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### **HOW FEMALE DIFFER IN DECISION MAKING FOR PERSONAL INVESTMENT STRATEGY**

**Abstract.** This study investigates Lithuanian females' personal investment peculiarities in line with Australia's case analysis and application as a good practice method. Based on many publicly available research females tend to have less knowledge about finances in general and particularly investment processes; hence, it leads to their lack of interest into investing and the possibility of poor money management. This issue might be solved by investigating why it appears first and adopting the practical example from countries with developed investment market. In the case of comparison of personal investment strategies among Lithuanian and Australian females the two sets of questionnaires have been used to collect the data for further analysis. The main findings revealed by the survey were, that women in Australia had a higher financial literacy level, invested more often, and chose broader variety of investment instruments compared to Lithuanian females. Moreover, the significant discovery of the article disclosed that Lithuanian females chose not to invest due to the lack of additional funds and the shortage of financial knowledge. The main limitation occurred during the research was the lack of the available data on personal investment topic in Lithuania's official statistic sources such as The Lithuanian Department of Statistics. The results of the research contribute towards improving Lithuanian female personal finance and investment areas and could be applied to further studies or used for the education program dedicated to financial literacy among women in Lithuania creation. Furthermore, this article creates an original value to personal finance, investment, and financial literacy areas in Lithuania by introducing an idea to not only conduct more studies in these fields, but also to use comparative analysis and good practice method from the countries that demonstrates high achievements in personal finance and gender equality areas.

**Keywords:** personal investment management, female investment, financial literacy, investor's profile, investing, investment options, investment strategies.

**JEL Classification** G51, G53

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## **ЯК ВІДРІЗНЯЮТЬСЯ ЖІНКИ У ПРИЙНЯТТІ РІШЕНЬ ДЛЯ СТРАТЕГІЇ ОСОБИСТИХ ІНВЕСТИЦІЙ**

**Анотація.** Це дослідження досліджує особливості особистих інвестицій литовських жінок відповідно до аналізу і застосування Австралії як методу належної практики. На підставі багатьох загальнодоступних досліджень жінки, здебільшого, мають менші знання про фінанси загалом та особливо про інвестиційні процеси; отже, це призводить до їхньої незацікавленості в інвестуванні та до можливості поганого управління грошима. Це питання можна вирішити, дослідивши, чому воно з'являється першим, і взявши на озброєння практичний приклад країн з розвиненим інвестиційним ринком. У разі порівняння особистих інвестиційних стратегій серед жінок Литви та Австралії для збору даних для подальшого аналізу були використані два набори анкет. Основні висновки, виявлені в опитуванні, полягають у тому, що жінки в Австралії мали вищий рівень фінансової грамотності, частіше інвестували та обирали більший вибір інструментів інвестування порівняно з жінками Литви. Більше того, виявилось, що литовські жінки вирішили не інвестувати через брак додаткових коштів і брак фінансових знань. Основне обмеження, що виникло під час дослідження, — брак наявних даних на тему особистих інвестицій в офіційних статистичних джерелах Литви, таких як Департамент статистики Литви. Результати дослідження сприяють удосконаленню сфери особистих фінансів та інвестицій жінок Литви і можуть бути використані для подальших досліджень або використані для освітньої програми, присвяченої фінансовій грамотності жінок у Литві. Крім того, ця стаття створює оригінальну цінність для галузей особистих фінансів, інвестицій та фінансової грамотності в Литві, вводячи ідею не лише проводити більше досліджень у цих галузях, а й використовувати порівняльний аналіз і метод належної практики з країн, які демонструють високі досягнення в галузі особистих фінансів та гендерної рівності.

**Ключові слова:** управління особистими інвестиціями, жіночі інвестиції, фінансова грамотність, профіль інвестора, інвестування, варіанти інвестування, інвестиційні стратегії.

Формул: 1; рис.: 5; табл.: 1; бібл.: 15.

