Measuring the Quality of Consumer Loan Service by Commercial Banks: The Case of Vietcombank Đà Nẵng

VÕ THỊ THỦY ANH*

ABSTRACT

There are many models for measurement of service quality in the world and the initial one was developed by Parasuraman et al. in 1985. Although widely employed in many researches, their original model has been modified and developed into various new ones and one of them is SERVPERF model introduced by Cronin and Taylor in 1992. My research applies those two models to measurement of quality of services supplied by Vietnamese commercial banks, and by VCB Đà Nẵng in particular. The research finds that factors affecting the quality of consumer loan service by VCB Đà Nẵng are, in order of importance, "assurance and empathy", "price awareness", "reliability of pledge", "convenience and tangibles", "responsiveness after disbursement", and "reliability of service supply process".

Keywords: Consumer loan service, VCB Đà Nẵng, price awareness, service quality

1. PROBLEM

There thus far have been many models on measurement of service quality in the world, and the initial one was developed by Parasuraman et al. (1985). Parasuraman et al. (1988) stated that service quality is affected by tangibles, reliability, responsiveness, assurance, and empathy. Although this model is widely employed, there have been a lot of debates concerning the utilization of service and distance model as a basis for measuring service quality (Carmen, 1990; Babakus and Boller, 1992; Cronin and Taylor, 1992). With the SERVPERF model, Cronin and Taylor (1992) assume that customer's awareness of a service reflects manifestly the service quality; and so, service quality is the customer's awareness.

This paper examines and develops the SERVPERF model of Cronin and Taylor (1992), and on the ground of SERVQUAL, measures the quality of consumer loan service of commercial banks. Based on the theoretical background of SERVQUAL model, the measurement will be implemented in the Joint Stock Commercial Bank for Foreign Trade of Vietnam (Vietcombank) in Đà Nẵng (a.k.a. VCB Đà Nẵng).

2. MEASURE THE QUALITY OF CONSUMER LOAN SERVICE

Like other services, banking services in general and consumer loan service in particular contain all attributes of a service such as abstraction, spontaneity, non-inventory, and heterogeneity. Therefore, components of consumer loan service quality are basically identical to those mentioned in the SERVPERF of Cronin and Taylor (1992). The SERVPERF model also employs five factors

Email: vothuyanh@yahoo.com

^{*} Doctor of Philosophy at Đà Nẵng University of Economics

of the SERVQUAL model (namely reliability, responsiveness, assurance, tangibles, and empathy), which are synthesized from 22 components (ones without the sign * in Table 1) developed by the SERVQUAL model of Parasuraman except for the component of expectation.

Consumer loan service also has its own specific attributes such as individuality, confidentiality, and sensitivity to the financial climate. Customers in need of consumer loans pay less attention to banking technology than the lending procedures, requirements about mortgages, tellers' attitude, and service quality. Therefore, compared with the original model by Parasuraman, the author has made some adjustment and added 13 more components. The component "working time convenient for customers" is shifted from Empathy to Responsiveness. The component "attractive banking facilities" is omitted because lending services are carried out by tellers and mortgaged assets are often evaluated outside the bank; thus banking facilities barely affect customers satisfaction. Detailed components are set forth in Table 1.

Table 1: Components of the adjusted SERVPERF model

Factors	Variables	Components
RELIABILITY	TC1	Banking services are provided to customers as committed in written contracts.
	TC2	Complaints are satisfactorily addressed.
	TC3	Procedures are carried out exactly in the first transaction with customers.
	TC4	Disbursement is undertaken as scheduled.
	TC5	Tellers barely or rarely make mistakes in transactions (i.e. correct calculation of interest, sufficient collection of debts, etc.)
	TC6	Interest sheet is made manifestly (*)
	TC7	Lending dossiers are kept secret and confidential (*)
	TC8	Tellers are honest enough (*)
RESPONSIVENESS	DU1	Date of receiving loans is notified in detail
	DU2	Banks' services are quickly provided to customers.
	DU3	Tellers devotedly instruct customers to complete necessary dossiers.
	DU4	Banks willingly satisfy customers' needs (e.g. checking mortgaged assets, debt and interest collection, etc.) done at the convenient time for customers.
	DU5	Lending procedures are simple (*).
	DU6	Lending term is flexible (*).
	DU7	24/7 banking services are good (*).
	DU8	Bank's working time is convenient for customers.
	DU9	The network of banks' branches is widespread and convenient for customers to carry out transactions (i.e. pay debts, interest, etc.) (*)
ASSURANCE	NLPV1	Customers have trust in tellers' expertise.

