

Financial Literacy In The Military: A Relationship Between Financial Knowledge, Financial Attitude and Financial Behaviour

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Abstract

Purpose

Financial literacy in soldiers is very important in securing life, especially after retirement. This is because a person's level of financial literacy will determine the level of financial planning that one needs to plan from the beginning. The main purpose of this study is to examine financial literacy in the military.

Methodology

This study examines financial literacy in soldiers using three main variables namely financial knowledge, financial behaviour and financial attitude. The study applied a quantitative method using survey questionnaires gathered from a total of 251 military personnel, selected based on a simple random sampling method. Data were analyzed using SPSS 25.0 in the form of descriptive analysis and Pearson correlation test.

Findings

Results found that the level of financial literacy in soldiers is moderate. There is a low and positive relationship between financial knowledge and financial attitude and financial behaviour.

Originality

a study on financial literacy in the military is essential to their retirement plan as limited study has been offered in our uniform body. This study helps military to prepare their members towards better financial planning.

Keywords: Financial Literacy, financial knowledge, financial behaviours, financial attitude,

Introduction

Financial literacy is very important as it guides people to plan their financial needs during retirement (Nuradibah, Thinagaran, Fazli & Catherine, 2018). It can prevent individuals from becoming victims of financial fraud (Mahathir, 2019). Financial literacy would increase the purchasing power of households, at the same time, it becomes the first line of defense for consumers to protect their rights in the face of unfair market practices (Mahathir, 2019).

Challenges in life may lead to the needs to increase financial literacy among individuals. Individual's livelihood can be improved by increasing the level of financial literacy. According to Taft, Hosein and Mehrizi (2013), a person with financial knowledge has less stress and fewer financial disputes within the family. An individual can also make better financial decisions and increase purchasing power if they have a good financial literacy (Sabri & Zakaria, 2015).

Even though most of people know about the importance of personal financial planning, however, many of them are still lack in understanding and unaware of the benefits of financial planning (Citi, 2008). Those with financial management problems were mostly having low productivity which affect their job performance (Marican, Roza & Asmak, 2012). This situation will indirectly cause persons to suffer financial stress. If this is the case with the military personnel, it would increase the risk of accidents as the military often undergoes risky trainings such as shooting, duty as a guard, weapons storekeeper, front-line operations and et cetera.

Furthermore, fail to plan financially will result in failing to meet minimum living standards in the future. Given the considerable impacts of mismanagement of personal financial planning, therefore, this study seeks to examine the financial literacy among soldiers in the armed forces with specific objectives as follows:

1. To determine the level of financial knowledge, financial attitude and financial behaviour among soldiers.
2. To examine the relationships between financial knowledge, attitude and behaviour.

Literature Review

Financial Literacy

There are many definitions of financial literacy. Garman (1997) defined financial literacy as sufficient knowledge of the facts about personal finance and considered financial literacy as the key to personal financial management. Fox, Bartholomae and Lee (2005) stated that financial literacy is 'understanding and knowledge of financial concepts'. On the other hand, Moore (2003) and Huston (2010) argues that a person is considered to be financially literate if he or she is competent and can integrate the knowledge. Alternatively, Organisation for Economic Co-operation and Development- OECD (2017) has delineated the term as a combination of awareness, knowledge, skill, attitude and behaviour, which are collectively necessary to make sound financial decisions and ultimately ensure one's happiness and financial wellbeing.

In terms of measurements, Lusardi and Mitchell (2011) used three financial concepts to measure the financial literacy; namely 'interest rate', 'inflation' and 'risk diversification'.

Leora, Lusardi and Peter (2014) measure financial literacy using the same fundamental concepts in financial decision-making with additional measure of interest compounding. Alternatively, Sabri, MacDonald, Hira and Masud (2010) used various measurements in their questionnaire which include cash flow management, credit management, savings and investment, retirement planning, risk management, shariah-compliant product, estate planning and financial institutions.

Undeniably, financial planning and management for personal and professional purposes is a continuous process of life. Learning and acquiring the skills required in financial management is invaluable. However, personal financial planning is still far from scratch in Malaysia (Gan, 2008). It is due to the level of financial capability and financial literacy of Malaysians is very low. Leora et al. (2014) found that Malaysia has only 36% of the adult who is financially literate. Mahdzan and Tabiani (2013) found that less than half of respondents achieved high scores in research conducted. This illustrates the level of financial knowledge among Malaysians is moderately low.

