

INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

UMI

A Bell & Howell Information Company
300 North Zeeb Road, Ann Arbor MI 48106-1346 USA
313/761-4700 800/521-0600

THE DETERMINANTS OF CUSTOMER RETENTION

By

CESAR M. MALOLES, III

**A dissertation submitted to the Graduate Faculty in Business
in partial fulfillment of the requirements for the degree of
Doctor of Philosophy, The City University of New York**

1997

UMI Number: 9720113

**Copyright 1997 by
Maloles, Cesar Mendoza, III**

All rights reserved.

**UMI Microform 9720113
Copyright 1997, by UMI Company. All rights reserved.**

**This microform edition is protected against unauthorized
copying under Title 17, United States Code.**

UMI
300 North Zeeb Road
Ann Arbor, MI 48103

© 1997

CESAR M. MALOLES, III

All Rights Reserved

This manuscript has been read and accepted for the Graduate Faculty in Business in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

Oct 28, 1996
Date

David Rachman
Chair of Examining Committee

October 28, 1996
Date

Ed Wolf
Executive Officer

Prof. David J. Rachman

Prof. Edward H. Wolf

Prof. Gopalkrishnan R. Iyer

Supervisory Committee

The City University of New York

Abstract
The Determinants of Customer Retention
by
Cesar M. Maloles, III

Adviser: Professor David J. Rachman

Retention has been recognized as a potent defensive tool in the marketing strategy literature. Research, however, has mainly been focused on the determinants of service quality and/or customer satisfaction. There are very few studies that have examined the linkage between service quality and/or customer satisfaction and retention behavior. Furthermore, different studies have drawn different conclusions as to whether the relationship between service quality and customer satisfaction is antecedent, mediating, or consequent. In addition, very few studies have been undertaken to help managers decide whether to focus more on service quality or customer satisfaction. The role of other factors that may inhibit defection has also been ignored.

This study found that both service quality and customer satisfaction influence loyalty intentions directly. Service quality also affects loyalty intentions indirectly through overall satisfaction. The results of the research also show that both firm/service characteristics and equity influence perceptions of service quality and overall satisfaction.

Equity, however, has a more powerful impact on perceptions of service quality and overall satisfaction. The roles of affiliation and consumer characteristics were negligible in this study.

This dissertation is dedicated to

the Lord for blessing me with a
family that has always encouraged
and supported all my endeavors

and

to my mother and my paternal and
maternal grandparents who impressed
upon me the value of education.

ACKNOWLEDGEMENTS

I would like to express my gratitude to my dissertation committee: Prof. David J. Rachman, chair; Prof. Edward H. Wolf; and Prof. Gopalkrishnan R. Iyer. They have continually provided guidance and encouragement in every stage of the dissertation process. Thanks are also due to Prof. Leon G. Schiffman for his direction and support during the initial phase of the dissertation process.

I would like to also thank Prof. Jagdish Agrawal of California State University, Hayward for his patience and assistance in writing this dissertation. Every doctoral student should be so lucky as to have a friend and colleague like Jagdish. I wish to express my appreciation for the support and help provided by Prof. Pamela Grimm and Prof. Lance Masters. I am forever indebted to Ms. Sandra Anderson for editing my study and for providing logistical support.

I am most grateful to my friends at Baruch College. Swee Chia and May Wong, Tami and Barry Schultz, and Bill Reisel were always there to cheer me up and urge me on whenever I felt like giving up. Aside from providing moral support, Swee and Bill also helped me with the logistics of doing a dissertation far from my committee.

Finally, special thanks go to the Santos, Callanta, Poblete, Rubio, and Tamesis families for their unwavering belief in me and for feeding me all these years.

TABLE OF CONTENTS

I. INTRODUCTION	1
1.1. Statement of the Problem	1
1.2. The Domain of the Study	1
1.3. The Objectives of the Research	1
1.4. The Significance of the Study	1
1.5. Organization of the Study	1
II. Literature Review	2
2.1. From Offensive to Offensive and Defensive Marketing	11
2.2. Why a Shift in Strategy Occurred	11
2.2.1. An Alternative Way to Higher Profits	13
2.2.2. The Mathematics of Retention	14
2.2.3. A Conceptual Model of the Determinants of Customer Retention	16
2.3. Customer Satisfaction	17
2.3.1. Defining Customer Satisfaction	18
2.3.2. Measuring Customer Satisfaction	20
2.3.3. The Disconfirmation of Expectations Paradigm	21
2.4. The Determinants of Consumer Satisfaction	22
2.4.1. Expectations	23
2.4.2. Performance	24
2.4.3. Disconfirmation	24
2.4.4. Desires	25
2.5. Satisfaction and Behavioral Intentions	26
2.6. Service Quality	28
2.6.1. Defining Service Quality	30
2.6.2. Measuring Service Quality	31
2.7. The Determinants of Service Quality	33
2.7.1. Expectations	34
2.7.2. Perceptions of Performance	36
2.7.3. Tangibles	36
2.7.4. Reliability	37
2.7.5. Responsiveness	38
2.7.6. Assurance	38
2.7.7. Empathy	39
2.8. Service Quality and Behavioral Intentions	39
2.9. The Link Between Customer Satisfaction and Service Quality	40
2.10. The Strategic Role of Customer Retention	43
2.10.1. The Concept of Customer Retention as a Strategy	46
2.10.2. The Theoretical Basis for Customer Retention	47
2.10.3. The Behavioral Aspects of Customer Retention	48

2.11. Customer Satisfaction, Service Quality, and Retention	49
2.12. Summary	51
III. Determinants of Customer Retention	53
3.1. A Model of the Determinants of Customer Retention	53
3.1.1. Effects of Service Quality and Overall Satisfaction on Behavioral Intentions	55
3.1.2. The Relationship of Service Quality, Overall Satisfaction, and Behavioral Intentions	57
3.1.3. Firm/Service Characteristics, Service Quality, and Overall Satisfaction	60
3.1.4. Equity, Service Quality, and Overall Satisfaction	61
3.1.5. Affiliation Characteristics, Service Quality, and Overall Satisfaction	63
3.1.6. Consumer Characteristics and Behavioral Intentions	66
3.2. Summary	67
IV. RESEARCH METHODOLOGY	70
4.1. Overview of Research Methodology	70
4.2. Industry Selection	70
4.3. The Pilot Study	72
4.3.1. Pilot Study Procedures	72
4.4. The Main Study	73
4.5. Sample Selection-Group 1	73
4.5.1. Sample Selection - Group 2	74
4.6. The Research Instrument	74
4.7. Mode of Analysis	77
4.8. Summary	81
V. DATA ANALYSIS	82
5.1. The Measurement Model	82
5.1.1. Measure of Firm/Service Characteristics	83
5.1.2. Measure of Equity	84
5.1.3. Measure of Overall Satisfaction	85
5.1.4. Measure of Service Quality	86
5.1.5. Measure of Loyalty Intentions	87
5.1.6. Measures of Single-Indicator Constructs	90
5.2. The Structural Equation Model	90
5.3. Tests of Validity	93
5.4. Results of Hypothesis Testing	94
5.4.1. Effect of Overall Satisfaction and Service Quality on Behavioral Intentions	94
5.4.2. Firm/Service Characteristics, Service Quality, and Overall Satisfaction	97

5.4.3. Equity, Service Quality, and Overall Satisfaction	98
5.4.4. Affiliation Characteristics, Service Quality, and Overall Satisfaction . . .	100
5.4.5. Consumer Characteristics, Service Quality, and Overall Satisfaction . . .	102
5.5. The Validity of The Results	103
5.6. Summary	106
VI. SUMMARY AND CONCLUSION	113
6.1. Objectives of the Study	113
6.2. Research Methodology	120
6.2.1. Mode of Analysis	121
6.3. Discussion of Results	123
6.3.1. Service Quality, Overall Satisfaction, and Loyalty	124
6.3.2. Effects of Firm/Service Characteristics and Equity	125
6.3.3. Impact of Affiliation and Consumer Characteristics	126
6.4. Contribution of the Study	126
6.5. Managerial Implications	127
6.6. Limitations of the Study	129
6.7. Directions for Future Research	130
Appendix A	
The Survey Instrument	135
Appendix B	
The LISREL Output for the Combined Sample	145
Appendix C	
The LISREL Output for the First Sample	203
Appendix D	
The LISREL Output Without Consumer Characteristics . . .	265
BIBLIOGRAPHY	316

LIST OF TABLES

Table 5.1.	Measures Used In The Operational Model . .	110
Table 5.2.	Measure of Firm/Service Characteristics .	111
Table 5.3.	Measure of Equity	112
Table 5.4.	Measure of Overall Satisfaction	113
Table 5.5.1.	Measure of Perceived Service Quality . . .	114
Table 5.5.2.	Measure of Service Quality	115
Table 5.6.	Measure of Loyalty Intentions	116
Table 5.7.	Fit and Reliability Statistics	117
Table 5.8.	Convergent Validity Test Results	118
Table 6.1.	A Summary of The Hypothesized Relationships and Empirical Evidence . . .	133

LIST OF FIGURES

FIGURE 1.1. A STRATEGIC MODEL OF CUSTOMER LOYALTY . . .	3
FIGURE 3.1. A CONCEPTUAL MODEL OF CUSTOMER LOYALTY . . .	69
FIGURE 5.1. A MEASUREMENT MODEL OF CUSTOMER LOYALTY . . .	108
FIGURE 5.2. A STRUCTURAL MODEL OF CUSTOMER LOYALTY . . .	109

I. INTRODUCTION

1.1 Statement of the Problem

Firms in many mature markets expend a great deal of resources trying to attract new customers. The problem is, given the intense competition that exists in mature markets, for every new customer that is gained, one or more customers may defect from the firm. Such a scenario leaves the firm in a situation worse off than before. Firms have tried to counter this problem by engaging in all sorts of defensive actions. One strategic parry is to increase the level of quality as well as the level of customer satisfaction. In fact, quality and customer satisfaction have become the buzzwords for the nineties.

Empirical evidence suggests that raising the levels of both quality and satisfaction will lead to brand loyalty and subsequent repeat purchase (e.g., Bearden and Teel, 1983; LaBarbera and Mazursky, 1983). Furthermore, it is suggested that the loyalty effect extends beyond the brand and to the firm (Webster, 1994). Figure 1.1 indicates the normative relationship between these constructs as presented in the marketing strategy literature. The model indicates that high quality products lead to high customer satisfaction levels. High customer satisfaction leads to continual purchase and/or patronage which becomes an indicator of loyalty. But, is it really as simple as postulated? What are the effects of satisfaction and quality on an

individual's behavior, and on each other? What are the determinants of quality and satisfaction? What factors influence retention (or attrition)?

The question about the effects of satisfaction and quality on an individual's behavior and on each other is particularly riveting because it has been posited in the services marketing literature that the effects of satisfaction and quality are weak in comparison to the effect of dissatisfaction on retention behavior (Bearden, Crockett, and Teel, 1981). In addition, a consensus among researchers has not been reached as to the effect of quality and satisfaction on each other (Rust and Oliver, 1994).

A review of the literature reveals that researchers have studied many of these issues. Many of these studies focused only on a few variables at a time, and the thrust has generally been on the direct relationship among the variables (e.g., Churchill and Suprenant, 1982). In addition, the relationship between service quality and/or customer satisfaction and loyalty has not been clearly defined. For example, Zeithaml, Berry, and Parasuraman (1996, p.32) pointed out that there are very few marketing studies that have looked at the impact of service quality on behavioral response. Yet, managers are expected to embrace customer retention wholeheartedly without knowing how service quality and/or customer satisfaction affects loyalty intentions.

One of the few studies that examined the linkage between service quality, customer satisfaction, and repurchase intentions found that service quality has less effect on purchase intentions than does customer satisfaction (Cronin and Taylor, 1992). Furthermore, the study concluded that service quality is an antecedent of customer satisfaction. These findings contradicted the popular beliefs that service quality has a more powerful impact on purchase intentions, which is one facet of loyalty behavior, than customer satisfaction, and that customer satisfaction preceded service quality. The results of this study, as well as other research with diametrically opposed conclusions (e.g., Bolton and Drew, 1991a), suggest that it is quite possible for these variables to play a mediating--or even a moderating--role, in addition to their direct impact on retention. Thus, it becomes critical to examine both the direct and indirect effects together in a comprehensive model.

A review of pertinent literature reveals several areas where knowledge gaps exist. This study seeks to close these knowledge gaps by 1) building a comprehensive model of loyalty (retention) that incorporates more constructs than existing models, 2) examining the nature of the relationship between service quality and customer satisfaction and their direct and indirect influence on loyalty, 3) determining whether service quality or customer satisfaction has a

greater impact on retention, and 4) ascertaining which among the various determinants of customer satisfaction and service quality have a greater effect on service quality, customer satisfaction, and loyalty.

1.2 The Domain of the Study

The services marketing literature indicates that there are significant differences between goods and services to merit looking at whether generalizations based on products can be applied to services (e.g., Berry, 1980). These differences between products and services call into question whether the normative relationship among quality, satisfaction, repurchase behavior and loyalty--as graphically depicted in Figure 1.1--hold. Moreover, in certain types of services wherein the nature of the service delivery is continuous and the type of customer relationship is described as "membership" in nature (Lovelock, 1983), the concept of repurchase may not be applicable.

The domain of this study is thus defined to be the service industry. More particularly, the boundaries are limited to those firms whose services can be classified as being both of a continuous and of a "membership" nature.

1.3 The Objectives of the Research

The major objective of this study is to develop a conceptual model of loyalty and test it empirically. One

goal is to examine the direct and indirect influences on loyalty intentions. More specifically, this research seeks to accomplish the following: 1) define the conceptual linkages between satisfaction, service quality, and loyalty intentions; 2) determine whether the relationship between customer satisfaction and service quality is antecedent, mediating, or consequent; 3) estimate the magnitude of the direct and indirect effects on loyalty intentions; and 4) determine the impact of a) the firm/service characteristics and b) a perception of the fairness of the exchange (equity) on service quality perceptions and satisfaction and, subsequently, on behavioral (loyalty) intentions.

The empirical examination of the conceptual model shall be expanded to include the investigation of the effects of affiliation characteristics on both satisfaction and perceptions of service quality, as well as the influence of individual background characteristics on behavioral intentions. As has been discussed in the statement of the problem, previous research on the determinants of loyalty have focused on service quality and/or customer satisfaction. Yet, Bitner (1990) suggests that there are other factors (e.g., time or money constraints, lack of alternatives, switching costs, habit, etc.) that can influence service loyalty. Thus, it becomes imperative to examine other variables that may affect retention ultimately. By incorporating all the aforementioned

variables and their respective relationships, the end result shall be a structural model of the determinants of customer retention.

1.4 The Significance of the Study

By examining the linkages between the theoretical constructs empirically, this study hopes to clarify the nature and direction of the relationships that exist among them. Additional evidence will provide fuel to the existing debate on this issue and may lead to new research directions in the future.

It has also been posited that the relationship between satisfaction (dissatisfaction) and loyalty is not linear (Coyne, 1989). This study seeks to provide evidence in support of or against such a postulate.

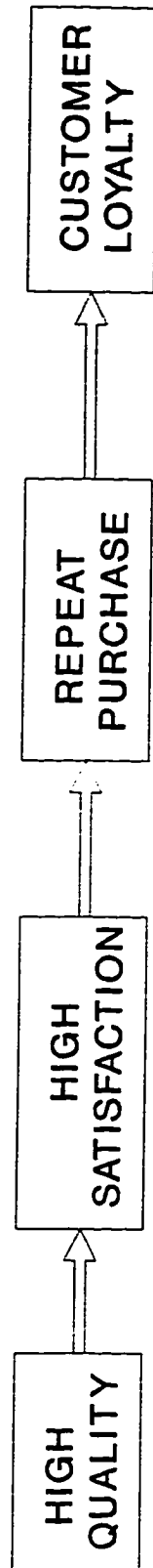
This study may also have meaningful managerial implications. For example, managers may be able to classify their customers based on their propensity to defect and alter the marketing mix to suit each particular type. Furthermore, by adding affiliation characteristics, managers can determine whether cross-selling is an effective way to increase satisfaction and service quality perceptions and thus retain customers. Resource allocation may be affected by the results of this study if results indicate that behavioral intentions are more heavily influenced by the disconfirmation of expectations. Should the study reveal

that individuals switch service providers primarily due to dissatisfaction, a firm may then concentrate on addressing dissatisfaction issues by complaint management rather than by increasing levels of quality and satisfaction.

1.5 Organization of the Study

In the succeeding chapter, a review of the literature relevant to customer retention is presented. This is followed by a chapter describing the proposed conceptual model of the determinants of customer retention. Chapter III also contains the research propositions. Chapter IV describes the methodology used in this study. The next chapter, Chapter V, is a discussion of the results of the study. In the last chapter, Chapter VI, the empirical results are summarized and a discussion of the limitations of the study is presented. The last chapter also includes proposed directions for future research.

FIGURE 1.1
A STRATEGIC MODEL OF CUSTOMER LOYALTY



II. Literature Review

The objective of this literature review is to examine existing research on retention and allied subjects in order to establish a theoretical basis for a model on loyalty. In particular, literature relevant to the antecedents of retention behavior will be reviewed and evaluated. A sound understanding of the literature is necessary to identify the gaps in retention/loyalty research. Identification of the gaps will permit this study to hypothesize the linkages among the different constructs currently acknowledged to affect retention behavior and propose additional linkages between new variables and retention behavior. In this manner, a comprehensive model of loyalty may be specified.

The review of the literature begins with a discussion of how customer retention has become a crucial area for both academicians and practitioners alike. The discussion, drawn mainly from the strategy literature, traces the growing importance accorded to customer retention.

Succeeding paragraphs discuss the literature on the development of the various models of the antecedents of retention behavior. These include customer satisfaction and service quality and their antecedents. Included in the review is a presentation of relevant issues, particularly measurement, confronting this growing field of research.

Toward the end, literature pertaining to retention

behavior and behavioral intentions is presented. This discussion includes complaint behavior.

2.1. From Offensive to Offensive and Defensive Marketing

The past ten years have seen a shift in many firms' market strategies from mostly offensive marketing (acquiring new customers) to a combination of offensive and defensive marketing (retaining customers). This strategic move represents a shift from the previously dominant paradigm in marketing strategy--that market share was the most important factor in achieving higher profits (e.g., Schoeffler, Buzzell, and Heany, 1974).

In the explication of this idea, a large market share was seen as a distinctive competence that a firm must have in order to achieve higher profits than its competitors and ensure its long-term survival. This is because a firm with a dominant market share is perceived to have semi-monopolistic control over its market and, therefore, can dictate the terms for those willing to remain in that market. The theory further holds that the remaining firms will follow the market leader, or be crushed to extinction. The market leader has such power because of the experience effects it has gained over time through volume production (Henderson, 1981).

Bolstered by research such as the PIMS (Profit Impact of Marketing Strategy) studies, which showed a high

correlation between high share and high profits, firms subscribed to this theory fervently. This offensive view of marketing has been the dominant paradigm for some time. Iyer (1995), however, indicated that marketing exchanges today are no longer characterized by an atmosphere of conflict, negotiation and bargaining. Instead, marketing exchanges are more likely to occur in "a more social context wherein norms of trust, cooperation, solidarity, reciprocity, and commitment are part of everyday exchange processes (Iyer, 1995, p.2)." The implication is that there has been a shift in focus from mostly competition to a balance between competition and customers. Hence, defensive marketing as a strategy has gained stature.

2.2. Why a Shift in Strategy Occurred

The allure of constantly seeking market share as a firm's principal strategy has somehow diminished, due in part to shorter product life cycles, as well as the maturity of many markets (Day, 1981). In the past, a firm in the early part of the growth stage need not worry much about competition since the market was big enough to accommodate everybody. Today, firms are increasingly becoming intensely competitive even in the growth stage.

Another reason for the change in strategy is the increased costs of acquiring new customers, particularly in mature markets (Reichheld and Kenny, 1990). By definition,

mature markets are intensely competitive and, in most cases, product and promotional offerings tend to be quite similar. A firm seeking to attract new customers will either differentiate itself and its products from the competition or give the customer an incentive to switch. Such incentives do not come cheap.