	NLPV2	Tellers make customers comfortable and relaxed.
	NLPV3	Tellers are polite, elegant and show respect to customers.
	NLPV4	Tellers are qualified enough to give advices or respond to customers' query.
	NLPV5	Tellers master their businesses (*).
_	NLPV6	Tellers actively notify customers of changes in lending rate (*).
	DC1	Banks introduce attractive customer care programs (e.g. sales promotion, birthday gifts, etc.)
	DC2	Tellers express their personal care for customers.
EMPATHY	DC3	Tellers devotedly consult customers about the best service package.
	DC4	Tellers are aware of specific demands of customers.
	DC5	Tellers politely notify customers of the maturity date of loans (*).
	HH1	The bank is equipped with state-of-the-art facilities.
TANGIBLES	HH2	The bank's amenities are well-designed and comfortable.
	НН3	Tellers' uniform is catchy.
	GIACN1	The lending rate is attractive (*).
PRICE AWARENESS	GIACN2	Lending service fee is reasonable (*).
	GIACN3	The mortgaged assets are appropriately evaluated (*).

Asterisked components, which are newly added by the author, include:

- a. Loan dossiers are kept confidential: This component has merely been added to the model when studying the quality of consumer loan service. Unlike other services, taking out a loan, is a very sensitive issue for Vietnamese people and must be kept confidential. Albeit it is legally required to keep loan dossiers confidential, many banks have not observed this.
- b. Interest sheet is made manifestly: Due to the fact that customers are required to pay off interest periodically, it is included in the factor "reliability". For banks using core banking, this component can be renamed as "Interest notice is clear".
- c. Tellers are honest enough: Human factors play an important role in banking activities and decide their quality, bank's reputation and even bank's credit effectiveness. Honesty here can be understood that tellers are transparent in dealing with customers and do not seek personal profit from transactions.
- d. Lending procedures are simple: This is a very popular opening title in almost all advertisement for consumer loan service nowadays.
- e. Lending term is flexible: The more flexible the lending term, the more customers are attracted to, because customers can actively balance their daily expenditures and plan monthly payment. This component is of the factor "responsiveness".

- f. 24/7 banking services are good: A bank with good 24/7 banking services can prove its responsiveness. Thus, it is a component of the factor "responsiveness". The 24/7 banking services can be understood that customers are able to enquire about information related the bank and the customer such as interest rate, personal account, how-tos, etc. through Internet banking, phone banking or call centers. In sum, such the services are to meet the customer's needs day and night.
- g. The network of banks' branches is widespread and convenient for customers to carry out transactions (i.e. pay debts, interest, etc.): A widespread network of branches and transaction offices is supposed to be extremely convenient for customers; and this is also a comparative factor to be mulled over by the customers before choosing a banking service provider. It belongs to the factor "responsiveness".
- h. Tellers master their businesses: For consumer loan service, professionalism will help sastisfy customers a great deal; and thus it should be added to the model.
- i. Tellers actively notify customers of changes in lending rate: At present, when entering into a contract of consumer loan, it is often stated that the bank will notify customers of any adjustment to the interest rate. Thus, active notification of such changes is very important, helping customers actively balance their finance and plan their payments appropriately. This component is of "assurance".
- j. Tellers politely notify customers of the maturity date of loans: Tellers assume responsibility for notifying customers of maturity date of loans. However, in order to fulfill the task, tellers should try to find a tactful way of collecting debts. This component is of the factor "empathy".

Theoretically speaking, the demand for consumer loans is less sensitive to interest rate. Yet, in the period 2008 – 2011, the bank rate did escalate and remain volatile; meanwhile, most consumer loan contracts accepted the floating interest rate; and policies on interest rate of commercial banks is always the first concern of customers when choosing a service provider. Therefore, besides five factors in the original model of Parasuraman, the factor "price awareness" is supplemented with three more components namely 'the lending rate is attractive', 'lending service fee is reasonable', and 'the mortgaged assets are appropriately evaluated'. They are also traditional competitive factors among commercial banks in the field of lending service.

SBV regulations ban commercial banks from collecting any kind of lending service fee; yet in fact, joint-stock banks do not observe this and collect fines of premature repayment and print fees. Thus, the component 'lending service fee is reasonable' is added to the model; and the 'reasonable' here means compliance with the State Bank's regulation and customer's payment ability.

