Vol. 3, No. 11 November 2008

# Consumption Model of Financial Products

# Among Minangkabau & Chinese in Bank Nagari, Sumatra

Heryanto (Corresponding author)

Regional Development Bank of West Sumatra

Jalan Pemuda No. 21 PO Box 111 Padang 25117 West Sumatra Indonesia

Tel: +62-8126771699 E-mail: dr\_heryanto@yahoo.com

# Laily Paim

Dean of Human Ecology Faculty, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia
Tel: 603-8946-7051 E-mail: laily@putra.upm.edu.my

#### Ahmad Hariza Hashim

Deputy Dean (Academic & International Affair) of Human Ecology Faculty, Universiti Putra Malaysia 43400 Serdang, Selangor, Malaysia

Tel: 603-8946-7052 E-mail: ahariza@putra.upm.edu.my

#### Sharifah Azizah Haron

Lecturer of the Department of Management Resource & Consumer Studies Faculty of Human Ecology, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia

Tel: 603-8946-7108 E-mail: sh.azizah@putra.upm.edu.my

#### **Abstract**

The purpose of the present study are first to analyze the differences in customer product preferences between Minangkabau and Chinese customers of Bank Nagari. Second, to determine factors affecting the use of Bank Nagari products among Minangkabau and Chinese customers. Third, to determine the Minangkabau and Chinese consumption models. The sample size amount 216 customers consisted of Minangkabau would amount to 162 persons and Chinese would amount to 54 persons. Systematic sampling is applied in this study as it often yields sampling error which is smaller. Data analysis technique is use consisted of factor analysis and logistic regression.

The result of logistics regression test for credit and saving products show partial significance at probability level of .050 and result of Hosmer and Lemershow Goodnes-of-Fit test show total significance at .050. Test result of ANOVA indicates that there is ethnic difference in the consumption of financial products. Cultural factor, saving and credit perception very much determine the consumption of ethnic Minangkabau and Chinese.

Keywords: Minangkabau, Chinese, Consumption, Financial products, Saving, and credit

# 1. Introduction

Deregulation is part of government action in banking industry. Since banking sector deregulation was issued on 1 June 1983 and followed by policy packing on 27 October 1988, Indonesia's banking industry has been continuously growing. In September 1988, it was recorded that the number of banks operating in Indonesia was 111 and it increased to 240 banks in 1995 (Febrianto, 1998). The condition coused some problems for the banking industry in Indonesia such as limited asset, capital, human resources, technology, and network operation. Hence, the banks underwent difficulties in business.

According to Info Bank Research Bureau, there were five Regional Development Banks, which had shown the ability to produce profit before tax during the economic crisis (Idris, 1997) namely, The Regional Development Bank of West Java (Rp.17.529 million), Jakarta (Rp.15.311 million), Middle Java (Rp.11.528 million), West Sumatra (Rp.8.131 million) and North Sumatra (Rp.7.360 million).

The West Sumatra banking development is in line with the national banking development. It began with the financial deregulation, until the central government implemented immediate deregulation in financial sectors; for example, deregulation in terminating the operation of the bank (bank beku operasi), and acquisition of the bank by the government (bank akuisisi) in 1997–1999. Thus, the banks that still exist in West Sumatra are public banks and People Credit Banks (Bank Perkreditan Rakyat (BPR)) (Note 1). Public banks consist of conventional and syariah public banks. Meanwhile the conventional and syariah public banks are divided into government and private banks. The government banks in Padang consist of Bank Nagari Bank Pembangunan Daerah Sumatera Barat (Bank Nagari BPD SB), Bank Negara Indonesia (BNI) 1946, Bank Negara Indonesia (BNI) 1946 Syariah, Bank Rakyat Indonesia (BRI), Bank Rakyat Indonesia (BRI), Bank Rakyat Indonesia (BRI), Bank Mandiri, and Bank Mandiri Syariah. The private banks consist of Bank Central Asia (BCA), Bank Bukopin, Bank Mega, Bank Permata, Bank Mestika, Bank Lippo, Bank Danamon, Bank Indonesia Internasional (BII) and Bank Muamalat.

The current situation in the banking business has increased in complexity in terms of customer, distribution and product (Kimbal & Gregor, 1995). The industry can be characterized by the changes in customers' preferences and the rising competition among and between banks and non-bank services providers. Customer satisfaction with the service of banks is a moving target; banks must continually monitor the rapidly changing marketplace and strive to understand and become more responsive to their customers' needs and preferences (Chakravarty, & Winddows, 1995; Glassman, 1995). Thus excellent service provides the bank with internal advantage retention of its customer. The needs and preferences are different for customers of Bank Nagari. The difference is caused by ethnic background, interest rates, perceived service, location, technology available, safety, networking, easiness, and prompt services.

As the banks grow and mature in West Sumatra, Bank Nagari moves stronger in retail than the business corporate. Bank Nagari always tries to balance between the fund collection and distribution. About 85 % to 90 % of the total fund collected in the form of saving, deposit, and giro are distributed to the community in the form of credits. Most notably the average growth of credit between 1995–1999 in West Sumatra was only 5.86% and the Bank Nagari credit grew up to 23.5% ("Untung Ada," 2000; "Bersama Membangun," 2001).

Almost all commercial banks including Bank Nagari that operate in this region are very aggressive in collecting fund from the community through saving, deposit, and giro (Note 2). Beside small and medium businesses, Bank Nagari also establishes micro banking. Micro banking activities concentrate on simple products ("Salah Satu,"2001), such as TAMI, KUMI, KUKI, SIMPEDA, KESRA (Note 3), personal and commercial credit.

Bank Nagari operates inside and outside of the West Sumatra, and has lower communication and information technologies compared to other government and private banks (Table 1).

In Table 1 it is seen that technological network was predominated by government and private banks i.e., BNI 1946 (26%), Bank Mandiri (22%) and BCA (17%). Banks with technological network means below 2% and lower were i.e., Bank Nagari, Bank BTN, Bank BTPN, Bank Mega, Bank Permata, Bank Mestika and Bank Muamalat. However, the simple products and good services provided by the Bank Nagari have contributed to its success ("Salah Satu," 2001; "Bersama Membangun," 2001).

Bank Nagari is different from other banks in sociological aspects success ("Salah Satu," 2001; "Bersama Membangun," 2001). It has a strategic position (location choice) and close relationship with Minangkabau. Hence, this condition is used by the bank management in collecting fund optimally from the Minangkabau community in Sumatra and Java. Moreover Anis Mucthar in "Hebat, BPD" (2000) explained that the reason Pekanbaru and Jakarta regions were chosen for establishing branches of regional development banks is that these regions are resided mostly by the Minangkabau. This idea is parallel with that of Kato Tsuyoshi in Junus (1990) that the migration areas of the Minangkabau outside West Sumatra is Jakarta and Pekanbaru.

Besides the Minangkabau, the Chinese is the second largest customers of Bank Nagari. They have bigger amount in credit facilities. Therefore the Chinese contribute higher revenue as compared to the Minangkabau. Hence, services received by the Chinese are better than those enjoyed by the Minangkabau. Pick up and delivery services are just for the Chinese and not for the Minangkabau. It means for the Chinese customers "welcoming services" as well as other services received are not limited within the bank's office, but also other convenient places for the client. These customers are deemed to be rational and more sensitive to price change, service, and economic condition. Moreover, the Chinese have very strong capital and get various amenities and facilities in doing business (Roziqin, 1997).

The purpose of the present study are first to analyze the differences in customer product preferences between Minangkabau and Chinese customers of Bank Nagari. Second, to determine factors affecting the use of Bank Nagari products among Minangkabau and Chinese customers. Third, to determine the Minangkabau and Chinese consumption models. This study is an extension of existing consumption theories namely classical and Duesenbery consumption theories. Both theories explain that the use of income is influenced only by culture, attitude, and habit. The present study combine both theories and add other factors that influence financial products consumption. This study enrich our knowledge and understanding on consumption behavior of different ethnic and factors affecting the choice made.

Indonesia is divided into 26 provinces, each region has its own regional development bank which is different from one another. Bank Nagari is the Regional Development Bank of West Sumatra that has branches outside the West Sumatra province and follows their customers. It differs from the Regional Development Bank of West Java, Jakarta, Mid Java and North Sumatra. They differ in terms of ethnic market and diversity. The study will benefit regional development banks, Bankers and financial customers. It hopes to facilitate regional development banks, in attaining optimal profits. Whereas Bankers would be able to offer optimal service to its customer and give priority to customers first, this encourage customer to use banking products and services, and provide alternatives to customers in the use of banking services. Furthermore, it is as indicator in arranging the regional financial planning for regional governments. Besides facilitate banks in attaining optimal profit, the findings of the study also be used in identifying and developing relevant policies in helping the traders (especially small traders) managing credit and savings.

This study has several limitations including selection of population and respondents and products studied. The study is limited to micro and small banking products of Bank Nagari. Banks that have corporate banking products are not included in the study. The respondents studied were Minangkabau and Chinese customers of Bank Nagari. There are other ethnics in Indonesia which were not included in the study. Ethnic and culture are closely related, thus different ethnics would have different consumption behavior. Amongst all the products offered by the Bank Nagari, only two products were studied i.e., saving and credit products.

# 2. Theoretical framework: Classical and Post Keynes consumption theory, the list of value (LOV), Service Quality (SERVQUAL), implication for the Construction of a Conceptual Model for Consumption, Conceptual Moder for Consumption and hypothesis

### 2.1Classical and Post Keynes consumption theory

In adopting this theory, considerable insight into the culture of other people, their general way of living, their point of view and their attitude need to be gathered before one can understand the significance of their experiences in using goods, or what their consumption means to them. What people get from their consumption depends partly on their point of view, as well as their general attitude toward life and living.

The common definition of culture is the mode of living that distinguishes one large group of mankind from another. Yet a culture is not a mere sum of beliefs, practices, and goods and services consumed (Hoyt, 1976); it is beliefs, practices, goods, service linked, and bound together, first by a mutual dependence on some common point of view, and second by a mutual interdependence on one another. A culture, in other words, is organic. A simple figure 1 will illustrate this influence of culture as follows (Hoyt, 1976).

In this diagram, the lines between nature and man represent the course that is taken by the various factors, which enter their experience. Only the very simplest things proceed directly, as by the heavy black vertical line. Almost everything is deflected by cultural attitude, some things more and some things less, and therefore reach man by an indirect route.

The illustration above presents that culture plays an important role in explaining consumption behaviour. In this case, culture is one of the factors that determine consumption. Kyrk (1976) tried to relate that culture is drawn by habit and consumption as human behavior in the fulfillment of the standard of living.

Keynes' (1936) said in the General Theory of Employment, Interest and Money:

"The fundamental psychological law, upon which we are entitled to depend with great confidence both *apriori* from our knowledge of human nature and from the detailed facts of experience, is that men are disposed, as a rule and on the average to increase their consumption as their income increase, but not by as much as the increase in their income "(p.96)

The theory also draws up a corresponding list of motives to consumption such as enjoyment, shortsightedness, generosity, miscalculation, orientation and extravagance (Keynes, 1936). An earlier analysis by Duesenbery (1949) emphasized an established habit patterns. According to this theory having become accustomed to a new living standard provided by growth of income, people also become reluctant to sacrifice that living standard in the face of income shrinkage. Thus, the relative income hypothesis expects the short-run consumption function to ratchet upward as the result of the establishment of higher standards of living.

# 2.2 List of Values (LOV)

Researchers have developed culture value inventories by studying particular cultures, identifying their values, and then determining whether these values are widely held (Assael, 1998). The best know inventory is the Rokeach Value Survey established in 1968 as cited in Schiffman and Kanuk (1991).

According to Assael (1998), the Rokeach Value Survey is based on a study of American culture. Then Kahle, Beatty, and Homer (1986) developed another widely used cultural inventory called the LOV.

