

-RESEARCH ARTICLE-

## GENERATION Y OVER-INDEBTEDNESS DECISION EFFECT FACTORS AFTER COVID-19 ERA: A CASE STUDY OF PHUKET PROVINCE, THAILAND

**Kulwadee Lim-u-sanno**

Assoc. Prof. Dr., Department of Accounting,  
Faculty of Management Sciences,  
Prince of Songkla University;  
Email: [kulwadee.l@psu.ac.th](mailto:kulwadee.l@psu.ac.th)

**Banpot Wiroomratch**

Assoc. Prof. Dr., Faculty of Political Science,  
North Bangkok University;  
Email: [banpot.wi@northbkk.ac.th](mailto:banpot.wi@northbkk.ac.th)

**Manop Saengchamnong**

Ph.D., Faculty of Liberal Art, Rajapark Institute,  
Email: [manop.sangjumnong@gmail.com](mailto:manop.sangjumnong@gmail.com)

**Chaiwat Watthanathiraphapwong**

Master's Degree Student in Accounting,  
Faculty of Management Sciences,  
Prince of Songkla University;  
Email: [ChaiwatWa@gmail.com](mailto:ChaiwatWa@gmail.com)

### —Abstract—

Given the critical role of decision-making in managing debt, particularly in cases of Over-Indebtedness Decision (OD), and the significance of Generation Y in contemporary contexts, it is essential to investigate the factors influencing such decisions. This article reports on a study aimed at (1) examining the determinants of

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decision-making related to OD and (2) analysing behaviours impacting OD among 399 Generation Y residents of Phuket, Thailand. Phuket was selected as a pilot area for the country's post-COVID-19 reopening. Data were collected using questionnaires that included multiple-choice close-ended questions to assess demographic characteristics and a 5-point Likert scale. The research instruments were validated through the Index of Item-Objective Congruence (IOC) by five experts, and the questionnaire achieved a Cronbach's Alpha value exceeding 0.75. The study explored various aspects, including consumer behaviour, marketing mix factors, the impact of the COVID-19 crisis, and OD levels. Data analysis employed statistical software, utilizing descriptive statistics, ANOVA (LSD), and multiple regression analysis for hypothesis testing. The findings revealed that having children/dependents and marital status influenced different levels of OD. However, the study did not find statistically significant differences in behaviours associated with excessive debt. It did identify correlations between consumer behaviour related to basic needs and investment/business purposes, certain indicators of the 4P's marketing mix (specifically Product and Price), and the impact of COVID-19 on family income, all of which were related to OD.

**Keywords:** Over-Indebtedness, COVID-19, Behaviour of Excessive Debt

## INTRODUCTION

Historical and educational evidence indicates that excessive debt can adversely affect both individual consumers and society at large. Nevertheless, in the 21st century, borrowing is frequently viewed as a necessary component of achieving an enhanced standard of living (Brook, 2007; Friedman & Bordo, 2017). Key factors have emerged that drive the demand for improved living standards, particularly during recovery periods following crises such as COVID-19 (Ferreira et al., 2021; Kurowski, 2021). When managed prudently, borrowing can enable consumers to acquire high-cost goods that would otherwise be unattainable with cash alone (Carlsson Hauff & Nilsson, 2020). The accessibility of credit, especially in the aftermath of crises, has been identified as a significant factor contributing to rising household and personal debt, along with increasing bankruptcy rates, particularly among Generation Y (ages 23-43, born between 1981 and 2000). This cohort often lacks adequate financial management experience (Carlsson Hauff & Nilsson, 2020; Loke, 2016; Rahman et al., 2020). Research demonstrates a strong correlation between over-indebtedness (OD) and consumer behaviour, particularly concerning basic needs and business investments (Yakean et al., 2020). For example, acquiring assets such as homes or vehicles frequently involves borrowing, which, despite manageable monthly payments, can result in OD if consumers overestimate their financial capacity.

The increased availability of credit, particularly in the wake of various crises, presents a dual-edged reality. While it has offered economic security to households, it has also contributed to rising levels of household and personal debt. This accessibility has led to a notable increase in debt-related problems, including bad debts and bankruptcies, particularly among Generation Y (aged 23-43, born between 1981 and 2000), who frequently lack adequate financial management experience (Carlsson Hauff & Nilsson, 2020; Loke, 2016; Rahman et al., 2020). Research by Carlsson Hauff and Nilsson (2020) indicates that many young adults from Generation Y have accumulated excessive debt, largely driven by general consumer behavior. OD is commonly linked to borrowing for essential needs or business investments (Herispon, 2019; Yakean et al., 2020). A significant source of this debt is the acquisition of assets such as homes or vehicles, which often necessitate loans. Although monthly instalment plans offered by lenders are intended to alleviate financial strain by spreading payments over time, this convenience can lead to over-indebtedness. Consumers may overestimate their ability to manage these debts, mistakenly believing that manageable monthly payments equate to financial stability, thereby resulting in the assumption of more debt than they can realistically handle.

