The Impact of Demand Side Barriers and Supply Side Barriers to Financial Inclusions: A Study on Micro Enterprises in Metro Manila

Review of Integrative Business & Economics Research

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ABSTRACT

The researchers study focused on Micro Enterprises in determining the significance impact of demand and supply side barriers in financial inclusion in the Philippines. Micro Enterprises acquiring financial support plays a big role in having a sustainable business operation. The researchers wanted to determine whether demand side barriers and supply side barriers had a significant effect on financial inclusion, we surveyed 400 respondents in Metro Manila and found out that under Demand Side Barriers and Supply Side Barriers have a significant impact towards Financial Inclusion. Irregular Income, Lack of Financial Literacy, and Trust are significant under Demand Side Barriers. Also, Physical Barriers, Inappropriate Products, and Policy Regulation are significant under Supply Side Barriers. The researchers concluded that most Micro Enterprises in Metro Manila, believe that the said factors are barriers for them to access loans. The researchers would recommend current and future Micro Enterprises owners to attend training such as UPLIFT Financial Training or seek financial advice from different peers. The researchers further recommend MFIs to tailor services, such as decreasing documents needed.

Keywords: Micro Enterprises, Financial Inclusion, Demand Side Barriers, Supply Side Barriers

1.0 INTRODUCTION

1.1 Background

The DTI’s MSME Development Plan of 2017-2022 states that one of the challenges that Micro, Small, Medium Enterprises (MSMEs) face is the access to financing. Currently, as provided under the law, there is a mandatory 10% lending allocation to the sector, providing opportunities for MSMEs. However, in general, banks tend to prioritize larger corporate borrowers because of higher gains, perception of lower credit risk, higher repayment rates, and the availability of collateral. Also, access to financing from traditional financial institutions is limited due to the lack of credit information. Based on the results of the Philippine MSMED Plan 2011-2016, Direct lending to MSMEs during the period reached PhP2,215.75 billion, of which 44% went to micro and small enterprises and 56% to medium enterprises by the fourth quarter of 2016. Compliance rate of the mandatory lending to MSMEs in December 2016 was 3.81% for micro and small enterprises and 5.44% for medium enterprises. Based on the data given in the Philippine MSMED Plan 2011-2016, although there are policies set in place for Micro Enterprises to receive additional financing from banks, a greater portion of the dispersed loans went towards Medium enterprises. In addition, according to the latest World Bank annual ratings, regarding the ease of doing business. The rank of Philippines deteriorated to 124 in 2018 from 113 in 2017. Ease of Doing Business in Philippines averaged 120.73 from 2008 until 2018, reaching an all-time high of 144 in 2009 and a record low of 97 in 2014.

The researchers choose to study Micro Enterprises on what are the factors affect them the most from accessing loans, because according to the 2017 List of Establishments of the Philippine Statistics Authority (PSA) recorded a total of 924,721 business enterprises operating in the Philippines. Micro, small and medium enterprises (MSMEs) account for 99.56% (920,677) of the total establishments, of which 89.59% (828,436) were Micro Enterprises, 9.56% (88,412) were small enterprises, and 0.41% (3,829) were medium enterprises. Large enterprises made up the remaining 0.44% (4,044). Wherein, within the sector, small enterprises accounted for the largest share of 20.5%. Medium enterprises followed with a share of 10.3% while micro enterprises registered a share of 4.9%.

According to the Bangko Sentral chief, that MSMEs were unable to reach their full potential because of the difficulty of securing funds. Only 6.6 percent and 9.8 percent of total loans in the banking system and total businesses comprise investments in MSMEs, he added. He also said that 81.2 percent of Philippine enterprises relied mostly on internal funds to finance investments and only 10.1 percent used bank financing.

Micro Enterprises, despite having the largest population, still has lowest contribution to the value added in the Gross Domestic Product or GDP of the country. If Micro Enterprises will grow, they will also contribute more to the GDP and help the Philippine's economy grow. Micro Enterprises needs financial services in order to have proper funding. Thus, with proper funding, this can help Micro Enterprises by being more flexible financially and be able to make more investment and would eventually grow.

1.2 Statement of the Problem

The researchers of this study would like to address the main problem: What is the effect of Demand Side Barriers and Supply Side Barriers to Financial Inclusion on Microenterprises in the Metro Manila?

The specific problems which the group intends to answer are the following:

1. What significant relationship exist between Demand Side Barriers and Financial

Inclusion?
2. What significant relationship exist between Supply Side Barriers and Financial Inclusion?
3. What significant relationship exist between Demand Side Barriers and Supply Side Barriers to Financial Inclusions?
4. Based on the result, what recommendations can be made to improve financial inclusion to Microenterprises?

1.3 Significance of the Study

The study aims to extend the knowledge of micro enterprise owners on how they can access loans. The researchers have recognized the potential growth in terms value added in the country's Gross Domestic Products, since the Micro Enterprises are the largest population in establishments, once they improve to small and medium enterprises and eventually turn into large enterprises. In addition, large enterprises have the largest value added gross domestic product. With this could help with the Philippine economy in terms of value added in the gross domestic product.

If no help can be provided to Micro Enterprises, this might result to discouragement of future entrepreneurs to start their own businesses. Also, current Micro Enterprises, if not improved in terms of providing additional capital which can help the business by financing their needs to grow, might result to dissolution. With this, the population of Micro Enterprises will decrease which will result to lesser contributors to the Philippine economy.

2.0 REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter provides an overview of previous researches about Demand Side Barriers, Supply Side Barriers and Financial Inclusion. The study will make use of scholarly articles and journals written by researchers conducting similar studies in the past in order to avoid biased opinions. This chapter will also discuss the definitions of each variable included in this study.

2.2 Financial Inclusion

2.2.1 Financial Inclusion

According to Chakaratan (2016). Financial inclusion is defined as the provision of access of financial services and products to the most vulnerable groups coming from lower tier of society. He also defines the basic necessities and expectations of the excluded members such as "safety and security of deposits, less transaction costs, less paperwork, recurring deposits, easy access of credits, remittances fit to their income and expenditures" Chakaratan (2016). Ibor et al. (2017) follows up with, financial inclusion is viewed as ability of some individual to access and use the basic financial services like saving, loans and insurance designed in the manner that is reasonably convenient, reliable and flexible.

According to Nwako (2014), the traditional idea of financial inclusion is the provision of access to the usage of diverse, convenient, affordable financial services. Access to and use of financial services is on of the major drivers of economic growth. Financial inclusion covers sustainable, relevant, cost effective and meaningful financial services for the financially underserved population especially rural dwellers. World Bank described financial inclusion as the range, quality and availability of financial services to the underserved and financially excluded.

The financial action task force stated that financial inclusion is about providing access to an adequate range of safe, convenient and affordable financial services to disadvantaged and other vulnerable groups, including low income, rural and undocumented persons, who have been underserved or excluded from the formal financial sector. It is also, on the other hand, about making a broader range of financial services available to individuals who currently only have access to basic financial products. The Centre for Financial Inclusion also described financial inclusion as a state in which all people who can use financial services have access to a complement of quality financial services, provided at affordable prices, in a convenient manner and with dignity for the clients. Clark and Ibor et al. (2017), asserted that financial inclusion helps people to diversify or increase income stream in the house, provides liquidity/cash flow; absorbs shock of adversity by building assets which enables client to cope with loss through consumption smoothing, thus avoiding the sale of productive assets.

The benefits of financial inclusion and inclusive growth are clearly established. Access to financial services opens doors for families, allowing them to smooth out consumption and invest in their futures through education and health. Access to credit enables businesses to expand, creating jobs and reducing inequality. Financial inclusion is the bridge between economic opportunity and outcome. The imperative to address this issue has never been more important and clearly because of the benefits it will bring to different countries, but also because of the challenges posed by the global economy. We are experiencing a period of disappointing global growth that is expected to continue into the foreseeable future. Slower demand from the advanced and emerging economies has hit Africa hard since 2014, particularly the natural resource exporters.