A firm may also acquire additional share through acquisitions and mergers (Fruhan, 1972). The cost of acquiring a firm's competitors can be huge, given that the price would include a premium for the owners of the acquired firm. Such consolidations must meet regulatory approval which can be both time and resource consuming. A recent example is the aborted acquisition of Intuit, producers of the financial software, Quicken, by Microsoft. After the government indicated it would oppose the acquisition, Microsoft walked away from the deal, but not before it paid Intuit tens of millions of dollars.

Fruhan (1972) correctly predicted that attempts to acquire additional share in industries where immense financial resources are required and/or where regulatory agencies may interfere with the firm's acquisition plans can lead to pyrrhic victories. He counseled firms to re-think their objectives and battle plan.

In a similar vein, Bloom and Kotler (1975) pointed out that gaining more share may be more trouble than it is worth because, beyond some point, pursuing additional share may

not be cost-effective. They proposed instead that firms assess whether the expected costs and risks of obtaining additional share outweighed expected gains. They suggested "managing share" as an alternative to a compulsive approach of acquiring share. Interestingly, their concept of "managing share" includes the notion of determining and maintaining an optimal level of share. Implicit in the share maintenance aspect is customer retention.

Another reason for the shift was the increasing emphasis on quality and customer satisfaction brought about by the establishment of the Malcolm Baldrige Award by the U.S. Department of Commerce (Sheth, 1992). It was suggested that quality and customer satisfaction go hand-in-hand in developing faithful customers. As long as the quality of the product was perceived to be high (i.e., no defects), then satisfaction will be high and, consequently, customers will be loyal.

2.2.1. An Alternative Way to Higher Profits

There are, however, a number of studies that illustrate that higher market share is *not* the only way to achieve higher profits. For example, Woo and Cooper (1982) demonstrated that low-share firms can also have higher than average profits by focusing on cost and quality. Their conclusions support earlier research done by Hamermesh, Anderson, and Harris (1978).

This new focus on quality has been gaining ground among firms in the last decade. However, such a focus can be expensive. In a time of downsizing, firms are hesitant to invest substantial resources in a quality program when the financial results are not immediately visible. While there have been studies demonstrating the positive financial impact of service improvements (e.g., Kearns and Nadler, 1992), the linkage between quality and profits is much more complex than initially conceived (Zeithaml, Berry, and Parasuraman, 1996).

The urgency of establishing a positive relationship between quality and profits took a critical turn during the recession of the early 1990's (Rust and Zahorik, 1993). The cost-cutting and down-sizing frenzy that occurred during that time made vulnerable those service improvements that did not clearly affect the bottom line in a positive way.

2.2.2. The Mathematics of Retention

Rust and Zahorik (1993) developed a mathematical framework to quantify the beneficial effects of customer satisfaction on market share and profits. More specifically, they used an individual-level model of loyalty and retention to build up to market share by aggregation. Their study allowed managers to determine which customer satisfaction elements have the biggest impact and, consequently, provided a resource allocation guideline.

There have been previous studies linking quality improvements to profits (e.g., Buzzell and Gale, 1987), but they were largely correlational studies. Among the early proponents of increasing satisfaction levels (and consequently retention levels) were Reichheld and Kenny (1990) who sought to demonstrate the financial impact of customer retention.

Based on attrition studies done for retail banks, Reichheld and Kenny (1990) found that 80-85% of a bank's customers are retained on an annual basis. While an 80-85% retention rate may seem acceptable, one has to consider that the firm will have to expend additional resources to obtain new customers to fill the void. Since these are new customers, their contribution to margin may be small or even negative in the first few years when compared to the high initial costs of acquiring them. Furthermore, considering that share leadership and cost reduction are major objectives, for a bank to achieve the same market share as the previous time period, it must attract new customers equal to the amount it lost.

To increase its market share relative to its competitors, a bank must then exceed the 15-20% attrition rate. In a particularly competitive market, this is much more difficult and costly to achieve.

The situation becomes more costly when the 80/20 rule is considered. This rule states that for many of the

businesses, 20% of their customers account for 80% of their sales. Thus, losing someone in the 20% segment can mean a disproportionate loss in sales revenue. Even if the defector is replaced, what are the chances he or she will be in the 20% segment? The implication is that the firm will have to find several individuals belonging to the 80% segment to be able to replace the lost revenues from one individual in the 20% sector. The same conclusions were reached by the U.S. Office of Consumer Affairs in a study on consumer complaint handling (TARP, 1986).

Zeithaml, Berry, and Parasuraman (1996) pointed out in their study that firms are reluctant to invest resources where the impact on the bottom line is not easily visible and quantifiable. Their research demonstrated that perceptions of high service quality leads to favorable behavioral intentions which affect profits positively.

2.2.3. A Conceptual Model of the Determinants of Customer Retention

Customer retention is often seen as synonymous with customer loyalty (Boulding, et al., 1993). Customer loyalty is a multi-dimensional construct that includes brand and firm loyalty. Customer retention is only one indicator of customer loyalty. Other indicators are willingness to pay a premium, word-of-mouth, and complaint behavior. However, there seems to be a consensus among academicians and practitioners that customer retention and customer loyalty

are very similar. Customer retention is viewed as a proxy for customer loyalty because of the very high covariance between retention and the other indicators. For this reason, this study will treat them as equivalent constructs.

Published studies posit that retention is caused by feelings of satisfaction and/or favorable perceptions of service quality (e.g., Bearden and Teel, 1983). Other factors, such as the characteristics of the firm and/or service, as well as the customer's perception of the fairness of the relationship, may affect retention behavior through the mediating effects of satisfaction (or dissatisfaction) and perceived service quality. This is because any evaluation of firm/service or relational influences occurs in the context of the consumers' expectations and perceptions of the performance of the service. These expectations and perceptions are the core of the satisfaction/dissatisfaction and service quality constructs.

2.3. Customer Satisfaction

The growing empirical evidence of the positive financial impact of customer satisfaction (e.g., Reichheld and Kenny, 1990) has led firms to focus on this concept. But what the customer satisfaction construct is or means or how it is used may not be the same for different individuals and/or entities (Bitner and Hubbert, 1994).

2.3.1 Defining Customer Satisfaction

Churchill and Suprenant (1982) described the concept of consumer satisfaction as an outcome of purchase and use resulting from the buyer's comparison of the rewards and costs of the purchase in relation to the anticipated consequences. Operationally, they compared satisfaction to an attitude that "can be assessed as the sum of the satisfactions with the various attributes of the product or service" (p. 493). Others see satisfaction as the confirmation of expectations (e.g., Engel and Blackwell, 1982; Oliver, 1980). Ostrom and Iacobucci (1995, p. 17) suggest that customer satisfaction is a "relative judgement that takes into consideration both the qualities and benefits obtained through a purchase as well as the costs and efforts borne by a customer to obtain that purchase." Howard and Sheth (1969) indicated that satisfaction is a customer's cognitive state wherein the customer feels that rewards are commensurate to the sacrifices. Spreng, Mackenzie, and Olshavsky (1996) proposed a model of consumer satisfaction that includes not only expectations, but also desires.

Bitner and Hubbert (1994) asserted that there has been no common definition or way of measuring customer satisfaction. What is clear, though, from these various perspectives is that satisfaction involves an assessment of certain features in relation to some kind of standard.

The distinction of whether satisfaction is a short-lived or enduring phenomenon was not made in most of these definitions. Only Churchill and Suprenant (1982) indirectly indicated that satisfaction, due to its similarity to attitude, tends to last. Bitner and Hubbert (1994) felt that the distinction between a short-term versus long-term, more global, satisfaction had strong implications for research in this area. Accordingly, they sought to differentiate satisfaction into two constructs: service encounter satisfaction and overall service satisfaction. Their delineation was based on the object of satisfaction/dissatisfaction.

Service encounter satisfaction was described as "the consumer's dis/satisfaction with a discrete service encounter" (Bitner and Hubbert, 1994, p. 76). Walker (1995) also provided a conceptualization of this type of satisfaction.

Overall service satisfaction was defined to be "the consumer's overall dis/satisfaction with the organization based on all encounters and experiences with that particular organization" (Bitner and Hubbert, 1994, p.77). Westbrook (1981) provided empirical evidence that supported Bitner and Hubbert's (1994) dichotomy of the satisfaction construct. He showed that overall satisfaction with a service provider was due to an evaluation of the total set of experiences.

The various definitions of satisfaction delineate two

types of satisfaction: service encounter satisfaction and overall satisfaction. Service encounter satisfaction is a transaction-specific evaluation, while overall satisfaction is a more comprehensive evaluation of the firm and all the service encounters experienced. Both service encounter satisfaction and overall satisfaction are the result of either confirmation of expectations or positive disconfirmation of expectations.

2.3.2. Measuring Customer Satisfaction

Churchill and Suprenant (1982) indicated that early researchers did not measure satisfaction. Instead, the focus was on the linkage between expectations and perceived product performance. At some point, research shifted to the relationship among perceived expectations, disconfirmation, and satisfaction. For example, Olson and Dover (1979) examined the effects of performance, expectations, and disconfirmation on an individual's beliefs. But they were unable to measure satisfaction and, consequently, were unable to determine the impact of the above constructs on satisfaction.

Satisfaction has been measured in terms of complaint behavior (Ross and Oliver, 1984). The use of complaint behavior to measure satisfaction is not common. The more frequently used approach is the disconfirmation approach.

The disconfirmation approach to measuring satisfaction

holds that the satisfaction is related to the size and direction of the disconfirmation experience (Churchill and Suprenant, 1982). This disconfirmation experience is a result of the discrepancy between a person's initial expectations and his assessment of the performance. Spreng, et al., (1996) proposed that satisfaction is a result of positive disconfirmation of not only expectations but also desires.

Swan and Trawick (1980) looked at the effect of perceived product performance on disconfirmation and satisfaction. Using correlational analysis, they suggested that disconfirmation was strongly linked to performance and satisfaction. Their study was typical of the growing number of studies that assessed satisfaction through disconfirmation. This gave impetus to the rise of the disconfirmation of expectations paradigm as the primary means to measure satisfaction (Spreng, et al., 1996). Disconfirmation was the crucial intervening variable in determining the satisfaction process.

2.3.3 The Disconfirmation of Expectations Paradigm

It seems that the most frequently utilized means of measuring satisfaction is through the disconfirmation of expectations model. According to Oliver (1980), feelings of satisfaction are generated when consumers compare their expectations with their perceptions of a product's

performance. If positive disconfirmation results--that is, when perceived performance exceeds expectations--then satisfaction occurs. If perceived performance meets the consumer's expectations, then positive confirmation takes place. Finally, if perceived performance falls short of expectations (negative disconfirmation), then feelings of dissatisfaction arise.

Very few research studies actually use the positive confirmation approach to measure satisfaction. On the other hand, firms utilize the positive confirmation approach in estimating the level of customer satisfaction. They design survey instruments that simply ask customers to rate their satisfaction level on a number of product attributes. Often times, the survey outcomes indicate high levels of customer satisfaction. The survey results may be misleading, however, because often those who are dissatisfied will just walk away rather than take the time and trouble to complain or respond negatively to surveys (Jones and Sasser, 1995). Firms must therefore measure satisfaction in other ways to validate survey results.

2.4. The Determinants of Consumer Satisfaction

From the above discussion, it can be deduced that satisfaction is influenced by a number of variables. These variables are expectations, performance, disconfirmation and desires. Each of these factors is discussed below.

2.4.1. Expectations

Expectations have been defined in the literature as predictions about what may likely occur in an exchange. These predictions are used as the basis for comparing performance.

According to Prakash and Lounsbury (1984), the conceptualization of the determinant role of expectations can be traced to adaptation level theory and comparison level theory. The authors sought to classify the different types of expectations that should be confirmed in the determination process. They identified three types of expectations: predictive, normative and comparative.

Predictive expectations refer to a consumer's beliefs about how a brand is likely to perform on certain attributes. These beliefs are influenced by past experience, marketing communications, and opinions of other people.

Normative expectations, also known as desired expectations, imply that a certain norm or standard must be met to generate satisfaction. This type of satisfaction involves consideration of equity, personal values, cultural norms, socio-economic and political philosophy, and quality of life.

The third type refers to expectations about a brand as compared to similar brands. Should the performance of the brand purchased exceed the expectations about similar

brands, then satisfaction results.

Oliver and Winer (1987) categorized expectations as either active or passive. Active expectations are consciously anticipated by consumers. Passive expectations exist only generally and are not processed unless disconfirmed.

2.4.2. Performance

Performance may be defined as the commission or omission of the service or some aspect of it. The role of performance is that it is the point of comparison by which disconfirmation may be assessed (Churchill and Suprenant, 1982). Performance that meets or exceeds expectations leads to satisfaction. The marketing literature is generally unanimous with regard to the importance of performance as a determinant of satisfaction.

2.4.3 Disconfirmation

Disconfirmation stems from the differences between prior expectations and actual performance. There is substantial empirical evidence to demonstrate the posited impact of disconfirmation on satisfaction (Yi, 1990). In these studies, disconfirmation plays a central role as the crucial intervening variable between various antecedents and satisfaction.

Oliver (1977) proposed that disconfirmation is an

independent construct that has additive effects on satisfaction. For this reason, he advocated measuring disconfirmation independently of expectations and performance. However, because disconfirmation has been defined as a difference, researchers are unable to manipulate and measure it independently (Churchill and Suprenant, 1982).

2.4.4. Desires

Spreng, Mackenzie, and Olshavsky (1996) called for the inclusion of desires as a key variable in determining consumer satisfaction. They pointed out that fundamental to the marketing concept is the idea of satisfying consumer wants and desires. Yet, researchers in this field have generally ignored desires and concentrated on the disconfirmation of expectations. Spreng, et al., (1996) proposed an expanded model that is built on the disconfirmation of expectations paradigm. Their model introduces the concept of information satisfaction which is based on the impact of marketing communications. Taken together, both the satisfaction generated by the product (or service) and by marketing communications influence the feelings of overall satisfaction.

Spreng and his colleagues (1996) acknowledged that there has been no clear conceptual definition of the construct. They attributed this limitation in part to the

possibility of conceptualizing desires at various levels. For example, Spreng and his co-authors (1996, p.16) stated that desires "can be defined abstractly in terms of the most basic and fundamental needs, life goals, or desired end-states or more concretely in terms of the means that a person believes will lead to the attainment of the desired end-states." The empirical results of their study reveal that desires serve as a mediating influence on the other factors that affect overall satisfaction.

2.5. Satisfaction and Behavioral Intentions

Consumer satisfaction by itself would attract little managerial interest if it were not for its hypothesized effects on behavioral intentions. A number of studies support the linkage between customer satisfaction and behavioral intentions (e.g., Bolton and Drew 1991a; Boulding, et al., 1993). Among the specific outcomes of customer satisfaction are attitude change, repeat purchase intentions, brand loyalty, customer loyalty, and word-of-mouth communication. Satisfaction may also affect market share and profits (Gale 1994).

The effect on consumers' product performance ratings by disconfirmed expectations was studied by Anderson (1973), Bolton and Drew (1991b), and Olshavsky and Miller (1972). All three studies concluded that satisfaction (dissatisfaction) affects consumers' attitudes positively

(negatively).

Substantial empirical evidence is also available to support the contention that satisfaction affects repeat purchase intentions (e.g., LaBarbera and Mazursky 1983; Bearden and Teel, 1983). LaBarbera and Mazursky (1983), in a longitudinal study, found that the effect of customer satisfaction was strong on repurchase intention. But its importance in predicting repeat purchase intentions decreases with high brand loyalty.

The 1986 TARP (Technical Assistance Research Program) study demonstrated that satisfaction also leads to brand loyalty and, subsequently, to repeat purchase intentions. Oliver (1980) also came to the same conclusion.

Webster (1994) stated that customer satisfaction not only led to brand loyalty but also to customer loyalty. Customer loyalty includes allegiance to the firm and its range of products and not only to specific brands. It is, therefore, a more encompassing construct than brand loyalty. Hirschman (1970) expressed the same notion that satisfied customers will be more loyal.

Hirschman (1970) also indicated that dissatisfied customers tend to engage in negative word-of-mouth. In fact, the 1986 TARP study asserts that dissatisfied customers are apt to tell more people about their negative experience than satisfied customers are likely to talk about their positive experience.

Richins (1983) concluded that negative word-of-mouth increased with increasing dissatisfaction. Bearden and Teel (1983) found an inverse relationship between satisfaction and negative word-of-mouth. Dabholkar and Thorpe (1994) decried the lack of empirical evidence to support the relationship between satisfaction and positive word-of-mouth. Instead, most research studies focused on dissatisfaction and its effect on complaining behavior, particularly negative word-of-mouth. Their study showed support for the proposition that satisfaction indeed leads to positive word-of-mouth.

Customer satisfaction also leads to higher market share. Several studies showed the positive linkage among satisfaction, repeat purchase, and increased market share (e.g., Anderson and Sullivan, 1993; Buzzell and Gale, 1987). Fornell and Wernerfelt (1988), in a seminal study, examined the relationship of satisfaction to profits through the intervening variable of behavior. They concluded that satisfaction with a firm's complaint handling can lead to customer retention, and thus to higher profitability.

2.6. Service Quality

Buzzell and Gale (1987) asserted that high satisfaction was only possible if perceived quality was deemed by the buyer to be high. Their assertion was backed by empirical and anecdotal evidence that showed that the American

consumer was buying more foreign-made products and less American-made goods because of the perception that American-made goods were of inferior quality. Buzzell and Gale (1987) essentially described the changes that had begun at the start of the decade.

The 1980's brought about a dramatic change in the strategic outlook of many American firms. Faced with competition from imported products that were perceived to be superior by American consumers, these firms realized that the only way to compete in their home market, as well as abroad, was to raise the level of quality of their products. Spurred by the revelation that perceived quality can be a powerful source of competitive advantage (Reichheld and Sasser, 1990), and encouraged by the U.S. Department of Commerce's Malcolm Baldrige Awards, many firms warmly embraced the idea of Total Quality Management. Additional evidence provided by the PIMS studies encouraged many firms to subscribe to the Total Quality Management program.

The Total Quality Management program calls for a firm to increase quality levels not only in the production area, but throughout the company including the pre- and post-purchase service aspects. This also put pressure on service companies to increase their service standards.

Evaluation of services utilizes relatively more experience and credence attributes than search attributes. In contrast, products have more search attributes and fewer

experience and credence attributes. The distinct characteristics of services (i.e., intangibility, perishability, simultaneous production and consumption, etc.) propelled a number of researchers to propose that service quality be examined independently from product quality. An important difference is that consumers use different cues to judge products and services (Parasuraman, et al., 1985). These service attribute cues caused consumers to infer quality (Zeithaml 1988).

2.6.1. Defining Service Quality

What is service quality? In the same way that Churchill and Suprenant (1982) alluded to satisfaction as similar to attitude, Bitner (1990) and Zeithaml (1988) viewed perceived service quality as similar to attitude. The difference between service quality and attitude is that service quality is seen as a general, comprehensive appraisal of some product or service (Bitner and Hubbert, 1994), while attitude is "a learned predisposition to respond to an object in a consistently favorable or unfavorable way" (cf: Bitner and Hubbert 1994, p.75: Allport, 1935). Holbrook and Corfman (1985) further explained that perceived quality is a global value judgement that relates to the superiority of the overall product. Maynes (1985) saw service quality as the extent to which a product provides the characteristics the individual desires.

Parasuraman, Zeithaml, and Berry (1985) conceptualized service quality as a number of gaps between a desired or ideal situation and actual performance. Gronroos (1982) and Lewis and Booms (1983) underscored the importance of the processes and the outcomes in defining service quality.

A common thread among these myriad definitions of service quality is the implication that standards exist against which services are judged. Furthermore, such standards seem to be linked to fundamental needs, wants, and desires.

