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Effects of Filipino Consumers' Financial Attitudes, Subjective Norms, and Perceived Behavioral Control on Intentions to Formal Banking: Towards Financial Inclusion

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This study analyzes the role of attitudes, subjective norms, and perceived behavioral control on the behavioral intentions of Filipinos in saving surplus money in the bank. Anchoring on the theory of planned behavior, a logistic model involving this financial behavioral intention and psychological variables extracted from the Philippine Central Bank's *Consumer Finance Survey* was developed. The survey generated data through a stratified random sampling of households asking their financial conditions including income, spending and insurance coverage. Findings illustrate that subjective norms and perceived behavioral control significantly predict behavioral intention towards banking. Moreover, demographic differences are also described to influence behavioral intentions. Implications and contributions are positioned in the contextualization of psychological factors in consumer finance domain and consequently towards financial inclusion marketing strategies.

Keywords: attitudes and behavioral intentions, consumer finance survey, marketing, behavioral finance

1 Introduction

Improving financial inclusion has been the major mandate of the *Bangko Sentral ng Pilipinas* (BSP). In this mandate, the BSP aims to achieve a state wherein the access to financial services such as in banking becomes effective especially for the vulnerable sectors. To do this, BSP continuously improves the design and quality of the formal financial offerings to address the varying needs of individuals wanting to conduct business with financial institutions.

This research explores on an alternative explanation of financial exclusion among individuals in the Philippines. This research uses a behavioral lens on linking attitudes, subjective norms, and perceived behavioral control on financial behaviors among Filipinos specifically in the formal banking domain. Past research has shown several explanations and mechanisms to explain low financial market participation in the country (e.g., Fernandes, et al., 2014; Ferrer, 2017; Razafimahasolo et al., 2016; Tan, 1991).

However, research set in the local context has been scarce in the attitudinal level to explain financial exclusion in the lens of attitudinal tendencies (Lucas, 2018). Thus, this paper aims to quantitatively link towards financial behaviors the following factors: (1) Filipinos' attitudes towards banking and investing, (2) their perceived behavioral control over banking and investing, and (3) the social influence emanating from subjective norms potentially coming from immediate family members at home.

The intended contributions of this paper are as follows. Firstly, beyond the observable reasons for financial exclusion such as cost and lack of funds, this research postulates that financial exclusion can be caused by attitudes, behavioral control (i.e., one's assessment of ability), and social influences from one's subjective norms. These factors have not been described in the formal reports and research done in the local context as barriers to financial inclusion initiatives. Apart from the issues relating education, access, infrastructure in the supply side, the grand concept of financial inclusion also requires scrutiny of individuals' psychological factors in the demand side (Debunque-Gonzales & Corpus, 2021). The common indicators included in several analyses on this side merely include demographic variables such as income, education, age, and gender. The intervention strategies of policymakers and private entities should also understand patterns of attitudes and behaviors among target populations. For example, as Rahman, et al. (2021) interpreted, poverty-stricken individuals might be anchoring their decisions on psychological factors such as emotionality. These seemingly

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small emotional factors might be hindering more rational financial decisions (Mullainathan & Shafir, 2009). Finally, the World Bank (2015) stresses that such financial decisions and participations are highly influenced by attitude and behavioral patterns. Mindra, et al. (2017) strongly connect such behavioral traits to financial inclusion such as self-efficacy. For formal financial services to be more enticing, encouraging, and participative, individuals' attitudes, subjective norms and social influences, and perceived behavioral control must be put to the equation when aiming for financial inclusion. The theoretical underpinnings on financial behaviors wherein a basic proposition is that attitudes towards financial behaviors precede intentions, and then actual behaviors are demonstrated in this empirical research. More importantly, the role of behavioral control (i.e., one's perceived ability to perform a behavior) is highlighted in this research as a major driver of financial behaviors. Third, practical utility of the findings in the paper could aid the micro-financial domain of the industry (e.g., personal banks and investment companies) in capturing market interest and understand consumer behaviors in the said category. Finally, academic and pragmatic knowledge coming from the richness of the Consumer Finance Survey of the BSP can be produced and disseminated through employing systematic, basic, and empirical research. The study of attitudes and its implications on consumer behavior is important to various stakeholders, especially those with immediate decision-making powers and/or those who interact directly with customers. Because of the potential benefits the understanding of how attitude translates into actual behavior that may be favorable or unfavorable to the financial institution in question, the study of attitude-behavior is worth examining.

This paper aims to answer the following research questions: (1) How do behavioral attitudes, subjective norms, and behavioral control beliefs affect both intentions and actual behaviors of Filipino consumers' behaviors towards financial services? (2) How do these intentions and actual behavior towards financial services differ among Filipino demographic segments?

The second question elaborates the attitudes, intentions, and behavioral manifestations on financial services based on some existing knowledge of attributable mechanisms among Filipinos' demographic differences. By empirically illustrating potential differences, implications can be realized with both theoretical development on attitude–behavior link and practical actions by agencies to encourage financial behaviors.

The Theory of Planned Behavior paves the way to conceptually illustrate the relationship and causality of attitudes, social norms, and perceived behavioral control towards behavioral intentions. Although the TPB explicates that these factors lead to behavioral intent, and does not strictly connect intentions to actual behaviors, theorists of TPB have argued that behavioral intention are approximations of actual behaviors (e.g., Eifler & Petzold, 2019). However, in this paper, the model explicitly tests the TPB factors linked to behavioral intentions, not to actual behaviors.

The intended contribution of this current research is to investigate generalized consumer attitudes, social influences, and perceived behavioral control in the context of banking. In addition, such generalized scanning of behavioral finance in the current Asian market (i.e., The Philippines) could represent well the entire society as the dataset utilized was a nationwide national survey conducted by the government similar to the quality of Western dataset by Rutherford and Devaney (2009) in credit card behaviors among Americans.

2 Review of Related Literature

2.1 Financial Inclusion Status in the Philippines

The Bangko Sentral ng Pilipinas emphasizes the importance of financial inclusion as it "lays the groundwork for sustainable and equitable national development" BSP, 2023, par.2). As financial inclusion achieves a state of effective access, appropriately designed, good quality, and responsive financial products and services (e.g., savings among others) especially with the vulnerable sectors, it also faces layers of consumer domains that need to be understood.

In 2021, BSP reports that ownership of bank accounts improved to 23% from a mere 12% in 2019 (BSP, 2021). However, the savings use of bank accounts decreased from 76% in 2019 to only 56% in 2021. On the other hand, the acceleration of digital finance adoption during the COVID-19 pandemic helped improve financial inclusion. But still, the number of unbanked Filipinos in 2021 remains at around 53% of the country's adult population, or roughly around 41 million on that year (Hilario, 2022).

The BSP's Consumer Financial Survey (CFS) that started in 2009 is a nationwide quadrennial survey on consumer finances among Filipino households (BSP, 2014). The 2014 version of the CFS involved approximately 15,000 households covering all regions in the country (except Leyte and the Autonomous Region of Muslim Mindanao (ARMM)). The survey generates data on household level financial conditions and individual-level financial attitudes. This 2014 edition added items on Filipinos' attitudes towards saving in banks and investments, which notably were not present in the 2009 edition.

To highlight some relevant findings, 2014 CFS reported that only 14 percent of Filipino households had a deposit account. This means that two in every five Filipinos had used deposit accounts in the Philippine banking system. However, those with financial assets such as investments in stocks, mutual funds, government securities, and fixed-income securities are still small. In the National Capital Region alone, only 0.4 percent of households had held investments in these types of assets while only 0.2 percent for the entire country (BSP, 2014). Since its inception in 2009, there had been a dearth of academic research that could tap into the richness of the data that the BSP-CFS contains. This research extracts the attitudinal–behavioral aspects of the instruments in the aim of explaining micro-personality levels of behavioral finance through the lens of a behavioral theory studies—i.e., Theory of Planned Behavior.