The amount of a loan is influenced by both the lender's criteria for determining loan amounts and the borrower's financial profile. This dynamic often reflects borrower behaviour, where individuals with heightened confidence in their financial capabilities are inclined to borrow more compared to those with lower confidence levels (Carlsson Hauff & Nilsson, 2020). Consumer behaviour studies indicate that a relaxation of stringent debt control measures correlates with an increase in OD, driven by factors such as life satisfaction and a pursuit of well-being (Ferreira et al., 2021). The concept of excessive debt behaviour seeks to elucidate, from a psychological perspective, the real-life usage of credit, debt accumulation, and over-indebtedness. Psychological factors, such as uncontrollable spending beyond one's income or the use of credit cards without regard for repayment capacity, are significant contributors to over-indebtedness. This behaviour often culminates in severe debt issues and financial instability (Lea, 2021). Empirical evidence suggests that individuals with excessive confidence in their financial abilities are more likely to incur higher levels of debt, leading to increased rates of over-indebtedness (Carlsson Hauff & Nilsson, 2020). Alternatively, there exists a perspective on leveraging OD within business operations and profit-oriented strategies through strategically designed loan offerings. This approach often involves managing funds to enhance business profitability or utilizing long-term loans from lenders or investors to address financial challenges. However, such strategies are accompanied by inherent risks. In the current economic context, these risks are particularly unpredictable and heighten the potential for insolvency (Rahman et al., 2020).

Research on OD encompasses a range of studies examining factors such as gender, age, education, family dynamics, marital status, financial literacy, debt burdens, and employment status (Hämmig & Herzig, 2022; Hiilamo, 2021; Pisitpipattana, 2018; Rahman et al., 2020). These studies explore how personal financial management skills, such as expense planning and financial literacy, relate to OD (French & McKillop, 2016; Hamid & Loke, 2021; Srivalosakul et al., 2018). Additionally, research incorporates Jerome McCarthy's 1957 marketing mix theory, showing its impact on consumer purchasing decisions and payment methods, including credit and OD (Gossen et al., 2019; Kelleci & Yıldız, 2021; Lahtinen et al., 2020; Lissitsa & Laor, 2021). Furthermore, studies have observed an increase in debt levels during the COVID-19 pandemic (Kurowski, 2021; Ritdamnernkit, 2018).

The study's objectives are informed by the outlined context and are as follows: (1) to examine the factors influencing decision-making, and (2) to analyse the behaviours affecting OD among Generation Y. Data from the Thailand (2021a) indicate a growing trend of debt accumulation among Thai individuals, with forecasts suggesting an annual increase in the proportion of indebted individuals (Thailand, 2021b). Additionally, indebtedness levels among the Thai population, particularly Generation Y, vary according to financial literacy (Pisitpipattana, 2018). The study focuses on Phuket Province, a prominent economic hub for tourism in Thailand, and considers the economic repercussions of the COVID-19 crisis. Given Phuket's role as a model area for post-pandemic reopening, the study aims to explore and develop strategies to understand and manage credit issues, household debt, and related social impacts (Lea, 2021).

## LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

### Over-Indebtedness Decision and Generation Y

Financial status is a key determinant of overall life satisfaction and serves as a moderating factor in the impact of debt (Lombardi et al., 2017). OD becomes a critical issue when a household is required to repay debts that exceed its available resources and income. This situation leads to an inability to meet all debt obligations in the short term and results in insufficient funds to cover living expenses over the long term (Ferreira et al., 2021). Definitions and measurement methods of OD vary across studies, but literature reviews indicate that common indicators are frequently employed (Bodea & Deceanu, 2022; Cifuentes & Martínez, 2020; Ferreira et al., 2021). These indicators typically include: (a) a high repayment rate relative to income (e.g., spending more than 30% of total monthly income on unsecured debt repayments), (b) multiple credit obligations (e.g., holding four or more loans), (c) arrears exceeding two months, and (d) personal perception of debt as an overwhelming burden (Angel, 2016; Ferreira et al., 2021).

Generation Y, encompassing individuals born during the information age and significantly shaped by digital technology, emerged during a period of declining birth rates. This generation is notably larger than preceding cohorts and currently wields considerable purchasing power. Many members of Generation Y are active in the workforce, gaining experience post-graduation, and often exhibit a resilience that prompts them to incur debt early in their careers. They frequently take on debt to secure long-term stability, such as acquiring homes or purchasing vehicles and equipment for professional use (Pisitpipattana, 2018). Research indicates that this generation generally possesses sound basic financial literacy and entrepreneurial capabilities, occasionally leveraging OD for project financing. Nonetheless, many lack long-term financial planning, effective money management, and careful consideration before making purchases. This behaviour often leads to excessive spending, contributing to OD and resulting in unsustainable debt burdens (Pisitpipattana, 2018).

### **Personal Characteristics and OD**

Various personal factors, including gender, education, occupation, marital status, income, dependents, and monthly expense planning, have been found to influence OD at varying levels (Pisitpipattana, 2018). The association between gender, marital status, and household circumstances with OD highlights that social roles related to gender, marital status, cultural background, access to financial resources, education, financial literacy, and debt burden contribute to differences in OD between men and women (Rahman et al., 2020). The relationship between education and OD suggests that higher educational attainment is associated with improved financial management skills, financial knowledge, and long-term financial planning, whereas lower educational levels increase the risk of OD (French & McKillop, 2016; Hamid & Loke, 2021). Additionally, individuals with stable employment and planned monthly expenses tend to manage debt more effectively than those with unstable income or irregular employment, as financial instability and insufficient income often lead to higher debt reliance (Hämmig & Herzig, 2022). Moreover, Hiilamo (2021) notes that financial needs increase with dependents, which can contribute to OD. This information leads to the formulation of the following hypothesis.