"LOV was developed from a theoretical base of Feather's in 1975, Maslow's in 1954 and Rokeach's in 1973 work on values in order to assess adaptation to various roles through value fulfillment. Beside that, LOV has been related to a number of important measures of mental health, well-being, and adaptation to society, roles, and self in Kahle, 1983, as well as geographic dispersement in Kahle, 1986" (Cited in Kahle et al., 1986, pp.406-407).

The LOV development was as an alternative to Rokeach's Value Inventory because the terminal values identified by Rokeach were too abstract and difficult to apply to marketing situations (Assael, 1998). Therefore, a study by Kahle et al. (1986) proposed that the LOV inventory measures nine values:

- Self-fulfillment
- 2. Excitement
- 3. Sense of Accomplishment
- 4. Self-respect
- 5. Sense of Belonging
- 6. Being Well Respected
- 7. Security
- 8. Fun and Enjoyment in Life
- 9. Warm Relationships with Others

Kahle et al. (1986) compared LOV and VALS (Value of LifeStyle) and concluded that LOV significantly predicts consumer behavior trends more often than does the VALS scoring system. In other words, LOV has greater predictive utility than does VALS in consumer behavior trends.

As global competition increases, understanding the cultural impacts of services becomes more critical for service firms (Riddle, 1992). Because culture provides the framework for social interactions, social rules and consumer expectations that are related to service encounters are likely to vary from culture to culture (Pucik & Katz, 1986). Service influences consumption through consumer satisfaction, and consumer satisfaction can be known by the voice the consumer.

# 2.3 Service Quality (SERVQUAL)

SERVQUAL has been described as a form of attitude, related but not equivalent to satisfaction that results from the comparison of expectations with performance (Bolton & Drew, 1991; Parasuraman, Zeitham, & Berry, 1998). The most common explanation of the difference between the two is that perceived service quality is a form of attitude, a long-run overall evaluation, whereas satisfaction is a transaction-specific measure(Bitner, 1990; Bolton & Drew, 1991; Parasuraman et al., 1998); Parasuraman et al., 1988) further suggested that the difference lies in the way disconfirmation is operationalized. They stated that in measuring perceived service quality the level of comparison is according to what a consumer *should* expect, whereas in measures of satisfaction the appropriate comparison is based on what a consumer *would* expect. However, such a differentiation appears to be inconsistent with Woodruff, Codotte, and Jenkins' (1983) suggestion that expectations should be based on experience norms i.e., what consumers *should* expect from a given service provider given their experience with that specific type of service organization.

The SERVQUAL instrument has been productively used for measuring service quality in many proprietary studies. It has also served as the basis for measurement approaches used in published studies examining service quality in a variety of contexts such as physicians in private practice (Brown & Swartz, 1989); a dental school patient clinic, a business school placement center, and a tyre store (Carman, 1990); discount and departmental stores (Teas, 1993); a gas and electric utility company (Babakus & Boller, 1992); hospitals (Carman, 1990); banks, pest control providers, dry cleaners, and fast food chains (Cronin & Taylor, 1992) and institutions of higher education (Boulding, Kalra, Staelin & Zeithaml, 1993).

While the SERVQUAL instrument has generated considerable interest in service quality measurement, it has also raised questions about the need to measure expectations (Cronin & Taylor,1992; Cronin & Taylor, 1994), the interpretation and operationalization of expectation (Teas, 1993; 1994), the reliability and validity of SERVQUAL's difference-score formulation (Babakus & Boller, 1992; Brown, Churchil & Peter, 1993), and SERVQUAL's dimensions (Carman, 1990).

As SERVQUAL instrument's expectation statement relate to the service level that consumers believe they should get from the service provider, its expectation components reflect the desired service construct. According to Parasuraman et al. (1994) that *desired service* is the level of service representing a blend of what consumers believe "can be" and "should be" provided and *adequate service* is the minimum level of service consumers are willing to accept. However, to incorporate the recently revised conceptualization of expectations they modified SERVQUAL's structure in order to capture not only the discrepancy between perceived service and desired service – labeled as measure of service superiority (or MSS) – but also the discrepancy between perceived service and adequate service or minimum service – labeled as measure of service adequacy (or MSA). SERVQUAL's dimensions or as Parasuraman et al. (1994) called

if the SERVQUAL Battery consist of five sub-dimensions namely reliability, responsiveness, assurance, empathy, and tangibility. Every SERVQUAL Battery has elements serving as indicators that measure the battery. The set of battery items are as in Table 2.

Based on the classical and post Keynes consumption theories discussed, some conclusions can therefore be derived. Classical consumption theory states that culture influences consumption through the relationship between nature and man, and post Keynes theory indicates that consumption is determined by income.

The current research defines consumption as how customers use financial products in business activities, or it is also known as business consumption. The current consumption is measured by culture, Service Quality (SERVQUAL) and income variable. It means Consumption is a dependent and a function of independent variables i.e., culture, SERVQUAL and income.

## 2.4 Implications for the Construction of a Conceptual Model for Consumption

Duesenbery (1949) asserted: "In every case the kinds of activities in which people engage are culturally determined; nearly all purchases of goods are made ... either to provide physical comfort or to implement the activities which make up the life of our culture" (p.25)

Moreover, purchase motivation may influence how people feel in service encounters. Consumers come into service consumption situations with different service-specific goals (Bitner, 1992; Lawson, 1997) that influence their pre-consumption expectations, including their affective expectations (Dube, 1990).

A study about culture-service relation to consumption has been considered by McCracken (1986), Riddle (1992), Pucik and Katz (1986), Mattila (1999), Bitner (1992), Lawson (1997), Dube (1990) and Tan and Farley (1987). Several studies have examined about ethnic consumption. Tan and Farley's (1987) study examined how cultural elements influence relationships between attitudes and intentions in a non-western culture i.e., Singapore. This study was concerned with product origins (local/foreign) of goods i.e., men's clothing, women's clothing and face cream, and it used two cultural variables i.e., family orientation (affection for family, interaction with family members, parental influence on thought and tendency to compromise subject needs with family needs) and conformity, defined as the sum of two scales: behavior according to what others expect and the sacrifice of personal desires to conform to social norms. Donthu and Cherian (1994), observed the Hispanic retail shopping behavior. Their study explored the differences in retail shopping behaviors of strongly and weakly identified Hispanics. The result showed that strongly identified Hispanics are more likely than weakly identified Hispanics to be loyal to product brands used by family and friends, to be influenced by the media, and to be less concerned about economic value.

Furthermore, the relationship between purchase intentions and consumer satisfaction has been addressed in several studies, including those by Bearden and Teel (1983), Oliver (1980), and Oliver and Swan (1989). LaBarbera and Mazursky (1983) investigated the relationship between actual purchase behavior and customer satisfaction. There have also been a number of recent empirical attempts to validate the specific nature of the relationship between service quality and consumer satisfaction in the formation of consumers' purchase intentions (Bitner, 1990; Cronin & Taylor, 1992).

Beside that Taylor and Baker (1994) stated that the results of empirical efforts to validate the specific nature of the relationship between service quality, consumer satisfaction, and purchase intentions have supported both possible relationships among the constructs (i.e., SERVQUAL, satisfaction, purchase intentions; satisfaction, SERVQUAL, purchase intentions).

# 2.5 Conceptual Model for Consumption

Based on a preceding study by Tan and Farley (1987), Donthu and Cherian (1994) affirmed that studies about ethnic consumption had been limited customer goods e.g., clothing, and food. Studies on the consumption of financial goods according to ethnic groups were rarely done before it.

The conceptual model of this study is based on strongly postulate relationships of culture-income and culture-service. Customers' indifferent cultures may have different levels of service expectation, because cultures differ in their patterns of behavior and attitudes (Donthu & Yoo, 1998). Income is independently influenced by culture. Household consumption is always maintained even though its income decreases (Duesenberry, 1949), because household consumption is a habitual expenditure.

Culture, SERVQUAL, and income are independent variables. Culture, service and income variables are measured using LOV, SERVQUAL and consumer expenditure per month (Figure 2).

# 2.6 Hypotheses

A set of hypotheses is developed based on consumption factors for financial products among Minangkabau and Chinese customers. LOV, SERVQUAL, and consumer expenditure per month are endogenous variables that influence saving and credit consumption between Minangkabau and Chinese customers.

Ha<sub>1</sub>.There is significant difference in preference between Minangkabau and Chinese customers in Bank Nagari. Minangkabau customers outnumbers the Chinese customers. The Minangkabau are constituted of micro, small and middle entrepreneurs. Conversely, Chinese customers are involved in medium enterprises. Customers attitude is seen through LOV, SERVQUAL and consumer expenditure per month variables in relation to saving and credit consumption in Bank Nagari. Beside that the Chinese ethnics are more sensitive to the changing market interest rate, resulting in the fluctuation of their behaviour.

Therefore, there are significant differences in cultural values, SERVQUAL and income between the Minangkabau and Chinese customers with relevance to consumption. Specifically, this hypothesis postulates that:

Ha<sub>1.1</sub> There is significant difference between Minangkabau and Chinese LOV to financial products consumption.

Ha<sub>1.2</sub>There is significant difference between Minangkabau and Chinese SERVQUAL to financial products consumption.

 ${\bf Ha_{1.3}}$  There is significant difference between Minangkabau and Chinese household expenditure to financial products consumption .

Ha<sub>2</sub>.There is a positive relationship between consumption and SERVQUAL SERVQUAL has a positive relationship with saving and credit product consumption, meaning that an increase in SERVQUAL increases product consumption. Service has a two-way relationship with product consumption. In other words consumption changes due to changes in the SERVQUAL expected by customers.

Ha<sub>3</sub>. There is a positive relationship between consumption and expenditure per month. Income through expenditure per month influences saving and credit consumptions i.e., the extent to which consumption changes is determined by changes in expenditure per month. It has a positive and two-way relationship with product consumption.

#### 3. Methods

# 3.1 Sampling Procedure

The population comprised of all Minangkabau and Chinese customers of Bank Nagari in Padang. To select the respondents, a list of saving-credit customers were obtained from the bank and names were selected randomly. This technique is called systematic random sampling. Systematic random sampling is a method of sample selection, whereby only initially the sample is selected at random, while the selection process hereafter is carried out systematically according to a certain pattern. In addition, systematic sampling often yields sampling error which is smaller. It caused by divergent sample member flattened in all population. According to Mantra and Kasto (1989) systematic sampling can be run at two situations. First, if there are names or identification in the elementary set of population list (sampling framework), that set can be given a series of numbers. Second, if that population have a regular pattern, then the sample size would be determined in accordance with the assumption of the desired precision level, the desired confidence level and a standard deviation.

Subsequently data were collected in one round by trained interviewers using questionnaire. Interview sessions were conducted most often in the afternoon. The one round personal interview was done with the consideration for the limited time the merchants could spare to be able to do interviews repeatedly. Data type is cross sectional data that provide information on a group of entities at a given time and differ from the time series data that provide information on one entity time. Data collection was carried out in May to August 2003.

Padang is the leading port on Sumatra's west coast and is now the main city of the Minangkabau of West Sumatra. The city's port, formerly Emmahaven, lies at the mouth of the Padang River at a point 5 miles (8 km) to the south of the city. Originally Padang is a bunker port for coal from the Umbilin coalfields, now it also ships coffee, rubber, cinnamon, tea, nutmeg, rattan, and plywood. Based on the 1990 census data, Padang had a population of 631.263 people, in 2000 the amount was 713.242 people. Based on SUSENAS 2001 'national economic social survey' data its population amounted to 720.783 people in terms of manpower. In 2001, the number was 240.192 people or 41.88 percent of the population aged more than 10 years old. Most of them (61.94 percent) worked in the trade and service sectors and the remaining were employed in other sectors. Furthermore, according to Twang (1998) Padang is one of the areas occupied by the Chinese ethnics outside Java Island. They occupy an area called 'Pondok', creating polarization within the island (Figure 3).

# 3.2 Sample Size

The purpose of sampling is to estimate population parameter value as accurately as possible. The only way to predict a parameter value from sample data is to come up with an estimate in the form of a confidence interval, usually 95% confidence interval is required for a social research.

