THE INFLUENCE OF SERVICE QUALITY TOWARD CUSTOMER SATISFACTION IN ORDER TO CREATE CUSTOMER LOYALTY IN BANKING INDUSTRY
(A CASE OF BRI CIK DITIRO YOGYAKARTA)

A THESIS

Presented as a Partial Fulfillment of the Requirements
To Obtain the Bachelor Degree in Management Department

By

SISKA ENDYANA
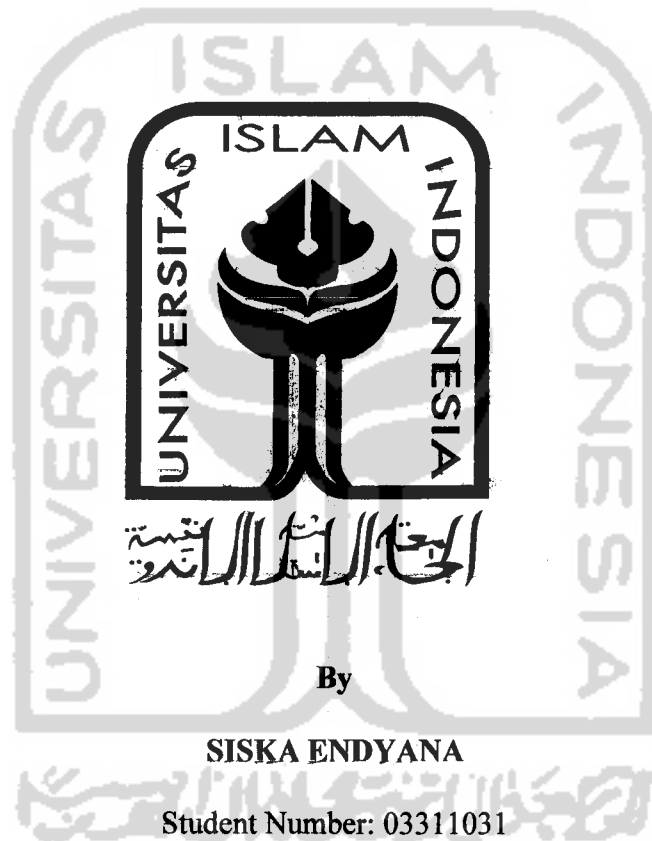
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**DEPARTMENT OF MANAGEMENT
INTERNATIONAL PROGRAM
FACULTY OF ECONOMICS
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YOGYAKARTA
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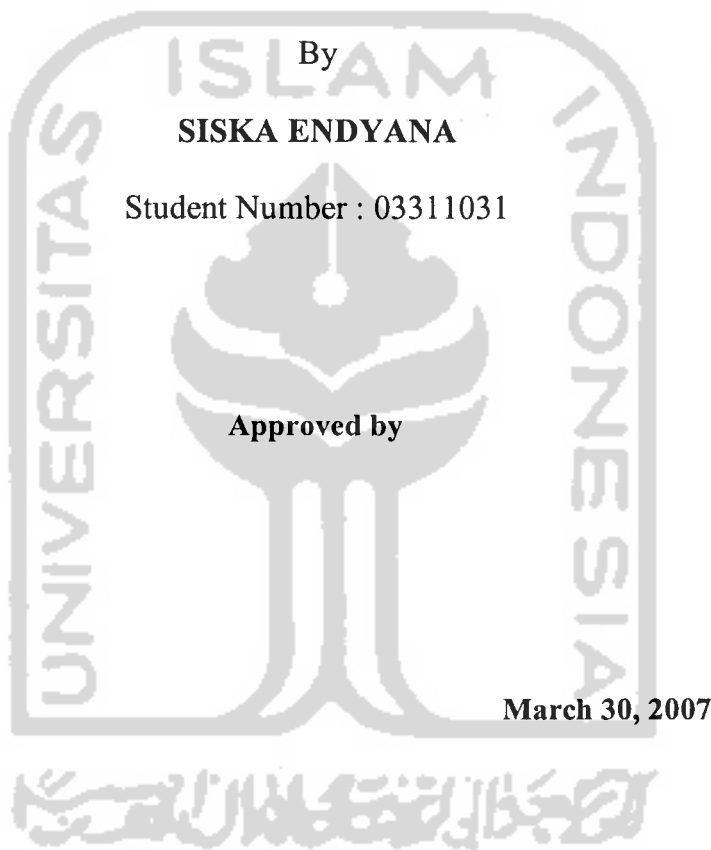
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Yogyakarta, April 30, 2007

Siska Endyana

STATEMENT OF FREE PLAGIARISM

Herein I declare the originality of this thesis; there is no other work which has ever presented to obtain any university degree, and in my concern there is neither one else's opinion nor published written work, except acknowledged quotation relevant to the topic of this thesis which have been stated or listed on the thesis bibliography.

If in the future this statement is not proven as it supposed to be, I am willing to accept any sanction complying to the determinates regulation for its consequence.

Yogyakarta,30 March, 2007

Siska Endyana

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ABSTRACT

Endyana, Siska (2007), "The Analysis of the Influence of Service Quality toward Customer Satisfaction In Order To Create Customer Loyalty in Banking Industry". Yogyakarta: Faculty of Economics, Department of Management, International Program, Universitas Islam Indonesia.

In the banking business competition recently, the customers' satisfaction and loyalty becomes the main priority in the level of customers' necessity and expectation, hence the bank has to consider the things, which are considered important by customers. In this case, bank need to consider influencing factors of service quality to the customer satisfaction and customer loyalty and whether or not it fulfills.

This research is conducted to analyze the influence of service quality toward customer satisfaction in order to create customer loyalty in banking industry. Variables tested in this research are service quality as the independent variables which are consist of reliability, tangible, responsiveness, assurance, empathy. Customer satisfaction and customer loyalty as the dependent variable. Subjects of this research are customer surveys taken in BRI Cik DiTiro Yogyakarta. A hundred samples respondents were taken randomly for those who are customers of BRI Cik DiTiro by distributing questionnaire.

The results of statistical tests indicate that there is significant positive influence of service quality to customer satisfaction, customer satisfaction to customer loyalty and service quality directly to customer loyalty. Another finding indicates that dimension of responsiveness is the most dominant that influence customer satisfaction and customer loyalty. Meanwhile, dimension of assurance has less influence on customer satisfaction and customer loyalty in BRI Cik DiTiro Yogyakarta.

ABSTRAK

Endyana, Siska (2007), "The Analysis of the Influence of Service Quality toward Customer Satisfaction In Order To Create Customer Loyalty in Banking Industry". Yogyakarta: Faculty of Economics, Department of Management, International Program, Universitas Islam Indonesia.

Dalam persaingan bisnis perbankan saat ini, kepuasan dan kesetiaan pelanggan menjadi prioritas utama yang berkaitan dengan kebutuhan dan harapan pelanggan, karena itu bank harus mempertimbangkan sesuatu yang dianggap penting oleh pelanggan. Dalam hal ini, bank perlu mempertimbangkan factor yang mempengaruhi kualitas jasa terhadap kepuasan dan kesetiaan pelanggan dan apakah faktor itu memenuhi atau tidak.

Penelitian ini dilakukan untuk menganalisa pengaruh dari kualitas jasa terhadap kepuasan pelanggan dalam menciptakan kesetiaan pelanggan dalam industri perbankan. Variabel yang diuji di dalam penelitian ini adalah kualitas jasa sebagai variable bebas yang terdiri dari keandalan, bukti fisik, daya tanggap, jaminan, empati. Sedangkan kepuasan dan kesetiaan pelanggan sebagai variabel tak bebas. Subjek dari penelitian ini diambil di dalam kantor BRI Cik DiTiro Yogyakarta. Seratus sample responden diambil secara acak kepada pelanggan BRI Cik DiTiro Yogyakarta dengan menyebar kuisioner.

Hasil dari tes statistik menunjukkan bahwa terdapat pengaruh yang signifikan positif di dalam variabel kualitas jasa terhadap kepuasan pelanggan, kepuasan pelanggan terhadap kesetiaan pelanggan dan kualitas jasa terhadap kesetiaan pelanggan secara langsung. Kesimpulan lain yang didapat adalah dimensi keandalan sangat berpengaruh terhadap kepuasan dan kesetiaan pelanggan. Sementara itu dimensi jaminan paling sedikit berpengaruh terhadap kepuasan dan kesetiaan pelanggan di BRI Cik DiTiro Yogyakarta.

I dedicate this thesis to;
My beloved Dad and Mom

CHAPTER 1

INTRODUCTION

1.1 Background of the study

The service sector is dramatically affected the way we live and work. Now service is continually being launched to satisfy our existing needs and to meet needs that we did not even know we had. Service organizations range in size from huge international corporations like airlines, banks, insurance companies, telecommunication companies, and hotel chain to a vast array of locally owned and operated small businesses, including restaurant, laundries, and numerous business to business services. This condition tightens the competition in the service firms. To survive in highly competitive markets, organizations need to provide goods and services that yield highly satisfied and loyal customers. When customers are satisfied, they will more likely return to those who helped them, while dissatisfied customers are will likely go elsewhere. The retention of very loyal customers is a key to organizational survival, because the dynamic environment of service today places a premium on effective marketing. Among the keys for competing effectively are skills in marketing strategy and execution.

One of the most basic concepts in marketing is the marketing mix, defined as the element an organization controls that can be used to satisfy or communicate with customers. To have an effective marketing strategy, the services firm should use the service marketing mix in order to compete with other competitors. This strategy

consist of 7Ps, that are, Product elements, Place and time (speed and convenience of place and time for the customer are becoming important determinants in service delivery), Promotion (to attract customer), Price, Physical environment (to have good customer's impression), Process (to have an effective process), People (many services depend on direct interaction between customer and a firm's employees). Service firm must understand the implication of the seven components of integrated service management, as described before, in order to develop effective strategies.

Targeting, acquiring, and retaining the "right" customer also at the core of many successful service firms. "Right" customer or loyal customer can mean, to a firm, a consistent service of revenue over time of period. But it will only continue as long as the customer feels that he or she receives better value than from other supplier. The longer customer remained with a firm in each of these industries, the more profitable they became to serve. By having the loyalty of customer, it helps service firm increase the profit. Its profit may come from such factors as profit derived from increased purchase (in banking environment, higher account balance), profit from reduced operating cost (as customer become more experienced, they need less for information and assistance), profit from referral to other customers (positive word of mouth and recommendation are like free sales and advertising), profit from price premium (loyal customers may be more willing to pay higher price at express work). Besides, being able to build loyalty of customer is seen as the key factor in winning market share and developing sustainable competitive advantage.

This research intentionally focuses on the relationship between service quality and customer satisfaction toward customer loyalty in retail banking. Because the researcher knows that condition of Indonesian banking always changes (form and character) significantly and there are so many new branches of bank existed at last view years. The competitiveness in the banking industry has increased significantly in recent years due to deregulation and globalization. Since the products and services offered by banks can often be easily duplicated, banks are not only competing with each other but also with other non-bank financial institutions. When banks provide nearly identical services, they can only distinguish themselves on the basis of price and quality. Besides, the ability to maximize customer loyalty through close and durable relationships is critical to retail banks' ability to grow their businesses. As banks strive to create and manage customer relationships, several emerging trends affect the approach and tools banks employ to achieve sustainable growth. These trends reflect a fundamental change in the way banks interact with the customers they have – and those they want to acquire by offering high service quality.

Based on the explanation above, and the fact that there is an influence between service quality toward customer satisfaction in order to create customer loyalty, then the research will be focused on " *The Influence of Service Quality Toward Customer Satisfaction In order to Create Customer Loyalty"* (A Case of BRI Cik DiTiro in Yogyakarta).

1.2 Problem Identification

Understanding the customer behaviour is very important for the company to know whether the experience of receiving the service and its benefits has met the customer's expectation. And also to know the reason why people buy and consume a product or service or the act of purchasing, and also includes the using of products, service that can affect satisfaction and loyalty derived from using them.

Based on the study background above, the basic problem that could be stated here is how far the customer's behaviour toward service quality influences the customer satisfaction and customer loyalty in BRI Yogyakarta branch.

1.3. Problem Formulation

The followings are the problems to be studied in the research.

1. Does service quality influence customer satisfaction and customer loyalty?

2. Does customer satisfaction influence customer loyalty?

3. Which service quality dimension dominantly influences customer satisfaction in order to create customer loyalty?

1.4. Limitation of Research Area

There are so many banks in Indonesia, for example: BI, BRI, BNI, BCA, Danamon, etc. Each bank has its own characteristics and value added for customers to choose from.

To make the research more focused on the influence of service quality and customer satisfaction toward customer loyalty, it only takes the BRI branch. The limitation of this research includes:

1. The research is going to be conducted at BRI Cik DiTiro Yogyakarta branch.

2. The population and samples of the research are customers of BRI Cik DiTiro Yogyakarta.

3. Emphasized on customers who come to BRI Cik DiTiro branch.

1.5. Research Objective

1. To identify the influence of service quality toward customer satisfaction and customer loyalty, and customer satisfaction toward customer loyalty.

2. To identify the most dominant dimension of service quality that influences customer satisfaction and customer loyalty at BRI Cik DiTiro Yogyakarta branch.

1.6. Research Benefit

This research examines about the relationship among service quality, customer satisfaction and customer loyalty in BRI Cik DiTiro Yogyakarta, which the researcher hopes will be beneficial for the following parties:

1. Writer

This research provides opportunities to develop understanding of the relationship among service quality, customer satisfaction, and customer loyalty.

2. Company

This research gives supporting data for BRI Yogyakarta branch to increase quality of their service and make the customers satisfy with that service in order to build customer loyalty.

3. Other

The method that has been used in this research hopefully can be useful for similar research in other products.

1.7. Definition of Terms

1. Service Quality

Service quality commonly noted as a critical prerequisite and determinant of competitiveness for establishing and sustaining satisfying relationships with customers.

2. Customer

According to the law of Republic of Indonesia number 7, 1992 about banking then it is change with the law number 10, 1998, customer is defined as any party who uses the financial service of bank.

3. Banking

According to the act of Republic of Indonesia number 10, 1998, concerning the amendment to act number 7, 1992 concerning banking, bank is defined as any activities that are related to the bank as an institution, based on the type of activities, based on the way it carries out activities, and based on the process of its daily activities.

CHAPTER II

REVIEW OF RELATED LITERATURE

2.1 Theoretical Review

2.1.1 Service Quality

The relationship quality is a general evaluation of relationship strength and the extent to which a relationship meets the needs and expectations of the parties involved, based on the history of successful or unsuccessful encounters or events (Crosby et al., 1990). In other words, relationship quality is regarded as construct comprising at least two components: (1) trust in sales agent and the service (Swan, Trawick, & Silwa, 1985); and (2) satisfaction with a sales agent and the service (Crosby and Stephen, 1987). In general, a high quality of service may be defined as consistently anticipating and satisfying the needs and expectations of customers. This is not an easy corporate objective as it is the customer who defines quality rather than the bank. Moreover, each customer will define quality in slightly different way depending upon their age, education, income, wealth, life style etc. To become increasingly customer driven and to respond customer needs rather than to rely on its own perceptions of what customers require. This will involve radical improvement in both technical qualities: product knowledge, operational systems, etc, and functional quality: staff attitudes, behaviour and appearance (Richardson and Robinson, 1985)

Service quality has been described as a form of attitude that results from the comparison of expectations with performance (Cronin and Taylor, 1992;

Parasuraman *et al.*, 1985; Zeithaml *et al*, 1990). It is similar to Gronroos (1982), he argued that customers, while evaluating the quality of a service, compare the service they expect with perceptions of the services they actually receive. It should not only meet but also exceed customer expectations and should include a continuous improvement process (Lloyd-Walker & Cheung, 1998).

Service quality has been defined as customers' overall impressions of an organization's services in terms of relative superiority or inferiority (Johnston, 1995). In the banking industry generally, service quality improvement has started at the front counter (Nazer, et al., 1999; Kaynak & Whiteley, 1999; Nielsen et al., 1998; Zineldin 1996; Boyd, et al., 1994; Haron, et al., 1994) and has moved to electronic services (Delvin, 1995; Joseph et al., 1999; Jayawardhena & Foley, 2000; Mols, 2000; Daniel, 1999; Sathye, 1999). Accordingly, there has been a growing trend to switch from personal banking services to electronic services with a matching improvement in service quality. Johnston (1995) examined, by using the critical incident technique, banking customers' perceptions about the service quality they received and found 18 service quality attributes. They are: access, aesthetics, attentiveness/helpful, availability, care, cleanliness/tidiness, comfort, commitment, communication, competence, courtesy, flexibility, friendliness, functionality, integrity, reliability, responsiveness, and security.

2.1.1.2 Service Quality Constructions and Measurement

Sasser et al. (978) believes that service quality includes the following seven constructions or attributes: (1) security, (2) consistency, (3) attitude, (4) completeness, (5) condition, (6) availability, (7) timing. Parasuraman et al. (1985) announces the service quality concept pattern which includes the five gaps created by service delivery and communication process between consumer and the service provider, thus defining the perceived service quality of the consumer as the difference between expected service and perceived service received, namely, "service quality (Q) = perceived service (P) – expected service (E)", they also propose the ten common factors to be considered by consumer in evaluating service quality: (1) reliability, (2) responsiveness, (3) competence, (4) access, (5) tangible, (6) courtesy, (7)security, (8)understanding/ knowing, (9) credibility, (10) communication. In 1988, Parasuraman et al. considered its benefits and simplification, simplifying these 10 service quality attributes into five, establishing the first measuring table for service quality, "SERVQUAL" to be used by service provider to assess customers' perception on service quality. It also provides an extended model (Zeithaml et al., 1988). SERVQUAL includes the five following characteristics: (1) tangible, (2) reliability, (3) responsiveness, (4) assurance, (5) empathy.

1. *Reliability* is defined as the ability to deliver the promised service dependably and accurately. It is about keeping promises – promise about delivery, pricing, complaint handling, etc.

2. ***Tangible*** *is* the service dimension that focuses on the elements representing the service physically.

3. ***Responsiveness*** can be described as the willingness to help customers and provide prompt service. This dimension stresses service personnel's attitude to be attentive to customer requests, question and complaints.

4. ***Assurance*** is the service quality dimension that focuses on the ability to inspire trust and confidence.

5. ***Empathy*** is the service aspect that stresses the treatment of customers as individuals.

Since this measuring table was suggested, in terms of all the measuring tables for service quality measurement, the SERVQUAL suggested by the Parasuraman et al. (1998) is the most broadly used tool. This measurement uses the perspective of the consumers to evaluate the expectations of consumers regarding similar kinds of service quality, and the differences of the consumers' perception performance with other service providers. In service quality measurement, SERVQUAL has already been broadly used and is considered to be of high quality by the business and academic world. The SERVQUAL measuring table will measure the recognition and expectations of the customers with these 22 measurement items from the perceived value. Hence, $Q = P - E$. Parasuraman et al. (1985) believed that the service industry has intangible characteristics. The enterprise's service performance lacks the concrete evaluation standard and is hard to be evaluated objectively. Thus, with the comparison between the consumer's expectations before purchase ad the actual

perception after purchase to evaluate the satisfaction degree of the service provided by the enterprise. In $Q = P - E$, when $P - E < 0$, this means that the consumers were not able to reach their expectations and are unsatisfied, unable to accept the quality; when $P - E = 0$, it means that the customers achieved their expectations and they are satisfied with the quality; when $P - E > 0$, this means that the customers surprised their expectations and are very satisfied with their ideal quality. It can be seen in figure 2.1.

Figure 2.1. The description of SERVQUAL, expectation and the quality that the customer accepted
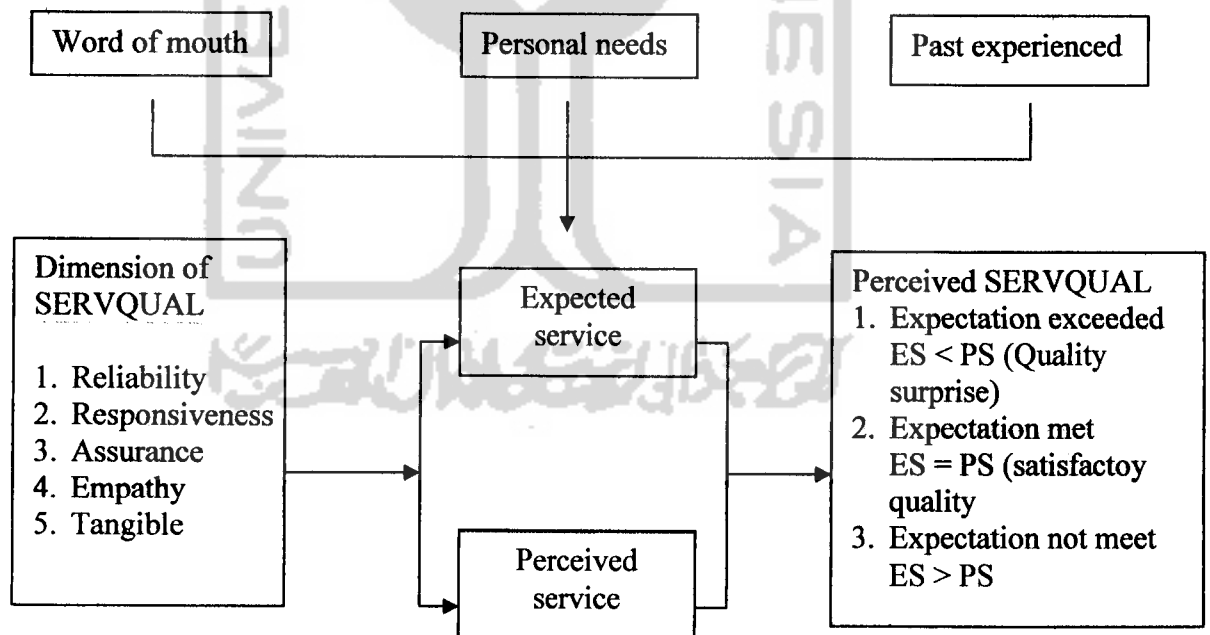
On the other hand, McDougall and Levesque (1994) argued that there were two overriding dimensions of service quality. The first one is the core or outcome aspects (contractual) of the service, and the second is the relational or process aspects (customer-employee relationship) of the service. Services are often characterized by their intangibility, inseparability, heterogeneity, and perish ability. The implications of these characteristics are that it is often difficult for customers to evaluate services at pre-consumption, consumption and post consumption stages of the consumer decision-making (Legg and Baker, 1996). Because of the intangible nature of services, it becomes difficult for an organization to understand how its customers perceive and evaluate the quality of its services (Parasuraman *et. al.*, 1985; Zeithaml, 1981). That is why customers make inferences about the service quality on the basis of tangible factors (the buildings, the physical layout etc.) that surround the service environment. It can have a significant impact on customers' affective responses, behavioural intentions and customers' perceptions of service quality. (Wakefield and Blodgett, 1999, Dabholkar et al. 1996) reported similar findings that the tangible aspects of department stores do influence.