2.6.2. Measuring Service Quality

In a ground-breaking article, Parasuraman, et al. (1988) presented a scale to measure perceived service quality. The items on this scale were based on a series of focus group interviews. The scale, known as SERVQUAL, represented five key dimensions of service quality: tangibles, reliability, responsiveness, assurance, and empathy. The authors contended that perceived service quality could be measured by getting the difference between perceptions and expectations of the five key dimensions.

The instrument drew criticism from a number of researchers who questioned the scale's reliability and discriminant validity (e.g., Babakus and Mangold, 1989; Finn and Lamb, 1991). Carman (1990) suggested that the item-factor relationships were unstable. He also suggested that

SERVQUAL had to be adapted to fit the particular service under review.

Cronin and Taylor (1992) took aim not only at the measurement issue, but also at the conceptualization of SERVQUAL. Their research indicated that the perceptions aspect of SERVQUAL was a better measure than SERVQUAL itself. This led them to conclude that the disconfirmation of expectations paradigm was the inappropriate choice for measuring service quality.

The authors of SERVQUAL countered the criticism mentioned above by doing a new study (Parasuraman, et al., 1991). They introduced a refined version. The modified scale contained changes in item wording and a direct measurement of the importance of each dimension to the respondent. Previously, the importance estimates were derived indirectly in the form of regression weights. Interestingly, the authors found that the items on tangibles were splitting into two factors.

The new version did not end the debate. As mentioned earlier, Cronin and Taylor (1992) concluded that performance ratings were a better predictor of perceptions of service quality. Brown, Churchill, and Peter (1993) argued that the use of difference scores was inadequate in conceptualizing service quality. They demonstrated that the new version of SERVQUAL had low psychometric scores. They proposed an alternative method which they claimed to be superior to

SERVQUAL.

Parasuraman, et al. (1993) responded by arguing that SERVQUAL was a richer diagnostic tool and that the psychometric advantage of the alternative method proposed by Brown, et al. (1993) was not clear. Parasuraman, et al. (1993) also acknowledged that there is a trade-off between the ability to explain variance and more accurate diagnostics for improving service quality.

Teas (1993) also joined the debate by concluding that the perceptions minus expectations framework was of doubtful validity due to conceptual and definitional problems. He proposed alternative models to address the issues he raised.

Despite the spate of criticism of SERVQUAL and the availability of alternative methods to conceptualize and measure service quality, the SERVQUAL instrument remains most popular and used widely (Brown, et al., 1993).

2.7. The Determinants of Service Quality

There is a strong belief that quality evaluations are not unidimensional, but instead consist of evaluations of multiple abstract dimensions (Garvin 1987). The services marketing literature contains a number of studies that indicate the multi-dimensionality of service quality (e.g. Parasuraman, et al., 1985; 1988). The authors of SERVQUAL identified the difference between perceptions and expectations of five key dimensions as the factors that

underlie the service quality construct. As previously noted, these are tangibles, reliability, responsiveness, assurance, and empathy.

Most researchers, including authors who have criticized SERVQUAL (e.g., Brown, et al., 1993; Teas, 1993), recognize the determinant roles of expectations and perceptions of performance. There is, however, disagreement over whether the five key dimensions capture all the determinants of service quality. For example, Carman (1990) found between six and eight dimensions in his study. Babakus and Boller (1992) did not find an unambiguous five factor solution. They had to settle for a two-dimensional structure.

Cronin and Taylor (1992) concluded that the five factor solution did not hold for SERVQUAL, but did quite well if only performance was evaluated. Based on their study, they asserted that a consumer's assessment of performance was sufficient by itself to determine perceptions of service quality.

Even with contradictory evidence, there is widespread acceptance of the SERVQUAL determinants. Hence, it would be prudent to discuss all these determinants.

2.7.1 Expectations

The expectations measured by SERVQUAL are not necessarily the same expectations measured by the satisfaction/dissatisfaction model (Mentzer, Bienstock, and

Kahn, 1993). As has been noted in the discussion of expectations in Section 2.4.1, three types of expectations were identified. The SERVQUAL model, on the other hand, focuses on normative expectations. It is therefore essential in assessing service quality not only to distinguish the type of expectation, but also to understand the nature of customer expectations.

Expectations are anticipatory and normative by nature (cf: Clow and Beisel, 1995; Miller, 1977; Oliver, 1980). In their article, Clow and Beisel (1995) state that a consumer would have anticipatory expectations of himself and the future behavior of the service provider. Such expectations will shape the consumer's behavior. They state that such anticipation stems from: 1) knowledge that the service provider (retailer) was able to do it (i.e., provide the service) in the past; 2) knowledge that the service provider has the ability to do it; 3) knowledge that others, whose opinions the consumer trusts, believe that the service provider can do it; and 4) the wish (hope) that the service provider can do it. They further contend that, "generally, consumer's expectations of a service provider are anticipatory when dealing with the provider for the first time" (p.34).

Expectations possess a normative quality when the consumer can consistently anticipate the behavior of the service provider (Swan and Trawick, 1980; Zeithaml, et al.,

1993). Through continuous and satisfactory interaction with the service provider, the consumer will be conditioned to believe that the service provider should and will act in that manner consistently. For example, students may expect to take only multiple choice exams in future classes because in all their previous classes only multiple choice tests were administered.

2.7.2. Perceptions of Performance

Perceptions of performance are defined as consumers' beliefs about the service they have experienced (Brown and Swartz, 1989; Parasuraman, Zeithaml, and Berry, 1985). Boulding, et al. (1993, p.10) proposed that perception is actually a "cumulative construct that is constantly updated each time the person is exposed to the service." Note that the possibility exists that a person's perception of the performance may be influenced by the service provided to others, and only observed by the customer.

2.7.3. Tangibles

Tangibles are those attributes that pertain to the physical facilities/equipment and appearance of both the personnel and communication materials of the service provider. Bitner (1992) presented a conceptual framework for exploring the impact of physical surroundings on both customers and employees. She proposed that careful and

creative management of the atmospherics can lead to perceptions of service quality in addition to other marketing goals.

The effect of atmospherics (the physical appearance) on a consumer's quality assessment has been validated (Berry and Clark, 1986; Shostack, 1977). Consumers look for cues about the firm and its product to assist them in the evaluation process. Furthermore, research shows that the physical appearance may influence the consumer's degree of satisfaction (Bitner, 1990).

2.7.4. Reliability

Reliability refers to the consistent and error-free delivery of service. In many studies of quality, the dimension of reliability always shows up (Garvin, 1987). Reliability essentially denotes that the very basic service must be delivered to attain any kind of consumer satisfaction. According to Walker (1995), if there is adequate delivery of the core service, then peripheral performance leads consumers to assess the service encounter as satisfying. It is crucial to note that most studies indicate that the reliability dimension usually stands out as the most important attribute consumers look for in a service (e.g., Parasuraman et al., 1988).

2.7.5. Responsiveness

Responsiveness is a relational trait that characterizes the service encounter. This dimension incorporates the attributes of time (promptness) and willingness to assist customers. Responsiveness includes attributes such as waiting time and standing in queues.

2.7.6. Assurance

The main attribute of assurance is the element of trust. Previous studies on bank selection decisions (e.g., Anderson, Cox, and Fulcher, 1976) indicate that confidence in the bank was crucial to patronage decisions. In the banking studies, it was found that only when there was a sufficient level of trust in the bank and its capabilities would the consumer be satisfied enough to start a relationship.

2.7.7. Empathy

Service does not operate in a vacuum. One dimension of service is the simultaneous production and consumption of the service good. The interaction between the consumer and the service provider activates the affective influence on satisfaction with the encounter, overall satisfaction, and perceptions of service quality. To the extent that the consumer feels (or does not feel) that he was accorded individual attention, the cognitive and affective effects

will be factored in the individual's evaluation of the service. The empathy dimension includes the attributes of convenience and personalized attention.

2.8. Service Quality and Behavioral Intentions

The effect of service quality on behavioral intentions is very similar to that of consumer satisfaction. Service quality affects the same range of behavioral intentions as consumer satisfaction. A number of studies that examined how service quality perceptions affect particular behavioral intentions are discussed in the next paragraph.

A perception of high service quality leads to a firm's success via customer loyalty and positive word-of-mouth (Boulding, et al., 1993). Zeithaml, Berry, and Parasuraman (1996) demonstrated the strong effect of perceived service quality on behavioral intentions (retention). Gale (1992) showed that customers who had high perceptions of quality of the service provider were likely to buy again from the same provider. His results, however, seem to indicate that the willingness to repurchase is highest at some intermediate level of service quality. Bolton and Drew (1992) posited that service failures (consequently, low perceived quality) weaken the relationship between the firm and the customer even when the problem is resolved.

2.9. The Link Between Customer Satisfaction and Service Quality

There has been very little research conducted to determine whether consumer satisfaction influences behavioral intentions much more strongly than service quality does or vice versa. This is probably due to the debate that is still going on in the services marketing literature as to whether satisfaction is an antecedent of service quality or vice versa.

From the foregoing, it is apparent that researchers believe that service quality and customer satisfaction are two independent constructs. But are they really two separate concepts?

Bitner and Hubbert (1994) raised the question whether the two are distinguishable from the customer's perspective. Shostack (1985) pointed out that customers have a hard time trying to determine service quality objectively. Boulding, et al. (1993) acknowledged that service quality and consumer satisfaction were treated as one and the same by the popular press (cf: Mentzer, et al., 1993).

The consumer is not the only one who lumps both constructs as one. In a footnote in an often-cited article, Rust and Zahorik (1993) indicated that both terms were used interchangeably. While it is most certain that Rust and Zahorik were aware of the purported differences, one can speculate that they treated the two constructs as one and the same for purposes of expediency. This was justifiable

because 1) the focus of their research was on the outcomes (retention behavior and market share) and 2) previous research has indicated very similar effects on behavioral intentions.

A point of contention among researchers is whether both constructs (satisfaction/dissatisfaction and service quality) are actually attitudes. Satisfaction (dissatisfaction) is viewed as an episodic, transaction-specific measure (cf: Clow and Beisel, 1995; Bitner, 1990). Yet, there are studies that treat satisfaction (dissatisfaction) as a cumulative, rather than a discrete measure (e.g., Cronin and Taylor, 1992; Oliva et al., 1992).

It has become obvious that satisfaction/dissatisfaction had to be separated into distinct types based on whether such satisfaction was with a specific service encounter or was with the totality of the service provided and the service provider. In essence, services marketing literature was really comparing three constructs and not two.

Service quality has been described as "similar in many ways to an attitude" that is developed over all previous encounters with a service firm (Parasuraman, et al., 1988, p.15). This hesitancy to call service quality an attitude has been termed a major problem in the literature (Cronin and Taylor, 1992). The problem is that while the disconfirmation paradigm has been used to measure perceptions of service quality, it has also been used at the

same time to differentiate consumer satisfaction from service quality. (Recall that satisfaction is meeting or exceeding expectations, while service quality measures the gap between perceptions and expectations.) Such an approach has been described as simply inconsistent with the differentiation expressed between these constructs in the satisfaction and attitude literature (Cronin and Taylor, 1992).

Bitner and Hubbert (1994) recognized the confusion over these different types of evaluation, and proposed a set of definitions to help clarify the issues involved. Their study also established the conceptual linkages among service encounter satisfaction, overall service satisfaction, and service quality.

To reiterate, Bitner and Hubbert (1994) defined service encounter satisfaction as the consumer's satisfaction with a discrete transaction. The consumer's evaluation will focus only on the events that transpired during the service encounter. According to the authors, "it is believed that consumers will distinguish their satisfaction with a particular encounter from their overall satisfaction" (p.76). They further suggest that assessment of a particular encounter may correlate perfectly with measures of overall satisfaction if the encounter was the first encounter or if it was particularly significant for the consumer. However, with consistently good service, a single

encounter gone awry will have minimal influence on overall satisfaction.

Overall service satisfaction was defined as the consumer's overall satisfaction with the organization based on all encounters and experiences with that particular organization. It may include evaluations of experiences with multiple individuals working for the firm (Oliva, et al., 1992). This perspective of satisfaction is more global than specific and the focus of the satisfaction shifts from the specific encounter to the organization. Bitner and Hubbert (1994) contend that a consumer with no prior exposure to the firm will have a highly correlated perception of service quality and overall satisfaction. Prior knowledge of and about the firm will not necessarily yield a strong correlation between service quality and overall satisfaction. For example, negative information from credible sources and the consumer's perception of value may temper his evaluation of service quality, although his personal experiences have been overwhelmingly satisfying.

The same authors define service quality as the consumer's overall impression of the relative inferiority/superiority of the organization and its services. Service quality is similar then to overall satisfaction in three ways: 1) the perspective taken is global, 2) they are both cumulative judgements, and 3) the focus is the firm. The two (i.e., service quality and

overall satisfaction) are different in that evaluations of service quality are held against a standard while overall satisfaction is the additive impact of all the service encounters the consumer has experienced or of which he is aware.

Bitner and Hubbert (1994) anoint service quality as the more abstract and "higher order construct" (p.77). They suggest that service quality may be affected by more variables and that it is likely to contain dimensions of the other two constructs.

Bolton and Drew (1994, p.176) indicated that 'in a dynamic framework, customer satisfaction with a specific service encounter depends on pre-existing or contemporaneous attitudes about service quality and customer post-usage attitudes depend on satisfaction.' The implication is that service quality is one of the inputs and customer satisfaction is an output. It is pertinent to note that these authors asserted that service quality is an attitude.

One may conclude from this debate that there is a consensus among researchers that service quality and customer satisfaction are two different constructs but may have common indicators. Furthermore, there is unanimity in the literature that both service quality and customer satisfaction influence loyalty. The discord stems from the disagreement as to which construct precedes the other. The idea that both constructs affect loyalty independently has

not been discussed in the literature. Instead the focus has been on trying to delineate which is the immediate antecedent of retention behavior.

2.10. The Strategic Role of Customer Retention

While academics may quibble over definitions, practitioners are more eager to examine the impact of satisfaction and/or service quality on behavioral intentions and, more concretely, on behavior. One behavioral facet that managers are interested in is retention behavior.

Customer defections become extremely costly for a firm competing in a mature market (e.g., Reichheld and Sasser, 1990). On a positive note, customer retention leads to higher market share and higher profits (Rust and Zahorik, 1993). Additionally, Reichheld and Kenny (1990) argue that retention leads to the following strategic advantages: 1) it increases profitability of customers over time, 2) it is hidden from competitors, and 3) it reduces employee attrition.

Given such benefits, why has this defensive marketing tactic lagged behind offensive marketing tactics (Liswood, 1990)? Why have firms chosen to treat customer retention as unequal to offensive marketing strategies? Often, customer retention is relegated to the periphery of a firm's strategies. To understand this seemingly anomalous situation, it is necessary to delve into the concept and

nature of customer retention.

2.10.1. The Concept of Customer Retention as a Strategy

A review of the leading textbooks in marketing strategy demonstrates the relatively small role that customer retention plays in a firm's overall marketing strategy (e.g., Czepiel, 1992; Ferrell, et al., 1994). The strategy books are full of discussions of market share maneuvers and improving real and perceived quality but say little or nothing at all about customer retention. Some books devote one or two paragraphs or, at most, a page to customer retention. Many just ignore customer retention. This neglect may be because customer retention may be regarded as antithetical to the idea of strategy. Strategy involves planning ahead to achieve certain goals.

Another reason customer retention has not gained ground may be that firms do not know how to identify and track the reasons why customers leave. Recent developments in technology and marketing research indicate that this may no longer be true. In fact, consumer complaint behavior has become an emerging field in marketing research.

Many firms prefer to focus on gaining new customers because of the visible impact on the bottom line (Rust and Zahorik, 1993). Liswood (1990, p.4) claimed that "a disproportionate share of a company's efforts, resources, and rewards is focused on getting new customers, [and] the

job of keeping customers is typically shortchanged." While such an approach may be appropriate in the introductory and growth stages of the product, such tactics may not work as well in the maturity stage.

2.10.2. The Theoretical Basis for Customer Retention

The theoretical basis for customer retention is founded on industrial economic theory. Assuming 1) that a finite number of firms compete in a homogeneous market, 2) that firms behave identically, and 3) that firms follow a profit-maximizing strategy, the profit function for a company may be derived. Utilizing these simplifying assumptions, Schwalbach (1991) derived a positive linear function between market share and profits.

The relationship between market share and profitability in a more or less homogeneous market depends on firm-specific marginal costs. This is well and good until marginal cost equals marginal revenue, at which point the law of diminishing marginal returns is activated. Thus, a high share firm, competing in a mature market for additional new share, may find marginal costs rising faster than profits. To maintain high profitability, the firm may choose to determine an optimal level of market share.

Bloom and Kotler (1975) prescribed a thorough analysis of costs, benefits, and risks associated with choosing an optimal share level. As part of its investigation, the firm

should compare the costs of acquiring new customers and the costs of reducing attrition. Empirical evidence suggests that reducing attrition through a customer retention strategy costs less than attracting new customers (e.g., Reichheld and Sasser, 1990).

2.10.3. The Behavioral Aspects of Customer Retention

The foundation of customer retention as a viable strategy lies in its behavioral implications. The behavior is hypothesized to have an impact on the financial situation of the firm (e.g., Reichheld and Sasser, 1990; Rust and Zahorik, 1993).

Three types of behavior may result from a service encounter or encounters. These are exit, loyalty, or voice (Hirschman, 1970). Exit is the act of leaving the service provider and switching to a competitor. Loyalty means remaining with the service provider. Voice refers to complaint behavior.

The first two behaviors are immediate responses to what has been referred to as the "critical incident" (Bitner, et al., 1990). The last behavior, voice, is seen as an intermediate step that will eventually result in either exit or loyalty depending on how well the complaint is perceived to be handled by the customer (Singh, 1988).

Customer retention is a strategy devised by a firm to stem defections from the customer base. For such a strategy

to work, managers must look at the behavioral implications of their actions. To effectively do that, it is imperative to take the customer's perspective and, if at all possible, analyze the reasons for attrition behavior. Unfortunately, once a customer defects, it is hard to get his cooperation. To make matters worse, the majority of customers are not even willing to express their dissatisfaction with the service and will just walk away (TARP, 1986).

It is clear then that the more viable option a firm can take is to engage in pro-active and preemptive action *before* attrition occurs. To do so, a firm may examine behavioral intentions rather than the behavior itself. The consensus among researchers is that intentions are reliable indicators of future behavior (Zeithaml, et al., 1996).

The marketing literature has unequivocally stated that customer satisfaction and/or perceived quality are major influences on behavioral intentions (e.g., Boulding, et al., 1993). Thus, managers should try to determine their customers' levels of satisfaction and/or perceived quality. Jones and Sasser (1995) offer a framework to classify customers on the basis of their loyalty and propensity to switch.

2.11. Customer Satisfaction, Service Quality, and Retention

There is empirical evidence that satisfied customers will become loyal customers (e.g., LaBarbera and Mazursky,

1983) and will be impervious to slight price differentials among competing products or services (Zeithaml, et al., 1996). High perception of service quality also positively impacts customer loyalty and word-of mouth (Boulding, et al., 1993).

Cronin and Taylor (1992) and Bitner (1990) demonstrated that both service encounter satisfaction and perceived service quality are positively related to behavioral intentions. Anderson, Fornell, and Lehmann (1994) concluded that customer satisfaction and perceived quality have a positive impact on market share and profitability.

From the above discussion, it may seem that satisfaction and/or high perceptions of service quality are sufficient to warrant the advantages of retention. If this is true, is the converse also true? Does dissatisfaction necessarily lead to attrition? Should firms just focus on reducing dissatisfaction and forget about raising the level of consumer satisfaction?

The last question is an acknowledgement of the findings in the customer satisfaction/dissatisfaction literature. It has been proposed that satisfaction and dissatisfaction are not on opposite ends of a continuum, but are actually on different levels. This distinction is important because not all dissatisfied customers leave, and not all satisfied customers stay (Sasser and Jones, 1995).

Woodruff, et al. (1983) suggested that consumers have a

zone of indifference that allows them to tolerate certain levels of dissatisfaction. Moreover, Bitner (1990) thinks that other factors such as time or money constraints, lack of alternatives, switching costs, and habit may impede defection. Inertia has also been mentioned as a possible cause for the distortion of the effects between satisfaction/service quality and behavior (Guadagni and Little, 1983). Other variables that may affect behavior through the mediating effects of satisfaction and/or service quality are convenience, price, availability (Cronin and Taylor, 1992), usage context (Morgan and Dev, 1994), and value (Ostrom and Iacobucci, 1995).

