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Selection Determinants in College Students' Financial Tools

Wei-Ting Huang[1]

[1] Department of Education, National Chiayi University, Taiwan

Correspondence: Wei-Ting Huang, Department of Education, National Chiayi University, 85 Wenlong Minshong, Chiayi County, Taiwan. Tel: 11-886-986-395-789. E-mail: pooh04193324@gmail.com

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Abstract

Recently, considerable concern has arisen over the complex financial markets, which are inclined to require more individual responsibility. Accordingly, students have to bear more responsibility for their financial management. Nevertheless, in a sluggish economy with high unemployment, the commercial events during the last decade have rendered the transition into financial independence more challenging for social freshmen. In addition, some statistical information has revealed the negative outgrowth that occurred in the wake of student loans and the reduction of beginning salaries. Given the aforementioned hidden risks of finance and the importance of money management, we thus endeavored to investigate the factors students consider when choosing financial tools. For the sake of providing students with information for reference, we delivered a similar questionnaire to professionals in the field. We used the received data to examine the gap between experts' views and students' perceptions and then inferred possible reasons for the comparison results.The AHP serves as the chief instrument for calculating relative importance and weighting the significance of the factors. We sent the questionnaires to 140 college students at National Chiayi University and 20 professionals in the financial field and 20 professionals in financial field. The general results indicate that opinions differ among individual students, and opinions of students are rather different from those of the experts; thus, we propose that financial institutions should take different opinions into consideration when designing their financial products.

Keywords: selection determinants, financial tools, college students

1. Introduction

In recent years, considerable concern has arisen over the complex financial markets, which are inclined to require more individual responsibility (Letkiewicz & Fox, 2014); therefore, students have to bear more responsibility for their financial management. Nevertheless, in a sluggish economy with high unemployment, the commercial events during the last decade have rendered the transition into financial independence more challenging for social freshmen. In addition, some statistical information has revealed the negative outgrowth that occurred in the wake of student loans and the reduction of beginning salaries.

According to the Department of Statistics in Taiwan, the number of applicants for student loans increased by more than 550,000 between 1994 and 2013, indicating that students will be in debt right after graduation. The other data demonstrating the potential crises for new graduates is the reduction of beginning salaries. As estimated by the Ministry of Labor, beginning salaries of university graduates in Taiwan declined from 27,462 to 26,915 New Taiwan (NT) dollars in 14 years (1999–2013); however, the cumulative price index rose by 15% within the same period. In these circumstances, young adults are confronted with more difficulties to generate revenues and expenditures in a balanced manner. As a result, money management and asset accumulation are of paramount importance at this juncture. For younger generations, building economic capital serves as their top-most priority as this is the phase in which they can start to prepare for their future lives. However, not everyone knows how to efficiently save their money. Most individuals tend to lack self-control and fail to spend in moderation. In other words, people with low self-control may fail to spend money efficiently (Faber & Vohs, 2004; Verplanken & Herabadi, 2001). In view of these situations, the young generation ought to prepare for personal finance in a precarious environment and do their utmost efforts to manage risks.

Given the aforementioned hidden risks of finance and the importance of money management, we thus endeavoured to investigate the factors students consider when choosing financial tools. For the sake of providing students with information for reference, we delivered a similar questionnaire to professionals in the field. We used the received data to examine the gap between experts' views and students' perceptions and then inferred possible reasons for the comparison results.

2. Literature Review

Money management, which comprises planning, investigating, and implementing one's financial selection, has exerted tremendous effect on daily lives (Elbogen, Tiegreen, & Vaughan, 2011). For instance, in work environments, a fundamental knowledge of money management is required to understand how earnings, taxes, and other financial investments relate to each other. Moreover, in living environments, personal budgets (such as bills, groceries, bank accounts, savings) also involve financial management (Dunn, Wewiorski, & Rogers, 2008). Certain economic variables can impact one's finances; hence, personal budgeting must be done by individuals to limit their daily expenses and save money (Maharesi & Hermawati, 2014). In order to figure out what aspect students and experts perceive as important, we divided the nine determinants into three dimensions: profit, risk, and convenience. These dimensions will be deliberated in the ensuing parts.

2.1 Profit Dimension Discuss

2.1.1 Profitability

Probability, measured with income and expenses, is the fundamental goal of all financial activities. Neither businesses nor investors will survive in the long run without making a profit; hence, it is crucial to estimate past and present profitability and plan for upcoming profitability. Profitability can be defined as (1) accounting profits and (2) economic profits. Accounting profit is defined as the total earnings of a corporation, which include overall costs of business operation such as depreciation, interest and taxes. And economic profit stands as the extra profits one would have made which considers assorted factors such as inflation and interest rates (Erdogan & Al, 2010).