In "Sinergi", it was also mentioned that service quality of the bank would be a crystallization of:

1. Bank officers' professionalism in providing service for their customers.

2. There is an interaction quality between bank officers and their customers.

Bank officer's effort to recognize their customers as described in Figure 2.2.

Figure 2.2 The Chain of the Quality of Bank Service

```
┌─────────────────┐    ┌─────────────────┐    ┌─────────────┐    ┌──────────────┐
│ Bank officer    │───▶│ The quality of  │───▶│ Recognize   │───▶│ The quality  │
│ professionalism │    │ personal        │    │ customer    │    │ of Bank      │
│                 │    │ relationship    │    │             │    │ service      │
└─────────────────┘    └─────────────────┘    └─────────────┘    └──────────────┘
        ▲                       ▲                     ▲
        │                       │                     │
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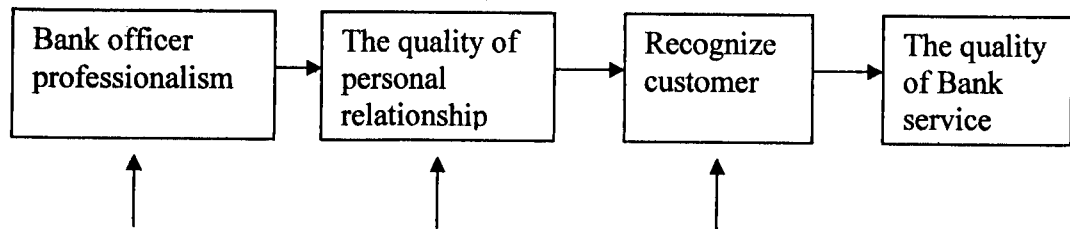
1. Trust   1. Concern and   1. Understanding

2. Competence   responsive   2. Communication

3. Credibility   2. Politeness

• Safety   3. Hospitality

• Physical facilities   4. Easy to be met

2.1.2. Customer Satisfaction

Customer satisfaction is a customer's perception that his or her needs, wishes, expectations, or desires with regard to products and service have been fulfilled. According to Jochen Wirtz (2003), satisfaction is matching the needs and wants with the expectation from the chosen product and truly one-dimensional response to consumption experience. Stronger emotional response to consumption will influence the customer satisfaction. Hean Tat Keh and Chi Wei Teo (2001) stated that customer satisfaction is customer form expectations about product or service performance prior to purchase or consumption experience. According to Paolo Genzi and Ottavia Pelloni (2004), overall satisfaction is the customer's dis/satisfaction with the

organization based on all encounters and experience with that particular organization. Besides, interpersonal relationship between the salesperson and the customer can have an impact on fostering customer satisfaction. It is similar to Paul G. Patterson's definition about the satisfaction. He analyzed that a degree of interpersonal interaction is necessary to "produce" the service, consumer with extravert personalities are more likely to be satisfied with the service encounter.

Roger Hallowell (1996) analyzed satisfaction in the retail banking. Based on his study, satisfied customer is customers who are most likely to remain with that bank for long periods, and who will purchase multiple product and services, who will recommend the bank to their friends and relation, and who may be the source of superior return to the bank's shareholder.

John B. Clark and Hojong Hwang divide the concept of satisfaction into four categories. First, satisfaction is viewed as a cognitive concept to be rewarded for the consumers' payment. Second, it is regarded as an evaluation on the accord of previous expectation with alternatives of the selection. Third, satisfaction is defined as an affective response after purchase. Fourth, consumer satisfaction demonstrates that satisfaction judgments are influenced by both emotional responses and cognitive disconfirmation. Satisfaction is a necessary but not a sufficient condition for loyalty. Other variables impact on the customer's choice including price, location and convenience (Andrea McIlroy and Shirley Barnett).

Customer satisfaction has for many years been a key determinant in explaining why customers leave or stay with an organisation. Every organisation

needs to know how to retain their customers, even if they appear to be satisfied. Reichheld (1996) suggests that some unsatisfied customers may choose not to defect, because they do not expect to receive better service elsewhere and that some satisfied customers may look for other providers if they believe they can get better services elsewhere. Customer satisfaction is viewed as an important indicator of customer retention but customer satisfaction is not always an assurance of customer retention. Retaining customers is also dependent on a number of other factors such as choices, conveniences, prices, and incomes.

2.1.2.1. Assessment of customer satisfaction

The customer satisfaction can influence significantly on operation performance of enterprise. With proper assessment tools, it can precisely assess customer satisfaction of the provided products or services and further provide products and service that meet customer expectations. When assessing customer satisfaction, there are generally two methods: (1) single items: having single item to assess the overall satisfaction. According to Day (1997), we can understand the results of overall satisfactions result after customers use the products by single satisfaction item; and (2) Multiple items: measuring individual satisfaction of products with general scale and summing up for the overall satisfaction

2.1.3. Customer Loyalty

Customer loyalty is difficult to define. In general, there are three distinctive approaches to measure loyalty:

1. Behavioural measurement
2. Attitudinal measurement
3. Composite measurement

The behavioural measurement is considered consistent, repetitious purchase behaviour as an indicator of loyalty. But repeat purchase does not always mean commitment. Attitudinal measurements use attitudinal data to reflect the emotional and psychological attachment inherent in loyalty. Loyalty attitudes are a softer measure than behaviour because people can feel one way and behave quite differently. The third approach, combine the first two dimensions and measure loyalty by customers' product preferences, propensity of brand switching, frequency of purchase and total amount of purchase (Simon D. Knox and Tim J. Denison, 1999)

Loyal customers are customers who hold favourable attitudes toward the company, commit to repurchase the product or service, and recommend the product to others (John T. Bowen and Shiang-Lih Chen, 2001). Paolo Genzi and Ottavia Pelloni (2004) examined loyalty at the interpersonal level. They define loyalty as intention to repurchase and to recommend. Loyalty is vulnerable because even if customers are satisfied with the service they will continue to defect if they believe they can get better value, convenience or quality elsewhere. Therefore, customer satisfaction is not an accurate indicator of customer loyalty. Customer loyalty is

frequently operationalised as the product or service that first comes to mind when making a purchase decision (Newman and Werbel, 1973; Bellenger et., al, 1976; Dwyer et al., 1987)

Roger Hallowell (1996) defines loyalty behaviour as relationship continuance, increased scale or scope of relationship, and recommendation (word of mouth advertising) result from customer's belief that the quantity of value received from one supplier is greater than that available from other supplier. Andrea McIlroy and Shirley Barnett (2000) describe loyalty is as a customer's commitment to do business with a particular organization, purchasing their goods and services repeatedly, and recommending the services and products to friends and associates. They also describe that loyalty customer can mean a consistent source of revenue over a period of many years. However, this loyalty can't be taken for granted. It will continue only as long as the customer feels they are receiving better value than they would obtain from another supplier. There is always the risk that a customer will defect when a competitor offers better value or a wider range of value added option. So before a relationship with a customer can develop, loyalty must be present.

Dean, Alison (2001) describe loyalty as true loyalty rather than repeat purchasing behaviour, which is the actual repurchase of brand, regardless of commitment. Also, he describes loyalty in an educational provider and is therefore service loyalty, rather than brand loyalty as has been developed. "Loyal customers stay with their primary bank longer, give more of their business to the bank, and are a source of positive word of mouth, which attracts additional new customers. Loyal

customers—with their longer customer lifetimes and potential high lifetime values— can mean greater market shares and profits," said Osipow. If we relate to the marketing, Andrea McIlroy and Shirley Barnett (2000) said that the cost of attracting new customers include advertising and promotion, but loyal customers also act as word of mouth advertisers and will generally spend more. These customers may tell up to ten people about the service to which they feel loyalty.

Loyal customers have a positive effect on customer retention but customer loyalty is not customer retention. Loyalty is only a valid concept in situations where customers have options to choose from. The main issue is that retention should not be taken as a substitute for loyalty and this suggests that banks need to understand why their consumers choose to stay and should not assume that it is a positive conscious choice (Colgate et al., 1996). Similarly, repurchase alone is not an indicator of loyalty. In financial services, continued customer support, which might even include extending the range of purchases, can often be an indication of inertia. Behavioural patterns form only one component of loyalty and if the consumer does not demonstrate a favourable attitude towards a brand or company, there is an increased chance of switching. Customers may be lured away by attractive offers made by competitors when they experience dissatisfying incidents (Jones and Farquhar, 2003).

2.2. Theoretical Framework

For the purpose of this study, thus, it is very important to examine the relationship between customer loyalty and the two prerequisites; service quality and

customer satisfaction in the banking industry. It is proposed to examine three sets of relationship:

1. How service quality of bank affects customer satisfaction.

2. How customer satisfaction affects customer loyalty to bank.

3. How service quality of bank directly affects customer loyalty.

Based on these three relationships a model is proposed in Figure 2.3.

This model predicts that service quality and customer satisfaction directly influence customer loyalty. The relationships between customer evaluations of supporting services and their attitude towards a provider will be explored from the perspective of the Quality-Satisfaction- Loyalty chain (Anderson and Sullivan, 1993). In this model, perceived service quality positively affects customer satisfaction. Satisfaction is considered to be a key antecedent of the whole battery of desired behavioural intentions (Lovelock and Wright, 2002; Zeithaml, Berry and Parasuraman, 1996)), such as recommendation of the provider, repurchase behavior and a preference for a particular provider compared to its competitors (Dick and Basu, 19911). In a relationship context, customer satisfaction is resulted from a comprehensive evaluation of the complete service offer Liljander and Strandvik, 1995; Bateson, 1991).

Figure 2.3

Model of the relationships between service quality, customer satisfaction and customer loyalty

---