The total population of this study was 514 customers, which was divided into two groups namely Minangkabau and Chinese. There were some assumptions in the sample size determination between Minangkabau and Chinese. This is in line with Parasuraman's (1986) idea:

- (1) The desired precision level is 10%. The desired precision level, is the magnitude of the ± term that the researcher (or decision maker) is willing to tolerate. It means the researcher wants to estimate the percentage of a population that owns Bank Nagari product accounts within a margin error of 10%.
- (2) The desired confidence level is 95%. The desired confidence level is degree of confidence that the decision maker wants to have in the interval estimate.
- (3) A standard deviation (the degree of variability in the population) is accounted by the minimum and maximum value of the variable in the population. If the variable value for the population unit can be assumed to be normally distributed, the standard deviation can be estimated as follows:

$$s = \underline{\text{Maximum Value} - \text{Minimum Value}} \dots (1)$$

This expression is derived in such a way that, given a group of numbers that are normally distributed, almost all the numbers will be included in the interval formed by the group mean ± three standard deviation. In other words, the difference between the largest and smallest numbers in the group should be approximately equal to six standard deviations (Parasuraman, 1986). Because the minimum and maximum values of the variable in the population are unknow hence deviation standard was specified at arbitrarily 75%.

Then, given a desired precision level (c), a desired confidence level (q), and an estimate of the standard deviation (s), the following equation can be established (Parasuraman, 1986):

$$c = \underline{Z}_{\underline{q}}\underline{s} \dots (2)$$

$$\sqrt{n}$$

One can square both sides of equation 5 and rewrite it as follows:

one can square both sides of equation 3 and rewrite it as follows:  

$$n = \underline{Z_q^2 s^2} \dots (3)$$

where n = sample size,  $Z_q = -\text{desired confidence level}$ , s = standard deviation and c = a desired precision. Equation 6 can be used to determine sample size, irrespective of whether the objective is to estimate a population mean.

In this study, the researcher wanted to estimate the number of sample size to be taken with assumption marginal of error  $\pm$  10 %, confidence level 95% and standard deviation arbitrarily 75%. Thus, c = 10%, s = 75% and  $Z_q = 1.96$ (corresponding to a confidence level of 95%) notice that c and s are expressed in the same unit. The value of n can be derived by using equation (6), where  $n = (1.96)^2 (0.75)^2 / (0.10)^2 = 216$  customers, approximately. By virtue of the ethnic composition within the bank's saving-credit customers list 75% Minangkabau would amount to162 persons and 25% Chinese would amount to 54 persons.

# 3.3 Instrument

Generally, there were two important steps in choosing indicators and variables that would best represent consumption (Paim, 1993). First, an inspection of face validity or logical validity of the variables, and inspection of unidimentionality of the indicators were carried out. The chosen variables are those which would logically indicate consumption, and from which a composite indicator could be developed. The composite indicator has values ranging from low to high. Second, the amount of variance provide by those variables and the bivariate relationships among them were examined. A variable would not be very useful in the creation of a measure if no one responds to that variable or everybody gives the same response.

Furthermore, the variables were trying to measure namely culture, SERVQUAL and income. Culture variable is measured by self-fulfillment, excitement, sense of accomplishment, self-respect, sense of belonging, being well respected, security, fun and enjoyment in life and warm relationships with other. SERVQUAL is measured by one of the three alternative service quality measurement formats (Parasuraman et al., 1994; Cronin & Taylor, 1992). Meanwhile, income variable is measured by household expenditure per month.

The questionnaire was pre-tested prior to the actual interview. Based on the pretest, some adjustments and modifications would be made to improve the questionnaire. According to Hunt, Sparkman, and Wilcox (1982) the questionnaire pre-test can be done by face-to-face interview but this opinion was objected by Parasuraman (1986), because being face to face with respondents may suggest problem areas or points of confusion that may otherwise go unnoticed. Parasuraman (1986) generally suggested that the pre-test is first conducted by using personal interviews and a second pre-test should be conducted using the proposed questionnaire administration method. The purpose of this method of pre-test is to detect problems that may be unique to the way in which the questionnaire is to be administered.

To be more accurate in data analysis, a researcher ought to first test reliability and validity of the questionnaire. Nunnally (1978) proposed using alpha values or the Cronbach's coefficient alpha test between 0.5 and 0.6 for exploratory studies. However, Peter (1979) refuted his suggestion by saying that these measures should not be taken as

the absolute standard for market research and as Guilford cited in Tay (1998), an alpha value of even 0.35 is applicable in some cases. To test reliability and validity, the present study used SPPS-11.5.

# 3.4 Factor Analysis

Factor analysis is used to reduce recommended variable as independent variables which influence ethnic consumption. The KMO test and Bartlett's and correlation anti-image were used to know the feasibility of these variables. A Variable is feasible if the KMO test and Bartlet's and anti-image correlation are above 0.50 (Santoso, 2001). If the anti-image correlation from a variable is below 0.50, hence that variable has to be dismissed, and factor analysis have to be carried out again on the variable until the KMO and Bartlet's and anti-image correlation are above 0.50. After each KMO test and Bartlett's and anti-image correlation is feasible, this variable can be accepted in the form of variable which have been reduced. To enable every variable to be used in regression analysis, each factor would deputize the variables in the form of score (Santoso, 2001).

# 3.5 The Consumption Equation

The logit models are appropriate to solve the consumption models. Hence, the dependent variable takes a binary form here. Such model is known as linear probability or binary choice model. If it is estimated by regressing the dummy variable P against culture, SERVQUAL and income variables, the residual will be heteroscedastic. Hence, the application of ordinary least square (OLS) will yield inefficient estimates (Ramanathan, 1992).

Thus, the logit model has the following functional form as follow:

Ln { P/1-P } = 
$$\beta_1 + \beta_2 X_{1t} + \beta_3 X_{2t} + \beta_4 X_{3t} + e_t$$
 .....(4)

where P is the value of the dependent variable between 0 and 1. 1 is for Minangkabau consumption and 0 is for Chinese consumption, t subscript = 1 ...n indexes the cross-section observation,  $\beta_1$  is intervening variable,  $\beta_2,\beta_3,\beta_4$  are LOV, SERVQUAL and income parameter respectively,  $X_1,X_2,X_3$  subscript are LOV, SERVQUAL and income, and e is error. If an ordinary regression model is used in such case, there is assurance that the predicted value will lie between 0 and 1 (Ramanathan, 1992). Thus, the rationale for this form can be seen by solving the equation for P (by first exponentiation both sides). It then obtains the probability that the dependent variable takes the value P, as follows:

$$P = 1/1 + e^{-(\beta_1 + \beta_2 X_1 + \beta_3 X_2 + \beta_4 X_1 + e)}.$$
 (5)

It is easy to see that if  $(\Sigma \beta_i X_{it}) = +\infty$ , P is 1, and when  $(\Sigma \beta_i X_{it}) = -\infty$ , P takes the value 0. Thus, P can never deviate from the range 0, 1 (Ramanathan, 1992; Lehmann, Gupta & Steckel, 1998). The estimation procedure depends on whether the observed P is between 0 and 1. Alternatively, whether it is binary and takes the value 0 or the value 1. In the case in which P is strictly between 0 and 1, the method is simply to transform P and obtain  $C = Ln \{ P/1-P \}$ . Then C is regressed against LOV, SERVQUAL and income variables. When P is binary the logarithm of P/1-P is undefined.

The marginal effect of X on P is calculated by taking the partial derivative of P with respect to an estimated marginal effect as given below:

$$\begin{split} &\Delta P/\Delta X_1 = \beta_2 \; e^{-(\beta_1 + \beta_2 X_1 + \beta_3 X_2 + \beta_4 X_3)}/1 + e^{-(\beta_1 + \beta_2 X_1 + \beta_3 X_2 + \beta_4 X_3)} \\ &\Delta P/\Delta X_2 = \beta_3 \; e^{-(\beta_1 + \beta_2 X_1 + \beta_3 X_2 + \beta_4 X_3)}/1 + e^{-(\beta_1 + \beta_2 X_1 + \beta_3 X_2 + \beta_4 X_3)} = \beta_3 P(1 - P)(10) \\ &\Delta P/\Delta X_3 = \beta_4 \; e^{-(\beta_1 + \beta_2 X_1 + \beta_3 X_2 + \beta_4 X_3)}/1 + e^{-(\beta_1 + \beta_2 X_1 + \beta_3 X_2 + \beta_4 X_3)} = \beta_4 P(1 - P)(11) \end{split}$$

Then the ethnic consumption equation will be written according to the above model concept as follows:

# Saving

$$C_{\text{saving}} = \beta_1 + \beta_2 X_{1t} + \beta_3 X_{2t} + \beta_4 X_{3t} + e_t \dots (9)$$

where  $C_{saving}$  is binary variable i.e., Minangkabau saving is 1 and Chinese saving is 0.  $X_1, X_2$ , and  $X_3$  are LOV, SERVQUAL and income variables respectively.  $\beta_1$  is intervening variable,  $\beta_2$ ,  $\beta_3$ , and  $\beta_4$ , are LOV, SERVQUAL and income coefficients and e is error.

#### Credit

$$C_{Credit} = \beta_1 + \beta_2 X_{1t} + \beta_3 X_{2t} + \beta_4 X_{3t} + e_t$$
....(10)

where  $C_{credit}$  is binary variable i.e., Minangkabau credit is 1 and Chinese credit is 0.  $X_1, X_2$ , and  $X_3$  are LOV, SERVQUAL and income variables respectively.  $\beta_1$  is intervening variable,  $\beta_2$ ,  $\beta_3$ , and  $\beta_4$  are LOV, SERVQUAL and income coefficients and e is error.

# 4. Results and discussion

#### 4.1 Respondents' profile

Of the 200 respondents in the study, 75.0% were Minangkabau and 25.0% were Chinese. The majority of them were within the age of < 50 years (59.5%). Most respondents were male (75.5%). Almost all respondents 98.5% were married and 1.5% were separated. More than half (68.5%) of the respondents' education was at the high school level

and 26.0% of respondents were university degree holders. Majority of the respondents (94.5%) were traders, 1.5% were manufacturers, 2.5% were distributors, and 1.5% were of other professions such as lawyer and doctor (Table 3).

#### 4.2 The Variable Test

### 4.2.1The questionnaire test of culture

The reliability analysis indicate that self-fulfillment (c1), excitement (c2), sense of accomplishment (c3), self-respect (c4), sense of belonging (c5), being well respected (c6), security (c7), fun and enjoyment in life (c8), and warm relationships with others (c9) instruments are valid. This indicates that the validity analysis in corrected item-total correlation or r-account is positive (Table 6), more than the t-table in degree of freedom (df = 200-2) 198 and significance level 5% namely 0.091.

Furthermore, the instruments above are reliable. It is shown that r-alpha ( $\alpha$ ) or Cronbach's test 0.916 has a higher positive value than r-table 0.091. So can be conclude based on the validity and reliability analyses that the cultural instrument is valid and reliable. Factor analysis was used to lessen cultural variables to become a dominant cultural variable (Table 4).

#### 4.2.2 The Culture variable validity test

KMO and Bartlett's test performed resulted a value of 0.924 and significant at 0.000 level. The point is over 0.5 and significantly below 0.05 (0.000<0.05). So the variables can be used for further analysis. Moreover in anti-image correlation, especially on correlation identified with superscript "a". Supercript "a" indicates measures of sampling adequacy (MSA). MSA is found for self-fulfillment (c1), excitement (c2), sense of accomplishment (c3), self-respect (c4), sense of belonging (c5), being well respected (c6), security (c7), fun and enjoyment in life (c8), and warm relationships with others (c9) with values more than 0.5. It means that the nine of culture variables can be utilised in the further analysis (Table 5).