**Introduction.** Personal investment strategy creation is one of the most important personal finance topics discussed over the past years. It is the highest importance decision in one's life to choose the right option to invest the available funds to increase wealth. The right decision might lead to future prosperity, financial safety, and broader opportunities. If the personal investment strategy has been created wisely, the investor would be able to get the benefits of high stable returns in the future, increasing his/her income without putting in additional work or effort. Besides, investment processes positively impact economic growth; thus, it is essential not only for the investor but also for the country's economic well-being that the money has been invested.

However, the available statistics distinguish a couple of interesting facts about the investing processes and some of them being that residents of the well-developed and economically more robust countries tend to choose to invest as wealth accumulation more often, males being more active investors than females, the financial education level having the major impact regarding choices of investing and the age tendency to correlate with risk perception directly.

According to many authors (Tengler [1]; Robin, Dominguez & Tilford [2]; Levine [3]; Itkin [4]), women tend to have less knowledge about finances in general and particularly investment processes; hence, it leads to their lack of interest into investment processes and the possibility of poor money management. This issue might be solved by researching why it appears first and adopting the practical example from countries with developed investment market to suggest how females could be motivated to invest more actively.

Since social inequality is one of the critical issues in today's world that must be addressed and the personal investment topic is vital, this paperwork aims to research, analyze, evaluate, and answer the main questions regarding female investors' personal investment strategies in Lithuania and to compare them with Australian female investors. This is crucial to distinguish the main differences to encourage Lithuanian females to invest and as a result to improve their financial understanding, knowledge of investment processes and overall wealth.

**Analysis of recent research and publications.** Many research and surveys conducted in personal investment area have been initiated by banks, stock market or investment related companies in order to analyze the market and the data representing the main findings have been presented in various reports or publicly available articles in Australia and Lithuania [5—10]. Also, research on the global financial understanding and education level has been performed in order to evaluate the overall situation in all of the countries around the world [11]. The combination of these research and paper works outcomes provide the profound outlook of the current female situation in finance and investment areas in both countries.

**Research methodology and methods.** To conduct the survey, it is a must to perform the selection of suitable participants. Since this questionnaire has been dedicated to observing and analyzing female personal investment strategies in Lithuania and Australia, the target group and participants were women in Lithuania and Australia (*Table*). The assumption was made that it is not possible to distribute the survey to the whole population in either of these countries; moreover, fund limitation is considered [12]. The sample that would represent all the population in this survey must be selected. Notwithstanding, while performing the research, the issues and errors could occur if the sample scale size would be selected too narrow; however, the same dilemma might appear with too extensive sampling that is why the medium proportion group of participants should be chosen to get the most accurate results [13; 14]. A simple random sampling technique has been chosen, and the persons who would take part in this survey were determined using Slovin’s formula [15]:

$$n = \frac{N}{(1 + Ne^2)},$$

where  $n$  = Number of samples;  $N$  = Total population;  $e$  = Error tolerance (level).

The variables used during the thesis research for Slovin’s sample determination formula have been presented in the table below.

Table

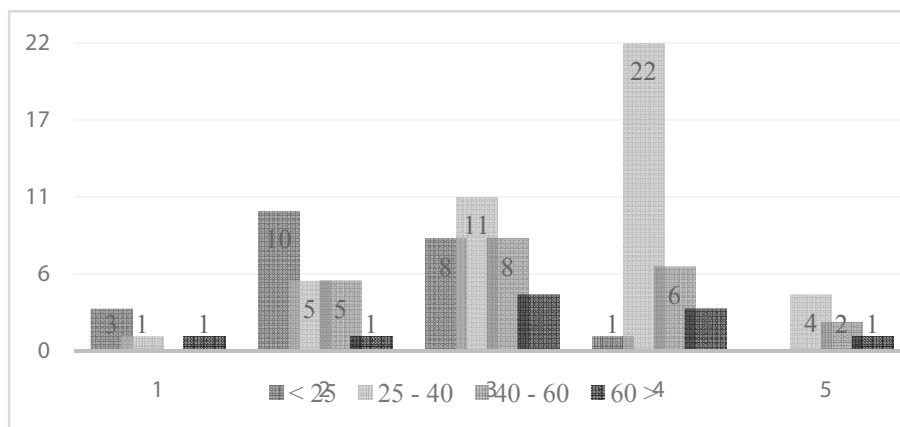
**Research samples in Australia and Lithuania**