Meanwhile, while the BSP aims to increase the numbers year-on-year, barriers against financial inclusion still thrive such as cost of financial services, and lack of excess money to be set aside for savings (BSP, 2018). The potential reasons according to the BSP include: not having enough money, no documentary requirements, unaware of the details about this or how it works, and not needed. Not many reports have explicated the attitudinal aspects of financial exclusion at least in the formal banking behaviors.

2.2 Theory of Planned Behavior

Ajzen and Fishbein (1980) originally asserted in the theory of reasoned action that human behaviors are influenced by attitudes and social norms. According to the theory, behavioral intention is influenced by the individual's attitude toward the behavior and the social norms surrounding the behavior. By evaluating the individual's attitude toward the behavior and the social norms surrounding the behavior, marketers and psychologists can gain insight if an individual is likely to perform the intended behavior. For example, if the individual has a positive attitude about securely saving money and society views securely saving money as a positive thing, then it is likely that the individual deposits money in banks to a secure saving behavior.

Given the potential precursors to consumer decisions to avail of financial services, a multi-theoretical view of consumer financial behavior is needed to explain the behavior (Ning et al., 2015). Behavioral finance as a modern area in the study of finance leans to combine behavioral and cognitive psychological mechanisms to explain individual behaviors. These mechanisms and behaviors are assumed to not reflect the conventions of economic fundamentals in the rational models (Kumar, 2017).

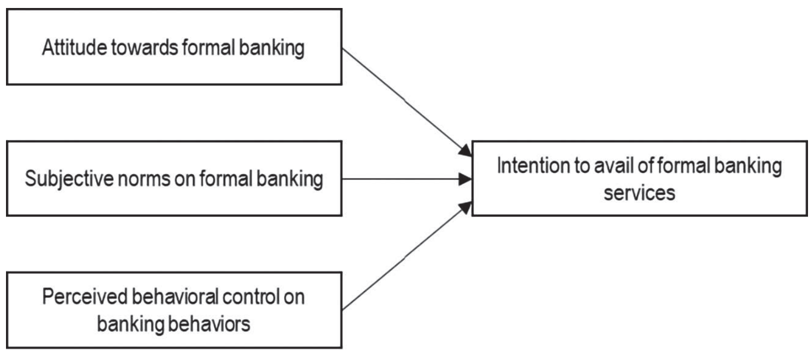
This paved the way towards developing a framework to model consumer financial behavior (Jungermann, 2004). The theory of planned behavior (TPB) states that the individuals' actual behavior is explained by their attitudes toward the behavior, subjective norm, and perceived behavioral control (Ajzen, 1991; Xiao et al., 2011). In addition, the theory of reasoned action (TRA) proposes that reasoned actions are based on information acquisition and processing, deliberation, and well-informed decisions (Ajzen & Fishbein, 1980). Therefore, both theories assert that in decisions that require cognitive involvement, such as financial decisions, attitudes become an important antecedent to behaviors.

Meanwhile, consumer financial socialization is a process by which individuals learn the system, values, norms, and required behavior of a group where they belong to that influence their financial attitude and behavior (Danes, 1994; Ozmete, 2009). One of the mechanisms through which consumer financial socialization is formed through social interaction. For example, Van Raaij (2016) explains that investing behaviors of individuals tend "to imitate and follow other investors due to lack of relevant and reliable information and lack of courage to behave differently" (p.89). There is broad research on how social interactions with several circles of groups affect the attitude and behavior of individuals. Social learning happens when behaviors are shaped by observing and imitating others (Bandura, 1971). Parents, for example, shape and guide the financial attitudes and behaviors of their child through communication and using negative and positive reinforcements (Bakir et al, 2006). That being said, these individuals would therefore develop some desire to belong to that group, or at the very least imitate those who are influencing them. In the context of this research, it can therefore be simply said that if those some parents, for example, possess some degree of knowledge and experience in financial products and services, then they themselves would be more interested to avail these products and services as well.

The theory of planned behavior states that attitude toward the focal behavior, subjective norms, and perceived behavioral control shape an individual's intention and behavior to the said behavior. Ajzen suggested the theory in 1991 as an improvement of the theory of reasoned action previously developed by Ajzen and Fishbein in 1980. Ajzen added perceived behavioral control as one of the determinants of intention and behavior with attitude toward the behavior and subjective norms.

Therefore, as seen in the financial behavior context, three primary factors can influence both intention and actual behaviors among individuals: attitudes towards financial services, social norms and influences around the individual on financial behaviors, and perceived behavioral control on saving and investing (e.g., ability to increase personal wealth). Moreover, the study further investigates the variances on intention and actual behaviors towards financial services that can be attributed to the perceived behavioral beliefs among demographic segments in the market. For example, an individual's financial resources, age, societal gender role, and level of educational attainment could improve the prediction of intention and actual behaviors by considering limiting factors affecting the individual's ability to perform the behavior (Sahni, 1995). An individual's ability to perform a behavior is limited by his maturity, level of knowledge, experience, financial resources, and societal gender roles. (Serido et al, 2013). According to Ajzen, by considering the individual's perceived behavioral control, the theory of planned behavior increases the descriptive power of the model to determine financial behaviors. Figure 1 illustrates the conceptual framework (See Figure 1. Conceptual Framework using the Theory of Planned Behavior).

Figure 1. Conceptual Framework using the Theory of Planned Behavior



This paper explores on these primary variables—attitudes towards the behavior, subjective norms, and behavioral control over financial behaviors among Filipinos. In addition, demographic features that marginally contribute to the prediction of intention and behavior are also investigated.

This paper aims to contribute to the growing literature that anchors onto the theory of planned behavior where the results of this paper are highly contextualized in behavioral finance. Recent research has utilized said theory in the financial context of consumer marketing such as those of Aboelmaged and Gebba (2013) in their study on mobile banking adoption, Yousafzai, Foxall, and Pallister (2010) in internet banking behavior, Gopi and Ramayah (2007) on online stock trading, Rutherford and DeVaney (2009), and Xiao et al. (2011) on credit card use. More recently, Effendi, et al. (2021) applied the theory to predict consumers' decisions in using Islamic rural banking services.

Meanwhile, Raut, Kumar, and Das (2021) studied the predictability and reasons of individual investors' intention to subscribe to socially responsible investments in the Indian market using the TPB model. Similarly, Nomi and Sabbir (2020) investigated the factors of consumers' purchase intention towards life insurance in Bangladesh through the lens of TPB.

To further establish that TPB models are most appropriate anchors in recent literature, Mahardika and Zakiyah (2020) analyzed the interest of millennial consumers in Indonesia with their intention to invest in stocks; as well as Putri and Adawiyah's (2020) main framework of TPB in analyzing the effect of behavioral finance towards investment intentions. Summing it up, Antony (2020) acknowledges that the TPB models are appropriate tools in the domain of behavioral finance when financial decisions are "guided and affected by psychological, emotional, and behavioral factors" (p. 5).

2.3 Role of Attitude on Financial Behavior

Campbell (1963) first argued that social attitudes are a hypothetical construct that is assumed to be shaped by historical experiences that can influence subsequent behavior. The study adopts Ajzen and Fishbein's (2000) definition of attitude as "the evaluation of a behavior, concept or object along the dimension of good or bad, favor or disfavor, like or dislike" (Ajzen & Fishbein, 2000).