#### 4.2.3 The Culture variable rotation

All nine variables are researched through the factoring process and can be reduced to become just one factor as seen in Table 8. This table of component matrix in factor analysis displays the nine variables as one factor. The one factor consists of self-fulfillment vs. no self-fulfillment (c1), excitement vs. sadness (c2), sense-accomplishment vs. sense-foolishness (c3), self-respect vs. no self-respect (c4), sense of belonging vs. sense of consuming (c5), being well respected vs. being unrespected (c6), security vs. insecurity (c7), fun and enjoyment in life vs. displeasure in life (c8), and warm relationships with others vs. cold relationship with others (c9) variables (Table 6).

#### 4.2.4 The questionnaire test of saving

The reliability analysis indicates that some statements regarding the saving product are valid i.e., when these institutions promise to do something by a certain time, they should do so (p1), when customers have problems, these institutions should be sympathetic and reassuring (p2), these institutions should be dependable (p3), they should provide their saving services at the time they promise to do so (p4), they should keep their records accurately (p5), they should not be expected to tell their customers exactly when saving services will be performed (p6), it is not realistic for customers to expect prompt service from employees of these institutions (p7), their employees do not always have to be willing to help customers (p8), it is okay if they are too busy to respond to customer requests promptly (p9), customer should be able to trust employees of these institutions (p10), customer should be able to feel safe in their transactions with these institutions' employees (p11), their employees should be polite (p12), their employees should get adequate support from these institutions to do their jobs well (p13), these institutions should not be expected to give customers individual attention (p14), employees of this institution cannot be expected to give customers personal attention (p15), it is unrealistic to expect these institutions to have their customers' best interest at heart (p16), it is unrealistic to expect employees to know what the needs of their customers are (p17), they should not be expected to have operating hours convenient to all their customer (p18), they should have up-to-date equipment and technology (p19), their physical facilities should be visually appealing (p20), their employees should be well dressed and appear neat (p21) and the appearance of the physical facilities of these institutions should keep up with the type of service provided (p22). Results from the corrected item-total correlation or r-account positive (Table 7) are more than the r-table 0.091 in degree of freedom (df = 200-2) 198 and significance level 5%.

Furthermore, the variables above are reliable. It is shown that r-alpha 0.949 is more positive than the r-table 0.091. So based on reliability analysis, the twenty-two variables of saving product service quality are valid and reliable. Likewise, the saving instrument underwent the similar process as the cuoltural instrument above. Factor analysis was used to lessen SERVQUAL instrument for saving to become some factors.

#### 4.2.5 The saving variable validity test

KMO and Bartlett's test were performed to test the feasibility of the saving variables. The result of the test indicated that the value of KMO and Bartlett test were 0.916 and significant at 0.00 level as seen in Table 8. The point is > 0.5

and significant point < 0.05 (0.000<0.05) then the variables and samples can be used for the next analysis. Moreover in anti-image correlation, especially on correlation identified with superscript "a" MSA. MSA was found to be more than 0.5 i.e., when these institutions promise to do something by a certain time, they should do so (p1), when customers have problems, these institutions should be sympathetic and reassuring (p2), these institutions should be dependable (p3), they should provide their saving services at the time they promise to do so (p4), they should keep their records accurately (p5), they should not be expected to tell their customers exactly when saving services will be performed (p6), it is not realistic for customers to expect prompt service from employees of these institutions (p7), their employees do not always have to be willing to help customers (p8), it is okay if they are too busy to respond to customer requests promptly (p9), customer should be able to trust employees of these institutions (p10), customer should be able to feel safe in their transactions with these institutions' employees (p11), their employees should be polite (p12), their employees should get adequate support from these institutions to do their jobs well (p13), these institutions should not be expected to give customers individual attention (p14), employees of this institution cannot be expected to give customers personal attention (p15), it is unrealistic to expect these institutions to have their customers' best interest at heart (p16), it is unrealistic to expect employees to know what the needs of their customers are (p17), they should not be expected to have operating hours convenient to all their customer (p18), they should have up-to-date equipment and technology (p19), their physical facilities should be visually appealing (p20), their employees should be well dressed and appear neat (p21) and the appearance of the physical facilities of these institutions should keep up with the type of service provided (p22). It means that twenty-two of the saving service quality variables can be analyzed further (Table 8).

#### 4.2.6 The saving variable rotation

All the twenty-two variables researched through the factoring process can be reduced to just three factors. Table rotated component matrix in factor analysis displays the twenty-two variables on the three factors (Table 9).

The first factor is named SSERVQUAL-1. This factor expresses that when these institutions promise to do something by a certain time, they should do so (p1), when customers have problems, these institutions should be sympathetic and reassuring (p2), these institutions should be dependable (p3), they should provide their saving services at the time they promise to do so (p4), they should keep their records accurately (p5), it is not realistic for customers to expect prompt service from employees of these institutions (p7), their employees do not always have to be willing to help customers (p8), it is okay if they are too busy to respond to customer requests promptly (p9), customer should be able to trust employees of these institutions (p10), customer should be able to feel safe in their transactions with these institutions' employees (p11). In SSERVQUAL-1, it is evident that saving product customers want reliability, responsiveness and assurance from the product they use. Customers' perception of reliability of this institute is very dominant in this case. In providing saving services to its customers, financial institutions ensure their continued existence. Technology does not determine service, it merely gives the character of extending the service. Service is very much determined by service quality from employers of the financial institutions.

The second factor is named SSERVQUAL-2, asserting that employees should be polite (p12), it is unrealistic to expect these institutions to have their customers' best interest at heart (p16), they should not be expected to have operating hours convenient to all their customer (p18), they should have up-to-date equipment and technology (p19), their physical facilities should be visually appealing (p20), their employees should be well dressed and appear neat (p21) and the appearance of the physical facilities of these institutions should keep up with the type of service provided (p22). In this case, customers that have experiences would accept and support adequate service facilities provided by the bank. Superior service is deemed the best customer experience.

The third factor is named SSERVQUAL-3, which outline that financial institutions should not be expected to tell their customers exactly when saving services will be performed (p6), their employees should get adequate support from these institutions to do their jobs well (p13), these institutions should not be expected to give customers individual attention (p14), employees of this institution cannot be expected to give customers personal attention (p15), and it is unrealistic to expect employees to know what the needs of their customers are (p17). This differ from the original SERVQUAL by Parasuraman, Zeithaml, and Berry as illustrated in the table 15. Goleman (1995) expressed that empathy represents one of the abilities that are most important apart from one's emotional intelligence. One should not only be able to recognize another person's emotions and self-awareness, manage his emotion, and motivate oneself, more than that he also should be able to know and feel the emotional feelings of others. This capacities and abilities are called empathy. Empathy have big role in forming customer experience because service "unforeseen" which is given as the result of employees' ability to feel what a customer feels can seldom awaken memorable experience to the customer.

# 4.2.7 The questionnaire test of credit

The validity analysis indicates that 22 statements of credit product are valid i.e., when these institutions promise to do something by a certain time, they should do so (p1), when customers have problems, these institutions should be sympathetic and reassuring (p2), these institutions should be dependable (p3), they should provide their credit services

at the time they promise to do so (p4), they should keep their records accurately (p5), they should not be expected to tell their customers exactly when credit services will be performed (p6), it is not realistic for customers to expect prompt service from employees of these institutions (p7), their employees do not always have to be willing to help customers (p8), it is okay if they are too busy to respond to customer requests promptly (p9), customer should be able to trust employees of these institutions (p10), customer should be able to feel safe in their transactions with these institutions' employees (p11), their employees should be polite (p12), their employees should get adequate support from these institutions to do their jobs well (p13), the statements of these institutions should not be expected to give customers individual attention (p14), employees of this institution cannot be expected to give customers personal attention (p15), it is unrealistic to expect these institutions to have their customers' best interest at heart (p16), it is unrealistic to expect employees to know what the needs of their customers are (p17), they should not be expected to have operating hours convenient to all their customers (p18), they should have up-to-date equipment and technology (p19), their physical facilities should be visually appealing (p20), their employees should be well dressed and appear neat (p21) and the appearance of the physical facilities of these institutions should keep up with the type of service provided (p22), where corrected item-total correlation or r-account positive more than r-table in degree of freedom (df = 200-2) 198 and significant level 5% namely 0.091. Furthermore, the variables above are reliable. It is shown that r-alpha 0.947 is a higher positive value than r-table 0.091 (Table 10).

# 4.2.8 The credit variable validity test

KMO and Bartlett's test performed at 0.919 with significance 0.000. The point is over 0.5 and it significance is below 0.05 (0.000<0.05) then the variables and samples can be used for the further analysis. Moreover in anti-image correlation, especially on correlation point "a" sign as seen in Table 11 MSA was found to exceed 0.5, i.e., when these institutions promise to do something by a certain time, they should do so (p1), when customers have problems, these institutions should be sympathetic and reassuring (p2), these institutions should be dependable (p3), they should provide their credit services at the time they promise to do so (p4), they should keep their records accurately (p5), they should not be expected to tell their customers exactly when credit services will be performed (p6), it is not realistic for customers to expect prompt service from employees of these institutions (p7), their employees don't always have to be willing to help customers (p8), it is okay if they are too busy to respond to customer requests promptly (p9), customer should be able to trust employees of these institutions (p10), customer should be able to feel safe in their transactions with these institutions' employees (p11), their employees should be polite (p12), their employees should get adequate support from these institutions to do their jobs well (p13), the statements of these institutions should not be expected to give customers individual attention (p14), employees of this institution cannot be expected to give customers personal attention (p15), it is unrealistic to expect these institutions to have their customers' best interest at heart (p16), it is unrealistic to expect employees to know what the needs of their customers are (p17), they should not be expected to have operating hours convenient to all their customers (p18), they should have up-to-date equipment and technology (p19), their physical facilities should be visually appealing (p20), their employees should be well dressed and appear neat (p21) and the appearance of the physical facilities of these institutions should keep up with the type of service provided (p22). It means that the twenty-two variables of credit service quality can be involved in further analysis (Table 11).

#### 4.2.9 The credit variable rotation

The variables above can be reduced to become just three factors. It is a different classification compared to the original SERVQUAL by Parasuraman, Zeitham and Berry as seen in Table 12.

The first factor is named CSERVQUAL-1. Fifty percent (11 out of the credit 22) service variable were included in this factor. That is when these institutions promise to do something by a certain time, they should do so (p1), when customers have problems, these institutions should be sympathetic and reassuring (p2), these institutions should be dependable (p3), they should provide their credit services at the time they promise to do so (p4), they should keep their records accurately (p5), it is not realistic for customers to expect prompt service from employees of these institutions (p7), their employees do not always have to be willing to help customers (p8), it is okay if they are too busy to respond to customer requests promptly (p9), customer should be able to trust employees of these institutions (p10), customer should be able to feel safe in their transactions with these institutions' employees (p11), and their employees should be polite (p12). In credit product (CSERVQUAL-1), customers also want reliability, responsiveness and assurance, which means that the product they use can solve the business problem they face. Total variable explained by CSERVQUAL-1 is 50.1%.

The second factor is named CSERVQUAL-2. In this factor 6 out of 22 credit service were included (27.3%). Within this factor, it is unrealistic to expect these institutions to have their customers' best interest at heart (p16), they should not be expected to have operating hours convenient to all their customers (p18), they should have up-to-date equipment and technology (p19), their physical facilities should be visually appealing (p20), their employees should be well dressed and appear neat (p21), and the appearance of the physical facilities of these institutions should be in keeping

with the type of service provided (p22). CSERVQUAL-2 indicates that credit customer want visual facilities support from bank supporting to its business road and accepted memorable experience from employee. This matter is not absolute for the Minangkabau customers, where they have by generations become Bank Nagari customer. Total variance explained by CSERVQUAL-2 is 12.1%

The third factor is named CSERVQUAL-3. Within this factor, only 5 out of 22 credit services included i.e., financial institutions should not be expected to tell their customers exactly when credit services will be performed (p6), their employees should get adequate support from these institutions to do their jobs well (p13), the statements of these institutions should not be expected to give customers individual attention (p14), employees of this institution cannot be expected to give customers personal attention (p15) and it is unrealistic to expect employees to know what the needs of their customers are (p17). Customer will improve usage of credit product if it is associated with good memorable experience. Parallel to that, if the faith level customer to a product has been good and memorable hence his faith will become excelsior. For the case of Bank Nagari its credit product is observed to have SERVQUAL-3, stressing empathy to service quality, meaning there were frictions from previous service quality. Total variance explained by CSERVQUAL-3 is only 5%. Referring to the finding by Parasuraman, Zeitham and Berry in Kartajaya al et. (2003), <sup>60</sup> reliability is among the five service dimensions assumed to be most important by customers. The five dimensions contribution are reliability (32%); responsiveness (22%); assurance (19%); empathy (16%); and tangibles (11%).

