

# MEASURES OF SAVING DECISION AMONG YOUNG PROFESSIONALS : A FACTOR ANALYSIS

Ma. Althea O. Andrada\*

\*(Master in Business Administration, University of Mindanao, Davao City

Email: [maaltheaandrada@gmail.com](mailto:maaltheaandrada@gmail.com))

\*\*\*\*\*

## Abstract:

This paper aimed to explore the factors affecting the saving decisions of young professionals in Davao City. The study utilized a descriptive-exploratory research design involving 400 randomly selected young professionals in Davao City. A validated, researcher-made survey instrument comprising all possible factors or variables from various literature and related studies as well as interviews with key informants on the topic was used in the study. Employing the exploratory factor and thematic analysis, eight extracted constructs with 37 factors passed the  $\geq 0.50$  threshold for statistical significance after four rotations and iterations, thus making them measures of saving decisions. These measures are competence in money management, resilience to risk, financial strain exposure, wealth-driven mindset, saving orientation, fear of uncertainty, attitude to save, and fiscal adequacy.

*Keywords* —*business administration, saving decision, young professionals, exploratory factor analysis, thematic analysis, Philippines*

\*\*\*\*\*

## I. INTRODUCTION

Filipinos face numerous survival problems every day. In 2001, The Philippines is among the countries that has very low savings rate and increasing poverty rate (Torres, 2001). In 2014, Dr. Nandy Aldaba, a professor of economics at the Ateneo de Manila University stated that aside from the financial information problem and inequality of access to higher yielding instruments, there is a lack of “saving culture” due to increasing commercial attitudes that are promoted by various media and the accessible credit facilities. Further, savers have also been prone to easy money gimmicks and invested their excess funds in pyramid scams or fly-by-night firms (Business Mirror, 2014). In an interview in 2019, ING Bank Manila economist Nicholas Antonio T. Mapa mentioned that savings in the country suffer because the economy is dependent on consumption (Cuaresma, 2019). The Inflation rate in the country has also risen from 4.6

percent (CNN Philippines, 2018) to 5.7percent as of July of 2018 (Lopez, 2018). Various reasons have been provided by the Bangko Sentral ng Pilipinas governor, Mr. Nestor A. Espenilla, Jr., including higher global oil prices, additional excise taxes, as well as the calamities that restrained the supply of rice and other farm products. Coexistent with the problem of how to cope with the increasing inflation rate is the decreasing value of money given that interest rates on saving in banks and other financial institutions are still the same. Saving, especially at this point, is of advantage. Information from the Census and Economic Information Center (CEIC) DATA (2018) presented that the Philippines’ gross savings rate in the first quarter of 2018 was lower by 1.8 percent than the fourth quarter of 2017. Although there was an increase in the percentage of respondents who reported that they could set aside money for savings during the second quarter of 2018, there was also a decrease in the percentage of respondents that reported that

they could set aside 10percent or more of their income (BSP Consumer Expectation Survey, 2018). According to the latest survey by Bangko Sentral ng Pilipinas, around 77% of Filipino adults do not have bank accounts (de Guzman, 2018). Identified barriers include costs, lack of money, lack of documentary requirements, and perceived low utility of a bank account, among others. To address these barriers, the Bangko Sentral ng Pilipinas (2018) issued a circular which contains a framework for banks to offer a basic deposit account to promote account ownership among the unbanked. The account has minimum key features that include simplified know-your-customer (KYC) requirements, an opening amount of less than Php 100; no maintaining balance; and no dormancy charges. However, the maximum balance of the account was set to Php 50,000 to avoid the misuse of the basic deposit account.

Amid economic struggles, it is important to explore the factors affecting the saving decisions of Filipinos, particularly the young professionals in Davao City, to measure their awareness and preparedness for uncertain future financial responsibilities. According to Roux (2010), savings are done by three entities, including the households. If they fail to save, they will not have sufficient funds to cover future plans and may struggle financially. Savings is an essential part of economic growth over time. It leads the economy to full utilization of scarce resources in its most efficient way and can solve economic problems such as inflation, poverty, unemployment, foreign debt thru capital formation (Jagadeesh, 2015) provided that other conditions such as business-friendly economic policies, political stability, the rule of law and property rights are in place (Roux, 2010).

The focal point of this study is to develop a scale that identifies and measures the saving decision of young professionals in Davao City. While existing studies are already done exploring this topic, none has been found that has led to developing a measurement tool; hence this study is conducted.

## **II. RESEARCH OBJECTIVES**

The key thrust of the study is to develop a measurement scale on saving decisions among young professionals. Specifically, it aims to achieve the following objectives:

1. To identify the measures of saving decisions among young professionals.
2. To develop a framework that characterizes the saving decision of young professionals.

## **III. REVIEW OF RELATED LITERATURE**

This section presents various views, arguments, theories, and findings from researches and publications which are relevant in establishing the relevance, significance, credence and essence of this investigation, especially on ascertaining variables that influence saving decision.

### **YOUNG PROFESSIONALS**

Young professionals, also known as the millennials, the “instant-gratification generation” with high expectations for their professional and personal lives, entered the workforce at a time of economic instability and are approaching critical points of their financial decision making (Lusardi & Oggero, 2017). Despite the high expectations, most young professionals lack basic financial knowledge (de BassaScheresberg, 2013), not well equipped to make financial decisions (Mitchell et al., 2009), and has the tendency to spend a large portion of their income on shopping, movies, fast food, mobile phone expenditure, investment, and transportation (Birari & Patil, 2014). On the other hand, de BassaScheresberg (2013) also noted that young professionals who display higher confidence in personal finance knowledge have better financial outcomes: they are less likely to use high-cost borrowing methods, and they are more likely to plan for retirement or have set aside savings for emergency and future safety (Ajeesh, 2019). Moreover, Rutledge & Deshpande (2014) stated that younger people tend to be more present-oriented. Low future orientation was linked with high levels of debt, while low present orientation

was related to increased amounts of personal savings. However, some scholars believed that overall, literacy levels of young adults are insufficient to make reasonably informed financial decisions (Mandell & Klein, 2007).

## **SAVING DECISION**

Saving is one of the important decisions an individual makes every day. According to Pulka (2015), saving is an important tool for capital build-up and creation, which further enhance economic growth and development through investing the saved fund. In addition, Bairamli & Kostoglou (2010) believed savings of people is the most important investment resource for the development of the non-oil sector, as the foreign capital is mostly involved in the production of natural resources like oil and gas. The utilization of domestic savings is fundamental for raising economic growth and promoting development, as savings from the private sector affects the domestic investments significantly. If people save more, it enables financial institutions to lend more to firms for investment (Pettinger, 2018). As suggested in the Harrod-Domar model of economic growth, the level of savings is a key factor in determining economic growth rates. At a micro level, Whitaker et al. (2013) stated that for most families, savings might mean survival rather than a disaster. Cho (2009) also emphasized that saving should not only be for retirement and that individuals at any age must have adequate resources to cover unexpected expenses. Further, savings are considered one of the main triggers of social mobility and of possible future spending (Attanasio & Szekely, 2000).

Individuals have different reasons for saving. A study by Kumarasinghe & Munasinghe (2016) identified that the most significant motive of households in Kalutara district is the precautionary saving motive. Due to the uncertainty of the future or fear of the future, it is believed that people plan and prepare for future shocks. This argument is further supported by Lugalde et al. (2018), who mentioned that increased uncertainty produces extra savings. In several studies conducted by Zaleskiewicz et al. (2013), they propelled the idea

that saving money can protect an individual from anxiety and establish a more effective buffer than spending. Saving can relieve future-related anxiety and provide people with a sense of control over their fate, thereby interpreting uncertainties and even death ideas less threatening. In his study, Ceritoglu (2011) accentuated that labor income risk appears as one of the main determinants of saving decisions. As a response, households adopt alternative approaches such as having second jobs and having multiple earners in the family to smooth out their income streams. However, the study also stated that these individuals are still vulnerable to labor income risk.