2.12. Summary

This chapter examined the relevant literature that established the linkages among the major constructs involved in modelling retention. The literature, drawn primarily from the strategy and services marketing literature, presents a coherent picture of the current hypothesized relationships that exist between and among the various constructs. It should be quite evident from the discussion that contributions from different streams of literature in the fields of psychology, sociology, economics, consumer behavior, etc. were utilized.

In the next chapter, a model of the determinants of customer retention is proposed and specific hypotheses are

presented.

III. Determinants of Customer Retention

3.1. A Model of the Determinants of Customer Retention

The preceding literature review identified a number of studies that examined several variables that ultimately affect behavioral intentions; but many of these studies do not test *all of them* collectively. Instead, researchers have concentrated on either satisfaction or service quality as the immediate antecedent to behavior intention (e.g., LaBarbera and Mazursky, 1983; Parasuraman, et al., 1988).

There are studies that assert that customer satisfaction is influenced by service quality (e.g., Cronin and Taylor, 1992). Similarly, there are studies indicating that the converse (i.e., service quality is influenced by customer satisfaction) is true (Bolton and Drew, 1991b). This lack of consensus among researchers has led to confusion as to which is a better predictor of customer loyalty (Bitner and Hubbert, 1994). To compound matters, critics point out that most satisfaction studies examine service encounter satisfaction rather than overall satisfaction (Boulding, et al., 1993). These critics suggest that since service quality is a higher level construct, it is more likely that service encounter satisfaction is an antecedent of service quality. Bitner and Hubbert (1994) also stated that researchers have not established the causal relationship of the three concepts

(i.e. service encounter satisfaction, overall satisfaction, and service quality) to each other.

This study is a response to the issues that have been raised. It aims to build a comprehensive model which incorporates the different variables that have been posited to influence retention behavior. Furthermore, the study examines the relationship of the three constructs in terms of direction and magnitude.

Figure 3.1 is a conceptual diagram of the determinants of customer retention and their predicted relationships. To ensure the validity of this model, a number of hypotheses were generated. Additionally, based on the literature, affiliation and consumer characteristics were added to the model. Figure 3.1 is found at the end of the chapter. A description of the determinants follows.

The firm/service characteristics construct is conceptualized as a multi-attribute construct. It pertains to the qualities that the firm possesses in the eyes of the customer. Among the attributes included in this measure are image, warmth/responsiveness, and service availability. Some of these attributes may also be multidimensional.

Equity is the name given to the measure of the consumer's evaluation of his relationship with the service provider. Like the first determinant, it is multidimensional and includes the concepts of value, switching costs, and fairness. Equity is also the

consumer's evaluation of discrete service encounters.

Affiliation characteristics refer to length of patronage and total number of services availed by the customer.

Overall satisfaction and service quality are conceptualized as multidimensional constructs that are a function of firm/service characteristics, equity, and affiliation characteristics. In addition, overall satisfaction is a function of service quality.

Behavioral intentions are used as a proxy for retention behavior. In this study, the behavioral intentions construct is theorized to contain two aspects: a positive aspect, of which loyalty is the most important indicator, and a negative aspect which is represented by defection. While there may be other behavioral outcomes (e.g., willingness to pay a premium) this study is primarily interested in these two outcomes.

3.1.1 Effects of Service Quality and Overall Satisfaction on Behavioral Intentions

Rust and Williams (1994) noted that the positive relationship between satisfaction and repurchase intent has been well established by previous research (e.g., LaBarbera and Mazursky, 1983; Oliver, 1980). Bitner (1990) stated that high perceived quality has a positive effect on behavioral intentions. These studies suggest that satisfaction and service quality are directly and positively

related to a customer's intentions to switch service providers. Yet, as has been noted in the literature review, there are a number of studies that indicate that dissatisfaction does not necessarily lead to attrition (e.g., Oliver, 1989; Woodruff, et al., 1983). The implication is that the relationship between satisfaction and/or service quality and behavioral intentions is not linear.

While many researchers agree that the effects of high perceived service quality or high overall satisfaction on behavioral intentions are positive and linear (e.g., Bearden and Teel, 1983; Rust and Zahorik, 1993), there are those who argue that the relationship between behavioral intentions and overall satisfaction or service quality is non-linear (e.g., Coyne, 1989). The latter group of researchers posit that individuals possess a zone of indifference that make them impervious to certain levels of dissatisfaction and perceived quality. Only when the level of perceived quality and/or satisfaction exceeds or falls below this zone of indifference, will customers act as predicted by the researchers who posit that the relationship is positive and linear. Based on this debate, the following hypotheses are proposed:

- H₁ : Positive feelings of overall satisfaction will have a positive and direct impact on loyalty intentions.

H₂: High perceived service quality will have a positive and direct impact on loyalty intentions.

3.1.2. The Relationship of Service Quality, Overall Satisfaction, and Behavioral Intentions

Most studies have looked at how service quality or customer satisfaction affects behavioral intentions (e.g., Bitner, 1990; Oliver, 1980). In a number of studies, service quality is described as an antecedent to satisfaction (e.g., Cronin and Taylor, 1992). On the other hand, Bolton and Drew (1991b) argued that it is satisfaction that is an antecedent to service quality.

One study examined whether both overall satisfaction and service quality impact behavioral intentions (Boulding, et al., 1993). Boulding, et al. (1993) segregated the effects of predictive and normative expectations and measured their impact on overall perception of service quality and behavioral intentions. Recall that the SERVQUAL scales measure normative expectations and overall satisfaction measures predictive expectations (Mentzer, et al., 1993). Boulding and his co-authors found that the two types of expectations had *opposing* effects on perceptions of service quality and that perceptions of service quality positively affect intended behavior. This conclusion leads one to speculate about the nature of the relationship of both service quality and overall satisfaction to behavioral intentions. Hence, the following relationship is proposed:

H₃: Service quality and overall satisfaction impact behavioral intentions simultaneously.

In past research, the magnitude of the impact of service quality and overall satisfaction on behavioral intentions has only been estimated separately. The question raised by Boulding, et al. (1993) is whether service quality has a relatively greater impact on behavioral intent than overall satisfaction or vice versa.

A careful reading of the literature indicates that what determines the relative impact on an individual's behavioral intentions is how lasting these positive (or negative) feelings are (Gale, 1994). Since overall satisfaction is generally seen as a global evaluation of all of an individual's service encounters with the firm (Bitner and Hubbert, 1994), it can be assumed that the feelings generated tend to be long lasting. On the other hand, the reluctance of Parasuraman, et al. (1985; 1998) to call service quality an attitude implies that the effects of perceptions of service quality are not as enduring as attitudes. By definition, attitudes are an enduring pre-disposition (Allport, 1935). If such is the case, then the following proposition may hold:

H₄: Overall satisfaction will have a relatively stronger impact on behavioral intentions than service quality.

There are a number of studies that show overall satisfaction affecting behavioral intentions indirectly through the mediating construct of service quality (e.g.,

Bolton and Drew, 1991b). Conversely, service quality has served as an antecedent of overall satisfaction which then impacts behavioral intentions (e.g., Gale, 1994). As has been noted in the literature review, this issue has remained unsettled.

Bolton and Drew (1994), however, characterized service quality as an input to evaluations. They also suggested that customer post-usage attitudes depend on satisfaction. This implies that service quality becomes antecedent to overall satisfaction.

The methods of measuring satisfaction are more encompassing than measuring service quality. Service quality is measured in terms of gaps between expectations and performance on a limited number of dimensions. Satisfaction has not only been measured in terms of perceived quality (e.g., LaTour and Peat, 1980), but also in terms of complaining behavior (e.g., Summers and Granbois, 1977). The ability to measure satisfaction in ways other than through the disconfirmation of expectations paradigm leads one to suspect that overall satisfaction is a higher construct than service quality.

Service quality has also been defined as the consumer's overall impression of the relative superiority (inferiority) of the organization and its services (Bitner and Hubbert, 1994). Thus, service quality is a subjective judgement of the characteristics of the firm and its services based on a

normative criterion. Overall satisfaction is said to include this global assessment of the qualities of the firm and/or service, but also includes an affective component (Oliver, 1989). Furthermore, a judgement of overall satisfaction includes not only assessing the qualities and benefits obtained from the service, but also includes an evaluation of the costs and efforts exerted by the customer (Ostrom and Iacobucci, 1995). This evaluation of a consumer's costs and efforts is missing in a judgement of service quality. Based on these arguments, the following hypothesis is proposed:

H₅: Service quality is an antecedent to overall satisfaction.

3.1.3. Firm/Service Characteristics, Service Quality, and Overall Satisfaction

There is some research that indicates that consumers evaluate firms based in part on what they know or have heard about the firm (Gronroos, 1990). First-time service recipients, due to their lack of experience, are apt to evaluate the quality of the organization on the basis of external cues, marketing communications, and other parties in whose judgement they have confidence (Clow, et al., 1991).

Firm and service characteristics may also affect consumers' evaluation of the firm and the services it offers. Social identification theory states that firm image

is systematically linked to the consumer's self-concept and that patronage of a certain firm can confer positive or negative attributes on the customer. For example, people who bank with J.P. Morgan may likely have feelings of superiority over customers of Dime Savings Bank. In this example, the cachet of J. P. Morgan extends to its customers, too.

Clearly, the characteristics of the firm/service may influence self-esteem through the identification process. This may lead to feelings of satisfaction and/or perceptions of high service quality. Such is possible only if consumers perceive the firm to be prestigious and are satisfied that the benefits of patronizing the firm are substantial (Bhattacharya, et al., 1995).

Based on the belief that evaluations of the firm and its proffered service lead to perceptions of quality and general feelings of satisfaction, the following hypotheses are proposed:

- H₆: Positive evaluation of the firm/service leads to favorable perceptions of service quality.
- H₇: Positive evaluation of the firm/service leads to favorable feelings of overall satisfaction.

3.1.4. Equity, Service Quality, and Overall Satisfaction

Equity theory, as applied in marketing, hypothesizes that individuals compare the inputs they bring into the exchange with the outputs that are generated. If there is

inconsistency between what the individual expects, and what he receives relative to his input, then feelings of unfairness occur. Furthermore, according to the theory, an effort will be made to return the situation to equity.

Huppertz, Arenson, and Evans (1978) examined the effect of inequity on behavior in buyer-seller situations. Their results indicate that individuals are likely to leave if perceptions of inequity exist.

Customers who experience some dissatisfying service encounters will not necessarily lower their overall evaluations of their satisfaction and the firm's service quality (Bolton and Drew, 1994). Based on attribution theory, Folkes (1984) indicates that customers themselves will question whether the problem is likely to occur again and if the firm could have prevented the problem from happening. If the customer believes that it will happen repeatedly, and if he believes that the problem was preventable, then overall evaluations will be negatively influenced.

Ostrom and Iacobucci (1995) looked at how value affected feelings of satisfaction. Their findings indicate that effect of value on satisfaction varied according to type of service industry (i.e., experience or credence services), how important the service is perceived, and the type of assessment asked of the subject. Their conclusion is consistent with how value is defined in marketing. For

example, value has been defined as a "consumer's overall assessment of the utility of a product based on perceptions of what has been given and what has been received" (Zeithaml, 1988, p.14).

The consumer does a cognitive assessment of the trade-off between his input and the output. Based on equity theory and attribution theory, the consumer will generate feelings of satisfaction/dissatisfaction and perceptions of quality. Given the preceding discussion, it is proposed that:

H₉: Positive overall feelings of equity will lead to favorable overall satisfaction.

H₉: Positive overall feelings of equity will lead to perceptions of high service quality.

3.1.5. Affiliation Characteristics, Service Quality, and Overall Satisfaction

Affiliation characteristics are variables which indicate the nature of the consumer's "membership." Membership can be characterized by the intensity of the bond between the individual and the service provider (Bhattacharya, et al., 1995). For example, the descriptor "the family doctor," connotes a bond of identification that does not exist for any other medical practitioner. More simply put, the family doctor may be seen as an informal, member of the individual's extended family. Additionally, membership also connotes a time element.

From the perspective of the service provider, membership is important if repeat business is crucial; otherwise the goals of overall satisfaction and high perceived quality are irrelevant to the firm. By encouraging membership, exit barriers are raised

Recall that this study has delineated the boundaries to services that possess a membership quality. Similar to industrial marketing, the economic exchanges that occur in this type of service are "embedded in a more social context wherein norms of trust, cooperation, solidarity, reciprocity, and commitment are part of everyday exchange processes" (Iyer 1995, p.2).

Jacoby and Chestnut (1978) showed that length of patronage is an important variable in understanding why consumers buy certain products repeatedly. Rust and Williams (1994) studied the effects of length of patronage on satisfaction and repurchase intention. He concluded that length of patronage and satisfaction influence repurchase intention, particularly for relatively new customers. Over time, the effect of satisfaction on customers' repurchase intentions diminishes.

From a strategic perspective, length of patronage is most beneficial to the firm. Reichheld (1996) stated that the longer the customer stays with the company, the more the customer is worth. Furthermore, Reichheld asserted that long-term customers tend to 1) purchase more, 2) make less

demands on the service provider's time, 3) be less price sensitive, and 4) are likely to bring new customers.

It is almost an axiom in the banking industry that the more accounts a customer has, the harder it is for him to defect. Thus, cross-selling is most popular. The basis for such thinking is that the switching costs may be so high in terms of money (e.g., pre-termination fees, forfeited interest, etc), in terms of trouble (e.g., setting up new accounts, developing new relationships, etc.) and in terms of time, that customers may mitigate their dissatisfaction with a service encounter. There is a basis for such thinking in the strategy literature. By engineering relationships so that buyers are less likely to switch (i.e., raise exit barriers), customers are held hostage (Jones and Sasser, 1995). Such a situation as has been described does not necessarily lead to overall satisfaction or perceptions of service quality. Yet, many service firms continue to entrench their customers (e.g., airlines, long distance carriers, etc.)

Since service quality and satisfaction are so closely intertwined, it is quite possible that any influence that affiliation characteristics have on service quality will parallel the effect on overall satisfaction. Thus the following relationships are proposed:

H₁₀: The longer the customer has been with the service provider, the higher the level of overall satisfaction.

- H₁₁: The longer the customer has been with the service provider, the higher the perception of service quality.
- H₁₂: Raising exit barriers by increasing the number of services availed by the customer leads to overall satisfaction.
- H₁₃: Raising exit barriers by increasing the number of services availed by the customer leads to higher perceptions of service quality.

3.1.6.Consumer Characteristics and Behavioral Intentions

Webster (1994) indicated that factors such as age, gender, ethnicity, and income influence expectations. For example, Morgan and Dev (1994) examined the impact of consumer characteristics, in addition to usage situation and marketing mix variables, on brand switching. They found that income was negatively related to switching behavior.

While Webster (1994) asserted that the impact of demographic variables was on expectations, Morgan and Dev (1994) linked them to switching behavior. Furthermore, consumer behavior research indicates that demographics are a salient factor in determining attitudes (Wells and Prensky, 1996). Since attitudes affect buyer behavior, it is quite possible that demographic factors will influence both expectations and behavior. However, because of the number of variables that are being studied, it was decided that the direct influence would be relatively stronger on behavior than if the study were to measure the effect on behavior indirectly.

Literature on the mature market indicates that the

elderly are more risk adverse and are less inclined to try new products than are younger people. Consequently, the older generation tends to be loyal customers while young people are more likely to try new brands (e.g., Loudon and Della Bitta, 1993).

According to Loudon and Della Bitta (1993), more educated people are likely to be more sophisticated in their product and brand choices. Highly educated people tend to be open to new products. In the context of this study, highly educated consumers are more likely than less educated consumers to consider more service providers before selecting which service provider to patronize. The probability that highly educated consumers who are dissatisfied with the service will switch to another service provider is higher than it is for less educated consumers. Hence, the following relationships are proposed:

H₁₄: Education will have a direct and negative influence on loyalty intent.

H₁₅: Age will have a direct and positive influence on loyalty intent.

3.2. Summary

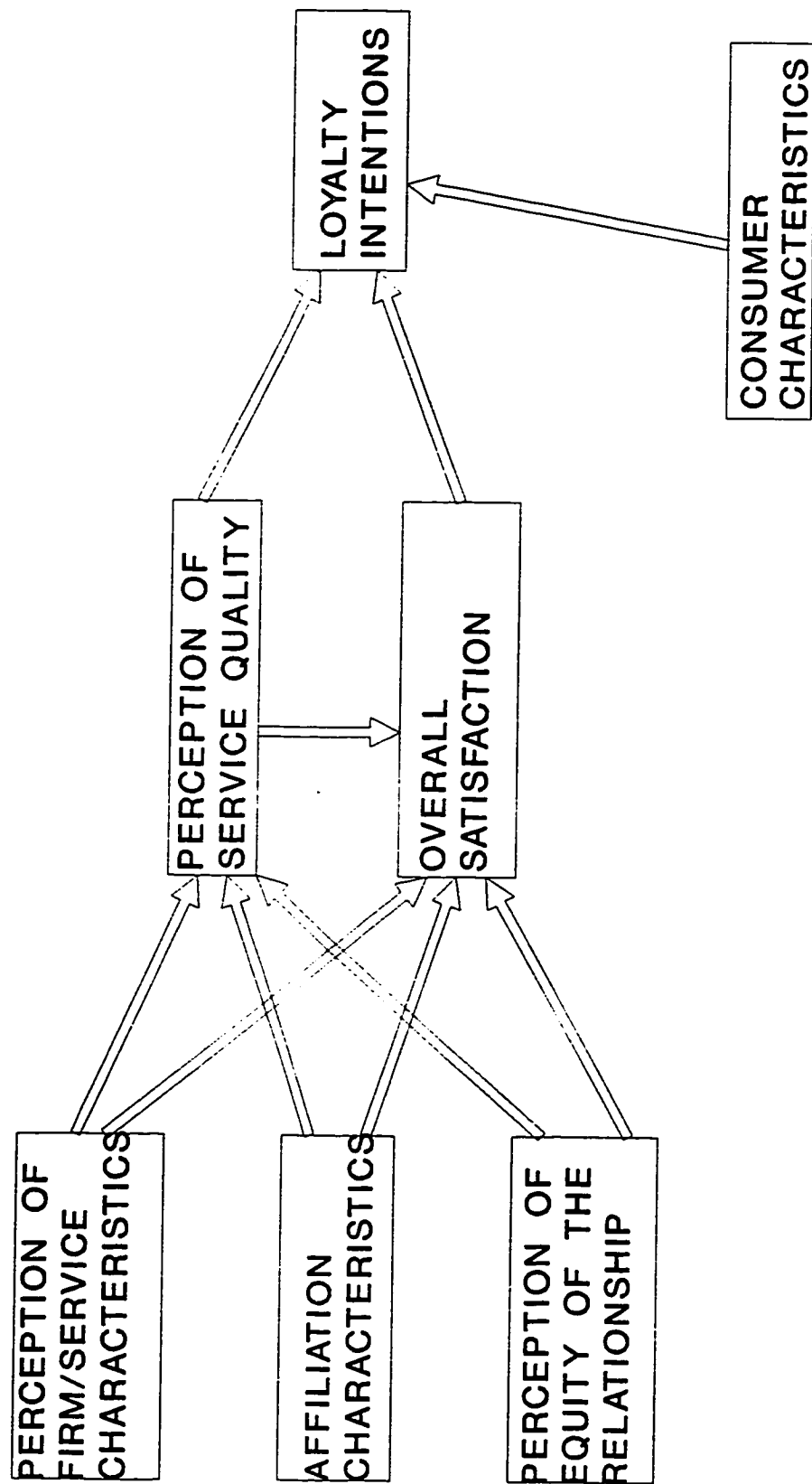
In this chapter, fifteen hypotheses were suggested regarding the relationships of the various constructs of the proposed model. It was proposed that the relationship between behavioral intention and satisfaction or service quality will be linear and positive. Additional hypotheses were offered that suggested that 1) the impact of overall

satisfaction and service quality perceptions on behavioral intentions was simultaneous, 2) overall satisfaction has a greater impact on behavioral intent, and 3) service quality is an antecedent of overall satisfaction.

