

## Household Debt Reduction Guideline towards the Stability and Sustainability of the Country

By

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### Abstract

The current economic crisis has a widespread impact and deprives the majority of the population of income and financial liquidity, resulting in faster, longer, and more debt. The purpose of this research was to study household debt reduction guideline towards the stability and sustainability of the country to further develop a structural equation model. Both qualitative and quantitative research was used in this study. A quantitative survey was conducted using a questionnaire collected by 500 financial institution executives. Descriptive statistics, reference statistics, and multiple statistics were used to analyze the data.

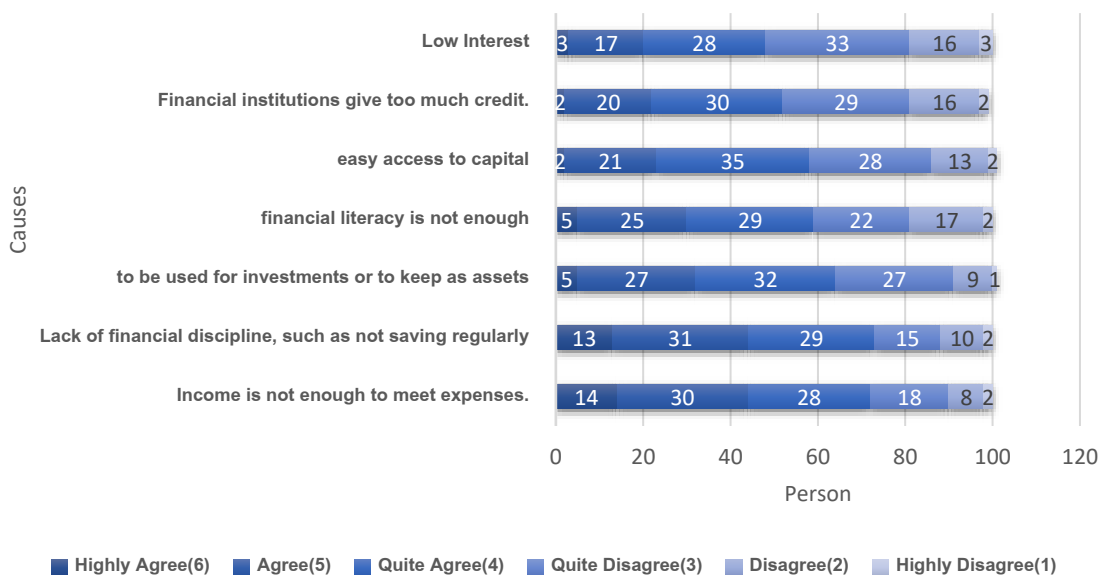
The results of the research revealed that the four components of household debt reduction guideline towards the stability and sustainability of the country are as follows: learning centric ( $\bar{X} = 4.27$ ), the most important item was the ability to manage and plan debt and expense repayment on time; sufficiency and reasonable ( $\bar{X} = 4.14$ ), the most important item was to put family and people into consideration first; debt management ( $\bar{X} = 4.01$ ), the most important items was non-informal loans; and income efficiency ( $\bar{X} = 3.90$ ), the most important item was the allocation of income for savings before spending. The hypothesis testing results showed that household debt reduction guideline towards the stability and sustainability of the country classified by branch locations were not significantly different at the .05 level. The analysis of the developed structural equation model found that it passed the assessment criteria and was consistent with the empirical data. The Chi-square probability was 0.068. The relative chi-square was 1.151. The Goodness of Fit (GFI) was 0.961. The Root Mean Squared Error of Approximation (RMSEA) was 0.017.