Further, there are many negative implications due to low level of financial literacy among Malaysian. According to Goi and Nee (2008), the number of Malaysian youths who suffered bankruptcy caused by card credits increased from 2.10 per cent in 2006 to 7.63 per cent in 2007 and increase from year to year even though the average income per person in Malaysia has increased from RM 5,156 in 2013 to RM 5,860 in 2016 (DOSM, 2017). This lack of financial literacy led to low level of savings among Malaysian. Bank Negara Malaysia (BNM) (2015) proved in the survey that 75% of Malaysians found it difficult to save RM1,000 for an emergency. The survey also showed that most Malaysian is tended to spend for their short-term gratification instead of planning for their future.

OECD INFE (2013) has conducted studies in 14 countries including Malaysia. This study also used 3 components to measure financial literacy which is financial knowledge, behaviour and attitude. The total questions are 20 questions with 8 questions for financial knowledge, 9 questions for behaviour and 3 questions for attitude represent values from 0 to 22. As an overall result, the average result is 13.7 points where the Czech Republic, Germany, Hungary, Ireland, Norway, Malaysia, Peru, United Kingdom and BRI are above this average result. For the financial knowledge component, Malaysia gets a high score in some questions compared to the other countries. For example, about 93% of the Malaysian respondent get the correct answer in the 'division' question which placed the second higher score after Hungary. The same score was achieved by Malaysia for 'interest paid on loan'. But Malaysia only achieved 62% of the correct answer in the 'time-value of money' question which placed it at the top 5 lowest in all countries. Overall, Malaysia is in 7th place who get a high score in financial knowledge.

For the financial behaviour component, Malaysia achieved the highest score in 'carefully consider purchases', 'responsible and has a household budget' and 'has been actively saving or buying investments in the past year' questions with the score of 92%, 74% and 97% respectively. But Malaysia achieved the second-lowest score in the 'pays bills on time' question where only 69% of the Malaysia respondent did not pay their bills on time compared to the highest score achieved by Germany (96%) and Armenia (94%). Overall, Malaysia is in second place who achieved a high score in financial behaviour share with Germany. For the financial attitude component, Malaysia achieved a lower average score compared to the other countries surveyed. With the score of 47% in 'I find it more satisfying to spend than save it for the long term', 57% in 'I tend to live for today and let tomorrow take care of itself' and 26% in

‘money is there to be spent’ question, it put Malaysia at 8th, 9th and 9th placed compared to all countries respectively.

Arceo and Villagomez (2017) have conducted a survey among Mexican high school teenagers using the same instruments developed by OECD. On average, only 4.3 points were scored correctly out of 8 total scores for financial knowledge. For financial behaviour, average respondents answered the questions correctly with a point score of 5.3 out of 8. Meanwhile, in financial attitudes, students answered 1.76 of the total 3-point score positively. Using Atkinson and Messy (2012) measurement, the research found that only 18.3% of the respondents achieved a high score in financial knowledge whereby 57.3% and 69.4% in financial behaviour and attitudes respectively.

There are some researches has been conducted in Malaysia to measure financial literacy. Sawandi, Abu, Shaari, Saad and Amran (2018) gathered research data of households around Malaysia specifically to determine financial knowledge. The study uses a random sampling technique and is descriptively analysed. With a total of 451 respondents, less than 50% of the respondents achieved a high score in financial knowledge.

Mason and Wilson Model

The model of financial literacy developed by Mason and Wilson (2000) shows in Figure 1. The model indicates that an individual needs to use a combination of skill/technology, resources and contextual knowledge as a condition for understanding a sufficient amount of financial information. Based on this financial information, one will be able to make financial decisions in light of the consequences. Although these terms are generally accepted, they are not attempting to explain and identify the form and level of skill required to influence one's financial literacy.