Glasman and Albarracin (2006) conducted a meta-analysis of different studies in the formation of attitudes that could predict subsequent behavior. Their study revealed that easily accessible and consistent attitudes tend to predict subsequent human behavior. Also, attitudes that are gained from past experiences tend to predict subsequent human behavior.

Several foreign studies have explored on the role of attitudes towards financial behavior. For example, Borden, Lee, and Collins (2008) considered American college students' financial knowledge, attitudes, and behavior through seminar participation and loaning behaviors. Also, Chien and Devaney (2001) investigated the effects of credit attitude on credit card and installment debt while Parrotta and Johnson (1998) explored the financial attitudes and knowledge and their effects to financial satisfaction among Canadian married individuals. These examples consistently illustrate the way consumers develop their financial attitudes towards financial behaviors and how do these ultimately affect their personal financial management.

In Asian contexts, Ahmed and colleagues (2010) described Malaysians' individualized attitudes towards financial behavior directly affect credit card spending. Moreover, anxiety towards money could affect risk-taking behaviors among Taiwanese (Shih & Ke, 2014). Attitudes towards financial behavior are also mediated by financial literacy in Malaysia and other Asian markets (Jamal et al., 2015; Xiao, 2020). Attitudes towards money and investments can also be construed as a gendered behavior (e.g., in Pakistan) according to Bhabha and colleagues (2014).

Therefore, based on these plethora of theoretical arguments and highlights of past research, we predict that positive attitudes toward financial services behavior (i.e., availing a bank deposit account and investing in stocks, bonds, mutual funds and UITFs) positively affect the likelihood that the individual intends to avail of these financial services. Also, it is deemed that positive attitudes toward financial services behavior (i.e., availing a bank deposit account and investing in stocks, bonds, mutual funds and UITFs) positively affect the likelihood that the individual avails of these financial services.

Thus, with these considerations, the first hypothesis is stated as:

H1: Individuals who have positive attitudes towards banking will have increased intention to avail of formal banking services.

2.4 Role of Social Influence and Subjective Norms on Financial Behavior

There is broad research on how the influence of family members, friends and peers shape the attitude and behavior of individuals (e.g., Gudmunson & Danes, 2011; Kasser et al., 1995; Schroder & McKinnon, 2007; Webley & Nyhus, 2006). Therefore, it is to be expected that such individuals can exert similar influences towards attitudes and behaviors on this context on behavioral finance. As mentioned, consumer financial socialization enables individuals to learn the system, values, norms and required behavior of a group where they belong to that which in turn influences their financial attitude and behavior (Danes, 1994; Ozmete, 2009). One of the mechanisms through which consumer financial socialization is formed includes social interactions that in turn lead to social learning (Bandura, 1971).

Socialization starts in the family as the initial reference point for the individual. Parents and other family members shape and guide the financial attitudes and behaviors of a child through communication and using negative and positive reinforcements, such as a head of the family who has stocks and bonds being able to influence his or her children to do the same (Bakir et al., 2006). Peer interaction in the workplace can also exert similar influences towards financial behavior, like colleagues discussing about important life decisions, including financial decision-making such as investments (Bursztyn, 2014) and availing deposit services (Tan & Chua, 1986), among others. To show belongingness and camaraderie to the group, individuals subscribe to the same attitudes and behaviors manifested within the group.

In view of family and workplace social influences, propinquity effect and mere exposure state that the mere presence and exposure to family members' and workplace colleagues' behavior has a direct influence on intention and actual behavior (Zajonc, 1968). In Malaysia, for example, Sharif and Naghavi (2020) investigated consumers and the significant indirect role of parents' teaching and behavior towards financial and risk-taking behaviors, while Jamal and colleagues (2015) enumerate social environment as a part of savings behavior among Malaysians. Similarly, Widyastuti and colleagues (2016) found out that attitude and subjective norm significantly influenced saving intentions among young people. Also, in Iran, Ghalandari (2012) includes social influence as a factor to positively affect user's behavior and intention to use e-banking.

The channels of social interaction have also been employed in behavioral finance research. Hong and colleagues (2014) enumerate two mechanisms through which social interaction can entice individuals to avail of financial services. First, information can be disseminated by means of word-of-mouth communication or observational learning (Banerjee, 1992; Bikhchandani et al., 1992; Ellison & Fudenberg, 1995). Second, individuals may also enjoy discussing the choice of financial services among the social group. Thus, it is more likely for an individual to avail of financial services, say invest in stocks, if the participation is high among an individual's social circles. Likewise, social interaction can also favorably influence financial decision-making in an effort to belong. Being aware of the financial decisions within a given society pressures the individual to follow and maintain the level of activity within the group. Bernheim (1994) presents a model of social conformity, where individuals adapt to a uniform standard of behavior. They believe that even slight departures of their actions with the social norm will diminish their status.

The study therefore looks at the presence of a household member that has financial assets and a household member working in the financial services industry as mechanisms for social learning theory within households. These household members possess enough knowledge to make more solid arguments to influence individuals to develop favorable attitudes and behaviors towards financial products and services. Likewise, this research also looked at being employed in the financial services industry as a mechanism where individuals are influenced by peers and colleagues in the workplace for the same reasons as that of household members. Thus, social influences from subjective norms, represented by the presence of a household member availing financial services (i.e., availing a bank deposit account) and employment in the financial services industry, positively affects the likelihood that the individual intends to avail of the same financial services.

Thus, the next hypothesis on the effect of social norms states that:

H2: Individuals who are affiliated with someone who has formal bank accounts will have increased intention to avail of formal banking services.

2.5 Perceived Behavioral Control in Financial Behaviors

Behavioral control is a perception of one's ability (ease or difficulty) in doing the focal behavior, which is contextual and can vary from person to person, from situation to situation. The theory of planned behavior is particularly highlighting the role of behavioral control as it critically recognizes an individual's self-efficacy in performing behaviors of interest (Ajzen, 1991). According to the proponents of TPB, the act of non-willingness but is constrained by the perceived ability should predict intentions and behaviors of individuals.

Perceived behavioral control could be semiotically connected to direct and indirect experiences towards an attitude object (e.g., saving towards banking) thus creating a 'dispositional control' (Manstead, 2001). Azjen (2002) himself clarified about the concept of perceived behavioral control.

This factor, which he added in the domain of cognitive control in the behavioral structure of an individual, deals with the perceived lack of volitional control over a locus of action. The lack of control even on the antecedent behavioral actions form part the series of perceived behavioral control. For example, if one says he/she cannot save money, thus, he/she cannot put anything on a bank to save, is a statement about controllability over the focal behavior. In this case, intention to use a bank.

Related studies have explored self-control and self-efficacy in financial behaviors. For example, Rha, Montalto, and Hanna (2006) connected varying self-control levels depending upon the life cycle of an individual. Also, behaviors of low-saving households are attributed to bounded rationality and self-control (Thaler & Benartzi, 2004). Through these foundations, thus, in the context of financial behaviors, it is predicted that perceived behavioral control towards saving behavior affects intentions and actual behavior (i.e., ownership of bank accounts and investment instruments) among Filipinos.

H3: Individuals who express negative perceived behavioral control over saving money will have lesser intention to avail of formal banking services.

2.6 Demographic Differences in Financial Behaviors

Expressed intentions towards availing of bank services could vary depending upon one's personal demographic profile. Such differences inform theoretical contingencies of behavioral intentions themselves based on the conceptual lining of resources, skills, and maturity in a domain (i.e., financial domain) (Serido et al, 2013). In this study, we explore the role of educational attainment, gender, income, employment, age, membership in pension, and household size as set of demographic determinants of financial behaviors.