**H1:** *Differences in Personal Characteristics lead to differences in OD.*

### **Behaviour of Excessive Debt and OD**

Uncontrolled spending behaviours, such as exceeding one's income or using credit cards without regard for repayment capacity, are considered critical factors contributing to over-indebtedness and resulting in severe debt problems and financial imbalance (Lea, 2021). Conversely, employing OD for business operations and profit generation, through well-structured credit models, may offer long-term solutions to credit issues but

also introduces inherent risks (Rahman et al., 2020). Empirical evidence indicates that borrowers with excessive confidence in their financial abilities are prone to borrowing more, leading to higher rates of OD compared to those with lower confidence (Carlsson Hauff & Nilsson, 2020). Research consistently identifies several key factors contributing to OD, often referred to as the Behaviour of Excessive Debt. These include (a) debt burden (total debt and monthly payment obligations), (b) debt payment default (delinquency of two months or more) (Ferreira et al., 2021), and (c) multiple financial credit sources (holding four or more credit accounts/cards) (Ferreira et al., 2021). Based on this literature, the study hypothesis is formulated as follow,

**H2:** *Differences in Behaviour of excessive debt lead to differences in OD.*

### **Consumer Behaviour**

Research on consumer behaviour has revealed that a relaxation of debt control measures or reduced strictness can lead to an increase in OD, driven by desires for life satisfaction and improved living standards (Ferreira et al., 2021). This finding aligns with Maslow's Hierarchy of Needs (1943). Furthermore, Yakean et al. (2020) and Herispon (2019) have identified various indicators linking consumer behaviour to OD. These indicators include expenditures on basic needs, family support, travel/social activities, electronics, education, and investment or business ventures. Based on these observations, the following study hypothesis can be proposed.

**H3:** *Consumer behaviour is related to OD.*

### **4P's Marketing Mix**

This study integrates Jerome McCarthy's Marketing Mix theory (1957), which emphasizes the management of the 4Ps—Product, Price, Place, and Promotion—to explore their relationship with OD. According to Lahtinen et al. (2020), the Marketing Mix framework can be applied to various marketing contexts and significantly impacts consumer purchasing decisions. Lissitsa and Laor (2021) note that the Marketing Mix is relevant across different consumer age groups. However, it is important to recognize that while the Marketing Mix influences purchasing decisions and payment methods, including credit use, it can sometimes contribute to OD. Kelleci and Yıldız (2021), as well as Gossen et al. (2019), highlight the role of marketing management strategies in fostering sustainable consumption and enhancing individual well-being by mitigating excessive debt. Based on these insights, the study hypothesis can be formulated as follows.

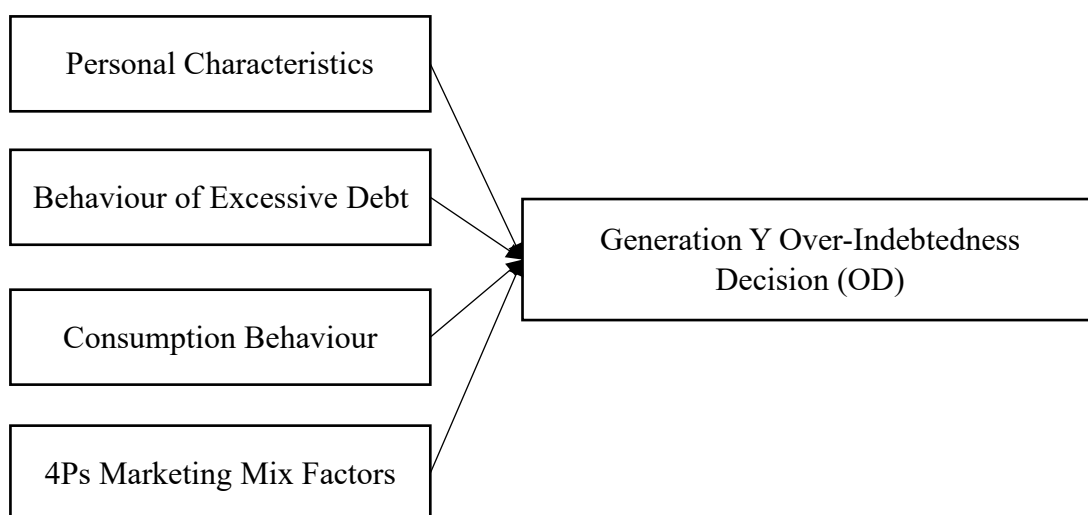
**H4:** *4P's marketing mix is related to OD.*

### **Factors of the COVID-19 Crisis**

Ritdamnernkit (2018) identified several factors contributing to increased debt during the COVID-19 pandemic within the sample group. These factors include: (a) reduced income due to prolonged pandemic conditions insufficient to meet current living expenses, (b) decreased income among family members, (c) rising consumption expenses, (d) existing debt burdens, and (e) the impact of government debt relief measures on debt levels and OD. The pandemic underscored issues such as unexpected income losses, inadequate personal financial preparedness, and challenges in household budgeting, leading to difficulties in debt repayment and influencing credit use and OD. During the crisis, consumer credit saw a higher incidence compared to housing loans (Kurowski, 2021). Based on these observations, the study hypothesis can be formulated as follows.