**Keywords:** household debt, learning centric, sufficiency, debt management

### Background and rationale

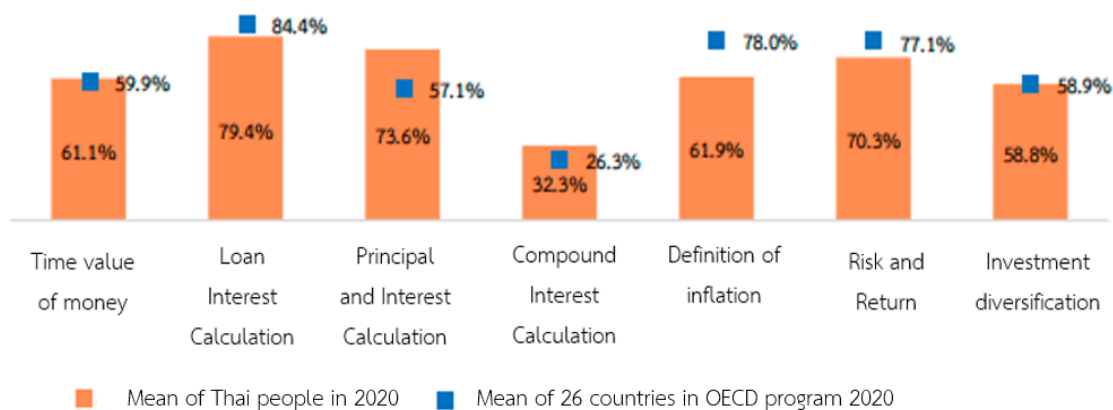
According to the past Thai household debt situation, although the growth rate of Thai household debt was relatively stable, it was still considered to be at a high level and ranked among the top in the region. Meanwhile, a research summary by the Puey Ungphakorn Institute for Economic Research, which looked at data from the National Credit Bureau, found that "Thai people were in debt faster, longer and more." 50% of the Thai population, aged 30 and

over, was in debt from consumer loans and credit card debt. Per capita debt was emerging faster for people in their late 20s and 30s and remained high throughout their working life. More importantly, debt levels did not drop even after approaching retirement age, reflecting life security concerns. The average per capita debt had more than doubled. Household debt could be caused by a variety of reasons. According to the BOT-Nielsen Household Financial Survey, the main reason was insufficient income, lack of financial discipline, insufficient financial literacy, coupled with lower employment rates (Bank of Thailand, 2020).



**Figure 1.** Main cause of household debt from BOT-Nielsen Household Financial Survey

According to the Household Socio-Economic Survey, National Statistical Office, Ministry of Digital Economy and Society, it was found that the average monthly expenditure per household was close to the average monthly income per household. Debt-to-income data for 2015-2019 ranged from 5.8 to 6.6 times. In 2020, the National Statistical Office and The Organization for Economic Co-operation and Development (OECD) surveyed the OECD Guidelines for Financial Skills, which consisted of three components: (1) financial literacy; (2) financial behavior; and (3) financial attitude. A survey of 11,901 target groups found that in 2020, the average financial skills of Thai people were 71.00 percent. Thai people had an average financial literacy score of 4.4 points out of a 7-point scale. The top 3 weak points of Thai people were compound interest calculation, risk diversification, and time value of money. Compared to the OECD average, Thai people's average scores were lower than the OECD average, especially in terms of inflation, risk and return (High Risk, High Return), and credit interest calculations. However, credit interest calculation was a topic that Thai people understand at the highest level, and the top 3 weak points of Thai people were the calculation of compound deposit interest, risk diversification, and time value of money. Overall, Thai people's financial skills and attitudes tend to improve between 2016 and 2018 (Bank of Thailand, 2020), as shown in Figure 2. In the view of the Bank of Thailand, the financial behavior of the Thai people should be developed and improved as there were still several risks such as a lack of long-term goals, a lack of close financial management, and a lack of reasonable consideration before making any purchases.