The concept of financial inclusion has gained much attention since the early 2000s and is a consequence of empirical findings that financial inclusion efforts have positive effects on the goal of poverty alleviation of a country Shiimi as cited in Siddik et al. (2018). Considering the imperatives, in recent years Governments, central banks and regulators around the world have taken initiatives and initiated new regulations to promote financial inclusion in their countries. Evidence suggests that financial stability contributes to the sustainable development of countries. On the other side, if there is financial instability, it could severely hamper the growth process of developing economies, even developed economies growth also affected by the same Siddik et al. 2018) Thus, we assume that financial stability plays a positive role in the country's growth process.

Okpara (2011); Prasad (2010); Cull et al. (2012). The authors argued that by providing greater access to and better uses of banking services to vast section of the society, including the disadvantaged group, financial inclusion efforts ensure efficiency of resources and financial intermediation which, in turn, boost financial stability given that a country has already implemented improved financial infrastructure and skilled supervision. Whilst other researchers observed that financial inclusion does not cause financial stability. These mixed evidences create an avenue for the researchers to examine and establish the connection between financial inclusion and financial stability.

2.2.2 Micro Enterprises

Republic Act No. 9501 states that Micro Enterprises are businesses whose assets are not more than 3,000,000 PHP and employs less than 9 employees. Micro and small business is an entity that is privately owned and operated, with a small number of employees and relatively low volume of soles.. The term MSE incorporates firms in both the formal and informal sectors. Regis, Tamirat and Senthil (2017). According to The 2017 List of Establishments of the Philippine Statistics Authority (PSA) recorded is a total of 924,721 business enterprises that are operating in the Philippines. Micro, small and medium enterprises (MSMEs) account for 99.56% (920,677) of the total establishments, of which 89.59% (828,436) were Micro Enterprises, 9.56% (88,412) were small enterprises, and 0.41% (3,829) were medium enterprises. Large enterprises made up the remaining 0.44% (4,044). Majority of the MSMEs in operation in 2017 can be found in the National Capital Region (NCR), with 192,316 business establishments; In terms of value-added, the MSME sector contributed 35.7% of the total with manufacturing contributing the largest share of 6.87%. Wholesale and retail trade and repair contributed 6.58% followed by financial intermediation with a share of 6%. Within the sector, small enterprises accounted for the largest share of 20.5%. Medium enterprises followed with a share of 10.3% while micro enterprises registered a share of 4.9%. MSMEs account for 25% of the country's total exports revenue. It is also estimated that 60% of all exporters in the country belong to the MSME category. MSMEs are able to contribute in exports through subcontracting arrangement with large firms, or as suppliers to exporting companies. According to Figueroa (2018) the Barangay Micro Business Enterprises (BMBE) Act of 2002 aims to help micro enterprises by providing incentives and benefits in order to grow their business, and yet only a few did avail the incentives while the rest did not use them.

According to Chin & Nor (2015) most micro entrepreneurs will initially not be able to finance the start-up costs of their micro enterprises out of their own pockets. Thus, the most obvious option is to partner up with a micro credit company to give these entrepreneurs access to microcredit with a fixed amount on predefined terms for starting the new micro business. Microcredit, in its simplest form, involves granting individuals who have lack of money access to capital in the form of uncollateralized small (micro) loans designed to be repaid with interest.

According to Choudhury (2018) MSMEs are particularly important for emerging countries, mainly because of their potential in job creation. India's eleventh five year plan, a national economic program, reports that MSME's have been recognised as engines of economic growth. The MSEs are more than just GDP earners; they are instruments of inclusive growth which touch upon the lives of the most vulnerable and the most marginalised. Being the largest source of employment after agriculture, the MSE sector in India enables 650 lakh people. MSEs also act as ancillary industries for large scale industries providing them with raw materials, vital components, and backward linkages. This sector seeks to empower people to break the cycle of poverty and deprivation.

The study of Ibor et al. (2017). MSME's have played a major role in employment generation, poverty reduction and globally advancing economic development. MSMEs are fundamental as part of developing countries economic fabric and they play a crucial role in furthering growth, innovation and prosperity. In this sense, Ibor et al. (2017) state that MSMEs have historically been the main players in domestic economic activities, especially as providers of employment opportunities, and hence generators of primary and secondary sources of income for many households. Ojokuku and Sajuyigbe (2014) confirmed that MSMEs has been recognized globally as the engine of economy growth and development, providing solutions to the problem of slow economic development among developing countries. The contribution of MSMEs to the economy has not been heavily felt because, according to Olowe, Moradeyo and Babalola as cited in Ibor et al. (2017) many MSMEs do not reach the growth stage of their life cycle due to lack of access to finance.

2.2.3 Involuntary and Voluntary Exclusion

Measuring financial inclusion is a challenge due to the difficulties in differentiating between voluntary and involuntary financial exclusion, the former refers to the population that has the ability to access financial services but chooses not to do so. This segment of the population needs to be excluded from estimations of financial exclusion, posing measurement challenges. A census or household survey may be the only way to obtain such data but very few such surveys on use of financial services are available Shankar (2013).

The study of Hundekar (2018). Defines financial inclusion as something closely intimated with the minimization of financial exclusion arising from market or government failures. Financial inclusion strategies are considered road maps of actions, agreed and defined at the nation level to achieve financial inclusion objectives, inclusion especially in entire economy requires a lot of strategies. Strategies coordinate efforts with the main stakeholder, convincing responsibility among them and giving clarity in planning of resources by: Clarity of definition and Prioritizing tasks

2.3 Demand Side Barriers

2.3.1 Human Barriers - Borrower

Based on the study titled "Key Barriers Faced in Implementing Financial Inclusion", there is another term for Demand side barriers which is called "Human Barriers". Human barriers include limited financial literacy , high cost , lack of legal identity , financial status of the people , age and gender issues. D. Gupta (2015)

2.3.2 Irregular income

Very low income and inconsistent flow of cash for the poor people are considered as a demand driven factors of financial inclusion Barkleys (2014). Savita Shankar (2013) stated that financial capability is an important factor in a view of increasing complexity of financial products. Carmen Hoyo Martinez et al., analysed that variability of income is an important factor for the self-exclusion of people from the rural areas. Aleksa Nenadovic et al. (2015) analyzed that irregular income of the poor people is a main cause for financial exclusion. Poor people from the most vulnerable groups in the society not only have low income but also they get an irregular income and various uncertainties in cash flows S. Shankar (2013).

This article also stated that income level is one of the prominent factors that hinder the underprivileged from availing services from banks. Majority of the people's income level in the rural area is low and irregular too. A major portion of people is in seasonal employment. Hence, income level decides the people's saving and investment avenues. N.Rajasekaran (2018).

2.3.3 Lack of trust

Savita Shankar (2013) reveals that negative experiences or negative perception of financial institutions makes the rural people to get mistrust of banks and which in turn leads to self-exclusion from the formal financial institutions. Lack of trust by the unbanked rural people on the formal financial institution is the main barrier of financial inclusion based from The Global Findex Database (2012). Disparities in financial inclusion has caused due to the lack of trust among the rural people in the banking systems H.Bykere (2015). Improper supervisory mechanism in financial institutions led to the loss of customer trust A. Klapper (2013).