2.6.1 Educational Attainment

The educational attainment of an individual can show the level of numeracy and understanding of economic concepts needed to comprehend risk and return concepts in availing financial services (Atkinson & Messy, 2012). Atkinson and Messy (2012) show that there is an association between higher educational attainment and higher financial literacy scores in the 14 countries included in their study. They suggest that higher levels of educational attainment impact not just knowledge but also to higher levels of financial literacy. Education can change individuals' behavior and decision making in several ways: through increasing financial literacy and cognitive skills, or by affecting social networks, job opportunities and beliefs and attitudes (Cole & Shastry, 2009). Grimes et al. (2010) find that individuals who have graduated from high school reduces the probability that an adult is unbanked in the United States compared to those who have not graduated from high school.

In the Philippines, as the level of education increases, the level of understanding of required to pass mathematics and economics subjects increase. A high school graduate will understand algebra, trigonometry, geometry and economics which are not yet learned by only an elementary school graduate. Similarly, college graduates have undertaken high-order thinking skills that are needed to evaluate whether to avail financial services.

Studies have correlated formal education attainment with banking behaviors. Loaba (2022) suggests that in West Africa, formal education significantly affect formal saving behaviors among individuals. Also in the United States, Kaynak and Harcar's research (2005) shows that American consumers' attitudes towards banks are affected by their educational segmentation: highly educated individuals tend to trust banks more. Finally, Andreou and Anyfantaki (2021) found a correlation between formal education and financial literacy affecting banking behaviors.

Therefore, it is proposed that:

H4: Individuals who have higher educational attainment are more likely to have more intention to avail bank deposit services than having lower educational attainment.

2.6.2 Gender

There is a considerable amount of research documenting a significant difference on how men and women behave financially. Men avail financial services as well as invest in risky investment such stocks and bonds more than women. In the perspective of the prospect theory, loss aversion is the behavioral tendency to be more sensitive to losses relative to gains (Kahneman & Tversky, 1979). Croson and Gneezy (2009) find that the significant gender variation in financial behavior is because women are more loss averse compared to men. They find that women exhibit a more severe loss reaction, leading to a higher risk aversion than men. Examining cross-country differences in gender use of banking services among 98 developing countries, Demirguc-Kunt and colleagues (2013) found that where women are restricted to work, lead a household, decide where to live and receive family inheritance, women tend to avail financial services less likely relative to men. Their study also validates the manifestation of gender norms in societal culture which adds to gender difference in the use of financial services such as: 1) where women home-make and men provide for the family, 2) where there is high violence and discrimination against women and 3) where there is a high incidence of early marriage (Demirguc-Kunt et al., 2013).

Furthermore, Bajtelsmit and Bernasek (1996) found that this difference is caused by mental cognition on how men and women process information brought by differences in income, discrimination, employment, experience, preferences, and human capital choices. The discussion of loss aversion between the two genders has two sides of the argument. One position is that men take excessive risk while the other position is that women generally invest conservatively (Hinz et al., 1997). Barber and Odean (2001) looked at overconfidence between men and women in investment decisions as another way to explain such differences. Overconfidence is a bias wherein individuals overestimate their skills relative to their actual skills. Croson and Gneezy (2009) corroborated the study of Barber and Odean that men are more overconfident than women. In addition, Agnew (2006) reported that men are more likely to take riskier investments such as investment in stocks and bonds while women tend to invest in less riskier investments like bank deposits. Related to this, in terms of investments, men primarily feel anger (which leads to overconfidence) while women feel fear (which leads to loss aversion).

In addition, Almenberg and Dreber (2015) suggest that gender differences in financial literacy can explain a significant part of the gender gap where men are typically more financially literate than women. It is therefore worth studying if the same is true in the context of the Philippines and in future studies assess whether improving financial literacy and financial inclusion among women could improve their access to financial services.

Thus, we infer the next hypothesis:

H5: Males are more likely to have higher level of intention to avail bank deposit services than females.

2.6.3 Age

Financial literacy increases with age as individuals mature (Atkinson & Messy, 2012). However, cognitive deterioration happens to aging individuals. According to the same study, people with the age group 30 to 60 have the highest financial literacy which translates to higher intentions towards financial services. The devoted time and effort to studying the financial markets is reflected by the age of the individual. Studies on cognitive aging show that cognitive abilities, especially memory, decline with age (Horn, 1968; Salthouse, 2000). Agarwal, Driscoll, Gabaix and Laibson (2009) examine the life-cycle patterns of financial decision errors, such as, suboptimal use of credit card balance transfer offers, incorrect estimation of the value of own house, and excess interest rate and fee payments. The authors recognize that the individual's financial sophistication and economic behavior varies with age and that the pattern is similar to the relationship between cognitive abilities and age. In addition, Korniotis and Kumar (2009) examine the role of cognitive aging on the stock investment decisions of older investors. Consistent with the financial sophistication life-cycle pattern, this research found that older investors have inferior investment skills and they earn on average 3% to 5% lower returns annually on a risk-adjusted basis compared to younger adults. According to the cohort effect on aged population, older people with experience of a very different financial marketplace may find it difficult to keep up with new technologies in the financial marketplace. With the advent of new technologies attached to banking and investment, younger individuals would tend to show interest and subscribe to new ways of banking and investing. Thus, we postulate that:

H6: Younger individuals are more likely to have more intention to avail bank deposit services.

2.6.4 Income

Income represents the cash inflow of an individual that is needed to avail of financial services. Conceptually, people who have more income are more likely to avail of financial services (US Government Accountability Office, 2022). Individuals with higher income tend to have more disposable income. Therefore, individuals earning more would be able to save and invest more compared to individuals who are earning less.

Moreover, the behavioral life-cycle theory states that individuals maximize their inter-temporal utilities over their lifetime with the full knowledge of their lifetime income (Agustin et al, 2016). The goal of the individual is to better manage their consumption behavior by availing of certain financial products and services designed to meet this particular goal. It is therefore worthwhile to investigate whether or not high-income individuals tend to increase their use of financial services than their low-income counterparts.

Past studies have shown that income is correlated with intention to avail of formal banking. For example, Servon and Kaestner (2008) found that interest in the impact of online banking are more pronounced in the lower-income sector which has yet started exposure to banking. In Bangladesh, Khan et al (2007) found that income and education have significant role in customers' usage of Islamic banks. In the Philippines, Chiu et al (2017) found that initial trust towards banking can be affected by income as well.

Therefore, the prediction is that:

H7: Individuals with higher income are more likely to have more intention to avail bank deposit services compared to their low-income counterparts.

2.6.5 Employment

An individual's work status might be affecting his or her disposition towards banking behaviors. Intuitively, employment provides a steady salary which is the usual source of funds for personal banking transactions. Obviously, no salary would mean a severe lack of funds to save. Research has demonstrated this effect and association of employment status in banking attitudes and behaviors. For example, Borden and colleagues (2008) have said that employment status predicted financial knowledge, attitudes, and behaviors. Also, Calvet et al (2009) linked professional status and lack of jobs to financial sophistication (i.e., literacy and interest). Similarly, Stolper and Walter (2007) have suggested that professional status is related to financial literacy, financial behavior, and financial advice interest. Finally, Ruberton and Gladstone (2016) connected happiness or life satisfaction to banking attitudes as determined by individuals' employment status, alongside relationship status and age as correlates.