**Figure 2.** Results of 2020 Financial Literacy Survey

As a result of a lack of financial skills, Thai people did not have a financial plan, leading to financial problems such as debt, insufficient funds for emergency expenses, or lack of reserves for retirement. A person's status was directly correlated with their financial skills score. Individuals with low levels of education and low-income occupations had lower scores in financial skills than other groups. If Thai people had financial knowledge and skills, they would be able to manage their finances appropriately, leading to better and sustainable household well-being (Sibley, 2010; Hall, 2008). At the same time, Thailand had already stepped into an aging society. According to the demographic projection of Thailand in 2010–2040, it was found that the elderly population aged 60 years and over tended to increase significantly. The proportion of the childhood and working-age population had declined, while the elderly population tended to increase continuously. Therefore, the challenge of household debt problems arose from the uncertainty of various situations and should be seriously addressed. In this regard, it must begin with financial discipline and immunity, coupled with proactive management and effective, rapid, and comprehensive debt relief mechanisms. As mentioned above, the researcher was interested in studying household debt reduction guideline towards the stability and sustainability of the country.

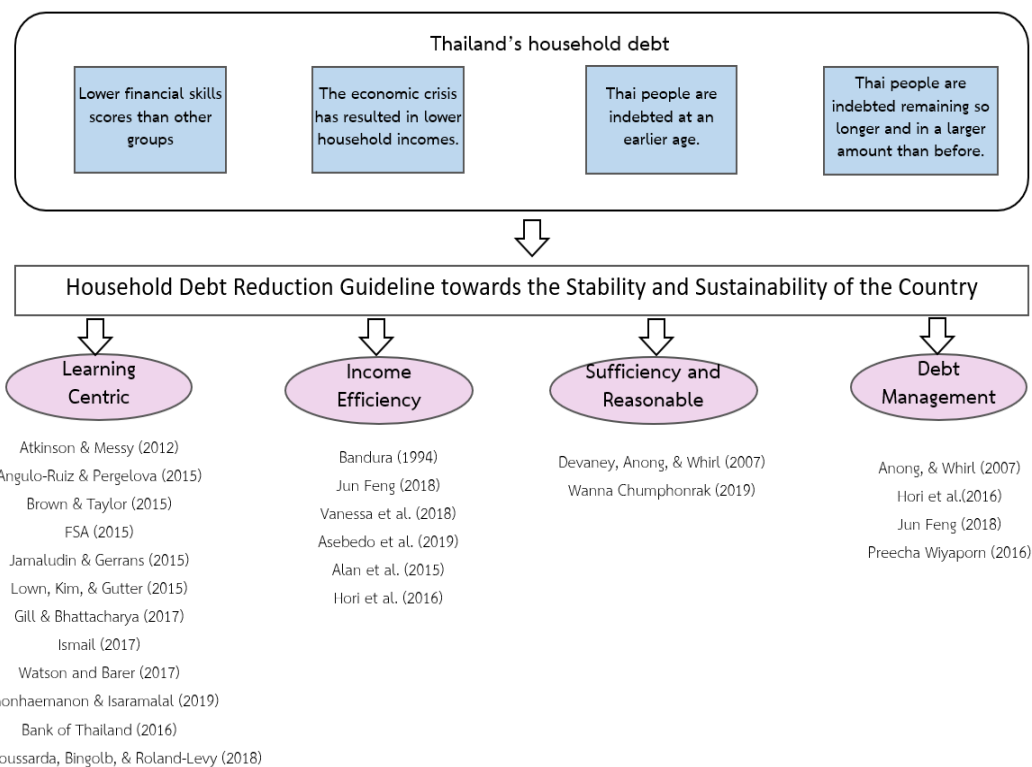
## Research objectives

- 1 To study the composition of household debt reduction guideline towards the stability and sustainability of the country
- 2 To develop a structural equation model of household debt reduction guideline towards the stability and sustainability of the country

## Literature review

According to the past concepts and theories, the researcher could summarize 4 household debt reduction guideline towards the stability and sustainability of the country as follows: 1) Learning Centric: A 2012 study by Atkinson, A. and F. Messy, found that individuals with low incomes and levels of education resulted in lower financial skills scores than other groups. The Bank of Thailand (2013) had brought the questionnaire to general investors and added financial knowledge with risk and return questions to collect additional information, it was found that people with advanced financial skills resulted in greater savings for retirement, especially among high-income earners. Consistent with research by [Y. J. Loke,](#)