2.3.4 Financial Literacy level

Financial isolation of the rural people often results in lack of understanding, which in turn makes them to distance themselves from the formal financial institutions. Even though banks have some suitable financial products for the poor people, due to their lack of knowledge and literacy level makes them an incorrect understanding of the products and hence opposed to use them Rajasekaran (2018). Cohen (2014), states that financial literacy is said to be one of the demand side factor which is a precondition for the first time users to access financial services. When financial Literacy was successfully delivered it creates a demand for financial services from the formal financial institutions which led to financial inclusion Ali, U. Khalid, Z. Khalid as cited in Rajasekaran (2018), Lower the level of financial inclusion is highly associated with lower the level of financial literacy based on OECD (2008) Annual Report.

Most of the people suffer from financial stress due to lack of financial literacy. Financial literacy teaches the vulnerability of the investments and loans given by the informal financial institutions. It also gives clarity about the formal financial institutions and its merits. Rajasekaran (2018). Financial literacy teaches the vulnerability of the investments and loans given by the informal financial institutions. It also gives clarity about the formal financial institutions and its merits. Rajasekaran as cited in Bhuvana, and Vasantha (2016). Having financial knowledge was conceptualized as knowing personal income and expenses, as well as personal savings and loans Banerjee (2016).

2.3.5 High cost

Obstacles of financial inclusion from the demand driven factors are high transportation and opportunity cost for the rural people to bank with formal financial institutions Barkleys (2014). Gadamsetty Sai Arun (2013), analyzed that people who lives in underdeveloped areas find it very difficult to reach nearest bank due to transportation cost and they lost their one day wages to reach the bank. Transaction cost is the barrier for the low income group household since they are more resource constrained Mowl and Boudot (2015). Low income group households either spends more time in travelling to the bank or spend high transaction cost for accessing financial services from the banks Friedline (2016).

2.3.6 Technology

Chakrabarty (2012) stated out that the as the banking and payment space become increasing everywhere, the biggest challenge is to maintain the quality of security at the highest level in the financial sectors. Therefore, the banks need to work on this regard in order to protect customers against fraudulent. Vimala (2015) reveals that banks can diverse services to customers with less manpower through the introduction of IT related products in internet banking, electronic payments, security investments and information exchanges. In order to improve the access to financial services for the households in rural areas and promote greater financial inclusion an appropriate framework and business environment should support a greater interaction between ICT and financial sector for addressing the challenges posed by mobile banking such as security concerns and compliance with Anti Money laundering rules. Gadamsetty Arun (2018) narrate that the financial inclusion through ICT faces security challenges such as SMS spoofing attack, where the attacker sends messages on network manipulating sender's number. Virus attack software like Trojan Horses and Zeus are used to steal mobile transaction authentication number and password.

2.3.7 Remoteness

Usually, banks are locating its branches in the high densely populated areas for covering its cost of operations. Unfortunately, people are scattered in rural India. The population densities of rural areas are very low. The remoteness of the financial institutions discourages rural people from utilizing such services. They have to travel far to approach these institutions which is again a time and cost consuming process. Rajasekaran (2018).

2.3.8 The attitude of employees

Employees of the formal financial institutions give differential treatments to dissimilar target groups. The high income group receives overwhelming response whereas low income and rural people suffer from bitter experiences. This affects the self-respect and dignity of the people and hampers the financial inclusion process. Rajasekaran (2018).

2.4 Supply Side Barriers

2.4.1 Institutional Barriers

These include lack of coordination between RBI and Government of India, Inadequate client protection, Limited understanding of customer needs, lack of quality services and inadequate regulatory framework.

2.4.2 Infrastructural Barriers

These include location, distance, high cost, time, lack of knowledge about use of technology, lack of ICT based banking transactions, and lack of incentives to BC. D. Gupta (2015).

2.4.3 Distance

Distance of the bank branch to reach the rural people is a common barrier of the supply driven factors Financial Action Task Force (2012). The greatest barrier of financial inclusion to reach rural areas is the distance from the bank S. Shankar (2013). Distance continues to be a major issue since Business Correspondent provides doorstep financial services to the outreach areas. A reasonable distance from the bank branch should be 3-4 kilometers Acharya (2013). For opening a bank account to the rural people distance and travelling from the bank branch to the remote areas is considered as a greatest challenge for the financial institutions Samundengu (2014).

2.4.4 Policy regulations

Savita Shankar (2013) analyzed that inability to provide documentation such as identity proof required by formal financial institutions is another frequently faced barrier. Banks are required by regulators to conduct sufficient identity checks before opening accounts. These regulations sometimes result in lack of access of genuine customers. Poor regulatory frameworks that reduces the quantity and quality of financial products and services that are accessible by the poor Gilberto (2015). Banks need to follow certain which was advised by Reserve Bank of India (RBI). This is again a barrier for the bank to target rural people for issuing checkbook, debit card for maintaining zero balance in their account Rani (2015). Current regulations advices Business Correspondent to settle the cash in the bank branches within 24 hours of transactions but, this may not be possible due to the huge distance from the bank. Savita Shankar as cited in Bhuvana and Vasantha (2016). analyzed that inability to provide documentation such as identity proof required by formal financial institutions is another frequently faced barrier. Banks are required by regulators to conduct sufficient identity checks before opening accounts.

2.4.5 Inappropriate products

Shankar (2013) narrated that lack of inappropriate products is an important supply side barrier. Certain terms and conditions of financial products like maintain minimum balance in the account and accounts closed by banks due to infrequency in use does not suit for the low-income group people. Naik (2013) illustrated that inappropriate products and processes are said to be a supply side constraint of financial inclusion. Banks and other financial services play an important role from supply side by providing access to basic financial services to the poor and disadvantage social group. Access to financial products are constrained by certain factors like lack of awareness about the products, the financial products are not convenient, flexible and low quality Shah, and Dubhashi (2015). The main reason for the financial exclusion from the supply side is documentation procedures and unsuitable financial products Damodaran (2013). According to this article, generally, banks are targeting educated and a high-income group of people. They develop financial products based on these target groups' requirements. The needs of low income and weaker section of people are quite different. This increases the percentage of financially excluded people in the society. Rajasekaran (2018).

2.4.6 Risk

The banks bears risk due to the improper identification of customers and they use retail agents for money laundering or channel funding to terrorists Nefa and Chiteli (2013). Anti-Money Laundering issues are regulated under the prevention of Money Laundering Act 2002. The law is applicable to both banks and financial institutions. For Banks, RBI has issued Know Your Customer (KYC) guidelines to categorize the customer into low, medium and high-risk customers in order to adjust the identification requirements based on the risk category CGAP (2010). According to the guidelines of RBI Business Correspondent Model acts as intermediaries that bridges the gap between service seekers and service providers but, Banks and Business Correspondent are exposed to huge risk of cash management. This was the issue surfaced by both the regulators and the partner banks Garg and Agarwal (2014). Outsourcing account opening and processing of retail transaction to inexperienced retail agents makes the banks difficult to observe and report doubtful transactions (Branchless Banking Regulations for Financial Institutions desirous to undertake Branchless Banking Updated on, Banking Policy & Regulatory Department, State Bank of Pakistan (2011)

2.4.7 Lack of proper Documents

As per norms of the banks, it is mandatory to submit legal documents at the time of opening an account. Majority of the poor people like migrants, tribes etc cannot access the formal financial services due to lack of having any legal documents. Getting legal document is an expensive and time-consuming process. Rajasekaran (2018). Submission of legal documents at the time of opening an account. Majority of the poor people cannot access the formal financial services due to lack of having any legal documents. Getting legal document is an expensive and time-consuming process. N.Rajasekaran (2018) as cited in Bhuvana, and Vasantha (2016).

2.6 Synthesis

It is necessary for micro enterprises to have access to loans in order maximize the growth of the economy. The accumulation of academic journal gave the researchers an opportunity to widen their perspective on the independent and dependent variables of the study. Having gathered a substantial amount of literatures, the researchers obtained a broad range of opinions and theories that is essential to the topic. also, this eliminates bias because some of the authors displayed supporting and conflicting ideas. The studies supported each other's data, findings, and recommendations giving the research team a well-defined and more reliable information, therefore, obtaining enough data that are relevant, timely and provides guidance to the study pursued.

