Project Title:

Increasing Financial Literacy and Likelihood of Investing in Financial Instruments Among University Students in Malaysia, Kyrgyzstan and United States.

Project Team

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Duration of the Project: 18 months

Executive Summary

According to a study by Organization for Economic Co-operation and Development on Financial Literacy in Kyrgyzstan, only 17% of young adults could score the minimum points for knowledge of Financial Literacy. This highlights the urgent need for tailored financial education programs targeting university students in Kyrgyzstan. Access to formal financial education courses and resources is crucial in equipping students with the necessary knowledge and skills to navigate the increasingly complex financial landscape.

Financial literacy is a crucial skill that directly impacts an individual's ability to manage their finances effectively. As evidenced by Sultakeev and Bayrak's study on the impact of microfinance on poverty in Kyrgyzstan (Sultakeev & Bayrak, 2016), the lack of financial literacy can lead to adverse outcomes, such as an increased likelihood of falling into poverty due to high interest rates on microcredit loans. This is especially significant in rural areas, where access to financial education and resources may be limited (Lusardi, 2019).

To compare the financial literacy of university students in Malaysia, Kyrgyzstan, and the United States, it would be beneficial to conduct a comprehensive survey or study that assesses their knowledge of financial concepts, investment practices, and understanding of financial instruments. By including students from these countries and gathering data on their current financial literacy levels, common reasons for their knowledge or lack of knowledge on the topic can be identified. A comparative analysis of the survey results from these diverse student populations could provide valuable insights into the factors that contribute to their financial literacy. Understanding these common reasons can help inform policymakers and educators about the specific needs and challenges faced by students in each country.

This study sets out to identify factors that can lead to a better understanding of personal finance among university students in Malaysia, Kyrgyzstan and US and to identify roadblocks in their path to financial literacy with a view to equipping them with the right skills to be financially literate. Thus, the study will concentrate on a two-prong approach to meet these objectives:

1) To identify the attitudinal and motivational factors that can lead to higher financial literacy among university students.
2) To determine possible intervention methods to improve the financial literacy and intention to invest in university students.

To achieve these objectives, this study will use the Theory of Planned Behavior (TPB) by Azjen (2021) to identify the variables that influences the university students when they are deciding to learn about financial literacy. To ensure that the present study's research gaps, research questions, research objectives and hypothesis are all in line, Zikmund's (2003) suggestion of an "Alignment Table" is created to guide this study
The research findings can inform policymakers, including the Finance Ministry and the Ministry of Higher Education, US Education Department in developing effective strategies to support secondary students in their financial education needs as they enter university. By disseminating the research findings, this project aims to elevate financial literacy among university students in Malaysia, Kyrgyzstan and United States.

Project Objectives

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Literature Review

Financial Literacy is defined as the Awareness, Knowledge, Skills, Attitude and Behavior necessary to make sound financial decisions (Financial Education Network, 2019). Also, following Lusardi (2019), financial literacy can be thought of as consisting of 2 parts:

1) the understanding and knowledge of financial concepts (e.g., inflation) and risk; and
2) the ability to apply such concepts and knowledge skillfully with confidence and motivation which brings about effective decisions across various financial contexts, leading to a financially stable individual and society.

Samsuri et al. (2017) also found significant differences between gender and financial literacy whereby females scored on average higher than males. It is important to also note that the national survey by the Financial Education Network (2019) only measured financial literacy confidence and not the skills itself. Hence, more research needs to examine the financial literacy skills of Malaysians and examine differences in ethnicity, religion, gender, and age.

Strong financial literacy in Malaysians would be crucial to personal financial well-being as multiple studies have found strong correlation between financial literacy and smart financial management (Ahlam & Sheerad, 2021; Lotto, 2020; Meyll et al., 2020; Murniati et al., 2020; Nawi et al., 2020; Wang et al., 2011). Smart financial management would include activities such as investing, saving and other means to make money grow to have a financially stable life. Other factors examined that studies found to have influence on financial management ability are social norms (Cucinelli & Bongini, 2018; Lotto, 2020; Raue, 2020; Széles & Szabó, 2022). As stated by Cucinelli & Bongini (2018), in Italy, relatives and family is crucial in predicting whether their children invest their money. In Malaysia, according to Financial Education Network (2019), lower income household tend to have lower financial literacy which is in line with the study by Lotto (2020). By developing financially literate in the younger generation may form a society with influences each other to also become financially literate. Hence, teaching financially literacy is beneficial not just to the individual but society as a whole. More research however needs to examine social norm influence on financial management abilities Another important finding by Cucinelli & Bongini (2018), the top financial literates (scoring full marks in their test) were significantly different from others in predicting investing behaviors. This opens up questions to whether it was financial literacy that led to better financial management/planning or that it was because the students originally already had high interest in becoming financially skilled which led to them working hard to increase their financial literacy. Studies so far examined attitude towards financial behaviors (spending, saving, investing) but not towards becoming financially literate. Hence, it is possible that personal interest in investing or saving money is driven more due to interest (attitude) in becoming rich and financially stable which developed from social norm factors (e.g., family/media). Hence, financial literacy may just be a tool rather than a factor which leads to wise financial management.