Another study by West & Worthington (2016) mentioned that major life events or financial strain of Australian households affect their financial decision making. The major life events that were identified were serious illness or injury, death of a spouse, fired or made redundant, marriage, having children, get separated or divorced, or losing a family member and these can cause households to rebalance portfolios in ways that have detrimental impacts on long term wealth accumulation. In addition to the major events mentioned, an individual's saving motive also includes preparation for emergencies like saving disaster and hospitalization (Samuel et al. 2012; Niwanthika, 2016). Although future strain can be a motive to save, there will be instances where financial strain such as having poor health can have a negative effect on the likelihood of saving (Fisher & Montalto, 2010). In a study by Reading & Reynolds (2001), they stated that the strongest predictor of depression among mothers of infants is concerned about debt. Perceived financial strain also worsened the mental health of individuals on the verge of bankruptcy (Selenko & Batinic, 2011). That sense of being financially strained among low-income among Northern Irish households resulted in psychological and physical health problems (French & McKillop, 2015).

On the one hand, Chia et al. (2012) identified the determinants of saving behavior among university students in Malaysia and these are financial literacy or competence in money management, parental socialization, peer influence,

and self-control. According to Jappelli (2010), a large portion of adults in most countries is unfamiliar with even the basic economic concepts that can be blamed for an individual's poor financial decisions. Although the definition of financial knowledge varies from one to another, this study adopts the definition of financial literacy as the ability to read, analyze, manage and communicate about the personal financial conditions that affect material well-being (Cude, 2010).

Further, Lusardi & Mitchell (2011) claimed that financial illiteracy is widespread in both well developed and rapidly changing markets and is a critical factor to retirement security. Thus, Zait & Berteau (2014) emphasized the importance of financial education of a country in obtaining a healthy economic life by suggesting that there should be a systematization of the concept based on five variables: financial knowledge; financial communication ability; ability to use financial knowledge for decision-making; real use of financial instruments; and financial confidence. Further, Isomidinova & Singh (2017) mentioned in their study conducted in Uzbekistan that financial literacy can be attained through financial education. Financial knowledge directly influences financial behaviour (Robb & Woodyard, 2011). More knowledgeable consumers would display more responsible financial behaviors and are more willing to save and invest (Lusardi & Mitchell, 2011) and would influence an individual's financial behavior towards a positive direction, such as establishing an emergency fund, having a retirement fund, and investments. The effect of financial knowledge and financial skills statistically has a significant positive relationship with personal financial decisions (Mwathi, et al. 2017).

However, Fernandes & Lynch (2014) stated that financial literacy only explains 0.1% of the variance of financial behaviors studied, with weaker effects in low-income samples. Research findings of Robb & Woodyard (2011) also mentioned that whether an individual's financial management decision is wise or not, it is closely related to the individual's ability and knowledge of concepts in financial literacy. The results of a study on

teenagers in Germany conducted show that financial training program significantly increases the teenager's interest in financial matters and their financial knowledge, especially on matters dealing with their ability to assess the riskiness of assets. There was also a noted decrease in the occurrence of impulse purchases. However, there was no evidence of a significant increase in savings (Luhmann et al., 2014)

One of the reasons being considered why individuals have poor financial decisions is the lack of familiarity with financial products from which they could benefit (Vaitilingam, 2016). In fact, Jappelli & Padula (2013) provided a simple model that shows financial literacy as a form of human capital, which individuals can accumulate in financial knowledge. Financial literacy and wealth are determined jointly and are positively correlated over the life-cycle. Other factors that affect financial literacy affect wealth in the same direction.

A study conducted by Rickwood et al. (2017) revealed that self-efficacy and attitudes are the main factors that cause an individual to save. Lim et al. (2011) identified that the ability of an individual to maintain self-control for saving depends on the strength of two opposing forces - desire and willpower. People are more likely to save if they are able to control themselves via implementing rigorous budgeting and economic cost assessment. In the same thought, Chudzian & Mikolajczak (2015) mentioned that people who have savings are more likely to perceive the possibility of covering unexpected expenses and a greater sense of security. Nyhus & Webley (2001) also assert that self-control and leadership make people make better decisions with respect to their financial responsibilities. In their inquiry, Sabri & Macdonald (2010) articulated that an individual's financial experience may create bad habits or poor attitudes toward financial management that could be lessened through financial education.

On the other hand, Travnichek (2016) declared that one of the reasons why Americans save too little is because of their optimism. This optimism has been a downfall because feeling and believing that they have control over random events in their lives may only be an illusion. Further, those

who have no savings consider saving a constant sacrifice and a cause of pain (Chudzian & Mikolajczak, 2015); Hence they do not subscribe to such an idea.

Additional factors provided in the literature about why people save are construction, purchase, expansion, house-related saving, children's education, and children's marriage (Samuel et al. 2012). Niwanthika (2016) also added that people's reasons for saving include old age, education, foreign travel, to buy goods, houses and lands, illness and hospitalization, and to meet any unexpected expenses. Financial satisfaction, moderated through income, is directly proportional to saving (Traut-Mattausch & Jonas, 2011). Research by Satsios & Bassim (2018) on the Pomaks has shown that their preferred saving motive is to buy a house. Further, James et al. (2011) studied saving motivations for future home purchases among Hispanic renters and suggested that an increasing quantity of Hispanic renters saved similarly for housing purchases. Since young professionals are at the start of their careers and in the transition period to adulthood, they will have a relatively greater need for current consumption such as a car, a home, and other durables (Yao et al. 2015). A study by Wei & Zhang (2012) mentioned that a lot of young Chinese face peer pressure that they need to own a home and car to be competitive in the marriage market.

According to Kamarudin & Hashim (2018), the factors affecting the saving behavior are financial literacy, parent socialization, and peer influence. As mentioned by Dangol & Majarjan (2018), Nepalese youth consider the participation of their parents and peers in financial decisions. Parent's guidance and support their children on personal financial management so they can make sound financial decisions. Further, peers can have a huge impact on saving decisions due to the close relationship other than family (Chia et al., 2012). In fact, when individuals start their careers, they are more exposed to their peers rather than their families. Similarly, Haliassos & Thornton (2016) believed that people's goals are shaped by their households and social circles because humans naturally interact and socialize with relatives and

peers. Behavior changes depending on the kind of peers they are exposed to. Based on the economic theory of time preference, Erskine et al. (2005) explained that individuals that were placed high on the adult-academic-oriented dimension are more patient and more likely to save. On the other hand, groups that are placed high on the peer-oriented dimension were expected to be less patient and less likely to save money. Further, in a study by Bursztyn et al. (2012) conducted in Brazil, where 150 pairs were chosen to be tested on the channels by which peer effects influence decisions. It was found out that both social learning (when someone purchases an asset after a peer expresses a desire to purchase the same asset) and social utility (when someone feels he can gain more from an asset because his peer owns it) had significant effects on financial decisions. The presence of peers "primes" a reward-sensitive motivational state that increases the subjective value of immediately available rewards and thereby increases the probability that adolescents will favor the short term benefits of a risky choice over the long-term value of a safe alternative (Albert et al. 2014). Peer pressure means the way that people of the same social group can influence other individual to take a certain action, adopt certain values, or otherwise conform in order to be accepted (Manese, 2012). Although exposure to peers can be good, the individual must also be responsible enough to evaluate his/her financial decisions.

Planning may result to be better informed about both asset returns and future income projections (Ameriks et al., 2003). The likelihoods to be currently saving or to have already saved were higher for those with longer planning perspectives, moderate risk tolerance, those who were married, white people, blue-collar workers, and those with discipline in spending and saving habits (Anong & Fisher, 2013). According to Vanderhei & Copeland (2010), one of the constant problems is that Americans do not adequately plan and save for the future. Clarvis et al. (2015) study draw on an established framework of resilience principles and examples of resilience investments to explore how resilience principles can actually inform decisions around disaster risk reduction and resilience

investing. It suggests some key courses for diversifying sources of finance in order to, in turn, improve "financial resilience." In doing so, it suggests a series of questions to align investments with resilience building and to better balance the attainment of the resilience principles with financial requirements such as financial diversification and replicability. Further, Haubrich (2020) mentioned that the financial crisis in 2007-2009 and the COVID-19 pandemic has made the central banks and the governments to take a closer look at the lessons of the financial crisis and help guide today's policy to be resilient to shocks.