Examining the relations between the demand side barriers and supply side barriers to financial inclusion according to various authors and studies gave the researchers a thorough understanding about the topic and gave insight on how it affects the variables. Being able to gather numerous articles and journals related with the variables of the study, the researchers valued each one of them and was very useful in the study. Having multiple resources available was a factor in conducting the study due to different options and opinions of different authors being able to guide the researchers.

3.0 FRAMEWORKS

3.1 Theoretical Framework

There were three theoretical frameworks presented in this study. The first two were the independent variables: Demand Side Barriers and Supply Side Barriers, while the other was for the dependent variable: Financial Inclusion.

3.1 Theoretical Framework of Financial Inclusion, Demand Side Factors, and Supply Side Factors.

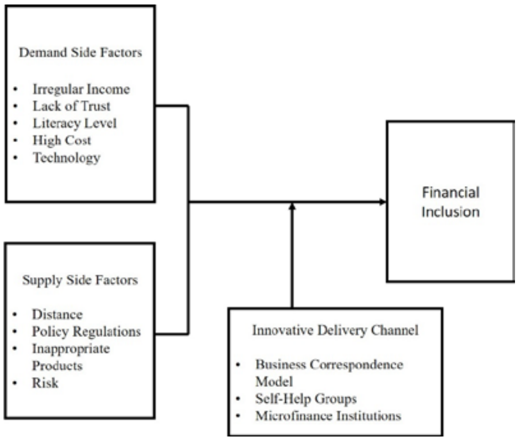


Figure 1 Drivers of Financial Inclusion to Reach Out Poor, Bhuvana &Vasantha (2016)

As stated in the study of Bhuvana &Vasantha (2016). these are five demand side factors of financial inclusion irregular income, lack of trust, Literacy level, high cost and technology. It also shows four supply side factors, distance, policy regulation, inappropriate products, and risk.

3.2 Operational Framework

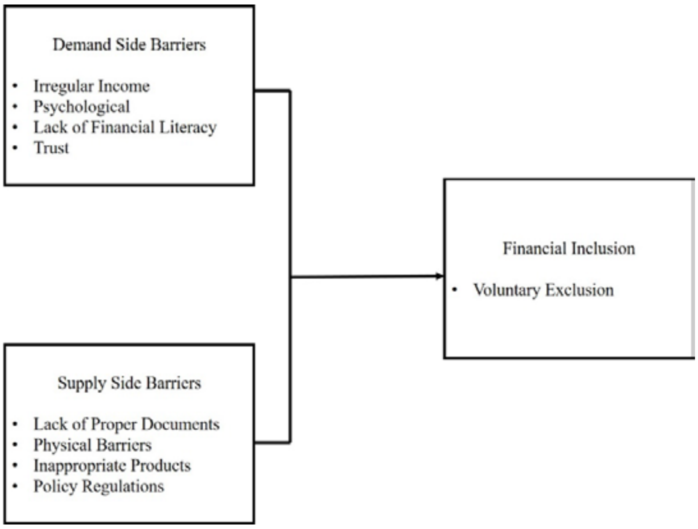


Figure 2. Operational Framework of the Study

The operational framework presents the independent variables, and dependent variable, the variables are Demand Side Barriers, Supply Side Barriers, and Financial Inclusion. The researchers choose this factor since among all three theoretical frameworks this are the common barriers to Financial Inclusion and as for Psychological Barrier the researchers added since people have different perceptions on accessing loans. Financial Inclusion is measured by the Voluntary Exclusions. In some cases, there are individuals who are capable of accessing loans however they choose not to. The researchers opted not to include the following factors taken from the theoretical frameworks: Cultural, due to the diversity of Philippine cultures adapted by different people and Philippine culture being outside the scope of the study. Employee attitude, due to the non-relevance of Microfinance Institutions' employees' attitude towards the loaning decisions of the owner of Micro. Innovative delivery channels, due to the non-relevance and it being outside the scope of the study.

3.3 Hypotheses of the Study

Ho_1: Irregular Income has no significant effect on Financial Inclusion.
Ho_2: Psychological Barriers has no significant effect on Financial Inclusion.
Ho_3: Lack of Financial Literacy has no significant effect on Financial Inclusion.
Ho_4: Trust has no significant effect on Financial Inclusion.
Ho_5: Demand Side Barriers (Irregular Income, Psychological Barriers, Lack of Financial Literacy and Trust) have no significant effect on Financial Inclusion.
Ho_6: Lack of Proper Documents has no significant effect on Financial Inclusion.
Ho_7: Physical Barriers has no significant effect on Financial Inclusion.
Ho_8: Inappropriate Products has no significant effect on Financial Inclusion.
Ho_9: Policy Regulations has no significant effect on Financial Inclusion.
Ho_{10}: Supply Side Barriers (Lack of Proper Documents, Physical Barriers, Inappropriate Products, and Policy Regulations) have no significant effect on Financial Inclusion.
Ho_{11}: Demand Side Barriers and Supply Side Barriers have no significant effect on Financial Inclusion.

3.4 Assumptions of the Study

The study was supported by the following assumptions:

- Supply side barriers and demand side barriers have a positive and significant effect on financial inclusion Bhuvana and Vasantha (2016)
- Psychological factors is behavioral factors Thomas, and Natarajan (2018)
- Financial inclusion is the usage of financial services Thomas, and Natarajan, (2018)
- Distance is the physical barrier that affects the lending decision of the micro enterprises which hinders the micro enterprise from being financially included Agarwal, and Hauswald (2016).

4.0 RESEARCH METHODOLOGY

4.1 Research Locale

The study was conducted within Luzon, Philippines. Specifically, areas in the National Capital Region; Manila, Makati, Paranaque, Quezon City, San Juan, Caloocan, Las Pinas, Malabon, Mandaluyong, Marikina, Muntinlupa, Navotas, Pasig, Pateros, and Vanenzuela. The researchers choose this are since this area has the most Micro Enterprises in the country.

4.2 Research Design

The research design that the researchers used a quantitative and descriptive design, under which used the measures of central tendency, correlation coefficient and regression. The researchers used the design to analyze the cause and effect of the dependent variables to the independent variable.

4.3 Profile of Respondents

The respondent of the study was individuals who owns Micro Enterprises. Micro Enterprises include businesses with less than PHP 3,000,000 assets and has less than 9 employees. Respondents were given a survey questionnaire to answer what affects their financial decisions. The respondents of this study was specifically Microenterprises who are registered and has ideas of loaning.

4.4 Sampling Design

The researchers surveyed 399 respondents using a non-probabilistic sampling method. The researchers based computed for the sample size using the Slovin's Formula the total population of Micro Enterprises in Metro Manila, according to PSA Statistics is 157,677 Enterprises, thus the researchers came up of 399 respondents which equates to a 100% response rate. The researchers use a 95% confidence level giving the study a .05 margin of error. The researchers used a non-probabilistic sampling such as Convenience, Purposive and Snowball Sampling. The researchers used Convenience and Purposive since the researchers are able to access more respondents and already had a list of possible target respondents. Furthermore, the researchers used the Snowball Sampling in order to have more respondents by asking referrals from previous respondents of whom the researchers can interview.

Slovin's Formula/Computations

157,677 / (1 + 157,677 * 0.052) = 398.98 = 399 respondents

4.5 Research Instrument

The respondent's demographics was surveyed by asking for their age, gender and position in the enterprise. The respondent's business profile was also surveyed by asking them of the name, location, number of employees, industry, and estimated assets. The respondents was surveyed on how much they agree or disagree on how important each factor is to Financial Inclusion using the 5-point Likert Scale.