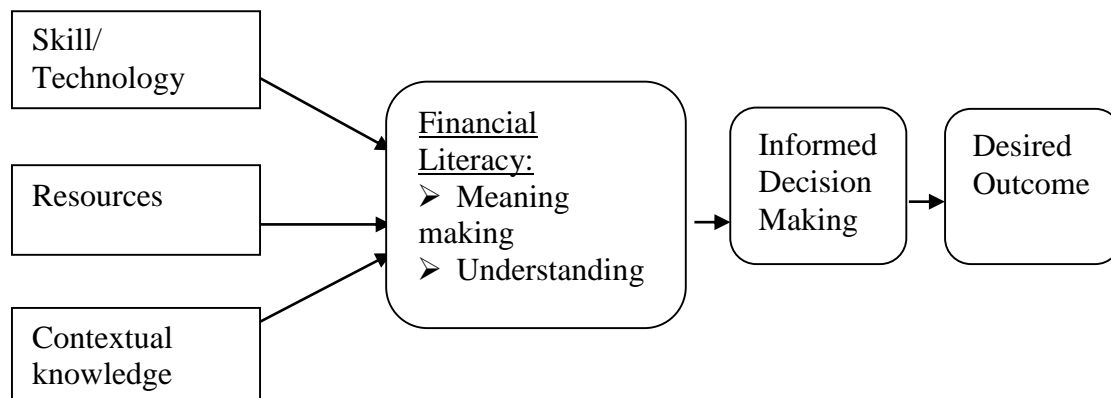


Figure 1 Mason and Wilson Model

Financial Knowledge

The definition of financial knowledge is frequently used same as financial literacy or financial education. However, financial literacy is conceptually different compare to financial knowledge which is a deeper meaning. Huston (2010) derived financial literacy in two ways; ‘understanding’ and ‘use’. The understanding of the financial matter is called financial

knowledge while 'use' refers to the management of personal financial knowledge. For example, to be considered someone is financial literate, he or she should have the ability and confidence to apply the knowledge before making any decision and not just have financial knowledge.

To have effective management of finance, an individual should have the financial knowledge and good behaviour which is measure through financial attitudes (Norvilitis & Maclean, 2010; Xiao et al., 2011). Financial knowledge can be gained through learning experiences in life when managing his or her income, expenses and savings in a safe way (Delavande et al., 2008). For OECD, financial knowledge can be measured using the related question consists of simple and compound interest, risk and return and inflation (Atkinson & Messy, 2012). Consequently, an individual who has a high level of financial knowledge was reported to have less stress and fewer financial disputes among his or her families (Taft, Hosein, & Mehrizi, 2013).

Financial Behaviour

There are many definitions of how to describe financial behaviour. Lusardi, Olivia and Curto (2010) explained that financial behaviour is "someone who has good financial literacy will influence his or her financial behaviour in a positive direction, such as the pay the bills on time, having investment and savings and able to manage credit card smartly". While Kasmir (2010) determined that financial behaviour is a financial management activity at the individual level which includes planning, management and supervision of his or her funds. Tezel (2015) describes financial behaviour as "the ability to capture the impact of financial decisions and to make accurate decisions on cash management, precautionary measures and opportunity for budget planning."

Many studies relate financial behaviour with other elements. The relationship that financial behaviour positively correlated with financial well-being is found by Joo and Grable (2004), Kim and Garman (2004), Kim et al. (2003) and others. Additionally, Joo and Grable (2004) found that financial well-being is closely linked to financial behaviour, financial level, financial knowledge, cash flow, income, financial tolerance and education. On the other, it had found that financial behaviour also has a similar correlation with the level of life satisfaction (Xiao & Shim, 2009). Besides that, Zaimah et al. (2013) has researched female teachers in Malaysia and found that good financial behaviour will have good saving practice and credit card usage whereby the good financial behaviour itself was influenced the high level of education and higher income.

An individual with positive financial behaviour also showed that he or she is capable to reduce financial stress and consequently increase financial well-being (Sorhaindo & Garman, 2002). The study also shows the characteristic of positive financial behaviour which are having a personal loan in less amount, fix within budget, reduce life expenditure and having financial planning.

Financial Attitudes

Attitude is considered as a person's tendency to value something in a certain way, including judgment, problem, object or event (Bahsin & Thenmozhi, 2014). Meanwhile, Pankow (2012) defined financial attitude as a state of mind, opinion, and judgment about finance.

In Australia, financial attitudes and financial behaviour is surveyed among adult by Australian Securities and Investments Commission (ASIC). They have also been informed about financial literacy programs and initiatives. Under segment of attitudes towards managing money, there

is more than 60% of Australians are confident about managing their money. Anyhow, a lot of them find dealing with money stressful and overwhelming (ASIC, 2018). Besides that, it also found that those who were professionals were more interested to deal with money thought consequently stay informed about their money matters and finance.