There is also a lighter approach in saving as part of the personal saving orientation that is analogous to maintaining good health, such as incorporating healthy behaviors such as dieting and exercising into one's routine and avoiding unhealthy activities (Dholakia et al., 2016). Further, Soman & Cheema (2011) believed that saving is more effective when consumers allocate amounts they wish to save into a category right away than depending on exerting self-control on their spending to reach saving goals. The need-based theory suggests that thrifty attitudes, behaviors, and lifestyles sometimes can work to gratify psychological desires for safety/security, competence, relatedness, and autonomy (and thus promote well being) but sometimes hinder with the satisfaction of these needs (and thus diminish well being) (Kasser, 2011). The finding of Murray (2018) study supported the predictions that thrifty individuals would be perceived as more intelligent, higher in self-control, more likable, emotionally closer to participants, lower in perceived vanity, lower in the valuation of wealth in other, cheaper, and lower in the short-term mating effort. Further, it also provided partial support for our predictions that thrifty targets would be perceived as more agreeable, higher in moral character, lower in infidelity probability, and higher in parenting effort and desirability as a long-term mate.

Similarly, Firmansyah (2014) states that students that are coming from a wealthy family already get the support to do the saving, while students with lower parent's income have a poor source to do the saving. Looking at the saving rates

across age groups for individuals with different earning capabilities, Huggett & Ventura (2000) state that the US social security system provides relatively low annual benefits to individuals with high earnings and relatively high annual benefits to individuals with low earnings resulting in high earning ability individuals to save at high rates before retirement and low earning ability individuals at low rates before retirement. However, Dynan et al. (2004) believed that the marginal propensity and to save and lifetime income has a positive relationship but weaker than the relationship of saving rates and lifetime income. Upon the review of the theories and factors related to saving, Okech et al. (2013) found that witnessing parents save more money through financial institutions, paying the rent with cash, and using voluntary income tax assistance to prepare taxes were positively linked with the likelihood to save.

Saving can also change with age, which makes it relevant to determine the best assets in which to put their savings (Campanale et al. 2015). According to a study by Li et al. (2013), although adults lose some cognitive ability as they age, the wisdom that they gained through knowledge and expertise remains. Meanwhile, age has a direct impact on the saving decision of an individual. In the study conducted by Gamble et al. (2015), it showed the varying effects of age on personal financial matters. The findings confirmed that the decline in cognition, an occurrence common to individuals in their 80s, is associated with a significant decline in financial literacy. However, it has no effect on their confidence in their financial knowledge and managing their finances.

Inflation is the rise in prices of commodities and devalues of money, which directly influences the standard of living (Farid et al. 2012). According to the study, people are obliged to get a loan and to get extra jobs to satisfy their family expenses due to inflation. Similarly, Premik & Stanislawski (2017) further concluded that inflation expectation and saving attitude have a negative relationship. Consumers who expect that during the next 12 months inflation will be higher than currently are less inclined to declare a positive

saving attitude than consumers expecting stable prices.

According to the previous empirical studies, the factors affecting the saving decision of young professionals are financial literacy, parental socialization, peer influence, and self-control (Chia et al. 2012; Alwi et al. 2015), self-efficacy and attitude (Rickwood et al. 2017), major life events (West & Worthington, 2016), precautionary saving (Kumarasinghe&Munasinghe, 2016), need-based theory on thrift and well-being (Kasser, 2011), old age, education, foreign travel, to buy goods, houses and lands, illness and hospitalization and to meet any unexpected expenses. Motives, savings habits, age, income, income uncertainty, wealth, risk tolerance, saving horizon, homeownership, household composition, health status, education, race/ethnicity, self-employment, and unemployment have all been linked to some aspect of saving (Niwanthika, 2016).

#### **IV. THEORETICAL FRAMEWORK**

The study is primarily anchored on Leland's precautionary saving hypothesis. Leland (1968) analyzed precautionary saving behavior and defined it as extra saving motivated by uncertainty concerning future income. This hypothesis of Leland (1968), as cited from the work of Ceritoglu (2009), asserts that household will postpone their consumption and increase their saving level to be protected against future labor income uncertainty. Moreover, households implement alternative strategies in addition to precautionary saving, such as holding a second job and increase the number of income earners in the family. The influence of risk and uncertainty on household consumption and saving behaviour is further intensified by the lack of a sufficient social security system, which meets the needs and the demands of society.

This study draws its principle on the Need-based theory of McClelland. This theory of McClelland (1987) as cited from the work of Kasser (2011) on thrift and well-being emphasizes

that thrifty attitudes, behaviors, and lifestyles sometimes can work to gratify psychological desires for safety/security, competence, relatedness, and autonomy (and thus promote well being) but sometimes hinder with the satisfaction of these needs (and thus diminish well being).

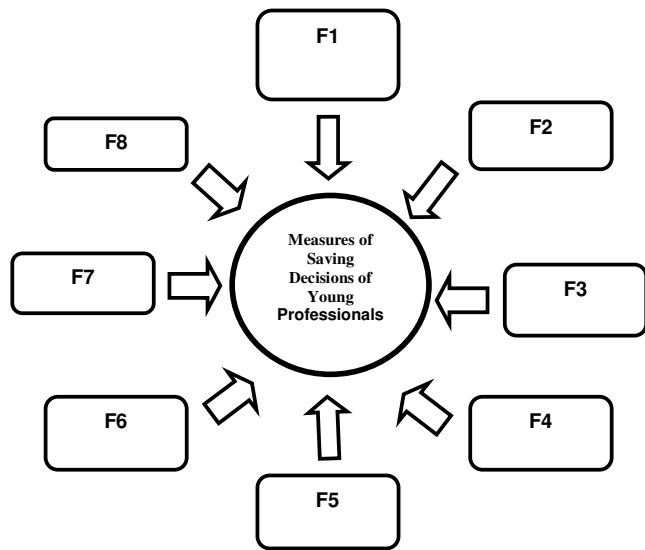
This research also draws its premise from the study of West and Worthington (2016), which mentioned that major life events of Australian households affect their financial decision making. The major life events that were identified were serious illness or injury, death of a spouse, fired or made redundant, marriage, having children, get separated or divorced, or losing a family member and these can cause households to rebalance portfolios in ways that have detrimental impacts on long term wealth accumulation.

Another underpinning study where this paper can take reference is from the studies of Niwanthika (2016) & Kasser (2012). Niwanthika (2016) highlighted the various factors that affect the saving of individuals, such as motives, savings habits, age, income, income uncertainty, wealth, risk tolerance, saving horizon, homeownership, household composition, health status, education, race/ethnicity, self-employment, and unemployment. Popovici (2012) also added openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism.

#### **V. CONCEPTUAL FRAMEWORK**

This study has shown a schematic model depicting the multidimensionality and functionality of saving decisions. This model exhibits multiple measures or determinants of the saving decisions of the young professionals in the specified locale. Moreover, the measures denoted as Factor 1... n characterize the determinant attributes of the latent constructs. At the center is the main variable, surrounded by the hypothesized determinants.

FIGURE 1  
THE CONCEPTUAL FRAMEWORK SHOWING THE HYPOTHETICAL DIMENSIONS OF SAVING DECISION OF YOUNG PROFESSIONALS



## VI. RESEARCH DESIGN

This study employed a quantitative, non-experimental research design using the descriptive exploratory factor analysis technique. A non-experimental design includes research designs in which the researcher describes a group or examines the relationship between pre-existing groups (Salkind, 2010). The exploratory factor analysis technique is a non-experimental design and the best design to effectively extract information from large bodies of interrelated data (Hair et al. 1998). Under this technique, the researcher summarizes the data by grouping correlated variables in a natural setting without manipulation or control. In addition, Stapleton (1997) stated that factor analysis is a method for determining the number and nature of the variables that underlie large numbers or measures. This technique tells the researcher what tests or measures belong together.

In exploratory factor analysis studies, the researcher investigated the sets of measured variables related to theoretical constructs. The exploratory factor analysis aims to reduce the complexity of the data set and explain the common and unique variance using latent variables

(Pettersson, 2017), and the aim is to study the relationship between practices usually considered more appropriate and actual decisions made by researchers (Izquierdo Alfaro et al., 2014). Although this procedure is the most criticized due to the poor management the researcher usually exhibits, this approach is most appropriate to determine and ascertain measures or dimensions of latent constructs, which in this study is the saving decision of young professionals.

