# Assessment of Bank Customer Equity

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#### ABSTRACT

The goal of the present article is to assess bank customer equity and the dimensions of the factors affecting it.

To achieve the goal, the authors have performed a qualitative analysis of scientific literature on customer equity and its dimensions.

To obtain empirical data, the authors have developed the questionnaire and adapted it for the bank customers in Latvia on the basis of factors affecting value proposed by Rust et al. [1]. The questionnaire mainly consists of closed questions, the evaluation of which is based on 5-point Likert scale (1 - strongly disagree, 5 - strongly agree).

The obtained empirical data has shown that bank customer equity may be affected by value and retention equity. By conducting the research, the authors have not only proven the hypotheses put forward, but also substantiated the findings with the scientific literature.

The authors also faced the restriction that only one of Latvia's commercial banks participated in the empirical research activities.

Keywords: Bank, Customer Equity, Model, Latvia.

#### **1. INTRODUCTION**

Financial institutions, such as banks, have a decisive role in any sector of the economy. Similarly, the fundamental objective is to increase the value of business shareholders [2]. However, with the increase of global competition, the issue of increasing the value of customer equity for both the customer and the economy involved becomes more topical.

Customers are intangible assets, and it is difficult to determine their future value [3]. Nevertheless, customer equity is considered the main source of current and future cash flow. Gupta et al. (2004) also stress that it is

important for an institution to obtain the maximum present value of customer equity as in the future it will provide an increase in value [4]. Thus, the models available in the scientific literature based on customer equity are regarded as powerful tools to maximize profit. By its nature, customer equity model is a financial instrument based on strategic decision management; besides, being dynamic, it may change depending on the type of industry and customer [1]. Great importance is also given to equity ratio, especially in such economic sectors where it is the dominating aspect.

The model developed by Rust et al. for determining customer equity from the point of view of the customer was used by Holehonnur et al. in their later studies [1, 5]. The conclusion was as follows: the goal of product acquisition is affected by the market of tangible and intangible factors classified as value and brand equity. However, in this research equity ratio has not been taken into account.

The goal of present study is to estimate customer equity and its structure from the point of view of the customer, which is based on three different factors affecting value developed by Rust et al. [1].

To achieve the goal, a questionnaire, quantitative and qualitative methods, including the method of sociologic research, monographic and descriptive methods have been used.

# 2. LITERATURE REVIEW

Blattberg and Deighton were one of the first who investigated customer equity in 1996 [6]. Later, studies have been conducted by other scientists [7, 3, 8].

Customer equity oriented model has been considered by many authors. For example, Blattberg and Deighton's (1996) model was based on determining the level of expenditure to maximize customer equity [6]. In the further studies, Blattberg et al. (2001) aimed at raising, retaining and selling equity [7], whereas Berger and Nasr-Bechwati (2001) based their studies on the rate of acquisition and retention [9]. Rust et al. (2000), in their turn, defined the essential customer affecting factors as follows: value, brand and retention equity (known also as equity ratio) [1].

Not only companies, but also banks have established customer relationship marketing programmes for customer relationship management. However, there is no unanimous opinion concerning customer equity and the concept of assessing it. Lemon (2001) also stresses that customer equity is a new marketing approach; it is based on increasing customer value [10]. Besides, Lemon (2001) and Gupta et al. (2004) define customer equity as the customer value of the company; it is customer lifetime value of its current and future customers [10, 4]. However, Rust et al. (2004) and Blattberg and Deighton (1996) defined customer equity as discounted life values of present and future customers [11, 6].

As for customer equity and its future value that is aimed at mutual relations, according to Villanueva and Hanssens (2007) it is based on three different conceptions: customer lifetime value, static customer equity and dynamic customer equity [12]. Moreover, Hanssens et al. stress that one of the essential and most complicated tasks is to identify the combinations of essential factors affecting customer equity that will allow retaining the existing customers and attracting new ones.

In the scientific literature, customer lifetime value is characterized as discounted amount of cash flow to individual customers or customer segment groups [9]. Static customer equity is the customer lifetime value of specific customers, while dynamic customer equity is the discounted amount of present and future value [12].

However, Rust et al. (2004) developed a comprehensive model, which identifies various factors that can affect the results of a company [11]. The model is called customer lifetime value (CLV) and is based on value, brand and retention equity. Reinartz and Kumar (2000), Rust et al. (2004) used the CLV model to assess the financial results of a company [13, 11]. However, it should be mentioned that this model can also affect customer equity.