Cronbach Alpha

The researchers did a pretest to check the reliability of the survey questionnaire. The researchers looked for 30 Micro Enterprises specifically in the areas in Metro Manila, Tarlac City, and Batangas City. The researchers personally handed the Micro Enterprises the questionnaires and asked if they were willing to answer. After collecting, the researchers used SPSS Software to check the reliability of the whole questionnaire and the interitem reliability using Cronbach Alpha. The result showed .97 Cronbach Alpha and (see Appendix D for theCronbach Alpha).

4.6 Method of Data Collection - Quantitative

The researchers personally approached the target respondents and asked them if they are willing to answer a survey questionnaire (see Appendix B) prepared by the researchers. After the data collection, the researchers checked the data whether the respondent fits the respondent profile of the study. Hence all respondents that don't fit to the criteria was disregarded from the data analysis. For the respondent's demographics, the respondent's profile and business profile, will be categorized in to specific ranges and will be counted which would be use in the recommendations of the study. Also included in the survey questionnaire is a 5-point Likert scale wherein data the mean response for each variable will be used to analyze whether the dependent variables affect the independent variable.

4.7 Method/s of Data Analysis

To analyze data collected, the researchers mainly used Microsoft Excel and SPSS to help with the statistical analysis. Specifically using functions such as mean, count, correlation coefficient and regression.

4.7.1 Descriptive Analysis

The researchers were able to get the mean, median and mode of the respondent's personal composed of the age, gender and the position of the respondent. and the business profile composed of the location, number of employees, industry and estimated assets. The mean and mode of the age, gender, location and industry was used to compare which is greater or less. To analyze number of employees, and estimated assets measures of skewness was used. The skewness will give the distribution or range of the number of employees and estimated assets. If the skewness is less than -1 or greater than +1, the distribution is highly skewed. The researchers used the data in order to have better analysis with the future results of the study. The industry was categorized in order to have specific analysis on each industry.

4.7.2 Correlation Coefficient

The researchers used the Pearson Correlation Coefficient to identify and measure the strength of the relationship between the dependent variables; Demand Side Barriers composed of; Irregular Income, Psychological Barriers, Lack of Financial Literacy and Trust and Supply Side Barriers of; Lack of Proper Documents, Physical Barriers, Inappropriate Products, and Policy Regulations to Financial Inclusion. The researchers used the Pearson R test to produce the coefficient value to determine the strength of the relationship between the independent variables and dependent variables. A negative coefficient would indicate a negative relationship of strength between the independent and dependent variables while a positive coefficient would indicate a positive relationship of strength between the variables. The formula for Correlation is covariance divided by the standard deviation of the variables. After acquiring the coefficients, the data was used in the regression analysis.

4.7.3 Regression

The researchers used simple and multiple linear regression to account for the all the variables. The researchers first tested the independent variables (Demand Side Barriers) Irregular Income, Psychological Barriers, Lack of Financial Literacy, Trust and (Supply Side Barriers) Lack of Proper Documents, Physical Barriers, Inappropriate Products, and Policy Regulations by using linear regression in order to validate the hypotheses. After the linear regression, all true hypotheses will be group to Demand Side Barriers and Supply Side Barriers, which has then lead the researchers testing the hypotheses; (1) Demand Side Barriers composed of; Irregular Income, Psychological Barriers, Lack of Financial Literacy and Trust have no significant effect on Financial Inclusion, (2) Supply Side Barriers of; Lack of Proper Documents, Physical Barriers, Inappropriate

Products, and Policy Regulations have no significant effect on Financial Inclusion, and (3) Demand Side Barriers and Supply Side Barriers have no significant effect on Financial Inclusion. The paper used the p-value to determine the validity of the hypothesis. The researchers used a 95% confidence level, thus if p-value is < 0.05 then the null hypotheses would be rejected, and the researchers would be able to identify whether the variables have a significant relationship.

5.0 PRESENTATION AND ANALYSIS OF DATA

5.1 Introduction

In this chapter the researchers will discuss the data gathered from the 400 respondents. The data gathered will be summarized and presented with the help of tables and brief discussions. The results will be able to provide further insight to Micro Enterprises operating within Metro Manila in relation to Financial Inclusion.

5.2 Summary of Demographic Profile

Characteristic	Frequency	% Freqeuncy
AGE		
20 Yrs. old and Below	15	3.8%
21 - 30 yrs old.	82	20.5%
31 - 40 yrs old.	217	54.3%
41 - 50 yrs old.	54	13.5%
51 - 60 yrs old.	24	6.0%
61 yrs old. and Up	8	2.0%
GENDER		
MALE	202	50.5%
FEMALE	198	49.5%
LOCATION		
MANILA	176	44.0%
SAN JUAN	100	25.0%
CALOOCAN	1	0.3%
PARANAQUE	51	12.8%
MAKATI	17	4.3%
QC	40	10.0%
PASAY	8	2.0%
MALABON	1	0.3%
LAS PINAS	3	0.8%
MARIKINA	1	0.3%
PASIG	1	0.3%
TAGUIG	1	0.3%
POSTION		
OWNER	359	89.8%
EMPLOYEE	41	10.3%

NO. OF EMPLOYEES		
1 - 3	222	55.5%
4 - 6	144	36.0%
7 - 9	34	8.5%
INDUSTRY		
MANUFACTURING	4	1.0%
AGRICULTURE	2	0.5%
SERVICE	173	43.3%
FOOD	192	48.0%
OTHERS	29	7.3%
ASSETS		
LESS THAN P500,000	275	68.8%
P501,000-P1,000,000	95	23.8%
P1,000,001-P2,000,000	20	5.0%
P2,000,001-P3,000,000	9	2.3%
GRAND TOTAL	**400**	**100.0%**

The researchers were able to gather data from a demographic 359 Micro Enterprises around Metro Manila. The data gathered showed that most of the respondents are in the age bracket of 31-40 years old, (209 respondents: 58.2%); people by this age are typically owners of businesses or working for their living in order to sustain themselves.

The gender ratio of the respondents is fairly equal, with 183 males (51%) and 176 females (49%). With this, the researchers can infer that gender does not play a role in owning and operating a business in Metro Manila. Most of the respondents are located in Manila (154 respondents), since Manila was where the researchers were able to find and gain easier access to Micro Enterprises willing to answer the survey questionnaire. Since Micro Enterprises are ideally small in nature, respondents' businesses mostly has 1-3 employees (189 respondents 52.6%) only. Respondents mostly have estimated assets of less than P500,000 (251 respondents 69.9%). Micro and small business is an entity that is privately owned and operated, with a small number of employees and relatively low volume of sales. The term MSE incorporates firms in both the formal and informal sectors. Regis, Tamirat and Senthil (2017).

The researchers were able to gather data from Micro Enterprises mostly under the food industry (170 respondents 47%), the reason for this is that food stalls and "Karindirya" are very convenient for the researchers to survey since they are all gathered in close proximity of each other and this type of business in the Philippines are usually Micro Enterprises making it abundant around Metro Manila.

5.3 Variables Interpretation

VARIABLES	$\bar{x}$	σ	INTERPRETATION
Irregular Income	4.12	0.65	High Level
Psychological	3.48	0.88	High Level
Lack of Financial Literacy	3.14	1.01	Fair Level
Trust	3.97	0.73	High Level
Lack of Proper Documents	3.20	1.09	Fair Level
Physical Barriers	3.51	0.89	High Level
Inappropriate Products	3.52	0.77	High Level
Policy Regulation	3.56	0.82	High Level
Financial Inclusion	3.94	0.78	High Level

As seen on Table above most of the variables' means are above moderate based from the answer of the respondents in the second part of the survey questionnaire. Irregular Income having the highest mean of 4.14 and Financial Inclusion 3.94 being next. Irregular Income has the highest mean due to the fact most respondents are not that financially stable. Poor people from the most vulnerable groups in the society not only have low income but also get an irregular income and various uncertainties in cash flows S. Shankar (2013). Since most respondents are said to be financially unstable, Financial Inclusion came next to having the greatest mean because financial inclusion is defined as the provision of access of financial services and products to the most vulnerable groups coming from lower tiers of society. People seek to loan in order to help them with their business.