3. THE CASE OF VCB ĐÀ NẪNG

a. Research process:

By June 2011, there are around 1,890 customers applying for consumer loans from VCB Đà Nẵng; and most of them are mortgage loans (representing 85% of total loans). Customers' payment is supported by their salary. In order to meet various needs of customers, VCB Đà Nẵng has introduced many products such as (1) mortgage loans or home equity loans, (2) loans for civil servants, (3) loans for managers or administrators, (4) overdraft loans, (5) car loans, (6) home loans,

(7) loans for learning overseas, (8) credit cards, (9) credit security, and (10) other consumer loans. Overall, the consumer loan service of VCB Đà Nẵng is very diverse and has held the market share of 7% in Đà Nẵng by June 30, 2011. Such achievements make VCB Đà Nẵng a typical commercial bank in this research on quality of consumer loan service.

In questionnaires, the five-point Likert scale is employed to test factors in Table 1, that is, (1) absolutely disagree, (2) disagree, (3) neutral, (4) agree, and (5) absolutely agree. Additionally, a general question for the consumer satisfaction with consumer loan service of VCB Đà Nẵng is also provided with five dimensions as follows: (5) extremely satisfied, (4) satisfied, (3) neutral, (2) dissatisfied, and (1) extremely dissatisfied.

Process of handling data and identifying influential factors is carried out as follows:

Step 1: Evaluate the reliability coefficient (the Cronbach's Alpha) and eliminate inappropriate components (i.e. those with the coefficient smaller than 0.6) (cf. Nunnaly, 1978; Peterson, 1994; and Slater, 1995).

Step 2: EFA

EFA is employed to test concept values of the scale. It helps to trim down a relatively large set of variables data and tailor one or some synthetic variables (which are called factors). Each variable will produce a ratio called the factor loading which will let us know to which factor this variable belongs.

In order to run EFA, there should be a correlation among variables. Thus, the correlation matrix will be employed to determine the goodness of fit of the EFA.

Extracted factors should satisfy the following conditions:

- The KMO coefficient is utilized to test the appropriateness of EFA. Accordingly, the KMO coefficient should range between 0.5 and 1; if it is smaller than 0.5, EFA may not be suitable for the data.
- Moreover, eigenvalues represent the ranges of factors and are used to determine the number of factors. Only factors with eigenvalues larger than 1 are included in the model. If this value is smaller than 1, its synthesis of information is not as good as an original variable which will bear a variance of 1 after standardization.
- When factors rotate, an important part in factor analysis is the factor matrix. The factor loading expresses the correlation between variables and factors. Because the principal component analysis is employed in the research, weight of factor loadings should be larger than 0.5 to be accepted.
 - Total extracted variance must be larger than 50% (Gerbing & Anderson, 1988).
 - The Bartlett test should have the statistical significant level at 5%.

Step 3: Name components and explain

To explain components, it is necessary to identify factors with large factor loadings within the rotated component matrix. In other words, the factor can be explained by variables with great coefficients compared to themselves.

Step 4: Calculate factorial score

After explaining components, factorial score should be calculated, that is, value of combined variables will be calculated with the support of the Score matrix in order to identify weight of each component of the factor and the overall value of each factor as well.

Step 5: Test the research model

In order to identify factors affecting the quality of consumer loan service, the regression analysis will be performed with the customer's satisfaction as the dependent variable and components obtained in Step 4 as explanatory variables. After testing for possible violations (e.g. multicollinearity, autocorrelation, heteroskedasticity) and addressing them properly, we test the statistical significance of each factor and then discard those without. Statistically significant factors are those that affect the quality of consumer loan service of VCB Đà Nẵng.

b. Research results:

- Description of samples

In order to measure the service quality, roughly 500 customers who have been taking out consumer loans from VCB Đà Nẵng were interviewed. At the point of research (as from June 2010 to Oct. 2010), this population represented 32% of the total number of VCB Đà Nẵng customers; and interest rate on loans in the VND was experiencing wide and upward fluctuations.

In the population, male customers make up 58.3% and female is 41.7%. Those in the 26-to-40 age bracket account for 56.4%, the 41-to-45 age bracket 31.3%; and the remaining is for others.

In terms of education, most customers are university graduates, making up 63.8%. The remaining customers are distributed evenly in other educational levels, from 3-year college to senior and junior high school. Thus, customers of VCB Đà Nẵng are mainly civil servants.

Regarding income of respondents, those with the monthly average income of VND10m to VND15m account for 48.2%; and the access of this group to consumer loans is better than others. The ratio of those with the monthly average income of VND5-10m and under VND5m is nearly the same whereas that of those with the monthly average income more than VND15m is the least.