#### **Customer Equity Drivers**

In general, value equity determines relationships among products, services and their price. However, Rust et al. (2000) define it as "customers' objective assessment of the utility of a brand based on perceptions of what is given up for what is received" (Rust et al., 2000: 56) [1]. Furthermore, value equity is characterized by three main components: quality, price and convenience (Rust et al., 2000: 74) [1]. Lemon et al. (2001) also consider that value equity is one of the most effective strategies of customer retention; however, it does not function if

products and services are not aimed at satisfying customer needs [10].

Brand equity, in its turn, is defined as "customers' subjective and intangible assessment of the brand, above and beyond its objectively perceived value" (Rust et al., 2000: 57) [1]. There are also three important components of brand equity: customer brand awareness, customer attitude towards the brand, customer perception of brand ethics (Rust et al., 2000: 88) [1].

However, retention equity is defined as "a tendency of the customer to stick with the brand, above and beyond the customer's objective and subjective assessment of the brand" (Rust et al., 2000: 57) [1]. Retention equity is characterized by five components: loyalty programs, special recognition and treatment programs, affinity programs, community building programs, knowledge building programs (Rust et al., 2000: 100) [1].

#### **3. METHODOLOGY**

To obtain the necessary data, the authors have used the conceptual framework of consumer equity [1] shown in Fig. 1:

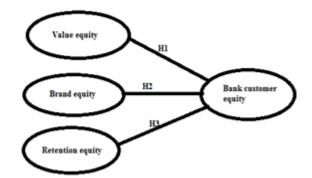


Fig. 1. Conceptual framework of bank customer equity

Based on the conceptual framework of bank customer equity, the authors have put forward and tested several hypotheses:

H1. Perceived value equity has a positive impact on bank customer equity.

H2. Perceived brand equity has a positive impact on bank customer equity.

H3. Perceived retention equity has a positive impact on bank customer equity.

The research has been conducted in one of the leading banks of Latvia during the period of time from January to April 2013 in order to evaluate bank customer total equity and its influencing factors. Based on empirical studies abroad and research conducted by Rust et al. (2000), a questionnaire has been developed and adapted for the bank customers in Latvia, as well as the collected data has been analysed [1].

The questionnaire contains 30 questions that make up five question blocks. The first question block (questions 1-3) includes demographic questions; the second block comprises the questions related to the evaluation of the bank position in the market (questions 4-8) and the questions regarding customer leaving probability (questions 9-10); the third block – the questions concerning value equity and its influencing factors (questions 11-17); the fourth block includes the questions related to brand equity and its influencing factors (questions 18-25); the fifth block – the questions regarding retention equity or interrelationship and its influencing factors (questions 26-30).

The questions used in the questionnaire are mainly closed-ended questions, the evaluation of which is based on five-point Likert scale (1 - strongly disagree, 5 - strongly agree), excluding the demographic questions.

The research findings have been summarised and displayed graphically. The questionnaire has been completed by bank customers, who have been divided into two groups: natural persons and legal persons.

#### 4. RESEARCH DATA

The main aim of the survey of bank customers has been to access the customer equity and its influencing factors, as well as to test the hypotheses put forward.

For the purpose of data collection, 283 questionnaires have been sent by e-mail to bank customers. A total of 232 filled questionnaires have been returned and considered valid, out of which 171 questionnaires have been received from natural persons and 61 questionnaires – from legal persons.

To collect the necessary data, the income level of natural persons and the annual turnover of legal persons have also been taken into account. Moreover, natural persons and enterprises have been divided into three groups.

Natural persons:

- 1.1. A natural persons with high income, i.e., over 500 LVL;
- 1.2. B natural persons with middle income, i.e., ranging between 200 to 500 LVL;
- 1.3. C natural persons with low income, i.e., up to 200 LVL.

Enterprises:

- 1.4. AA enterprises with an annual turnover of over 500,000 LVL;
- 1.5. BB enterprises with an annual turnover ranging between 100,000 and 500,000 LVL;
- 1.6. CC enterprises with an annual turnover of up to 100,000 LVL.

The demographic and private data obtained from customers of natural persons have demonstrated that of all the respondents 59% are women, and 41% men. A total of 29% of respondents are aged 20–29; 44% are aged 30–39 and 27% aged above 40. The majority of respondents, i.e., 67% are highly educated, 23% have a master's degree, and 10% have a secondary education. In terms of income, 24% of respondents consider themselves to be lower class, 67% of respondents – middle class and 9% – upper class.

However, the demographic and private data obtained from customers of enterprises have demonstrated that of all the respondents 36% are women, and 64% men. A total of 11% of respondents are aged 20–29; 36% are aged 30–39 and 53% aged above 40. The majority of respondents, i.e., 49% are highly educated, 13% have a Master's degree, and 38% have a secondary education. In terms of annual turnover, 51% of the enterprises have annual turnover of up to 100,000 LVL, 40% of the enterprises have annual turnover ranging between 100,000 and 500,000 LVL, while 9% of the enterprises reach turnover of over 500,000 LVL.