#### 4.2.10 The questionnaire test of income

The validity analysis indicates that food (y1), celebration (y3), housing (y6) and credit (y10) are valid variables because the reliability analysis in corrected item-total correlation more than r-table on df=200-2=198, significant level ( $\alpha$ ) 5% and r-table 0.091. Conversely, clothing (y2), education (y4), health (y5), recreation (y7), transportation (y8), saving (y9), and other (y11) are invalid as the value of the corrected item-total correlation is less than t-table<sub>(df=198,  $\alpha$ =5%)</sub> 0.091. As a result, income variables have to be retested. Reliability test eventually shows that r-alpha; 0.2221 is more than r-table; 0.091 indicating reliability of the income variable.

The second validity test of income instruments indicate that food (y1), celebration (y3), housing (y6), and credit (y10) are valid, and reliability test shows the income instruments are reliable (Table 13b).

# 4.2.11 The income variable validity test

The value of KMO and Bartlett's test performed was 0.529 which was significant at 0.000. The value is over 0.5 and significant below 0.05 (0.000<0.05) than the variables and samples can be used for the next analysis. Moreover, in anti-image correlation, especially on correlation point "a" sign MSA found for food (y1), housing (y6) and credit (y10) were more than 0.5. It means that the three income variables can be analyzed further. It is summarized in Table 16a and Table 16b. Thus, celebration (y3) have to be dropped of the analysis because the variability is less than 0.50. The re-factor analysis found that y1, y6 and y10 are more than 0.50, meaning that only three variables can be used for the next analysis (Table 14).

#### 4.2.12 The income variable rotation

The variables above can be reduced to become just one factor consisting of food (y1), housing (y6) and credit (y10). Housing expenditures include expenditures in utility bills: water, electricity, telephone and hand phone while credit incorporates expenditure in the Bank credit repayment. There are two distinct behaviors in the expenditure pattern of Minangkabau and Chinese households concerning food, housing and credit. The Minangkabau behavior in the expenditure on food more have the character of sustaining their living, that is the tendency earn only sufficiently for daily and expenses without concerning themselves with future plans. Capital accumulation is only attained through addition efforts and future consumption depends on future conditions. Besides that, the amount of saving generated by this ethnic group is relatively small and expensive purchases need the support from local banks. Minangkabau expenditures for housing and credit are always not supported. Minangkabau customers use their houses only as residence while they trade at different places. House represents a separate pride to a Minangkabau customer. Ownership of other facilities such as cars is a second any matter. Home ownership is important for a Minangkabau family. They will strive to get homes either through their achievements work or until they can afford to build good house. Besides that, home ownership is important because the Minangkabau society embraces their mother lineages (matriarchal families).

#### 4.3 Binomial Logistic Regression Results

#### 4.3.1 Credit Products

Table 15 and 16 present the mean and standard deviation of credit, culture and income variables. Generally the mean value of credit products, culture, and income are bigger than the standard deviation value of credit, culture, and income. It can be concluded that each of the variables are feasible for the next analysis. Additionally, the means for housing and credit are smaller than their standard deviations meaning that both variables must be excluded from analysis.

Table 17 indicates that the model is feasible for the next analysis because its probability point or Hosmer and Lemeshow Goodness-of-Fit Test is .075 which is more than .050. It means there is no real difference between predicted and observed result. As for the results of the t-test in Table 17, all of the variables are significant statistically (see significant point), but income coefficient have a negative sign. It is really different from the theoretical concept above.

In equation form of credit binomial logistic regression can be rewritten as follow:

```
C_{credit} = 3,095+1,728x1t+0,657x2t-3,917x3t....(11)
```

where the probability of Minangkabau credit consumption is  $1/(1+e^{-(3,095+1,728x1t+0,657x2t-3,917x3t)})$  and the probability of Chinese credit consumption is  $1/(1+e^{3,095+1,728x1t+0,657x2t-3,917x3t})$ . The interpreting of Minangkabau credit consumption is Minangkabau consumption changes is 1,728 p $^{\wedge}$  (1-p $^{\wedge}$ ) due to changes in the culture is 1. Minangkabau consumption changes is 0,657 p $^{\wedge}$  (1-p $^{\wedge}$ ) due to changes in the credit SERVQUAL is 1. Thus, Minangkabau consumption changes is -3,917 p $^{\wedge}$  (1-p $^{\wedge}$ ) due to changes in the income is Rp.1,-

Whereas for Chinese credit consumption as follow: The interpreting of Chinese credit consumption is Chinese consumption changes is -1,728(1-  $p^{\wedge}$ )  $p^{\wedge}$  due to changes in the culture is 1. Chinese consumption changes is -0,657(1- $p^{\wedge}$ )  $p^{\wedge}$  due to changes in the credit SERVQUAL is 1. Thus, Chinese consumption changes is 3,917(1- $p^{\wedge}$ )  $p^{\wedge}$  due to changes in the income is Rp.1,-

Furthermore there are some reason for the negative sign of income namely income psychometric and disconnected consumption (money decision) to income. In this case all customers were asked to compare their expenditure and determine which expenditure is larger from the other. In doing the comparison, subjects are not allowed to express that two expenditures are of equal size, so that they are obliged to determine that one expenditure is larger than the other. Therefore, the level of customer expenditure can be established. Expenditure level in its influence to consumption gives negative inclination. In fact, customer choices with existence of the make-up of earnings are indirectly related and to make-up of usage of financial products. Whereas, the real consumption for example food, payment of water bill, electricity, hand-phone and telephone are directly correlated.

From the ethnic consumption model (Minangkabau-Chinese) of credit products above it can be concluded that ethnic consumption is determined by culture and customer perception from consuming the credit product, and a positive relation means that the make-up of cultural values and customer perception to credit proportionally improve ethnic consumption.

# 4.3.2 Saving Products

Furthermore, Table 18 below exhibits that means for saving products are bigger than standard deviation. It indicates that each variable is feasible for the next analysis. The next analysis is presented in Table 18. Table 19 indicates that the model is doubtful in its significance value at .05.

Thus, table 19 indicates that the significant probability of Hosmer and Lemershow goodness-of-fit test is small and equal with  $.05 \le .05$ ). It indicates that the saving model can be concluded as an feasible model for the next analysis because the probability point or Hosmer and Lemeshow Goodness-of-Fit Test is at .05, which means that there is not real difference between prediction and observation classification. Results of the t-test presented in this table show that culture, saving, and income variables are statistically significant (see significance point).

In equation form of saving binomial logistic regression can be rewritten as follow:

$$C_{\text{saving}} = 3,192+1,630x1t+0,754x2t-3,862x3t$$
....(12)

where the probability of Minangkabau saving consumption is  $1/(1+e^{-(3,192+1,630x1t+0,754x2t-3,862x3t)})$  and the probability of Chinese saving consumption is  $1/(1+e^{3,192+1,630x1t+0,754x2t-3,862x3t})$ . The interpreting of Minangkabau saving consumption is Minangkabau consumption changes is  $1,630p^{\wedge}(1-p^{\wedge})$  due to changes in the culture is 1. Minangkabau consumption changes is  $0,754p^{\wedge}(1-p^{\wedge})$  due to changes in the saving SERVQUAL is 1. Thus, Minangkabau consumption changes is  $-3,862p^{\wedge}(1-p^{\wedge})$  due to changes in the income is Rp.1,-

Whereas for Chinese saving consumption as follow: The interpreting of Chinese saving consumption is Chinese consumption changes is -1,630(1-  $p^{\wedge}$ )  $p^{\wedge}$  due to changes in the culture is 1. Chinese consumption changes is -0,754(1- $p^{\wedge}$ )  $p^{\wedge}$  due to changes in the saving SERVQUAL is 1. Thus, Chinese consumption changes is 3,862(1- $p^{\wedge}$ )  $p^{\wedge}$  due to changes in the income is Rp.1,-

From the ethnic consumption model between the Minangkabau and Chinese in saving products above one can conclude that at significance level 0.05 ethnic consumption is determined by culture and consumer perception from consuming the saving products, and has a positive relation which means that the make-up of culture and customer perception to saving proportionally improve ethnic consumption.

#### 4.4 Analysis of Varian (ANOVA)

From Table 20 below the result shows that ANOVA of Culture, SERVQUAL, and income among Minangkabau and Chinese customers have significantly probability. The significant (Sig.) of culture is .000 less than 0.05. Its means there

is difference in the LOV among Minangkabau and Chinese customers. The sig. of saving (.000) and credit (.000) SERVQUAL are less than 0.05. Its means there is difference in saving and credit SERVQUAL among Minangkabau and Chinese customers. Thus, the sig. of income is .000 less than 0.05. Its mean there is difference in income among Minangkabau and Chinese.

Generally, Infer that from results of the ANOVA, there are significant differences of culture, saving, credit, and income in relation to ethnic consumption of the Minangkabau and Chinese customers. The difference in culture, SERVQUAL, and income are explained in sub-heading types of the Minangkabau and Chinese customers.

#### 4.5 Discussion

Result obtained show that culture, saving, credit and income variables are valid and reliable. This matter is seen from each r-account and r-alpha values, which are higher compared to r-table. Result of variable validity test by using factor analysis through KMO and Bartlet's test and anti-image correlation obtained show that culture, saving, credit, and income variables are bigger than .50, meaning the sample and variable can be used for the further analysis. Moreover, The factor analysis recommends that there is one factor to culture variable, three factors to saving variable, three factors to credit variable, and one factor to income variable. Credit and saving variables show that every factor has value of above .50. This means each factor strongly contributes to the formation of factor. Then this variable regresses to its probability by using logistic regression. This consumption model is significant at test by partial by using significant probability .05 and test by totally Hosmer and Lemershow Goodness-of-Fit-Test .05. From this model can be concluded that there are difference consume among saving product and credit from ethnic Minangkabau and Chinese.

Both of ethnic differentiate in Culture, SERVQUAL, and Income. The difference is caused by the consumption motive, perception and average income are difference. On Minangkabau customers are not only business orientation to use the Bank Nagari products. There is *kenagarian* factors. Whereas Chinese customers are business orientation. Chinese customers always request SERVQUAL highly. Conversely Minangkabau customers receive average in SERVQUAL. Minangkabau customers have average in income. If compared with Chinese customers have highly income. They give contribution highly in the Bank Nagari profit. Hence they get highly SERVQUAL.