**H5:** *Factors of the COVID-19 Crisis are related to OD.*

## RESEARCH FRAMEWORK



**Figure 1:** Research Framework

## RESEARCH METHOD

### Population and Sample

The study defines its population as all residents of Phuket Province, specifically targeting Generation Y, defined as individuals born between 1981 and 2000 (Bussin et al., 2019). As reported by the Department of Provincial Administration, Phuket has a total population of 418,674, with 127,715 individuals belonging to Generation Y (Administration, 2022). The sample size was calculated using Taro Yamane's formula with a 0.05 margin of error, resulting in a sample of 399 respondents.



Table 1 displays the demographic characteristics of the Generation Y sample. Of the 399 respondents, the majority were female, comprising 248 individuals (62.2%), while 151 respondents (37.8%) were male. Regarding educational attainment, the majority held a bachelor's degree, with 244 individuals (61.2%), followed by those with a master's degree, numbering 149 (37.3%). In terms of occupation, most respondents were employed in private companies, totalling 227 individuals (56.9%), followed by public servants (89 individuals, 22.3%), and self-employed business owners (74 individuals, 18.5%). Marital status data revealed that the majority were single (277 individuals, 69.4%), with 118 respondents (29.6%) being married. Additionally, 281 respondents (70.4%) reported having no children. The majority of respondents reported having planned monthly expenses, with 341 people, accounting for 85.5%, while the remaining 58 people, or 14.5%, reported not planning their monthly expenses.

**Table 1: Personal Characteristics and Behavior of Excessive Debt**

Personal Characteristics					
Total Sample	399 (100%)	-	-	-	-
Gender	Male 151 (37.8%)	Female 248 (62.2%)	-	-	-
Education	Undergraduate 6 (1.5%)	Bachelor 244 (61.2%)	Postgraduate 149 (37.3)	-	-
Occupation	General employment 9 (2.3%)	Private company emp. 227 (56.9)	Public servant 89 (22.3%)	Self- owners' business 74 (18.5%)	-
Married Status	Single 277 (69.4%)	Married 118 (29.6%)	Others 4 (1.0%)	-	-
Children/ Dependents	Yes 118 (29.6%)	None 281 (70.4%)	-	-	-
Monthly Expenses Planned	Regularly 341 (85.5%)	No Plan 58 (14.5%)	-	-	-
Income (THB)	<15.0K 10 (2.5%)	15.0K-30.0K 146 (36.6%)	30.0K-45.0K 139 (34.8%)	45.0K- 50.0K 57 (14.3%)	>50K 47 (11.8%)
Behaviour of Excessive Debt.					
Debt Burden (THB)	1K-5K 93 (23.3%)	5K-10K 125 (31.3%)	10K-15K 116 (29.1%)	15K-20K 30 (7.5%)	25K-30K 35 (8.8%)
Debt Payment Default (Month)	Never 218 (70.4%)	A Month 73 (18.3%)	2 Month 38 (9.5%)	3 Month 7 (1.8%)	-
Nr of Credit Card	None 36 (9.0%)	1-3 284 (71.2%)	>3 79 (19.8%)	-	-



**Income (THB):** The majority of respondents reported an average monthly income ranging from 15,000 to 30,000 THB, with 146 individuals (36.6%) falling into this category. A further 139 respondents (34.8%) had an average monthly income between 30,001 and 45,000 THB. Additionally, 57 respondents (14.3%) earned between 45,001 and 50,000 THB per month, while 47 respondents (11.8%) had a monthly income exceeding 50,001 THB. Only 10 respondents (2.5%) reported an average monthly income of less than 15,000 THB.

**Generation Y Behaviour of Excessive Debt:** The majority of respondents reported a monthly debt burden ranging from 5,000 to 10,000 THB, with 125 individuals (31.3%) in this category. A further 116 respondents (29.1%) had a monthly debt burden between 10,001 and 15,000 THB, while 93 respondents (23.3%) reported a debt burden of 1,000 to 5,000 THB per month. Additionally, 34 respondents (8.5%) had a monthly debt burden ranging from 20,001 to 25,000 THB, and 30 respondents (7.5%) reported a debt burden of 15,001 to 20,000 THB per month.

**Debt Payment Default (Month):** The majority of respondents reported having never defaulted on a payment, with 281 individuals (70.4%) in this category. Additionally, 73 respondents (18.3%) had defaulted for one month, 38 respondents (9.5%) had defaulted for two months, and 7 respondents (1.8%) had defaulted for three months.

**Number of Credit Cards:** The majority of respondents reported holding 1 to 3 credit or cash cards, with 284 individuals (71.2%) in this category. In contrast, 79 respondents (19.8%) had 4 or more credit or cash cards, while 36 respondents (9.0%) reported having none.