Hypotheses regarding the determinants of overall satisfaction and perceptions of service quality were generated. Finally, the roles of age and education on behavioral intentions were hypothesized.

These hypotheses have to be empirically tested. The next chapter discusses the methodology used in the empirical tests of these hypotheses.

FIGURE 3.1
A CONCEPTUAL MODEL OF CUSTOMER LOYALTY



IV. RESEARCH METHODOLOGY

This chapter discusses the research methods, techniques, and procedures utilized to test the model empirically. Descriptions of how each construct of the empirical model was operationalized are also contained in this chapter.

4.1 Overview of Research Methodology

The objective of this chapter is to provide a description of the procedures used to measure the constructs and collect data. The following steps were taken to accomplish the goal. First, a service industry was selected. Next, measures of the various constructs were developed and incorporated into a survey instrument. This survey instrument was tested in a pilot study. Based on the results of the pilot study, certain scale items were modified. Finally, data collection for the main study commenced when the survey instrument was mailed to a national random sample. Simultaneously, additional data were collected from undergraduate and graduate students of a major urban university in New York.

4.2. Industry Selection

A criterion was developed to select the service industry to be studied. The criterion called for the

following characteristics: 1) the service industry was deemed to be in the maturity phase of the product life cycle, 2) the customers of the service industry must be numerous and accessible, 3) the manner of the service delivery must be continuous by nature, and 4) the nature of the relationship of the service provider with its customers must have a "membership" quality to it.

The selection was limited to service industries in the maturity stage because product offerings of industries in the mature stage tend to be comparable and, consequently, exit barriers are low. This allows customers to switch to alternative service providers with relatively little risk. Another reason for limiting the choice to mature service industries is that, at this stage, share growth usually occurs at the expense of competitors. Hence, interest in retention among firms in that industry would be relatively higher than firms in the first two stages of the product life cycle.

The last two constraints are consistent with Lovelock's (1983) classification scheme and are necessary to highlight the relational aspect that exists between the service provider and the customer. If the exchange between the service provider and the customer is purely discrete (i.e., a one-shot deal), then the importance of customer satisfaction and service quality will be minimal and retention will not even be a consideration.

Based on the stated criteria, the banking industry was selected. Aside from possessing the characteristics sought for this study, many other studies of retention have chosen this industry (e.g., Rust and Zahorik, 1992).

4.3. The Pilot Study

It was necessary to conduct a pilot study because, for many of the constructs, scales are not well developed. Furthermore, there was a need to adapt the scales to the banking industry. The development of the scales was based on 1) a thorough literature review, 2) personal judgement, and 3) discussions with banking industry personnel.

4.3.1. Pilot Study Procedures

A questionnaire was developed and administered to a convenience sample of fifty nine undergraduate and graduate marketing students of a major university in the San Francisco Bay Area. By seeking the cooperation of the instructors, the response rate was 100%. Exploratory factor analysis and bivariate correlational analysis of the items were performed to verify if the items loaded on the appropriate constructs.

Based on the results of these analyses, the questionnaire was modified. Some items were dropped; new items were added. Revisions were made in the wording of certain items.

4.4. The Main Study

An introductory letter was attached to the revised questionnaire (see Appendix A). The cover letter requested the addressee's assistance and offered an incentive in the form of a chance to win cash prizes. A postage paid return envelope was also provided to facilitate the response. The survey instrument was sent to two groups--a national random sample of bank customers and a convenience sample of students.

4.5. Sample Selection-Group 1

Data for the main study was collected simultaneously from the two groups. The first group was comprised of individuals from a mailing list purchased by this researcher. The mailing list was a nation-wide random sample of 1,000 individuals who have bank accounts. An incentive in the form of a chance to win cash prizes was offered to facilitate their response. Of the 1,000 surveys that were sent, 225 were returned to this researcher. It took six weeks to collect all the mailed responses.

The response rate of 22.5% is comparable to similar studies (e.g., Rust and Zahorik, 1993). However, due to the large data size required in the LISREL program of SPSS in testing both the measurement and the structural models, it became necessary to augment the pool of respondents. Accordingly, the survey instrument was administered to a

second group of individuals.

4.5.1. Sample Selection - Group 2

The second group was composed of 104 undergraduate and graduate students at a major university in New York City. Most of these students were working full time and attending classes at night. It was expected that they would all have bank accounts, which was the primary criterion for inclusion in both samples.

The students were given extra credit points by their instructors for completing the questionnaire. The incentive raised the response rate to 100%. Tests were conducted to make sure that the results would not be affected by the type of sample. Altogether, the total number of questionnaires that were returned totaled 329--225 from the national random sample and 104 from the student sample. Of the 329 questionnaires received, only 290 were usable. T-tests were performed on the demographic variables. The results indicate that the two samples did not differ much except in income. Income of the student sample was slightly below that of the first group.

4.6. The Research Instrument

The survey instrument asked respondents to indicate their perceptions about their *primary* bank. They were also asked about their psychographic (mainly attitudes) and

demographic characteristics. In most cases, Likert-type statements were utilized to facilitate ease of response.

The survey instrument was divided into seven sections (see Appendix A). With the exception of the second section, each section measured a particular construct. Each construct has multiple item measures. The items were randomly distributed. A more detailed description of each section is discussed in turn.

The first section, Section A, explored the respondent's perceptions of the firm and the service/s offered. Section A had 25 items altogether. Items about the firm's image, responsiveness, stability, accessibility, convenience, service delivery, and service availability were included. Responses were measured on a 7-point Likert scale (where 1=strongly agree, and 7=strongly disagree).

The second section, Section B, had two parts. One part examined a respondent's perceptions of his relationship with the service provider (the bank). The items in the first part measured switching costs, value, and complaint equity. There were 13 items in the first part. Respondents were asked to encircle the appropriate number in a 7-point Likert scale which best described their perceptions. The second part asked how many accounts the respondent had with his primary bank and how long he had been a customer of the bank.

Section C looked at a respondent's attitude toward

risk, service failures, price, and losing face. It was composed of fifteen items with a 7-point Likert scale.

The next section, Section D, measured overall satisfaction with the bank. The 9-item scale had Likert-type statements describing the firm or service in very general terms.

The fifth section, Section E, measured the service quality construct. The scale has three parts: 1) a 22-item expectations scale, 2) a 22-item perceptions of performance scale, and 3) importance weightings for the five dimensions of SERVQUAL. These five dimensions are tangibles, responsiveness, reliability, assurance, and empathy. Respondents were asked to indicate their expectations of the bank and/or its service in terms of the five dimensions. A 7-point scale was provided. Respondents were asked to indicate their perceptions of the actual performance of the firm and/or service in terms of the same five dimensions. The third part asked the respondent to allocate 100 points among the five dimensions on the basis of importance.

Section F presented a 13-item scale measuring behavioral intentions. This scale measures the likelihood of word-of-mouth behavior, defection, loyalty, price sensitivity, and complaint behavior. This scale was taken from a study done by Zeithaml, et al. (1996). A 7-point Likert scale accompanies each item (where 1 = extremely likely and 7 = extremely unlikely).

The last section, Section G, requests demographic data from the respondent. All the items are categorical in nature. The respondent is asked to provide information on his gender, age, level of education completed, civil status, ethnicity, number of household members, number of working household members, approximate household income before taxes, and current occupation.

4.7. Mode of Analysis

The choice of which statistical technique to use in analyzing the data is a function of the objective of the research. In this study, the main objectives were to assess causal relationships among certain variables and test specific hypotheses regarding the nature of the relationships. Two statistical techniques were considered for this study: multiple regression analysis and the LISREL procedure in SPSS. In deciding which technique to use, careful consideration was given to the objective, the measurement properties, and the hypothesized relationships among the constructs. In addition, the advantages and disadvantages of each technique were evaluated in terms of the objective.

Multiple regression analysis is a statistical technique used to analyze the relationship between a single dependent variable and several predictor variables. Regression analysis requires that the value of the predictor variables

be known in order to determine the criterion or dependent variable (Hair, Anderson, and Tatham, 1987). In marketing applications, theoretical constructs are typically difficult to operationalize in terms of a single measure and measurement error is often unavoidable (Fornell and Larcker, 1981a). Regression analysis, unfortunately, does not account for measurement error. Instead, it is assumed that the measures of the independent variables are pure. Such an assumption can lead to a biasing of the regression weights. Another shortcoming of regression analysis is that the direct and indirect effects are not partitioned. Given the purposes of the study, it was imperative to know the direct and indirect effects.

The LISREL procedure in SPSS accounts for measurement error and estimates the fit of the model. One strength of this technique is the ability to bring together psychometric and econometric analyses in such a way that some of the best features of both types of analyses can be utilized. It also allows for the evaluation of more complex models. LISREL partitions the total effects into direct and indirect effects. By using LISREL, both the direct and indirect impact of the exogenous variables may be clearly seen.

The LISREL model is made up of two parts: a measurement model and a structural model. The measurement model stipulates how the latent variables or hypothetical constructs are measured in terms of the observed variables

and is used to describe the validity and reliability of the observed variables. The structural equation model indicates the causal relationships among the latent variables and is used to show the causal influences and amount of explained variance.

The LISREL program analyzes variables in a set of linear structural equations which may be either directly observable variables or hypothetical construct variables which may be related to the observed variables. LISREL posits that there is a causal structure among a set of latent constructs. The latent constructs are the theoretical constructs measured by the observed variables.

The structural equation model is used to specify the phenomenon under study in terms of putative cause and effect variables and their indicators. Srinivasan (1987) asserts that because "each equation in the model represents a causal link rather than a mere empirical association, the structural parameters do not, in general, coincide with coefficients of regressions among observed variables" (p.114). He also states that the structural parameters represent relatively unmixed, invariant and autonomous features of the mechanism that generate the observable variables.

The disadvantage of using LISREL is its sensitivity to sample size and distribution normality. LISREL requires a strong theory and good measurement to be effective. Large

and normally distributed samples tend to reduce measurement error.

For this study, it was decided to use the LISREL procedure in SPSS. The choice to use LISREL stems from the fact that the objective was to predict loyalty intentions on the basis of a number of constructs. A second objective was to examine individual linkages between constructs of the composite model. It is more difficult to achieve the second objective using regression analysis. Each of the constructs has multiple and, most likely, imperfect measures. LISREL accounts for these imperfections and consequently reduce bias. Furthermore, the proposed model has several equations that need to be empirically examined simultaneously. LISREL is suitable for this estimation. The model has two components: the measurement model and the structural model. The measurement model tests whether the set of items designed to measure a construct converge well. This may be seen in the factor analysis portion. The model also allows the researcher to assess the measurement errors and reliability of each construct. Using the factor scores from the measurement model, the structural equation model helps to test the hypothesized relationship between each construct. In addition, it also helps to measure the direct and indirect effects of each construct on dependent variables.

4.8. Summary

This chapter describes the procedures used to develop the survey instrument and collect data. It also describes how the sampling frame was derived. Additionally, response rates and non-response were discussed. A description of the survey instrument is included in this chapter. Finally, a discussion of why the LISREL model was chosen for data analysis was provided. The next chapter discusses the results.

V. DATA ANALYSIS

The objective of this chapter is to present the empirical tests of the proposed hypotheses outlined in Chapter 3. The results are presented for the measurement model and for the structural equation model. The chapter is divided into two major parts: a discussion of the measurement model results and a discussion of the structural equation model results.

5.1. The Measurement Model

The proposed structural model has six independent and three dependent constructs. The independent constructs are firm/service characteristics, equity, number of accounts, length of patronage, education, and age. The endogenous variables are overall satisfaction, service quality, and loyalty intentions. Most of these unobservable constructs--except for age, education, number of accounts, and length of patronage--have multiple indicators.

Unfortunately, not all the constructs have well-developed scales. In addition, constructs, for which scales were available, had to be adapted for the banking industry.

In order to ensure that measures used for each construct were reliable, they were subjected to several tests. An exploratory factor analysis was performed to check if the given items load on the expected factors.

Items with a factor loading of less than 0.5 were discarded.

After this initial screening procedure, the measures of each construct underwent a reliability test with a hurdle rate of 0.80. Items that met the criterion of having a factor loading of at least 0.50 were retained. In addition, any item that reduced the overall reliability of the construct below 0.80 was discarded. These screening criteria were used to select items for all the multiple indicator constructs.

The selected items were used in the measurement model simultaneously to make sure that the items designed to measure each construct loaded on that construct and not on other constructs. In the measurement model, items with a factor loading of less than 0.50 were dropped.

Figure 5.1 displays the measurement model. Table 5.1 indicates the correspondence between the items and the X (independent) and Y (dependent) variables. The constructs are represented by circles. The X variables represent the indicators of the independent or exogenous variables. The Y variables represent the indicators of the dependent or endogenous variables. The numbers on the arrows indicate the factor loadings derived from the measurement model. The measures of each construct will be discussed individually.

5.1.1. Measure of Firm/Service Characteristics

Firm/service characteristics is a construct that

represents the customer's perception of the qualities that are inherent in the firm and/or the service provided. It is a multi-dimensional construct that includes image, warmth, and responsiveness.

This construct was measured by using nine items. These items all loaded on one factor only. Table 5.2 describes each item and its respective factor loadings and T-values. The scale demonstrates high reliability as may be gauged by Cronbach alpha, which is 0.9065. Based on their T-values, the items are significant at the 0.05 level. Among the items that made the final cut are qualities that indicate a pleasant bank atmosphere (items A02, A07, A12, and A15), warm and friendly personnel (items A01, A08, and A09), and empathy (items A16 and A25). Surprisingly, convenience did not emerge as a factor. Perhaps with the proliferation of ATMs (automated teller machines), telephone banking, and on-line banking--all of which allow individuals to access their accounts at all hours and at more locations--the importance of convenience has diminished.

5.1.2. Measure of Equity

Equity is a multi-dimensional construct that measures perceptions of relative fairness of the exchange. It incorporates value and complaint responsiveness. Each service encounter is evaluated on this criterion of equity. In this manner, equity may also serve as a surrogate for

service encounter satisfaction.

After undergoing the screening process, the scale was whittled down to 8 items which all loaded on one factor. All the items had factor loadings of at least 0.6. Some of the factors included in the scale evaluated the benefits relative to the costs. For example, one item was about the appropriateness of the fees for the service rendered (item B01). Another item was a statement on the fairness of credit application outcomes (item B05). A complete listing of the items and their respective factor loadings and T-values are in Table 5.3. The scale exhibits high reliability as demonstrated by Cronbach's alpha of 0.87.

5.1.3. Measure of Overall Satisfaction

The scale used to measure overall satisfaction was adapted from a study done by Ratchford and Srinivasan (1991). The scale has nine items which all load on one factor. The results of the initial factor analysis were consistent with that of the confirmatory factor analysis. In both instances, factor loadings and reliability were high. No item was discarded. Additionally, all items loaded on one factor.

The items consisted of general statements about the overall characteristics of the bank and the services it provides. A listing of the items is provided in Table 5.4 at the end of the chapter. Factor loadings and T-values for

each item are also given in Table 5.3. The reliability of the scale is quite high, the Cronbach's alpha being 0.9571. The items were also all deemed significant because they exceeded the T-value of 2.0. This scale includes both factual and affective statements. One item is a statement regarding the customer's overall experience with the bank (item D09). Another item talks about general satisfaction with the bank (D01).

5.1.4. Measure of Service Quality

This measure was adapted from the revised SERVQUAL scale developed by Parasuraman, et al. (1991). The scale consists of two 22-item, Likert-type measures that evaluated the five key dimensions and includes a measure of importance of the dimensions. These dimensions are reliability, empathy, responsiveness, assurance, and tangibles. These dimensions are the key attributes customers want from their service provider. Each of these dimensions is measured by multiple items.

SERVQUAL was conceptualized as a measure of the gaps that exist between a person's expectations of the service and his perception of the performance of the service. The scale's validity and reliability have received considerable attention because of the diametrically opposite conclusions researchers have found (e.g., Cronin and Taylor, 1992; Brown, et al., 1993). In spite of various attacks on

SERVQUAL, this measure is still the leading measure of perceptions of service quality (Brown, et al., 1993).

For this study, only the perceptions-of-performance scale was used. This is allowed if the purpose of the study is to measure variation in a dependent variable (Zeithaml, et al., 1996). The initial factor analysis of the scale revealed five factors. However, several items were dropped because their factor loadings were less than 0.60. A second round of factor analysis confirmed the existence of five factors. Altogether, sixteen items remained. Table 5.5.1 shows the factor loadings for the sixteen items. Each of the factors is also identified. Composite measures of these five key dimensions were created using the corresponding items from the SERVQUAL scale.

Table 5.5.2 is a depiction of the standardized factor loadings of the five key dimensions. Consistent with the findings of most researchers, tangibles has the lowest factor loading. Nevertheless, it is sufficient enough to be included. T-values for the five dimensions indicate the significance of the dimensions. Furthermore, the Cronbach's alphas depict high reliability.

5.1.5. Measure of Loyalty Intentions

This scale was taken from a study by Zeithaml, et al. (1996) and adapted for this research. Their scale consisted of thirteen items describing four categories of behavioral

intent: word-of-mouth communications, purchase intentions, complaining behavior, and price sensitivity. Their analysis yielded five factors using a configuration of items from the original categories. These factors were named loyalty, switch, pay more, internal response, and external response. The names of the first three factors indicate what is being measured. The fourth and the fifth factors are really complaint behavior split into internal and external complaining behavior.

Jones and Sasser (1995) pointed out that satisfied customers may defect for reasons that are not inherent to the firm or its service offering. For example, a satisfied customer may switch because of monetary incentives offered by a competitor. Jones and Sasser (1995) also indicated that the converse may also be true--that dissatisfied customers may not switch. One reason advanced as to why dissatisfied customers continue with their service provider is the zone of tolerance individuals have (Coyne, 1989). This zone of tolerance theory suggests that customers will permit a certain level of dissatisfaction without switching. Another reason may be that relatively high exit barriers may exist that prevent dissatisfied customers from leaving. For example, dissatisfaction with an airline's service may not necessarily make a customer switch if he has a substantial amount of mileage points in his frequent flyer account. In other words, membership may have its privileges; but it also

may bind a dissatisfied customer to the service provider.

The preceding discussion raised the issue of the appropriateness of using intentions to switch as a dependent variable. Instead, it was decided that a better measure of the effect of satisfaction and service quality on loyalty intentions was items that indicated the customer's propensity to increase or decrease his business with the bank. Additionally, word-of-mouth communication items were chosen. Items on price sensitivity were discarded because it could be argued that willingness to pay more may be a function of a person's wealth/income or some other factor.

Exploratory factor analysis was done on the 13-item scale. Three factors emerged. Most of the items loaded on the first factor. After discarding the switch and pay-more items, as well as items that had a factor loading of less than 0.60, four items remained. A subsequent factor analysis revealed a single factor, which was named loyalty. This factor demonstrated elements of word-of-mouth communications (items F03, F04, and F08) and purchase intentions (F13).

Table 5.6 depicts the items with their respective factor loadings and T-values. All items are deemed to be significant at the 0.5 level. The Cronbach's alpha statistic (0.8639) indicates good reliability.

5.1.6. Measures of Single-Indicator Constructs

There are four single-indicator constructs in the proposed structural model. They are number of accounts, length of patronage, age, and education. All of these indicators are self-reported.

Number of accounts represents the total number of bank services and products that the customer utilizes. Length of patronage refers to how long the individual has been a customer with the bank. The indicator for age was a categorical measure that allowed the study to classify the respondent by cohort groups (i.e., youth, young adults, middle aged, mature, and elderly). Education was operationalized by asking the respondent to indicate the highest level of education attained.

5.2. The Structural Equation Model

The objective of this section was to test the significance of the hypothesized relationships using a system of equations. The proposed model is based on hypothetical relationships presented in Chapter 3. The structural model is also presented in Figure 5.2. The model was tested using LISREL 7. The complete output may be found in Appendix B.