## VII. POPULATION AND SAMPLE

A total of 400 young professionals from government banks in Davao City were surveyed as study respondents. The sample size was deemed adequate since it is way higher than the maximum number of samples of 384 for an unknown population and a way greater than the minimum recommended sample size of 50 for an exploratory factor analysis study (Pearson and Mundfrom, 2010).

The respondents were savings depositors, at least having a savings of either regular, time deposit, term deposit or any special savings account in any financial institution; employed in an institution or company of at least six months, with regular or job order/contractual appointments at the date of the survey; at least receiving a minimum wage; and were aged between 23-38 years old. The respondents were aptly chosen for the study since saving experiences are expected to be manifested to achieve the objective of the study.

On the contrary, those young professionals graduate of a 2-year course or have not completed the 4-year course; not engaged in any sector or area; not maintaining a savings account; not employed in an institution or company of at least six months, with a regular or contractual appointment at the date of the survey; salary has not reached of at least minimum wage; and are aged below 23 and above 38 years old are excluded from participating. Those who did not voluntarily consent to be part of the study were likewise excluded. Further, those respondents who decided or wished to withdraw



during the course of the study due to some reasons were let off.

The researcher employed a stratified random sampling method using ratio and proportion in determining the target study participants. This method is regarded as the most time-efficient and cost-efficient probability design for samples from wide geographical areas. This technique provides a high level of accessibility and objectivity from diverse sample groups (Sedgwick, 2013).

### VIII. RESEARCH INSTRUMENT

This study used a researcher-made instrument extracted from literature and sources adapted to fit the study and were subjected to content and expert validation. The survey instrument consists of two parts, the first part is the profile and the second part is the variable of the study, the saving decision. The second part of the questionnaire composes of 105 item statements structured using the five-point Likert-type scale. The first draft of the instrument was submitted to the research adviser for comments and suggestions to improve its contents and presentation. The final draft was submitted to the panel of experts for validation and refinement based on the standards of appropriateness, adequacy, and objectivity. The average validation score of the instrument was 3.4, with an alpha value of good as appended herein.

### IX. STATISTICAL TOOLS

The following statistical tools were used in interpreting the data collected.

**Tests of sampling adequacy and sphericity.** In order to examine the adequacy of the sample and the suitability of the data for factor analysis, the use of Kaiser Meyer-Olkin measure of sampling adequacy and Barlett’s test of sphericity was utilized.

**Data reduction analysis.** To extract the factors of saving decision from the context of study participants, the use of principal component analysis was used.

**Factor rotation method.** To decide which factors are to retain for rotation, the study use Percentage of Variance and Orthogonal Rotation using Varimax.

### X. EXTRACTED MEASURES OF SAVING DECISION

**Table 1**  
*Extracted Factors Affecting Saving Decisions of Young Professionals*

ITEM	COMPETENCE IN MONEY MANAGEMENT	LOADING
Q15	I use the formulas for future and present value to help me decide about savings choices.	.867
Q14	I calculate changes in the ratio of my total net worth to total assets on a regular basis.	.863
Q16	I calculate changes in my liquid assets to current debts ratio on a regular basis.	.853
Q17	I use the formula for my marginal tax rate to decide whether or not to save in taxable and non-taxable alternatives.	.803
Q12	My spending goals for this year are in writing.	.667
Q13	My saving records are detailed and accurate.	.525
ITEM	RESILIENCE TO RISK	LOADING
Q24	Once I have made a decision about saving, I immediately take action.	.743
Q37	When it seems difficult to reach a goal, I make a list of all resources in order to think of a new way to do it.	.706
Q21	I have a saving plan with strategies in case of long life, disability, or premature death.	.666
Q23	I have definite saving goals for 10 years from now.	.658
Q36	I usually have written savings goals with time deadlines for accomplishment.	.609
Q5	I have carefully estimated my savings for retirement and know what resources I will create for that purpose.	.589
Q8	I carefully study my saving progress by making a yearly chart of net worth changes.	.561
ITEM	FINANCIAL STRAIN EXPOSURE	LOADING
Q71	Saving problems hurt my relationships.	.887
Q72	My relationships with others are affected by saving problems.	.873
Q73	Are you ever unable to sleep well because of saving worries?	.839
Q74	Does your saving situation cause you to feel heartburn or an upset stomach?	.809
Q70	I tend to argue with others about money	.715

ITEM	WEALTH-DRIVEN MINDSET	LOADING
Q76	Saving helps me to maintain high standard of living.	.816
Q77	Saving improves my capacity to acquire financial and physical assets.	.768
Q75	Savings and investment increase my family income.	.731
Q79	Saving helps me to plan luxurious holiday trips with my family.	.707
ITEM	SAVING ORIENTATION	LOADING
Q47	I'm likely to save money by buying clothes off-season or on sale for lower prices.	.867
Q49	I'm likely to save money by depositing gift of money into a savings account.	.813
Q48	I'm likely to save money by sharing a magazine subscription with a friend.	.744
ITEM	FEAR OF UNCERTAINTY	LOADING
Q27	I make spending plans, but I have trouble disciplining myself to carry them out.	.794
Q28	I save money, but not a fixed percentage on a regular schedule.	.747
Q26	I can see the overall saving picture, but do not make detailed written plans.	.620
Q42	I begin making saving plans, but have trouble deciding what to do.	.578
Q29	When it comes to saving decisions, I do what my intuition suggests is best.	.518
ITEM	ATTITUDE TO SAVE	LOADING
Q51	When I get money, I save some of it no matter what.	.820
Q50	Saving money for the future is something I think about.	.775
Q52	I do a good job of budgeting my money.	.684
ITEM	FISCAL ADEQUACY	LOADING
Q55	I pay for yearly expenses out of current income or savings (not with a loan).	.815
Q54	I use banking accounts that pay me interest.	.694
Q56	I usually live from pay check to pay check.	.690
Q57	I regularly set aside money for large expected expenses (like insurance or taxes).	.594

15.490. The second measure is described as resilience to risk, with an initial Eigenvalue of 4.367 and a percentage of variance of 10.650. The third measure is interpreted as financial strain exposure, with a corresponding Eigenvalue of 3.533 and a percentage of variance is 8.617. The fourth measure named as wealth driven mindset has an initial Eigenvalue of 3.176 and a percentage of variance of 7.747. The fifth measure named as saving orientation has an initial Eigenvalue of 2.170 and a percentage of variance of 5.293. The sixth measure named as fear of uncertainty has an initial Eigenvalue of 1.997 and a percentage of variance of 4.871. Whereas, the seventh measure named as attitude to save has an initial Eigenvalue of 1.669 and a percentage of variance of 4.070. Lastly, the eighth measure is identified as fiscal adequacy which has an initial Eigenvalue of 1.497 and a percentage of variance of 3.652. The cumulative variance percentage suggests that the extracted measures, when taken together, can explain 60.39 of the overall variability of the saving decision among young professionals.

*Table 4*  
**Latent Roots Criterion of the Extracted Factors**

Factors	Initial Eigen Value	Percent of Variance	Cumulative Variance percent
Competence in Money Management	6.351	15.490	15.490
Resilience to Risk	4.367	10.650	26.140
Financial Strain Exposure	3.533	8.617	34.757
Wealth-Driven Mindset	3.176	7.747	42.504
Saving Orientation	2.170	5.293	47.797
Fear of Uncertainty	1.997	4.871	52.668
Attitude to Save	1.669	4.070	56.738
Fiscal Adequacy	1.497	3.652	60.390

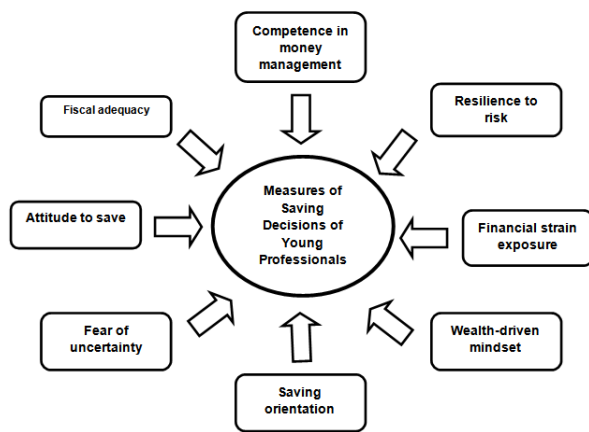
**XI. LATENT ROOTS CRITERION OF THE EXTRACTED MEASURES**

Table 2 shows the latent roots criterion of the extracted measures depicting the percentage of variance. The first measure is labelled as competence in money management, with an initial Eigenvalue of 6.351 and a percentage of variance of

**XII. FRAMEWORK DEVELOPED BASED ON THE FINDINGS OF THE STUDY**

Presented in Figure 2 is the thematic framework that encapsulates the eight categorized factors or constructs on saving decision in the context of young Professionals in Davao city. These measures include competence in money management, resilience to risk, financial strain exposure, wealth-driven mindset, saving orientation, fear of uncertainty, attitude to save, and fiscal adequacy.