```
┌─────────────────────┐
│   Service Quality   │ ──────────┐
│       (X₁)          │           │
└─────────────────────┘           │
           │                      ▼
           │            ┌─────────────────────┐
           │            │  Customer Loyalty   │
           ▼            │        (Y₂)         │
┌─────────────────────┐ └─────────────────────┘
│ Customer Satisfaction│          ▲
│   (Y₁) & (X₂)       │ ──────────┘
└─────────────────────┘
```
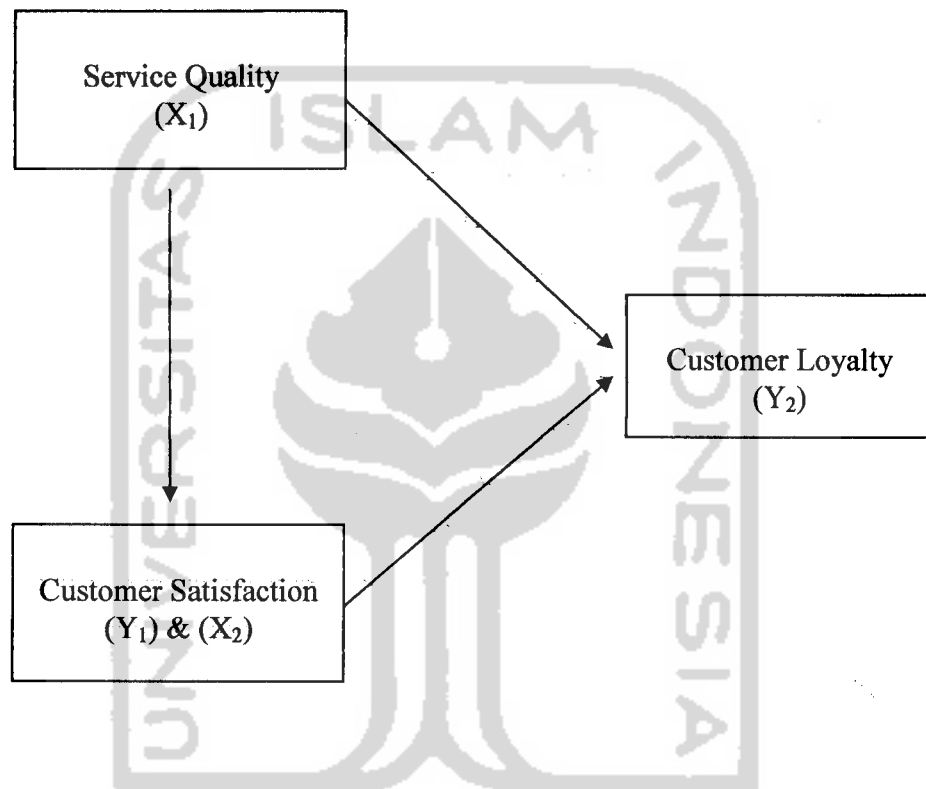
Explanation:

Service quality has influence in creating customer satisfaction. In creating customer loyalty of BRI assumes that before entering loyal phase through customer satisfaction first. But there is possibility of service quality directly influence customer loyalty without through customer satisfaction. In this case, variable customer satisfaction called as intervening variable in this model.

2.3. Hypothesis Formulation

The dynamic relationship among service quality, customer satisfaction and customer behaviour (loyalty, switching or repurchasing) constitutes the research area as particular interest. Service quality enhances customer satisfaction, which in turn, contributes to customer loyalty (Parasuraman & Grewal, 2000). The quality-satisfaction-loyalty linkage is also consistent with Heskett, Sasser, and Schlesinger's work (1997) on the service profit chain. There is evidence in the literature that consumer/s perceived service quality and satisfaction are related to customer loyalty. Practitioners and researcher have not clearly identified yet a theoretical framework, identifying factors that could lead to the development of customer loyalty (Gremier and Brown, 1997). However, there is a consensus among practitioners and academics that customer satisfaction and service quality are prerequisites of loyalty (Gremier and Brown, 1997; Cronin and Taylor, 1992). In terms of retaining customers, previous research shows that service quality and overall service satisfaction can improve customers' intentions to stay with a firm (Keaveney, 1995).

Service quality and customer satisfaction have been the focus of much marketing theory and theory. In today's competitive markets, delivering high quality service and having satisfied customers are viewed as indispensable for gaining a sustainable advantage.

Butcher et al. (2001) supports the efficacy of customer satisfaction as the major predictor of service loyalty. More importantly, their study shows that satisfaction with a single service encounter is critical to loyalty formation. However,

friendship between customers and particular service employees also has a major influence on the development of loyalty. It also appears that value for relationship and service quality are the major variables in forming customer loyalty. The following hypothesis is proposed:

Hypothesis 1: Service quality influence Customer satisfaction

Customer satisfaction is an important outcome for service operation and is one of the most viable means of influencing customer loyalty (Anderson et al., 1994) except in a few rare instances; complete customer satisfaction is the key to securing customer loyalty and generating superior long-term financial performance (Jones & Sasser, 1995). Studies show, however, satisfying customers alone is not enough since there is no guarantee that satisfied customers will return to purchase. It is now becoming apparent that customer loyalty is significantly more important than customer satisfaction in a business organization's success. Although companies are realizing the value of keeping customer loyal, no one knows for sure how to do it. Companies measure customer satisfaction, and hope that if the satisfaction score is good, the customer will stay with the firm. Heavy use of satisfaction surveys by service industries is driven by the assumption that a satisfied customer will return for a repurchase (Jones and Sasser, 1995). An important concept to consider when developing a customer loyalty is customer satisfaction. Satisfaction is a measure of how well a customer's expectations are met while customer loyalty is a measure of how likely a customer is to repurchase and engage in relationship activities (Andrea McIlroy and Shirley Barnett, 2000). The effects of customer attitudes on bank loyalty

and bank switching are posited to be mediated by perceived satisfaction. Bank customer attitudes are likely to impact on overall satisfaction, and the level of bank customer perceived satisfaction is likely to affect the degree of loyalty towards the bank (Howcroft and Lavis, 1986; Moutinho and Meidan, 1988; Moutinho and Brownlie, 1989; Manrai, 1993).

Hypothesis 2: Customer satisfaction influence customer loyalty

The service management literature suggests that service quality usually leads to stronger customer loyalty. Offering superior service provides consumers with a reason for selecting and remaining with a particular provider (Enew & Binks, 1996). Rust and Zahorik (1993) related service quality perceptions to customer loyalty in banking industry. Parasuraman et al. (1988) found a positive and significant relationship between customers' perceptions of service quality and loyalty including their willingness to recommend the company and their purchasing intention. In addition, Zeithaml et al. (1996) offered strong empirical support for the notion that improving service quality could increase favourable behavioural intentions on the part of a customer and decrease unfavourable ones.

The reason for using and measuring service quality to explain customer loyalty is that quality ratings tell us the state of the service provider's resources and actions (Banwari Mittal and Walfried M. Lassar, 1998). In general, banks in the world offer similar kinds of services (Lim & Tang 2000), quickly matching their competitors' innovations. However, customers can perceive differences in the quality of service. Banks have realized the importance of concentrating on service quality as

a way to increase customer satisfaction and loyalty, and to improve their core competence and business performance (Kunst & Lemmink, 2000; Stafford, 1996). Gronroos (1983), using numerous researcher on service organization, found that service quality was the single most important determinant of image. Thus, a customer's experience with the products and services is considered to be the most important factor that influences his/her minds in regarding to image. This indicates that desirable image leads to customer loyalty and customer preference.

Hypothesis 3: Service quality has a direct positive effect on Customer loyalty
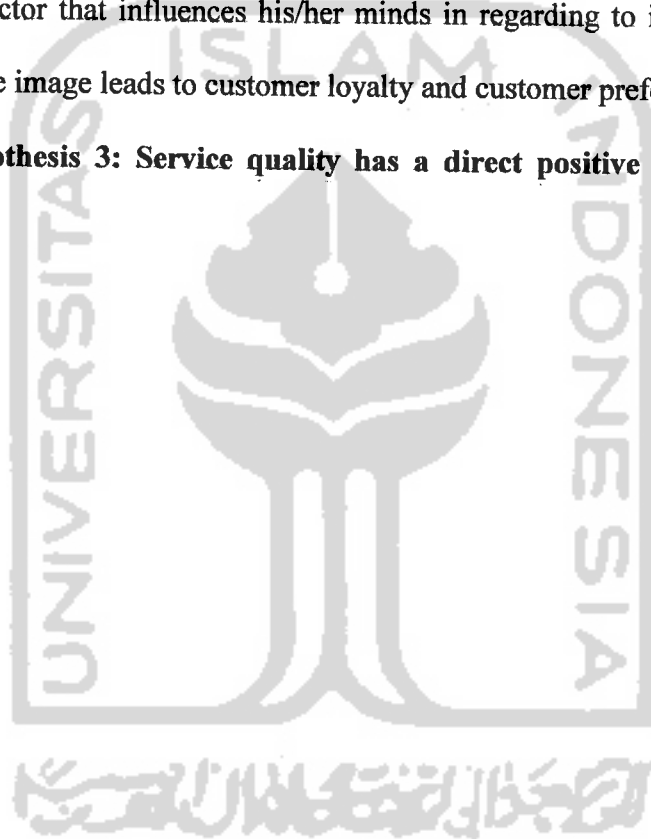
CHAPTER III

RESEARCH METHOD

3.1. Research Method

3.1.1. Type of the study

This study applies an empirical research with a study case and is in the form of quantitative and qualitative research. The method used in this research is survey by distributing questioners to subjects of the research.

3.2. Research Subject

3.2.1. Population

Population is the whole or individual unit becoming the suggestion or the research subject, which the characteristic will be supposed. In this research, the population was customer of BRI Yogyakarta branch.

3.2.2. Sample and Sampling

Sample is a subset measurements selected from the population of interest (Kotler, 1991; 109). The samples of this research were customers of BRI Yogyakarta who came to the branch at the time of research is conducted. According to Sekaran (2003), the minimum sample for correlation research is 30 samples. In order to make the results more generalized 100 respondents were used.

Sampling is the process of selecting items from the population so that the sample characteristics can be generalized to the population.

According to Hair, *et. Al.,* (1998) measurement samples suggested in using estimation of *Maximum Likelihood* in SEM *(Structural Equation Modelling)* are 100-200 respondents. The weaknesses of *Maximum Likelihood* is when using big amount of respondents (400-500), will sensitively result the bad *goodness of fit index.* That is why the researcher use 100 respondents.

3.3. Research Setting

3.3.1. Place

The research was conducted at BRI Cik DiTiro in Yogyakarta.

3.3.2. Time

This research was conducted in January - February 2007

3.4. Research Instrument & Data Collection

The survey method as part of data collection may adopted to obtain the primary data in this study. The survey was taken in order to analyse the relationship between service quality, customer satisfaction and customer loyalty.

3.4.1. Measurement Scale

This research uses Likert scale. Respondent were asked for to fill the statement in five categories. According to Jogiyanto (2004), it can be measured based on the rating of the statements given by respondents by giving score 1 for "strongly disagree", 5 for "strongly agree" and 3 for neutral (see table 3.1)

Table 3.1

Variable Measurement Scale

Score	Summary	Notation
1	Strongly disagree (Sangat Tidak Setuju)	STS
2	Disagree (Tidak Setuju)	TS
4	Neutral (Netral)	N
3	Agree (Setuju)	S
5	Strongly agree (Sangat Setuju)	SS

Source: Jogiyanto (2004)

3.4.2. Questionnaire

The way to get 100 respondents, the researcher distributed questionnaire to each person randomly. The purpose is to get information based on the respondent's point of view.

3.5. Research Variables

The variables of the research are service quality, customer satisfaction and customer loyalty. Furthermore, a pre-test was conducted prior the distribution of the questionnaire. The pre-test is aimed to identify the respondent's difficulty to understand the statements and the question listed in the questionnaire.

3.5.1. Dependent Variable (Y_j)

A dependent variable is variable that measures the effect of the independent variables or treatment being studied (Malhotra, 1999 p, 217). The dependent variable in this study is customer satisfaction (Y_1) and customer loyalty (Y_2).

3.5.2. Independent Variable (X_i)

An independent variable is a variable that is manipulated by the researcher and whose effects are measured and compared (Malhotra, 1999 p. 217). The independent variable in this study is service quality.

3.5.2.1. Service Quality (X_1)

Service Quality includes the five following characteristics: (1) reliability, (2) assurance, (3) tangible, (4) empathy and (5) responsiveness. Those dimension are measured by some indicators.

1. Reliability

Reliability variable was measured by using the customer perception indicators, they are:

   a. Service giving acceleration

   b. Staff culture

   c. Staff courtesy

   d. Skill including accuracy, involving in recording transaction

   e. Punctuality in holding appointment

   f. Duration of customer queue

2. Assurance

This variable was measured through customers' perception to their knowledge, capability, culture and reliability owned by staffs:

a. Bank capability to give the security in doing transaction

b. Excellent performance

c. Staff's self reliance to bank product knowledge

3. Tangible

The customers' perception indicators measures the physical condition variable about:

a. Physical facilities owned by the bank in the form of office performance

b. Instrument owned by bank including bank interior

c. Supporting instruments such as the communication instrument

d. Technology as the inter-branch on line vehicle

4. Empathy

Empathy variable was measured by using indicators such as:

a. Staffs' accessibility to do communication with customers

b. Staffs' capability to give the personal attention to the customer

c. Staffs' understanding to what customers need by providing products in accordance with the needs

5. Responsiveness

This variable was measured by the customers' perception on how far is the readiness of staff in giving support and services to the customers. Its indicators, such as:

a. Staffs' eagerness in responding customers' need

b. Professionalism in managing the case (compliance) of customers

c. The readiness of staff to help customers

3.5.3. Techniques of Data Analysis

3.5.3.1. Qualitative Analysis

The information collected from the respondent questionnaires comprises the main characteristics of analysis. It is useful to know the proposition, composition, and ratio of respondents based on age, gender, education, job or occupation, and initiative and recommendation.

3.5.3.2. Quantitative Analysis

The statistical tool used in this research was Structural Equation Modelling (SEM) to analyze data collected. It was used to determine the correlation between service quality and customer satisfaction that influences customer loyalty. In order to determine the influence of independent variables on dependent variables, this was calculated by using AMOS program.

3.5.3.2.1. Structural Equation Modelling (SEM)

Quantitative Analysis is an analysis method that uses statistical methodology to solve the problems. This research used analysis of *Structural Equation Modelling* (SEM). This model is *multivariate* analysis technique that tests the correlation among variables *recursively* and *non-recursively,* to get whole analysis about whole model. This model was chosen to determine the extent of the influence of service quality and customer satisfaction on customer loyalty regarding customer of BRI. According to Hair, *et. al.,* (1998) the process of *Structural Equation Modelling* (SEM) consists of the following steps:

1. **Model Development Based on Theory**

Structural Equation Modelling (SEM) is based on causality relationship where the changing of one variable is assumed to be caused by changing other variables. The strong causality relationship between two variables is assumed not to be caused by the analysis chosen, but by the theoretical justification to support the analysis (Ghozali, 2004:8).

2. **Path Diagram and Structural Equation.**

According to Ghozali (2004), there are two important things, arranging the structural model by correlating latent construct (endogenous and exogenous) with indicator variable *(manifest variable).* Based on theoretical model above, path diagram can be developed as follows:

Figure 3. *Path Diagram* **of the Influence of Service Quality and Customer Satisfaction toward Customer Loyalty in BRI**
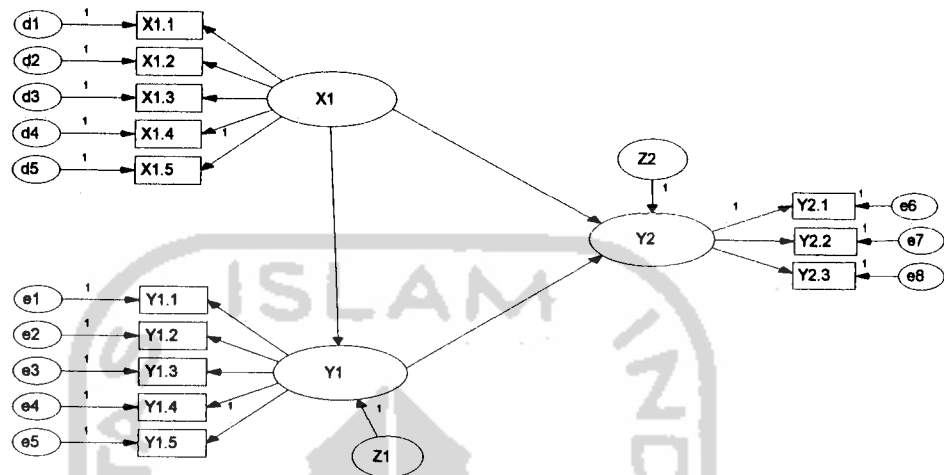
3. Choosing Input Matrix and Estimation Model