#### 5. Conclusions

The following specific conclusions could be drawn from this study:

- (1) The Minangkabau and Chinese consumption model of credit and saving products significantly are dependent on culture values, customer perception to SERVQUAL, and household expenditure. For both ethnic and products that culture values and customer perception to SERVQUAL have a positive relation means that the make-up of cultural values and customer perception to both products proportionally improve ethnic consumption. Conversely household expenditure have a negative relation means that the make-down of household expenditure to both products proportionally improve ethnic consumption.
- (2) Both the consumption models uses the binary logistic model. The differences of Minangkabau and Chinese consumption model are probability each of the model. Probability expectation from Minangkababu consumption is than Chinese consumption. The probability of Minangkabau credit consumption namely  $1/(1+e^{-(3,095+1,728x1t+0,657x2t-3,917x3t)})$ and The probability of Minangkabau saving consumption namely  $1/(1+e^{-(3,192+1,630x1t+0,754x2t-3,862x3t)})$ . Thus, The probability of Chinese credit consumption namely  $e^{3,095+1,728x1t+0,657x2t-3,917x3t}$ ) and The probability of Chinese saving consumption namely  $1/(1+e^{3,192+1,630x1t+0,754x2t-3,862x3t})$ .
- (3) The interpreting of Minangkabau credit consumption is Minangkabau consumption changes is  $1,728 \text{ p}^{\wedge} (1-\text{p}^{\wedge})$  due to changes in the LOV is 1. Minangkabau consumption changes is  $0,657 \text{ p}^{\wedge} (1-\text{p}^{\wedge})$  due to changes in the credit SERVQUAL is 1. Thus, Minangkabau consumption changes is  $-3,917 \text{ p}^{\wedge} (1-\text{p}^{\wedge})$  due to changes in the income is Rp.1,-
- (4) The interpreting of Chinese credit consumption is Chinese consumption changes is  $-1,728(1-p^{\wedge})$  p<sup>\(\text{\text{}}\)</sup> due to changes in the LOV is 1. Chinese consumption changes is  $-0,657(1-p^{\wedge})$  p<sup>\(\text{\text{}}\)</sup> due to changes in the credit SERVQUAL is 1. Thus, Chinese consumption change is 3,917 (1-p<sup>\(\text{\text{}}\)</sup>) p<sup>\(\text{\text{}}\)</sup> due to changes in the income is Rp.1,-
- (5) The interpreting of Minangkabau saving consumption is Minangkabau consumption changes is  $1,630p^{\wedge}$  (1-p^) due to changes in the LOV is 1. Minangkabau consumption changes is  $0,754p^{\wedge}$  (1-p^) due to changes in the saving SERVQUAL is 1. Thus, Minangkabau consumption changes is -3,862 p^ (1-p^) due to changes in the income is Rp.1,-
- (6) The interpreting of Chinese saving consumption is Chinese consumption changes is -1,630(1-  $p^{\wedge}$ )  $p^{\wedge}$  due to changes in the LOV is 1. Chinese consumption changes is -0,754(1-  $p^{\wedge}$ )  $p^{\wedge}$  due to changes in the saving SERVQUAL is 1. Thus, Chinese consumption changes is 3,862(1-  $p^{\wedge}$ )  $p^{\wedge}$  due to changes in the income is Rp.1,-
- (7) The implication of the finding has on the consumption theory is consumption is not only function of income. In context consumption is only for daily goods consumption. But business consumption for financial products is determined by culture values, customer perception to SERVQUAL, and household expenditure.

- (8) The result of factor analysis indicates that there are three dimensions of saving products and three dimensions of credit products. The dimensions for saving products are labelled SSERVQUAL-1 (certain time, sympathy and reassurance, dependability, saving service, accurate records, prompt service, willingness to help consumers, prompt response to consumer request, trusted employees, and safe feeling), SSERVQUAL-2 (politeness, best interest at heart, convenient hours, up-to-date equipment and technology, visual appeal, well dressed and neat appearance and service type), and SSERVQUAL-3 (consumer information, adequate support, individual attention, personal attention and consumer needs).
- (9) Whereas, the dimensions of credit products are labelled CSERVQUAL-1 (certain time, sympathy and reassurance, dependability, credit service, accurate records, prompt service, willingness to help consumers, prompt response to consumer request, trusted employees, safe feeling, and politeness), CSERVQUAL-2 (best interest at heart, convenient hours, up-to-date equipment and technology, visual appeal, well dressed and neat appearance and service type), and CSERVQUAL-3 (consumer information, adequate support, individual attention, personal attention and consumer needs).

#### 6. Recommendations and Further Studies

The following points could be considered for recommendations and further studies:

- (1) The findings of the study can be used by Regional Development Banks, Bankers and financial customers. It hopes to facilitate Regional Development Bank, in attaining optimal profit. Bankers would be able to offer optimal service to its customer. This will encourage customers to use banking products and services and provide alternatives to customers in the use of banking services.
- (2) The study could also be used in identifying and developing relevant policies in helping the traders (especially small traders) managing credit and savings.
- (3) The limitation of secondary data hence measurements of consumption function by considering customer behavior, cultural aspects and perception.
- (4) Extensive studies are required on other different ethnic groups to provide a broader comparison between them for example studies on the Javaness-Chinese, Chinese-Tapanuli, Minangkabau-Tapanuli, Minangkabau-Javaness and Javaness-Tapanuli ethnics. Moreover, researchers can focus on the Chinese families and clans, which educate them to become natural entrepreneurs. The structure of the certainty of Rights in Minangkabau and Tapanuli, according to Ong Hock Ham in Roziqin (1997) could possibly impose a successful link in commerce.
- (5) Visual analysis is necessary, by using the geography Information System (GIS) along with cluster analysis, factor analysis, and logistic regression. Such method is beneficial for obtaining more accurate consumption model. GIS analysis will also be of benefit to entrepreneurs as they will have access to information regarding earlier behavior of ethnic customers in an area.

# References

Febrianto, Danu (1998, July/August). Independensi Bank Indonesia Antara Harapan dan Kenyataan. *Bank & Manajemen*, 22-24.

Idris, La Ode. (1997, October). INFOBANK, pp. 36-43.

Kimball, R. C. and Gregor, W.T. (1995). How Distribution is Transforming Retail Banking Changes Leading Banks are Making. *Journal of Retailing Banking Service*, 17 (Autumn), 1-9.

Chakravarty, S., Feinberg, R.A., and Winddows, R. (1995). What Do Customers Want from Banks?. *Journal of Retail Banking*, 17 (Summer), 15-19.

Glassman, C.A. (1995). Industry Structure: Erosion of Banks' Franchise. *Journal of Retail Banking Service*, 17 (Autumn), 53-58.

Utung Ada Bank Nagari. (2000, March 13). Mimbar Minang.

Bersama Membangun Ekonomi Ranah Minang. (2001, April). INFOBANK.

Salah Satu Penggerak Ekonomi Sumatera Barat. (2001, March). INFOBISNIS, pp. 42-43.

Hebat, BPD Sumbar Kembangkan Sayapnya Ke Pekanbaru dan Jakarta. (2000, September 28). Harian Haluan.

Junus, Umar. (1990, May). Minangkabau Suatu Paradoks. TEMPO, p. 109.

Roziqin, M.Khoerur. (1997). Keberhasilan Bisnis Cina di Indonesia : Sebuah Catatan. *Artikel Media Akuntansi*, 21, vi-xi.

Hoyt, Elizabeth Ellis. (1976). The Consumption of Wealth. New York: MacMillan pp.9-10.

Kyrk, Hazel. (1976). A Theory of Consumption. New York: Arnos-Press. pp.172-189.

Keynes, J.M. (1936). General Theory of Empoyment Interest and Money. London: MacMillan pp.96-108.

Duesenberry, James S. (1949). *Income, Saving and the Theory of Consumer Behavior*. London: Oxford University Press pp.19,110-116.

Assael, Hendry. (1998). Consumer Behavior and Marketing Action (6<sup>th</sup> ed). Ohio: South-Western College pp. 92,95, 423,459,470,479

Schiffman, Leon G and Kanuk, Leslie Lazar. (1991). *Consumer Behavior (4<sup>th</sup> ed)*. USA: Prentice Hall Englewood Cliffs p.424.

Kahle, LYNN, R., Beatty, Sharon E, & Homer, Pamela (1986). Alternative Measurement Approaches to Consumer Values: The List of Value (LOV) and Values and Life Style (VALS). *Journal of Consumer Research*, 13, 405-409.

Riddle, D. (1992). Leveraging Cultural Factors in International Service Delivery. *Advances in Services Marketing and Management*, 1, 297-322.

Pucik, V and Katz, J. (1986). Information, Control and Human Resource Management in Multinational Firm. *Human Resource Management*, 25, 121-132.

Bolton, Ruth N and Drew, James H. (1991). A Longitudinal Analysis of the Impact of Service Changes on Customer Attitudes. *Journal of Marketing*, 56(January) ,1-9.

Parasuraman, A., Zeitham, Valarie A, & Berry, Leonard L. (1988). SERVQUAL: A Multiple-Item Scale for Measuring Customer Perception of Service Quality. *Journal of Retailing*, 64(Spring), 12-40.

Bitner, Mary Jo. (1990). Evaluating Service Encounter: The Effects of Physical Surroundings and Employee Responses. *Journal of Marketing*, *54*(*April*), 69-82.

Woodruff, Robert B, Codotte, Ernest R and Jenkins, Roger L. (1983). Modeling Consumer Satisfaction Processes Using Experience-Based Norms. *Journal of Marketing Research*, 20(August), 296-304.

Brown, Stephen and Swartz, Teresa A. (1989). A Gap Analysis of Professional Service Quality. *Journal of Marketing*, 53(April), 92-98.

Carman, James M.(1990). Consumer Perceptions of Service Quality: An Assessment of the SERVQUAL Dimensions. *Journal of Retailing*, 66(1), 33-55.

Teas, R Kenneth. (1993). Expectations, Performance Evaluation, and Consumers' Perception of Quality. *Journal of Marketing*, 57(October), 18-34.

Babakus, Emin and Boller, Gregory W.(1992). An Empirical Assessment of the SERVQUAL Scale. *Journal of Business Research*, 24, 253-268.

Cronin, J Joseph Jr. and Taylor, Steven A. (1992). Measuring Service Quality: A Reexamination and Extension. *Journal of Marketing*, 56(July), 55-68.

Boulding, William, Kalra, Ajay, Staelin, Richard and Zeithaml, Valarie. (1993). A Dynamic Process Model of Service Quality: From Expectation to Behavioral Intentions. *Journal of Marketing Research*, 30(February), 7-27.

Cronin, J Joseph Jr. and Taylor, Steven A. (1994). SERVPERF Versus SERVQUAL: Reconciling Performance-Based and Perception-Minus-Expectations Measurement of Service Quality. *Journal of Marketing*, *58(January)*, 125-131.

Teas, R Kenneth. (1994). Expectations as a Comparison Standard in Measuring Service Quality: An Assessment of a Reassessment. *Journal of Marketing*, 58(January), 132-139.

Brown, Tom J, Churchil, JR Gilbert A and Peter, J Paul. (1993). Research Note: Improving the Measurement of Service Quality. *Journal of Retailing*, 69(1),127-139.

Parasuraman, A., Zeitham, Valarie A & Berry, Leonard L. (1994). Alternative Scales for Measuring Service Quality: A Comperative Assessment Based on Psychometric and Diagnostic Criteria. *Journal of Retailing*, 70(3), 201-230.

Bitner, M. (1992). Servicescope: The Impact of Physical Surroundings on Customer and Employee. *Journal of Marketing*, 56, 69-82.

Lawson, R. (1997). Consumer Decision Making Within a Goal Driven Framework. *Psyschology & Marketing*, 14(5), 427-449.

Dube, L. (1990). The Power of Affective Report in Predicting Satisfaction Judgements. *Advances in Consumer Research*, 17, 571-576.

MaCracken, Grant. (1986). Culture and Consumption: A Theoretical Account of the Structure and Movement of the Cultural Meaning of Consumer Goods. *Journal of Consumer Research*, 13, 71-84.

Tan, Chin Tiong and Farley, John V. (1987). The Impact of Cultural Patterns on Cognition and Intention in Singapore. *Journal of Consumer Research*, 13, 540-544.

Donthu, Naveen and Cherian, Joseph. (1994). Impact of Strength of Ethnic Identification Hispanic Shopping Behavior. *Journal of Retailing*, 70(4), 383-393.

Bearden, William O and Teel, Jesse E (1983). Selected Determinants of Consumer Satisfaction and Complaint Reports. *Journal of Marketing Research*, 20(February), 21-28.

Oliver, Richard L. (1980). A Cognitive Model of the Antecedents and Consequences of Satisfaction Decision. *Journal of Marketing Research*, 17(November), 460-469.

Oliver, Richard L and Swan, John E. (1989). Consumer Perception of Interpersonal Equity and Satisfaction in Transaction: A Field Survey Approach. *Journal of Marketing*, 53(April), 21-35.