A theoretical framework for this study is shown below:

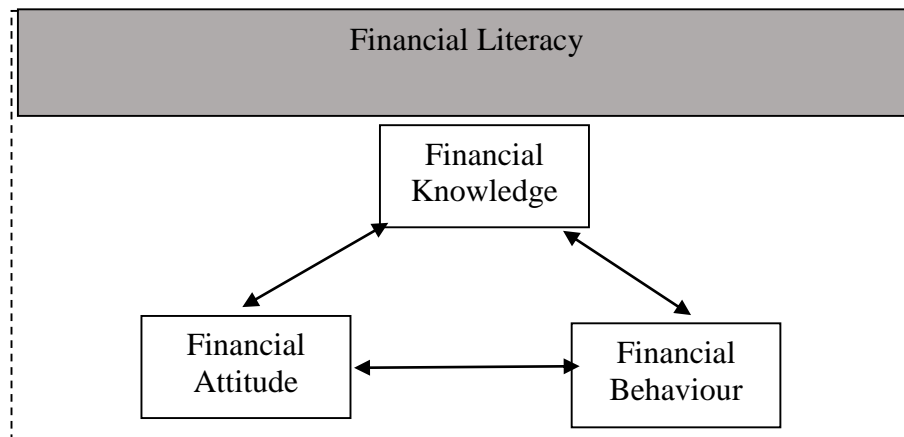


Figure 2 Theoretical Framework

Hypothesis Development

Relationship between financial knowledge with financial behaviour

OECD INFE (2013) has conducted a study across 14 countries on financial literacy. The study indicates that there is a positive relationship between knowledge and behaviour where the higher knowledge scores also have a high score in behaviour aspects. Besides that, the correlation between financial knowledge and financial behaviour is found positive and strongly significant in the study conducted in urban India (Sobesh et al., 2015). Arifin, Agus and Zainul (2017) also found that there is a positive and significant influence from financial knowledge on financial behaviour. It means that an individual who has more knowledge will have better financial behaviour

Relationship between financial knowledge with financial attitude

There is a study conducted in Kanjuruhan University Malang that found financial attitude has a significant influence on financial management behaviour (Dwiastanti, 2017). Meanwhile, Amanah, Dadan and Aldila (2016) found that a person who has an attitude of no interest in saving, will be a difficult behaviour to change.

Relationship between financial behaviour with financial attitude

A study about financial literacy among Mexican high school teenagers shown that financial behaviour is positively correlated to financial attitudes (Arceo & Villagomez, 2017). This result was supported by the finding by Arceo-Gomez and Villagomez (2017). However, Sobhesh et al. (2015) found a significant negative correlation between financial behaviour and financial attitude.

Based on the above literature , it is hypothesised that:

H1: Financial knowledge has a positive and significant relationship with financial attitude and financial behaviour

Methods

This study used a quantitative method using questionnaire adapted from OECD INFE (2013). The questionnaire is divided into four categories. Category A is about financial knowledge. It consists of eight questions with the combination of basic calculation, ‘true and false’ and multiple answers. Category B consists only three questions measuring financial attitude. The questions were measured using 5-Likert scale; Scale 1 = strongly agree, 2 = agree, 3 = undecided, 4 = disagree and 5 = strongly disagree. Next, Category C is to measure financial behaviour which consists of eight questions. The first four questions are Likert type of questions; Scale 1 = Always, 2 = often, 3 = sometime, 4 = rarely and 5 = never. The rest questions use multiple answers. Lastly, Category D. It is about the demography of the respondent which covers marital status, age, rank, educational level and years of service. Respondents for this study were randomly selected from a small size of military organization. This study analysed data using SPSS 25.0. The results of the analysis will then be interpreted and discussed so that the results of the research can be concluded.