Variables	Lithuania	Australia
$N$	1500000	12600000
$E$	0,1	0,1
Confidence level	95 %	95 %
$n$	~100	~100

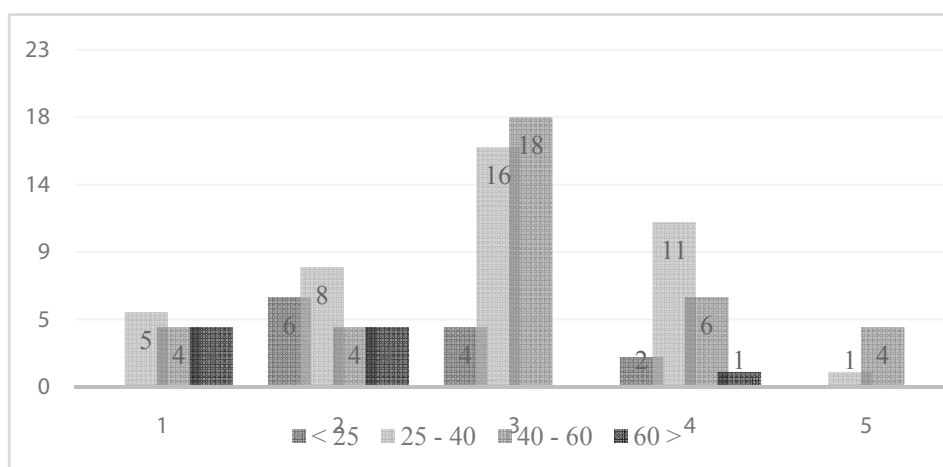
Source: created by authors.

Accordingly, 100 recipients sample size has been calculated as an adequate number to represent the all-female population in Lithuania and Australia with 95 % of certainty that the population would express an identical opinion to the matter and 10 % of marginal error possibility that the answers fairness could fluctuate to the negative or positive side. Furthermore, to obtain the required data for further analysis, questionnaires have been formed with questions about demographics, personal finance, and personal investment strategy areas, allowing them to figure out the participant profile’s statistical information. A variety of different structure questions have been prepared to gather accurate material for the topic analysis, and they have been introduced in the form of a survey placed in Google form and Anketa.lt and distributed through personal contacts and social media.

**Research results.** The information has been introduced by Global Financial Literacy Survey [11] conducted in 2015 that 39 % of Lithuanians were indicated as financial literate; in contrast, Australia has been selected as one of the countries with the highest literacy rates globally, and its financially knowledgeable residents substituted for 64 % out of all Australians. Additionally, it was indicated that in general females’ financial literacy levels were lower than men and this can be applied to both countries. These findings have also been confirmed by the survey used for this article where females from Australia evaluated themselves as having more financial knowledge compared to Lithuanians as presented in figures (*Fig. 1, 2*) below.



**Fig. 1. Self-evaluation of knowledge level in finance area by Australian females**  
 Source: created by authors.



**Fig. 2. Self-evaluation of knowledge level in finance area by Lithuanian females**  
 Source: created by author.

The main results collected using the questionnaire and introduced by participants answers were that Australians attended more courses whereas Lithuanians either graduated from a formal education institution or did not pursue financial knowledge; thus, a higher percentage of the female participants claimed to have a greater level of knowledge in a field compared to Lithuanian women. The findings also led to the assumption that financial literacy is a major issue among Lithuanians, they lack the knowledge in this field, and changes should be implemented to improve the situation. After comparing Australia and Lithuania based on financial education and literacy level, the evidence leads towards the suggestion that Australia could be used as an example for the development of the financial education stimulation plan and state improvement in Lithuania.

The next section of the survey was concerned with the comparative analysis of personal investment strategies among Australians and Lithuanian females. The main aspects that have been observed and analyzed were workforce structure, monthly salary, personal investment options among participants who invest and the reasons behind the decision not to invest among females in Australia and Lithuania.