Model in structural equation is different from other multivariate analysis techniques, SEM only uses data input, and that is variance/covariance matrix or correlation matrix. Rough data from questionnaire will be changed into variance/covariance matrix or correlation matrix, so that the equation is also called as *covariance structural analysis.* Covariance matrix has more advantage than correlation matrix in giving comparison validity between different population and different sample. The use of correlation is best suited if the research objectives are simply to understand the pattern of construct relationship, but do not describe the total variance of the construct (Ghozali, 2004).

4. Structural Model Identification

Identification problem is incapability of proposed model to result estimation model. In order to see the identification problem, by seeing the estimation result,

those are: big value of *standard error* for one or more coefficients, incapability of program to invert *information matrix,* impossible estimation value (negative *error variance*), and high correlation (>0.90). If there is any identification problem, so there are 3 things that must be concerned, coefficient amount that relatively estimated toward covariance or identified correlation with small value of *degree of freedom (df),* using reciprocal correlation among constructs, failures in determining fix value on construct scale (Ghozali, 2004).

5. Goodness of Fit Criteria

If *offending estimate* happening, i.e negative variance *error* or *non-significant error variance* of construct, *standardized coefficient* close to value of 1.0, and high standard error, the cause of offending *estimate* must be eliminated first. In SEM analysis, there is no single statistical test tool to measure or test the model (Hair, *et. Al.,* 1995; Joreskog & Sorbom, 1989; Long, 1983; Tabachnic & Fidell, 1996, in Ferdinand, 2002). *Fit Index* and *cut of value* that is used to test whether the model can be accepted or not is listed:

a) *Absolute Fit Measures*

1) *Likelihood Ratio Chi Square Statistic*

An analysis tool to measure overall fit is *likelihood ratio chi-square statistic,* with sample of 100 respondents. The model which is tested will be considered good or satisfied if the *chi-square* (χ^2) value is small. Small value of χ^2 means that the model is good ($\chi^2 = 0$, means that there is nothing differences, Ho is accepted) and

accepted based on probability with the *cut of value of* p>0.05 or p>0.10 (Hulland, *et. Al.,* 1996, in Ghozali, 2004).

Because this analysis objective is to develop and test a model which suits and *fit* based on the data, so it required insignificant value of χ^2 that test null hypotheses (*estimated population covariance* is not equal than *sample covariance*). Value of χ^2 can be compared with *degree of freedom (df)* to get relative value of χ^2 and it is used to make conclusion that high relative value of χ^2 means that there is significant difference between covariance matrix observed and covariance matrix estimated.

Small value of χ^2 resulting the significant level more than 0.05 that indicates that there is no significant difference between covariance matrix data and covariance matrix estimated (Hair, *et. Al.,* 1995, in Ghozali, 2004).

2) CMIN/DF (*The minimum Sample Discrepancy Function*)

The minimum Sample Discrepancy Function (CMIN) divided by its *degree of freedom (df)* will result in CMIN/DF (generally, it is used for researcher as indicator to measure fit level of model. CMIN/DF is also as *chi-square* statistic; χ^2 divided by its *degree of freedom (df)* is relative χ^2. Value of χ^2 relatively less than 2.0 or even less than 3.0 as indication of *acceptable fit* between model and data (Arbuckle, 1997 in Ghozali, 2004).

3) GFI (*Goodness of Fit Index*)

Fit Index can measure proportion of variance in covariance matrix sample stated by estimated matrix covariance population (Bentler, 1983; Tanaka & Huba, 1989 in Ghozali, 2004). GFI is *non-statistical* measurement tool that has value

ranging from 0 (*poor fit*) until 1.0 *(perfect fit)*. High value in this index shows *"better fit"*.

4) RMSEA (*The Root Mean Square Error of Approximation*)

RMSEA is index that can be used to compensate *chi-square* statistic in big sample (Baumgartner & Homburg, 1996, in Ghozali, 2004). RMSEA value shows expected *Goodness of Fit Index* if it estimated model in population (Hair, *et. al.,* 1995). Small value of RMSEA (=0.08) means that model that shows *close fit* of model based on *degree of freedom (df)* can be accepted (Browne & Cudeck, 1993, in Ghozali, 2004)

b) *Incremental Fit Measures*

1) AGFI (*Adjusted Goodness of Fit Index*)

Tanaka & Huba (1989) and Ghozali (2004) stated that GFI was analogue of R^2 in multiple regressions. This *Fit Index* can be adjusted toward available *degree of freedom (df)* to test whether the model can be accepted or not (Arbuckel, 1999, in Ghozali 2004: 20). The index can be obyained from the equation below:

$$AGFI = 1 - (1 - GFI)\frac{d_b}{d}$$

Where

$$d_b = \sum_{g=1}^{G} p^{\bullet(g)} = \text{Sample } moments$$

$$d = degrees\ of\ freedom$$

Acceptance level that is recommended is if AGFI has equal value with more than 0.90 (Hair, *et.al.,* 1996, in Ghozali, 2004). GFI and AGFI are the criteria that

measure proportion of variance in a covariance matrix sample. Value of 0.95 can be interpreted as *good overall fit* level and range value of 0.090-0.95 shows *adequate fit level* (Hulland, *et. Al.,* Ghozali, 2004).

2) TLI (*Tucker Lewis Index*)

TLI is *incremental fit index* alternative that compares tested model toward baseline model (Baugartner Homburg, 1996). The recommended value as the base of the model is $\geq 0,90$ (Hair, *et. al.,* 1995), and the value that is close to 1 (one) shows a very good fit(Arbuckle, 1997, in Ghozali, 2004:32). Index as follows:

$$TLI = \frac{\left(\chi^2_{null}/df_{null}\right)-\left(\chi^2_{proposed}/df_{proposed}\right)}{\left(\chi^2_{null}/df_{null}\right)-1}$$

Or:

$$TLI = \frac{\frac{C_b}{d_b}-\frac{C}{d}}{\frac{C_b}{d_b}-1}$$

Where C is discrepancy of model that is evaluated and d is degree of freedom, meanwhile C_b and d_b is discrepancy and *degrees of freedom* from the *baseline model* that has comparison.

3) NFI (Normed Fit Index)

NFI is the comparison measurement between *the proposed model* and *the null model*. The value of NFI will be varied from 0 *(no fit at all)* until 1.0 *(perfect fit)*. Like TLI, there is no *absolute value* used as the standard, but generally recommended as equal or > 0.90

6. Model Interpretation

According to Ghozali (2004), a model is stated as acceptable, when it can consider making a modification index to recover theoretical justicification or goodness of fit. This modification must have a consideration. If modification model must be cross validated (estimated with separated data) before modification model accepted or if it got value absolute fit model from default model, with chi-square that relatively big value, that is showed by significant probability level (p < 0.5) so it requires modification. Model can be stated as good fit model if probability level of chi-square relatively is smaller than in significant probability level (p > 0.05).
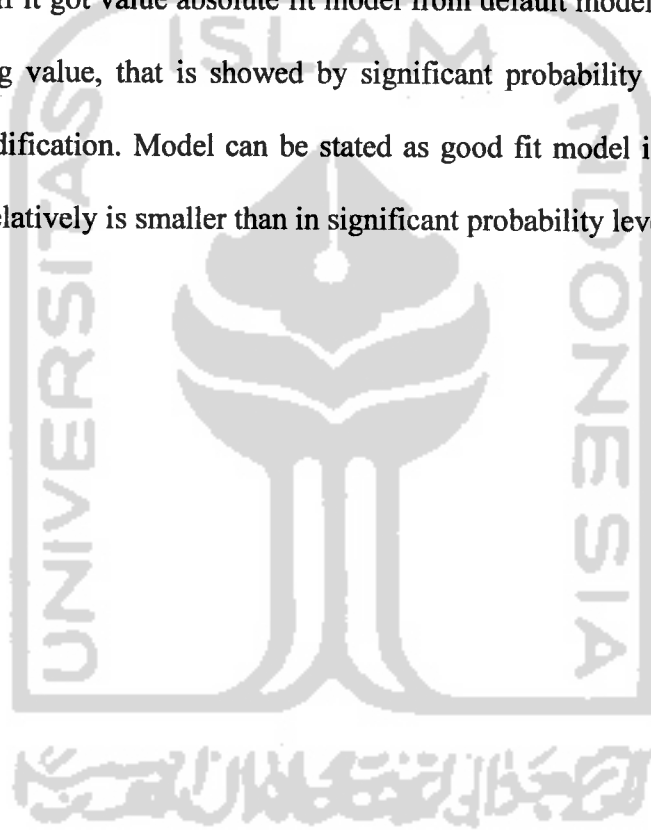
CHAPTER IV

DATA ANALYSIS, HYPOTHESIS TESTING AND DISCUSSION

4.1. Overview of the Strategy Analyses

This research was conducted at BRI Cik DiTiro in Jogjakarta and aimed to answer the questions as mentioned in the previous chapter.

The first section discusses the descriptive analysis. It describes the respondent demographic characteristics, which includes the respondent's gender, education, occupation, initiative and recommendation, and period become BRI's customers. The next section is Measurement Model to determine whether the data is valid, reliable and meets the requirements of further analysis.

Quantity analysis used in this research is *Structural Equation Model* (SEM) with AMOS program version 5.0, *Structural Equation Model* chosen to determine how significant the model of the influence of Service Quality and Customer Satisfaction toward Customer Loyalty. One hundred respondents were used for the purpose of this research.

4.2. The Respondent's Demographic Characteristics

This research was conducted in BRI Cik DiTiro Jogjakarta, where a hundred respondents are taken as samples. The purpose is to identify the customer's characteristics of BRI. The distribution of the respondents' characteristics is described in the tables below as follows:

4.2.1. Respondents' Gender

Based on the respondents' gender, there are two categories, male and female. The data of the analysis result based on respondents' characteristic of gender is showed in table 4.1.

Table 4.1

The Distribution Frequencies of the Respondents' Gender

Gender	Frequency	Percentage
Male	62	62.00
Female	38	38.00
Total	100	100.00

Source: Primary Data (computed), 2007

Table 4.1 describes that most of BRI's customers are male (62%) and the rest are female (38%).

4.2.2. Respondents' Age

Based on the respondents' age, there are 4 groups: less than 20 years old; 21-30 years old; 31-40 years old; more than 40 years old. The data of the analysis result based on respondents' characteristic of age showed in table 4.2.

Table 4.2

The Distribution Frequencies of the Respondent's Age

Age	Frequency	Percentage
< 20 years old	15	15.00
21 – 30 years old	38	38.00
31 – 40 years old	22	22.00
>40 years old	25	25.00
Total	100	100.00

Source: Primary Data (computed), 2007

Table 4.2 describes that most of BRI's customers are under 30 years old (53%). Adult and mature are 47%. From the age point of view, the segments of BRI are below and above 30 years old. This separation may be important because it may indicate two different characteristics. From this result, the researcher concludes that customers of BRI are in productive level of age. Besides, it was supported by the surrounding environment of BRI that consist of offices and schools.

4.2.3. Respondents' Education Background

Based on the respondents' education background, there are five categories that are: Junior High School, High School, Diploma/Under Graduate, Post Graduate and other. The data of the analysis result based on respondents' characteristic of education background is showed in table 4.3.

Table 4.3

The Distribution Frequencies of the Respondent's Education Background

Last Education	Frequency	Percentage
Junior High School	6	6.00
High School	20	20.00
Diploma/Under Graduate	45	45.00
Post Graduate	22	22.00
Other	7	7.00
Total	100	100.00

Source: Primary Data (computed), 2007

Table 4.3 describes that most of the BRI's customers are diploma/undergraduate (45%). Based on the result of respondent's education

background, the researcher concludes that the customers of BRI have enough knowledge and understanding about banking. It means that BRI can easily transform the information to the customers rationally.

4.2.4. Respondents' Occupation

Based on the respondents' occupation, there are five categories of customers: Student/College students, Government officer, Private employee, Entrepreneur and Other. The data of the analysis result based on respondents' characteristic of education background are showed in table 4.4.

Table 4.4

The Distribution Frequencies of the Respondent's Occupation

Occupation	Frequency	Percentage
Student/College student	38	38.00
Government Officer	18	18.00
Private Employee	15	15.00
Entrepreneur	17	17.00
Other	12	12.00
Total	100	100.00

Source: Primary Data (computed), 2007

Table 4.4 describes that most of BRI's customers are student/ college students (38%) and employees (33%). This result shows that respondent's occupation has the relevance with respondent's age, dominated by the age of under 30 years old. Besides, it is due to the fact that the majority of population in Yogyakarta is dominated by students or college students.

4.2.5. Respondents' Initiative and Recommendation Source in Buying

Respondents' initiative and recommendation is very important source in buying. One of the most effective recommendations which become free promotion for many companies is word of mouth. Besides, the word of mouth also has dominant influence toward customer loyalty. In other word, the customer's behaviour to recommend BRI toward other people is the main factor that influences the customer loyalty. Table 4.5 presents the distribution frequencies of respondents' initiative and recommendation source in buying in BRI.

Table 4.5

The Distribution Frequencies of Respondent's Initiative and Recommendation Source in Knowing BRI

Recommendation	Frequency	Percentage
Friend/colleague	29	29.00
Family/relatives	25	25.00
Advertisement	22	22.00
Business partner	10	10.00
Other	14	14.00
Total	100	100.00

Source: Primary Data (computed), 2007

Table 4.5 describes the distribution frequencies of respondent's initiative and recommendation. Based on the table it can be inferred that most of BRI's customers know about BRI from the word of mouth (54%). So, BRI has to focus on customer satisfaction in order to make positive word of mouth.

4.2.6. Respondents' Period as Customer of BRI

Even though it does not describe accurate loyalty, the information below is considered very important because repeat buying in a long period of time is one important indicator of loyalty (longitudinal loyalty). Implicitly the customers who do repeat buying are those who are satisfied. Table 4.6 presents the distribution frequencies of the respondent's period become BRI's customers.

Table 4.6

The Distribution Frequencies of the Respondent's Period become Customer of BRI

Period	Frequency	Percentage
< 1 years	31	31.00
1 – 3 years	25	25.00
3 – 5 years	21	21.00
> 5 years	23	23.00
Total	100	100.00

Source: Primary Data (computed), 2007

Table 4.6 describes the frequency distribution of the respondent's period become customer of BRI. Based on the table above, it can be seen that most of respondents are become BRI's customers for less than 1 year (31%).

4.3. Measurement Model

Measurement model in this research is used to know *unobserved variable* that can be measured by each *observed variable* construct, by using *Confirmatory Factor Analysis* (CFA) or well known as factor analysis. If the value of *factor loading* from

each construct is more than 0,5 (λ>0,5), it can be stated as reliable and significance rate of 5% (p<0,05), it can be states as valid, or *unobserved variable* can be measured by using each *observed variable* construct (Hair, *et al*., 1998).

4.3.1. Service Quality Construct

Service quality construct *(unobserved/latent variable)* measured by using indicator *(observed/manifest variable)*, there are 22 questions in the questionnaires which are divided by five dimension of service quality. The result of *confirmatory factor analysis* (CFA) is:
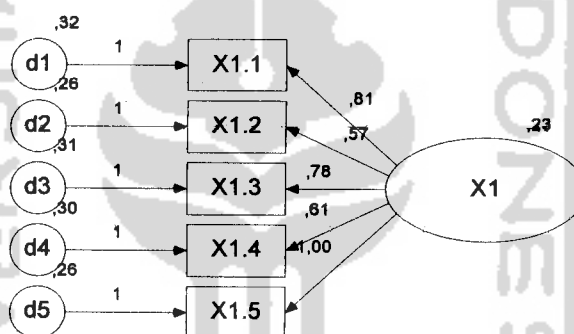