An examination of the chi-square statistic (1681.21 at $P = .000$, with 680 degrees of freedom) suggests rejection of the model. However, the chi-square is not a satisfactory

measure of the goodness of fit because of its sensitivity to sample size and the multi-normality of the variables (Joreskog and Sorbom, 1989).

The goodness of fit, the amount of variance explained for dependent variables, and the coefficient of determination for structural equations are also indicators of the fitness of the model. A listing of these statistics may be found in Table 5.7.

The goodness of fit index (0.757) and adjusted goodness of fit index (0.722) indicate a moderate fit of the model to the data. Furthermore, the variance explained for service quality, satisfaction, and loyalty is 87.3%, 87.9%, and 77.7%, respectively. The high percentages of variance explained imply that the proposed model has strong predictive power. The total coefficient of determination is a measure of the strength of several relationships together. The proposed model has a total coefficient of determination of 0.903 indicating sound theoretical linkage.

Fornell and Larcker (1981a) decried the common practice of declaring a theory as sustainable based on a good chi-square fit. They argued that the chi-square test utilized to support hypothesized relationships among constructs of a given model is insufficient because the chi-square statistic only evaluates the structure of the relationships but not the strength of the relationships.

Fornell and Larcker (1981a) cited three reasons why the

chi-square statistic should not be the ultimate test of rejecting a model. First, they cite Bielby and Hauser's (1977) assertion that the power (i.e., the ability to reject the null hypothesis when it is false) is unknown. It is critical to know the power curve in evaluating theory posited in a structural equation model because the testing is conducted in such a way that the researcher *a priori* expects the null hypothesis will not be rejected.

Another weakness demonstrated by Fornell and Larcker (1981a) is that a significant chi-square statistic may indicate good fit between the hypothesized model and the data even though both the measures and the theory are inadequate. This may lead to the acceptance of a model in which no relationship among the constructs exist.

Fornell and Larcker (1981a) also showed that large samples do not necessarily reduce the possibility of making a Type II error. In fact, they state that the risk of making a Type II error is substantial even if sample size is large. They also decried the practice of rejecting a model on the basis of a single statistic, which they claim to be an oversimplification of the testing procedure.

It was proposed by Fornell and Larcker (1981a; 1981b) that rejection only occurs after a careful evaluation of all the facets of the study, rather than on the basis of some summary statistics. An important consideration is the objective of the research. If the goal is to simply test

theories without regard to the explanatory power of the model, then the chi-square should be the focus. If, however, the aim is to explain variance or predict, then alternative tests may be considered.

A necessary condition to testing a significant relationship in the structural model is that the measurement model be deemed valid and reliable. Fornell and Larcker (1981a) suggested calculating the reliability rho to examine the amount of variance that is caused by the construct in relation to the amount of variance due to measurement error.

5.3. Tests of Validity

The study examined the convergent and discriminant validity of the measures. Convergent validity is the determination that the scale measures what it is supposed to measure. Discriminant validity indicates that the constructs are different from each other.

The convergent validity was determined by calculating the reliability rho for each construct. If the reliability rho is less than 0.50, the convergent validity of the construct is doubtful (Fornell and Larcker, 1981). With the exception of equity, all the constructs exhibit convergent validity. Equity has a reliability rho of 0.478, falling short of the criterion. Table 5.8 displays the results of the convergent validity tests.

Discriminant validity was determined by comparing the

reliability rho with the squared gamma of the exogenous variables or with the squared betas of the endogenous constructs (Fornell and Larcker, 1981). It was determined that all constructs with multiple indicators had discriminant validity. The results indicate that service quality and overall satisfaction are two different constructs, although they have been used synonymously in the popular press. The reliability rho of single-indicator constructs was not available, therefore, discriminant validity could not be empirically determined.

5.4. Results of Hypothesis Testing

This section will address whether the empirical results support the hypothesized relations found in Chapter 3. Each hypothesis or set of hypotheses will be discussed in turn. The values of the coefficients used in this discussion and enclosed in parenthesis refer to the standardized solution of the LISREL output found in Appendix B.

5.4.1. Effect of Overall Satisfaction and Service Quality on Behavioral Intentions

- H₁ : Positive feelings of overall satisfaction will have a positive and direct impact on behavioral intentions.
- H₂: High perceived service quality will have a positive and direct impact on behavioral intentions.

The empirical results indicate that the hypothesized

effect of overall satisfaction on loyalty intentions is positive and direct (0.401). The T-value (3.617) indicates that this relationship is significant at the 0.05 level. This hypothesis is thus confirmed.

The results for the second hypothesis show a beta coefficient of 0.500 and a T-value of 4.390. This indicates that there is a direct relationship between perceptions of service quality and loyalty intentions. The positive sign of the beta coefficient indicates this relationship is positive. The T-value establishes the significance of this relationship at the 0.05 level. Thus, the second hypothesis is also confirmed.

It is noted that service quality has an indirect effect on loyalty intentions with a magnitude of 0.177. Thus, the total effect of service quality on loyalty intentions is 0.706.

The conclusions drawn from the first two hypotheses are consistent with the findings that satisfaction and service quality both affect loyalty intentions (e.g., Boulding, et al., 1993; Cronin and Taylor, 1992; Rust and Zahorik, 1993). The direct influence of both service quality and satisfaction on loyalty intention demonstrates that the relationship is linear rather than non-linear as suggested by Coyne (1989).

H₃: Service quality and overall satisfaction impact behavioral intentions simultaneously.

The literature review noted that some studies hypothesized that satisfaction affected loyalty intentions through the intervening variable of service quality. The opposite (i.e., service quality influences loyalty intentions through satisfaction) has also been posited. Based on the empirical results discussed above, the third hypothesis is confirmed and significant. Both satisfaction and service quality affect loyalty intentions simultaneously rather than indirectly.

H₄: Overall satisfaction will have a relatively stronger impact on behavioral intentions than service quality.

There is a growing debate on whether service quality is or is not an attitude. Parasuraman, et al. (1985; 1988) deny that service quality is an attitude, but describe it as similar to one. If service quality is not an attitude, then its effects on loyalty intentions will be less than overall satisfaction. This hypothesis would be consistent with the literature on attitude. Boulding, et al. (1993) found that the type of expectations measured by overall satisfaction had opposing effects on the perception of service quality and, by extension, on loyalty intentions. The results, however, show otherwise. The beta coefficients of satisfaction and service quality are 0.401 and 0.500, respectively. This means that service quality affects loyalty intentions more than satisfaction does. The magnitude of the difference is quite large. Based on this

finding the hypothesis is disconfirmed.

H₅: Service quality is an antecedent to overall satisfaction.

Overall satisfaction has been posited to include perceptions of service quality as one of its elements. This hypothesis was formulated to provide empirical support for this idea. The beta coefficient (0.417) indicates that there is a positive and direct relationship between service quality and overall satisfaction. The T-value (3.834) indicates that this relationship is significant at the 0.05 level.

5.4.2 Firm/Service Characteristics, Service Quality, and Overall Satisfaction

H₆: Positive evaluation of the firm/service leads to favorable perceptions of service quality.

H₇: Positive evaluation of the firm/service leads to favorable feelings of overall satisfaction.

The gamma coefficient (0.323) for the proposed relationship in the sixth hypothesis indicates that there is a direct and positive relationship between firm/service characteristics and service quality. The T-value of 2.878 denotes this relationship is significant at the 0.50 level. These results support the confirmation of this hypothesis.

The LISREL output also indicates that firm/service characteristics have an indirect effect on loyalty intentions in the amount of 0.311. It is quite possible

that this indirect effect was coursed partly through the satisfaction construct.

It was proposed in the seventh hypothesis that positive evaluation of a firm/service will generate positive feelings of overall satisfaction. The gamma coefficient (0.257) provides support for this thinking. Furthermore, the T-value of 2.762 indicates that the relationship is significant at the .05 level. Based on the results of the empirical test, the seventh hypothesis is deemed confirmed. The confirmation of hypotheses 6 and 7 supports findings in the literature that indicate that atmospherics influence satisfaction levels and perceptions of service quality (e.g., Bitner, 1992).

5.4.3. Equity, Service Quality, and Overall Satisfaction

H₈: Positive overall feelings of equity will lead to favorable overall satisfaction.

H₉: Positive overall feelings of equity will lead to perceptions of high service quality.

Equity has been defined as the consumer's evaluation of the fairness of the exchange. This construct incorporates both cognitive and affective components. The eighth hypothesis proposes that a general positive feeling of equity will lead to overall satisfaction. The gamma coefficient (0.287) supports this assertion. The T-value (2.394) is also considered significant at the .005 level.

These results provide support for the confirmation of the hypothesis.

Positive overall feelings of equity were also hypothesized to directly and positively affect perceptions of service quality. Both the gamma coefficient (0.619) and the T-value (5.467) lend credence to this proposition. What is surprising is the magnitude of the influence in relation to firm/service characteristics. The gamma coefficient and the T-value for the effect of equity on perceptions of service quality are more than double the gamma coefficient and T-value for overall satisfaction. The implication is that equity influences service quality more than equity affects overall satisfaction. The ninth hypothesis is confirmed by the empirical evidence.

Equity also affects loyalty intentions indirectly in the magnitude of 0.516. Taken all together, equity is proving to be a powerful construct. These findings give support to the conclusions that value (Ostrom and Iacobucci, 1995) and complaint management (Fornell and Wernerfelt, 1988) are effective tools in generating happy customers.

5.4.4. Affiliation Characteristics, Service Quality, and Overall Satisfaction

H₁₀: The longer the customer has been with the service provider, the higher the level of overall satisfaction.

H₁₁: The longer the customer has been with the service provider, the higher the perception of service quality.

Rust and Williams (1994) examined the impact of length of patronage on customer satisfaction and, subsequently, on repurchase intentions. They concluded that tenure has an impact on satisfaction and repurchase intentions, particularly for relatively new customers. Hypothesis 10 was formulated to test their conclusion. Regrettably, the results do not strongly support their contention. The gamma coefficient (0.040) is quite small and the T-value (1.317) does not meet the test for significance. Hence, this hypothesis is disconfirmed.

If tenure affected satisfaction positively and directly as Rust and Williams (1994) found, then it is plausible that length of patronage will also affect perceptions of service quality since satisfaction and service quality seem to go together. Thus, hypothesis 11 proposed that length of patronage is directly and positively related to perceptions of service quality. The gamma coefficient (0.043)--while positive--is quite small, and the T-value (1.168) indicates that the result is not meaningful at the .05 level. Length of patronage has a very small (0.044) indirect impact on loyalty.

H₁₂: Raising exit barriers by increasing the number of services availed by the customer leads to overall satisfaction.

H₁₃: Raising exit barriers by increasing the number of services availed by the customer leads to higher perceptions of service quality.

Keaveney (1995) argued that researchers should broaden their focus from just satisfaction, service quality, or the service encounter to include customer switching behavior. She asserted that other factors may account for switching behavior. For example, Jones and Sasser (1995) pointed out that satisfied customers do defect. Bitner (1990) speculated that switching costs may affect switching behavior. Banks have embraced this idea totally. They seek to bind the customer to themselves by cross-selling other products and services. The rationale is that the more accounts or services the customer has or uses, the harder it is for that customer--even a dissatisfied customer--to extricate himself from a banking relationship. Terminating all the accounts in one stroke may cost the customer dearly in terms of actual costs (e.g., pre-termination penalties) or opportunity costs (e.g., switching banks can cause disruption to direct deposit/debit arrangements). However, Jones and Sasser (1995) pointed out that there could be partial attrition wherein a bank's share of a customer's business is lessened over time. To test the validity of this reasoning, hypotheses 12 and 13 were proposed.

The gamma coefficient (-0.008) produced by the LISREL program for hypothesis 12 is very low and negative. The T-value (-0.251) indicates non-significance at the .05 level.

This leads the study to reject the hypothesis.

Similarly, the gamma coefficient (0.020) for the relationship proposed in hypothesis 13 is minuscule but positive. However, the T-value obtained (0.519) does not denote significance. Hence, hypothesis 13 is disconfirmed.

5.4.5. Consumer Characteristics, Service Quality, and Overall Satisfaction

H₁₄: Education will have a direct and negative influence on loyalty intent.

H₁₅: Age will have a direct and positive influence on loyalty intent.

Education presumably enables consumers to make informed choices. The higher the educational level attained by the customer, the more sophisticated is his choice criterion. Therefore, a highly educated customer will be more likely to switch if he perceives he will obtain more benefits from an alternative service provider. Hypothesis 14 was proposed to test the relationship between education and loyalty intentions.

The gamma coefficient (-0.006) indicates a very small and negative influence on loyalty intentions. The T-value (-0.151) indicates that the relationship is not significant. The hypothesis is, therefore, disconfirmed.

Age, on the other hand, was hypothesized to affect loyalty intentions directly and positively. Older people

are less receptive to change and, thus, they are more likely to stay with a current bank even if they are dissatisfied.

The gamma coefficient (-0.011) indicates very little direct relationship exists between age and loyalty intentions. The results show that the relationship is negative rather than positive as has been hypothesized. The T-value (-0.162) denotes lack of significance at the .05 level. Hence, the hypothesis is rejected.

5.5. The Validity of The Results

As has been pointed out, the chi-square statistic indicates that the model should be rejected. Other goodness-of-fit statistics also show a moderate fit. Given such, should the overall model be rejected? If the overall model is rejected, are the results of the tests of hypotheses invalid?

It was previously discussed that the chi-square statistic had several weaknesses that severely limited its use as the determinant statistic in rejecting or accepting a model. Fornell and Larcker (1981a), however, asserted that the objective of the study determines whether the chi-square statistic will be the main consideration in deciding whether to accept or reject a structural model.

One of the objectives of this study was to explain the variance in the endogenous variables. The variance explained for service quality, satisfaction, and loyalty is

87.3%, 87.9%, and 77.7%, respectively. The high percentages of variance explained imply that the proposed model has strong predictive power. Furthermore, the total coefficient of determination for the structural equation--a measure of the strength of several relationships together--is substantial (0.903), indicating good theoretical linkages.

In the course of the investigation, one suspects that the large number of variables in relation to sample size, the distribution normality of the sample, and the imperfect measurement of the constructs are probably the reasons for the unacceptable chi-square statistic. To examine the effect of sample size on the fit of the model, a LISREL output (see Appendix C) was generated using only the randomized sample. While the chi-square statistic was smaller, it still indicated bad fit. Furthermore, other measures of goodness of fit indicated a worse fit than the measures provided by the LISREL output for the combined sample (see Appendix A).

Fornell and Larcker (1981a) suggested calculating the reliability and validity scores for each measure and comparing them to some heuristic ($p > .50$) as a way to evaluate the measurement model. The suggestion was followed and the results are displayed in Table 5.8. The results indicate that convergent validity exists for all constructs except the equity construct ($p = .478$) which barely missed the hurdle.

The LISREL output may be manipulated to reduced the chi-square statistic. Variables with high scores in the modification indices may be dropped. For example, the consumer characteristics--age and education--were dropped. While the chi-square statistic got smaller, the scores of other variables in the modification indices went up! (See Appendix D.) Continuous modification will eventually lead to a good fit, but not necessarily to a good theory (Fornell and Larcker, 1981a). Another way to reduce the chi-square statistic is by calculating composite scores of the multiple-measure constructs. This has the effect of reducing the number of variables. The drawback of this approach is that there is no full utilization of LISREL, which defeats one of the objectives of the study.

The proposed model, as gauged from the LISREL output (see Appendix A), provides good predictive power, which is the main objective of the study. It also accounts for measurement error in the constructs. Given that there is still a debate raging in the services marketing literature on the measurement of some of these widely accepted constructs (e.g., SERVQUAL), the importance of accounting for measurement error cannot be overemphasized. Furthermore, LISREL allows the study to examine the direct and indirect effects which are critical to proving some of the hypotheses.

The scales are not well developed for many of the

constructs used in relation to the banking industry. Although a pilot test was done, the high modification indices of some of the items indicate that poor fit was caused more by the measurement model rather than by the structural model. It is noted that the model may still be improved by developing better scales, but these modifications fall beyond the scope of this study. They are, however, discussed in the section on directions for further research. Nonetheless, based on the above discussion, this researcher feels that the results are still valid.

5.6. Summary

This chapter presented the empirical tests of the proposed hypotheses outlined in Chapter 3. The results were discussed for both the measurement model and the structural equation model. The results for the measurement model indicate the high reliability of the multiple-item measures. The results for the structural equation model show convergent validity for most multiple-item measures except equity. The discriminant validity of the measures was also examined. All the measures exhibited substantial discriminant validity.

The chi-square statistic reveals a bad fit between the data and the model. Other measures of fit yield a moderate fit. However, because the chi-square has been described in

the literature as an inappropriate measure of fit, this study relied more on the other measures.

The second section of this chapter also presented the results of the tests of hypotheses. A summation of the findings is included in the next chapter.