LaBarbera, Priscilla A and Mazursky, David. (1983). A Longitudinal Assessment of Consumer Satisfaction/Dissatisfaction: The Dynamic Aspect of the Cognitive Process. *Journal of Marketing Research*, 20(November), 393-404.

Taylor, Steven A and Baker, Thomas L. (1994). An Assessment of the Relationship Between Service Quality and Customer Satisfaction in the Formation of Consumers' Purchase Intentions. *Journal of Retailing*, 70(2), 163-178.

Donthu, Naveen and Yoo, Boonghee. (1998). Cultural Influences on Service Quality Expectations. *Journal of Service Research*, 1(2), 178-186.

Mantra, Ida Bagoes and Kasto (1989). Penentuan Sampel, in Masri Singarimbun and Sofian Effendi (ed) *Metode Penelitian Survai*. Jakarta: LP3ES pp.159-162.

Parasuraman, A. (1986). Marketing Research. Canada: Addison-Wesley.pp.372-469.

Salvatore, Dominick. (2001). Managerial Economic (4<sup>th</sup> ed). Canada: Wesley. Pp. 372-469.

Twang Peck Yang. (1998). *The Chinese Business Elite in Indonesia and the Transition to Independence 1940-1950*. Singapore: Oxford University Press pp.18-69.

Paim, Laily. (1993). A Model for Measuring Poverty. Unpublished Doctoral Dissertation, University of Illinois, Urbana-Champaign.

Hunt, Selby, Sparkman, Richard D, and Wilcox, James B. (1982). The Pretest in Survey Research: Issues and Prelimary Findling. *Journal of Marketing Research*, 19, 269-273.

Nunnally, J.C. (1978). Psychometric Theory. New york: McGraw Hill Book Company.

Peter, J.P. (1979). Reliability: A Review of Psychometric Basic and Recent Marketing Practices. *Journal of Marketing Research*, 16 (February), 6-17

Tay, Angeline. (1998). A Psychographic Study and Discriminant Analysis of Urban Working Women in Apparel Purchase. *Malaysian Journal of Consumer and Family Economics*, 1, 116-131.

Santoso, Singgih. (2001). Buku Latihan SPSS Statistik Non Parametrik. Jakarta: PT Elex Media Komputindo pp. 118-126.

Ramanathan, Ramu. (1992). *Introductory Econometrics with Application (2<sup>nd</sup> ed*). Florida: Harcourt Brace Javanovich, Inc. pp.183, 513-526.

Lehmann, Donald, Gupta, R Sunil and Steckel, Joel H. (1998). *Marketing Research*. USA: Addison-Wesley pp.565-715.

Goleman, Daniel. (1995). Emotional Intelligence: Why It Can Matter More Than IQ. New York: Bantam Books.

Kartajaya, Hermawan, Yuswohady, Madyani, Dewi and Indrio, Bembi Dwi. (2003). *Marketing in Venus*. Jakarta: PT Gramedia Pustaka Utama pp.83-95.

# Notes

Note 1. Indonesia has central bank, is called Indonesia Bank. Indonesia Bank controls commercial, syahriah, and people credit banks (BPR). BPR bank is especially for micro banking. There is different definition between micro and small banking. Micro banking is banking activities in rural areas and provides credit up to Rp. 1 million and small banking is banking activities bigger than micro banking and it provides credit more than Rp. 1 million.

Note 2. Giro is a checking account. Giro is divided into saving and credit giro. Saving giro is checking account in saving and credit giro is checking account in credit.

Note 3. TAMI is special saving for micro /small business. KUMI and KUKI are micro/small credit for small business. KUMI and KUKI have credit maximum from Rp. 1 million up to Rp. 5 million. SIMPEDA is cooperation saving with

other Regional Bank in Indonesia and KESRA is cooperation saving with other private bank in Indonesia. Both of them are general saving.

Table 1. The network "Self-Supporting Bridge Cash (ATM)" of Government and private banks in Padang

Banks	Unit	%
Government Banks		
1. Bank Nagari BPD Sumbar	2	2
2. BNI 1946 *)	21	26
3. BRI*)	4	5
4. BTN	1	1
5. BTPN	1	1
6. Bank Mandiri*)	18	22
Private Banks		
7. Bank BCA	13	17
8. Bank Bukopin	5	6
9. Bank Mega	1	1
10. Bank Permata	1	1
11. Bank Mestika	1	1
12. Bank Lippo	5	6
13. Bank Danamon	4	5
14. Bank BII	5	6
15. Bank Muamalat	0	0
BPR	0	0
Total	82	100

<sup>\*)</sup> including syariat bank

**Source:** Personal communication with relevant banks.

Table 2. SERVQUAL Battery

Dimension	Component
Reliability	1. Providing service as promised.
	2. Dependability in handling consumers' service problems.
	3. Performing services right the first time.
	4. Providing service at the promised time.
	5. Maintaining error-free records.
Responsiveness	6. Keeping consumers informed about when service will be performed.
Responsiveness	7. Prompt service to consumers.
	8. Willingness to help consumers.
	9. Readiness to respond to consumers' requests.
	7. Readiness to respond to consumers requests.
Assurance	10. Employees who instill confidence in consumers.
	11. Making consumers feel safe in their transactions.
	12. Employees who are consistently courteous.
	13. Employees who have the knowledge to answer consumers' questions.
Empathy	14. Giving consumers individual attention.
	15. Employees who deal with consumers in a caring fashion.
	16. Having the consumers' best interest at heart.
	17. Employees who understand the needs of their consumers.
	18. Convenient business hours.
m 11	
Tangibles	19. Modern equipment.
	20. Visually appealing facilities.
	21. Employees who have neat, professional appearance.
	22. Visually appealing materials associated with the service.

**Source:** Parasuraman, A., Zeitham, Valarie A & Berry, Leonard L (1994)

Table 3. Profile of Respondents

	Frequency	Percentage
	(n=200)	
Ethnicity		
Minangkabau	150	75.0%
Chinese	50	25.0%
Sex		
Male	151	75.5%
Female	49	24.5%
Status		
Married	197	98.5%
Separated	3	1.5%
Age		
30 – 34	14	7.0%
35 – 39	22	11.0%
40 – 44	51	25.5%
45 – 49	32	16.0%
50 – 54	27	13.5%
55 – 59	18	9.0%
60 – 64	27	13.5%
65 – 69	9	4.5%
<b>Educational Level</b>		
Primary School &	11	5.5%
Lower		
Junior High School	43	21.5%
Senior High School	94	47.0%
Diploma	3	1.5%
Bachelor's degree	49	24.5%
Profession		
Trader	189	94.5%
Manufacturer	3	1.5%
Distributor	5	2.5%
Other	3	1.5%

Table 4. The Validity and Reliability Analyses of Cultural Instruments

	Corrected Item-Total Correlation
C1	.7086
C2	.7428
C3	.7508
C4	.5331
C5	.7656
C6	.7071
C7	.7159
C8	.7477
С9	.7522
α	.9162

Table 5. The Feasibility Test of Culture Variables

	LOV Variables
Kaiser-Meyer-Olkin	
(KMO)	.924
Measure of Sampling	
Adequacy (MSA)	
C1	.915
C2	.959
C3	.906
C4	.939
C5	.927
C6	.903
C7	.891
C8	.947
С9	.937

Table 6. Factor Loadings of the LOV

Instrument	Factor
self-fulfillment vs. no self-fulfillment	.771
excitement vs. sadness	.807
sense-accomplishment vs. sense-foolishness	.808
self-respect vs. no self-respect	.608
sense of belonging vs. sense of consuming	.822
being well respected vs. being unrespected	.783
security vs. insecurity	.793
fun and enjoyment in life vs. displeasure in life	.816
warm relationships with others vs. cold relationship with others	.817

Table 7. The Validity and Reliability Analyses of Saving Instruments

	Corrected Item-Total Correlation
p1	.5986
p2	.6513
р3	.5477
p4	.6858
p5	.6941
p6	.5062
p7	.6896
p8	.7177
p9	.6921
p10	.7311
p11	.7045
p12	.7007
p13	.6856
p14	.5776
p15	.6071
p16	.6485
p17	.5707
p18	.7194
p19	.7443
p20	.7429
p21	.7199
p22	.6833
α	.9490

Table 8. The Validity Test of Saving Variables

	Saving Variables
Kaiser-Meyer-Olkin	
(KMO)	.916
Measure of Sampling Adequacy (MSA)	
p1	.937
p2	.921
p3	.884
p4	.954
p5	.890
p6	.853
p7	.911
p8	.921
p9	.931
p10	.935
p11	.913
p12	.934
p13	.914
p14	.872
p15	.886
p16	.943
p17	.888
p18	.920
p19	.906
p20	.919
p21	.941
p22	.927

Table 9. Factor Loadings of the Saving SERVQUAL Instruments

Present Study		Parasuraman et al
Questions	Factors	Instrument
	SSERVQUAL-1	Reliability
When these institutions	.663	Providing service as promised
promise to do something by a		
certain time, they should do		
so		
When customers have	.683	Dependability in handling
problems, these institutions		customers' service problems
should be sympathetic and		
reassuring		
These institutions should be	.837	Performing services right the
dependable		first time
They should provide their	.705	Providing service at the
saving services at the time		promised time
they promise to do so		
They should keep their	.621	Maintaining error-free
records accurately		records
It is not realistic for	.670	Responsiveness
customers to expect prompt		<b></b>
service from employees of		
these institutions		
Their employees do not	.743	Keeping customers informed
always have to be willing to		about when service will be
help customers		performed
It is okay if they are too busy	.669	Prompt service to customers
to respond to customer		
requests promptly		
Customer should be able to	.625	Willingness to help customers
trust employees of these	.020	vv minghess to help edisterners
institutions		
Customer should be able to	.616	Readiness to respond to
feel safe in their transactions	.010	customers' requests
with these institutions'		customers requests
employees		
Total Variance Explained	49.5%	Assurance
Total variance Explained	<del>4</del> 7.J/0	Assurance
	SSERVQUAL-2	Employees who instill
		confidence in customers
Their employees should be	.546	Making customers feel safe in
polite		their transactions

It is unrealistic to expect	.603	Employees who are
these institutions to have their		consistently courteous
customers' best interest at		
heart		
They should not be expected	.707	Employees who have the
to have operating hours		knowledge to answer
convenient to all their		customer questions
customers		
They should have up-to-date	.659	Empathy
equipment & technology		
Their physical facilities	.716	Giving customers individual
should be visually appealing		attention
chourd of visually appearing		
Their employees should be	.711	Employees who deal with
well dressed and appear neat		consumers in a caring fashion
won dressed and appear near		tensomers in a taring rasinen
The appearance of the	.822	Having the customer's best
physical facilities of these		interest at heart
institutions should keep up		interest at near
with the type of service		
provided	0.007	E 1 1 1 1 1
Total Variance Explained	8.9%	Employees who understand
		the needs of their customers
	SSERVQUAL-3	Convenient business hours
These institutions should not	.822	Tangibles
be expected to give customers		
individual attention.		
They should not be expected	.806	Modern equipment
to tell their customers exactly		
when saving services will		
be performed		
Their employees should get	.653	Visually appealing facilities
adequate support from these		, samely approximate
1 11	İ	
institutions to do their jobs		
institutions to do their jobs		
well	791	Employees who have a neat
well Employees of this institution	.791	Employees who have a neat,
well  Employees of this institution cannot be expected to give	.791	Employees who have a neat, professional appearance
well Employees of this institution cannot be expected to give customers personal attention		professional appearance
well  Employees of this institution cannot be expected to give customers personal attention  It is unrealistic to expect	.791	professional appearance  Visually appealing materials
well  Employees of this institution cannot be expected to give customers personal attention  It is unrealistic to expect employees to know what the		professional appearance
well  Employees of this institution cannot be expected to give customers personal attention  It is unrealistic to expect		professional appearance  Visually appealing materials