# Bank Position in the Market and Customer Leaving Probability

Fig. 2 illustrates the issues related to the bank position in the market from the customer perspective.

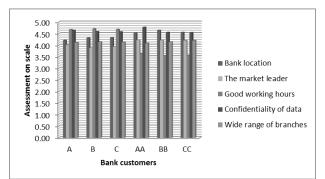


Fig. 2. Bank position in the market

As shown in Fig. 2, both natural persons and legal persons highly evaluate confidentiality of customer data. However, bank leader position in the market and bank working hours are low rated by natural persons and legal persons, respectively.

The use of products and services provided by banks, as well as customer leaving probability is demonstrated in Fig. 3.

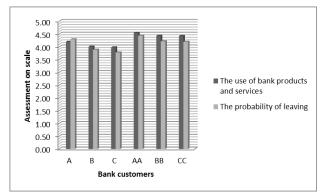


Fig. 3. The use of consumer banking products and services, as well as customer leaving probability

The obtained data has demonstrated that legal persons use banking products and services more often than natural persons. In terms of customer leaving probability, middle- and low-income natural persons, if attracted by competitors, will join them as soon as possible.

### Value Equity

To estimate value equity, it was necessary to consider the three sub-drivers: quality, price and convenience [1].

The questions related to the evaluation of quality (Q. 11. Quality of services and products; Q. 12. Service and product price-quality relationship) have demonstrated that all three categories of legal persons highly evaluate the quality of banking products and services (mean value ranged from 3.87 to 3.89); natural persons also share similar views (3.75–3.77).

Service and product price-quality relationship has been highly evaluated by customers of legal persons from AA (3.77) and CC (3.67) categories, but BB category has rated it low (3.45). The same issue has also been highly evaluated by A (3.45) and B (3.35) categories of natural persons, but C category has rated it low (3.23).

The questions related to the price of banking products and services (Q. 13. Competitiveness of the price; Q. 14. Service and product price compared to that of other banks; Q. 15. Discounted price for services and products) have demonstrated that all customer categories consider this issue important (Q. 13 – natural persons: 3.52-3.55; legal persons: 3.59-3.61 and Q. 14 – natural persons: 3.53-3.56; legal persons: 3.61-3.67). In terms of discounted price, AA (3.23) and BB (3.01) customers consider it to be important, but it is low rated by A (2.56), B (2.33) and C (2.31) customers. As one of the possible reasons for such assessment could be the fact that the bank is much more flexible in terms of discounted price for legal persons than natural persons. The issues related to convenience (Q. 16. Bank offers services and products that I need; Q. 17. Services and products are easy available) have been highly evaluated by all customer groups (natural persons: 3.99–4.03; legal persons: 4.03–4.05), except for CC group (3.59). The availability of products and services has been highly evaluated by AA, BB, CC (4.01–4.06) customers; while A, B, C customers have rated it low (3.51–3.59).

To evaluate the importance of each component of value equity, the authors have calculated the total customer mean values (see Fig. 4).

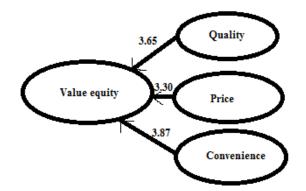


Fig. 4. Mean values of value equity components

As shown in Fig. 4, from the customer perspective, the three components of value equity are of importance: convenience, quality and price.

# **Brand Equity**

The evaluation of brand equity is also based on the components developed by Rust et al. (2000): customer brand awareness, customer attitude toward the brand and customer perception of brand ethics [1].

The questions related to customer brand awareness (Q. 18. I pay attention to the bank media advertising; Q. 19. I pay attention to the information sent by the bank) have shown that bank advertisements attract attention of C (2.88) and CC (2.94) customers; all the other customer categories pay little attention to bank advertisements. However, the opposite results have been obtained regarding the issue related to the information sent by the bank that attracts attention of A (2.61) and AA (2.71) customers.

However, the questions related to the attitude toward the bank (Q. 20. Attitude toward the bank is extremely favourable; Q. 21. The image of this bank fits my personality well; Q. 22. Positive feelings toward the bank) have demonstrated that both natural persons (3.19-3.21) and legal persons (3.39-3.42) consider attitude toward the bank to be important; the same situation has been observed with the bank image and feelings toward the bank.