2.1.2 Tax Deduction

Tax regulations that permit various expenses to be deducted from taxable revenues differ from region to region. Generally, tax deductions are defined as the removal of adjusted gross income to benefit consumers or investors by lowering the entire tax-expense liability (Poterba & Sinai, 2008). Due to the advantages that tax deductions offer, certain governmental policies are constantly utilized to encourage taxpayers to engage in activities with societal benefits, such as charitable donations or insurance (Okten & Weisbrod, 2000).

2.2 Risk Management

Throughout modern society, the concept of risk is pervasive and has also received widespread attention (Tulloch & Lupton, 2003), whereas definitions of risk have differed considerably within the last decade. Paul (2000) stated that risk is a result of societal concern about coping with the hazards of contemporary life whereas Alona (2010) proposed that risk is a notion with no single accurate definition on account of its complexity and that is influenced by numerous aspects such as cultural, economic, and genetic factors. Moreover, numerous researchers have suggested that risk is also relevant to social and political issues (Petersen & Wilkinson, 2008), while others regard risk as dangerous and harmful (Kettles, 2004; Slovic, Peters, Finucance, & MacGregor, 2005). Hence, the issue of risk management is crucial for individuals. Risk management has expanded drastically in its wide-stretching influence and significance since the middle 1990s. During these years, risk management has been transformed from "management control" to a benchmark of efficient administration for organizations or individuals. Stulz (1996) indicated that risk management represents selecting which risks to bear based on numerous considerations rather than minimizing risk by escaping from the obstacles. For a specific statement of risk management, Cappels (2004) suggested that four steps are required to evaluate and manage risk: identification of potential risks, quantification of risks, development of a reaction to risk, and risks reaction control.

2.2.1 Interest Rate Risk

Interest rate risk is relevant to commercial banks' possible losses that result from the uncertainty of a variable interest rate**.** As commercial banks can sustain losses in business if rates fluctuate unexpectedly, managing the interest rate risk is critical for a bank to survive (Arida, Bacha, & Resende, 2006). Hence, financial regulators ought to evaluate and control it cautiously as interest rate spikes can devastate the entire financial system (William & Mahmoud, 2014).

2.2.2 Investment Risk

When making investments, risk is a critical component that deserves consideration. Investment risk refers to the uncertainty of future investment income and the possible losses of revenues or even capital (Arrow & Lind, 2014). Generally speaking, most investors prefer investments with less risk as they will be more lucrative. Nevertheless, some might consider high-risk investment as favourable due to the better return (Maudos, Pastor, Perez, & Quesada, 2002).

2.2.3 Default Risk

In our research, we focus on the default risk of banks or financial organizations rather than investors. Default risk (also called credit risk), a kind of risk in bond investment, is generally defined as the possibility that banks might fail to pay back the principal and interest (Neal, 1996). Default risk also refers to the occasion when companies are incapable of paying the required disbursements on their debt responsibilities (Athreya, Tam, & Young, 2012). Neal (1996) stated that default arises when debtors (banks) are unable to carry out financial obligations (fulfilling interest payments or repaying loans).

The rate of credit risk typically upsurges during a period of economic downturn as individual income deteriorates within the phase, rendering it more difficult to pay back the required debt and interest payment. Meanwhile, the probability of credit risk declines during economic progresses as ample revenues will lower default rates (Lowe, 2002).

2.3 Convenience

When it comes to investment, the capital threshold is the most preliminary consideration for investors. In general, investing in funds requires less capital than investing in stocks, making fixed deposits, or making demand deposits. In Taiwan, it requires at least 100,000 NT dollars for one to make a fixed deposit (in bank or post office). For those who invest in the stock market, much capital is demanded, meaning it might be unaffordable for new graduates with low income to invest in stocks. Investing in funds requires the lowest capital, relatively speaking, and may come as the priority for investors. No specific capital threshold is required to purchase funds; even only 1,000 NT dollars per month are permitted.

In addition, investors do not need to constantly note the condition of the financial market as the professional investment agent will help navigate the situation. Unlike investing in funds, stock investors must continuously be attentive to the rise and fall of stock prices and global economic fluctuations.

Another critical factor that deserves cautious consideration is the flexibility of capital application. For example, with deposit insurance, although the capital threshold is also low, the insurance contract clause renders it hard to withdraw funds at any time. Investors cannot receive a refund until the expiration date, and no interest is paid before the assumed premium term. Investors can only withdraw money by cancellation. However, while investing in funds, investors are allowed to decide whether or not to purchase it themselves; hence, it offers rather high flexibility for capital application when investing in funds.