FIGURE 2  
 Thematic Framework on Saving Decision



**XIII. MEASURES OF SAVING DECISION OF YOUNG PROFESSIONALS**

This study employed the Exploratory Factor Analysis (EFA) through principal component analysis as data reduction technique where large numbers of variables were tested at  $\geq 0.50$  threshold for scale inclusion. Items which did not reach the desired threshold were removed from the scale. Meanwhile, those items whose factor loadings satisfied the criterion after four varimax rotations were included in the scale and were analyzed further through thematic analysis in order to generate the constructs that best characterize the clustered factors. The results of the analysis revealed eight overarching measures for saving decision, to wit: *competence in money management*,

*resilience to risk*, *financial strain exposure*, *wealth-driven mindset*, *saving orientation*, *fear of uncertainty*, *attitude to save*, and *fiscal adequacy*.

The first identified measure is *competence in money management*. In the study of Jappelli (2010), he argued that a large portion of adults in most countries are unfamiliar with even the basic economic concepts. Thus, low levels can be blamed for individual’s poor financial decisions. Although definition of financial knowledge varies from one to another, this study will adopt the definition of financial literacy as the ability to understand, apply and manage personal finance in order to ensure financial well-being (Cude, 2010). Money management is the incorporation of an individual’s ability to understand, evaluate, handle, and communicate personal finance issues towards their financial welfare (Atkinson and Messy,2012). Having knowledge of personal financial management is an indication of a greater ability to manage financial resources (Bowen et al., 1997).

In their works, Sendarasan and Rahman (2017) stated that money management is a critical factor in this age where young professionals are lured in living an ostentatious lifestyle while being burdened by their responsibilities. Further, Sendarasan et al. (2016) indicated that together with financial literacy and wealth optimization, money management is a ‘cradle to grave’ process. Proper education and guidance should be provided to an individual at every stage of their life-cycle, so as to ensure reduction of financial mistakes and attain financial freedom at the earliest possible stage of their lives (Mwathi et al., 2017).

The second measure is *resilience to risk*. People with financial accounts are more resilient than their counterparts (Hussain et al., 2019). Similarly, Hannig and Jansen(2010) also believed that low-income households, being the most vulnerable to shocks, should be involved in financial inclusion such as saving in order to be more resilient in times of aggregate shocks. Currently, the world is facing an emergency health crisis as the world battles with the COVID-19 Coronavirus Pandemic that has affected over 15 million people around the world as of July 2020 (Worldometer, 2020). A lot of aspects in the

economy have been affected. Numerous people have lost jobs as businesses are required to stop their operations and just allowing essential businesses to operate. Some businesses have shifted to essential industries in order to cope with the current situation the world is facing (Euronews, 2020). Planning may result to be better informed about both asset returns and future income projections (Ameriks et al, 2003). The likelihoods to be currently saving or to have already saved were higher for those with longer planning perspectives, moderate risk tolerance, those who were married, white people, blue-collar workers, and those with discipline in spending and saving habits (Anongand Fisher, 2013). According to VanderheiandCopeland (2010) one of the constant problems is that Americans do not adequately plan and save for the future. Clarvis et al. (2015) study draws on an established framework of resilience principles and examples of resilience investments to explore how resilience principles can actually inform decisions around disaster risk reduction and resilience investing. It suggests some key courses for diversifying sources of finance in order to, in turn, improve "financial resilience". In doing so, it suggests a series of questions to align investments with resilience building, and to better balance the attainment of the resilience principles with financial requirements such as financial diversification and replicability. Further, Haubrich (2020) mentioned that the financial crisis in 2007-2009 and the COVID-19 pandemic has made the central banks and the governments to take a closer look at the lessons of the financial crisis and help guide today's policy to be resilient to shocks.

Small businesses have also moved to online selling and services as the movement have been controlled. The current situation the world is currently facing has emphasized the importance of saving as deficiency in money to provide for basic needs such as food, safety and medicines, and shelter will result to feelings of not being able to cope (TurunenandHiilamo, 2014).

The third measure identified is *financial strain exposure*. An individual's saving motive includes preparation to emergencies like illness, saving disaster, and hospitalization (Samuel et al.

2012; Niwanthika, 2016). Serious illness or injury, loss of employment, and separation cause households to rebalance portfolios in ways that have detrimental impacts on long term wealth accumulation (West and Worthington, 2016). Although future strain can be a motive to save, there will be instances where financial strain such as having poor health can have a negative effect on the likelihood of saving (Fisher and Montalto, 2010).

On the other hand, Reading and Reynolds (2001) stated that the strongest predictor of depression among mothers of infants is concerns about debt. Perceived financial strain also worsened the mental health of individuals on the verge of bankruptcy (Selenko and Batinic, 2011). That sense of being financially strained among low-income among Northern Irish households resulted to psychological and physical health problems (French and McKillop, 2015).

The fourth measure of saving decision is *wealth-driven mindset*. Individuals also save for construction, for purchase, expansion, house related saving, children's education, and children's marriage (Samuel et al. 2012). Niwanthika (2016) also added that people's reasons for saving includes old age, education, foreign travel, to buy goods, houses and lands, illness and hospitalization, and to meet any unexpected expenses. Financial satisfaction, moderated through income, is directly proportional to saving (Traut-Mattauschand Jonas, 2011). A research by Michail (2003) on the Pomaks has shown that their preferred saving motive is to buy a house. Further, James et al. (2011) studied saving motivations for future home purchases among Hispanic renters and suggested that an increasing quantity of Hispanic renters saved similarly for housing purchases. Since young professionals are at the start of their careers and in transition period to adulthood, they will have a relatively greater need for current consumption such as a car, a home, and other durables (Yao et al, 2015). A study by Wei and Zhang (2012) mentioned that a lot of young Chinese face a peer pressure that they need to own a home and car to be competitive in marriage market.

The fifth measure of saving decision is *saving orientation*. There is also a lighter approach in saving as part of the personal saving orientation that is analogous to maintaining good health such as incorporating healthy behaviors such as dieting and exercising into one's routine and avoiding unhealthy activities (Dholakia et al., 2016). Further, Soman and Cheema (2011) believed that saving is more effective when consumers allocate amounts they wish to save into a category right away than depending on exerting self-control on their spending to reach saving goals. The need-based theory suggests that thrifty attitudes, behaviors, and lifestyles sometimes can work to gratify psychological desires for safety/security, competence, relatedness, and autonomy (and thus promote wellbeing) but sometimes hinder with satisfaction of these needs (and thus diminish wellbeing) (Kasser, 2011). The finding of Murray (2018) study supported the predictions that thrifty individuals would be perceived as more intelligent, higher in self-control, more likeable, emotionally closer to participants, lower in perceived vanity, lower in valuation of wealth in other, cheaper, and lower in short-term mating effort. Further, it also provided partial support for our predictions that thrifty targets would be perceived as more agreeable, higher in moral character, lower in infidelity probability, and higher in parenting effort and desirability as a long-term mate.

Based on the economic theory of time preference, Erskine et al. (2005) explained that groups that were placed high on the adult-academic-oriented dimension are more patient and more likely to save. On the other hand, groups that are placed high on the peer-oriented dimension were expected to be less patient and less likely to save money. There is also a lighter approach in saving as part of the personal orientation that is analogous to maintaining good health such as incorporating healthy behaviors such as dieting and exercising into one's routine and avoiding unhealthy activities (Dholakia et al., 2016). Further, Soman and Cheema (2011) believed that saving is more effective when consumers allocate amounts they wish to save into a category right away than

depending on exerting self-control on their spending to reach saving goals.