## **Data Collection**

Data collection involved using a questionnaire that was assessed for validity through the Index of IOC by five experts, and reliability was confirmed with a Cronbach's Alpha greater than 0.75 after a preliminary trial. The questionnaire comprised multiple-choice, close-ended questions addressing demographic factors such as gender, education level, occupation, marital status, presence of children or dependents, and current housing situation. Additionally, it examined factors related to excessive debt behaviour, including monthly expense planning, average monthly income, amount of monthly debt payments, payment defaults, number of credit and cash cards, consumption behaviour, family financial support, and attitudes toward indebtedness. The opinion section of the questionnaire employed a 5-point Likert scale, ranging from "5" (maximum) to "1" (minimum), to assess various aspects including consumption behaviour, marketing mix factors, the impact of the COVID-19 crisis, and elements influencing decision-making related to indebtedness. Data collection occurred from December 2022 to January 2023.

## Data Analysis

Data analysis was conducted using statistical software to perform Descriptive Statistics and Inferential Statistics, including LSD One-way ANOVA and Multiple Regression Analysis, to test the hypotheses. The variable definitions are outlined in [Table 2](#).

## RESEARCH RESULT

### Descriptive Analysis

The descriptive statistical analysis of the various variables is detailed in [Table 2](#).

**Table 2: Descriptive Statistical Analysis of Variables**

Variable	Mean	S.D.	Significant Level
<b>Consumer Behaviour</b>	4.237	.676	<b>Highest</b>
- Spending for Basic Needs	4.27	.752	Highest
- Spending for Family Support	4.25	.776	Highest
- Spending for Travel/Socializing	4.28	.745	Highest
- Spending for Purchasing Electronics	4.19	.841	High
- Spending for Education	4.26	.693	Highest
- Spending for Investment or Business Purposes	4.22	.807	High
<b>4P's Marketing Mix</b>	4.140	.713	<b>High</b>
- Product	4.05	.867	High
- Price	4.18	.772	High
- Place	4.18	.787	High
- Promotion	4.15	.803	High
<b>Covid 19 Affect to Family' Income</b>	4.078	.852	<b>High</b>
<b>Over-Indebtedness Decision (OD)</b>	4.06	.718	<b>High</b>
- Feeling Capable of Repaying the Debt Even if it Requires Paying More than 30% of the Total Monthly Income	4.03	.835	<b>High</b>
- History of Overdue Loan Payments for More than 2 Months is Considered Normal.	4.05	.820	High
- Holding More than 4 Loan/Credit Card Accounts	4.14	.785	High
- The Current Debt Burden is "Heavy" But it is Believed to Still be Manageable.	4.01	.852	High

[Table 2](#) shows that the Generation Y sample group perceives their overall consumer behaviour at the "highest" level (Mean = 4.237, S.D. = .676). The factors rated as "highest" in importance include spending on travel/social activities (Mean = 4.28, S.D. = .745), basic needs (Mean = 4.27, S.D. = .752), education (Mean = 4.26, S.D. = .693), and family support (Mean = 4.25, S.D. = .776). Factors evaluated at the "high" level are spending on investment or business (Mean = 4.22, S.D. = .807) and purchasing electronics (Mean = 4.19, S.D. = .841). Regarding the 4P's Marketing Mix, it is rated overall at a "high" level (Mean = 4.140, S.D. = .713). The importance rankings for each

component are as follows: Price (Mean = 4.18, S.D. = .789), Place (Mean = 4.18, S.D. = .787), Promotion (Mean = 4.15, S.D. = .803), and Product (Mean = 4.05, S.D. = .867). The impact of COVID-19 on family income is also rated at a "high" level (Mean = 4.078, S.D. = .852), and its influence on Over-Indebtedness Decision is rated overall at a "high" level (Mean = 4.06, S.D. = .718). Key indicators of over-indebtedness include holding more than four loan or credit card accounts (Mean = 4.14, S.D. = .785), experiencing overdue loan payments for more than two months as normal (Mean = 4.05, S.D. = .820), feeling capable of managing debt even if it requires allocating over 30% of total monthly income (Mean = 4.03, S.D. = .835), and perceiving the current debt burden as "heavy" but still manageable (Mean = 4.01, S.D. = .852).

### Sample Characteristics and Over-Indebtedness Decision

The results of the analysis for testing differences in sample characteristics affecting Over-Indebtedness Decision, using t-Test and ANOVA (F-test), are presented in [Table 3](#). [Table 3](#) indicates that Generation Y respondents with children or dependents exhibit a higher level of OD compared to those without dependents. Additionally, singles tend to report higher levels of OD than their married counterparts. Income data suggest that individuals in the 45K-50K THB income bracket experience a reduction in OD compared to those earning less than 45K THB. Furthermore, respondents earning between 15K-30K THB demonstrate higher OD levels than those earning above 50K THB, with this finding reaching statistical significance at the 0.05 level. However, no statistically significant differences were observed concerning Gender, Monthly Expense Planning, Education, Occupation, or Excessive Debt Behaviour among Generation Y.