The standard deviation of all variables are low which means that there is low dispersion of answers of the respondents from the mean of the variables. With this, most respondents' perceptions are almost the same towards the variables. Lack of Financial Literacy and Lack of Proper Documents have the highest standard deviation of 1.01 and 1.09 respectively. Relating the standard deviation of Lack of Financial Literacy and Lack of Proper Documents to its mean, both have moderate mean which most respondents have a common perception about Lack of Financial Literacy and Lack of Proper Documents hindering them from being financially included and same perception of their intentions of loaning.

5.4 Correlation Matrix

	Irregular Income	*Psych*	*Lack of Financial Literacy*	*Trust*	*Lack of Proper Documents*	*Physical Barriers*	*Inappropriate Products*	*Policy Regulation*	*Financial Inclusion*
Irregular Income	1								
Psych	0.36	1							
Lack of Financial Literacy	0.19	0.66	1						
Trust	0.54	0.32	0.16	1					
Lack of Proper Documents	0.21	0.64	0.74	0.25	1				
Physical Barriers	0.50	0.43	0.48	0.45	0.52	1			
Inappropriate Products	0.40	0.65	0.63	0.37	0.62	0.58	1		
Policy Regulation	0.50	0.51	0.55	0.49	0.57	0.66	0.69	1	
Financial Inclusion	0.53	0.26	0.14	0.50	0.19	0.48	0.42	0.52	1

The table above shows the correlation between the Independent Variables and the Dependent Variable. While most of the Independent Variables (Psychological, Lack of Financial Literacy, Trust, Lack of Proper Documents, Physical Barriers, and Inappropriate Products) shows a positive weak relationship with the Dependent Variable, only 2 Independent Variables (Irregular Income & Policy Regulation) shows a positive moderate correlation with the Dependent Variable (Financial Inclusion). The table above also shows the correlation between the different Independent Variables, of which, the correlation between Lack of Proper Documents and Lack of Financial Literacy showed the highest correlation with each other, showing a positive strong correlation (0.75). The cause of the positive moderate correlation between Irregular Income and Financial Inclusion is that there are Micro Enterprises that are financially stable enough that Irregular Income would not be a factor for them towards financial inclusion since they most likely would veer from the intention of loaning. On the other hand, since there are Micro Enterprises that are more affected by Irregular Income, these enterprises would most likely interpret Irregular Income to be a factor towards their intention to seek out a loan as a way to stimulate their enterprises.

The researchers can conclude that the cause of the positive moderate correlation between Policy Regulation and Financial Inclusion is that meeting of Policy Regulations set by MFIs is intrinsically an attribute of Micro Enterprises that are financially stable, although there some Micro Enterprises that may have the capacity to be able to meet Policy Regulations set by MFIs, these certain Micro Enterprises would most likely not be the ones who would have a high intention on seeking loans. The Micro Enterprises that are hindered by the Policy Regulations set by MFIs are those who are more likely to be in need of loans, therefore they are the segment that would have a high intention of seeking out loans. Also, the researchers found out that the relationship of two independent variables (Lack of Financial Literacy and Lack of Proper Documents) stood out having a positive strong correlation. The researchers concluded that the cause of this correlation is due to the similar nature of the Independent variables. Financial Literacy is needed to be able to produce Proper Documents, hence having the Lack of Financial Literacy will come hand in hand with the Lack of Proper Documents. To add Financial Literacy also gives clarity about the formal financial institutions and its merits. Rajasekaran (as cited in Bhuvana, and Vasantha, 2016). With this, as the respondent lacks financial literacy it would be harder for them to know what documents are needed to loan.

5.5 Summary of Regression

Hypothesis	P-Value	Coefficient	R Square	Interpretation
1	0.000**	0.66	0.3	Significant
2	0.000**	0.23	0.06	Significant
3	0.019*	0.10	0.01	Significant
4	0.000**	0.54	0.26	Significant
6	0.000**	0.13	0.03	Significant
7	0.000**	0.43	0.24	Significant
8	0.000**	0.42	0.17	Significant

9	0.000**	0.50	0.27	Significant

Hypothesis	P-Value	Coefficient	R Square	Interpretation
5	0.000**	0.45	0.36	Significant
		0.04		
		-0.01		
		0.31		

Hypothesis	P-Value	Coefficient	`R Square	Interpretation
10	0.000**	-0.20	0.35	Significant
		0.26		
		0.17		
		0.35		

Hypothesis	P-Value	Coefficient	R Square	Interpretation
11	0.000**	0.275	0.45	Significant
		0.012		
		-0.156		
		0.170		
		-0.067		
		0.166		
		0.172		
		0.231		

After running regression on all hypotheses, they proved that they are all statistically significant to financial inclusion. The researchers identified under hypothesis number eleven (11) as being the best model for predicting financial inclusion, having the highest R Square (45%).

	Coefficients	***P-value***
Irregular Income	0.251	< 0.00
Psychological	-0.009	0.86
Lack of Financial Literacy	-0.147	< 0.00
Trust	0.184	< 0.00
Lack of Proper Documents	-0.065	0.14
Physical Barriers	0.151	< 0.00
Inappropriate Products	0.178	< 0.00
Policy Regulation	0.233	< 0.00

The researchers then identified which Demand Side Barriers and Supply Side Barriers significantly affected Financial Inclusion. As seen on Table above, all variables except Psychological and Lack of Proper Documents, are significant to Financial Inclusion.

Since most respondents have less than P500,000 worth of assets, they would also be yielding a smaller income, this could be a reason why Irregular Income is one of the significant variables towards Financial Inclusion. According to Ajayi (2014), one of the key findings of this report is that lack of regular income remains the most commonly cited reason for not having a bank account. However, over half of people who are actively saving money chose not to save in banks and instead save at home, with friends or family or using informal savings clubs. Psychological is one of the two variables that is not statistically significant towards financial inclusion since not all respondents have no same perception towards their ability to loan. Also, Psychological also has one of the highest dispersion among respondents answers which confirms that not all respondents have the same perceptions. Thomas, and Natarajan (2018) identified Impulsiveness, Commitment to Goals, Social Proof, Self-Efficacy, Comfort Level, and Privacy Concerns are factors of Psychological behavior towards Financial Inclusion. Lack of Proper Documents is the second variable that showed not statistically significant towards Financial Inclusion. The mean level of Lack of Proper Documents shows a moderate mean, this implicates that some respondents find this factor to have moderate affect to their intention to financial inclusion while others do not. This shows that some of the respondents can afford to process and receive the Proper Documents while others cannot. To add, the respondents’ high mean level for Irregular income implies that the respondents are financially challenged and may only be able to sustain their most basic needs and not have enough to be able to afford other expenses such as legal documents required by MFIs.

Poor people cannot access the formal financial services due to lack of having any legal documents. Getting legal document is an expensive and time-consuming process. N.Rajasekaran (2018) as cited in Bhuvana and Vasantha (2016). Also, in this model, the adjusted R Square is 0.45, the acceptable level of adjusted R Square for studies such as this is 0.10, making this model more than acceptable. Irregular Income, as seen on table above, has the highest coefficient of 25%. This means that even in regression collectively it explains 25% of its variation towards Financial Inclusion and leaving the remaining 75% explained by other variables. Although individually Psychological and Lack of Proper Documents were significant, when used together in this model, their P-Values were more than .05 making them insignificant; This reinforces the coefficients gathered for these two variables being .01 and -0.07, respectively. Explaining that, individually, Psychological only explains its variation towards Financial Inclusion by only 1% and Lack of Proper Documents by -7% when collectively regressed.