Table 4.7

Measurement of Service Quality Construct

Regression Weights: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
X1.5 <--- X1	1,000				
X1.4 <--- X1	,611	,195	3,131	,002	par_1
X1.3 <--- X1	,776	,218	3,568	,000	par_2
X1.2 <--- X1	,573	,162	3,546	,000	par_3
X1.1 <--- X1	,815	,196	4,160	,000	par_4

Source: Appendices C

The result of *confirmatory factor analysis* (CFA) leads to the value for each

construct *(loading factor or λ)*:

$$X1 = \lambda_1 X1.1 + \lambda_2 X1.2 + \lambda_3 X1.3 + \lambda_4 X1.4 + \lambda_5 X1.5$$

$$X1 = 0{,}815X1.1 + 0{,}573X1.2 + 0{,}776X1.3 + 0{,}611X1.4 + 1{,}000X1.5$$

From the equation above, it can be concluded that service quality is influenced

dominantly by X1.5 (Responsiveness) = 1,000

4.3.2. Customer Satisfaction Construct

Customer Satisfaction Construct, *(unobserved/latent variable)* measured by

using indicator *(observed/manifest variable)*, that derives from the service quality

questionnaire. The result of *confirmatory factor analysis* (CFA) is:
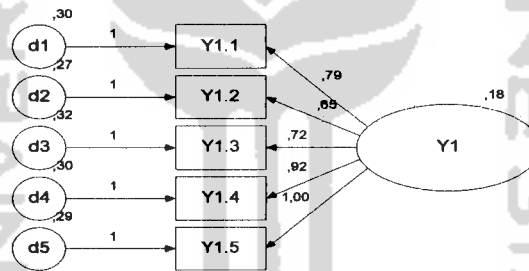
Table 4.8

Measurement of Customer Satisfaction Construct

Regression Weights: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
Y1.5 <--- Y1	1,000				
Y1.4 <--- Y1	,917	,259	3,540	,000	par_1
Y1.3 <--- Y1	,721	,213	3,383	,000	par_2
Y1.2 <--- Y1	,645	,219	2,939	,003	par_3
Y1.1 <--- Y1	,792	,265	2,991	,003	par_4

Source: Appendices C

The result of *confirmatory factor analysis* (CFA) leads to the value for each construct *(loading factor or λ)*:

$$Y1 = \lambda_1\,Y1.1 + \lambda_2\,Y1.2 + \lambda_3\,Y1.3 + \lambda_4\,Y1.4 + \lambda_5\,Y1.5$$

$$Y1 = 0,792Y1.1 + 0,645Y1.2 + 0,721Y1.3 + 0,917Y1.4 + 1,000Y1.5$$

The equation above shows that customer satisfaction is influenced dominantly by $Y1.5 = 1,000$ (customer satisfaction of the responsiveness)

4.3.3. Customer Loyalty Construct

The data Customer Loyalty construct *(unobserved/latent variable)* were determined by using three indicators *(observed/manifest variable)*, they are: you will always become a customer of BRI (Y2.1), you will recommend to others to be customer of BRI when they will open new account, ATM, or other case about financial banking (Y2.2), you will stay to be the customer of BRI, although other bank offer interesting reward (Y2.3). The result of *confirmatory factor analysis* (CFA) is:
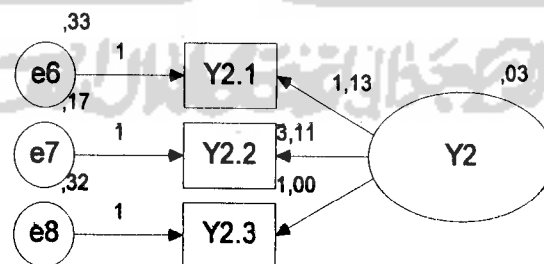
Table 4.9

Measurement of Customer Loyalty Construct

Regression Weights: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
Y2.3 <--- Y2	1,000				
Y2.2 <--- Y2	3,105	3,124	,994	,320	par_1
Y2.1 <--- Y2	1,134	,611	1,854	,064	par_2

Source: Appendices C

The result of *confirmatory factor analysis* (CFA) leads to the value for each construct *(loading factor or λ)*:

$$Y2 = \lambda_1\ Y2.1 + \lambda_2\ Y2.2 + \lambda_3\ Y2.3$$

$$Y2 = 1,134Y2.1 + 3,105Y2.2 + 1,000Y2.3$$

From the equation above, it can be concluded that Customer Loyalty is influenced dominantly by Y2.2 (recommend others to be customer of BRI) = 3,105.

4.4   Goodness of Fit Model

To know good criteria of model *(Goodness of Fit)*, it use: *Absolute Fit Measured, Incremental Fit Measured* and *Parsimonious Fit Measured*. The result of the measure based on *Absolute Fit Measured, Incremental Fit Measured* and *Parsimonious Fit Measured* is as follows:

Figure 4.1. Measurement of Absolute Fit Measured, Incremental Fit Measured and Parsimonious Fit Measured *before* Modification
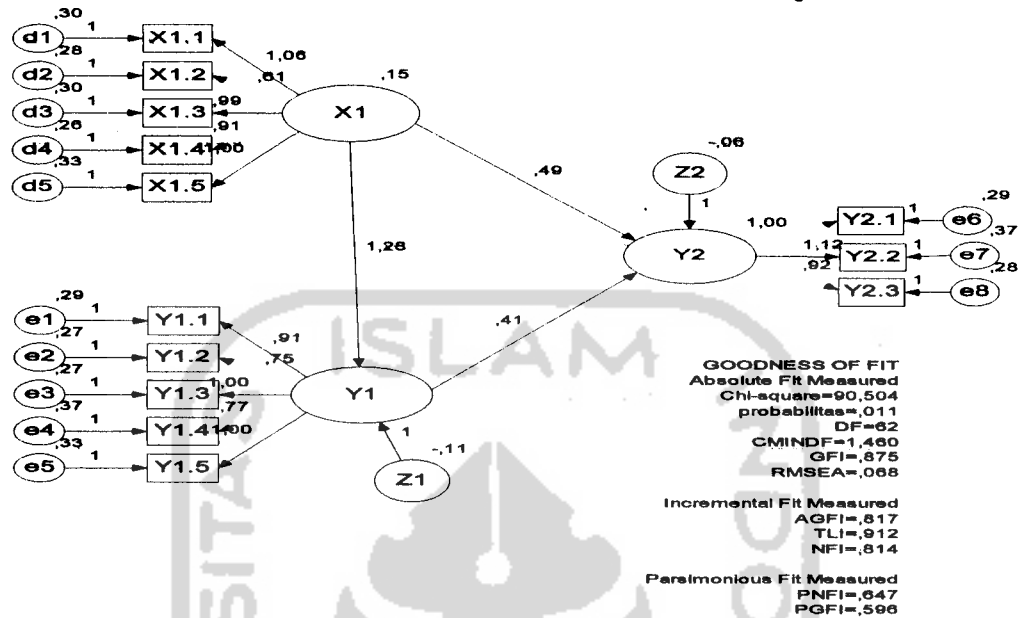
From the analysis result can be get as follows:

Table 4.10

Goodness of Fit Index before Modification Indices

Goodness of Fit Index	Result	Cut Off Value	Model Evaluation
Absolute Fit Measured			
Likelihood Chi Square	90,504	< 81,38102	Marginal
CMIN/DF	1,460	≤ 2,00	Good
GFI	0,875	≥ 0,90	Marginal
RMSEA	0,068	≤ 0,08	Good
Incremental Fit Measured			
AGFI	0,817	≥ 0,90	Marginal
TLI	0,912	≥ 0,90	Good
NFI	0,814	≥ 0,90	Marginal
Parsimonious Fit Measured			
PNFI	0,647	0,60 – 0,90	Good
PGFI	0,596	0,50 – 1,00	Good

Source: Appendices D

From the measurement's result of *Goodness Fit Index* above, it can be seen that the amount of *Absolute Fit Measured* that is measured by using *Likelihood Chi Square,* Cmin/df, GFI, and RMSEA got *Cut Off Value* which have not yet fulfilled the expected criteria, that are *Likelihood Chi Square* and GFI. And the amount of *Incremental Fit Measured* that is measured by using AGFI, TLI and NFI got *Cut Off Value* that have not yet fulfilled the expected criteria, that are AGFI and NFI. For the value of *Parsimonious Fit Measured* which is measured by using PNFI and PGFI, it is resulted the *Cut off Value* which has already fulfilled the expected criteria. Table 4.11 shows the whole estimation model.

Table 4.11

Result (Default Model) **before Modification**

Summary	Value
Chi-square	90,504
Degrees of freedom	62
Probability level	0,011

Source: Appendices D

Table 4.11 shows that probability level is significant = 0,011 (p<0,05), it shows that there is deviation between *sample covariance matrix* and *model (fitted) covariance matrix.* In order to be a good model, the value of *chi square* should have insignificant probability level (>0.05) to get expected value of *Goodness Fit Index* (better). It is required to do model revision by making *modification index* to revise the model by increasing parameter amount, so that value of *Chi Squares Statistic* will decrease rapidly compared to decreasing of *degree of freedom* (df), by doing *modification indices* according to value showed in Table 4.12 as follows:

Table 4.12

Modification Indices by using *Covariance*

	M.I.	Par Change
e3 <--> e2	4,662	-,047
e8 <--> e1	5,531	,056
d2 <--> e1	6,230	-,062
d5 <--> e8	4,297	-,054

Source: Appendices D

Modification Indices can only be done based on *measurement error covariance* value assumed by 0 (zero), because modifying with *measurement error covariance* does not need to do theoretical justification. But Modification Indices based on *measurement regression weight* must be supported by theory (Ghozali, 2004). The result of *modification index* can be seen in figure 4.2 and table 4.13.

Figure 4.2. Measurement of Absolute Fit Measured, Incremental Fit Measured and Parsimonious Fit Measured after Modification
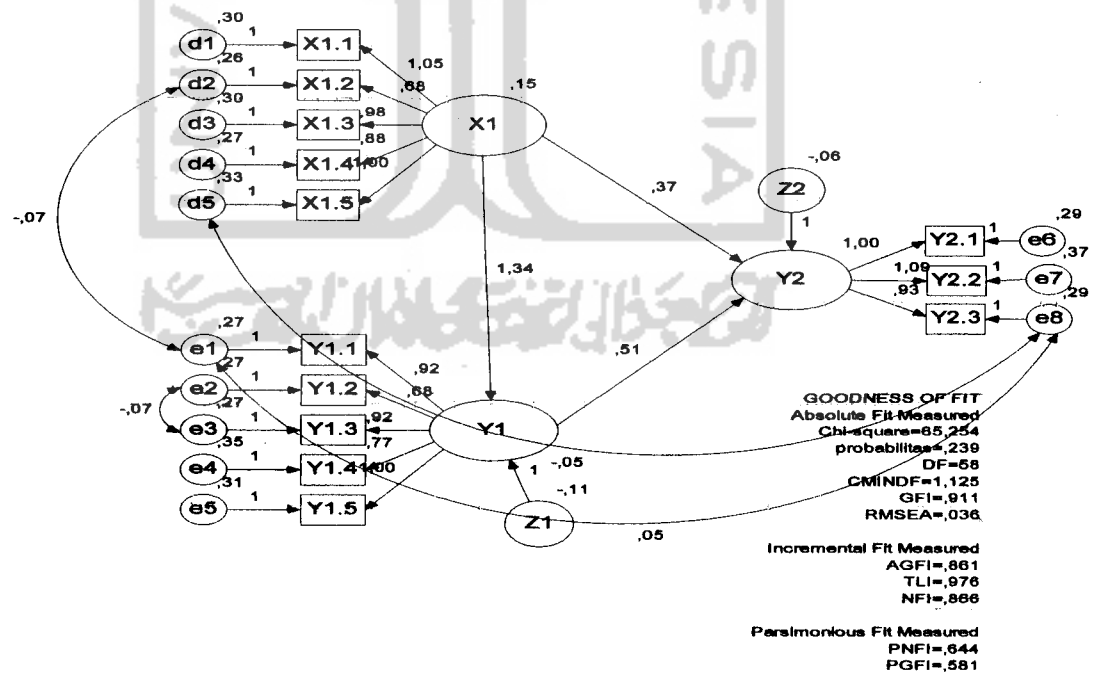
From the analysis result can be get as follows:

Table 4.13

Goodness of Fit Index **after Modification Indices**

Goodness of Fit Index	**Result**	*Cut Off Value*	**Model Evaluation**
Absolute Fit Measured			
Likelihood Chi Square	65,254	< 76,7778	Good
CMIN/DF	1,125	≤ 2,00	Good
GFI	0,911	≥ 0,90	Good
RMSEA	0,036	≤ 0,08	Good
Incremental Fit Measures			
AGFI	0,861	≥ 0,90	Marginal
TLI	0,976	≥ 0,90	Good
NFI	0,866	≥ 0,90	Marginal
Parsimonious Fit Measured			
PNFI	0,644	0,60 – 0,90	Good
PGFI	0,581	0,50 – 1,00	Good

Source: Appendices E

From the measurement's result of *Goodness Fit Index* above, it can be seen that the amount of *Absolute Fit Measured* that is measured by using *Likelihood Chi Square,* Cmin/df, GFI, and RMSEA derives *Cut Off Value* which has already fulfilled the expected criteria. And the amount of value of *Incremental Fit Measured* by using AGFI, TLI and NFI resulted *Cut Off Value* that is have not yet fulfilled the expected criteria, that are AGFI and NFI. The value of *Parsimonious Fit Measured* which is measured by using PNFI and PGFI led to *Cut Off Value* which has already fulfilled expected criteria. Table 4.14 shows the whole estimation model.

Table 4.14

***Result (Default Model)* after Modification Indices**

Summary	Value
Chi-square	65,254
Degrees of freedom	58
Probability level	0,239

Source: Appendices E

Table 4.14 shows that probability level is not significant =0,239 (p>0,05), so this model already become a good model *(goodness fit model)*, good model has insignificant probability level more than α=5% (Ghozali, 2004:45), so it shows conformity between *sample covariance matrix* and *model (fitted) covariance matrix* (Joreskog & Sorbom, 1993; Joreskog & Sorbom, 1996; Hair, *et. al.*, 1998; Joreskog, 2002:76). Thus, whole model used has fulfilled the expected criteria (*Goodness of Fit Model*).

4.5 Causal Correlation and Hypotheses Test

To know how big significant level of regression between indicator variable and latent variable, *Regression Weight* can be used by comparing probability level. If the probability level is less than α=5%, it can be said that it has significant regression. From *regression weight*, the result is as follow:

Figure 4.3. Regression Coefficient Service Quality, Customer Satisfaction toward Customer Loyalty

Explanation:

———————▸ = significant regression

- - - - - - -▸ = insignificant regression

** = Probability Level less than 5% (p<0,05)
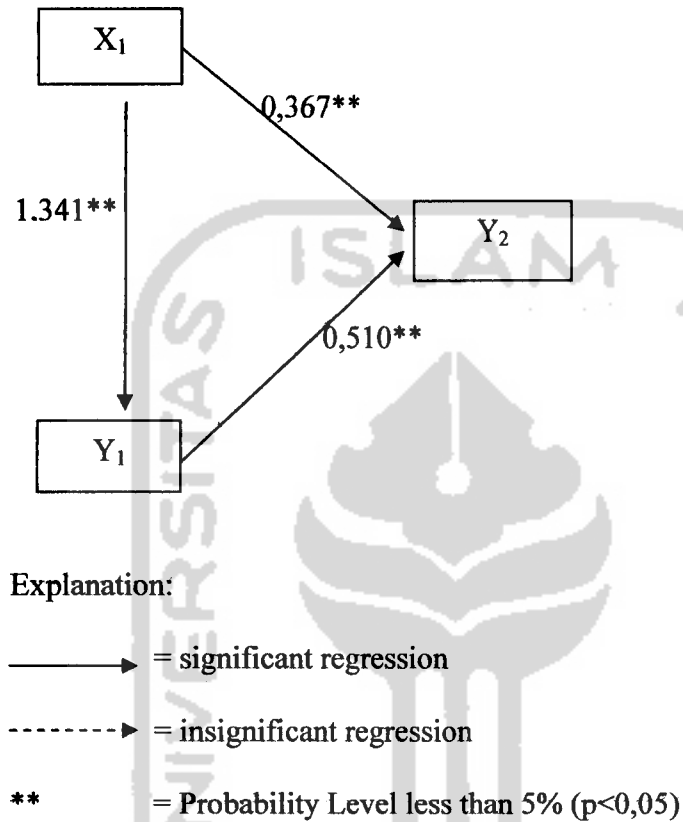
Table 4.15

Regression Weight

	Estimate	S.E.	C.R.	P	Label
Y1 <--- X1	1,341	,249	5,395	,000	par_11
Y2 <--- X1	,367	,107	3,439	,000	par_1
Y2 <--- Y1	,510	,112	4,535	,000	par_12

Source: Appendices E

From the *regression weight* on Table 4.15, it can be concluded that Service Quality (X_1) and Customer Satisfaction (Y_1) have positive influence on Customer Loyalty (Y_2); while Service Quality (X_1) has significantly positive influence on Customer Satisfaction (Y_1); with the significant level of less than 5%, the equation can be stated as follows:

$$Y_1 = \beta_1 X_1 + \zeta_1$$

$$Y_1 = 1{,}341 X_1 + \zeta_1$$

$$Y_2 = \beta_1 X_1 + \beta_2 Y_1 + \zeta_2$$

$$Y_2 = 0{,}367 X_1 + 0{,}510 Y_1 + \zeta_2$$

$$Y_2 = \beta_1 X_1 + \zeta_2$$

$$Y_2 = 0{,}367 X_1 + \zeta_2$$

4.5.1. The influence of Service Quality (X_1) toward Customer Satisfaction (Y_1)

Variable of Service Quality (X_1) has significantly positive influence on Customer Satisfaction (Y_1) = 1,341 with the significant level of 0,000 ($p<0{,}05$). It means that if variable of Service Quality (X_1) increases, Customer Satisfaction (Y_1) will increase also and vice versa. So it can support the hypotheses 1 that Service Quality influences Customer Satisfaction.

4.5.2. The influence of Customer Satisfaction (Y₁) toward Customer Loyalty (Y₂)

Variable of Customer Satisfaction (Y_1) has significantly positive influence on Customer Loyalty (Y) = 0,510 with the significant level of 0,000 (p<0,05). It means that if variable of Customer Satisfaction (Y_1) increases, Customer Loyalty (Y_2) will increase and vice versa. So it can support hypotheses 2 that Customer Satisfaction influence on Customer Loyalty.

4.5.3. The direct Influence of Service Quality (X₁) toward Customer Loyalty (Y₂)

Variable of Service Quality (X_1) has significantly positive influence on Customer Loyalty (Y_2) = 0,367 with the significant level of 0,000 (p<0,05). It means that if variable of Service Quality (X_1) increases, Customer Loyalty (Y_2) will increase and vice versa. So it can support hypotheses 3 that Service Quality has a direct positive effect on Customer Loyalty.

4.6. Discussion

From the result of the analysis, the relationship among Service Quality, Customer Satisfaction and Customer Loyalty can be measured by *Structural Equation Modelling* (SEM). To know the dominant variable that influences Customer Loyalty, which is *standardized regression weight* can be used. From the analysis the researcher get the result as follows:

Table 4.16

Standardized Regression Weight

	Estimate
Y1 <--- X1	1,300
Y2 <--- X1	,511
Y2 <--- Y1	,732

Source: Appendices E

The analysis result shows that the variable which dominantly influences customer loyalty is Customer Satisfaction. This finding is relevant to the theory of Anderson et al., (1994), he states that customer satisfaction is an important outcome for service operation and is one of the most viable means of influencing customer loyalty.

Studies conducted by Cronin and Taylor (1992) in service sectors such as: banking, pest control, dry cleaning, and fast food; found that customer satisfaction has a significant effect on purchase intentions in all four sectors. Howcroft and Lavis (1986) define that Bank customer attitudes are likely to impact on overall satisfaction, and the level of bank customer perceived satisfaction is likely to affect the degree of loyalty toward the bank.

Service Quality has significantly positive influence on the intervening variable that is Customer Satisfaction and also on Customer Loyalty. This finding is supported by some authors, as follows:

Parasuraman et al. (1988) found a positive and significant relationship between customers' perceptions of service quality and loyalty including their willingness to recommend the company and their purchase intention. In addition, Zeithaml et al. (1996) offers strong empirical support for the notion that improving service quality could increase favourable behavioural intentions on the part of a customer and decrease unfavourable ones. Those theories are related to the finding of this research. It can be seen in table 4.5 that presents the distribution frequencies of respondent's initiative and recommendation source in BRI. From that table, it can be concluded that most of respondents who become BRI's customer by the recommendation of their family/relatives and friend/colleague. So, word of mouth was occurred in BRI.

In banking industry, loyalty must be the priority of bank because competition is very intensive. To make the customer loyal, the bank must be able to satisfy the customer. Satisfaction can be built from the service quality. So BRI must focus on the service quality and always make improvement of it. Because of the loyalty as a priority, the bank must explore the capability of each resource, especially in human resource to produce high quality of service. By knowing those considerations, BRI must monitor continually dealing with the expectation of customers. Only by doing that, BRI can improve the loyalty.

Parasuraman and Grewal (2000) defines that service quality enhances customer satisfaction, which in turn, contributes to the customer loyalty. There is

evidence in the literature that customer's perceived service quality and satisfaction are related to customer loyalty.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

5.1. Conclusions

Based on the data analysis and the discussion, the researcher presents conclusion as follows:

1. Customer of BRI is dominated by those who are in the age of under 30 years old and their educational background is diplomas or under graduate students and most of them are students or college students. These may because the bank is surrounded by offices and schools, so the researcher find that most respondents have already become BRI's customers for less than 1 year. This finding is supported by strategic location, modern technology and good physical environment in BRI right now. Besides, in this research, the researcher finds that word of mouth is very effective in attracting new customer of BRI; it can be seen from the result of respondents' initiative and recommendation. Most of customers know about BRI from their friend/colleague or from their family/relatives.