N. Delafrooz, and L. H. Paim, 2010, people with good education and income had better financial skills and financial behavior. 2) Income Efficiency: According to a Jun Feng, 2018 study that explored stimulating additional savings within the Australian superannuation system, where fixed deposits are defined as fixed savings for retirement, it was found that economic, financial and income conditions, and the nature of the stable job were key parameters for voluntary pension savings. In the United States, savings for people who were approaching retirement age, adequate income, and control over spending led to lower debt generation and more money to save for retirement. A sufficient income allowed them to better manage and plan their spending. 3) Sufficiency and Reasonable: If a population had sufficient financial skills, they would have good debt management and management discipline. A population's ability to pay off debt was analyzed from the elements of debt based on the principles of moderation, rational spending, and consideration of the expected outcomes, including being prepared to deal with the impacts and changes that may occur. The researcher applied the sufficiency economy concept to the discipline of debt management based on the principles of moderate practice, caution, savings, and moderation (Devaney, Anong, & Whirl, 2007). 4) Debt Management: The current social lifestyle encouraged overspending as the population became more active on social media, thus exerting influence over consumption. Dressing in fashion or being trend-setting led to more borrowing for daily expenses. In the elderly group, there was a financial plan to spend in retirement. Retirement and estate planning was becoming more important because Thailand had entered an aging society. Importantly, the retirement age was the age without income, if they had poor financial planning, insufficient funds for expenses, or no one cares, this could lead to borrowing and increased debt (Anong, & Whirl, 2007; Hori et al., 2016; Jun Feng, 2018).



**Figure 3.** Elements of household debt reduction guideline towards the stability and sustainability of the country

## Research Methods

This research was inductive using mixed-methodology research which consisted of 3 parts: qualitative research using in-depth interview technique, quantitative research using exploratory research data collection, and qualitative research using focus group discussion to verify the validity of this research model.

- 1 Qualitative research using in-depth interview technique: The population used in this study consisted of 9 experts using purposive sampling. The selection criteria were based on the qualifications of experts determined by the Doctorate of Business Administration Program Executive Committee, Industrial Business Administration, Faculty of Business Administration, King Mongkut's University of Technology North Bangkok. The research titled “Household Debt Reduction Guideline towards the Stability and Sustainability of the Country” consisted of 3 groups of experts: 3 bank executives, 3 government agencies, and 3 educational experts.
- 2 Quantitative research: The population used in this research was responsible for the credit work of 16,093 financial institutions. The criteria of factor analysis or structural equation modeling were used to determine the sample size. The sample size of 500 very good samples was determined using Multi-Stage Sampling (Silpcharu, 2021). The operation procedure consisted of cluster sampling divided by the location of financial institutions such as the Bangkok Metropolitan Region, and probability sampling using the lottery method. Then, data was collected from the sample group.
- 3 Qualitative research using focus group discussion to verify the model: The population used in this research consisted of 11 experts using purposive sampling.

## Results

A summary of the research findings on household debt reduction guideline towards the stability and sustainability of the country could be summarized as follows:

- 1 The results of the analysis of household debt reduction guideline towards the stability and sustainability of the country through qualitative research using in-depth interview techniques from experts, could be classified into 4 components: 1) learning-centric 2) income efficiency 3) sufficiency and reasonable, and 4) debt management.
- 2 The level of importance for household debt reduction guideline towards the stability and sustainability of the country was found that the overall importance was at a high level, with an average of 4.08. When considering each aspect, it was found that the average learning centric was 4.27, the mean sufficiency and reasonable was 4.14, the average debt management was 4.01, and the mean income efficiency was 3.90. In provincial branches, it was found that household debt reduction guideline towards the stability and sustainability of the country were at a high level, with an average of 4.05. When considering each aspect, it was found that the average financial literacy was 4.27, the mean sufficiency and rationality were 4.13, the average debt management was 3.96, and the mean income efficiency was 3.85.
- 3 Comparison of importance level of household debt reduction guideline towards the stability and sustainability of the country classified by branch location by t-Test for differences between the mean of two independent population groups, it was found that overall, when classified by branch location, there was no statistically significant difference at the 0.05 level as shown in Table 1.