Thus, the next hypothesis for this research is:

H8: Individuals who are employed are more likely to have more intention to avail bank deposit services than being non-employed.

2.6.6 Membership in pension

Individuals' membership in pension could also affect the intention to save money in banks. For instance, if one has pension availed due to employment or have voluntarily gotten one, he or she could just ignore saving money in formal banks as the pension would cover for future expenses. On the other hand, a common scenario is that the auto-membership to other financial services tied to certain banking products and services leaves the individual with no choice but avail of bank accounts. However, despite this growing phenomenon, very little research has attempted to investigate this relationship. Shaw and Waite (2015) mentioned that Australian research examines an auto-enrolment policy indicates young men choose enjoying life over savings for retirement. Another extant research suggests that the introduction of mandatory pension plan increases saving intentions (Thaler and Shefrin, 1981).

Therefore, the next hypothesis for this research is:

H9: Individuals who are members of pensions are more likely to have more intention to avail bank deposit services than those who are not.

2.6.7 Size of household

Finally, the demographic variable relating to size of family or household also helps to predict intention to save surplus money to formal banking. The household size determines expressions of attitudes, expectations, and economic activity that can include savings behavior (Lindqvist, 1981). Research on developed and developing countries consistently illustrate that the number of household members is negatively related to household savings, e.g., Browning and Lusardi (1996), Loayza and Shankar (2000), Gardiol (2004), and Orbeta (2006). This pattern could lead in the dispositional intention towards banking services. Thus, our final hypothesis is:

H10: Increased size of one's household decreases the individual's intention to avail of formal bank services.

3 Methodology

3.1 Data from the BSP Consumer Financial Survey (CFS)

The CFS is a nationwide quadrennial survey on consumer finances among Filipino households. It generates data on the financial conditions of households, including what they own (financial and non-financial assets) as well as from whom and how much they borrow (sources of credit and level of indebtedness). It also generates data on the income, spending and insurance coverage of households (BSP, 2014).

CFS used the 2003 Master Sample (MS 2003) from the Philippine Statistics Authority (PSA). This MS 2003 used a two-stage sampling with stratification at the primary sampling unit: on stage 1, households were stratified in terms of Enumeration Areas (EA)/"Barangays"/Villages. Random samples of EAs were drawn in each region with probability proportional to the size (i.e., total number of households) of the EA. In the second sampling stage, random samples of 12 households for the national capital region and 16 for areas outside the national capital region were selected from each of the sample EAs.

CFS was conducted through a survey that encouraged participation among households by a letter sent by the central bank governor informing the households of the CFS, its objectives, and the confidentiality of their responses. The survey-taker identified the appropriate survey respondent: the person living in the household who is the most knowledgeable and credible to answer questions about household finances. The respondents may, however, consult any person in their households or look for documents that helped them answer accurately. The survey was conducted from July 2014 to January 2015 with a response rate of 86.2 percent (BSP, 2014*)*. The following table shows the details of the response rates:

Table 1. Response Rates of the Household Surveyed

Area	Sample Households	% share of sample households	Respondent Households	Response Rate
Philippines	18,000	100	15,503	86.1
National Capital Region	1,962	10.9	1,565	79.8
Areas outside the capital	16,038	89.1	13,938	86.9
North/Central Luzon	4,387	24.4	3,987	90.0
South Luzon	3,860	21.4	3,395	88.0
Visayas	3,248	18.0	2,799	86.2
Mindanao	4,543	25.2	3,757	82.7

(Source: BSP, 2014)

Using the 2014 CFS dataset described at the onset, the variables that serve as proxies to the concepts proposed to describe Filipino consumers' financial behaviors were extracted. The unit of observation in the study is the respondent who is the most knowledgeable about household finances.

3.2 Dependent Variables

To describe further the items utilized from the 2014 CFS, the following variables in the dataset were used:

($Bank_i$) Intentions to avail of bank deposit services ("*banking intentions*"), the CFS variable with code "L1: If you have surplus money, where will you put the money?" was used for this variable. Answers indicating "deposit/save in bank" were extracted. The variable then was transformed into a categorical "1" if the answer was "deposit/save in bank" or "0" otherwise. This indicates if the respondent intends to use bank deposit services.

3.3 Independent Variables

Three primary independent variables were represented by the following CFS variables:

3.3.1 Banking Behaviors

(X_1) The *attitudes toward banking* behavior was extracted from the CFS variable code "E70a: I like to save money using a banking institution". The responses were collected using a Likert scale: "1" as strongly agree, "2" as agree, "3" as neither agree/disagree, "4" as disagree and "5" as strongly disagree. Therefore, a unit increase in the variable represents a positive attitude towards banking services behavior.

(X_2) The *subjective norm* variable utilized a proxy variable wherein the respondent has no deposit account, but another household member instead (CFS code E4a-c). The variable was then transformed into a categorical variable to indicate if the household where the respondent belongs has a member (aside from the respondent) who has a bank deposit account in the form of checking, savings or time deposit account with any deposit-taking bank regulated by the BSP. It is a dummy variable with a value of "1" if at least a member exists, otherwise the value is "0".

(X_3) *Perceived behavioral control* in availing a bank deposit service was represented by the CFS items "E70d: I just don't earn enough money to save regularly" and "E70e: I don't think I'm saving enough for the future." The answers were elicited using a Likert scale: 1= strongly agree to 5= strongly disagree. The answers to the two items were averaged. Thus, a unit increase in this variable represents positive perceived behavioral control.

3.4 Demographic Variables

As conceptualized, demographic variables are important determinants of the contingencies of intentions and actual behaviors on financial services. The CFS database has a rich resource for these variables:

3.4.1 Educational Attainment

The study utilizes two education dummy variables from the ten highly granular categorizations of the CFS to underscore the two major educational completion attainment in the Philippines – whether one is able to finish high school or not **($X_{4\text{-}1}$)**, and if one is able to finish college **($X_{4\text{-}2}$)**. The base category (0) is a person who has an education less than a high school graduate.

3.4.2 Gender (X_5)

The variable is a categorical variable to indicate if the gender of the respondent. It is a dummy variable with a value of "1" if the respondent is a male, otherwise the value is "0".

3.4.3 (X_6)

Age **(X_6)** is the actual age of the respondent as of survey date. The age brackets were defined according to marketing segmentation labels (Hecht, 2022): millennials (aged 14-32), generation x (33-48), and 'baby boomers' (49 and up) by 2014.

3.4.4 Annual Household Income (X_7)

The variable is the total sum of the respondent and other household members' income. The CFS survey did not explicit ask an estimated household income. Instead we derived the income information to essentially capture the following sub-information: primary and secondary income of respondent + other income of respondent + primary and secondary income of spouse + other income of spouse + business income of respondent and spouse. The codes used from the CFS were: I-13a-d: How much in gross salary or wages were you paid before taxes and other deductions in 2013? Is this in—(denomination)?; I-14a-d: Is that amount per day, per week, per month, per quarter, every 6 months or per year?; I-16a-f: How much did you receive from the earnings or profit of this company or business? Is this in--?; I59a-f: About how much was your spouse/partner's total income and benefits from this job in 2013? Is this in –?; I60a-b: Is that amount per day, per week, per month, per quarter, every 6 months or per year?, I-63a-l: How much did your spouse / partner earn in 2013 from each of these other jobs? Is this in--?; J19a-f: How much in gross salary or wages were you and/or your spouse/partner paid in 2013?; J20: Is that amount per day, per week, per month, per quarter, every 6 months or yearly?. The resulting variable is an annual household income. In the model, three level-bracket was used according to the 2015 middle-income classification by the Philippine Statistics Authority (Virola et al, 2022): low-income (base 0) = < PHP 104,150, middle-income ($\mathbf{X_{7\text{-}1}}$) = $\geq$ PHP 104,150 < PHP 1,341,157, high-income ($\mathbf{X_{7\text{-}2}}$) = $\geq$ 1,341,157 per year.