2. Variable of Service Quality has significantly positive influence on Customer Satisfaction. It means that if variable of Service Quality (X_1) increases, Customer Satisfaction (Y_1) will increase and vice versa. So hypothesis 1 is proven. It means that customers decide whether or not they are satisfied with

BRI by considering the service offered by BRI. So it is very important for BRI to increase the quality of service.

3. Variable of Customer Satisfaction has significantly positive influence on Customer Loyalty. It means that if variable of Customer Satisfaction (Y_1) increases, Customer Loyalty (Y_2) will increase and vice versa. So hypothesis 2 is proven.

4. Variable of Service Quality has a direct positive effect on Customer Loyalty. It means that if variable of Service Quality (X_1) increases, Customer Loyalty (Y_2) will increase also, and vice versa. So hypothesis 3 is proven.

5. From five dimension of service quality: reliability, assurance, tangibility, empathy and responsiveness, the most dominant dimension that influences customer satisfaction is dimension of responsiveness. On the other hand, dimension of assurance has less influence on customer satisfaction.

5.2. Recommendation

Service quality is commonly noted as a critical prerequisite and determinant of competitiveness for establishing and sustaining satisfying relationships with customers. Parasuraman and Zeithaml et al., established the first measuring table for service quality, "SERVQUAL" to be used by service provider to assess customers' perception on service quality. SERVQUAL includes five following characteristics:

1. *Tangible* is the service dimension that focuses on the tangible elements that represent the service quality.

2. ***Reliability*** is defined as the ability to deliver the promised service dependably and accurately.

3. ***Responsiveness*** can be described as the willingness to help customers and provide prompt service. This dimension stresses service personnel's attitude to be attentive to customer requests, question and complaints.

4. *Assurance* is the service quality dimension that focuses on the ability to inspire trust and confidence.

5. ***Empathy*** is the service aspect that stresses the treatment of customers as individuals.

From the estimation result, the influence of Service Quality toward Customer Satisfaction and also Service Quality and Customer Satisfaction toward Customer Loyalty of BRI, it is suggested to the BRI Cik DiTiro Yogyakarta, based on lowest value of *standardized regression weight*, to take more attention on dimension of Assurance in Service Quality.

To increase the quality of BRI in order to get customer satisfaction and customer loyalty, this is the summary of lessons that the management can undergo.

1. BRI must keep the competitiveness in the very competitive situation of banking industry. In order to do that, BRI must always monitor the customer expectation that is always changes.

2. Train the employee continually to figure out how they treat customer properly and always give the high service quality without exception. So, there is no

discrimination in serving customers. The purpose is to improve the service quality which will be followed by satisfying the customer in order to build the customer loyalty.

3. The employees have to be able to communicate well, such as always communicate with the customer when they need more explanation patiently, give the accurate report of customers' account, etc.

4. To increase the dimension of assurance in BRI, the employee must have high commit to keep the confidentiality of the customers and make them feel secure in saving their money.

5. Always pay attention to the customer experience. By having good experience, may be they have willingness to recommend and help BRI to promote to others.

6. From the most dominant dimension on influencing customer loyalty (responsiveness), BRI needs to prepare the strategies to avoid " service failure " that may be caused by many factors, such as employees lack of skill supporting technology tool (ATM machine and ATM card) that is often off line and insufficient amount of ATM machine or money availability. So, it will disturb the operational or service activity.

7. BRI needs to do survey of customer satisfaction and customer loyalty (spread the questionnaire) continually in order to investigate the customer's perception toward service quality and customer satisfaction, and encourage customers to give advice or recommendation dealing with what should BRI do.

5.3. Limitations of the Study and Guidelines for Future Research

1. The result of this research gives temporary effect, because customer expectation is varied through the times.

2. The subject of research is only conducted in BRI Cik DiTiro Yogyakarta branch, by taking / testing 100 respondents only.

3. The research does not investigate every possible irrelevant effect that influences customer loyalty.

Based on the limitations, the researcher suggests the following guidelines for future research:

1. Using larger respondents is suggested for the next / future research to have more reliable data. Further, the number of research subject should be developed in order to gain results which are broadly accepted.

2. The future research should incorporate with other possible irrelevant effects that influence customer loyalty. It may include promotions, management strategies, or innovative technology in banking. In addition, future research may develop valid measure or enough evidence to determine that customer loyalty which is highly correlated with customer relationship management. This is to improve that the total quality management has applied successfully by companies to gain and retain customers is success or accomplished.

BIBLIOGRAPHY

Bloemer, Josee (1999), "Linking perceived service quality and service loyalty: a multidimensional perspective", *Journal of Marketing*, Vol.33 (1999), 1082-1106.

Bowen, John T. and Shiang-Lih Chen (2001), "The relationship between customer loyalty and customer satisfaction", *International Journal of Contemporary Hospitality Management (2001)*, 213-217.

Cheng, Kai-Wen (2006),"What Consumers Need from Restaurants: An Empirical Study on Different Classes of Restaurants in Taiwan ad Their Customer Service", *Journal of American Academy of Business*, Vol.8 (2006), 156-162.

Clark, John B. and Hojong Hwang,"International Comparative Analysis of Customer Satisfaction with Discount Stores".

Cronin, J., Taylor, S. (1992), Measuring service quality: A re-examination and extension, *Journal of marketing*, 55-68.

Deshmukh, Sanjay (2005),"The Effect of Asymmetric Information on Dividend Policy", *Journal of Business and Economics*, pg. 107.

Fontenot, Gwen, Lucy Henke, and Kerry Carson (2005), "Take Action on Customer Satisfaction", Quality Progress (2005), pg. 40.

Ghozali, Imam., (2004), *"Model Persamaan Struktural: Konsep dan Aplikasi dengan Program AMOS Ver. 5.0"*, Badan Penerbit Universitas Diponegoro, Semarang.

Hallowell, Roger. (1996) "The relationship of customer satisfaction, customer loyalty, and profitability", *International Journal of Service Industry Management*, Vol. 7 (1996), 27-42.

Hean Tat Keh and Chi Wei Teo (2001), "Retail customers as partial employees in service provision: a conceptual framework", *International Journal of Retail & Distribution Management*, Vol. 29 (2001), 310-378.

Irawan D, Handi (2004), *"10 Prinsip Kepuasan Pelanggan"*, PT Elex Media Komputindo Kelompok Gramedia, Jakarta.

Karna, Sami (2004),"Analyzing customer satisfaction and quality in construction-the case of public and private customers", *Journal of Surveying and Real Estate Research,* Vol. 2 (2004).

Kandampully, Jay and Suhartanta, Dwi (2000)," Customer Loyalty in the Hotel Industry: The Role of Customer Satisfaction and Image," *International Journal of Contemporary Hospitality Management,* pg. 346-351.

Khalifa, Mohamed and Ning Shen," Effect of electronic customer relationship management on customer satisfaction: A temporal model".

Knox, Simon D. and Tim J. Denson (2000), "Store Loyalty: its impact on retail revenue", *Journal of Retailing and Consumer Service (2000),* 33-45

Lanny, Lidya, "Pengaruh Customer Value Terhadap WOM, Retransaction Commitment dan Cross Selling Dalam Usaha Menciptakan Loyalitas Nasabah Tabungan Bank Maspion", *Journal of Marketing.*

Mittal, Banwari and Walfried M. Lassar (1998),"Why does Customer Switch? The Dynamics of Satisfaction versus Loyalty", *Journal of Service Marketing,* Vol. 12, 177-194.

Moutinho, Luiz and Smith, Anne (2000)," Modelling Bank Custome Satisfaction through Mediation of Attitudes towards Human and Automated Banking", *International Journal of Bank Marketing,* pg. 124-134.

Parazuraman, A., Zeithaml, V., et Berry, L. (1985), A conceptual model of service quality and its implications for future research, *Journal of Marketing,* Fall.

_____. (1988), Servqual: a multi-item scale for measuring consumer perceptions of service quality, *Journal of Retailing,* Spring.

Patterson, Paul G."The Impact of Key Personality Constructs on the Satisfaction, Trust, and Loyalty Relationship in a Service Context".

Pizam, Abraham and Ellis, Taylor (1999)," Customer Satisfaction and its Measurement in Hospitality Enterprise", *International Journal of Contemporary Hospitality Management,* pg. 326-339.

Reed, John H. and Nicholas P. Hall," Method For Measuring Customer Satisfaction".

Sekaran, Uma. (2003). *Research Methods for Business: A Skill Buildind Approach* (2nd ed). Illinois: John Wiley & Sons, Inc.

Soderlund, Magnus and Mats Vilgon (1999),"Customer Satisfaction and Link to Customer Profitability", Working Paper Series in Business Administration.

Soderlund, Magnus"Customer satisfaction, word of mouth intention, and repurchase intention', *Journal of Retailing*, Vol. 57, 25-48.

Smith, Michael F. and Indrajit Sinha (2000), "The impact of price and extra product promotion on store preference", *International Journal of Retail & Distribution Management*, Vol. 28 (2000), 83-92.

Wirtz, Jochen and Meng Chung Lee (2003), "An examination of the quality and context-specific applicability of commonly used customer satisfaction measures", *Journal of Service Research (2003)*, pg. 345.

Yu, Chang-Hsi, Hsiu-Chen Chang, Gow-Liang Huang (2006), "A Study of Service Quality, Customer Satisfaction and Loyalty in Taiwanese Leisure Industry", *Journal of American Academy of Business*, Vol.9 (2006), 126-132.
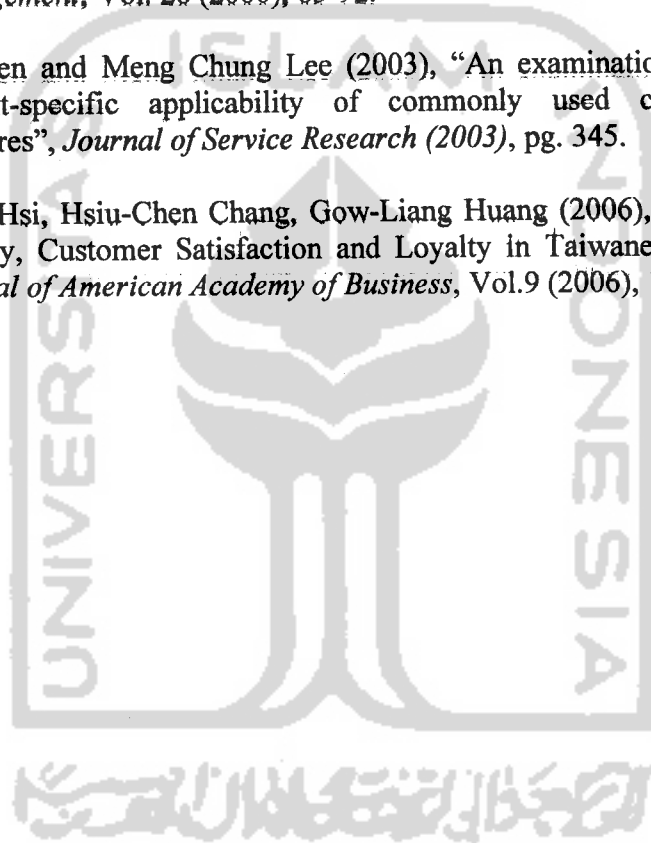
APPENDICES A:

QUESTIONNAIRES

Kepada Yth:

Nasabah BRI

Di tempat

Dalam rangka penelitian mengenai kesetiaan (Customer Loyalty) dan kepuasaan pelanggan (Customer Satisfaction) bagi nasabah BRI, berikut ini kami sampaikan daftar pertanyaan yang disusun sebagai sarana untuk memperoleh masukan dari para nasabah BRI. Jawaban yang diberikan tidak ada benar atau salah, kita lebih melihat angka – angka terbaik dari persepsi nasabah tentang pelayanan yang diberikan BRI. Data atau identitas responden dijamin kerahasiannya.

Adapun cara mengisi daftar pertanyaan adalah dengan memberi tanda (√) dalam kolom yang telah tersedia sesuai dengan penilaian Anda.

Hormat saya,

Siska Endyana

IDENTITAS RESPONDEN

1. Jenis kelamin

   a. Pria   b. Wanita

2. Umur

   a. Kurang dari 20 tahun

   b. Di antara 21-30 tahun

   c. Di antara 31-40 tahun

   d. Di atas 40 tahun

3. Pendidikan

   a. SMP

   b. SMU

   c. S1

   d. S2

   e. Lain - lain

4. Pekerjaan

   a. Pelajar / mahasiswa

   b. Pegawai negeri

   c. Pegawai swasta

   d. Wiraswasta

   e. Lain – lain

5. Lama menjadi nasabah BRI

   a. Kurang dari 1 tahun

   b. Diantara 1 – 3 tahun

   c. Diantara 3 – 5 tahun

   d. Di atas 5 tahun

6. Darimana Anda tahu keberadaan BRI

   a. Teman

   b. Saudara

   c. Iklan

   d. Relasi bisnis

   e. Lain - lain

KUALITAS JASA

STS : Sangat tidak setuju   S   : Setuju

TS   : Tidak setuju   SS : Sangat Setuju

N   : Netral

A. Keandalan (Reliabilty)	STS	TS	N	S	SS
1. BRI selalu memberikan pelayanan yang memuaskan pada saat pembukaan/penutupan rekening					
2. Pelayanan penerbitan kartu ATM BRI selalu tepat waktu dan sesuai dengan yang dijanjikan					
3. BRI selalu memberikan informasi dengan jelas dan terperinci tentang jasa/ fasilitas yang ditawarkan BRI tentang jenis-jenis tabungan yang diberikan					
4. BRI selalu memberikan layanan yang serius terhadap penabung yang mendapatkan kesulitan					
5. BRI selalu melaksanakan berbagai aktivitas pelayanan sesuai dengan jadwal (misal; penyerahan, buku tabungan, kartu ATM BRI)					

B. Jaminan (Assurance)	STS	TS	N	S	SS
1. Karyawan BRI mempunyai kompetensi dalam bidang jasa pelayanan perbankan					
2. Karyawan BRI dapat menumbuhkan perasaan aman kepada para nasabah selama berhubungan dengan mereka					
3. Jajaran karyawan BRI sabar dalam memberikan layanan kepada para nasabah					
4. BRI memberikan dukungan kepada karyawannya untuk melaksanakan tugas mereka dengan baik (Misal: menyediakan peralatan pendukung)					
5. Kartu ATM BRI dengan fasilitas layanan 24 jam selalu siap mengatasi masalah kebutuhan keuangan yang dihadapi nasabah					

E. Daya Tanggap (Resposiveness)	STS	TS	N	S	SS
1. Nasabah mendapat pelayanan dengan segera ketika akan membuka, menyetor, menarik, mentransfer dan menutup tabungan					
2. BRI memberikan informasi dengan jelas tentang tata cara (seperti yang disebutkan pada no. 1)					
3. Karyawan BRI mau meluangkan waktu untuk menjawab pertanyaan/ menanggapi kesulitan yang dihadapi nasabah					
4. Kartu ATM BRI dengan fasilitas pelayanan 24 jam selalu siap merespon kebutuhan nasabah dalam masalah keuangan yang dapat muncul sewaktu - waktu.					
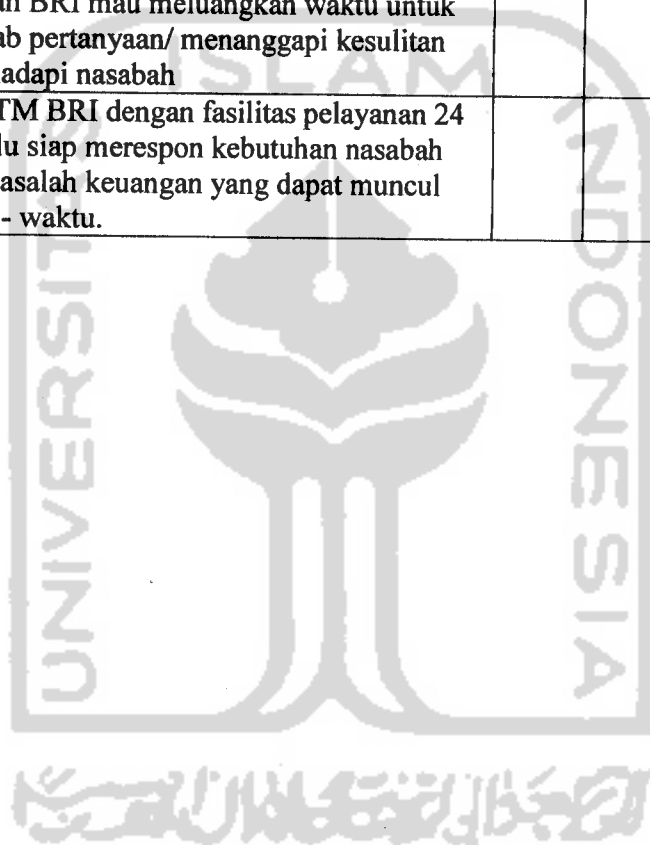
KEPUASAN PELANGGAN

Berdasarkan jawaban Anda pada pertanyaan tentang KUALITAS JASA yang ada dilembar sebelumnya, seberapa puaskah Anda dengan BRI sesuai dengan point-point yang ada dibawah ini.

1= sangat tidak puas   4= puas

2= tidak puas   5= sangat puas

3= netral

A. Keandalan (Reliabilty)	1	2	3	4	5
1. Seberapa puaskah Anda dengan pelayanan yang ditawarkan BRI pada saat pembukaan/penutupan rekening					
2. Seberapa puaskah dengan pelayanan penerbitan kartu ATM BRI					
3. Seberapa puaskah Anda dengan informasi / fasilitas yang ditawarkan BRI tentang jenis-jenis tabungan yang diberikan					