FIGURE 5.1
A MEASUREMENT MODEL OF CUSTOMER LOYALTY

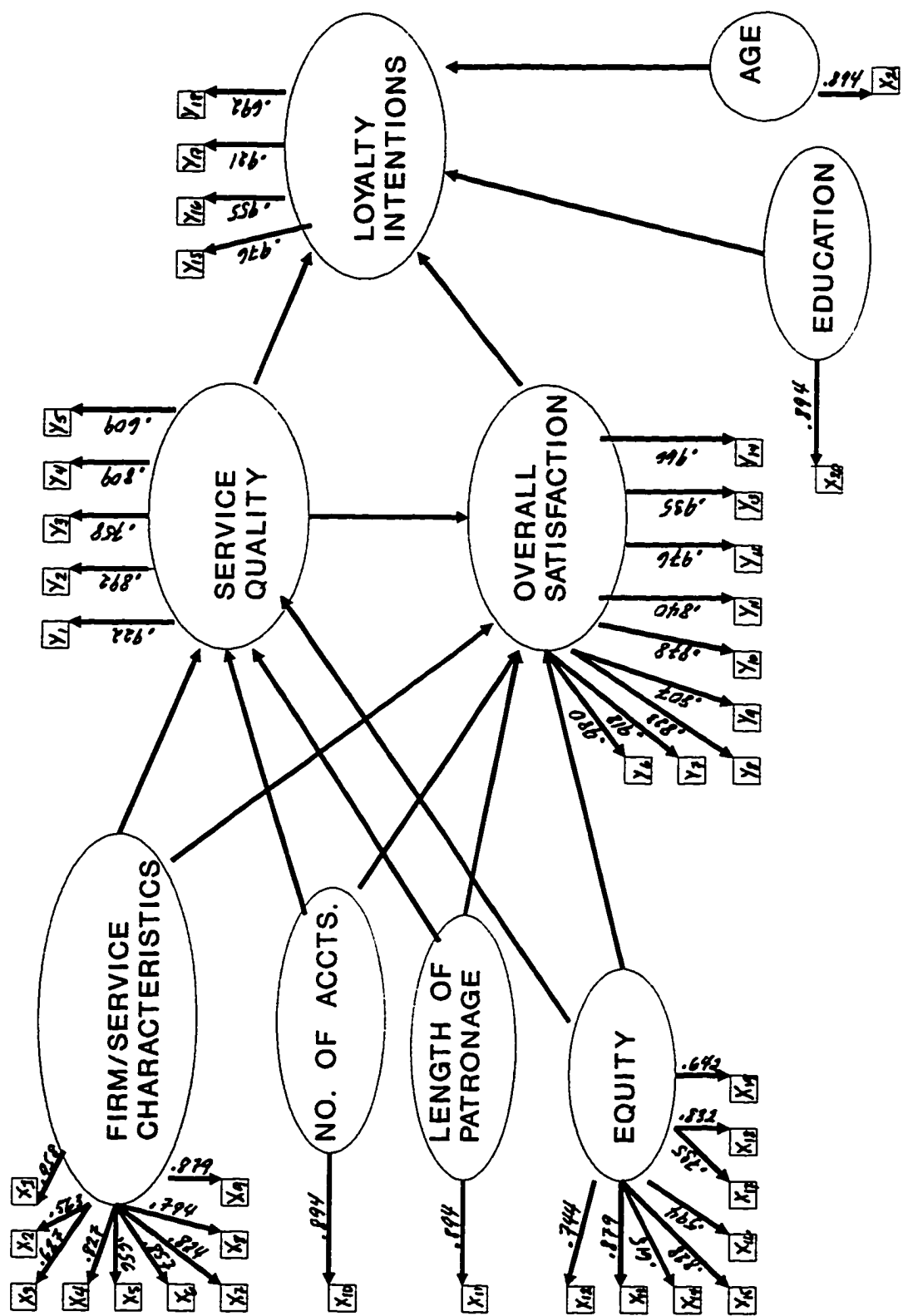


FIGURE 5.2
A STRUCTURAL MODEL OF CUSTOMER LOYALTY

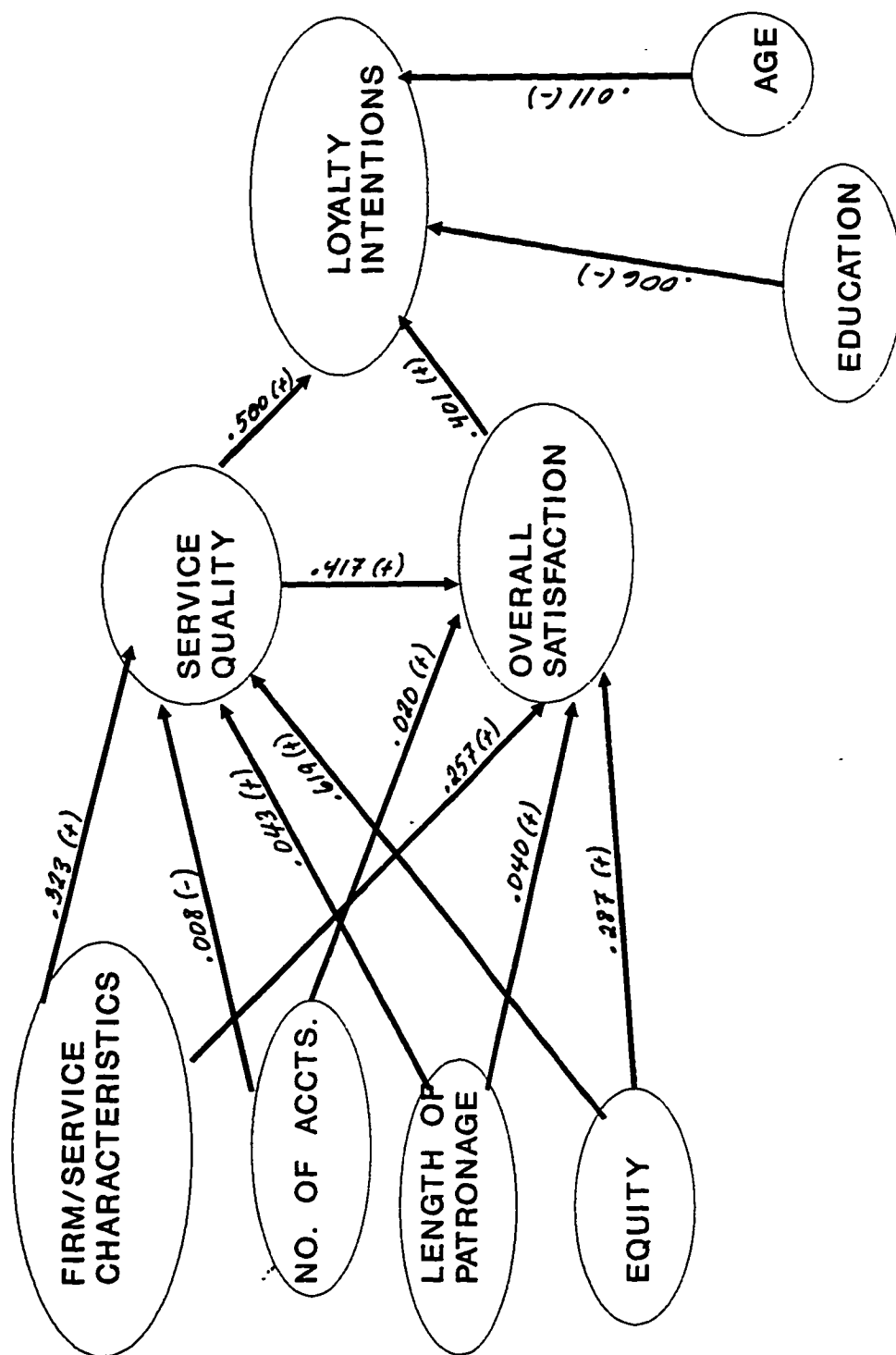


Table 5.1**Measures Used In The Operational Model**

Independent Measures		Dependent Measures	
x ₁	Helpful	y ₁	Empathy
x ₂	Good reputation	y ₂	Reliability
x ₃	Good image	y ₃	Responsiveness
x ₄	Pleasant place	y ₄	Assurance
x ₅	Knows me well	y ₅	Tangibles
x ₆	Friendly	y ₆	Bank has excellent service
x ₇	Pays attention	y ₇	Meets my needs
x ₈	Listens to problems	y ₈	Bank is just as good
x ₉	Knowledgeable	y ₉	Complaints dealt with fairly
x ₁₀	Number of accounts	y ₁₀	Bank is reliable
x ₁₁	Length of patronage	y ₁₁	Likeable bank people
x ₁₂	Fees worth service	y ₁₂	Gives expected service
x ₁₃	Gets service deserved	y ₁₃	Very satisfied with bank
x ₁₄	Credit results are fair	y ₁₄	Bank experience is positive
x ₁₅	Willing to listen	y ₁₅	Say positive things
x ₁₆	Manager never around*	y ₁₆	Encourage others to bank
x ₁₇	Manager available	y ₁₇	Recommend bank
x ₁₈	Resolves complaints satisfactorily	y ₁₈	Do less business*
x ₁₉	Employees become defensive*		
x ₂₀	Education		
x ₂₁	Age		

* Reverse-coded

Table 5.2

Measure of Firm/Service Characteristics

Items	Factor Loadings	T-Values**
Helpful	0.958	***
Good reputation	0.563	10.541
Good image	0.627	12.171
Pleasant place	0.827	19.122
Knows me well	0.656	12.977
Friendly	0.857	20.582
Pays attention	0.824	18.973
Listens to problems	0.794	17.705
Knowledgeable	0.879	21.731

Cronbach's alpha = 0.9065

Reliability rho = 0.573

** Significant at 0.05 level if > 2

*** The initial factor loading was fixed to one.

Note: Factor loadings are standardized.

Table 5.3

Measure of Equity

Items	Factor Loadings	T-Values**
Fees worth service	0.744	***
Gets service deserved	0.879	20.526
Credit results are fair	0.615	11.603
Willing to listen	0.828	18.293
Manager never around*	0.594	11.091
Manager available	0.735	14.976
Resolves complaints satisfactorily	0.832	18.455
Employees become defensive*	0.642	12.318

Cronbach's alpha = 0.8666

Reliability rho = 0.478

* Reverse coded

** Significant at 0.05 level if > 2

*** The initial factor loading was fixed to one.

Note: Factor loadings are standardized.

Table 5.4

Measure of Overall Satisfaction

Items	Factor Loadings	T-Values**
Bank has excellent service	0.980	***
Meets my needs	0.918	24.792
Bank is just as good	0.823	19.329
Complaints dealt with fairly	0.807	18.599
Bank is reliable	0.878	22.206
I like bank people	0.840	20.142
Give service I expect	0.976	29.673
Very satisfied with bank	0.935	25.990
Bank experience is positive	0.966	28.651

Cronbach's alpha = 0.9571

Reliability rho = 0.717

** Significant at 0.05 level if > 2

*** The initial factor loading was fixed to one.

Note: Factor loadings are standardized.

Table 5.5.1

Measure of Perceived Service Quality

Factor Loadings

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
	Tangible	Reliable	Response	Assuran	Empathy
Item #					
EB02	.822				
EB03	.831				
EB04	.868				
EB05		.789			
EB06		.814			
EB07		.877			
EB09		.684			
EB11			.819		
EB12			.909		
EB13			.873		
EB14				.909	
EB15				.901	
EB16				.748	
EB18					.889
EB19					.886
EB22					.767

Table 5.5.2

Measure of Service Quality

Items	Factor Loadings	T-Values**
Empathy	0.922	***
Reliability	0.892	19.906
Responsiveness	0.758	15.201
Assurance	0.809	16.803
Tangibles	0.609	11.250

Cronbach's alpha:

Empathy = 0.8798
Reliability = 0.8627
Responsiveness = 0.8791
Assurance = 0.8725
Tangibles = 0.8663

Reliability Rho = 0.605

** Significant at 0.05 level if > 2

*** The initial factor loading was fixed to one.

Note: Factor loadings are standardized.

Table 5.6

Measure of Loyalty Intentions

Items	Factor Loadings	T-Values**
Say positive things	0.976	***
Encourage others to bank	0.955	27.740
Recommend bank	0.921	25.068
Do less business*	0.692	14.209

Cronbach's alpha = 0.8639

Reliability rho = 0.744

* Reverse coded

** Significant at 0.05 level if > 2

*** The initial factor loading was fixed to one.

Note: Factor loadings are standardized.

Table 5.7.

Fit and Reliability Statistics

Chi-square with with 680 degrees of freedom	=	1681.21 (P=.000)
Goodness of fit index	=	0.757
Adjusted goodness of fit index	=	0.722
Root mean square residual	=	0.085
Coefficient of determination for structural equations	=	0.903
Squared multiple correlations for structural equations:		
Service quality	=	0.873
Satisfaction	=	0.879
Loyalty	=	0.777

Table 5.8

Convergent Validity Test Results

Construct	Reliability Rho	Result*
Firm/Service Characteristics	0.573	Convergent
Equity	0.478	Not Convergent
Satisfaction	0.717	Convergent
Service Quality	0.605	Convergent
Loyalty	0.744	Convergent

*** If reliability rho is greater than 0.50, then construct is deemed convergent (Fornell and Larcker, 1981) .**

VI. SUMMARY AND CONCLUSION

This chapter is a summary of the research study. A recapitulation of the objectives of this research, the data collection procedures, the methodology utilized for the analysis, and the major findings of the study are provided. A discussion of the managerial implications and the limitations of the study are also included in this chapter. Lastly, suggestions for direction for future research are given.

6.1. Objectives of the Study

Retention has been recognized in the marketing strategy literature as a potent defensive tool needed to remain profitable and survive market maturity. Past research has posited that retention is a consequence of consumer satisfaction and/or service quality. Thus, most of these studies have concentrated on consumer satisfaction and/or service quality. In most cases, these studies have focused on a few variables at a time. Furthermore, little research has been done on the impact of consumer satisfaction and/or service quality on behavior (Zeithaml, et al. 1996). Instead, research has been concentrated on satisfaction/dissatisfaction, service quality, and the nature of the relationship between these two causal factors of loyalty behavior.

The main objective of this dissertation was to describe and empirically test a more comprehensive model of retention behavior. Several specific goals were set toward achieving the main objective. These were to: 1) define the conceptual linkages between satisfaction, service quality, and loyalty intentions; 2) determine whether the relationship between customer satisfaction and service quality is antecedent, mediating, or consequent; 3) estimate the magnitude of the direct effects of satisfaction and service quality on loyalty intentions; and 4) determine the impact of firm/service variables, equity, affiliation characteristics, and consumer characteristics on satisfaction, service quality, and loyalty intentions.

The underlying premise of this study is that if consumer satisfaction and/or service quality affect customer retention at the aggregate level as implied by past research, then the impact of consumer satisfaction and/or service quality on individual intentions should be evident. These loyalty intentions may be a reliable proxy for actual behavior and may serve to signal a customer's forthcoming defection.

6.2. Research Methodology

To accomplish the objectives enumerated in the preceding paragraph, the following steps were taken. A thorough review of extant and relevant literature was

undertaken to: 1) identify the different constructs that are posited to directly and indirectly affect retention, 2) summarize existing evidence about the behavioral consequences of consumer satisfaction and/or service quality and identify specific areas to which this study may contribute, and 3) provide a firm basis for the development of the scales used in the survey instrument. Fifteen hypotheses were proposed and empirically tested.

A pilot study was done to test the validity of the scales. The results of the pilot study helped in fine-tuning the questionnaire.

The final version of the questionnaire was administered to two samples. A national random sample of 1,000 bank customers (drawn from a mailing list) was surveyed by mail, and a convenience sample of 104 students from a reputable university in New York City was asked to complete the questionnaire to augment the pool of respondents. It was decided that a national random sample would avoid a firm-specific bias. The same may be said for the student sample given the large number of banks operating in New York City. Of the 1,000 questionnaires mailed out, 225 were returned. An analysis of the two samples indicated that there was no statistically significant difference between the two groups except in terms of income.

6.2.1. Mode of Analysis

The multiple-item scales were subjected to reliability tests. Results indicated that the multiple-item measures had high reliability. In addition, the model had four single-indicator constructs.

The multiple-item measures were also factor analyzed to ensure that they loaded on the right factor. These measures were again tested for the hypothesized factor structure using confirmatory factor analysis in LISREL 7 and were deemed to be valid. The main test of the model was also done utilizing a general LISREL model.

The conceptualized comprehensive model of customer retention is a simultaneous system of equations having latent constructs and multiple indicators. LISREL was used to test the relationships posited in the model. This required the construction of a measurement model to test the reliability and validity of the multiple-item measures of the constructs. After the measurement model was tested, a structural equation model was proposed to specify the causal relationships among the latent variables. The LISREL statistical package allows for an analysis of a system of simultaneous equations where measurement errors are allowed. This means that the relationships between error components are not constrained since LISREL is a full information, maximum likelihood method of estimation. It was this feature that led to the choice of the LISREL technique over

the alternative--the simultaneous regression of equations.

6.3 Discussion of Results

The study looked at the impact of firm/service characteristics, affiliation characteristics, and equity on service quality perceptions and consumer satisfaction directly, and on loyalty intentions indirectly. This research also examined the nature of the relationship among service quality, consumer satisfaction, and loyalty intentions. In addition, the impact of consumer characteristics on loyalty intentions was investigated.

The unique contribution of this study to the services marketing literature is the treatment of the service quality and satisfaction constructs as equally independent variables affecting loyalty intentions directly. Past research has theorized that one is an antecedent of the other and, consequently, influences loyalty indirectly (e.g., Cronin and Taylor, 1992; Parasuraman, et al., 1988). In addition, the notion of affiliation characteristics as a factor affecting service quality and overall satisfaction was introduced in this study. There is little academic literature that looks at the impact of length of patronage, engineered relationships (in the form of number of accounts), and other affiliation characteristics. Yet, managers fervently advocate these practices. A recent article on the impact of the bond of identification

(Bhattacharya, et al., 1995) may finally raise interest in affiliation characteristics.

Fifteen hypotheses were submitted. Of the fifteen hypotheses, nine were statistically significant at the $p < .05$ level. Out of the nine meaningful hypotheses, only one had a linkage that was contrary to what was hypothesized. The other six hypotheses were statistically insignificant. Table 6.1 presents a summary of the hypotheses and the empirical results.

6.3.1. Service Quality, Overall Satisfaction, and Loyalty

There are a number of studies in the services marketing literature calling for the clarification of the relationship between satisfaction and service quality. One question raised is whether service quality and satisfaction are one and the same. Others assert that service quality is really an attitude rather than a separate construct. Discussions of which of the two is the antecedent, or the consequent, have also been pervasive in the literature. Additionally, the linkage of satisfaction and/or service quality to behavior or behavioral intentions has been a subject of debate. Some posit that the relationship is linear; others argue that it is non-linear.

The first five hypotheses were proposed to provide some clarity on these matters. The first two hypotheses support the notion that these are two separate constructs. Both of

them affect loyalty intentions directly and simultaneously, signifying that the structural linkage is positive and linear. The empirical results indicate that the magnitude of the impact of service quality on loyalty intentions is greater than the impact of satisfaction. This may mean that service quality may be an attitude because of its enduring effect. Furthermore, service quality appears to influence both loyalty intentions and satisfaction directly, which may imply that service quality is a more effective construct in influencing loyalty.

6.3.2. Effects of Firm/Service Characteristics and Equity

Both satisfaction and service quality are based on disconfirmation of expectations, albeit different types of expectations. A firm may opt to increase satisfaction levels or increase perceived service quality--or both--to reduce attrition rates by raising performance levels to the point of positive disconfirmation. At times, the issue becomes one of resource allocation. Which determinant of either satisfaction or service quality is the most effective?

The empirical evidence shows that equity is a much more powerful determinant of service quality. Equity has been defined as the consumer's perception of the fairness of the exchange. Additionally, equity also impacts loyalty intention directly. But should a firm concentrate on just

equity? The results indicate that firm/service characteristics are effective determinants of both satisfaction and service quality and, by extension, of loyalty intentions. Firm/service characteristics also influence loyalty intentions indirectly.

6.3.3. Impact of Affiliation and Consumer Characteristics

The other variables considered--affiliation characteristics (i.e., length of patronage and number of accounts) and consumer characteristics (i.e., education and age)--did not impact any of the exogenous constructs in a meaningful way. While the observed sign for education's impact on loyalty intention was consistent with the hypothesized sign, the linkage was quite weak. In the case of affiliation characteristics, it is suspected that the operationalization of the concept accounted for its weak relationship to satisfaction and service quality.

6.4. Contributions of The Study

Most of the studies of this genre tested the empirical relationships among a subset of constructs. This study examined the impact of several variables simultaneously. By so doing, the study was able to identify the variables that play a dominant role vis à vis the roles of the causal variables identified in the literature. Additionally, this study developed scales that could be utilized by the banking

industry to measure perceptions of equity and of firm/service characteristics, and behavioral intentions. While the scales are not necessarily final, they provide the basis on which more reliable and valid scales could be developed.

6.5. Managerial Implications

Ideally, firms will try to raise the quality of the service they provide and try to increase customer satisfaction. Unfortunately, financial constraints may prevent firms from undertaking both courses of action equally. Furthermore, decisions as to which alternative would garner more resources are dependent, in many cases, on how soon the impact of the investment is reflected in the bottom line.

The findings of this study indicate that banks should focus more on creating an impression of equity in their relationship with their customers. If customers feel that they are getting the service they deserve and that they are being treated fairly, perceptions of service quality and overall satisfaction are generated. The impact of these perceptions outweigh improvements in firm/service characteristics. This may explain why many small banks thrive despite their lack of services and features offered by bigger banks. This is not to say that improving firm/service characteristics does not affect perceptions of

service quality and overall satisfaction positively, because it does.

The empirical results also imply that firms should focus more on being perceived as warm and responsive rather than being impressive in terms of image and physical appearance. This conclusion supports earlier works (e.g., Parasuraman, et al., 1991) that show responsiveness as the trait most desired by customers. The least desired characteristic was tangibles (physical appearance).

Should a firm emphasize service quality or overall satisfaction? The cumulative impact of firm/service characteristics and equity on service quality indicate that a firm is better off pursuing service quality improvements rather than just increasing overall satisfaction. The study found that service quality significantly influences overall satisfaction directly and loyalty intentions both directly and indirectly. An effort to see if overall satisfaction affects service quality and loyalty intentions in a similar manner did not yield significant results.

This effect of service quality on overall satisfaction and loyalty intentions may be attributed to the fact that overall satisfaction is experience-based while service quality is affected by both experience and normative perceptions. Thus, one who has no prior experience with a particular service provider will make judgements based on what others (whose opinions the individual values) say. For

those with prior experience, customers may attribute a dissatisfactory service experience or experiences to the employee personally rather than regard it as institutional behavior. For example, if a Nordstrom store employee bungles a customer's order three times, the customer may think less of the employee, but not less of Nordstrom. The customer will be influenced by the general perception among consumers that Nordstrom is a quality service provider, rather than just the customer's personal consumption experience.