There are also other studies finding different factors influencing financial behaviors. The study by Raue et al. (2020) found that social comparison and confidence will boost motivation of students to have higher savings. Furthermore, it was found that poor saving rate individuals with higher likelihood of social comparison and from low-income households had a higher increase in savings. Therefore, increasing financial literacy scores in students without developing interest, confidence and self-control may be ineffective hence requires additional examination. For this study, it was decided that taking samples from scholarship recipients from lower income families will be able to help investigate this phenomenon. This sample will be compared to regular self-funded students for analysis.

Factors such as fear of death and old age were also seen to increase saving behaviours (Zaleskiewicz et al., 2013). Attitude, confidence (in the ability to invest and save), emotions (the ability to limit spending habits due to desire and wants) and personality are hence important factors to be examined. Besides that, it is also unknown whether learning financial literacy from young differs from learning it later in life and would individual who learn financial literacy from young have better financial management skills. This is an area that remain under-studied which will be explored in this study.

Financial literacy is influenced by attitude (the perception of spending, saving, investing) and social norms which is in line with studies finding that low-income households have lower financial literacy (Ahlam & Sheerad, 2021; Financial Education Network, 2019; Lotto, 2020). However, the study by Ahlam & Sheerad (2021) failed to clearly describe what types of attitudes towards financial behaviors they were measuring. Another study by Nawi et al. (2020) examined the influence of motivation, individual skills (education) and social norms on financial literacy. The three factors were effective at predicting financial literacy with motivation and social norms having the highest influence (high beta). As the study was conducted in a private university, Nawi et al. (2020) stated that it is possible that students were not given responsibility financially as all financial expenses were managed by their parents and hence influence their personal financial literacy. It is therefore important to also look into public universities in Malaysia as the background and upbringing of public university students may differ and hence provide different results. Understanding the various factors that can affect the motivation for financial literacy and investing can inform efforts to refine the integration of financial literacy education into the Malaysian Qualification Framework.

Overall, increasing financial literacy is beneficial as it promotes good financial management and develops a society of financially skilled individuals. Being financially stable leads to a successful, thriving and healthy nation. This is in line with one of the six core concepts of Malaysia Madani, which is economic wellbeing through a culture of knowledge and diverse views. It may also help the university students in Malaysia, Kyrgyzstan and US become more aware on how to meet the United Nations Sustainable Development Goal # 1 (End Poverty in all its forms everywhere). However, purely teaching financial literacy may not be sufficient (according to past studies) and hence more factors need to be examined to develop a plan that would effectively communicate the importance of financial literacy and inculcate a culture of investment among university students.

Research Methodology

This study employs a rigorous and reliable quantitative process to evaluate the relationship between financial literacy and behavior, guided by the Theory of Planned Behavior. The study consists of several important steps that thoroughly analyses the factors that is hypothesized to impact financial literacy that influences the behavior that promotes financial literacy among university students in Malaysia Kyrgyzstan and US.

Data Collection and Pre-Processing

To obtain relevant data, a survey questionnaire based on the Theory of Planned Behavior (TPB) will be created as the research instrument. This questionnaire will be employed to gather responses from university students in Malaysia Kyrgyzstan and US. This study sample size would be 465 participants for three countries as this number would give the required reliability according to

G*Power analysis. Non-probability sampling will be used to select the participants due to the total number of university populations among the university students in these two countries being unclear. The collected data will then be subjected to a preprocessing stage to address any data quality issues, such as missing values, outliers, and inconsistencies. This will involve data cleaning, imputation of missing values, if necessary, outlier detection, and normalization of data to ensure its suitability for analysis.

Identification and Analysis of Significant Factors:

The resulting data will then be modelled using the Theory of Planned Behavior in SmartPLS. The resulting coefficients provided by the model will be extracted and analyzed to determine the relative significance of the factors. In addition, statistical analysis techniques, such as correlation analysis and hypothesis testing, will be employed to examine the relationships between these factors and financial literacy and investment intention. This analysis will provide a better understanding of the factors influencing financial literacy and intention to invest among university students in Malaysia, Kyrgyzstan and US.

Recommendations and Interventions:

The resulting analysis will identify and verify significant factors and confirm/disconfirm the study's hypothesis. Due to this, practical recommendations and interventions will be developed to help university students in all countries to improve their financial literacy. These recommendations will be formulated based on the insights gained from the analysis and will consider factors such as feasibility, cost-effectiveness, and ease of implementation. The recommendations will be communicated in a clear and concise manner, emphasizing the importance of addressing financial literacy and investment in Malaysia, Kyrgyzstan and US. The findings and proposed interventions will be presented to relevant stakeholders, including the Finance Ministry and Ministry of Higher Education, US Department of Education and policymakers in Kyrgyzstan, with the aim of promoting their implementation and improving financial literacy in 3 countries.

Expected Output/Outcomes:

The expected outcomes of this study are expected to provide insights into financial literacy of students in the institutions of higher learning in Malaysia, Kyrgyzstan and US and provide insights for the development of effective methods to elevate the financial literacy of university students in three countries. The understanding of factors affecting financial literacy and intention to invest will contribute to the development of a future financial literacy curriculum for university students. The analysis of these factors is expected to shed light on the underlying predictors for financial literacy. These predictors, such as perceived ease of use, perceived usefulness, parental influences, religiosity, peer pressure, mass media and perceived behavioral controls could be the possible catalysts for financial literacy and investment intention. The study aims to uncover correlations, patterns, or trends that explain the relationships between these factors and the occurrence of such investment behaviors.