3. Methodology

3.1 Reasons for Adopting the Analytic Hierarchy Process

The chief purposes of this investigation were to identify students' and professionals' major consideration while selecting financial tools. From the data of measuring the relative importance of each considering element, we examine the gap between experts' views and students' perceptions. The AHP serves as the chief instrument for calculating relative importance and weighting the significance of the factors. The essential tactic of AHP is to resolve a complex problem into several tiny problems that are more easily settled and also clarify the subordinate relationships among each of the elements being inspected. AHP functions to simplify and reform complicated problems into an organized hierarchy. We adopted AHP as our major instrument as it contains numerous strengths: (1) gathering opinions from experts; (2) calculating relative weights for individual factors of the hypothesized model; (3) validating the consistency of the ratings; (4) helping to select the best decision from many complicated options (Saaty, 1990).

AHP is appropriate for this research as it presents the relative importance of every factor, and the factors are relative measure instead of objective determinant. We thus designed an AHP questionnaire, and the relative weights of the elements were defined by comparing in pairs of verbal judgements.

Based on the previously reviewed literature, the AHP structure was designed. As Figure 1 shows, the main goal which is to choose the finest financial tool, is located in the uppermost level; the second level is comprised of the three chief dimensions (i.e., profit, risk, and convenience); and the third level is comprised of the factors for considering the dimensions: high profitability, few tax deductions, few administrative expenses, interest rate risk, investment risks, default risk, low capital threshold, simple procedure, and high flexibility.

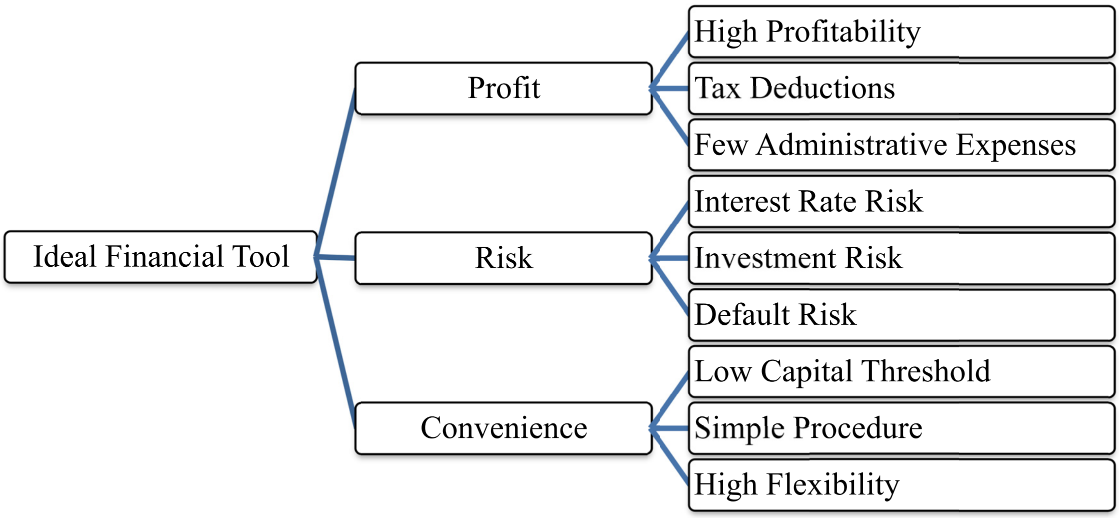

Figure 1. AHP structure

3.2 Questionnaire Design

The questionnaire consisted of two segments. The first one included questions about the participants' demographical information, and the second one comprised 12 pairs of questions including 3 dimensions and 9 factors for AHP analysis.

3.3 Research Participants

We sent the questionnaire to 140 college students at National Chiayi University and 20 professionals in the financial field. A total of 130 questionnaires from students and 20 questionnaires from experts were received and validated for the AHP analysis.

4. Research Results

4.1 Participants' Demographic Information

The sample was comprised of 130 students: 49 (38%) males and 81 (62%) females. Of these, 45 (34%) participants were from the social sciences field, 42 (33%) from science and technology, and 42 (33%) from business.

4.2 AHP Results

Microsoft Excel was adopted to conduct the AHP procedure in our research. More than two alternatives constitute the second- and third-level AHP procedures; therefore, we applied eigenvector consistency tests to confirm the reliability and validity.

The research results of the AHP analysis (Table 1) indicated that students attach much more importance to the "profit" aspect (.338) than the experts, who are more concerned about "risk" (.451) and "convenience" (.225) than students (.449 and .213, respectively). This might be due to students tending to have more desire for material goods, so they might desire money. As they do not possess adequate experience in the financial market, they tend to neglect the aftermath that potential risk might bring about. On the other hand, as students do not know much about the operations of the financial market, they might also ignore the complex procedure. Although the professionals also need money, they have more experience and know more about the potential negative effects of that risk as well as the benefits that operational convenience can bring. In addition, most professionals have to take care of their own families, so they prefer investments with constant returns and low risk rather than high-paying investments with higher risk.