Regarding housing conditions, around 83% of respondents are homeowners. This group represents a high percentage because most customers of VCB Đà Nẵng often take a mortgage loan or a home equity loan.

- Results of scales tests and regression model:

After testing the scales with the Cronbach's Alpha and performing EFA, we find that the quality of consumer loan service of VCB Đà Nẵng is measured by six factors which comprise 29 components as a whole.

For Factor 1, variables NLPV4, NLPV3, NLPV5, NLPV2, NLPV1, DC3, DC2, DC4 and DC1 have large loading coefficients. Thus, this factor is named as "assurance and empathy" (NLPV_THCAM).

Factor 2 has a correlation with variables NVPV6 (tellers actively notify customers of changes in lending rate), DC5 (tellers politely notify customers of the maturity date of loans), and TC6 (interest

sheet is made manifestly). Thus this factor is named as "Responsiveness after disbursement" (DU_SGNGAN).

The factor "reliability" is split into two new factors, that is, Factor 3 which is named as "Reliability of the service supply process" (TC_CUDVU) and includes variables TC5, DU4, DU3, and TC7; and Factor 6 which is named as "Reliability of pledge" including variables TC4, TC1, and TC8.

Factor 4 includes variables DU9 (the network of banks' branches is widespread and convenient for customers to carry out transactions), DU8 (Bank's working time is convenient for customers), and HH1 (the bank is equipped with state-of-the-art facilities); and is named as "Convenience and tangibles" (THTIEN HHINH).

Factor 5, or price awareness (GIACACN), consists of variables GIACN2 and GIACN1, which have large loading coefficients.

Factor 6, the reliability of pledge (TC_HUAKH) comprises variables TC4, TC1, and TC8.

Table 2: New factors after testing the scale and running EFA

Factors	Variables	Components
Factor 1 Assurance and empathy	NLPV4	Tellers are qualified enough to consult or respond to customers' query.
	NLPV3	Tellers are polite, elegant and show respect to customers.
	NLPV2	Tellers make customers comfortable and relaxed.
	NLPV5	Tellers master their businesses.
	NLPV1	Customers believe in tellers' knowledge.
	NLPV1 DC3	Tellers devotedly consult customers about the best service package.
(NLPV_THCAM)	DC4	Tellers are aware of specific demands of customers.
	DC2	Tellers express their personal care for customers.
	TC3	Procedures are carried out exactly in the first transaction with customers.
	DU5	Lending procedures are simple.
	DU7	24/7 banking services are good.
	DC1	Banks introduce attractive customer care programs.
Factor 2	DC5	Tellers politely notify customers of the maturity date of loans.
Factor 2 Responsiveness after disbursement (DU_SGNGAN)	GIACN3	The mortgaged assets are appropriately evaluated.
	TC6	Interest sheet is made manifestly.
	NLPV6	Tellers actively notify customers of changes in lending rate.
Factor 3	TC7	Loan dossiers are kept secret and confidential.

Reliability of the service provision process (TC_CUDVU)	DU4 DU3	Banks willingly satisfy customers' needs. Tellers devotedly instruct customers to complete necessary dossiers.
	TC5	Tellers barely or rarely make mistakes in transactions.
Factor 4 Convenience and tangibles (THTIEN_HHINH)	DU8	Bank's working time is convenient for customers.
	HH1	The bank is equipped with state-of-the-art facilities.
	DU9	The network of banks' branches is widespread and convenient for customers to carry out transactions.
Factor 5	GIACN2	Lending service fee is reasonable.
Price awareness (GIACACN)	GIACN1	The lending rate is attractive.
	DU6	Lending term is flexible.
Factor 6 Reliablity of pledge (TC_HUAKH)	TC4	Disbursement is performed as scheduled
	TC1	Banking services are provided to customers as committed in written contracts.
	TC8	Tellers are honest enough.

In order to pinpoint impacts of these new factors on the quality of consumer loan service of VCB Đà Nẵng, we have the following regression equation.

 $CLDV_CVTD = 3.902 + 0.221NLPV_THCAM + 0.065\ DU_SGNGAN + 0.030TC_CUDVU + 0.099THTIEN_HHINH + 0.126GIACACN + 0.106TC_HUAKH$

All the six factors are statistically significant. Regression coefficients bear the positive sign, proving that factors of the regression model positively impact on the quality of consumer loan service of VCB Dà Nẵng. The impact of NLPV_THCAM on such the service quality is the strongest, which is respectively followed by GIACACN, TC_HAKH, THTIEN_HHINH, DU_SGNGAN, and TC_CUDVU. It is possible to explain the effect level of each factor on the service quality.