3.4.5 Employment (X_8)

Using CFS code I-1 "What was your employment status in 2013?", the responses were extracted and recoded into 1= employed (including those that were self-employed, employer of a business, and OFW). Otherwise, the other responses were recoded into 0=Unemployed.

3.4.6 Membership in Pension (X_9)

The item on GSIS and SSS insurance of the respondent were directly extracted from item HA: Do you have GSIS/SSS plan or insurance? The responses were either Yes or No.

3.4.7 Household Size (X_{10})

This variable literally counts the number of household numbers asked in item B1 (household number of members).

3.5 Econometric Model

To statistically illustrate the proposed model of the study in its aim to describe the effects of attitudes, behavioral control, and subjective norms towards financial behaviors, the following formula is used. Logistic model theoretical derivations are discussed in Menard (2002). The following equations show the multinomial logit model used in the analysis of banking behaviors:

$$Logit\,[P(Bank_i=1)] = a + \beta_1 X_1 + \beta_2 X_2 + \ldots + \beta_k X_k \qquad (1)$$

where $Bank_i$: is the intention to avail of banking services (i.e., whether to use banking or not for surplus money)

βs: are the logistic regression coefficients to be estimated for each of the independent variables Xs:

- X_1: attitudes towards banking
- X_2: whether a family member (instead of the respondent) has a bank account ("subjective norm")
- X_3: perceived behavioral control
- $X_{4\text{-}1}$: educational attainment 1 (high school graduate or not)
- $X_{4\text{-}2}$: educational attainment 2 (college graduate of not)
- X_5: gender (male or female)
- X_6: age (bracketed into three categories)
- $X_{7\text{-}1}$: middle-income annual income (base: low-income)
- $X_{7\text{-}2}$: high-income annual income (base: low-income)

$X_{8:}$ employment
$X_{9:}$ membership in pension
$X_{10:}$ household size

The specific levels of each of the variables above are described in the methodology section. The study used STATA statistical software to compute for the marginal effects and test for the significance of the variables in explaining the Filipino's decision whether to avail deposit services or not.

Logit regression was used as the dependent variable is treated as a binary (1=surplus money to put in bank or 0=otherwise). The logit regression is a nonlinear model that forces the output or predicted values to be either 0 or 1.

STATA statistical software was also employed to conduct the regression analysis following the proposed econometric model. The data on the behavioral variables that had more than one survey item were averaged to obtain an aggregated value. Chi-square analysis was conducted to understand the relationships between the variables. Logistic regression was conducted to predict and explain the dependent variable using a covariate of independent variables (Hair et al., 2006). Logistic regression is a statistical tool that is used to predict the likelihood of a discrete outcome (0 or 1) from a set of variables that may be continuous, discrete, dichotomous, or a combination. The dependent variables in the current study are dichotomous (1 if the consumer actually uses bank or invest; also if consumer intends to use bank; and 0 otherwise) logistic regression is the appropriate method to predict the likelihood of the dependent variable occurring given the set of independent variables.

4 Results and Discussions

The CFS 2014 had a sample of 15,503 respondents randomly chosen across the country. In terms of age of respondents, the working population group (21 to 64 years old) comprises majority of the sample with 84.2%. Furthermore, most of the respondents have an education less than a high school diploma with 71% of the respondents. Also, 21.4% have at least a high school diploma but not a college degree. College graduates only comprise about 7.5% of the total sample. Majority of the respondents are female with 61.4% of the population while male respondents account for 39.6% of the population. The average monthly income of respondents is PhP 23,172 with majority of the respondents having a monthly income of below PhP 5,000 (38.6%) which is below the minimum wage set by the government (PSA, 2014). The number of respondents employed in the financial services industry is 109 or 0.7% of the total respondents.

A deposit account is required to have access to a whole slew of banking services like credit, investment, and payment services. Only 12.4% of the respondents reported having a deposit account with a banking institution which means that 87.6% of the respondents are unbanked and has no access to any bank services. Deposit intention among Filipinos is higher than those with actual deposit accounts with about 41.2% of the respondents indicating that given the opportunity and means to avail of a deposit account, they will do so. Investment in stocks, bonds and pooled funds is significantly small at only 0.2% of the respondents, signifying that Filipinos do not take advantage of the benefits of financial investments. This situation is an opportunity for financial services firms to expand to and engage in their financial services. Likewise, although higher than those with actual investments in stocks, bonds and pooled funds, the number of Filipinos intending to invest in these assets is also low at only 3% of the respondents.

Table 2. Descriptive statistics of respondents and response summaries of the sample (i.e., no savings deposit accounts) from the Consumer Finance Survey 2014

Variable	n	%
Age group		
Millennials (14 – 32 yo)	1,655	12.2%
Generation X (33 – 48 yo)	5,157	38.0%
Baby Boomers (>49 yo)	6,763	49.8%

Variable	n	%
Education		
Below high school graduate	9,812	72.3%
High School graduate	2,919	21.5%
College graduate	844	6.2%
Gender		
Male	5,312	39.1%
Female	8,563	63.1%
Average Annual Income, in Philippine Peso PHP (Average: PHP 137, 202.76)		
None-Low: Below PHP 104,150	11,220	82.65%
Middle: ≥ PHP 104,150 < PHP 1,341,157	2,186	16.10%
High: ≥ 1,341,157	169	1.24%
Employed		
Not employed	6,575	48.4%
Employed	7,000	51.6%
With Government Pension		
Yes	2,627	19.4%
No	10,948	80.6%
Household size (Average = 4.9)		
Small (1 – 4)	6,534	48.1%
Medium (5-10)	4,550	33.5%
Large (>11)	2,491	19.3%
Banking (Deposit) Intention		
Has deposit intention	5,080	37.4%
Has no deposit intention	8,495	62.6%
Attitude towards opening a bank account (Average: 2.35)		
1 strongly agree	1,459	10.7%
2 agree	7,858	57.9%
3 neutral	2,410	17.8%
4 disagree	1,738	12.8%
5 strongly disagree	110	0.8%
Family with bank account		
With bank account	250	1.8.%
With no bank account	13,325	98.2%
Perceived Behavioral Control 1 (Average = 2.11)		
1 strongly agree	2,139	15.8%
2 agree	8,766	64.6%
3 neutral	1,775	13.1%
4 disagree	850	6.3%
5 strongly disagree	45	0.3%
Perceived Behavioral Control 2 (Average = 2.24)		
1 strongly agree	2,076	15.3%
2 agree	7,965	58.7%
3 neutral	1,922	14.2%
4 disagree	1,460	10.8%
5 strongly disagree	152	1.1%
Total	**13,575**	**100.0%**

(Source: BSP, 2014)

4.1 Intentions towards Banking Behavior

The logistic regression results show that among the three predictors of intention of the banking behavior, two were significant: social norms and perceived behavioral control. Attitudes towards banking, although was consistent with the stated hypothesis that attitudes precedes intent, the result was not significant. Among the demographic variables offered, educational attainment, gender, age bracketed into generations, employment and membership in pension were found to be predictors of intention towards putting surplus money in a formal banking service. Table 3 presents the logistic regression results.