4. Seberapa puaskah Anda dengan pelayanan yang diberikan oleh karyawan BRI terhadap nasabah yang mendapatkan kesulitan					
5. Seberapa puaskah Anda dengan ketepatan jadwal/ waktu yang dilakukan oleh karyawan BRI dalam berbagai aktivitas pelayanan (misal; penyerahan, buku tabungan, kartu ATM BRI)					

B. Jaminan (Assurance)	1	2	3	4	5
1. Seberapa puaskah Anda dengan kompetensi yang dimilik karyawan BRI dalam bidang jasa pelayanan perbankan					
2. Seberapa puaskah Anda dengan karyawan BRI dalam menumbuhkan perasaan aman kepada para nasabah selama berhubungan dengan mereka					
3. Seberapa puaskah Anda dengan jajaran karyawan BRI dalam memberikan layanan kepada para nasabah					
4. Seberapa puaskah Anda dengan peralatan pendukung yang dimiliki BRI untuk membantu aktifitas karyawan					
5. Seberapa puaskah Anda dengan kartu ATM BRI dengan fasilitas layanan 24 jam					

C. Bukti Fisik (Tangible)	1	2	3	4	5
1. Seberapa puaskah Anda dengan peralatan/ teknologi modern (ATM, computerized, Call banking) yang dimiliki BRI					
2. Seberapa puaskah Anda dengan fasilitas fisik dan sarana penunjang yang disediakan BRI					
• Parkir yang luas					
• Gedung yang baik					
• Ruang tunggu yang nyaman					
• Buku tabungan					
• Kartu ATM BRI					
• ATM					
3. Seberapa puaskah Anda dengan informasi yang ditawarkan BRI					
4. Seberapa puaskah Anda dengan kemudahan dalam menemukan ATM BRI					

D. Empati (Empathy)	1	2	3	4	5
1. Seberapa puaskah Anda dengan bantuan yang diberikan BRI tanpa membedakan setiap individu, dan sesuai dengan kesulitan atau kebutuhan nasabah(missal: membantu dalam kesulitan menggunakan kartu ATM BRI)					
2. Seberapa puaskah Anda dengan perhatian yang diberikan karyawan BRI kepada para nasabah (missal: mengenal secara pribadi para nasabah)					
3. Seberapa puaskah Anda dengan karyawan BRI dalam mengerti kebutuhan dan keinginan para nasabah					
4. Seberapa puaskah Anda dengan kesungguhan karyawan BRI dalam memperhatikan keluhan/ persoalan yang dihadapi para nasabah					

E. Daya Tanggap (Resposiveness)	1	2	3	4	5
1. Seberapa puaskah Anda dengan ketepatan pelayanan ketika akan membuka, menyetor, menarik, mentransfer dan menutup tabungan					
2. Seberapa puaskah Anda dengan kejelasan informasi yang diberikan BRI tentang tata cara (seperti yang disebutkan pada no. 1)					
3. Seberapa puaskah Anda dengan karyawan BRI dalam meluangkan waktu untuk menjawab pertanyaan/ menanggapi kesulitan yang dihadapi nasabah					
4. Seberapa puaskah Anda dengan kartu ATM BRI dengan fasilitas pelayanan 24 jam yang selalu siap merespon kebutuhan nasabah dalam masalah keuangan yang dapat muncul sewaktu - waktu.					

KESETIAAN PELANGGAN

1= sangat tidak setuju   4= setuju

2=tidak setuju   5= sangat setuju

3= netral

PERTANYAAN	JAWABAN				
	1	2	3	4	5
1. Apakah Anda akan selalu menjadi nasabah BRI?					
2. Apakah Anda akan merekomendasikan orang lain untuk menjadi nasabah BRI jika akan membuka rekening, ATM, atau urusan perbankan lainnya?					
3. Meski bank lain menawarkan hadiah yang menarik, apakah Anda akan tetap menjadi nasabah BRI?					

APPENDICES B:

BRI's Respondent Data

Data Respondent BRI

No	X1.1	X1.2	X1.3	X1.4	X1.5	Jml	Rata2	No	Y1.1	Y1.2	Y1.3	Y1.4	Y1.5	Jml	Rata2
1	3	4	3	4	3	17	3,40	1	3	3	4	4	3	17	3,40
2	3	4	5	4	4	20	4,00	2	3	4	4	4	5	20	4,00
3	4	4	4	3	4	19	3,80	3	4	4	3	3	4	18	3,60
4	4	3	4	4	3	18	3,60	4	4	5	3	4	3	19	3,80
5	4	3	3	4	3	17	3,40	5	4	3	4	4	3	18	3,60
6	3	4	4	3	4	18	3,60	6	3	4	4	3	4	18	3,60
7	2	3	2	3	2	12	2,40	7	2	3	2	3	2	12	2,40
8	3	4	4	3	4	18	3,60	8	3	4	4	3	4	18	3,60
9	4	4	4	3	4	19	3,80	9	3	4	4	3	4	18	3,60
10	4	3	3	4	3	17	3,40	10	5	4	3	4	3	19	3,80
11	4	3	3	4	4	18	3,60	11	4	4	4	3	4	19	3,80
12	3	4	4	4	4	19	3,80	12	4	4	4	3	4	19	3,80
13	3	4	3	3	3	16	3,20	13	3	3	3	4	3	16	3,20
14	3	4	4	3	4	18	3,60	14	3	3	4	4	4	18	3,60
15	3	4	4	3	4	18	3,60	15	3	3	4	3	4	17	3,40
16	4	3	3	4	4	18	3,60	16	4	4	3	4	3	18	3,60
17	4	3	4	3	3	17	3,40	17	4	4	3	4	3	18	3,60
18	4	4	4	3	4	19	3,80	18	4	3	4	3	4	18	3,60
19	3	4	4	4	3	18	3,60	19	3	4	3	4	4	18	3,60
20	1	2	1	2	2	8	1,60	20	2	2	2	1	1	8	1,60
21	3	4	3	3	4	17	3,40	21	4	4	3	4	4	19	3,80
22	4	3	4	4	4	19	3,80	22	4	4	3	4	4	19	3,80
23	4	3	4	4	4	19	3,80	23	3	3	4	3	4	17	3,40
24	4	4	3	3	4	18	3,60	24	4	4	3	4	3	18	3,60
25	3	4	4	3	3	17	3,40	25	3	4	4	4	3	18	3,60
26	3	3	4	4	4	18	3,60	26	4	3	3	3	4	17	3,40
27	4	3	3	3	4	17	3,40	27	4	4	4	3	3	18	3,60
28	2	3	2	3	2	12	2,40	28	2	3	2	2	3	12	2,40
29	4	3	4	4	4	19	3,80	29	4	4	3	3	4	18	3,60
30	4	4	3	4	3	18	3,60	30	4	3	4	4	4	19	3,80
31	5	4	3	4	4	20	4,00	31	3	4	4	4	3	18	3,60
32	4	3	4	5	4	20	4,00	32	4	4	4	3	3	18	3,60
33	4	3	4	3	3	17	3,40	33	4	3	4	4	3	18	3,60
34	3	4	4	4	3	18	3,60	34	3	4	3	3	4	17	3,40
35	4	5	4	4	5	22	4,40	35	4	4	4	5	4	21	4,20
36	3	4	4	3	3	17	3,40	36	3	4	3	3	4	17	3,40
37	3	4	4	4	4	19	3,80	37	3	3	4	4	3	17	3,40
38	4	3	4	4	3	18	3,60	38	5	4	4	4	3	20	4,00
39	4	4	3	3	4	18	3,60	39	4	3	3	4	4	18	3,60
40	4	3	3	4	4	18	3,60	40	4	4	4	3	4	19	3,80
41	3	4	4	4	3	18	3,60	41	3	3	3	4	4	17	3,40
42	3	4	4	3	4	18	3,60	42	3	4	4	3	3	17	3,40

No	X1.1	X1.2	X1.3	X1.4	X1.5	Jml	Rata2	No	Y1.1	Y1.2	Y1.3	Y1.4	Y1.5	Jml	Rata2
43	4	4	4	4	3	19	3,80	43	4	4	4	3	4	19	3,80
44	3	3	4	4	4	18	3,60	44	4	4	3	4	3	18	3,60
45	4	4	4	3	4	19	3,80	45	3	3	4	4	4	18	3,60
46	5	4	3	4	4	20	4,00	46	4	4	4	3	3	18	3,60
47	4	3	4	3	4	18	3,60	47	3	3	4	4	3	17	3,40
48	4	5	4	3	3	19	3,80	48	4	4	3	3	4	18	3,60
49	3	4	4	4	4	19	3,80	49	4	3	4	4	3	18	3,60
50	3	4	3	4	4	18	3,60	50	4	4	3	4	3	18	3,60
51	3	4	4	4	4	19	3,80	51	4	3	4	3	4	18	3,60
52	4	3	3	3	4	17	3,40	52	4	3	4	3	4	18	3,60
53	4	4	3	3	4	18	3,60	53	3	4	3	5	4	19	3,80
54	4	4	4	4	3	19	3,80	54	4	3	4	4	4	19	3,80
55	4	3	3	3	4	17	3,40	55	4	4	3	4	3	18	3,60
56	3	4	4	4	3	18	3,60	56	4	3	4	3	4	18	3,60
57	2	3	2	2	2	11	2,20	57	2	2	3	2	2	11	2,20
58	3	4	4	4	3	18	3,60	58	4	3	4	3	3	17	3,40
59	3	4	4	4	3	18	3,60	59	3	4	3	4	4	18	3,60
60	4	4	3	3	4	18	3,60	60	3	4	3	4	4	18	3,60
61	3	3	3	4	4	17	3,40	61	4	3	4	4	3	18	3,60
62	3	4	4	4	4	19	3,80	62	4	3	4	4	4	19	3,80
63	3	3	3	3	3	15	3,00	63	3	3	3	3	3	15	3,00
64	3	4	4	4	3	18	3,60	64	4	4	4	3	3	18	3,60
65	4	4	3	4	4	19	3,80	65	3	4	3	4	4	18	3,60
66	4	4	3	4	4	19	3,80	66	4	4	3	3	4	18	3,60
67	3	4	4	3	4	18	3,60	67	3	3	4	4	3	17	3,40
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69	4	3	4	4	3	18	3,60	69	3	4	4	3	4	18	3,60
70	2	2	2	1	1	8	1,60	70	2	2	1	2	1	8	1,60
71	3	4	4	3	3	17	3,40	71	3	4	4	4	4	19	3,80
72	4	3	4	3	4	18	3,60	72	3	4	4	4	4	19	3,80
73	4	4	4	3	5	20	4,00	73	4	3	4	3	3	17	3,40
74	5	4	3	4	4	20	4,00	74	4	4	3	3	4	18	3,60
75	3	3	3	4	4	17	3,40	75	4	3	3	4	4	18	3,60
76	4	4	3	4	3	18	3,60	76	4	4	3	4	3	18	3,60
77	3	4	3	3	4	17	3,40	77	3	3	4	3	4	17	3,40
78	2	3	2	3	2	12	2,40	78	2	3	2	2	2	11	2,20
79	4	4	3	4	4	19	3,80	79	3	3	4	4	4	18	3,60
80	4	3	3	4	4	18	3,60	80	4	4	4	4	3	19	3,80
81	3	4	4	3	4	18	3,60	81	4	4	3	5	4	20	4,00
82	4	4	3	3	4	18	3,60	82	3	4	4	4	3	18	3,60
83	4	3	4	4	3	18	3,60	83	4	3	4	4	4	19	3,80
84	4	3	4	4	3	18	3,60	84	3	4	4	3	3	17	3,40
85	4	5	4	4	5	22	4,40	85	4	5	4	4	4	21	4,20

No	X1.1	X1.2	X1.3	X1.4	X1.5	Jml	Rata2	No	Y1.1	Y1.2	Y1.3	Y1.4	Y1.5	Jml	Rata2
86	3	3	4	4	3	17	3,40	86	3	3	4	3	4	17	3,40
87	4	4	4	4	3	19	3,80	87	4	4	3	3	3	17	3,40
88	3	4	4	4	4	19	3,80	88	4	4	4	3	3	18	3,60
89	4	4	4	3	5	20	4,00	89	4	3	3	4	4	18	3,60
90	3	4	3	4	4	18	3,60	90	4	4	3	3	3	17	3,40
91	3	3	5	4	4	19	3,80	91	3	3	4	4	4	18	3,60
92	3	4	4	4	3	18	3,60	92	4	3	3	3	4	17	3,40
93	4	3	4	4	4	19	3,80	93	4	3	4	4	4	19	3,80
94	4	4	3	4	3	18	3,60	94	3	4	3	4	4	18	3,60
95	4	3	4	3	3	17	3,40	95	4	4	3	3	3	17	3,40
96	4	4	4	5	3	20	4,00	96	4	4	5	3	4	20	4,00
97	3	4	4	4	4	19	3,80	97	3	3	4	4	4	18	3,60
98	4	3	3	4	4	18	3,60	98	3	4	3	4	5	19	3,80
99	4	4	4	4	3	19	3,80	99	4	4	3	4	3	18	3,60
100	4	4	4	3	3	18	3,60	100	3	4	3	4	4	18	3,60

No	Y2.1	Y2.2	Y2.3	Jml	Rata2
1	4	5	3	12	4,00
2	4	3	4	11	3,67
3	3	3	4	10	3,33
4	3	4	5	12	4,00
5	4	4	4	12	4,00
6	4	3	4	11	3,67
7	3	2	2	7	2,33
8	4	3	3	10	3,33
9	4	4	3	11	3,67
10	3	4	4	11	3,67
11	3	3	4	10	3,33
12	4	4	4	12	4,00
13	3	3	3	9	3,00
14	4	3	3	10	3,33
15	4	4	3	11	3,67
16	3	4	4	11	3,67
17	3	4	4	11	3,67
18	4	3	3	10	3,33
19	4	3	4	11	3,67
20	2	1	2	5	1,67
21	3	3	4	10	3,33
22	3	4	3	10	3,33
23	3	4	3	10	3,33
24	4	3	4	11	3,67

No	Y2.1	Y2.2	Y2.3	Jml	Rata2
25	4	3	4	11	3,67
26	3	3	4	10	3,33
27	4	4	3	11	3,67
28	2	3	3	8	2,67
29	4	3	3	10	3,33
30	3	4	4	11	3,67
31	4	4	4	12	4,00
32	3	3	4	10	3,33
33	4	4	3	11	3,67
34	3	4	3	10	3,33
35	4	5	4	13	4,33
36	3	3	4	10	3,33
37	4	4	3	11	3,67
38	4	4	3	11	3,67
39	3	3	4	10	3,33
40	3	4	4	11	3,67
41	4	3	3	10	3,33
42	4	4	3	11	3,67
43	4	3	4	11	3,67
44	3	4	4	11	3,67
45	3	3	3	9	3,00
46	4	4	4	12	4,00
47	4	3	3	10	3,33
48	3	4	4	11	3,67
49	5	3	4	12	4,00
50	3	4	3	10	3,33
51	3	4	4	11	3,67
52	4	4	4	12	4,00
53	4	4	3	11	3,67
54	4	3	3	10	3,33
55	3	3	4	10	3,33
56	3	3	4	10	3,33
57	2	2	3	7	2,33
58	4	4	4	12	4,00
59	4	3	4	11	3,67
60	3	3	3	9	3,00
61	4	4	3	11	3,67
62	3	3	4	10	3,33
63	3	3	3	9	3,00
64	4	3	4	11	3,67
65	4	3	4	11	3,67
66	3	4	3	10	3,33
67	3	3	3	9	3,00
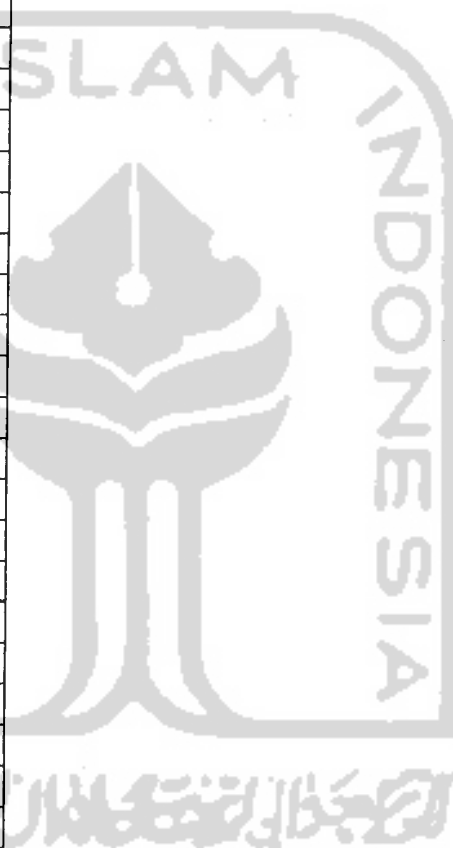
No	Y2.1	Y2.2	Y2.3	Jml	Rata2
68	4	3	4	11	3,67
69	4	3	4	11	3,67
70	2	1	2	5	1,67
71	3	4	3	10	3,33
72	3	4	3	10	3,33
73	4	3	3	10	3,33
74	4	4	4	12	4,00
75	3	3	4	10	3,33
76	4	3	3	10	3,33
77	3	4	4	11	3,67
78	2	3	3	8	2,67
79	4	4	4	12	4,00
80	4	3	3	10	3,33
81	3	3	4	10	3,33
82	4	4	3	11	3,67
83	4	3	4	11	3,67
84	3	4	3	10	3,33
85	4	5	4	13	4,33
86	3	4	3	10	3,33
87	4	4	4	12	4,00
88	3	3	4	10	3,33
89	4	3	3	10	3,33
90	4	4	3	11	3,67
91	3	4	4	11	3,67
92	4	3	4	11	3,67
93	3	4	4	11	3,67
94	4	3	3	10	3,33
95	4	4	3	11	3,67
96	4	3	4	11	3,67
97	3	4	4	11	3,67
98	4	3	3	10	3,33
99	3	3	5	11	3,67
100	4	3	3	10	3,33
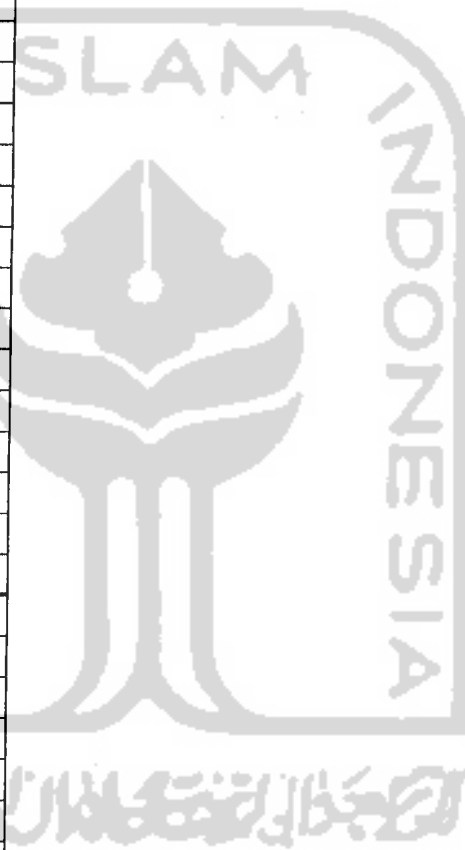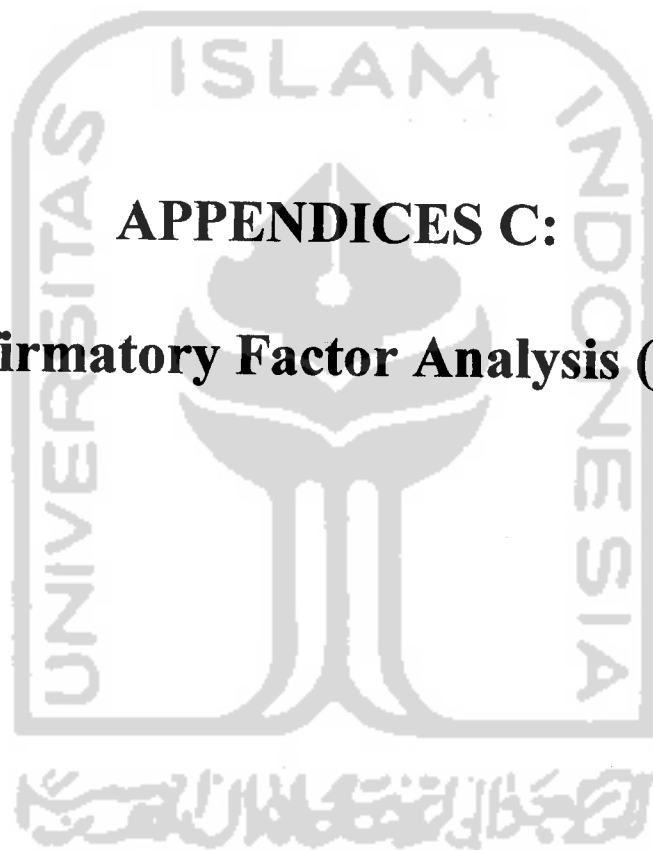
APPENDICES C:

Confirmatory Factor Analysis (CFA)

CONFIRMATORY FACTOR ANALYSIS

SERVICE QUALITY
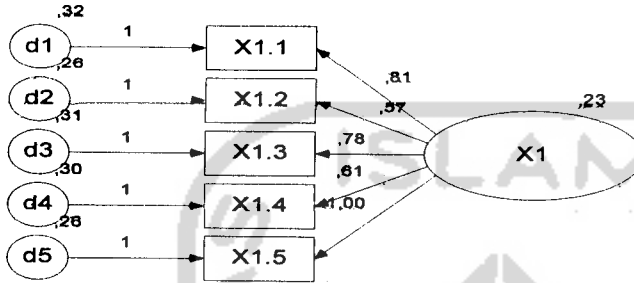
Regression Weights: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
X1.5 <--- X1	1,000				
X1.4 <--- X1	,611	,195	3,131	,002	par_1
X1.3 <--- X1	,776	,218	3,568	***	par_2
X1.2 <--- X1	,573	,162	3,546	***	par_3
X1.1 <--- X1	,815	,196	4,160	***	par_4

CUSTOMER SATISFACTION
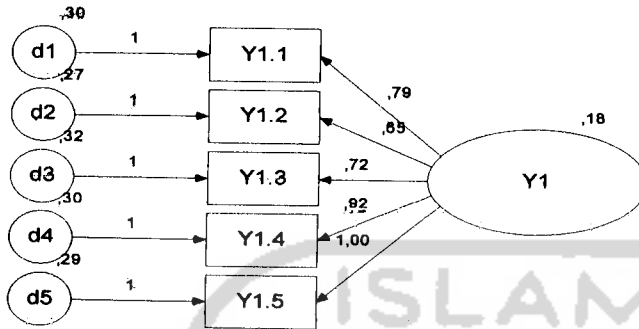
Regression Weights: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
Y1.5 <--- Y1	1,000				
Y1.4 <--- Y1	,917	,259	3,540	***	par_1
Y1.3 <--- Y1	,721	,213	3,383	***	par_2
Y1.2 <--- Y1	,645	,219	2,939	,003	par_3
Y1.1 <--- Y1	,792	,265	2,991	,003	par_4

CUSTOMER LOYALTY
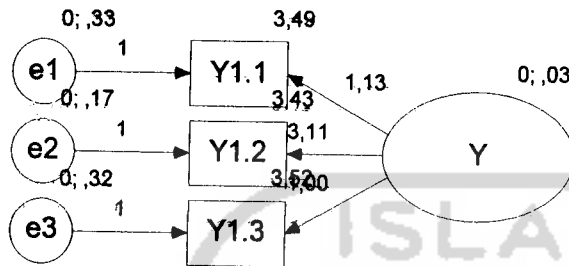
Regression Weights: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
Y1.3 <--- Y	1,000				
Y1.2 <--- Y	3,105	3,124	,994	,320	par_1
Y1.1 <--- Y	1,134	,611	1,854	,064	par_2
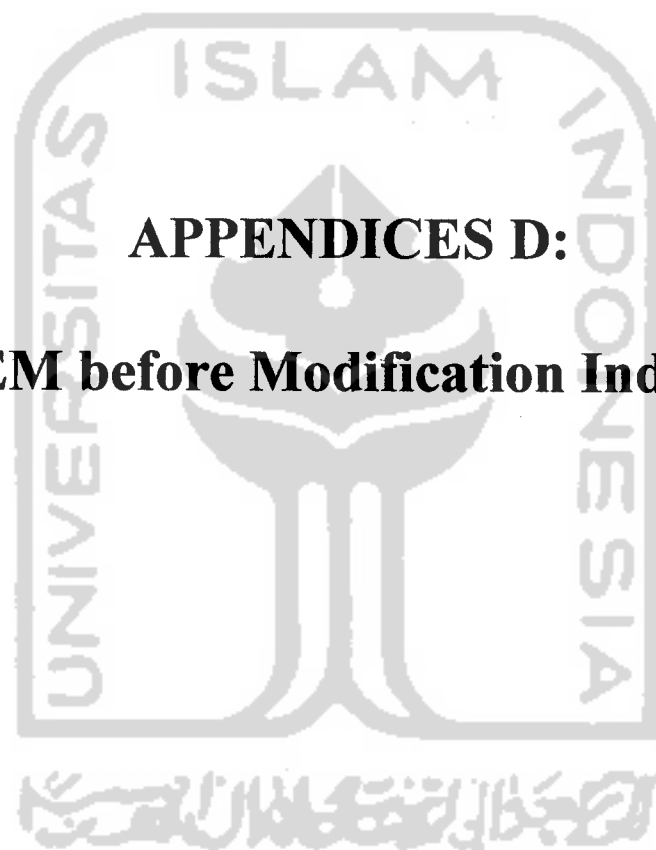
APPENDICES D:

SEM before Modification Indices

TRUCTURAL EQUATION MODELLING
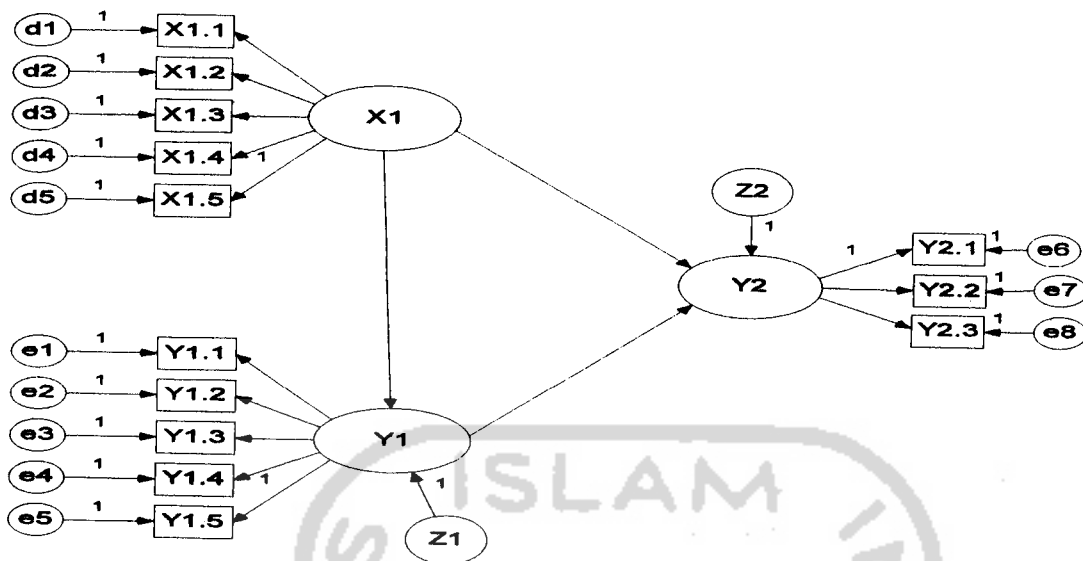
HASIL STRUCTURAL EQUATION MODELLING
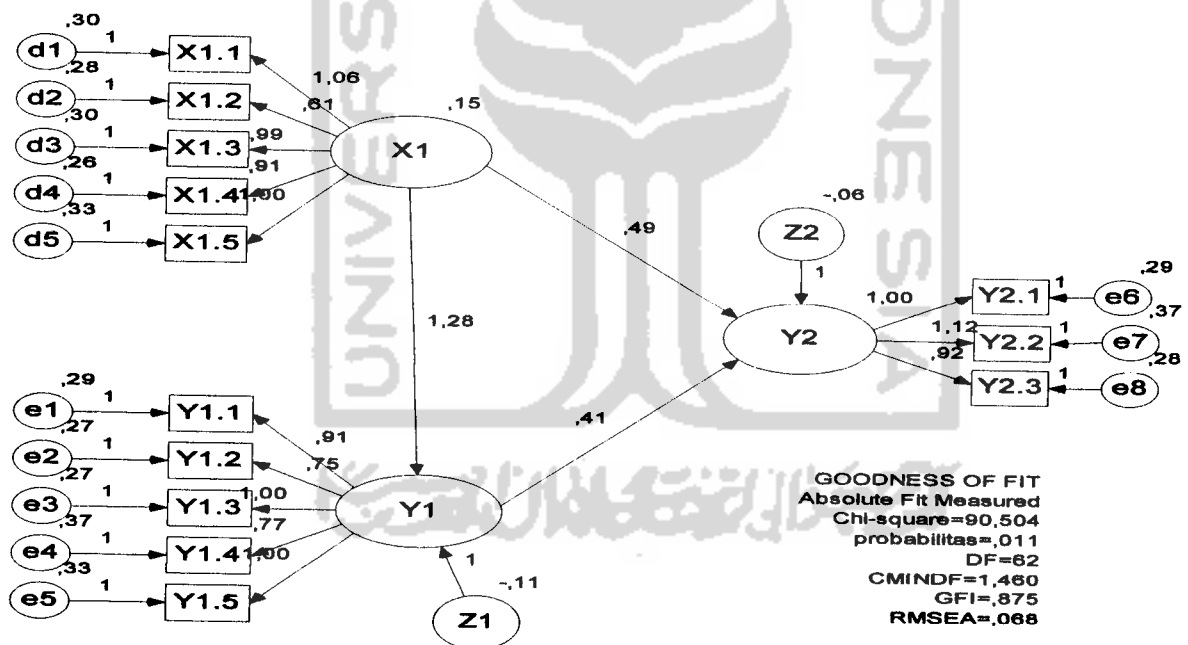
GOODNESS OF FIT
Absolute Fit Measured
Chi-square=90,504
probabilitas=,011
DF=62
CMINDF=1,460
GFI=,875
RMSEA=,068

Incremental Fit Measured
AGFI=,817
TLI=,912
NFI=,814

Parsimonious Fit Measured
PNFI=,647
PGFI=,596

Analysis Summary

Date and Time

Date: 08 Maret 2007
Time: 9:25:35

itle

Notes for Group (Group number 1)

The model is recursive.
Sample size = 100

Variable Summary (Group number 1)

Your model contains the following variables (Group number 1)

Observed, endogenous variables
X1.5
X1.4
X1.3
X1.2
X1.1
Y2.1
Y2.2
Y2.3
Y1.5
Y1.4
Y1.3
Y1.2
Y1.1
Unobserved, endogenous variables
Y2
Y1
Unobserved, exogenous variables
X1
d5
d4
d3
d2
d1
e6
e7
e8
e5
e4
e3
e2
e1
Z2
Z1
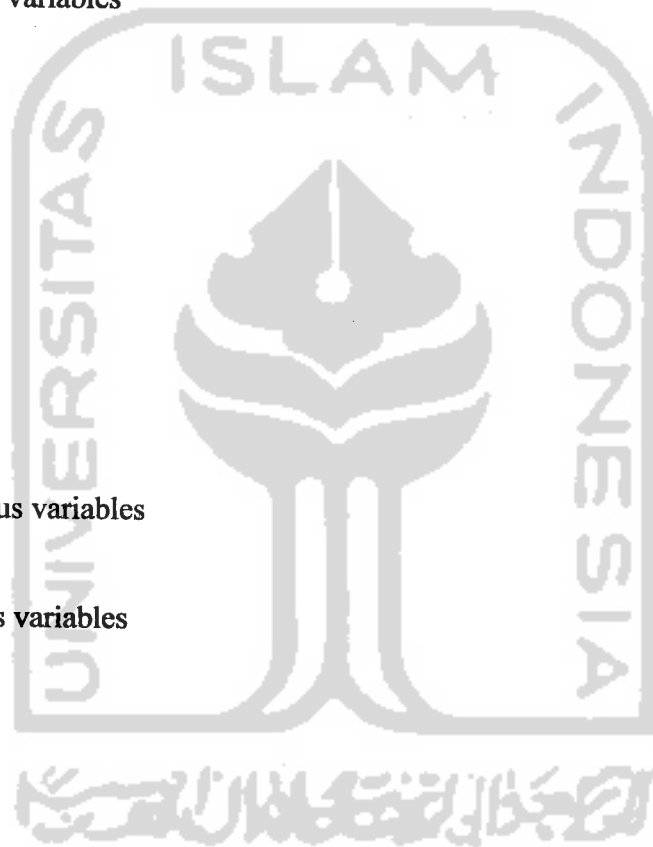
Variable counts (Group number 1)

Number of variables in your model: 31
Number of observed variables: 13
Number of unobserved variables: 18
Number of exogenous variables: 16
Number of endogenous variables: 15

Parameter summary (Group number 1)

	Weights	Covariances	Variances	Means	Intercepts	Total
Fixed	18	0	0	0	0	18
Labeled	0	0	0	0	0	0
Unlabeled	13	0	16	0	0	29
Total	31	0	16	0	0	47

Assessment of normality (Group number 1)

Variable	min	max	skew	c.r.	kurtosis	c.r.
Y1.1	2,000	5,000	-,532	-2,174	-,183	-,373
Y1.2	2,000	5,000	-,380	-1,553	-,303	-,618
Y1.3	1,000	5,000	-,877	-3,581	1,125	2,296
Y1.4	1,000	5,000	-,670	-2,735	1,045	2,132
Y1.5	1,000	5,000	-1,098	-4,481	2,077	4,240
Y2.3	2,000	5,000	-,222	-,908	-,420	-,857
Y2.2	1,000	5,000	-,597	-2,439	1,742	3,556
Y2.1	2,000	5,000	-,495	-2,022	-,385	-,786
X1.1	1,000	5,000	-,652	-2,661	,859	1,754
X1.2	2,000	5,000	-,322	-1,313	-,218	-,445
X1.3	1,000	5,000	-1,025	-4,183	1,347	2,749
X1.4	1,000	5,000	-,894	-3,651	1,727	3,525
X1.5	1,000	5,000	-,707	-2,888	,969	1,979
Multivariate					-3,298	-,835

Observation number	Mahalanobis d-squared	p1	p2
70	31,918	,002	,219
20	30,670	,004	,055
96	21,002	,073	,980
48	20,897	,075	,947
98	20,571	,082	,920
32	20,403	,086	,866
4	19,839	,099	,878
52	19,141	,119	,919
31	18,988	,123	,883

Observation number	Mahalanobis d-squared	p1	p2
73	18,705	,133	,868
38	18,605	,136	,815
1	18,358	,144	,796
57	18,057	,155	,797
91	17,693	,170	,820
89	17,063	,196	,906
49	16,919	,203	,886
99	16,569	,220	,910
28	16,287	,234	,922
7	16,034	,247	,929
81	15,763	,262	,940
71	15,694	,266	,919
78	15,662	,268	,885
74	15,404	,283	,903
30	15,133	,299	,922
95	14,636	,331	,968
84	13,758	,391	,998
90	13,731	,393	,996
85	13,722	,394	,993
33	13,646	,399	,991
25	13,620	,401	,986
23	13,490	,411	,985
50	13,452	,414	,979
46	13,357	,421	,975
10	13,318	,424	,965
2	13,195	,433	,963
54	13,131	,438	,953
53	13,096	,440	,937
29	13,067	,443	,914
21	13,021	,446	,891
61	12,914	,454	,884
77	12,899	,456	,845
35	12,830	,461	,822
68	12,775	,465	,790
69	12,771	,466	,730
80	12,749	,467	,672
88	12,618	,478	,675
11	12,540	,484	,647
66	12,534	,484	,574
17	12,479	,489	,530
47	12,478	,489	,451
72	12,460	,490	,384
27	12,447	,491	,318
45	12,438	,492	,255

Observation number	Mahalanobis d-squared	p1	p2
44	12,374	,497	,225
79	12,190	,512	,256
87	12,160	,515	,210
5	11,940	,533	,259
6	11,753	,548	,295
67	11,742	,549	,234
92	11,714	,551	,190
34	11,684	,554	,151
26	11,496	,569	,178
75	11,469	,572	,140
39	11,451	,573	,105
65	11,381	,579	,090
76	11,336	,583	,070
94	11,284	,587	,055
22	11,270	,588	,038
37	11,232	,591	,027
18	10,727	,634	,100
42	10,641	,641	,089
41	10,616	,643	,064
58	10,511	,652	,060
40	10,450	,657	,047
86	10,399	,661	,036
83	10,116	,684	,062
56	10,039	,691	,051
3	10,035	,691	,032
64	9,990	,695	,022
8	9,901	,702	,018
100	9,599	,726	,035
55	9,559	,730	,024
60	9,469	,737	,019
24	9,376	,744	,015
82	9,162	,761	,020
15	9,131	,763	,012
62	9,080	,767	,007
59	9,074	,767	,003
19	9,074	,767	,001
97	8,807	,787	,002
9	8,411	,816	,007
51	8,369	,819	,003
36	8,245	,827	,002
12	8,219	,829	,001
43	8,211	,830	,000
16	8,181	,832	,000
93	8,148	,834	,000

Observation number	Mahalanobis d-squared	p1	p2
14	6,729	,916	,008
13	6,545	,924	,003
63	2,166	1,000	,965

Notes for Model (Group number 1 - Default model)

The following variances are negative. (Group number 1 - Default model)