The sixth measure of saving decision is *fear of uncertainty*. It is important to maintain and improve an individual's financial wellbeing in response to future risks and uncertainties; hence savings play a crucial role in this preparation. In a study by Kumarasinghe and Munasinghe (2016), the most important savings motive is the precautionary savings motive. Due to uncertainty of the future, it is believed that people plan and prepare for future shocks. This argument is further supported by Lugilde et al. (2018) who mentioned that increased uncertainty produces extra saving.

In several studies conducted by Zaleskiewicz et al. (2013), they propelled the idea that saving money can protect an individual from anxiety and establish a more effective buffer than spending. Saving can relieve future-related anxiety and provide people with a sense of control over their fate, thereby interpreting uncertainties and even death ideas less threatening. In his study, Ceritoglu (2011) accentuated that labor income risk appears as one of the main determinants of saving decisions. As a response, households adopt alternative approaches such as having second jobs and having multiple earners in the family to smooth out their income streams. However, the study also stated that these individuals are still vulnerable to labor income risk.

The seventh measure is *attitude to save*. Lim et al. (2011) identified that the ability of an individual to maintain self-control for saving depends on the strength of two opposing forces - desire and willpower. People are more likely to save if they are able to control themselves via implementing rigorous budgeting and economic cost assessment. In the same thought, Chudzian et al. (2015) mentioned that people who have savings are more likely to perceive the possibility of covering unexpected expenses and a greater sense of security. In their inquiry, Sabri and Macdonald (2010) articulated that an individual's financial experience may create bad habits or poor attitudes toward financial management that could be lessened through financial education.

On the other hand, Travnicheck (2016) declared that one of the reasons why Americans save too little is because of their optimism. This optimism has been a downfall because feeling and believing that they have a control over random events in their lives may only been an illusion. Further, those who have no savings consider saving a constant sacrifice and a cause of Chudzian et al. (2015), hence they do not subscribe to such idea.

The eight and the final measure of saving decision among young professionals is *fiscal adequacy*. Firmansyah (2014) states that students that are coming from wealthy family already get the support to do saving, while students with lower parent's income are having a poor source to do saving. Looking at the saving rates across age groups for individuals with different earning capabilities, Huggett and Ventura (2000) states that the US social security system provides relatively low annual benefits to individuals with high earnings and relatively high annual benefits to individuals with low earnings resulting to high earning ability individuals to save at high rates before retirement and low earning ability individuals at low rates before retirement. However, Dynan et al. (2004) believed that the marginal propensity and to save and lifetime income has a positive relationship but weaker than the relationship of saving rates and lifetime income. Upon the review of the theories and factors related to saving, Okech et al. (2013) found that witnessing parents save more money through financial institutions, paying rent with cash, and using voluntary income tax assistance to prepare taxes were positively linked with the likelihood to save.

Carroll (1998) further argued that there is a model in which wealth enters the utility function as a luxury goods or wealth produces a stream of services. This reconciles with the models of Fitzgerald and Hemingway by stating that rich people do not behave simply as scaled-up versions of everyone else. They choose to save more and accumulate faster because they have the means of doing so and people would probably behave the same way, if only they have had more money.

#### XIV. CONCLUSIONS

Based on the foregoing findings, the researcher concluded that there are measures of saving decisions of young professionals. The eight measures of saving decisions developed using the exploratory factor analysis are *competence in money management, resilience to risk, financial strain exposure, wealth-driven mindset, saving orientation, fear of uncertainty, attitude to save, and fiscal adequacy*. The generated measures are aligned with Leland's precautionary hypothesis (1968) which stated that extra saving is motivated by uncertainty concerning future income. More so, the identified measures correspond to the need-based theory of McClelland's (1987) that emphasizes that thrifty attitudes, behaviors, and lifestyles sometimes can work to gratify psychological desires for safety/security, competence, relatedness, and autonomy and thus promote well-being. Further, the measures support the proposition West and Worthington (2016), which mentioned that major life events affect their financial decision making. The major life events that were identified were serious illness or injury, death of a spouse, fired or made redundant, marriage, having children, get separated or divorced, or losing a family member and these can cause households to rebalance portfolios in ways that have detrimental impacts on long term wealth accumulation. Lastly, the results strengthen the arguments of Niwanthika (2016) & Popovici (2012) that motives, savings habits, age, income, income uncertainty, wealth, risk tolerance, saving horizon, homeownership, household composition, health status, education, race/ethnicity, self-employment, unemployment, openness to experience (*rich vocabulary, vivid imagination, ideas as well as understanding things*), conscientiousness (*being always prepared, attention to details, order, schedule or the accomplishment of duties*), extraversion (*being in the center of attention, life of the party, starting conversations as well as having a lot to say or drawing attention*), agreeableness (*making use of the premises interested in people, have a soft heart or feel other emotions*), and

neuroticism (*get easily disturbed, changing mood, easily irritated, stressed out easily or often feel blue*) affect the saving of individuals.

## XV. RECOMMENDATIONS

Based on the foregoing results, the researcher would like to recommend to the management of financial institutions and financial literacy groups and advocates to consider the measures identified and the scale developed by the study to strengthen their products and services. Specifically, the financial institutions may use the results of the study to identify interventions to address the gaps in the saving intentions and propensities of young professionals.

In addition, the financial institutions may use the instrument and the framework developed by the study to assess their current product and service offerings, thus offer more relevant and effective portfolios that suit the needs and expectations of the market especially the young professionals. Further, financial institutions may utilize the generated measures in their marketing strategies.

It is also recommended that the resulting saving decision measurement tool be tested in other financial institutions and other industries to substantiate and validate its strength as a saving decision tool and to establish its psychometric properties. Apart from that, the result of this study may be utilized by future researchers who wish to conduct further in-depth study on savings and saving decision using confirmatory factor analysis, or using different research designs and with other set of respondents. They may adopt the tool developed by the researcher as it is or they can make necessary modifications to align it based on the intent and objectives of their study. Through utilization, the scale can be further polished and improved.

## REFERENCES

Albert, D., Chein, J. and Steinberg, L., 2013. The teenage brain: Peer influences on adolescent decision making. *Current directions in psychological science*, 22(2), pp.114-120.

Alwi, S., Amir Hashim, I.Z. and Ali, M.S., 2015. Factors affecting savings habits within millennials in Malaysia: Case study on students of Taylor's university. In *Proceedings of the Fourth Asia-Pacific Conference on Global Business, Economics, Finance and Social Sciences* (pp. 1-10).

Ajeesh, P.P., 2019. A Study on Saving and Spending Habit of Youth with Special Reference to Thrissur District.

Ameriks, J., Caplin, A. and Leahy, J., 2003. Wealth accumulation and the propensity to plan. *The Quarterly Journal of Economics*, 118(3), pp.1007-1047.

Anong, S.T. and Fisher, P.J., 2013. Future orientation and saving for medium-term expenses. *Family and Consumer Sciences Research Journal*, 41(4), pp.393-412.

Atkinson, A. and Messy, F.A., 2012. Measuring financial literacy: Results of the OECD/International Network on Financial Education (INFE) pilot study.

Attanasio, O.P. and Székely, M., 2000. *Household saving in developing countries-inequality, demographics and all that: how different are Latin America and South East Asia*. Inter-American Development Bank, Research Department.

Bairamli, N. and Kostoglou, V., 2010. The role of savings in the economic development of the Republic of Azerbaijan. *International Journal of Economic Sciences and Applied Research*, 3(2), pp.99-110.

Birari, A. and Patil, U., 2014. Spending and saving habits of youth in the city of Aurangabad. *The SIJ Transactions on Industrial, Financial and Business Management (IFBM)*, 2(3), pp.158-165.

Bowen, C.F., Lago, D.J. and Furry, M.M., 1997. Money management in families: A review of the literature with a racial, ethnic, and limited income perspective. *Advancing the Consumer Interest*, pp.32-42.

Bangko Sentral ng Pilipinas, 2018. BSP Consumer Expectations Survey Second Quarter 2018. *Consumer Expectation Report*.

Bangko Sentral ng Pilipinas, 2018. BSP Targets the Unbanked with Basic Deposit Accounts. *Media Releases*.

Bangko Sentral ng Pilipinas, 2015. BSP Brings "Money Matters for Kids" Exhibit to Davao City. *Media Releases*.