Table 3. Model summary on the effects of independent variables to formal banking behavioral intentions

Independent Variables	Intention to Save Surplus Money in Formal Bank Accounts			
	β	***SE***	***z***	***P***
Attitude toward banking 1= Disagree, 5=Agree	0.0186	0.0207	0.90	0.369
With a family member with a bank deposit account 1=Yes, 0=No	0.4397	0.1295	3.39	0.001*
Perceived Behavioral Control 1: *"I just don't earn enough money to save regularly"* 1=strongly agree, 5= strongly disagree	0.6158	0.0272	2.26	0.024*
Perceived Behavioral Control 2: *"I don't think I'm saving enough for the future"* 1=strongly agree, 5= strongly disagree	-0.1098	0.2344	-4.68	0.000*
Educ. Attainment 1 1= Finished high school, 0= Not finished high school	0.0873	0.0449	1.94	0.052*
Educ. Attainment 2 1= Finished college, 0= Not finished college	0.3344	0.0741	4.51	0.000*
Gender 1=Male, 0=Female	0.0873	0.0403	2.17	0.030*
Age Bracket (base=millennial) 2= Gen X 3= Baby Boomers	 -0.0864 -0.1202	 0.0595 0.0572	 -1.45 -2.10	 0.147 0.036*
Annual Income (base 0 = low-income) 1= middle-income 2= high-income	 0.1361 -0.4757	 0.0439 0.1831	 3.10 -2.60	 0.002* 0.009*
Employment (1=employed, 0=otherwise)	-0.0818	0.0390	-2.09	0.036*
Membership in pension fund (e.g., SSS, GSIS) 1=yes, 0=otherwise	0.3420	0.0451	7.59	0.000*
Size of Household	-0.0108	0.0079	-1.36	0.175
Constant	-0.4287	0.1059	-4.05	0.000
Model Summary	N=13,575 Goodness of Fit Pseudo R2 = 0.0094 Hosmer-Lemeshow Test, p <.01 $\chi 2$ = 168.65			

We also estimated the average marginal effects (AME) of the independent variables towards formal banking intentions. Using the delta method of estimation of marginal effects describes the average predicted probability influenced by the factors. Table 4 shows the results of the delta method.

Table 4. Marginal effects of proposed independent variables to intention to put surplus money in a formal banking

Independent Variable	dy/dx (Delta Method)	SE	z	p value
Attitude toward bank	.0043058	.0047895	0.90	0.369
Subjective norm	.1016704	.0299068	3.40	0.001*
Perceived behavioral control 1	.0142405	.0062881	2.26	0.024*
Perceived behavioral control 2	-.0253978	.0054059	-4.70	0.000*
Educational attainment 1 (HS or not)	.0202631	.0104959	1.93	0.054*
Educational attainment 2 (college or not)	.0795316	.0180233	4.41	0.000*
Gender (1=male)	.020191	.0093084	2.17	0.030*
Age, if Gen X (base=millennial)	-.0202202	.0139928	-1.45	0.148
Age, if Baby Boomer (base=millennial)	-.0280073	.0134365	-2.08	0.037
Annual Income (base 0 = low-income)				
1= middle-income	.0318396	.0103517	3.08	0.002
2= high-income	-.1014043	.0355892	-2.85	0.004
Employment	-.0197077	.0090203	-2.18	0.029
Membership in Pension	.0805714	.0103304	7.80	0.000
Size of Household	-.0023638	.0018297	-1.29	0.196

Note: dy/dx for factor levels is the discrete change from the base level.

4.1.1 Attitude toward banking behaviors

A more favorable attitude toward using a bank deposit account (moving downward to a rating of 1) increases the probability (at $\beta=0.0186$) of the intention to avail of a bank deposit account. This is in line with the theory of planned behavior which states that attitude toward the behavior increases the intention and behavior of an individual. However, the effect was not significant ($p=0.369$). The result may descriptively imply a stronger translation of a positive attitude toward using a deposit account on the behavior of using a bank deposit account.

The average marginal effect shows that a unit-scale improvement in the attitude toward using a deposit account increases the probability of availing a deposit account and the intention to avail a deposit account by only 0.43% holding other variables constant. The result implies a weak translation of a positive attitude toward using a deposit account.

4.1.2 Social influences on banking behaviors

The presence of a household member who owns a bank account, other than the respondent, significantly affects the probability that the respondent may put his or her surplus money to a deposit account in a bank. The results show that such co-household member's banked status increases ($\beta=0.4397$, $p=0.001$) that chance that the unbanked respondent will have higher tendency to save money in bank.

This confirms the effect of social influence on the intention of an individual to avail bank deposit services. Propinquity effect states that individuals tend to form close relationships and influence each other by repeated encounter (Nahemow & Lawton, 1975). Furthermore, financial socialization explains the mechanism through which propinquity to a household member with the experience and knowledge in bank deposit services translates to the corresponding increase in individual's intention and behavior.

Based on the AME, the influence of the presence of a banked co-household member has a strong effect on the respondent's intention to avail bank deposit account by 10.16% holding other variables constant. This means that when a respondent lives with a household co-member who are banked, there is a 10.16% chance that he/she will also put surplus money in a bank. This marginal effect is highly significant at the $p<0.001$ level.

4.1.3 Perceived behavioral control in banking behaviors

One unit increase in the scale on perceived behavioral control variable 1 ("I just don't earn enough money to save regularly") on a reverse degree (5=strongly disagree) increases the probability that the respondent will have higher intention to deposit surplus money in a bank (β=0.6158, p=0.024). In other words, when a respondent perceives that he or she does earn money to save regularly, the tendency is to have a higher probability that he or she will intend to put surplus money in a bank. The marginal effect of this statement of controllability to perform a focal behavioral intention is computed at 1.424%. Meaning, for every unit increase in the scale answer that the respondent perceives controllability to earn enough money to save, an increase on intentional level at marginal chance at 1.424% could happen. This effect was significant at p=0.024.

On the other hand, the effect of perceived behavioral control expression: "I don't think I'm saving enough for the future" on a reverse degree (5=strongly disagree) is found to be negatively affecting the probability of higher intention to save surplus money in a bank. The regression beta was at β= -0.1098, significant at p=0.00. In a revert sense, when a respondent perceives that he or she does think he/she saves enough for the future (a unit scale lower in the questionnaire), the tendency is to have a lower probability that he or she will intend to put surplus money in a bank. The marginal effect of this statement of controllability to perform a focal behavioral intention is computed at -2.54%, significant at p=0.00. The more a respondent disagrees with the statement, the higher the marginal effect to intention to bank surplus money. In short, if one thinks he or she is saving enough for the future, he or she will have lower intention to open a bank account.

4.1.4 Demographic differences in banking behaviors

a. Educational Attainment

The results on educational attainment were presented into two variables. One compares these coefficients of those that have finished high school versus those who have not. The other analyzes the coefficients of those that have finished college versus those who have not. Both have produced significant effects to the intention to put money in a formal bank. Those respondents that have finished high school are more probably putting surplus money to banks than those that have not finished high school (β=.0.0873, significant at p=0.052).

Meanwhile, those that have finished college also have higher probability of putting surplus money in a bank than those that did not finish college. The effect was observed to be stronger (β=.0.3344, significant at p=0.00). In other words, as educational attainment increases, the higher the probability of banking intentions.

b. Gender

Unbanked men are more likely to put surplus money in a bank than women according to the results of the regression (β=0.0873, significant at p=0.03). The marginal effects by delta method also illustrates that unbanked men are 2.02 more likely put surplus money in a formal bank than women.

c. Age

The analysis bracketed the age groups according to popular generational terminologies used such as in marketing: millennials, generation x, and baby boomers. The CFS 2014 allows for this data recoding based on the current year versus 2014. Results showed that compared to millennials who were 14- to 32-year-olds, members of Generation X (33- to 48-year-old) have lower intention to put surplus money in a formal bank. However, this effect was not significant (p=0.141).