Significant findings provide important insights regarding employment and education structure in both countries. The main distinctions were that majority of Australian females has been studying to improve their current skills and working for the company, almost as half as much as working for the employer also owns their own businesses and only 8 % of respondents has been retired. It is worth mentioning that around 50 % of respondents were involved in two activities at once for example working for the company and owning their own business, owning the business

during the time of pension, or studying while working for the company or running their own venture. In contrast, Lithuanians mainly chose to be involved in one activity at once, unless it was studying while working for the employer. In addition, it is worth mentioning that with the combination of overall higher average salary in the country Australian females have the ability to access more spare funds that could be dedicated for the investing purposes. This information stands out in a figure (Fig. 3) below:

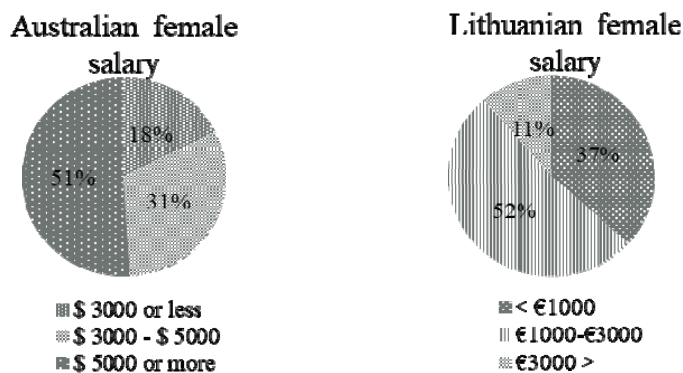


Fig. 3. Salary ranges among Australian and Lithuanian females

Source: created by authors.

As indicated previously the next step was to research current personal investment strategies and management tendencies among investing females in both countries. To achieve this goal, the question dedicated to ask the survey participants what investment options they prefer as of present day has been introduced. To compare the differences between Australian and Lithuanian female respondents the main discovery has been presented in further section of this article (Fig. 4).

