tarp jų ir AIF, Lietuvoje. Šiuo tikslu priėmus IIKISĮ, AIF valdytojai turės daugiau investicinių ir veiklos formos galimybių, o potencialiems investuotojams taikomi reikalavimai yra mažesni, todėl tai gali lemti AIF investicijų populiarėjimą, bent jau dalyvių skaičiaus prasme. Baigus Lietuvos teisinės sistemos KIS reguliavimo procesus, planuojama turėti tris teisės aktus, kurie reguliuotų AIF. Pagal KISĮ besisteigiantys AIF galės būti skirti tik neprofesionaliesiems investuotojams ir tik teoriškai galėtų būti vadinami AIF, didžioji dalis AIF turėtų veikti pagal IIKISĮ, o tais atvejais, jei fondo valdytojo valdomas turtas viršytų 500 mln. eurų (100 mln. eurų jei naudojamas svertas), jam turėtų būti taikomos PIKISĮ nuostatos (šis teisės aktas dar nėra priimtas). Nuo AIF leidimo registruoti Lietuvoje atlikta nemažai teisinio reguliavimo pakeitimų, įvertinus KISĮ pakeitimus ir susiejus juos su AIF veiklos dinamika Lietuvoje, galima teigti, kad KISĮ pakeitimai neturėjo įtakos AIF skaičiaus ar valdomo turto apimčių augimui. Negalima teigti, kad atskiri KISĮ pakeitimai lėmė esminius pokyčius AIF rinkoje, nes įstatymo pakeitimai neapėmė plačių reguliavimo sričių ir daugeliu atvejų buvo ne apribojantys, o tik kiek supaprastinantys AIF taikomą reguliavimą.

4. Atsižvelgiant į naudojamas AIF veiklos tyrimo metodikas ir AIF veiklos ypatumus, išskirti ir Lietuvos atvejui pritaikyti konkretūs veiksniai, kuriems įtaką daro AIF, ir kurių pagalba galima įvertinti AIF poveikį Lietuvos ekonomikai. PKF atveju parinkti rodikliai, kurie galėtų atspindėti PKF daromą įtaką realiajam sektoriui, per sukuriama pridėtinę vertę, t.y. tiriant PKF atliekamų investicijų įtaką įmonių plėtros ir veiklos rodikliams ir tokių įmonių santykį bendrame veiklos kontekste. NTF veikla susijusi su investicijomis į NT rinką tiek investuojant į jau egzistuojančius objektus, tiek ir plėtojant naujus projektus. Kadangi NTF veikia ir gyvenamosios paskirties ir komercinės paskirties NT rinkose, o šių rinkų savybės iš esmės skiriasi, NTF veiklos įtakos tyrime šios rinkos nagrinėjamos atskirai, įvertinant NTF atliekamų investicijų įtaką NT rinkas apibūdinantiems pagrindiniams rodikliams. Visi AIF gali turėti poveikį

(NTF ir PKF daugiausia netiesioginį, RDF ir tiesioginį) finansų sistemai, tačiau RDF atvejis AIF kontekste yra išskirtinis, kadangi šių fondų veikla nėra tiesiogiai susijusi su investicijomis į realųjį sektorių – RDF veiklą daugiausia vykdo kapitalo rinkose. Dėl šios priežasties ir RDF veiklos įtakos tyrimas koncentruojasi į finansų rinkoje atliekamus veiksmus ir jų galimą poveikį rinkai. Pagrindiniai rodikliai, per kuriuos galėtų būti matuojama RDF daroma įtaka pasirinkti akcijų rinkos likvidumas ir RDF susietumas su kitais investiciniais fondais ar tarpusavyje pagal naudojamas strategijas, kuris gali kelti likvidumo ir poveikio finansų sistemai rizikas.