Notably though, compared to millennials, the baby boomers of more than 49-year-old in 2014, also have lower intention to put surplus money in a bank. This result was significant at p=0.036).

d. Annual income

The results show that unbanked middle-income respondents have higher intentions to save surplus money to a formal banking compared to their low-income counterparts. The coefficient was at $\beta=0.1361$, significant at $p=0.002$. Interestingly, unbanked high-income respondents also have the same direction as low-income individuals – they both have lower intention to save surplus money to a formal bank ($\beta= -0.4757$, $p=0.009$). One possible interpretation is that unbanked high-income respondents put their surplus money somewhere other than in formal savings bank accounts.

e. Employment

Surprisingly, unbanked and unemployed respondents have higher intention to put surplus money in a bank than those that are unbanked and employed. The regression beta for the dummy variable was at $\beta= -0.0827$, significant at $p=0.034$. Being unbanked and employed decreases intention to avail of banking services by 1.97%. One possible reason is that the nature of employment might be entailing lower salary and does not give way to surplus. Another possible reason is that the nature of the employment and the industry is such that there is little need for banking transactions or has very low bank penetration rates, such as those who work in farms and fisheries.

f. Membership in Pension

The effect of membership in government pension towards unbanked respondents was significant ($\beta= 0.3474$, $p=0.00$). Those that have pension plans have higher intention to put surplus money in a formal bank.

g. Household Size

Finally, the size of household negative affects the respondent's intention to put surplus money in a formal bank. The effect was a $\beta= -0.0101$, but was not significant at $p=0.202$.

5 Summary and Conclusion

In summary, for individuals who are unbanked, the intention to avail of formal banking services for surplus money significantly increases with the following predictors as stated in the hypothesis: (H2) the unbanked individual has a co-household member that is banked, (H3) the individual perceives that he or she does earn money to save regularly; and that he or she does not think he or she saves enough for the future, (H4) the individual has higher educational attainment, (H5) is male, (H6) is younger, (H7) comes from a middle-income household, (H8) is unemployed, and (H9) a member of pension plan. Comparing the results with previous studies cited in the review, the planned behavioral factors of attitudes, social norm, and perceived behavioral control exhibited mixed results. The expressed positive attitudes towards banking do not significantly lead to higher intention to put surplus money in a bank. This is largely contrarian to several research presented in the review. This kind of attitude–intention inconsistency can be explained by the mediating factors that can be guided by situational and dispositional processes as well (Fazio, 1990; Zanna et al 1980). Such dispositional factors are demonstrated in the current results on the effect of perceived controllability over putting surplus money in a formal bank wherein an unbanked individual who thinks that he or she is not saving enough for the future will actually put surplus money in a formal bank.

The social influence coming especially from immediate family members is a significant factor in banking (e.g., Ghalandari, 2012; Wahyuni, 2012), and savings behavior (e.g., Alwi & Ali, 2015; Jamal et al., 2015). Also, the idea of perceived behavioral control is an important factor in savings is consistent with previous research (Jamal et al., 2015; Sharif & Naghavi, 2020; Widyastuti et al., 2016). The intricacy of the overall structure of controllability in the surrounding dispositional attitudes may be more complex than a straightforward expression of perceived control such as what the results demonstrated. The statements on 'earning enough money' have a different direction than 'saving enough for the future' in determining intentions to put surplus money in a formal bank.

As for the demographic variables, the results on educational attainment is consistent with the findings by Kaynak and Harcar (2005) and Loaba (2022), and can be due to the relationship with financial literacy as what Andreou and Anyfantaki (2021) assert. Also, this current study's result on gender that unbanked men are more likely to put surplus money in a formal bank than women is also consistent with previous research. Thirdly, the younger generation that is unbanked expresses higher intention to avail of formal banking as well. The results involving annual income also suggest that middle-income individuals have a higher intention to put surplus money in formal banking. The none-to-low-income and the high-income counterparts have less intentions to do so. Furthermore, the results also indicate that membership in pension can lead to saving intentions in a formal bank. Finally, the household size result, albeit non-significant, was consistent with the several past research saying that this particular variable has a negative relationship with banking intentions.

This study provides empirical evidence that attitudes, social influence, and perceived behavioral control influence banking behaviors among Filipinos. Essentially, encouraging financial behaviors depends primarily on how Filipinos think about the ability and controllability to save. The attitude towards the gains of proper financial management such as those manifested in banking behavioral intentions can be directed towards the benefit frame. This can be achieved by understanding how cognitive perceptions towards money (i.e., saving) and how social norms in immediate social circles can be favorably utilized towards encouraging saving in a formal bank.

These findings also have substantial implications on public policy and private companies in enabling Filipinos to be more favorable in their financial behaviors. For policy makers such as the BSP, programs enabled and the strategies employed should deeply understand individuals in their attitudes (i.e., what drives such valence and direction of attitudinal influences), social norms (i.e., who has strong word-of-mouth power among individuals), and perceived behavioral control (i.e., communication and actual tactics on how to enable behavioral capability and control as perceived by individuals). Consumer-centric programs that anchor on behavioral patterns must be established. Finally, focused interventions and education on behavioral finance may be implemented in select segments such as those in the younger generation or even those who are under-served in rural areas.

As for the managerial implications among private financial firms, the use of strategic marketing communications that focus on positive and gain framing require thoughtful considerations. Targeted campaigns towards identified demographic profilers can also be employed. For example, unbanked individuals with lower educational attainment need more tailored messages that fit their motivations towards banking and are anchored towards social influences, and more importantly, perceived behavioral control on these target behaviors. Similarly, those individuals with less formal education require strategic messages that are tailor fitted to the communication elements that match their level of understanding towards these financial behaviors. Message design is a key factor that might enhance attitudes and perceived behavioral control among target segments.

Finally, the international audience of this research can appreciate the behavioral distinctiveness among Filipinos who are situated in an Asian community where collectivism is highly manifested – as seen in the results of social influences towards the target financial behaviors. Moreover, the findings of this study suggest that there is universality in the attitudes and perceived behavioral control towards banking and investing relating to the demographic features among groups of consumers, governed by psychological factors in the attitudes and behavioral intentions.

6 Limitations and Future Research

This study analyzed individuals' attitudes, social influence, and perceived behavioral control towards banking and investing behaviors. The data were extracted from a nationwide Consumer Financial Survey in the Philippines in 2014. The study recognizes that other financial behaviors on banking can be extracted in future study such as the motivations and reasons for availing of bank services and subscribing to investment instruments. Furthermore, the degree of influence from different members of social circle (e.g., parents, siblings, close friends, etc.) can be explored further to analyze social network and behavioral finance in a deeper perspective. Also, a cross-sectional or longitudinal analyses in future surveys can be undertaken to monitor which segments need further attention in enabling financial inclusion as well those which have been receptive to the programs of the government; also considering cross-country analyses provided that the data and survey instruments have comparative equivalence. Similarly, the data on these behavioral and psychological items can be correlated with data on financial inclusion dimensions (Mindra et al, 2017) such as access, usage, and quality dimensions in behavioral finance. This way, the survey can further scrutinize the behavioral aspects that directly identify key gain and pain points for the said financial inclusion dimensions. Finally, to validate the results, an overall perception study of banking and investments as everyday consumer concepts can be examined – as Antony (2020) puts it, many psychological factors govern our everyday economic phenomena.

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