Results

Level of Financial Literacy

In order to measure the level of financial literacy, the data which include financial knowledge, financial attitude and financial behaviour were compiled. Then, the overall scores were gathered and classified into three categories. The score-driven groupings were ‘low level of financial literacy’ with scores ranging 0 – 0.32, ‘moderate level of financial literacy’ with scores ranging 0.33 – 0.65 and ‘high level of financial literacy’ ranging 0.66 - 1. The overall mean of financial literacy was 0.59 with a standard deviation (SD) = 0.41. From the results, 56.6% of the respondents showed a moderate level of financial literacy, while 39.4% of them showed a high level of financial literacy. However, 10.0% of the respondents showed a relatively low level of financial literacy. The frequencies mean and standard deviations of financial literacy is shown in Table 1. The result shows that the overall level of financial literacy of the respondents was moderate.

| Level | Frequency | Percentage |
|------------------------|-----------|------------|
| Low (0 – 0.32) | 10 | 4.0 |
| Moderate (0.33 – 0.65) | 142 | 56.6 |
| High (0.66 - 1) | 99 | 39.4 |
| Mean= 0.59 | SD= 0.14 | |

SD= Standard deviations

Table 1: Levels of Financial Literacy

Level of Financial Knowledge

Based on the results of the financial test, the data were compiled. Then, the overall scores were gathered and classified into three categories. The score-driven groupings were ‘low level of financial knowledge’ with scores ranging 0 – 0.32, ‘moderate level of financial knowledge’ with scores ranging 0.33 – 0.65 and ‘high level of financial knowledge’ ranging 0.66 - 1. The

overall mean of financial knowledge was 0.63 with a standard deviation (SD) = 0.91. Based on the results, 50.2% of the respondents showed a moderate level of financial knowledge, while 44.2% of them showed a high level of financial knowledge. Only 5.6% of the respondents showed a low level of financial knowledge. Table 2 shows the frequencies, mean and standard deviations of financial knowledge. This shows that the largest level of financial knowledge of the respondents was moderate.

| Level | Frequency | Percentage |
|-------------------------|-----------|------------|
| Low (0 – 0.32) | 14 | 5.6 |
| Moderate (0.33 – 0.65) | 126 | 50.2 |
| High (0.66 - 1) | 111 | 44.2 |
| Mean= 0.63 | SD= 0.91 | |
| SD= Standard deviations | | |

Table 2: Levels of Financial Knowledge

Level of Financial Attitude

Based on a 5-point scale, ranging from 1= ‘strongly agree’ to 5= ‘strongly disagree’, the data of financial attitude were compiled. Then, the overall scores were gathered and classified into three categories. The score-driven groupings were ‘low level of financial attitude’ with scores ranging from 3.65 to 5.00, ‘moderate level of financial attitude’ with scores ranging from 2.33 – 3.65 and ‘high level of financial attitude’ ranging from 1.00 – 2.32. Table 3 displays the frequencies, means and standard deviations of financial attitude. The overall mean of financial attitude was 3.55 with SD is 0.82. The results show that 53.8% of the respondents indicated a low level of financial attitude, while 40.6% indicated a moderate level of financial attitude and only 5.6% of the respondents indicated a high level of financial attitude.

| Level | Frequency | Percentage |
|-------------------------|-----------|------------|
| Low (3.65 – 5.00) | 135 | 53.8 |
| Moderate (2.33 – 3.65) | 102 | 40.6 |
| High (1.00 – 2.32) | 14 | 5.6 |
| Mean= 3.55 | SD= 0.82 | |
| SD: Standard deviations | | |

Table 3: Frequencies, means and standard deviations of financial attitude

Level of Financial Behaviour

The overall mean of financial behaviour was 1.90 with a standard deviation of 0.64. Based on the results, 68.9% of the respondents showed a high level of financial behaviour, while 29.9% of them showed a moderate level of financial behaviour. Only 1.2% of the respondents showed a low level of financial behaviour. Table 4 shows the frequencies, mean and standard deviations of financial behaviour. This shows that the largest level of financial behaviour of the respondents was high.

| Level | Frequency | Percentage |
|-------|-----------|------------|
|-------|-----------|------------|

| | | |
|------------------------|---------|------|
| Low (3.65 – 5.00) | 3 | 1.2 |
| Moderate (2.33 – 3.65) | 75 | 29.9 |
| High (1.00 – 2.32) | 173 | 68.9 |
| Mean= 1.90 | SD= .64 | |

SD: Standard deviations

Table 4: Frequencies, means and standard deviations of financial behaviour

Relationship between Financial Knowledge, Financial Attitude and Financial Behaviour

The second objective of the study was to determine the relationship between financial knowledge, financial attitude and financial behaviour. In order to fulfil the objectives, this study employed Pearson correlation statistics. Table 5 shows the summary result of the correlation analyses. A Pearson correlation analysis was performed to test the relationship between financial knowledge (mean= .63, SD= .19), financial attitude (mean= .355, SD= .82) and financial behaviour (mean = 1.90, SD = .64).