Table 10. The Validity and Reliability Analyses of Credit Instruments

	Corrected Item-Total Correlation
p1	.6284
p2	.6686
p3	.5865
p4	.7102
p5	.7292
p6	.3718
p7	.7290
p8	.7469
р9	.7167
p10	.7676
p11	.7331
p12	.7139
p13	.5447
p14	.4604
p15	.4935
p16	.6951
p17	.4784
p18	.7499
p19	.7629
p20	.7628
p21	.7478
p22	.7189
α	.9466

Table 11. The Validity Test of Credit Variables

	Credit Variables
Kaiser-Meyer-Olkin	
(KMO)	.919
Measure of Sampling Adequacy	
(MSA)	
p1	.952
p2	.934
p3	.901
p4	.965
p5	.908
p6	.794
<b>p</b> 7	.916
p8	.931
p9	.939
p10	.943
p11	.928
p12	.942
p13	.855
p14	.825
p15	.841
p16	.961
p17	.831
p18	.924
p19	.914
p20	.924
p21	.945
p22	.925

Table 12. Factor Loadings of the Credit SERVQUAL Instruments

Present S	Present Study	
Questions	Factors	Intrument
	CSERVQUAL-1	Reliability
When these institutions	.727	Providing service as promised
promise to do something by		
a certain time, they should		
do so		
When customers have	.742	Dependability in handling
problems, these institutions		customers' service problems
should be sympathetic and		
reassuring		
These institutions should be	.856	Performing services right the
dependable		first time
They should provide their	.741	Providing service at the
saving services at the time		promised time
they promise to do so		
They should keep their	.694	Maintaining error-free
records accurately		records
It is not realistic for	.714	Responsiveness
customers to expect prompt		
service from employees of		
these institutions		
Their employees do not	.767	Keeping customers informed
always have to be willing to		about when service will be
help customers		performed
It is okay if they are too	.710	Prompt service to customers
busy to respond to customer		
requests promptly		
Customer should be able to	.690	Willingness to help customers
trust employees of these		
institutions		
Customer should be able to	.675	Readiness to respond to
feel safe in their transactions		customers' requests
with these institutions'		•
employees		
Their employees should be	.545	Employees who instill
polite		confidence in customers
Total Variance Explained	50.1%	Assurance
		Making customers feel safe in
	CSERVQUAL-2	their transactions

It is unrealistic to expect	.578	Employees who are
these institutions to have		consistently courteous
their customers' best interest		
at heart		
They should not be expected	.682	Employees who have the
to have operating hours		knowledge to answer
convenient to all their		customer questions
customers		Cuccenior questions
They should have up-to-date	.690	Empathy
equipment & technology	.070	Emparity
	.755	Giving austamore individual
Their physical facilities	.133	Giving customers individual attention
should be visually appealing		attention
Their employees should be	.703	Employees who deal with
well dressed and appear neat		consumers in a caring fashion
The appearance of the	.839	Having the customer's best
physical facilities of these		interest at heart
institutions should keep up		
with the type of service		
provided		
Total Variance Explained	12.1%	Employees who understand
Total Valiance Explained	12.170	the needs of their customers
	CSERVQUAL-3	Convenient business hours
	CSERVQUAL-3	Convenient ousmess nours
These institutions should not	.833	Tangibles
be expected to give		
customers individual		
attention.		
They should not be expected	.805	Modern equipment
to tell their customers		
exactly when saving		
services will be performed		
Their employees should get	.750	Visually appealing facilities
adequate support from these		
institutions to do their jobs		
well		
Employees of this institution	.826	Employees who have a neat,
cannot be expected to give		professional appearance
customers personal attention		r
It is unrealistic to expect	.658	Visually appealing materials
employees to know what the		associated with the service
needs of their customers are		associated with the service
Total Variance Explained	5.0%	
Total variance explained	3.070	

Table 13. The Validity and Reliability Analyses of Income Instruments

# a. Test I

	Corrected Item-Total
	Correlation
y1	.3641
y2	.0177
у3	.3958
y4	.0117
у5	.0827
у6	.3813
у7	0479
y8	0007
у9	.0668
y10	.3945
y11	0873
α	.2221

b. Test II

	Corrected Item-Total	
	Correlation	
y1	.3902	
у3	.3908	
у6	.4987	
y10	.4382	
α	.2529	

Table 14. The Feasibility Test of Income Variables

# a. Test I

	Household Expenditure
	Variables
Kaiser-Meyer-Olkin	.529
(KMO)	
Measure of Sampling Adequacy (MSA)	
y1	.580
y3	.396*
у6	.518
y10	.562

<sup>\*</sup> MSA < .50 as a result y3 out of the model.

# b. Test II

	Household Expenditure
	Variables
Kaiser-Meyer-Olkin	.601
(KMO)	
Measure of Sampling Adequacy (MSA)	
y1	.585
у6	.566
y10	.741

Table 15. Mean and Standard Deviation (Credit Products)

Variables	Mean	Standard
		Deviation
Reliability		
When these institutions promise to do	6.36	2.89
something by a certain time, they should do so		
When customers have problems, these	6.51	2.90
institutions should be sympathetic and		
reassuring		
These institutions should be dependable	6.03	3.03
They should provide their credit services at the	6.63	2.73
time they promise to do so		
They should keep their records accurately	7.17	2.76
It is not realistic for customers to expect	6.82	2.80
prompt service from employees of these		
institutions		
Their employees do not always have to be	6.74	2.88
willing to help customers		
It is okay if they are too busy to respond to	6.36	3.02

customer requests promptly	
1 1 1 7	.78
these institutions	. 7 6
	.70
transactions with these institutions' employees	. 70
1 ,	.79
	. 19
Tangibles	00
P	.82
have their customers' best interest at heart	
They should not be expected to have operating 6.76 2.	.80
hours convenient to all their customers	
They should have up-to-date equipment and 6.74 2.	.69
technology	
Their physical facilities should be visually 6.64 2.	.90
appealing	
Their employees should be well dressed and 6.68 2.	.92
appear neat	
The appearance of the physical facilities of 6.72 2.	.90
these institutions should keep up with the type	
of service provided	
Empathy	
These institutions should not be expected to 4.63 3.	.46
give customers individual attention	
They should not be expected to tell their 5.62 3.	.48
customers exactly when credit services will	
be performed	
Their employees should get adequate support 4.28 3.	.30
from these institutions to do their jobs well	
	.28
expected to give customers personal attention	
	.35
what the needs of their customers are	

Table 16. Mean and Standard Deviation (Culture and Income Variables)

Variables	Mean	Standard	Varia-ble	Mean	Standard
		Deviation	s		Deviation
self-fulfilling vs.not	2.11	1.73			
self-fulfilling					
excited vs. sad	2.19	1.74			
sense-accomplished	2.24	1.88			
vs. sense-foolish					
self-respecting vs. not	2.77	2.30			
self-respecting					
sense of belonging vs.	2.14	1.95			
sense of consuming					
being well respected vs.	1.82	1.73			
being unrespected					
Secure vs.insecure	1.76	1.70	Food	1165.25	879.27
fun and enjoyment in life	1.99	1.71	Housing	893.91	1040.28
vs. unpleasure in life					
Warm relationships with	2.10	1.92	loan	4326.90	7096.37
others vs. cold			payment/		
relationships with others			credit		
			liabili-ties		

Table 17. Credit Binomial Logistic Regression Results

Independent Variable	В	Εχρ (β)	Wald	Sig.	
LOV	1.728	5.632	10.316	.001	
CREDIT	.657	1.928	6.442	.011	
INCOME	-3.917	.020	28.851	.000	
CONSTANT	3.095	22.085	24.298	.000	
Negelkerke R Square .877					
Hosmer and Lemeshow Test .075					

Table 18. Mean and Standard Deviation (Saving Products)

Variables	Mean	Standard
		Deviation
Reliability		
When these institutions promise to do	5.04	2.86
something by a certain time, they should do so		
When customers have problems, these	5.22	2.93
institutions should be sympathetic and		
reassuring		

Those institutions should be dependeble	4.72	2.09
These institutions should be dependable		2.98
They should provide their saving services at the	5.30	2.70
time they promise to do so  They should keep their records accurately	5.99	2.86
It is not realistic for customers to expect	5.59	2.87
prompt service from employees of these institutions		
	7.71	2.01
Their employees do not always have to be	5.51	2.91
willing to help customers	<b>7</b> 0 c	• • •
It is okay if they are too busy to respond to	5.06	3.00
customer requests promptly		
Customer should be able to trust employees of	5.53	2.78
these institutions		
Customer should be able to feel safe in their	5.91	2.81
transactions with these institutions' employees		
Tangibles		
Their employees should be polite	5.80	2.93
It is unrealistic to expect these institutions to	5.38	2.83
have their customers' best interest at heart		
They should not be expected to have operating	5.52	2.85
hours convenient to all their customers		
They should have up-to-date equipment and	5.46	2.92
technology		
Their physical facilities should be visually	5.39	3.04
appealing		
Their employees should be well dressed and	5.69	3.10
appear neat		
The appearance of the physical facilities of	5.50	3.04
these institutions should keep up with the type		
of service provided		
Empathy		
These institutions should not be expected to	3.72	3.62
give customers individual attention		
They should not be expected to tell their	4.70	3.62
customers exactly when saving services will		
be performed		
Their employees should get adequate support	3.31	3.40
from these institutions to do their jobs well		
Employees of this institution cannot be	3.31	3.33
expected to give customers personal attention		
It is unrealistic to expect employees to know	3.62	3.37
what the needs of their customers are		
The state of the s		

Table 19. Saving Binomial Logistic Regression Results

Independent	В	Exp (β)	Wald	Sig.				
Variable								
LOV	1.630	5.106	8.539	.003				
SAVING	.754	2.126	8.243	.004				
INCOME	-3.862	0.21	27.126	.000				
CONSTANT	3.192	24.331	23.086	.000				
Negelkerke R Square.884								
Hosmer and Lemeshow Test .05								

Table 20. The ANOVA of Culture, SERVQUAL, and Income among

# Minangkabau and Chinese Customers

		Sum of	df	Mean	F	Sig.
		Squares		Square		
Culture	Between Groups	38.370	1	38.370	47.297	.000
	Within Groups	160.630	198	.811		
	Total	199.000	199			
SAVING	Between Groups	86.814	1	86.814	33.692	.000
	Within Groups	510.186	198	2.577		
	Total	597.000	199			
CREDIT	Between Groups	37.088	1	37.088	13.115	.000
	Within Groups	559.912	198	2.828		
	Total	597.000	199			
INCOME	Between Groups	123.701	1	123.701	325.274	.000
	Within Groups	75.299	198	.380		
	Total	199.000	199			

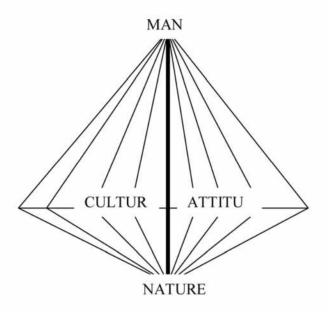


Figure 1. Man and Nature Source : Hoyt, Elizabeth Ellis (1976)

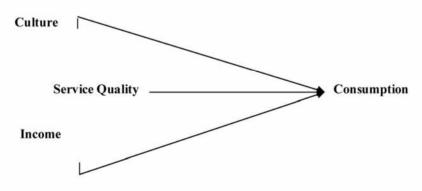


Figure 2. Conceptual Model for Consumption

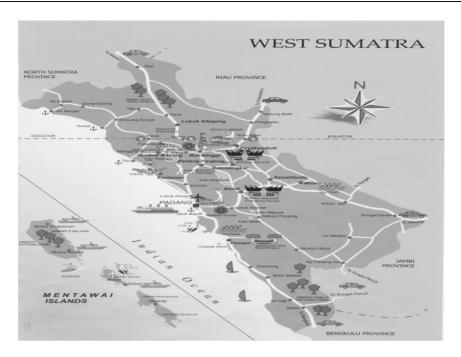


Figure 3. Research Location