5. Atlikus bendrą AIF, registruotą Lietuvoje, veiklos tyrimą, nustatyta, kad AIF finansinis svertas naudojamas vis aktyviau, tačiau vidutinis jo dydis dar nesiekia ankstesnėse KISĮ redakcijose numatyto limito (RDF sverto naudojimas nėra ribojamas). Pavieniai AIF pasižymi santykinai dideliu sverto lygiu, tačiau šių AIF santykinė reikšmė yra maža, todėl ir tokio fondo nesėkmė, jei ji būtų susijusi su sverto naudojimu, neturėtų reikšmingos įtakos bendrai situacijai AIF rinkoje. Saikingas sverto naudojimas nėra žalingas ir susiklosčius neigiamoms aplinkybėms nepadarytų didelės žalos fondui ir nevestų prie fondo likvidavimo – modeliavimo Baltijos šalių akcijų rinkos duomenimis 50% GA dydžio svertas lemtų 18% GA vertės dydžio nuostolius, jei akcijų kainos svyruotų amplitude iki 10% (mažai tikėtino scenarijaus atveju). Daugeliu atvejų aukštą sverto lygį naudoja RDF, kurie pasižymi ir tuo, kad sąskaitoje turi pakankamą grynujų pinigų rezervą, kuris leistų padengti atsirandančius nuostolius. Rinkoje vyraujant net ir santykinai mažos apimties svyravimams, nepagrįstas sverto naudojimas gali vesti prie didelių nuostolių ir sukelti papildomą įtampą finansų sektoriuje. Dėl augančių RDF valdomo turto apimčių, sverto naudojimas tampa vis aktualesniu klausimu ir turėtų būti siūloma grįžti prie ankstesnio jo ribojimo (RDF atveju maksimalus svertas neturėtų viršyti 200% GA vertės). Augant RDF skaičiui ir didėjant konkurencijai tarp šios rūšies fondų, nepagrįstai didelio sverto įgijimas gali būti naudojamas kaip finansinių rezultatų spartesnio pagerinimo įrankis, kas kartu didintų grėsmes pačiam fondui bei finansų sistemai. Griežtinant RDF (ir AIF apskritai) reguliavimą, turi būti išlaikomas balansas, kad AIF netaptų panašūs į įprastinius investicinius fondus, todėl turi būti siekiama griežtesnio reguliavimo ir skaidresnės veiklos tik tose srityse, kurios, gali turėti įtaką sisteminės rizikos atsiradimui, o sverto naudojimas gali būti priskirtas tokiai sričiai.

6. AIF dalis finansų sistemos turto augime yra labai maža, atsižvelgiant ir į menką santykinę AIF turto dalį finansų sistemos mastu, kur vyrauja bankų sektorius, neaktyvų išvestinių finansinių priemonių ir sverto naudojimą, galima teigti, kad AIF įtaka finansų sistemos plėtrai yra nereikšminga ir AIF veikla nekelia tiesioginių rizikų finansų sistemai. Nedidelis fondų ir jų atliekamų sandorių skaičius, maža jų vykdomų sandorių apimtis ir veiklos vykdymas ne vien tik vietinėje rinkoje lemia mažą AIF ir kredito įstaigų susietumą. Tai atskleidžia kredito įstaigų pajamų dalis, gaunama iš AIF veiklos, kuri yra beveik lygi nuliui ir nors šis santykinis dydis auga, tačiau vis dar nėra reikšmingas, todėl nėra pagrindo teigti, kad Lietuvos kredito įstaigos yra priklausomos nuo AIF ir jų vykdomos veiklos ir AIF galėtų turėti netiesioginės įtakos finansų sistemai. Komisinių sąnaudų santykis su fondo GA yra pakankamai stabilus dydis ir mažai priklauso nuo fondo veiklos fazės, tačiau šios sąnaudos absoliučia apimtimi priklauso nuo fondo GA vertės ir nuo fondo tipo. Aktyviau veiklą vykdančių RDF GA santykis su komisinių išlaidomis yra didesnis, todėl didėjant AIF GA vertėms, potencialiai didžiausią įtaką susijusioms įstaigoms galėtų turėti RDF.