**Table 3: Analysis on the Differences between Mean Values among Variables Affecting Over-Indebtedness Decision**

Characteristics Variable	t-Test	Sig	ANOVA Test Result (LSD)				
- Gender	-0.143	0.886					
- Children	-2.592	0.010*					
- Monthly expense plan	-1.526	0.128					
	<b>F-Test</b>	<b>Sig</b>					
- Education	0.669	0.513					
- Occupation	2.186	0.089					
- Married Status	3.082	0.047*		Married	Others		
			Single	0.015*	0.548		
			Married	-	0.946		
- Income	3.587	0.007*		15K-30K	30K-45K	45K-50K	>50K
			<15K	0.398	0.206	0.025*	0.062
			15K-30K	-	0.243	0.002*	0.026*
			30K-45K		-	0.023*	0.163

			45K-50K			-	0.533
<b>Behaviour of Excessive Debt</b>	<b>F-Test</b>	<b>Sig</b>					
- Debt Burden	0.563	0.728					
- Debt Pay Default	1.877	0.133					
- Nr of Credit Card	0.557	0.573					
* Significant level .05							

## Multiple Regression Analysis

The Pearson Correlation analysis results reveal correlation coefficients ranging from .519 to .745, which support the hypothesis of the Linear Regression Model and indicate minimal multicollinearity. These correlation values are within acceptable limits, facilitating further examination of the model through Multiple Regression Analysis (Hair et al., 2010). The outcomes of the Multiple Regression Analysis are detailed in Table 4.

**Table 4: Analysis on Differences in Mean Values Among Variable Pairs**

	<b>Model#1</b>			<b>Model#2</b>		
<b>Variable</b>	<b>Beta</b>	<b>t</b>	<b>Sig.</b>	<b>Beta</b>	<b>t</b>	<b>Sig.</b>
(Constant)		-	-		1.977	.049
<b>Consumer Behaviour</b>	.358	8.618	.000	-	-	-
- Spending for Basic Needs	-	-	-	.102	2.802	.005
- Spending for Family Support	-	-	-	.031	.835	.404
- Spending for Travel/Socializing	-	-	-	.017	.419	.675
- Spending for Purchasing Electronics	-	-	-	.009	.231	.817
- Spending for Education	-	-	-	.012	.315	.753
- Spending for Investment or Business Purposes	-	-	-	.225	5.297	.000
<b>4P's Marketing Mix</b>	.405	8.573	.000	-	-	-
- Product	-	-	-	.259	6.381	.000
- Price	-	-	-	.116	2.770	.006
- Place	-	-	-	-.004	-.106	.915
- Promotion	-	-	-	.019	.468	.640
<b>Covid-19 Effect</b>	.236	6.948	.000	-	-	-
- To Family Income	-	-	-	.267	6.774	.000
R	.996			.885		
R Square	.993			.784		
Adjusted R Square	.993			.778		
F-Test	17961.705			127.605		
Sig	.000			.000		

Table 4 presents the results from the Multiple Regression Analysis, summarizing two standardized models. Model #1 accounts for 99.3% of the variance in the dependent

variable, while Model #2 explains 78.4% of the variance. The regression models can be expressed in the following equations:

Over-Indebtedness Decision (OD)<sub>std</sub> = .358\*Consumer behaviour + .405\*4P's Marketing

Mix + .236\*Covid-19 effect ..... Model#1

Over-Indebtedness Decision (OD)<sub>std</sub> = .102\* Spending for basic needs + .225\* Spending for investment or business purposes + .259\*Product + .116\*Price + .267\*

Covid-19 effect to Family income... Model#2

### Hypothesis Summary

The results of the MRA hypothesis testing are summarized in [Table 5](#).

**Table 5: Factors Influencing the Decision to Incur Over-Indebtedness.**

Hypothesis	Description	Analysis/Result	Summary
H1	Different personal characteristics vary in their impact on the over-indebtedness (OD) of Generation Y.	Children/dependents and married status showed a statistically significant relationship at the .05 level in relation to differences in Over-indebtedness Decision (OD).	Accept the hypothesis
H2	Different behaviours of excessive debt have varying impacts on the OD of Generation Y.	Differences in debt burden, debt payment, default, and the number of credit cards did not yield statistically significant results.	Reject the hypothesis
H3	Consumer behaviour is correlated with the OD of Generation Y.	Consumer behaviour revealed statistically significant results for the use for basic needs and use for investment or business operations in relation to OD.	Accept the hypothesis
H4	The 4P's Marketing mix is correlated with the OD of Generation Y.	The 4P's Marketing mix showed statistically significant results for product and price in relation to OD.	Accept the hypothesis
H5	Factors from the COVID-19 crisis are correlated with the OD of Generation Y.	The COVID-19 effect revealed statistically significant results for the effect on family income in relation to OD.	Accept the hypothesis

## DISCUSSION AND CONCLUSION

To address the research objectives, the following conclusions and discussions were drawn:

**Impact of Personal Characteristics on OD Among Generation Y:** The analysis reveals statistically significant differences in OD related to the presence of children or dependents and marital status, with these factors demonstrating a significant relationship at the 0.05 level. Specifically, having family members is associated with higher consumption expenses compared to being single and childless. This finding aligns with the studies of [Ritdamnernkit \(2018\)](#) and [Kurowski \(2021\)](#), which observed an increase in debt during the COVID-19 pandemic due to reduced income and inadequate financial preparedness, making it challenging to cover living expenses and repay debt.