For an alpha level of 0.05, the result of the correlation shows that there is a significant, low and positive relationship between financial knowledge and financial attitude, $r(251) = 0.19$, $p < 0.05$). This indicates that an increase in financial knowledge will increase financial attitude. Consistently, the result of the study shows that there is a significant, low and positive relationship between financial knowledge and financial behaviour, $r(251) = 0.16$, $p < 0.05$). This indicates that an increase in financial knowledge will increase financial behaviour. Meanwhile, the result shows that there is a significant, low and negative relationship between financial attitude and financial behaviour, $r(251) = -0.21$, $p < 0.05$). This indicates that an increase in financial attitude will decrease in financial behaviour.

| Variable | Mean | SD | Financial Knowledge | Financial Attitude | Financial Behaviour |
|---------------------|------|------|---------------------|--------------------|---------------------|
| Financial Knowledge | .63 | 0.19 | - | 0.19* | 0.16* |
| Financial Attitude | 3.55 | 0.82 | 0.19* | - | -0.21* |
| Financial Behaviour | 1.90 | 0.64 | 0.16* | -0.21* | - |

* $P < 0.05$, ** $p < 0.01$

Table 5: Correlation between financial knowledge, financial attitude and financial behaviour

Discussion and Conclusion

This study aims to examine the relationship between financial knowledge, financial attitude and financial behaviour. In order to show the results of this study perspicuously, the discussion was guided by the objectives of the study. Overall, results of financial test revealed that most of the respondents answer correctly on the questions related to the division of financial, definition of inflation as well as the risk and return of investment.

The first objective focused on determining the level of financial literacy in terms of financial knowledge, financial attitude and financial behaviour. Results revealed that the level of financial literacy among the respondents was moderate with almost half of them indicated a high level of financial literacy. It designated that the overall level of financial literacy among military personal was good. Furthermore, results showed that almost half of the respondents indicated a high level of financial knowledge. In terms of financial attitude, military personnel was found to have a relatively low level of financial attitude. Further, the results of financial behaviour showed a high level of financial behaviour among them. Inclusively, the results of the first objective is in line with the survey of OECD INFE (2013).

The second objective is to examine the relationship between financial knowledge, financial attitude and financial behaviour. Results of correlation between variables showed that there is a low and positive relations between financial knowledge and financial attitude and behaviour but low and negative relations between financial attitude and financial behaviour.

It can be concluded that, the military personal especially the lower level ranks need to have a great personal financial planning to sustain their life in the present environment. It will indirectly help them in carrying big responsibilities without any distress or distract to their work performance.

The study has revealed that people might think money is there to be spent and think for short-term financial planning rather than long-term financial planning. A systematic financial education program should be developed to educate military personnel to be more alert to the impact of financial literacy including financial knowledge, financial attitude, and financial behaviour on their future life. Military members that have a low level of financial attitude may require different education approach for optimum education effectiveness. Awareness programmes on financial wellbeing can be conducted among the new batch of military personnel during orientation. Financial wellbeing matters need to be disclosed and applied from the beginning so that members can make financial preparation better. In addition, financial programs need to be implemented continuously

Limitations and Suggestions for Future Research

This study revealed the inconsistencies in findings in which financial attitude negatively related to financial behaviour and indicated that there are still opportunities for future studies to determine the relationship between those variables. Continued efforts exploring financial literacy associated with socio-demographic profile and other potential factors are essential for the ongoing development of research and practice unique to business studies.

Furthermore, there needs to be more research on the influence of financial literacy on quality of work life. Issues related to managing finances can be determined earlier to ensure employees feel secure financially and get benefits for a better financial wellbeing in the workplace. Therefore, it is critical to research on how the abilities of employees in making accurate

financial decisions (financial literacy) affect the quality of work-life and lead to healthy economic habits, and in turn encouraging savings and investment over-indebtedness.

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