7. Konkrečių NTF veiklos specifika skiriasi priklausomai nuo to, ar fondo investicinė strategija susijusi su komerciniu, ar su gyvenamosios paskirties NT. Analizuojamu laikotarpiu aktyvesni ir santykinai svarbesni yra NTF, vykdančys operacijas su KNT, tačiau apskritai visų tipų investicinių sandorių nebuvo atlikta daug (7, įskaitant ir pastatų statybą). Tiriant potencialią NTF įtaką gyvenamosios paskirties NT rinkai, papildyta Ramanausko T. (2011) ekonometrinio modelio lygtis, įtraukiant papildomą nepriklausomą kintamąjį – NTF investicijų į gyvenamosios paskirties NT objektus vertes. Sudarius lygtį ir atlikus naujai įtraukto veiksnio parametro nulinės hipotezės tikrinimą, ji nebuvo atmesta, su 95% tikimybe tai leidžia teigti, kad naujai įtrauktas veiksnio parametras yra lygus nuliui ir įtakos būsto kainų indekso kitimui nedaro. Papildoma analizė patvirtina šio teiginio teisingumą, kadangi NTF atliktos investicijos bendrame gyvenamosios paskirties NT rinkos kontekste nėra reikšmingos – NTF bendra viso laikotarpio sandorių vertė sudaro tik 0,28% 2012 m. būsto sandorių apimties, o šių fondų statomų gyvenamosios paskirties NT objekto naudingas plotas 2012 m. sudarė 0,5% baigtų statyti butų naudingo ploto. Atsižvelgiant į NTF atliekamus veiksmus, susijusius su KNT, pasirinkta tirti NTF įtaką KNT pasiūlai. Sudarytas modelis, kuriame priklausomas kintamasis yra KNT pasiūla, o nepriklausomi kintamieji

yra naujos paskolos nefinansinėms korporacijoms, tiesioginės užsienio investicijos, susijusios su statyba ir NTF investicijos Lietuvoje, susijusios su KNT. Tiriant NTF įtaką KNT pasiūlai vertintas parametras prie NTF investicijų į Lietuvos KNT veiksmo reikšmingumas. Nustatyta, kad iškelta nulinė hipotezė dėl parametro buvimo lygiu nuliui negali būti atmesta ir minėtas veiksnys su 95% tikimybe yra lygus nuliui. Galima teigti, kad NTF investicijų į KNT statybą veiksnys yra nereikšmingas ir analizuojamu metu neturi įtakos KNT pasiūlai. Papildomai analizuojant KNT pardavimo kainų kitimą matyti, kad laikotarpiais, kai NTF atliko investicinius veiksmus, KNT pardavimo kainos nesikeitė. Galima teigti, kad NTF veiksmai, analizuojamu laikotarpiu dar nėra tokių vertinių apimčių, kad galėtų turėti įtaką KNT kainoms ir paveikti rinkos pusiausvyras.

8. Atskirų RDF valdomo turto apimtys nėra didelės, todėl nėra stambių fondų, galinčių lemti situaciją rinkoje. Tačiau net ir maži RDF galėtų turėti tam tikrą poveikį rinkai ir finansų sistemai, jei jie pasižymėtų tarpusavio susietumu ir juos visus kartu paveiktų išorinis šokas. Dėl RDF aktyvaus dalyvavimo kapitalo rinkose, jų įtaka finansų rinkai turėtų būti tiriama vertinant likvidumo ir nelikvidumo rodiklius, susijusius su RDF atliekamais veiksmais, ir su konkrečiais VP, taip pat vertinant RDF tarpusavio susietumą ir susietumą su kitais rinkos dalyviais, kurį gerai atspindi skaičiuojama VSK. Analizuotu periodu RDF nepasižymėjo tarpusavio susietumu – jų tarpusavio pelningumų koreliacijos buvo įvairių krypčių ir vidutiniškai sudarė -0,06, todėl grėsmės finansų rinkų stabilumui dėl galimo rinkos perpildymo išlieka tik teorinės. RDF kaip investicinių fondų grupė pasižymi aukšta teigiamo dydžio pelningumų koreliacija su kitomis KIS grupėmis ir tik porinė pelningumų koreliacija su NTF yra artima nuliui. Aukštas RDF pelningumų porinės koreliacijos lygis nulemtas pasaulio finansų rinkos globalizacijos reiškinio, kadangi ir kiti investiciniai fondai daugiausia dalyvauja užsienio kapitalo rinkose, kai NTF pelningumas nėra tiesiogiai veikiamas pokyčių kapitalo rinkose. Dėl mažo santykinio RDF dydžio net ir aukšto lygio RDF pelningumų tarpusavio koreliacija su kitais KIS nenulemia augančio bendro rinkos VSK dydžio. Atsižvelgiant į nustatytas atskirų RDF pelningumų porinės koreliacijos reikšmes, siūlytina ir ateityje sekti RDF tarpusavio koreliaciją ir jos įtaką bendrai rinkos situacijai, taip pat siektina naudoti dažnesnio (mėnesinio) periodo duomenis, kad būtų tiksliau atspindimos besiformuojančios tendencijos. Taip pat ateityje, esant pakankamai duomenų, siūlytina RDF įtaką Lietuvos finansų rinkai papildomai tirti vertinant šių fondų įtaką rinkos ar