In turn, the questions aimed at reflecting customer perception and brand ethics (Q. 23. Bank is well known as a good corporate citizen; Q. 24. Bank is an active sponsor of community events; Q. 25. Bank has high ethical standards with respect to its customers and employees) have shown that AA and CC (3.85–3.86) customers consider the issue of bank being well known from the corporate point of view to be significant; however, the same issue seems less important for B customers (3.14). In turn, sponsorship has been considered less important (natural persons: 2.19–2.24, legal persons: 2.4–2.44). The ethical standards have been highly evaluated by all the customer categories (natural persons: 3.99–4.01, legal persons: 4.18–4.22).

To determine the importance of each component of brand equity, the authors have calculated total customer mean values (see Fig. 5).

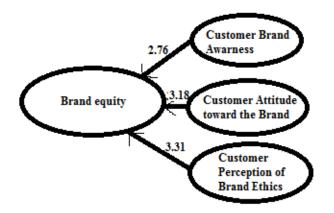


Fig. 5. Mean values of brand equity components

The obtained data has demonstrated that when evaluating brand equity as a component of customer equity the utmost importance is given to customer perception of brand ethics, which is followed by customer attitude toward the brand and customer brand awareness.

#### **Retention Equity**

Likewise, the evaluation of value and brand equity, retention equity is also based on the components developed by Rust et al. (2000): loyalty programs, special recognition and treatment programs, affinity programs, community building programs and knowledge building programs [1].

The question related to customer loyalty programs (Q. 26. Bank implements customer loyalty programs) has demonstrated that this issue attracts a lot of attention from AA, BB, CC customers (3.47-3.51), and little attention from A, B, C customers (2.51-2.56).

In turn, special recognition and treatment programs (Q. 27. Bank recognizes me as being special) have been low

rated by all customers (natural persons: 2.41–2.44, legal persons: 2.59–2.65).

However, the question related to affinity programs (Q. 28. Bank knows a lot about me) has demonstrated that all customers highly evaluate affinity programs (natural persons: 4.36–4.56, legal persons: 4.54–4.55). Also community building programs (Q. 29. Sense of community with bank employees) have been highly evaluated (natural persons: 4.33–4.35, legal persons: 4.41–4.43).

The question related to knowledge building programs (Q. 30. I know this bank procedures well) has reflected that this issue is important to both A (3.67) and AA (3.87) customers, but less important to B, C (3.56; 3.55) and BB, CC (3.65; 3.64) customers.

To determine the components of retention equity, customer mean values have also been calculated (see Fig. 6).

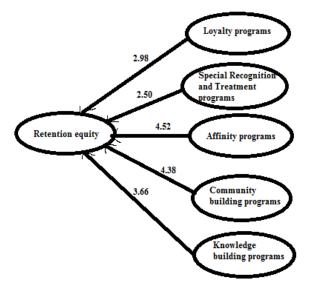


Fig. 6. Mean values of retention equity components

As shown in Fig. 6, the most important components of retention equity are those, which are based on affinity and community building programs; important components are knowledge building programs, and the least important are loyalty programs, special recognition and treatment programs.

# **Customer Equity Drivers**

Based on the results obtained from empirical studies, the authors could determine bank customer equity, as well as test the hypotheses put forward.

Three-dimensional mean values of bank customer equity are summarised and shown in Fig. 7.

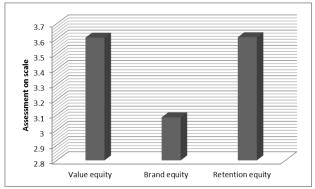


Fig. 7. Customer equity drivers in the bank

The obtained results have demonstrated that bank customer equity is mainly based on such components as value equity and retention equity and less on brand equity.

The research has also proven all three hypotheses put forward, i.e., if mean values of all three components are above 3 according to Likert scale, there is a positive correlation between customer equity and its three dimensions.

The authors have also theoretically substantiated their research. For example, Rust et al. (2000) emphasized that the main value of customer equity of enterprises that provide services is mutual relationship [1]. A similar conclusion was also drawn by Berger et al. [14]. However, the importance of value equity was determined by Bauer and Hammerschmidt (2005).

#### 5. CONCLUSIONS

Within the framework of the present research, the authors have managed to empirically evaluate customer equity and its three dimensions.

Having conducted the research, the authors have come to a conclusion that bank customer equity is mainly affected by two out of three customer equity dimensions – value and retention equity. The research findings have also proven the hypotheses put forward in the article.

The data also demonstrated that on the whole all three customer equity dimensions mainly affect legal persons, as compared to natural persons.

The authors suggest that further empirical research is needed to evaluate customer equity in other banks. It is also necessary to compare the bank financial data and the data obtained from the empirical research.

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