	Z1	Z2
	-,111	-,063

Estimates (Group number 1 - Default model)

Scálar Estimates (Group number 1 - Default model)

Maximum Likelihood Estimates

Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
Y1	<---	X1	1,282	,249	5,150	***	par_11
Y2	<---	X1	,489	,110	4,439	***	par_1
Y2	<---	Y1	,415	,104	3,988	***	par_12
X1.5	<---	X1	1,000				
X1.4	<---	X1	,909	,168	5,398	***	par_2
X1.3	<---	X1	,991	,182	5,434	***	par_3
X1.2	<---	X1	,610	,148	4,113	***	par_4
X1.1	<---	X1	1,062	,193	5,489	***	par_5
Y2.1	<---	Y2	1,000				
Y2.2	<---	Y2	1,116	,250	4,464	***	par_6
Y1.5	<---	Y1	1,000				
Y1.4	<---	Y1	,767	,175	4,390	***	par_7
Y1.3	<---	Y1	1,004	,183	5,497	***	par_8
Y1.2	<---	Y1	,755	,156	4,823	***	par_9
Y1.1	<---	Y1	,913	,175	5,228	***	par_10
Y2.3	<---	Y2	,918	,207	4,431	***	par_13

Standardized Regression Weights: (Group number 1 - Default model)

			Estimate
Y1	<---	X1	1,337
Y2	<---	X1	,688
Y2	<---	Y1	,559
X1.5	<---	X1	,561
X1.4	<---	X1	,574
X1.3	<---	X1	,581
X1.2	<---	X1	,413
X1.1	<---	X1	,607
Y2.1	<---	Y2	,458
Y2.2	<---	Y2	,456
Y1.5	<---	Y1	,549
Y1.4	<---	Y1	,430
Y1.3	<---	Y1	,589
Y1.2	<---	Y1	,482
Y1.1	<---	Y1	,536
Y2.3	<---	Y2	,433

Variances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
X1	,154	,050	3,094	,002	par_14
Z1	-,111	,031	-3,642	***	par_15
Z2	-,063	,022	-2,876	,004	par_16
d5	,334	,047	7,171	***	par_17
d4	,258	,035	7,459	***	par_18
d3	,296	,040	7,346	***	par_19
d2	,278	,038	7,236	***	par_20
d1	,297	,040	7,413	***	par_21
e6	,292	,042	6,892	***	par_22
e7	,368	,055	6,679	***	par_23
e8	,284	,041	7,011	***	par_24
e5	,328	,045	7,261	***	par_25
e4	,366	,050	7,261	***	par_26
e3	,267	,035	7,623	***	par_27
e2	,266	,036	7,472	***	par_28
e1	,292	,039	7,391	***	par_29

Squared Multiple Correlations: (Group number 1 - Default model)

	Estimate
Y1	1,787
Y2	1,815
Y1.1	,288
Y1.2	,232
Y1.3	,347
Y1.4	,185
Y1.5	,301
Y2.3	,187
Y2.2	,208
Y2.1	,210
X1.1	,368
X1.2	,170
X1.3	,338
X1.4	,330
X1.5	,315

Factor Score Weights (Group number 1 - Default model)

	Y1.1	Y1.2	Y1.3	Y1.4	Y1.5	Y2.3	Y2.2	Y2.1	X1.1	X1.2	X1.3	X1.4	X1.5
X1	,309	,280	,371	,207	,301	,131	,123	,139	-,186	-,114	-,175	-,184	-,156
Y1	-,231	-,210	-,277	-,155	-,225	,150	,140	,159	,353	,216	,331	,348	,296
Y2	,145	,132	,174	,097	,141	-,205	-,192	-,217	,145	,089	,136	,143	,121

Total Effects (Group number 1 - Default model)

	X1	Y1	Y2
Y1	1,282	,000	,000
Y2	1,021	,415	,000
Y1.1	1,171	,913	,000
Y1.2	,968	,755	,000
Y1.3	1,287	1,004	,000
Y1.4	,983	,767	,000
Y1.5	1,282	1,000	,000
Y2.3	,937	,381	,918
Y2.2	1,139	,463	1,116
Y2.1	1,021	,415	1,000
X1.1	1,062	,000	,000

	X1	Y1	Y2
X1.2	,610	,000	,000
X1.3	,991	,000	,000
X1.4	,909	,000	,000
X1.5	1,000	,000	,000

Standardized Total Effects (Group number 1 - Default model)

	X1	Y1	Y2
Y1	1,337	,000	,000
Y2	1,436	,559	,000
Y1.1	,717	,536	,000
Y1.2	,644	,482	,000
Y1.3	,788	,589	,000
Y1.4	,575	,430	,000
Y1.5	,733	,549	,000
Y2.3	,621	,242	,433
Y2.2	,655	,255	,456
Y2.1	,658	,256	,458
X1.1	,607	,000	,000
X1.2	,413	,000	,000
X1.3	,581	,000	,000
X1.4	,574	,000	,000
X1.5	,561	,000	,000

Direct Effects (Group number 1 - Default model)

	X1	Y1	Y2
Y1	1,282	,000	,000
Y2	,489	,415	,000
Y1.1	,000	,913	,000
Y1.2	,000	,755	,000
Y1.3	,000	1,004	,000
Y1.4	,000	,767	,000
Y1.5	,000	1,000	,000
Y2.3	,000	,000	,918
Y2.2	,000	,000	1,116
Y2.1	,000	,000	1,000
X1.1	1,062	,000	,000
X1.2	,610	,000	,000
X1.3	,991	,000	,000
X1.4	,909	,000	,000
X1.5	1,000	,000	,000

Standardized Direct Effects (Group number 1 - Default model)

	X1	Y1	Y2
Y1	1,337	,000	,000
Y2	,688	,559	,000
Y1.1	,000	,536	,000
Y1.2	,000	,482	,000
Y1.3	,000	,589	,000
Y1.4	,000	,430	,000
Y1.5	,000	,549	,000
Y2.3	,000	,000	,433
Y2.2	,000	,000	,456
Y2.1	,000	,000	,458
X1.1	,607	,000	,000
X1.2	,413	,000	,000
X1.3	,581	,000	,000
X1.4	,574	,000	,000
X1.5	,561	,000	,000

Indirect Effects (Group number 1 - Default model)

	X1	Y1	Y2
Y1	,000	,000	,000
Y2	,532	,000	,000
Y1.1	1,171	,000	,000
Y1.2	,968	,000	,000
Y1.3	1,287	,000	,000
Y1.4	,983	,000	,000
Y1.5	1,282	,000	,000
Y2.3	,937	,381	,000
Y2.2	1,139	,463	,000
Y2.1	1,021	,415	,000
X1.1	,000	,000	,000
X1.2	,000	,000	,000
X1.3	,000	,000	,000
X1.4	,000	,000	,000
X1.5	,000	,000	,000

Standardized Indirect Effects (Group number 1 - Default model)

	X1	Y1	Y2
Y1	,000	,000	,000
Y2	,748	,000	,000
Y1.1	,717	,000	,000
Y1.2	,644	,000	,000
Y1.3	,788	,000	,000
Y1.4	,575	,000	,000
Y1.5	,733	,000	,000
Y2.3	,621	,242	,000
Y2.2	,655	,255	,000
Y2.1	,658	,256	,000
X1.1	,000	,000	,000
X1.2	,000	,000	,000
X1.3	,000	,000	,000
X1.4	,000	,000	,000
X1.5	,000	,000	,000

Modification Indices (Group number 1 - Default model)

Covariances: (Group number 1 - Default model)

	M.I.	Par Change
e3 <--> e2	4,662	-,047
e8 <--> e1	5,531	,056
d2 <--> e1	6,230	-,062
d5 <--> e8	4,297	-,054

Variances: (Group number 1 - Default model)

	M.I.	Par Change

Regression Weights: (Group number 1 - Default model)

	M.I.	Par Change
Y1.1 <--- Y2.3	4,554	,178
Y1.1 <--- X1.2	5,113	-,193
Y1.2 <--- Y1.3	4,004	-,151
Y1.3 <--- Y1.2	4,268	-,161

Standardized Indirect Effects (Group number 1 - Default model)

	X1	Y1	Y2
Y1	,000	,000	,000
Y2	,748	,000	,000
Y1.1	,717	,000	,000
Y1.2	,644	,000	,000
Y1.3	,788	,000	,000
Y1.4	,575	,000	,000
Y1.5	,733	,000	,000
Y2.3	,621	,242	,000
Y2.2	,655	,255	,000
Y2.1	,658	,256	,000
X1.1	,000	,000	,000
X1.2	,000	,000	,000
X1.3	,000	,000	,000
X1.4	,000	,000	,000
X1.5	,000	,000	,000

Modification Indices (Group number 1 - Default model)

Covariances: (Group number 1 - Default model)

	M.I.	Par Change
e3 <--> e2	4,662	-,047
e8 <--> e1	5,531	,056
d2 <--> e1	6,230	-,062
d5 <--> e8	4,297	-,054

Variances: (Group number 1 - Default model)

	M.I.	Par Change

Regression Weights: (Group number 1 - Default model)

	M.I.	Par Change
Y1.1 <--- Y2.3	4,554	,178
Y1.1 <--- X1.2	5,113	-,193
Y1.2 <--- Y1.3	4,004	-,151
Y1.3 <--- Y1.2	4,268	-,161

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	29	90,504	62	,011	1,460
Saturated model	91	,000	0		
Independence model	13	487,104	78	,000	6,245

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	,030	,875	,817	,596
Saturated model	,000	1,000		
Independence model	,137	,402	,302	,345

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	,814	,766	,933	,912	,930
Saturated model	1,000		1,000		1,000
Independence model	,000	,000	,000	,000	,000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	,795	,647	,739
Saturated model	,000	,000	,000
Independence model	1,000	,000	,000

NCP

Model	NCP	LO 90	HI 90
Default model	28,504	7,047	57,951
Saturated model	,000	,000	,000
Independence model	409,104	343,172	482,532

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	,914	,288	,071	,585
Saturated model	,000	,000	,000	,000
Independence model	4,920	4,132	3,466	4,874

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	,068	,034	,097	,165
Independence model	,230	,211	,250	,000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	148,504	158,057	224,054	253,054
Saturated model	182,000	211,976	419,070	510,070
Independence model	513,104	517,386	546,971	559,971

ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	1,500	1,283	1,797	1,597
Saturated model	1,838	1,838	1,838	2,141
Independence model	5,183	4,517	5,925	5,226

HOELTER

Model	HOELTER .05	HOELTER .01
Default model	90	100
Independence model	21	23

Execution time summary

Minimization: ,484
Miscellaneous: ,922
Bootstrap: ,000
Total: 1,406
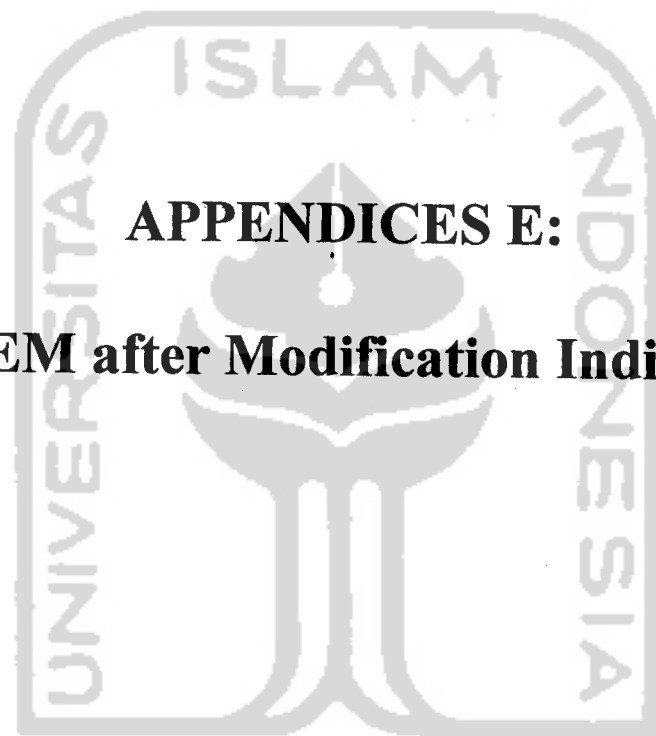
APPENDICES E:

SEM after Modification Indices

SEM MODIFICATION

HASIL SEM MODIFICATION

GOODNESS OF FIT
Absolute Fit Measured
Chi-square=65,254
probabilitas=,239
DF=58
CMINDF=1,125
GFI=,911
RMSEA=,036

Incremental Fit Measured
AGFI=,861
TLI=,976
NFI=,866

Parsimonious Fit Measured
PNFI=,644
PGFI=,581
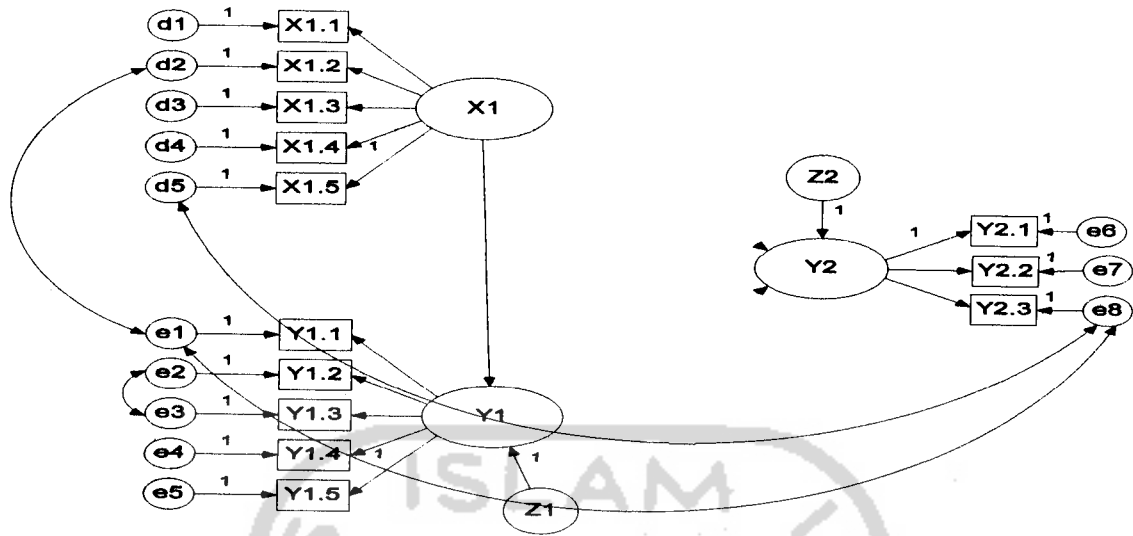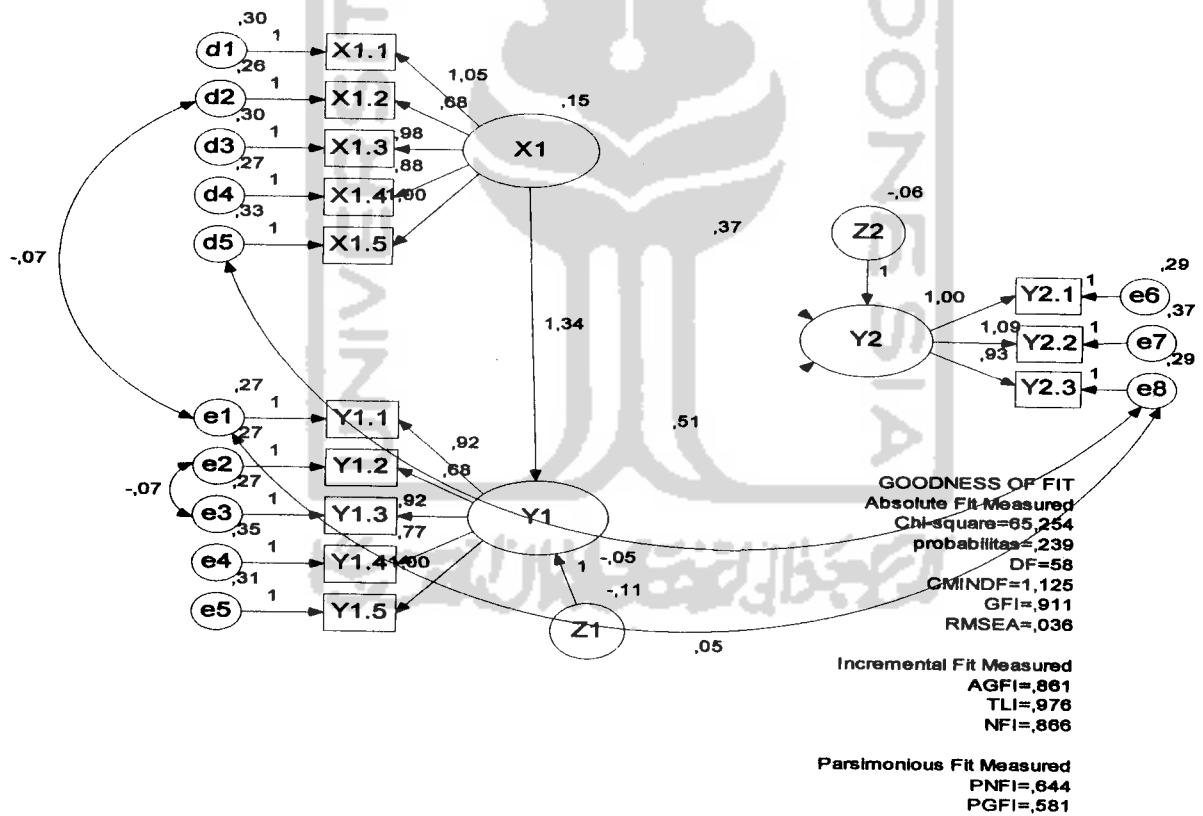
Analysis Summary

Date and Time

Date: 08 Maret 2007
Time: 9:54:20

Title

Sem xyz: 08 Maret 2007 09:54

Parameter summary (Group number 1)

	Weights	Covariances	Variances	Means	Intercepts	Total
Fixed	18	0	0	0	0	18
Labeled	0	0	0	0	0	0
Unlabeled	13	4	16	0	0	33
Total	31	4	16	0	0	51

The following variances are negative. (Group number 1 - Default model)

	Z1	Z2
	-,113	-,061

Estimates (Group number 1 - Default model)

Scalar Estimates (Group number 1 - Default model)

Maximum Likelihood Estimates

Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
Y1	<---	X1	1,341	,249	5,395	***	par_11
Y2	<---	X1	,367	,107	3,439	***	par_1
Y2	<---	Y1	,510	,112	4,535	***	par_12
X1.5	<---	X1	1,000				
X1.4	<---	X1	,877	,163	5,366	***	par_2
X1.3	<---	X1	,983	,179	5,497	***	par_3
X1.2	<---	X1	,680	,145	4,700	***	par_4
X1.1	<---	X1	1,052	,189	5,579	***	par_5
Y2.1	<---	Y2	1,000				
Y2.2	<---	Y2	1,088	,243	4,472	***	par_6
Y1.5	<---	Y1	1,000				
Y1.4	<---	Y1	,768	,166	4,634	***	par_7
Y1.3	<---	Y1	,922	,166	5,548	***	par_8
Y1.2	<---	Y1	,683	,146	4,690	***	par_9
Y1.1	<---	Y1	,921	,163	5,649	***	par_10
Y2.3	<---	Y2	,931	,210	4,433	***	par_13

Standardized Regression Weights: (Group number 1 - Default model)

			Estimate
Y1	<---	X1	1,300
Y2	<---	X1	,511
Y2	<---	Y1	,732
X1.5	<---	X1	,565
X1.4	<---	X1	,554
X1.3	<---	X1	,577
X1.2	<---	X1	,464
X1.1	<---	X1	,602
Y2.1	<---	Y2	,463
Y2.2	<---	Y2	,450
Y1.5	<---	Y1	,591
Y1.4	<---	Y1	,464
Y1.3	<---	Y1	,583
Y1.2	<---	Y1	,470
Y1.1	<---	Y1	,583
Y2.3	<---	Y2	,441

Covariances: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
e3	<-->	e2	-,068	,028	-2,401	,016	par_14
e8	<-->	e1	,053	,029	1,832	,067	par_15
d2	<-->	e1	-,071	,025	-2,795	,005	par_16
d5	<-->	e8	-,053	,030	-1,787	,074	par_17

Correlations: (Group number 1 - Default model)

			Estimate
e3	<-->	e2	-,250
e8	<-->	e1	,189
d2	<-->	e1	-,267
d5	<-->	e8	-,173

Variances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
X1	,154	,049	3,142	,002	par_18
Z1	-,113	,030	-3,743	***	par_19
Z2	-,061	,021	-2,879	,004	par_20
d5	,328	,045	7,249	***	par_21
d4	,267	,036	7,467	***	par_22
d3	,298	,040	7,389	***	par_23
d2	,259	,035	7,330	***	par_24
d1	,300	,040	7,486	***	par_25
e6	,290	,042	6,899	***	par_26
e7	,371	,055	6,696	***	par_27
e8	,285	,041	7,044	***	par_28
e5	,306	,042	7,253	***	par_29
e4	,353	,049	7,201	***	par_30
e3	,271	,037	7,399	***	par_31
e2	,270	,037	7,255	***	par_32
e1	,271	,037	7,316	***	par_33

Squared Multiple Correlations: (Group number 1 - Default model)

	Estimate
Y1	1,690
Y2	1,767
Y1.1	,339
Y1.2	,221
Y1.3	,340
Y1.4	,215
Y1.5	,349
Y2.3	,194
Y2.2	,202
Y2.1	,215
X1.1	,362
X1.2	,216
X1.3	,333
X1.4	,307
X1.5	,319

Factor Score Weights (Group number 1 - Default model)

	Y1.1	Y1.2	Y1.3	Y1.4	Y1.5	Y2.3	Y2.2	Y2.1	X1.1	X1.2	X1.3	X1.4	X1.5
X1	,276	,332	,396	,200	,300	,082	,147	,173	-,206	-,079	-,193	-,193	-,165
Y1	-,161	-,187	-,223	-,113	-,169	,185	,087	,103	,322	,198	,303	,302	,310
Y2	,196	,108	,129	,065	,098	-,238	-,201	-,236	,176	,186	,166	,165	,115

Total Effects (Group number 1 - Default model)

	X1	Y1	Y2
Y1	1,341	,000	,000
Y2	1,050	,510	,000
Y1.1	1,236	,921	,000
Y1.2	,917	,683	,000
Y1.3	1,237	,922	,000
Y1.4	1,031	,768	,000
Y1.5	1,341	1,000	,000
Y2.3	,977	,474	,931
Y2.2	1,143	,554	1,088
Y2.1	1,050	,510	1,000
X1.1	1,052	,000	,000
X1.2	,680	,000	,000
X1.3	,983	,000	,000
X1.4	,877	,000	,000
X1.5	1,000	,000	,000

Standardized Total Effects (Group number 1 - Default model)

	X1	Y1	Y2
Y1	1,300	,000	,000
Y2	1,462	,732	,000
Y1.1	,757	,583	,000
Y1.2	,611	,470	,000
Y1.3	,758	,583	,000
Y1.4	,603	,464	,000
Y1.5	,768	,591	,000
Y2.3	,644	,322	,441
Y2.2	,657	,329	,450
Y2.1	,677	,339	,463
X1.1	,602	,000	,000

	X1	Y1	Y2
X1.2	,464	,000	,000
X1.3	,577	,000	,000
X1.4	,554	,000	,000
X1.5	,565	,000	,000

Direct Effects (Group number 1 - Default model)

	X1	Y1	Y2
Y1	1,341	,000	,000
Y2	,367	,510	,000
Y1.1	,000	,921	,000
Y1.2	,000	,683	,000
Y1.3	,000	,922	,000
Y1.4	,000	,768	,000
Y1.5	,000	1,000	,000
Y2.3	,000	,000	,931
Y2.2	,000	,000	1,088
Y2.1	,000	,000	1,000
X1.1	1,052	,000	,000
X1.2	,680	,000	,000
X1.3	,983	,000	,000
X1.4	,877	,000	,000
X1.5	1,000	,000	,000

Standardized Direct Effects (Group number 1 - Default model)

	X1	Y1	Y2
Y1	1,300	,000	,000
Y2	,511	,732	,000
Y1.1	,000	,583	,000
Y1.2	,000	,470	,000
Y1.3	,000	,583	,000
Y1.4	,000	,464	,000
Y1.5	,000	,591	,000
Y2.3	,000	,000	,441
Y2.2	,000	,000	,450
Y2.1	,000	,000	,463
X1.1	,602	,000	,000
X1.2	,464	,000	,000
X1.3	,577	,000	,000
X1.4	,554	,000	,000
X1.5	,565	,000	,000

Indirect Effects (Group number 1 - Default model)

	X1	Y1	Y2
Y1	,000	,000	,000
Y2	,684	,000	,000
Y1.1	1,236	,000	,000
Y1.2	,917	,000	,000
Y1.3	1,237	,000	,000
Y1.4	1,031	,000	,000
Y1.5	1,341	,000	,000
Y2.3	,977	,474	,000
Y2.2	1,143	,554	,000
Y2.1	1,050	,510	,000
X1.1	,000	,000	,000
X1.2	,000	,000	,000
X1.3	,000	,000	,000
X1.4	,000	,000	,000
X1.5	,000	,000	,000

Standardized Indirect Effects (Group number 1 - Default model)

	X1	Y1	Y2
Y1	,000	,000	,000
Y2	,951	,000	,000
Y1.1	,757	,000	,000
Y1.2	,611	,000	,000
Y1.3	,758	,000	,000
Y1.4	,603	,000	,000
Y1.5	,768	,000	,000
Y2.3	,644	,322	,000
Y2.2	,657	,329	,000
Y2.1	,677	,339	,000
X1.1	,000	,000	,000
X1.2	,000	,000	,000
X1.3	,000	,000	,000
X1.4	,000	,000	,000
X1.5	,000	,000	,000

Modification Indices (Group number 1 - Default model)

Covariances: (Group number 1 - Default model)

	M.I.	Par Change

Variances: (Group number 1 - Default model)

	M.I.	Par Change

Regression Weights: (Group number 1 - Default model)

	M.I.	Par Change

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	33	65,254	58	,239	1,125
Saturated model	91	,000	0		
Independence model	13	487,104	78	,000	6,245

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	,026	,911	,861	,581
Saturated model	,000	1,000		
Independence model	,137	,402	,302	,345

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	,866	,820	,983	,976	,982
Saturated model	1,000		1,000		1,000
Independence model	,000	,000	,000	,000	,000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	,744	,644	,730
Saturated model	,000	,000	,000
Independence model	1,000	,000	,000

NCP

Model	NCP	LO 90	HI 90
Default model	7,254	,000	31,286
Saturated model	,000	,000	,000
Independence model	409,104	343,172	482,532

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	,659	,073	,000	,316

Model	FMIN	F0	LO 90	HI 90
Saturated model	,000	,000	,000	,000
Independence model	4,920	4,132	3,466	4,874

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	,036	,000	,074	,691
Independence model	,230	,211	,250	,000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	131,254	142,125	217,225	250,225
Saturated model	182,000	211,976	419,070	510,070
Independence model	513,104	517,386	546,971	559,971

ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	1,326	1,253	1,569	1,436
Saturated model	1,838	1,838	1,838	2,141
Independence model	5,183	4,517	5,925	5,226

HOELTER

Model	HOELTER .05	HOELTER .01
Default model	117	131
Independence model	21	23

Execution time summary

Minimization: ,328
Miscellaneous: ,750
Bootstrap: ,000
Total: 1,078