6.0 CONCLUSION AND RECOMMENDATION

6.1 Conclusion

Being financially included is challenging when you don't have the right resources or knowledge. Vulnerable groups such as people with financial instability struggle to access loans which unfortunately decreases their chances of putting up or improving their businesses. The researchers were able to gather data from 359 Micro Enterprises, as their main respondents of the study. Respondents were surveyed and asked about their personal insights about what they perceive about factors that can affect their loaning capability and their intentions to loan.

The results showed that under the Demand Side Barriers, the factors Irregular Income, Psychological, Lack of Financial Literacy, and Trust are all individually and collectively significant to Financial Inclusion. The data also showed that under the Supply Side Barriers, the factors Lack Proper Documents, Physical Barriers, Inappropriate Products, and Policy Regulations are also all individually and collectively significant to Financial Inclusion

6.2 Recommendation

For Future and Current Micro Enterprise Owners

To address the last statement of the problem "What recommendations can be given to Micro Enterprises to gain better access of financial services from Financial Institutions?" The researchers recommend that Micro Enterprises, especially who are located in Manila and is under the food industry, would undergo financial training, so that they would become more knowledgeable on how to properly budget their income to better improve their financial position and businesses. An example of financial training they could undergo is UPLIFT, UPLIFT, located in Manila is an organization working towards excellence with a holistic approach to guide the entrepreneurial urban poor. If some Micro Enterprises are not open to the idea of undergoing financial training the researchers would suggest that they seek financial advice from their more successful colleagues that also come from the same background might be received better by these Micro Enterprise owners such as family members or peers who already has experience accessing loans. As results shows that Micro Enterprises are affected by some factors pertaining to the Supply Side or MFIs, the researchers recommend Micro Enterprises owners to try appealing to MFIs that somehow, they can adjust to their needs. With this, it also follows that Micro Enterprises should be more proactive in the improvements toward their financial status that would help them to be able to meet the MFIs requirements.

For Micro Finance Institutions

As for the recommendation on Supply Side Barriers, the researchers would recommend that the MFIs would tailor financial packages that would be more apt for Micro Enterprises that are in most need of financial inclusion. With the data gathered from currently operating Micro Enterprises, most of the given independent variables are perceived to affect the decision towards financial inclusion. With this knowledge, forums can be opened wherein Micro Finance Institutions can review the needs and the current capabilities of Micro Enterprises in the Philippines. Successful communication with Micro Enterprises can lead Micro Finance Institutions to be able to tailor more suitable packages to Micro Enterprises where in Micro Enterprises will gain easier access to Financial Inclusion. Examples of this can be the decrease of required documents that Micro Enterprises would need to submit, decreasing physical barriers and creating more avenues wherein Micro Enterprises could avail of their services, and having forums with Micro Enterprises where Micro Finance Institutions could organize free financial planning seminars, increasing Micro Enterprise's trust.

For Future Researchers

It is worth noting that the numerous related literatures used in this study were mostly used in the context of India and that not all the variables given in these studies were used in this study (refer to figure 1, figure 2, and figure 3). The variables used in the operational model of this study were taken from the said studies, this can explain the discrepancies in which some variables were deemed insignificant in this study even though they were given as significant variables in previous studies. These discrepancies show that although some variables may be taken as significant to Micro Enterprises in India, this does not necessarily mean that Philippine Micro Enterprises will show the same sentiment to the same variables. It is very much likely that there are more variables that Philippine Micro Enterprises may find more influential in their decision to become financially inclusion. Therefore, it is recommended that future researchers make use of the variables left out by this study and to take certain steps to be able to gather data and insights from Philippine Micro Enterprises to be able to adequately identify the variables which are more appropriate in the Philippine setting.

APPENDIX A

Survey Questionnaire
Available from the authors on request

APPENDIX B

Survey Questionnaire
Available from the authors on request

APPENDIX C

Cronbach Alpha

Reliability Statistics

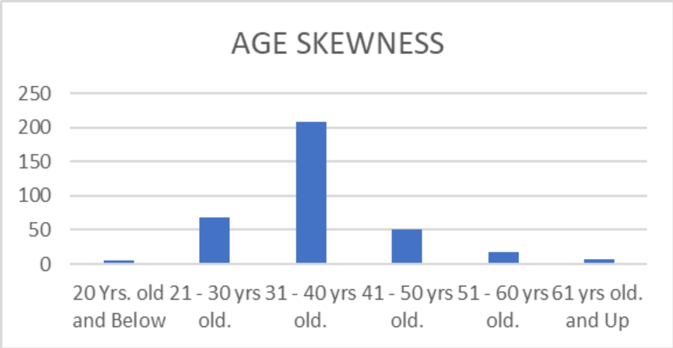
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.970	.970	45

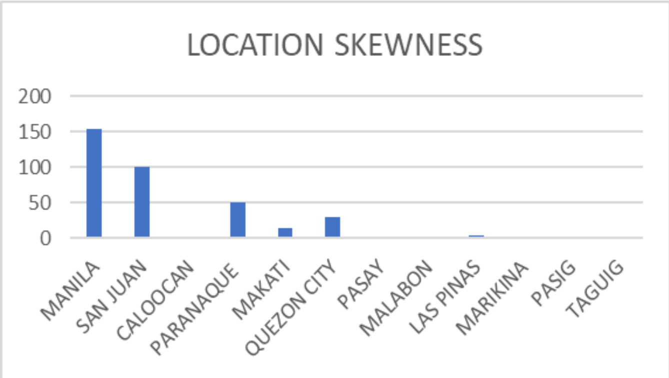
APPENDIX D

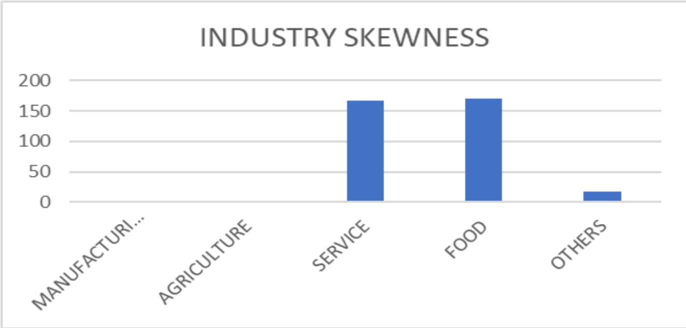
Inter Item Reliability
Available from the authors on request

APPENDIX E

Skewness Graphs






INDUSTRY SKEWNESS
200
150
100
50
0
MANUFACTURI...
AGRICULTURE
SERVICE
FOOD
OTHERS


EMPLOYEE SKEWNESS
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1 - 3
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7 - 9


EMPLOYEE SKEWNESS
200
150
100
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0
1 - 3
4 - 6
7 - 9

APPENDIX F

Hypothesis 1 Regression Results

Regression Statistics	
Multiple R	0.547
R Square	0.299
Adjusted R Square	0.297
Standard Error	0.655
Observations	359

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	65.38	65.38	152.45	2.07986E-29
Residual	357	153.10	0.43		
Total	358	218.49			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	1.22	0.22	5.47	8.51E-08	0.782	1.660	0.782	1.660
IRREGULAR INCOME	0.66	0.05	12.35	2.08E-29	0.553	0.762	0.553	0.762

APPENDIX G

Hypothesis 2 Regression Results

Regression Statistics	
Multiple R	0.257
R Square	0.066
Adjusted R Square	0.063
Standard Error	0.756
Observations	359