konkreto VP likvidumo pokyčiams. Šiai užduočiai atlikti siūloma naudotis Amihud nelikvidumo indeksu (angl. *Amihud Illiquidity Index*) bei efektyviuoju pasiūlos ir paklausos kainų skirtumu (angl. *effective bid-ask spread*).

9. Lietuvoje registruoti AIF (tarp jų ir RDF) neaktyviai naudoja svertą ir išvestinių finansinių priemonių sandorius, kas neleidžia RDF pasiekti teigiamos ir su pokyčiais rinkoje nesusijusios investicinės grąžos. RDF neturi konkurencinio pranašumo prieš kitus Lietuvos rinkoje esančius investicinius fondus, kadangi negali pasiūlyti rezultatų, besiskiriančių nuo kitų investicinių fondų rezultatų, nors yra potencialiai rizikingesni, taip pat tokių fondų dalyviams taikomi mažesni investuotojų apsaugos reikalavimai. RDF, skirtingai nei PKF ar NTF, neinvestuoja į specifines sritis, kurios yra sunkiau prieinamos paprastiems investuotojams, dėl šios priežasties RDF turėtų teikti galimybę investuotojams uždirbti nepriklausomai nuo rinkos svyravimų. Kadangi analizuoti RDF nesuteikia galimybės gauti investicinių rezultatų, kurie nepriklausytų nuo rinkos krypties, galima manyti, kad jie nėra patrauklūs investuotojams ir tai įvardinti kaip vieną iš priežasčių, paaiškinančių mažą RDF rinkos dalį Lietuvoje. Bendri AIF rinką charakterizuojantys rodikliai rodo, kad dominuojanti rinkos pozicija tenka NTF, tai atsiliepia ir AIF bei bendrai KIS rinkos koncentracijai – dėl didelių NTF valdomo turto apimčių rinka vis dar išlieka stipriai koncentruota. Vis dėlto VSK, kuri atspindi investicinių fondų grupių tarpusavio susietumą, analizė atskleidžia, kad AIF atsiradimas Lietuvoje sumažino VSK reikšmes, todėl net ir nepaisant didelės koncentracijos AIF rinkoje, bei aukšto lygio RDF sąsajų su kitomis KIS grupėmis, AIF Lietuvoje daro teigiamą poveikį investicinių fondų susietumo mažinimo linkme ir prisideda prie finansinio stabilumo gerinimo.

10. PKF rinka Lietuvoje pasižymi itin didele fondų kaita – nuo veiklos pradžios likviduota 66,7% visų įregistruotų PKF. Tai beveik dvigubai viršija bendrą AIF rinkos Lietuvoje vidurkį, kuris siekia 36,4%. Tokias PKF raidos tendencijas Lietuvoje galima sieti su ES struktūrinių fondų teikiamu finansavimu ir su pastaruoju metu populiarėjančiu rizikos kapitalo finansavimu, teikiamu mažoms ir vidutinėms įmonėms. PKF pasižymi veiklos koncentracija vietinėje rinkoje, tačiau analizuojamu metu PKF, registruotų Lietuvoje, atliekami veiksmai nėra plataus masto ir gali būti vertinami tik kaip pavienės investicijos. Atliktų PKF investicijų analizė (1 pabaigtas sandoris) rodo, kad PKF finansavimas nesuteikė įmonei pranašumo ir nepagerino jos veiklos rodiklių.