Belayeth Hussain, A.H.M., Endut, N., Das, S., Chowdhury, M.T.A., Haque, N., Sultana, S. and Ahmed, K.J., 2019. Does financial inclusion increase financial resilience? Evidence from Bangladesh. *Development in Practice*, 29(6), pp.798-807.

Bursztyn, L., Ederer, F., Ferman, B. and Yuchtman, N., 2014. Understanding mechanisms underlying peer effects: Evidence from a field experiment on financial decisions. *Econometrica*, 82(4), pp.1273-1301.

Business Mirror, 2014. Why is our savings rate still low? Eaglewatch by Dr. Nandy Aldaba. Ateneo.edu

Carroll, C. D., 1998. *Why do the rich save so much?* (No. w6549). National Bureau of Economic Research.

Campanale, C., Fugazza, C. and Gomes, F., 2015. Life-cycle portfolio choice with liquid and illiquid financial assets. *Journal of Monetary Economics*, 71, pp.67-83.

- Census and Economic Information Center 2018. Philippines Gross Savings Rate. Economic Indicators. Ceic
- Ceritoglu, E., 2013. The impact of labor income risk on household saving decisions in Turkey. *Review of Economics of the Household*, 11(1), pp.109-129.
- Chia, Y.K., Chai, M.T., Fong, S.N., Lew, W.C. and Tan, C.T., 2011. *Determinants of saving behavior among the university students in Malaysia* (Doctoral dissertation, UTAR).
- Cho, S.H., 2009. *Role of saving goals in savings behavior: regulatory focus approach* (Doctoral dissertation, The Ohio State University).
- City Government of Davao, 2016. Literacy and People Empowerment.
- Clarvis, M.H., Bohensky, E. and Yarime, M., 2015. Can resilience thinking inform resilience investments? Learning from resilience principles for disaster risk reduction. *Sustainability*, 7(7), pp.9048-9066.
- Comrey, A.L. and Lee, H.B., 1992. *A first course in factor analysis* (2nd edition). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Chudzian, J., Aniola-Mikolajczak, P. and Patarai, L., 2015. Motives and attitudes for saving among young Georgians. *Economics and sociology*, 8(1), p.165.
- CNN Philippines Staff, 2018. Inflation reaches highest rate in 5 years. [cnnphilippines.com](http://cnnphilippines.com)
- Cuaresma, B., 2019. ING: Savings suffer in economy dependent on consumption. [businessmirror.com](http://businessmirror.com).
- Cude, B.J., 2010. Financial literacy 501. *Journal of Consumer Affairs*, 44(2), pp.271-275.
- de Guzman, L., 2018. 77% of Filipinos remain unbanked—BSP. [cnnphilippines.com](http://cnnphilippines.com)
- Dangol, J. and Maharjan, S., 2018. Parental and Peer Influence on the Saving Behavior of the Youth. *International Research Journal of Management Science*, 3, pp.42-63.
- Dayot, R. et al., 2016. The Level of Financial Literacy on Minimum Wage Earners in Davao City.
- de Bassa Scheresberg, C., 2013. Financial literacy and financial behavior among young adults: Evidence and implications. *Numeracy*, 6(2), p.5.
- Dholakia, U., Tam, L., Yoon, S. and Wong, N., 2016. The ant and the grasshopper: understanding personal saving orientation of consumers. *Journal of Consumer Research*, 43(1), pp.134-155.
- Dynan, K.E., Skinner, J. and Zeldes, S.P., 2004. Do the rich save more? *Journal of political economy*, 112(2), pp.397-444.
- Erskine, M., Kier, C., Leung, A. and Sproule, R., 2006. Peer crowds, work experience, and financial saving behavior of young Canadians. *Journal of Economic Psychology*, 27(2), pp.262-284.
- Euronews, 2020. Coping with Covid: How Cargo Companies and Big Brands are Adapting to the Coronavirus.
- Farid, S., Khan, W.A., Warriach, I.A. and Warriach, A., 2012. Effects of Inflation on Standard of Living (A case study of Multan, Pakistan). *Universal journal of management and social sciences*, 2(12), pp.1-06.
- Fernandes, D., Lynch Jr, J.G. and Netemeyer, R.G., 2014. Financial literacy, financial education, and downstream financial behaviors. *Management Science*, 60(8), pp.1861-1883.
- Firmansyah, D., 2014. The influence of family backgrounds toward student saving behavior: A survey of college students in Jabodetabek. *International Journal of Scientific and Research Publications*, 4(1), pp.1-6.
- Fisher, P.J. and Montalto, C.P., 2010. Effect of saving motives and horizon on saving behaviors. *Journal of Economic psychology*, 31(1), pp.92-105.
- French, D. and McKillop, D., 2015. The impact of household over indebtedness on health, WP No. 15-007, University of St Andrews.
- Gamble, K.J., Boyle, P.A., Yu, L. and Bennett, D.A., 2015. How does aging affect financial decision making? *Centre for Retirement Research*, 1(15), pp.1-7.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. and Tatham, R.L., 1998. *Multivariate data analysis* (Vol. 5, No. 3, pp. 207-219). Upper Saddle River, NJ: Prentice hall.
- Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E., 2009. *Multivariate Data Analysis 7th Edition* Pearson Prentice Hall.
- Haliassos M. and Thornton, P., 2016. Helping People Make Good Financial Decisions: The Think Forward Initiative.
- Hannig, A. and Jansen, S., 2010. Financial inclusion and financial stability: Current policy issues.
- Haubrich, J., 2020. Financial Stability: Risks, Resilience, and Policy. *Economic Commentary 2020-22*.
- Huggett, M. and Ventura, G., 2000. Understanding why high income households save more than low income households. *Journal of Monetary Economics*, 45(2), pp.361-397.
- Isomidinova, G., Singh, J.S.K. and Singh, K., 2017. Determinants of financial literacy: a quantitative study among young students in Tashkent, Uzbekistan. *Electronic Journal of Business and Management*, 2(1), pp.61-75.
- Izquierdo Alfaro, I., Olea Díaz, J. and Abad García, F.J., 2014. Exploratory factor analysis in validation studies: Uses and recommendations. *Psicothema*.
- Jagadeesh, D., 2015. The impact of savings in economic growth: An empirical study based on Botswana. *International Journal*, 10.
- James, R., Atilas, J. and Robb, C. A. 2011. "Homeownership plans among Hispanic renters: Ethnic or geographic differences?", *Housing and Society*, 38(2), pp. 191-209
- Jappelli, T., 2010. Economic literacy: An international comparison. *The Economic Journal*, 120(548), pp. F429-F451.