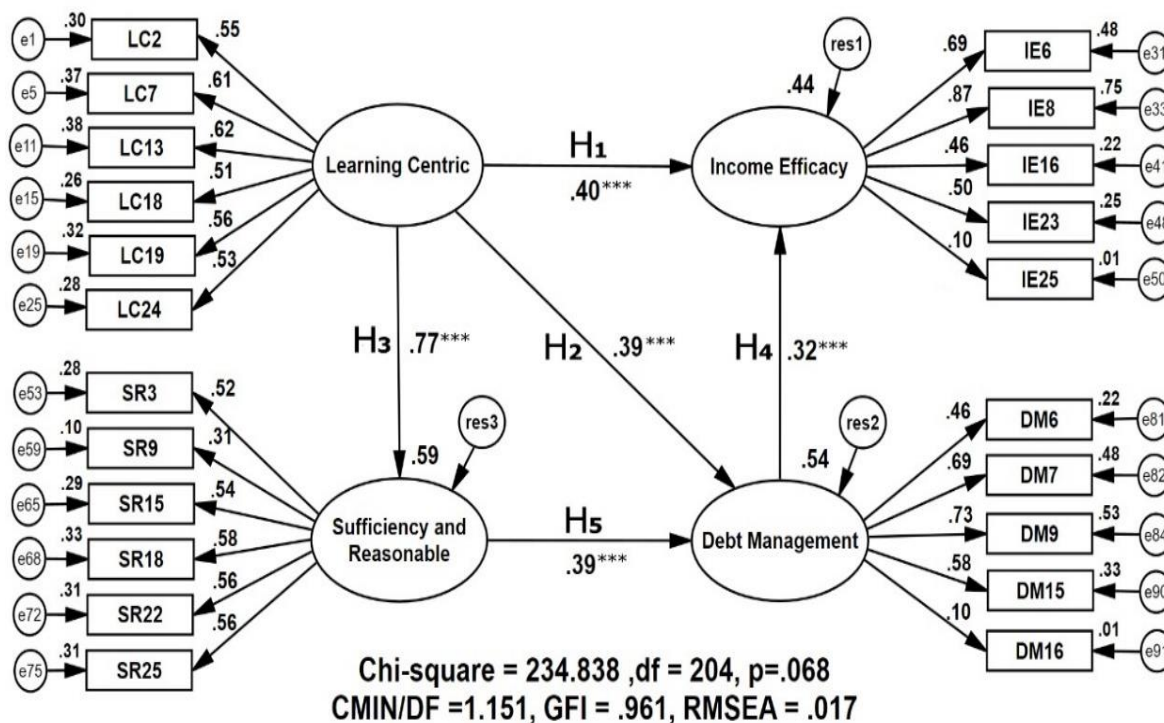
**Table 1.** Comparison of importance level of household debt reduction guideline towards the stability and sustainability of the country

Elements of approaches to reduce household debt burden toward stable and sustainable development of the country	Bangkok Metropolitan Region			Province			t-Value	P-Value
	$\bar{X}$	SD.	Importance level	$\bar{X}$	SD.	Importance level		
Overall	4.11	0.58	High	4.05	0.62	High	0.63	0.65
.1Learning Centric	4.27	0.47	High	4.27	0.48	High	0.20	0.47
.2Income Efficiency	3.95	0.76	High	3.85	0.78	High	0.06	0.46
.3Sufficiency and Reasonable	4.15	0.54	High	4.13	0.53	High	1.56	0.87
.4Debt Management	4.05	0.69	High	3.96	0.70	High	0.70	0.83

In a structured equation model on household debt reduction guideline towards the stability and sustainability of the country, the researchers analyzed and adjusted the model using the "Modification Indices" as suggested by Arbuckle. In this regard, the values of the theoretical academic outcomes were considered and some of the inappropriate observational variables were excluded one by one and the model was reprocessed until a model with all 4 statistical values was obtained. Finally, the results were consistent with the empirical data (Silpcharu, 2020), as shown in Table 2, the structural equation model in Figure 5, and the definition of the variables in Table 3.