**Influence of Excessive Debt Behaviour on OD Among Generation Y:** The study did not find statistically significant differences in OD when examining variables such as debt burden, debt payment defaults, and the number of credit cards. This lack of significance may be attributed to the restrictive financial conditions imposed by the COVID-19 pandemic, which curtailed excessive spending and tightened credit availability ([Lea, 2021](#)). Additionally, individuals engaged in business operations were only able to incur debt when favourable conditions permitted, and long-term debt issues were addressed by evaluating crisis-related risks ([Rahman et al., 2020](#)). The study could not confirm whether borrowers' confidence in their financial abilities correlated with lower OD rates compared to those with less confidence, consistent with findings by ([Carlsson Hauff & Nilsson, 2020](#)).

**Relationship Between Consumer Behaviour and OD Among Generation Y Post-COVID-19:** Statistically significant relationships were observed between consumer behaviour and OD, particularly concerning expenditures for basic needs and investment or business activities. This may reflect accumulated OD from the crisis or the incurrence of new OD for essential needs or post-crisis investments ([Kurowski, 2021](#); [Ritdamnernkit, 2018](#)).

**Impact of the 4P's Marketing Mix on OD:** The study identified statistically significant relationships between the product and price components of the marketing mix and OD. This finding supports the earlier conclusion that spending was restricted to essential purchases. Despite strategic placement and promotions, non-essential items did not significantly impact purchasing decisions or contribute to OD beyond manageable

levels, thereby exacerbating debt issues and financial imbalances (Lea, 2021; Rahman et al., 2020).

Effect of COVID-19 on Family Income and OD: Statistically significant relationships were found between the impact of COVID-19 on family income and OD. These findings corroborate the broader understanding that factors such as household situations, social roles, cultural influences, access to financial resources, education, and financial literacy, along with debt burdens and responsibilities, contribute to variations in OD (Rahman et al., 2020).

## SUGGESTIONS AND RECOMMENDATIONS

For Generation Y, effective financial management encompasses several key components: possessing financial expertise, maintaining reasonable spending relative to income, engaging in planned expenditures, being prepared for crises, engaging in comprehensive financial planning, and ensuring the availability of sufficient emergency funds. This approach is preferable to incurring debt or facing long-term OD. As future investors, whether in the form of new start-ups or through funding business operations, Generation Y must understand that the strategic use of OD for investment or business purposes is critical. Utilizing OD wisely for profit-seeking, coupled with adherence to risk assessments and approval processes from lenders, demonstrates the ability to secure the confidence of lenders or investors. This, in turn, facilitates the effective allocation of funds to generate returns. Nonetheless, given that business operations are subject to continuous change, adjustments should always be made with the aim of maximizing benefits. Future research should explore methods or models for managing OD to restore financial normalcy or to compare the financial conditions before and after a crisis.

## REFERENCE:

- Administration, D. O. P. (2022). The Thai population in 2022. <https://www.dopa.go.th/news/cate1/view6988>
- Angel, S. (2016). The effect of over-indebtedness on health: comparative analyses for Europe. *Kyklos*, 69(2), 208-227. <https://doi.org/10.1111/kykl.12109>
- Bodea, G., & Deceanu, L. (2022). Private over-indebtedness, a concept that has become too common? *Review of Economic Studies and Research Virgil Madgearu*, 15(1), 5-33. <https://www.cceol.com/search/article-detail?id=1044125>
- Brook, Y. (2007). The Morality of Moneylending: A Short History. 2(3), 9-45. <https://defendersofcapitalism.com/wp-content/uploads/2022/01/DoC-Morality-of-Money-Lending.pdf>
- Bussin, M. H., Serumaga-Zake, P., & Mohamed-Padayachee, K. (2019). A total rewards framework for the attraction of Generation Y employees born 1981–2000 in



- South Africa. *SA Journal of Human Resource Management*, 17(1), 1-14.  
<https://hdl.handle.net/10520/EJC-1fa6505c55>
- Carlsson Hauff, J., & Nilsson, J. (2020). Determinants of indebtedness among young adults: Impacts of lender guidelines, explicit information and financial (over) confidence. *International Journal of Consumer Studies*, 44(2), 89-98.  
<https://doi.org/10.1111/ijcs.12549>
- Cifuentes, R., & Martínez, F. (2020). *Over-indebtedness in households: measurement and determinants*. Banco Central de Chile.  
<https://www.researchgate.net/profile/Felipe-Martinez-14/publication/363481489>
- Ferreira, M. B., de Almeida, F., Soro, J. C., Herter, M. M., Pinto, D. C., & Silva, C. S. (2021). On the relation between over-indebtedness and well-being: an analysis of the mechanisms influencing health, sleep, life satisfaction, and emotional well-being. *Frontiers in psychology*, 12, 591875.  
<https://doi.org/10.3389/fpsyg.2021.591875>
- French, D., & McKillop, D. (2016). Financial literacy and over-indebtedness in low-income households. *International Review of Financial Analysis*, 48, 1-11.  
<https://doi.org/10.1016/j.irfa.2016.08.004>
- Friedman, M., & Bordo, M. (2017). *The optimum quantity of money*. Routledge. 1, 308.  
<https://doi.org/10.4324/9781315133607>
- Gossen, M., Ziesemer, F., & Schrader, U. (2019). Why and how commercial marketing should promote sufficient consumption: a systematic literature review. *Journal of Macromarketing*, 39(3), 252-269.  
<https://doi.org/10.1177/0276146719866238>
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. (2010). *Multivariate Data Analysis: Pearson Education. Upper Saddle River, New Jersey*. <https://www.iaesb.org/standards-pronouncements>
- Hamid, F. S., & Loke, Y. J. (2021). Financial literacy, money management skill and credit card repayments. *International Journal of Consumer Studies*, 45(2), 235-247.  
<https://doi.org/10.1111/ijcs.12614>
- Hämmig, O., & Herzig, J. (2022). Over-indebtedness and health in Switzerland: A cross-sectional study comparing over-indebted individuals and the general population. *Plos one*, 17(10), e0275441.  
<https://doi.org/10.1371/journal.pone.0275441>
- Herispon, H. (2019). An empirical analysis of household debt behavior determinants. *Economics and Finance in Indonesia*, 65(2), 132-148.  
<https://repository.stieriau-akbar.ac.id/id/eprint/32/>
- Hiilamo, H. (2021). The legacy of economic recession in terms of over-indebtedness: A framework and review of the evidence. *Social Policy and Society*, 20(1), 111-124.  
<https://doi.org/10.1017/S1474746420000354>