Customers pay more attention to lending procedures, and tellers' attitude. Additionally, the bank rate keeps changing and consumer loan rate skyrockets; and thus customers are also interested in the lending rate when choosing an appropriate service provider. In sum, both "assurance and empathy" and "price awareness" have sharp impact on the service quality whereas effects of the "convenience and satisfaction" are not profound. This is to say, in order to enhance the service quality, VCB Đà Nẵng should concentrate on two factors "Assurance and empathy" and "price awareness".

- Measurement results

As analyzed above, the service quality is affected by six factors, namely "assurance and empathy", "price awareness", "reliability of pledge", "convenience and tangibles", "responsiveness after disbursement", and "reliability of service provision process". Results are set forth in Table 3.

Variable Min Max Mean Standard deviation NLPV THCAM 3.972 0.525 2.491 3.486 DU SGNGAN 2.893 3.328 3.059 0.195 TC_CUDVU 3.816 4.043 3.960 0.100 3.561 3.785 3.704 THTIEN_HHINH 0.123 **GIACACN** 3.638 4.018 3.823 0.189 TC_HUAKH 4.230 4.371 4.305 0.071 Customers' satisfaction 2.491 4.371 3.622 0.201

Table 3: Consumer loan service quality measurement results

Overall, most customers appreciate the service of VCB Đà Nẵng, and the mean satisfaction level is 3.622 (if it is 3, satisfaction is at average level; and if 4, it is at the high level). All factors are placed above the average level. Among factors affecting the service quality, "reliability of pledge" reaches the high (4.3, above 4 - the satisfaction level). Customers' evaluations on this factor are quite identical (the standard deviation is quite small, just 0.071). The factor "Responsiveness after disbursement" which is given lowest estimate also reaches the average level (3.059).

4. CONCLUSION

Based on SERVPERF and its foundation, the SERVQUAL model, the paper has developed a model with six factors and 34 components to measure the quality of consumer loan service provided by commercial banks. Through the practical application to VCB Đà Nẵng, the model shows that the service quality is affected by six factors with 29 components, namely "assurance and empathy", "responsiveness after disbursement", "reliability of service supply process", "price awareness", "reliability of pledge", and "convenience and tangibles". The strongest effect is produced by "assurance and empathy" that is followed by, in order of importance, "price awareness", "reliability of pledge", "convenience and tangibles", "responsiveness after disbursement", and "reliability of service supply process."

Therefore, in order to improve the quality of consumer loan service, commercial banks in general and VCB Đà Nẵng in particular should pay due attention to these factors, especially factors "assurance and empathy" and "price awareness". Specifically, banks should attend to the professional skills and competence of consumer loan tellers, appropriate lending rate and fees, flexible lending term, etc. in order to satisfy customers' need for capital.

Note:

(1) Although VCB Đà Nẵng has deployed core banking, printed interest sheets are also sent to customers as supplemental evidence■

References

Babakus, E. & G.W. Boller (1992), "An Empirical Assessment of the SERVQUAL Scale", *Journal of Business Research*, Vol.24, pp.253-268.

Carmen, J.M. (1990), "Consumer Perceptions of Service Quality: An Assessment of the SERVQUAL Dimensions", *Journal of Retailing*, Vol.66(1), pp.33-55.

Cronin, J.J. & S.A. Taylor (1992), "Measuring Service Quality: A Reexamination and Extension", *Journal of Marketing*, Vol.56, pp.55-68.

Gerbing, D. & J. Anderson (1988), "An Updated Paradigm for Scale Development Incorporating Unidimensionality and Its Assessment", *Journal of Marketing Research*, Vol.25, pp.186-192.

Nunnally, J. (1978), Psychometric Theory, New York, McGraw-Hill.

Parasuraman et al. (1985), "A Conceptual Model of Service Quality and Its Implications for Future Research", *Journal of Marketing*, Vol.49, pp.41-50.

Parasuraman et al. (1993), "More on Improving Service Quality Measurement", *Journal of Retailing*, Vol.69, pp.140-147.

Peterson, R. (1994), "A Meta-Analysis of Cronbach's Coefficient Alpha", *Journal of Consumer Research*, No.21 Vol.2, pp.38-91.

Slater, S. (1995), "Issues in Conducting Marketing Strategy Research", *Journal of Strategic Marketing*, Vol.3(4), pp.257 - 270.