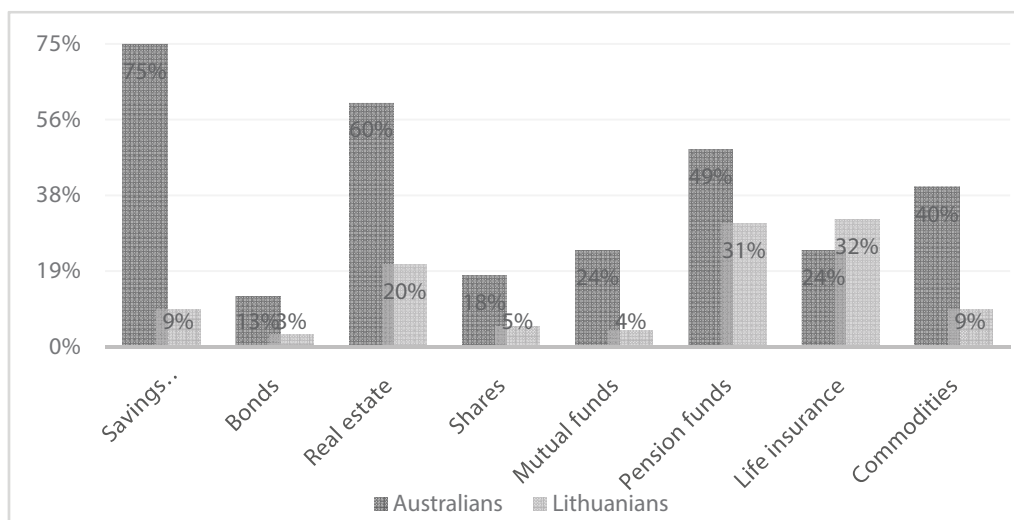


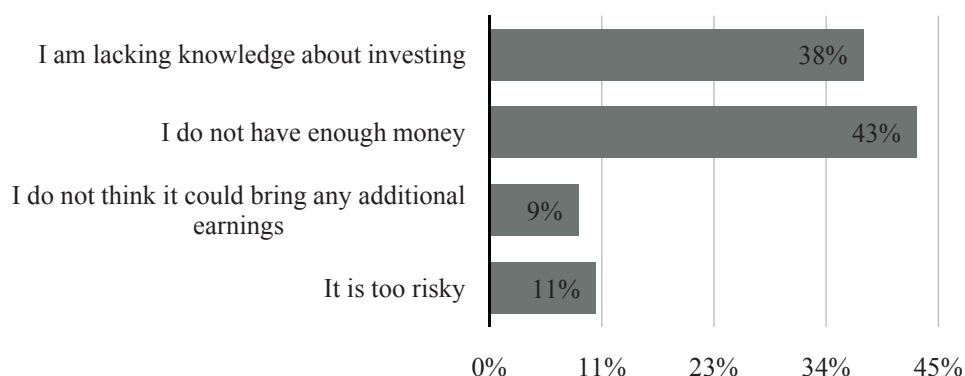
Fig. 4. Personal investment option selections among Australian and Lithuanian females

Source: created by authors.

This figure is quite revealing in several ways. What stands out in the figure is that Australians were more likely to invest overall than Lithuanians and the main reason that could be seen from the evidence above is the variety of available investment instruments in the country. As an example, the simplest investment options savings account could be taken. Since in Australia there is a possibility to get interest rates if you are holding your money into savings account and it could be as high as 3 % per month many females, who tend to place their funds into as safe as possible investment instrument prefer this opportunity. The second most common investment alternative is real estate the third pension funds and fourth commodities, respectively. In comparison Lithuanians choose to invest into life insurance, pension funds, real estate and

commodities or savings account. The reasons for these selections could be the education and information availability in the country on each of the investment instruments as well as uncomplicated as possible availability to access these investments.

To clarify the main reasons why Lithuanian females, hold back reading investing compared with males from the same country as well as females in Australia, the other set of questions has been created and the collected data has been summarized. The main findings were indicating that Lithuanian women rather choose to save than invest and the fundamental reasons for that was either lack of the knowledge and understanding of the investment tools or lack of side funds that they could afford to lose since investing is inseparable from risk (*Fig. 5*).



**Fig. 5. Reasons for not investing among Lithuanian females**

*Source:* created by author.

The main reasons for not investing among Lithuanian females have been lack of knowledge about the subject 38 % out of all responders that answered they are not investing selected this option, but the most important impact to the choice has been made by lack of money as 43 % of females selected this as the main reason.

Overall, these survey results provide important insights into the comparative analysis of personal investment strategies among Australians and Lithuanian females. The data collected by the first couple of questions indicated that most Australian females tend to participate in several activities at once that generate returns; hence, their salaries and funds are relatively higher than Lithuanian women. The second important finding was that there is a broader selection of investment tools; consequently, Australians are familiar with a substantial variety of investment instruments, and women in this country invest in diversified investment instruments. The most significant discovery established in this article was that Lithuanian females chose not to invest due to the lack of additional funds and the shortage of financial knowledge, such as understanding investing processes and investment tools.

**Conclusions.** According to the global surveys, Australians, in general, tend to obtain higher financial education than Lithuanians — 64 % of Australians and 39 % of Lithuanians have been assessed as financially literate. Based on the survey question, which concentrated on Australian and Lithuanian female financial literacy level self-evaluation, the results matched with the global surveys — Australians evaluated themselves as knowledgeable or highly knowledgeable in the investment field. In contrast, Lithuanians stated to have a medium amount of understanding. The research also revealed that Lithuanian females are mainly obtaining their education from the formal degree whereas Australians continuously pursue additional education in the form of courses, seminars, or publicly available training. The main personal investment strategies among Australian females were investments into saving accounts, real estate, pension funds, commodities, life insurance, shares, bonds, and mutual funds. In comparison, Lithuanian females prefer to save, and the main investment strategies are life insurance, pension funds, but real estate, commodities, shares, bonds, and mutual funds being unpopular investments with as low as 5 % for shares and 3 % for bond investment selection during the survey.

Since education should be the priority in pursuance of a better quality of life for humanity and Lithuania and female financial literacy is not an exception, the suggestions would be to prepare and introduce more pieces of training dedicated to women that would concentrate on investment and personal finance topics and would be available to broader female groups in Lithuania and especially concentrating on regional areas in order to minimize the social separation first of all among genders second of all among the country.

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