Table 1. Weights of the three dimensions perceived by professionals and students

Professionals		Students	
Aspect	Weight	Aspect	Weight
Profit	.324	Profit	.338
Risk	.451	Risk	.449
Convenience	.225	Convenience	.213

As Table 2 shows, female students consider the profit aspect more than male students. Nevertheless, male students put much emphasis on the risk aspect. For the convenience aspect, opinions of female and male students are similar. Generally, male students hold a similar opinion of profit, risk, and convenience as the professionals.

Table 2. Weights of the three dimensions perceived by male and female students

Males		Females	
Aspect	Weight	Aspect	Weight
Profit	0.314	Profit	0.354
Risk	0.473	Risk	0.434
Convenience	0.214	Convenience	0.212

Business students put much emphasis on the convenience aspect when making investments, although social science students regard the profit aspect as more important. Despite the fact that opinions of business students are generally considered closer to those of the professionals, opinions of students in science and technology were more similar to the experts' opinions in this study.

Table 3. Weights of the three dimensions perceived by students from different fields

Social Sciences		Science and Technology		Business	
Aspect	Weight	Aspect	Weight	Aspect	Weight
Profit	0.304	Profit	0.344	Profit	0.366
Risk	0.477	Risk	0.436	Risk	0.432
Convenience	0.218	Convenience	0.220	Convenience	0.201

The results for the third level of the AHP analysis (Table 4) indicated that investment risk (.214 and .288) was regarded as the most crucial factor by both professionals and students. Professionals thought default risk (.164) was the second important factor, followed by high profitability (.162), whereas students viewed high profitability (.192) as their second concern, followed by default risk (.112).

Table 4. Weights of the determinant factors

Professionals			Students		
Rank	Item	Weight	Rank	Item	Weight
1	Investment Risks	0.214	1	Investment Risks	0.288
2	Default Risks	0.164	2	High Profitability	0.192
3	High Profitability	0.162	3	Default Risks	0.112
4	High Flexibility	0.135	4	Interest Rate Risk	0.102
5	Tax Deductions	0.088	5	High Flexibility	0.094
6	Few Administrative Expenses	0.074	6	Tax Deductions	0.089
7	Interest Rate Risk	0.073	7	Low Capital Threshold	0.054
8	Simple Procedure	0.050	8	Few Administrative Expenses	0.038
9	Low Capital Threshold	0.039	9	Simple Procedure	0.031

5. Conclusion and Suggestions

As examining how students define an ideal financial tool is a fundamental requirement for guiding them to select a suitable one that accords with their desires, this research endeavoured to classify the chief factors of financial tool selection recognized by students and measure the relative importance of each factor.

Table 1 indicated that most experts emphasized the dimensions of risk and convenience more whereas students considered profit to be more important. One possible reason for this phenomenon is that students tend to have more desire for material enjoyment, so they need more money. In addition, students lack experience in the financial market, so they might also neglect the complex procedures. On the other hand, experts have more experience and know more about the possible negative effects of risk and benefits that operational convenience will bring; as a result, they prefer investments with constant returns and low risk rather than high paybacks and high risk.

Table 2 showed that female students consider the profit aspect more than male students, who put more emphasis on the risk aspect. Both female and male students have similar opinions about the convenience aspect. Generally, male students hold similar opinions on profit, risk, and convenience as the professionals.

Table 3 demonstrated that business students emphasize the convenience aspect more when making an investment while social science students regard the profit aspect more. Although business students are generally expected to have opinions more like those of the professionals, opinions of students in science and technology were more similar to the experts' opinions in this study.

The third level of the AHP analysis (Table 4) showed that investment risk was considered the most crucial element by both professionals and students. Default risk and high profitability were included in the top three important factors (yet the ranking differed among experts and students).

These general results indicate that opinions differ among individuals; thus, we propose that financial institutions should take different opinions into consideration when designing their financial products. Financial institutions such as banks and insurance companies should focus more on customizing their products to be in line with the needs of students from different backgrounds.

Moreover, opinions of the students are rather different from those of the experts. As a result, students ought to acquire greater exposure to financial knowledge so that they can enhance their competence in fiscal management. In addition, higher educational institutions should provide relevant courses or seminars for students to improve their capability in selecting and using financial tools.

Given our results, we highly suggest that a follow-up investigation containing financial tools such as stocks, funds, fixed deposits, demand deposits, deposit insurance, and investment-oriented insurance be conducted to assist students in choosing the ideal financial tools.

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