**Table 2.** Statistics assessing congruence of structural equation model before and after adjusting model

	Statistics	Criterion	Before	After
1.	CMIN- $\rho$ (Chi-square probability)	greater than 0.05	000.0	06.08
2.	CMIN/DF (Relative Chi-square)	less than 2.00	4.036	1.151
3.	GFI (Goodness of Fit)	greater than 90.0	.0402	9.061
4.	RMSEA (Root Mean Squared Error of Approximation)	less than 08.0	0.078	01.07



**Figure 4.** Structural equation model of household debt reduction guideline towards the stability and sustainability of the country in "Standardized Estimates" after adjusting the model

**Table 3.** Definition of variables

Vari able	Meaning	Vari able	Meaning
LC2	Detailed knowledge of financial and investment products	SR25	Taking advantage of the government's income-boosting policy
LC7	Knowledge of financial and investment product risks	IE6	Comparison of advantages and disadvantages before making a purchase decision.
LC13	Ability to calculate the value of closing debt	IE8	Calculating the cost-effectiveness if changing to a newer product
LC18	Choosing the right digital technology for financial transactions	IE16	Using digital technology and online media to increase revenue, such as posting products for sale
LC19	Knowledge and ability to analyze political situations	IE23	Return on investment in gold bullion
LC24	Knowledge of credit lending of financial institutions	IE25	Family and caregiver considerations before any spending
SR3	Income Allocation for Savings Before Spending	DM6	Asking for help from government agencies for debt reconciliation
SR9	Income from selling or leasing unnecessary valuable assets.	DM7	Consolidating debt from multiple creditors into a single creditor to increase bargaining power.
		DM9	
		DM15	
		DM16	

**Table 3.** Definition of variables

<b>Vari ables</b>	<b>Meaning</b>	<b>Vari ables</b>	<b>Meaning</b>
SR15	Bringing leftover products to develop into income	DM9	Education about interest rates of various types of borrowings
SR18	Using the existing products to the maximum benefit	DM1 5	Non-informal debt borrowing to pay off debts in formal loans
SR19	Bringing household and community resources to generate income	DM1 6	Non-informal debt borrowing for expenses
SR22	Earning from investing in cryptocurrencies		

The results of the 6-hypothesis test to analyze the causal factors among the latent variables in the structural equation model on household debt reduction guideline towards the stability and sustainability of the country, the results were based on the following 5 assumptions: H1: Learning centric had a statistically significant direct influence on sufficiency and reasonableness at the 0.001 level, the Standardized Regression Weight was 0.77. H2: Learning centric had a statistically significant direct influence on income efficiency at the 0.001 level, the Standardized Regression Weight was 0.40, consistent with the research hypothesis. H3: Learning centric had a statistically significant direct influence on debt management at the 0.001 level, the Standardized Regression Weight was 0.39, consistent with the research hypothesis. H4: Sufficiency and reasonable had a statistically significant direct influence on debt management at the 0.001 level, the Standardized Regression Weight was 0.39. H5: Sufficiency and reasonable had a statistically significant direct influence on debt management at the 0.001 level, the Standardized Regression Weight was 0.32.