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	14.404	14.404	25.197	8.18485E-07
Residual	357	204.082	0.572		
Total	358	218.486			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	3.155	0.162	19.437	6.43E-58	2.835	3.474	2.835	3.474
PSYCHOLOGICAL	0.227	0.045	5.020	8.18E-07	0.138	0.316	0.138	0.316

APPENDIX H

Hypothesis 3 Regression Results

Regression Statistics	
Multiple R	0.124
R Square	0.015
Adjusted R Square	0.012
Standard Error	0.776
Observations	359

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	3.333	3.333	5.530	0.019
Residual	357	215.153	0.603		
Total	358	218.486			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	3.644	0.134	27.194	5.22162E-89	3.381	3.908	3.381	3.908
LACK OF FINANCIAL LITERACY	0.095	0.041	2.352	0.019	0.016	0.175	0.016	0.175

APPENDIX I

Hypothesis 4 Regression Results

Regression Statistics	
Multiple R	0.510419234
R Square	0.260527794
Adjusted R Square	0.258456443
Standard Error	0.672726323
Observations	359

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	56.9216219	56.92162	125.7768	3.28517E-25
Residual	357	161.564172	0.452561		
Total	358	218.4857939			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	1.792766867	0.195100784	9.188927	3.33E-18	1.409075578	2.176458155	1.409075578	2.176458155
TRUST	0.544324662	0.048535309	11.21502	3.29E-25	0.448873608	0.639775715	0.448873608	0.639775715

APPENDIX J

Hypothesis 5 Regression Results

Regression Statistics	
Multiple R	0.602020629
R Square	0.362428837
Adjusted R Square	0.355224644
Standard Error	0.627298579
Observations	359

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	4	79.18555228	19.79638807	50.30803462	1.64243E-33
Residual	354	139.3002416	0.393503507		
Total	358	218.4857939			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.748758	0.235927	3.173682	0.001637	0.284763	1.212752	0.284763	1.212752
IRREGULAR INCOME	0.446555	0.062611	7.132211	0.000000	0.323419	0.569692	0.323419	0.569692
PSYCHOLOGICAL	0.042933	0.052267	0.821421	0.411959	-0.059860	0.145726	-0.059860	0.145726
LACK OF FINANCIAL LITERACY	-0.008246	0.043144	-0.191115	0.848545	-0.093097	0.076606	-0.093097	0.076606
TRUST	0.309338	0.055327	5.591080	0.000000	0.200527	0.418149	0.200527	0.418149

APPENDIX K

Hypothesis 6 Regression Results

Regression Statistics	
Multiple R	0.186590901
R Square	0.034816164
Adjusted R Square	0.032112568
Standard Error	0.768568382
Observations	359

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	7.60683727	7.60683727	12.87772355	0.000
Residual	357	210.8789566	0.590697357		
Total	358	218.4857939			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	3.51702593	0.125783045	27.96104939	6.03184E-92	3.269657069	3.764395	3.269657069	3.764394791
LACK PROPER DOCUMENTS	0.134062571	0.037358377	3.588554521	0.000378947	0.060592422	0.207533	0.060592422	0.207532721

APPENDIX L

Hypothesis 7 Regression Results

Regression Statistics	
Multiple R	0.495046579
R Square	0.245071115
Adjusted R Square	0.242956469
Standard Error	0.67972073
Observations	359

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	53.54455717	53.54455717	115.892225	1.35905E-23
Residual	357	164.9412367	0.462020271		
Total	358	218.4857939			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	2.416343573	0.14639573	16.50556045	6.98715E-46	2.128437162	2.704249984	2.128437162	2.704249984
PHYSICAL BARRIERS	0.433691222	0.040285938	10.76532512	1.35905E-23	0.354463639	0.512918805	0.354463639	0.512918805

APPENDIX M

Hypothesis 8 Regression Results

Regression Statistics	
Multiple R	0.414111008
R Square	0.171487927
Adjusted R Square	0.169167165
Standard Error	0.712076928
Observations	359

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	37.46767594	37.46768	73.89293659	2.62342E-16
Residual	357	181.0181179	0.507054		
Total	358	218.4857939			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	2.454458268	0.177342685	13.8402	3.56912E-35	2.10569061	2.803225925	2.10569061	2.803225925
INAPPROPRIATE PRODUCTS	0.42056181	0.048924722	8.5961	2.62342E-16	0.324344924	0.516778696	0.324344924	0.516778696

APPENDIX N

Hypothesis 9 Regression Results

Regression Statistics	
Multiple R	0.519946001
R Square	0.270343844
Adjusted R Square	0.268299989
Standard Error	0.668246387
Observations	359

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	59.06628929	59.06629	132.2716	2.96992E-26
Residual	357	159.4195046	0.446553		
Total	358	218.4857939			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	2.175872236	0.157755859	13.79266	5.49E-35	1.865624641	2.486119832	1.865624641	2.486119832
POLICY REGULATION	0.495772806	0.043107167	11.50094	2.97E-26	0.410996908	0.580548705	0.410996908	0.580548705

APPENDIX O

Hypothesis 10 Regression Results

Regression Statistics	
Multiple R	0.596207114
R Square	0.355462923
Adjusted R Square	0.348180018
Standard Error	0.630716109
Observations	359

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	4	77.66359888	19.41589972	48.80784951	1.1028E-32
Residual	354	140.822195	0.397802811		
Total	358	218.4857939			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	1.809932781	0.170454475	10.61827668	4.76303E-23	1.474702027	2.145163534	1.474702027	2.145163534
LACK PROPER DOCUMENTS	-0.196653081	0.040899575	-4.808193723	2.25596E-06	-0.277089781	-0.116216381	-0.277089781	-0.116216381
PHYSICAL BARRIERS	0.2596792	0.051249126	5.06699759	6.52233E-07	0.158888164	0.360470237	0.158888164	0.360470237
INAPPROPRIATE PRODUCTS	0.16775166	0.065362199	2.566493519	0.010683847	0.039204614	0.296298706	0.039204614	0.296298706
POLICY REGULATION	0.35098538	0.062943412	5.57620515	4.88538E-08	0.227195333	0.474775427	0.227195333	0.474775427

APPENDIX P

Hypothesis 11 Regression Results

Regression Statistics	
Multiple R	0.677665936
R Square	0.459231121
Adjusted R Square	0.44687069
Standard Error	0.581009756
Observations	359

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	8	100.3354761	12.54193451	37.15332	1.72838E-42
Residual	350	118.1503178	0.337572336		
Total	358	218.4857939			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.76574328	0.222172933	3.44660922	0.000637	0.32878133	1.20270523	0.32878133	1.20270523
IRREGULAR INCOME	0.275460101	0.062502232	4.407204194	1.39E-05	0.152532897	0.398387304	0.152532897	0.398387304
PSYCHOLOGICAL	0.012172291	0.052520385	0.231763166	0.816857	-0.091122964	0.115467545	-0.091122964	0.115467545
LACK OF FINANCIAL LITERACY	-0.156207665	0.051273554	-3.046554283	0.002491	-0.257050697	-0.055364634	-0.257050697	-0.055364634
TRUST	0.170829236	0.054503798	3.134262993	0.001868	0.063633074	0.278025398	0.063633074	0.278025398
LACK PROPER DOCUMENTS	-0.067535627	0.046632903	-1.448239806	0.148445	-0.159251589	0.024180335	-0.159251589	0.024180335
PHYSICAL BARRIERS	0.166781043	0.049865812	3.344596946	0.000913	0.068706709	0.264855377	0.068706709	0.264855377
INAPPROPRIATE PRODUCTS	0.172963781	0.065143233	2.655130433	0.00829	0.04484235	0.301085212	0.04484235	0.301085212
POLICY REGULATION	0.231637493	0.061670992	3.756020199	0.000202	0.110345143	0.352929842	0.110345143	0.352929842

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