- Jappelli, T. and Padula, M., 2013. Investment in financial literacy and saving decisions. *Journal of Banking and Finance*, 37(8), pp.2779-2792.
- Kamarudin, Z.B. and Hashim, J.H., 2018. Factors Affecting the Saving Behaviour of TAJ International College Students. *Journal of Management and Science*, 4(1).
- Kasser, T., 2011. Can thrift bring well-being? A review of the research and a tentative theory. *Social and Personality Psychology Compass*, 5(11), pp.865-877.
- Kaiser, H.F. and Rice, J., 1974. Little jiffy, mark IV. *Educational and psychological measurement*, 34(1), pp.111-117.
- Kumarasinghe, P.J. and Munasinghe, S.C., 2016, December. The Savings Motives: With Special Reference to Households in Kalutara District. In *University of Sri Jayewardenepura, Sri Lanka, 13th International Conference on Business Management (ICBM)*.
- Leland, H.E., 1978. Saving and uncertainty: The precautionary demand for saving. In *Uncertainty in economics* (pp. 127-139). Academic Press.
- Li, Y., Baldassi, M., Johnson, E.J. and Weber, E.U., 2013. Complementary cognitive capabilities, economic decision making, and aging. *Psychology and aging*, 28(3), p.595.
- Lim, C.S., 2011. The analysis of psychological factors affecting savers in Malaysia.
- Lopez, M., 2018. July inflation boosts rate hike odds. Bworldonline.
- Lucas, D., 2018. BSP Orders Hassle-Free Bank Account Opening for Small Depositors. Business Inquirer Net.
- Lugilde, A., Bande, R. and Riveiro, D., 2019. Precautionary saving: a review of the empirical literature. *Journal of Economic Surveys*, 33(2), pp.481-515.
- Luhrmann, M., Serra-Garcia, M. and Winter, J., 2015. Teaching teenager's in finance: does it work? *Journal of Banking and Finance*, 54, pp.160-174.
- Lusardi, A. and Mitchell, O.S., 2011. *Financial literacy around the world: an overview*. (No. w17107). National Bureau of Economic Research.
- Lusardi, A. and Oggero, N., 2017. Millennials and financial Literacy: A global perspective. *Global Financial Literacy Excellence Center*, May.
- Mandell, L. and Klein, L. S., 2007. Motivation and financial literacy. *Financial Services Review*, 16, 105-116.
- Manese, J., 2012. The Good and Bad Effect of Peer Pressure on Teenagers. [janettemanese.blogspot.com](http://janettemanese.blogspot.com)
- McClelland, D.C., 1987. *Human motivation*. CUP Archive.
- Michail, D., 2003. "From 'locality' to 'European identity': Shifting identities among the Pomak minority in Greece", *EthnologiaBalkanica*, 7, pp. 140-157.
- Mitchell, O.S., Lusardi, A. and Curto, V., 2009. Financial literacy among the young: Evidence and implications for consumer policy. *Pension Research Council WP*, 9.
- Murendo, C. and Mutsonziwa, K., 2017. Financial literacy and savings decisions by adult financial consumers in Zimbabwe. *International journal of consumer studies*, 41(1), pp.95-103.
- Murray, L.J., 2018. Thrifty Spending as a (Paradoxically) Costly Signal: Perceptions of Others' Traits and Mating Patterns as a Function of Their Spending Style (Doctoral dissertation, Bowling Green State University).
- Mwathi, A.W., 2017. *Effects of financial literacy on personal financial decisions among Egerton university employees, Nakuru County, Kenya* (Doctoral dissertation, Egerton University).
- Niwanthika, T. (2016). Determinants of Personal Savings: A Review of Literature.
- Nyhus, E.K. and Webley, P., 2001. The role of personality in household saving and borrowing behavior. *European journal of personality*, 15(S1), pp. S85-S103.
- Okech, D., Mimura, Y., Mauldin, T. and Kim, J., 2013. The influence of financial factors on motivation to save among poor individuals. *Journal of Policy Practice*, 12(2), pp.107-124.
- Osborne, J.W., Costello, A.B. and Kellow, J.T., 2014. *Best practices in exploratory factor analysis* (pp. 86-99). Louisville, KY: CreateSpace Independent Publishing Platform.
- Pearson, R.H. and Mundform, D.J., 2010. Recommended sample size for conducting exploratory factor analysis on dichotomous data. *Journal of Modern Applied Statistical Methods*, 9(2), p.5.
- Petterson, C., 2017. Exploratory factor analysis and theory generation in psychology. *Review of Philosophy and Psychology*, 8(3), pp.519-540.
- Pettinger, T., 2018. Would an increase in savings help the economy? *Economicshelp.org*, 7102.
- Popovici, G., 2012. Understanding the factors affecting savings of Dutch households. *Groningen: University of Groningen and "Alexandru Ioan Cuza" University of Iasi*.
- Premik, F. and Stanislawski, E., 2017. The impact of inflation expectations on Polish consumers' spending and saving. *Eastern European Economics*, 55(1), pp.3-28.
- Pulka, B., 2015. The Effects of Saving and Saving Habits on Entrepreneurship Development. [Researchgate.net, 301355055](https://www.researchgate.net/publication/301355055).
- Reading, R. and Reynolds, S., 2001. Debt, social disadvantage and maternal depression. *Social science and medicine*, 53(4), pp.441-453.
- Rickwood, C.M., Johnson, L.W., Worthington, S. and White, L., 2017. Customer intention to save for retirement using a professional financial services planner. *Financial Planning Research Journal*, 1(1).
- Robb, C.A. and Woodyard, A., 2011. Financial knowledge and best practice behavior. *Journal of Financial Counselling and Planning*, 22(1).
- Roux, R., 2010. The Role of Savings in the Economy.
- Rutledge, D. and Deshpande, S., 2015. The influence of time orientation on personal finance behaviors. In *Ideas in Marketing: Finding*

- the New and Polishing the Old (pp. 67-76). Springer, Cham.
- Sabri, M.F. and MacDonald, M., 2010. Savings behavior and financial problems among college students: The role of financial literacy in Malaysia. *Cross-Cultural Communication*, 6(3), pp.103-110.
- Salkind, N., 2010. Nonexperimental designs. *Encyclopedia of Research Design*.
- Samuel, Y.A., Abeka-Donkor, S. and Awuah, J.B., 2012. Motive for Saving: A Survey of Why People Save. *International Journal of Innovative Research and Development (ISSN 2278-0211)*, 1(11), pp.174-190.
- Satsios, N. and Bassim, M., 2018. The effect of control variables on the saving motives of the Pomak households. 1. *Cotae, Alexandra—Professional multiculturalism in the medical field...5*.
- Sedgwick, P., 2013. Stratified cluster sampling. *Bmj*, 347, p. f7016.
- Selenko, E. and Batinic, B., 2011. Beyond debt. A moderator analysis of the relationship between perceived financial strain and mental health. *Social science and medicine*, 73(12), pp.1725-1732.
- Soman, D. and Cheema, A., 2004. When goals are counterproductive: The effects of violation of a behavioral goal on subsequent performance. *Journal of Consumer Research*, 31(1), pp.52-62.
- Stapleton, C.D., 1997. Basic Concepts in Exploratory Factor Analysis (EFA) as a Tool to Evaluate Score Validity: A Right-Brained Approach.
- Stevens, J.P., 1992. Applied multivariate statistics for the social sciences (2nd edition). Hillsdale, NJ: Erlbaum.
- Sundarasan, S.D.D., Rahman, M.S., Othman, N.S. and Danaraj, J., 2016. Impact of financial literacy, financial socialization agents, and parental norms on money management. *Journal of Business Studies Quarterly*, 8(1), p.137.
- Sundarasan, S.D.D. and Rahman, M.S., 2017. Attitude towards money: Mediation to money management. *Academy of Accounting and Financial Studies Journal*, 21(1), pp.80-96.
- Tabachnick, B.G. and Fidell, L.S., 2007. Using multivariate statistics. Fifth Edition. Pearson Education Inc.
- Torres, T., 2001. RP has very low savings rate — study. Philstar.com
- Travnicek, R.J., 2009. Whatever Happened to Thrift? Why Americans Don't Save and What to Do about It. *Journal of Financial Counseling and Planning*, 20(2), p.82.
- Traut-Mattausch, E. and Jonas, E., 2015. Why do people save? *Zeitschrift für Psychologie*.
- Turunen, E. and Hiilamo, H., 2014. Health effects of indebtedness: a systematic review. *BMC public health*, 14(1), pp.1-8.
- Vaitilingam, R., 2016. Improving People's Financial Decision Making. Voxeu.org.
- VanDerhei, J. and Copeland, C., 2010. The EBRI retirement readiness rating:™ Retirement income preparation and future prospects. *EBRI Issue Brief*, (344).
- Wei, S.J. and Zhang, X., 2011. The competitive saving motive: Evidence from rising sex ratios and savings rates in China. *Journal of political Economy*, 119(3), pp.511-564.
- West, T. and Worthington, A.C., 2016. The impact of major life events on Australian household financial decision-making and portfolio rebalancing. Available at SSRN 2826337.
- Whitaker, E.A., Bokemeiner, J.L. and Loveridge, S., 2013. Interactional associations of gender on savings behavior: Showing gender's continued influence on economic action. *Journal of Family and Economic Issues*, 34(1), pp.105-119.
- Worldometer, 2020. Covid-19 Corona Virus Pandemic Count. Wordometers.info.
- Yao, R., Xiao, J.J. and Liao, L., 2015. Effects of age on saving motives of Chinese urban consumers. *Journal of Family and Economic Issues*, 36(2), pp.224-238.
- Zait, A. and Berteau, P.E., 2015. Financial literacy— Conceptual definition and proposed approach for a measurement instrument. *The Journal of accounting and management*, 4(3).
- Zaleskiewicz, T., Gasiorowska, A. and Kesebir, P., 2013. Saving can save from death anxiety: Mortality salience and financial decision-making. *PloS one*, 8(11), p. e79407.