## Conclusion

An important issue from the research findings on household debt reduction guideline towards the stability and sustainability of the country was that government agencies should formulate policies to enhance learning centric as well as support households to secure careers and incomes with rational attitudes. When a household had a body of knowledge and stable income, it would lead to good and appropriate debt management. The researcher used the results of this research in the discussion to draw conclusions along with the relevant research

According to the research findings, when comparing the composition of household debt reduction guideline towards the stability and sustainability of the country classified by branch location, overall and each aspect, it was not different to statistically significant at the 0.05 level. The results showed that the household sector still lacked financial literacy in many areas such as the calculation of principal and interest on deposits. Most households still had low and unstable incomes, a lack of saving behavior, and more importantly, easy access to informal loans, resulting in the inability to manage debt, consistent with a study by [Pornthip and Siwapong \(2021\)](#).

According to the hypothesis testing, it was found that the knowledge of financial (Learning Centric) directly influenced sufficiency and reasonableness, the Standardized Regression Weight was 0.77. Consistent with research by [Ismail, et al., 2017](#), households with good financial behavior were attributed to financial literacy, positive attitudes, and self-efficacy. They are mostly analyzed before spending first and emergency savings reduced their



debt burden. As the population had sufficient financial skills, it results in the good debt management discipline. Households could adopt the Sufficiency Economy Philosophy and become one of the guidelines for debt management based on the Sufficiency Principle (Wantanakomol & Silpcharu, 2020), rational spending from good decisions, taking into account the expected results, and preparedness for impacts and changes in various aspects that would occur. The researcher applied the Sufficiency Economy Principle to the Debt Management Discipline based on the principles of moderate practice, caution, savings, and moderation, consistent with a study by Devaney, Anong, & Whirl, 2007.

Household debt reduction guideline towards the stability and sustainability of the country, overall, the Learning Centric was at the highest level of 4.27. According to research by Worthington & Whittaker, 2006 and Cole, Sampson, & Zia (2009), the more knowledge households had, the more opportunities they had to use financial services to manage their finances effectively. Financial literacy, or understanding of finance-related concepts, was significant for spending behavior as well as the ability to apply knowledge and skills to manage finances sustainably. In this respect, not only was living a negative life (earning more than expenses) and comparing options, but also visionary goal setting and disciplined financial planning throughout life. Most households saved money for emergencies, education, investments, and home purchases. Therefore, the government should have measures or policies to educate the household sector and reduce the measures that lead to debt generation. For example, a study by Jamaludin & Gerrans (2015) found that Malaysia established a government agency called the Malaysian's Employees Provident Fund (EPF), which was responsible for allocating social security funds to income earners.

Household debt reduction guideline towards the stability and sustainability of the country, overall, the management and planning of debt repayment and expenses on time were at the highest level of 4.49 (S.D.=0.681). Consistent with a study by Jun Feng (2018), if a household did not have good financial planning and enough money to cover expenses, especially those who were unattended in old age, it would result in more borrowing and debt. The concept of money management should be changed based on the sufficiency economy principle in the sense that spending money must be based on income minus expenses and savings. Household accounting showed true income and expenditure and can plan to spend accordingly, even if the income did not increase. Therefore, the income and expenses accounting was extremely effective in money management because it allowed them to spend reasonably and moderately, thus creating good immunity according to the principles of the Sufficiency Economy Philosophy, consistent with Wanna's study, 2019.

The results of the analysis of the relationship between variables in terms of household debt reduction guideline towards the stability and sustainability of the country after adjusting the structural equation model, the relationship between variables in negotiating with creditors for debt waiver or interest reduction (DM3) and variables in consolidating debt from multiple creditors to a single creditor to increase bargaining power (DM5) was the highest level of 0.931. Debt-bearing households should have a good debt management process using negotiating or consolidating debt. More importantly, the household sector should negotiate debt compromise and request a reduction in loan rates or a compromise on debt, consistent with the study of Preecha, 2016.

Household debt reduction guideline towards the stability and sustainability of the country in terms of financial literacy found that the management and planning of debt repayment and expenses on time were at the highest level of 4.49. Consistent with a study by

Allom, et al., 2018, people with financial knowledge or skills were able to plan and manage their money effectively in terms of spending, saving, and paying off their debts, as well as being able to handle challenges appropriately, for example, debt management tailored to one's abilities and preparation for entering retirement that leads to the sustainable well-being of the people and the further economic stability of the country (Silpcharu & Boonrattanakul, 2021).