Vis dėlto tikėtina, kad PKF veikla gali suteikti pranašumą ir geresnes veiklos perspektyvas įmonei, į kurią yra investuota, ypač tam tikruose specifiniuose ūkio sektoriuose, kuriuose vyrauja didelė informacijos asimetrija ir rizikingumas. Bendrame kontekste tampa aišku, kad nagrinėjamu metu PKF atliekamos investicijos yra nereikšmingos, finansavimo sulaukusios įmonės nedemonstruoja geresnių nei rinkos vidurkis veiklos rezultatų, tokios įmonės sukuria tik labai mažą, apie 0,004% BVP dalį, todėl nagrinėjamu metu PKF įtakos šalies ūkiui neturi. Atsižvelgiant į apibendrintus kitų autorių naudojamus PKF veiklos tyrimo metodus, nagrinėjamu metu, kol PKF rinka Lietuvoje yra mažų apimčių ir vystymosi stadijoje, PKF investicinių veiksmų įtaką verslo plėtrai Lietuvoje tinkamiausia tirti pasitelkiant santykinius rodiklius, tačiau ateityje, didėjant PKF duomenų imčiai, siūlytina kaip prioritetinį tyrimo metodą naudoti momentinio stebėjimo regresijas (angl. *cross-sectional regression*).

Analizuotu laikotarpiu daugiausia dėl santykinai mažų AIF valdomo turto apimčių, pakankamai konservatyvaus veiklos būdo ir vis dar trumpo bei nepastovaus veiklos periodo, AIF nei bendrai nei kiekviena šių fondų rūšis atskirai neturėjo kiekybiškai išmatuojamos įtakos Lietuvos ekonomikai.

Tolesnių tyrimų kryptys ir rekomendacijos

Nors analizuojamu metu AIF tiesioginės ar netiesioginės įtakos šalies ekonomikai neturi, tačiau AIF plėtros tendencijos rodo, kad teorinės grėsmės ateityje gali tapti ir realiomis. Naujausių teisinės aplinkos pakeitimų įtakos AIF rinkos raidai, dar nėra įmanoma nustatyti, tačiau tikėtina, kad supaprastinti apribojimai paskatins investuotojus aktyviau rinktis šiuos fondus, taip pat ir fondų valdytojams sudarytos palankesnės sąlygos steigti naujus AIF. Be paminėtų veiksnių ir šiuo metu stebimas NTF turto augimas ir dėl to didėjantis koncentracijos rinkoje lygis, aukšto lygio RDF tarpusavio susietumas taip pat duoda pagrindą ateityje ir toliau aktyviai sekti AIF rinkos vystymąsi.

Ypatingą dėmesį reikia skirti ir RDF investicinės veiklos stebėjimui, kadangi šie fondai aktyviai veikia kapitalo rinkose. Augančios išvestinių finansinių priemonių ir finansinio svarto naudojimo apimtys leidžia manyti, kad ateityje prekyba tokiomis priemonėmis potencialiai bus viena iš sričių, kuri, jei nebus laikomasi griežtų rizikos valdymo modelių ir susiklosčius nepalankioms aplinkybėms, kels grėsmę paties fondo ir finansų sistemos stabilumui. Todėl ateityje rekomenduotina sekti RDF vykdomus investicinius veiksmus, jų investicijų struktūrą ir kryptis, skaičiuoti susietumo

tarpusavyje ir su kitais investiciniais fondais rodiklius, taip pat tam naudoti kuo didesnio dažnumo (geriausia mėnesinius) duomenis.

Viena iš tolesnių tyrimo krypčių neabejotinai yra susijusi ir su jau parengtų AIF įtakos ekonomikai modelių tobulinimu. Dabartiniai modeliai sudaryti sprendžiant duomenų ribotumo problemą, ilgėjant AIF veiklos periodui Lietuvoje, ir atsirandant didesniam stebėjimų skaičiui, sudarytus modelius galima toliau tobulinti ar atnaujinti su papildomais duomenimis.

Mokslinių tyrimų aprobavimas ir sklaida. Mokslinio tyrimo teiginiai ir rezultatai paskelbti 6 mokslinėse publikacijose ir pristatyti 2 tarptautinėse mokslinėse konferencijose.

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