- Kelleci, A., & Yıldız, O. (2021). A guiding framework for levels of sustainability in marketing. *Sustainability*, 13(4), 1644. <https://doi.org/10.3390/su13041644>
- Kurowski, Ł. (2021). Household's overindebtedness during the COVID-19 crisis: The role of debt and financial literacy. *Risks*, 9(4), 62. <https://doi.org/10.3390/risks9040062>
- Lahtinen, V., Dietrich, T., & Rundle-Thiele, S. (2020). Long live the marketing mix. Testing the effectiveness of the commercial marketing mix in a social marketing context. *Journal of Social Marketing*, 10(3), 357-375. <https://doi.org/10.1108/JSOCM-10-2018-0122>
- Lea, S. E. (2021). Debt and overindebtedness: Psychological evidence and its policy implications. *Social Issues and Policy Review*, 15(1), 146-179. <https://doi.org/10.1111/sipr.12074>
- Lissitsa, S., & Laor, T. (2021). Baby Boomers, Generation X and Generation Y: Identifying generational differences in effects of personality traits in on-demand radio use. *Technology in society*, 64, 101526. <https://doi.org/10.1016/j.techsoc.2021.101526>
- Loke, Y. J. (2016). Living beyond one's means: evidence from Malaysia. *International Journal of Social Economics*, 43(1), 2-18. <https://doi.org/10.1108/IJSE-11-2013-0248>
- Lombardi, M. J., Mohanty, M. S., & Shim, I. (2017). The real effects of household debt in the short and long run. <https://ssrn.com/abstract=2906555>
- Pisitpipattana, L. (2018). Self-Control and Over-Indebtedness behavior among young residents of the Bangkok metropolitan area. . *Business Economics, Economics, Thammasat University*. [https://ethesisarchive.library.tu.ac.th/thesis/2018/TU\\_2018\\_6004010275\\_9934\\_10262.pdf](https://ethesisarchive.library.tu.ac.th/thesis/2018/TU_2018_6004010275_9934_10262.pdf)
- Rahman, M., Azma, N., Masud, M. A. K., & Ismail, Y. (2020). Determinants of indebtedness: Influence of behavioral and demographic factors. *International Journal of Financial Studies*, 8(1), 8. <https://doi.org/10.3390/ijfs8010008>
- Ritdamnernkit, K. (2018). *Factors affecting debt creation during the COVID-19 situation of Ban Bueng Municipality personnel, Chonburi Province*. . <https://mmm.ru.ac.th/MMM/IS/vlt15-1/6114993638.pdf>
- Srivalosakul, P., Suwanragsa, I., & Tangjitprom, N. (2018). More knowledge, more experience, less debt? The mediating role of money management on the effects of financial knowledge and experience on consumer debt. *The Mediating Role of Money Management on the Effects of Financial Knowledge and Experience on Consumer Debt (July 1, 2018)*. *Asian Administration & Management Review*, 1(2). <https://ssrn.com/abstract=3269057>
- Thailand, B. o. (2021a). Report on the results of the 2018 Thai Financial Skills Survey. <https://www.bot.or.th/content/dam/bot/image/research-and-publications/2561ThaiFLsurvey.pdf>.

- Thailand, B. o. (2021b). *Household debt: a problem that everyone must help solve.* .  
<https://www.bot.or.th/Thai/BOTMagazine/Pages/25650157TheknowledgeHouseholdDebt.aspx>.
- Yakean, S., Pangjai, K., Inta, K., Slesongsm, T., Sirikaew, P., & Nojuk, W. (2020). Factors Influencing Debt Creation of Generation Y People in Thawangthong Sub-District Municipality, Mueang Phayao District, Phayao Province. *Economics and Business Administration Journal Thaksin University*, 13(1), 95-112. <https://so01.tci-thaijo.org/index.php/ecbatsu/article/view/244743>