Household debt reduction guideline towards the stability and sustainability of the country in terms of income efficiency, the allocation of income for savings before spending was at the highest level of 4.33. Consistent with a study by Hori et al., 2016, people with stable careers tended to have fewer savings and debt behavior. The relationship between savings rates and lifetime wealth varied among households depending on the life span of each household. Older households required higher lifetime wealth, which was consistent with household consumption and consumption life cycle patterns. A study by Devaney, Anong, & Whirl (2007), who studied the motivations for saving in the United States, found that the factors leading to savings were the Liquidity Preference Theory and the Propensity to Consume of individuals such as the amount of cash in savings. Most of the population increased the amount of money they spend on their consumption as their income increased. Most of the population's savings objectives included home purchases, emergency spending, unemployment spending, or retirement spending. Independent variables such as demographic characteristics, economic characteristics, and attitudes of individuals significantly affected their saving behavior.

Household debt reduction guideline towards the stability and sustainability of the country in terms of sufficiency and reasonable, family and caregiver considerations before any spending was at the highest level of 4.38. Consistent with a study by Pornthip and Siwapong, 2021, who studied the factors of informal debt formation, most of them involved family members. The number of family members in custody and each household's income factors inevitably affected the amount of debt. If a family had members who were highly dependent, they would incur a lot of debt. On the other hand, if households had fewer dependent members, they did not incur or have low debt, as in Sukanya's study, 2012.

Household debt reduction guideline towards the stability and sustainability of the country in terms of debt management, non-informal debt borrowing for expenses was at the highest level of 4.46. Consistent with a study by Wichaphon, 2015, most informal borrowers had low and unstable incomes. Consistent with a study by Chadaporn, 2015, lack of access to funding and large family members of informal borrowers inevitably resulted in informal borrowing.

## **Recommendations**

The recommendation obtained from this research is that the government should focus on finding solutions to the household debt problem for the stable and sustainable development of the country. Moreover, financial institutions should adopt this approach to introduce savings principles to the public sector to reduce the burden of household debt. The researcher would like to suggest an interesting two-level household debt reduction guideline towards the stability and sustainability of the country as follows:

### ***Government policy level***

- (1) The Ministry of Labor and related government agencies should have measures to reduce the causes leading to household debt such as a policy that promotes increasing income to meet daily expenses.

- (2) The Ministry of Finance should not adopt a cash distribution policy but should provide financial knowledge or income efficiency measures.
- (3) The Ministry of Education should develop a course or body of knowledge related to finance, including savings products from high school to university.
- (4) The Bank of Thailand should have more restrictive measures to control personal loans of financial institutions to reduce bad debt or non-performing loans (NPL).

### **Operational level**

- (1) Financial institutions should develop credit products for low-income or unstable income such as self-employed or merchant loans.
- (2) Financial institutions should improve borrowing conditions so that people can access more sources of formal loans, resulting in a reduction of informal debt.
- (3) Financial institutions should develop a service system that can be contacted easily and quickly to reduce access to informal borrowing sources.
- (4) Financial institutions should develop credit expertise for employees by researching information thoroughly to screen customers and provide accurate information advice to borrowers.
- (5) Financial institutions should analyze the behavioral data of debtors in the sense that they may be strict with overdue debtors and closely to avoid becoming NPL debtors.

## **Recommendations for future research**

According to this study, collected data from the Credit Responsibility Group of Financial Institutions, Thailand has a population with uncertain incomes. These people have low incomes and are unstable, resulting in more informal debt. Subsequent studies should provide an in-depth analysis of each occupation group to obtain accurate information and apply it to effective policy-making. In addition to the main components of the research, external components were not analyzed. Importantly, research should be continued, namely, technological advancements, domestic and foreign economic systems, domestic political stability, as well as natural disasters and epidemics.

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