Unlike Rust and William's (1994) study, this research did not find affiliation characteristics (length of patronage and number of accounts) to significantly affect overall satisfaction and perceptions of service quality. The impact of these characteristics may overlap with the impact of perceptions of service quality and satisfaction. A discussion of the limitations of the study follows.

6.6. Limitations of the Study

There are several limitations associated with this study. First, the generalizability of the findings across service industries may be restricted. As has been noted in Chapter 1, the domain of the study was limited to services that possess "membership" characteristics and wherein the nature of service delivery was continuous rather than discrete. A second limitation is the amount of data

collected. Cost and time constraints did not allow for a more extensive data collection. A larger and more representative sample may affect the influence of consumer characteristics on loyalty intentions. A third impediment was the length of the survey instrument. Both response rates and quality of responses may have improved had the questionnaire been more compact. An additional limitation was the operationalization of affiliation characteristics. Length of patronage and number of accounts may be insufficient to conceptualize the bond that exists between the service provider and the customer. Finally, the study assumed that the respondents were all individual bank customers whose individual satisfaction and perception of service quality determined individual loyalty intentions. The study did not account for joint decision making and joint satisfaction. This was done to simplify the study. Yet, it is quite plausible that the decision to remain or switch banks is a function of more than one individual's satisfaction and perception of service quality. To the extent that joint decision making and joint satisfaction are important influences affecting loyalty intentions, there exists a limitation.

6.7. Directions for Future Research

This study used only one industry to test the model. Applying the model to other service industries may improve

the generalizability of the model. Replication would also increase its validity.

It would be interesting to examine how joint account holders make decisions to stay or leave. What would be the effect on loyalty intentions if one party has positive perceptions of service quality and the other party does not?

There are very few studies that look at the impact of identification on satisfaction, service quality perceptions, and loyalty intention. To this end, a better operationalization of affiliation characteristics that transcends industries would be a worthwhile research objective. Another construct which requires additional research is the dimensionality of retention behavior. The current operationalization of retention behavior may be inadequate since it is primarily limited to voice, exit, and loyalty responses. On the other hand, the battery developed by Zeithaml, et al. (1996) includes price sensitivity. To the degree that price sensitivity is a function of wealth/income, rather than satisfaction or perceptions of service quality, inclusion in the retention battery may be flawed.

This research was a cross-sectional study. The dynamic nature of retention would suggest that a longitudinal study may be better.

Finally, an examination of the influence of competition on retention behavior may be appropriate. Not everyone who

leaves a bank is a dissatisfied customer. Yet, why do they leave? Aside from the most apparent reason--relocation--competition may influence retention decisions.

Table 6.1

A Summary of The Hypothesized Relationships and Empirical Evidence

Hypothesis	Hypothesized Sign	Observed Sign	Significance (alpha=.05) (two-tailed)
1. Satisfaction impacts Loyalty	+	+	Sig.
2. Service Quality impacts Loyalty	+	+	Sig.
3. Satisfaction and Service Quality impact Loyalty simultaneously	+	+	Sig.
4. Satisfaction has greater impact on Loyalty than Service Quality	>	<	Sig.
5. Service Quality impacts Satisfaction	+	+	Sig.
6. Firm/Service impacts Service Quality	+	+	Sig.
7. Firm/Service impacts Satisfaction	+	+	Sig.
8. Equity impacts Satisfaction	+	+	Sig.
9. Equity impacts Service Quality	+	+	Sig.

Table 6.1 (continued)

A Summary of The Hypothesized Relationships and Empirical Evidence

Hypothesis	Hypothesized Sign	Observed Sign	Significance (alpha=.05) (two-tailed)
10. Tenure impacts Satisfaction	+	+	Not Sig.
11. Tenure impacts Service Quality	+	+	Not Sig.
12. Number of Accts. impact Satisfaction	+	-	Not Sig.
13. Number of Accts. impact Service Quality	+	+	Not Sig.
14. Education impacts Loyalty	-	-	Not Sig.
15. Age impacts Loyalty	+	-	Not Sig.

Appendix A
The Survey Instrument



CALIFORNIA STATE UNIVERSITY, HAYWARD

HAYWARD, CALIFORNIA 94542-3070

SCHOOL OF BUSINESS AND ECONOMICS

Department of Marketing

Telephone: (510) 885-4146

Fax: (510) 885-2041

June 6, 1996

Dear Sir/Madam:

I need your assistance. I am conducting a study of consumers' perception of their banks to have a better understanding of customers' relationships with their banks and their reaction to the services provided by their bank. This study is for purely academic research purposes. You have been selectively chosen to participate in this survey. I would appreciate it very much if you will answer the attached questionnaire as completely as possible. I would like to keep your identity and responses completely confidential, so please do not write your name or make any identifying marks on the questionnaire.

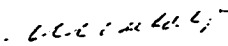
To thank participants for their cooperation, I shall hold a drawing with the following cash prizes:

One	First prize of \$250.00
One	Second prize of \$100.00
Three	Third prizes of \$50.00 each

If you wish to participate in the raffle, please print your name and address on the index card enclosed and return it with your completed questionnaire in the postage paid return envelope. I shall separate the index cards from the questionnaire. The drawing will be on July 15, 1996.

If any part of the questionnaire is unclear or if you have any questions about the study, please contact me at (510) 885-2342. Thank you in advance for participating in this survey. Your participation will help us understand consumer behavior better.

Sincerely,


Cesar M. Maloles III
Assistant Professor of Marketing

P.S. Since very few people were chosen to participate in this study, your complete response is extremely important for the success of this project.

THE CALIFORNIA STATE UNIVERSITY

SECTION A

Please indicate to what extent you agree or disagree with the following statements about your primary bank by encircling the number that best represents your situation. A primary bank is the financial institution you use most and/or have most or all of your accounts.

Example: with the first item, "My bank's employees are friendly," encircling 1 means that you strongly agree that your bank's employees are friendly.

	Strongly agree		Neutral		Strongly disagree		
	1	2	3	4	5	6	7
My bank's employees are friendly.	1	2	3	4	5	6	7
My bank has a good image.	1	2	3	4	5	6	7
All banks are generally safe.	1	2	3	4	5	6	7
My bank tries to satisfy my needs.	1	2	3	4	5	6	7
My bank's location is convenient.	1	2	3	4	5	6	7
I sometimes get frustrated dealing with my bank.	1	2	3	4	5	6	7
My bank is a pleasant place to go to.	1	2	3	4	5	6	7
My bank has helpful employees.	1	2	3	4	5	6	7
My bank's employees are knowledgeable.	1	2	3	4	5	6	7
My bank has all the services I need.	1	2	3	4	5	6	7
My bank is well respected in our community.	1	2	3	4	5	6	7
The bank employees know me well.	1	2	3	4	5	6	7
My bank has convenient parking.	1	2	3	4	5	6	7
My bank is a good source of financial information.	1	2	3	4	5	6	7
My bank has a good reputation.	1	2	3	4	5	6	7
My bank pays attention to what I say.	1	2	3	4	5	6	7
I get very little personal attention from my bank.	1	2	3	4	5	6	7
I am proud of my bank.	1	2	3	4	5	6	7
My bank offers banking by phone.	1	2	3	4	5	6	7
My bank does not offer all the services I need.	1	2	3	4	5	6	7
My bank is safe and solid.	1	2	3	4	5	6	7

	Strongly agree			Neutral			Strongly disagree
My bank provides the information I need all the time.	1	2	3	4	5	6	7
My bank's customer service is available by phone 24 hours a day.	1	2	3	4	5	6	7
I rarely wait long to be served at my bank.	1	2	3	4	5	6	7
My bank listens to my problems/complaints.	1	2	3	4	5	6	7

SECTION B

Please indicate to what extent you agree or disagree with the following statements describing your relationship with your primary bank.

	Strongly agree			Neutral			Strongly disagree
Even if I have to pay fees, I think the service I get from my bank is worth it.	1	2	3	4	5	6	7
My bank is willing to listen to reasonable complaints.	1	2	3	4	5	6	7
Changing banks can result in the delay of the direct deposit of paycheck/pension/social security check(s).	1	2	3	4	5	6	7
I get the service I deserve from my bank.	1	2	3	4	5	6	7
When I apply for credit, I know that the result will be fair.	1	2	3	4	5	6	7
The manager is never around whenever I have a complaint.	1	2	3	4	5	6	7
Switching banks is too much trouble.	1	2	3	4	5	6	7
A manager is usually available whenever I have problems.	1	2	3	4	5	6	7
My bank charges high fees.	1	2	3	4	5	6	7
My bank resolves my problems/complaints to my satisfaction.	1	2	3	4	5	6	7
My bank's interest rates are better than those of other banks.	1	2	3	4	5	6	7
Since my bank knows me and my account(s), I hesitate to move to another bank.	1	2	3	4	5	6	7
My bank's employees become defensive when I complain.	1	2	3	4	5	6	7

Please check all the different kinds of accounts/services you have with your primary bank.

☐ checking	☐ savings	☐ money market	☐ credit card/s
☐ certificate of deposit	☐ direct deposit	☐ auto loan/s	☐ direct debit
☐ business accounts	☐ personal loan/s	☐ bill paying service	☐ mortgage
☐ safe deposit box	☐ IRA/Keogh acct/s.	☐ others (please specify) _____	

How long have you been banking with your current bank? _____ years and _____ months

SECTION C

Please indicate to what extent you agree or disagree with the following statements by encircling the appropriate number for each statement. Please remember there is no right or wrong answer.

	Strongly agree			Neutral			Strongly disagree
I wait for "sales" rather than pay full price.	1	2	3	4	5	6	7
I like to try new and different things.	1	2	3	4	5	6	7
I am too embarrassed to complain.	1	2	3	4	5	6	7
When I buy appliances, I like to buy well known brands.	1	2	3	4	5	6	7
A person can save a lot of money by shopping around for bargains.	1	2	3	4	5	6	7
I get angry when the bank commits errors with my account/s.	1	2	3	4	5	6	7
I don't like taking chances.	1	2	3	4	5	6	7
I get upset when the bank makes an error that puts me in an embarrassing position.	1	2	3	4	5	6	7
I compare prices before making a major purchase.	1	2	3	4	5	6	7
I expect my bank to act on my request/complaint promptly.	1	2	3	4	5	6	7
I am usually among the first to try new products.	1	2	3	4	5	6	7
I look a lot for "specials."	1	2	3	4	5	6	7
Every bank makes mistakes. As long as the bank corrects the mistake, there is nothing to get upset about.	1	2	3	4	5	6	7
It is no big deal if the bank mistakenly bounces a check once in a while.	1	2	3	4	5	6	7
I usually watch advertisements for announcements of sales.	1	2	3	4	5	6	7

SECTION D

Please tell me to what extent you agree or disagree with the following statements that describe your satisfaction with your primary bank.

	Strongly agree			Neutral			Strongly disagree
I am very satisfied with my bank.	1	2	3	4	5	6	7

	Strongly agree			Neutral			Strongly disagree
	1	2	3	4	5	6	7
My bank meets my needs.							
Compared to other banks, my bank is just as good or even better.	1	2	3	4	5	6	7
My complaints/problems are always addressed in a fair manner.	1	2	3	4	5	6	7
My bank is very reliable.	1	2	3	4	5	6	7
I like the people at my bank.	1	2	3	4	5	6	7
My bank gives me the service I expect.	1	2	3	4	5	6	7
My bank provides excellent service.	1	2	3	4	5	6	7
Overall, my experience with my bank is positive.	1	2	3	4	5	6	7

SECTION E

I. Based on your experiences as a bank customer, please indicate to what extent you agree or disagree with the following statements that describe what you expect to find in an ideal bank.

	Strongly agree			Neutral			Strongly disagree
	1	2	3	4	5	6	7
A bank should have up-to-date equipment and technology.	1	2	3	4	5	6	7
A bank's physical facilities must be visually appealing.	1	2	3	4	5	6	7
A bank's employees should look professional.	1	2	3	4	5	6	7
A bank's appearance should be in keeping with the type of services it provides.	1	2	3	4	5	6	7
When a bank promises to do something by a certain time, it should do so.	1	2	3	4	5	6	7
When customers have problems, a bank should be sympathetic and reassuring.	1	2	3	4	5	6	7
A bank should be dependable.	1	2	3	4	5	6	7
A bank should do everything right the first time.	1	2	3	4	5	6	7
A bank should keep accurate records.	1	2	3	4	5	6	7
A bank should not be expected to tell a customer when his requests will be fulfilled.	1	2	3	4	5	6	7
It's not realistic to expect prompt service from bank employees.	1	2	3	4	5	6	7

	Strongly agree		Neutral			Strongly disagree	
Bank's employees don't always have to be willing to help.	1	2	3	4	5	6	7
It is okay if a bank's employees are too busy to respond to customer request promptly.	1	2	3	4	5	6	7
A bank's employees should be polite.	1	2	3	4	5	6	7
A customer should be able to trust bank employees.	1	2	3	4	5	6	7
Customers should be able to feel safe in their transactions with a bank's employees.	1	2	3	4	5	6	7
A bank's employees should get adequate support from the bank to do their job well.	1	2	3	4	5	6	7
A bank is expected to give customers individual attention.	1	2	3	4	5	6	7
A bank should understand the specific needs of their customers.	1	2	3	4	5	6	7
Bank employees cannot be expected to give customers personal attention.	1	2	3	4	5	6	7
A bank should have convenient operating hours.	1	2	3	4	5	6	7
A bank should have its customers' best interests at heart.	1	2	3	4	5	6	7

II. Based on your experiences as a bank customer, please indicate to what extent you agree or disagree with the following statements that describe what you feel about your bank.

	Strongly agree		Neutral			Strongly disagree	
My bank has up-to-date equipment and technology	1	2	3	4	5	6	7
My bank's physical facilities are visually appealing	1	2	3	4	5	6	7
My bank's employees look professional.	1	2	3	4	5	6	7
My bank's appearance is in keeping with the type of services it provides.	1	2	3	4	5	6	7
When my bank promises to do something by a certain time, it does so.	1	2	3	4	5	6	7
When I have problems, my bank is sympathetic and reassuring.	1	2	3	4	5	6	7
My bank is dependable.	1	2	3	4	5	6	7

	Strongly agree		Neutral			Strongly disagree	
My bank does everything right the first time.	1	2	3	4	5	6	7
My bank keeps accurate records.	1	2	3	4	5	6	7
My bank does not tell me when my requests will be fulfilled.	1	2	3	4	5	6	7
I do not receive prompt service from my bank's employees	1	2	3	4	5	6	7
My bank's employees are not always willing to help	1	2	3	4	5	6	7
My bank's employees are too busy to respond to my request promptly.	1	2	3	4	5	6	7
I trust my bank's employees.	1	2	3	4	5	6	7
I feel safe in my transactions with a bank's employees.	1	2	3	4	5	6	7
My bank's employees are polite.	1	2	3	4	5	6	7
My bank's employees get adequate support from the bank to do their job well.	1	2	3	4	5	6	7
My bank gives its customers individual attention.	1	2	3	4	5	6	7
My bank understands my specific needs.	1	2	3	4	5	6	7
My bank's employees do not give me personal attention.	1	2	3	4	5	6	7
My bank has convenient operating hours.	1	2	3	4	5	6	7
My bank has my best interests at heart.	1	2	3	4	5	6	7

II. Listed in the next page are five features pertaining to banks and the services they offer. Please indicate how important each of these features is to you when you evaluate the quality of a bank's service. Please allocate a total of 100 points among the five features according to how important each feature is to you—the more important the feature, the more points you should allocate to it. Please ensure that the points you allocate to the five features add up to 100.

The appearance of the bank's physical facilities, equipment, personnel, and communication materials.	_____ points
The ability of the bank to perform the promised service dependably and accurately.	_____ points
The willingness of the bank to help customers and provide prompt service.	_____ points
The knowledge and courtesy of the bank's employees and their ability to convey trust and confidence.	_____ points
The caring, individual attention the bank provides its customers.	_____ points
TOTAL	100 points

SECTION F

Please indicate to what extent you agree or disagree with the following statements about your bank.

	Extremely Likely			Neutral			Not at all Likely
I may move some of my accounts to another bank that has lower fees and/or better rates.	1	2	3	4	5	6	7
I will do <i>more</i> business with my bank in the next few years.	1	2	3	4	5	6	7
I will say positive things about my bank.	1	2	3	4	5	6	7
I will encourage my friends and relatives to do business with my bank.	1	2	3	4	5	6	7
I am willing to pay a higher fees than what other banks are charging for the same services.	1	2	3	4	5	6	7
I will complain to external agencies, such as the Better Business Bureau, if I experience a problem with my bank	1	2	3	4	5	6	7
I will consider my bank as my first choice for any financial service needs I may have.	1	2	3	4	5	6	7
I will recommend my bank to anyone who seeks my advice.	1	2	3	4	5	6	7
I will switch banks if I experience a problem.	1	2	3	4	5	6	7
I will tell other customers if I have a negative experience with my bank.	1	2	3	4	5	6	7
Even if the fees are somewhat higher, I will remain with my bank.	1	2	3	4	5	6	7
I will complain to the manager if I have a problem with the service.	1	2	3	4	5	6	7
I will do <i>less</i> business with my bank in the next few years.	1	2	3	4	5	6	7

SECTION G

Please tell me about yourself by checking the appropriate category. This information will only be used for classification purposes.

You are: ☐ Male ☐ Female

You are:

☐ (1) Below 18 years old	☐ (2) 18 to 29 years old	☐ (3) 30 to 49 years old
☐ (4) 50 to 64 years old	☐ (5) 65 years and older	

The highest level of education you have completed is:

- ☐ (1) did not graduate from high school
- ☐ (2) high school graduate
- ☐ (3) some college
- ☐ (4) college graduate
- ☐ (5) some graduate school/professional (e.g. law, medical) school
- ☐ (6) graduate/professional school and/or post-graduate education

Your current marital status is:

☐ (1) single	☐ (3) married	☐ (5) separated/divorced
☐ (2) widowed	☐ (4) living with someone but not married	

Your ethnic background is:

☐ (1) Afro-American/black	☐ (5) Caucasian/white, non Hispanic
☐ (2) Hispanic	☐ (6) Native American
☐ (3) Asian, Oriental	☐ (7) Other (please specify) _____
☐ (4) Asian, Non-Oriental	

How many members are there in your household? _____

How many members of your household work? _____

What is your approximate household income before taxes?

- ☐ (1) \$10,000 and below
- ☐ (2) between \$10,001 and \$25,000
- ☐ (3) between \$25,001 and \$50,000
- ☐ (4) between \$50,001 and \$75,000
- ☐ (5) \$75,000 and more

Please check which one would best describe your current occupational status?

☐ (1) unemployed	☐ (6) student
☐ (2) executive	☐ (7) white collar (clerical)
☐ (3) managerial	☐ (8) professional
☐ (4) retired	☐ (9) self-employed
☐ (5) blue collar	☐ (10) other (please specify) _____

Thank you again for your time.

Appendix B

The LISREL Output for the Combined Sample

```

1  0  SET WIDTH = 80
2  TITLE 'CESAR DISSERTATION FILE'
3  DATA LIST FIXED RECORDS = 4
4    /1 IDNUM 1-3
5    /2 A01 TO A25 1-25
6      B01 TO B28 26-53 B29 54-55 B30 56-57
7    /3 C01 TO C15 1-15
8      D01 TO D09 16-24
9      EA01 TO EA22 25-46
10     EB01 TO EB22 47-68
11   /4 EC01 TO EC05 1-10
12     F01 TO F13 11-23
13     G01 TO G05 24-28 G06 G07 29-32 G08 33 G09 34-35

```

0THIS COMMAND WILL READ 4 RECORDS FROM THE COMMAND FILE

OVARIABLE	REC	START	END	FORMAT

IDNUM	1	1	3	F3.0
A01	2	1	1	F1.0
A02	2	2	2	F1.0
A03	2	3	3	F1.0
A04	2	4	4	F1.0
A05	2	5	5	F1.0
A06	2	6	6	F1.0
A07	2	7	7	F1.0
A08	2	8	8	F1.0
A09	2	9	9	F1.0
A10	2	10	10	F1.0
A11	2	11	11	F1.0
A12	2	12	12	F1.0
A13	2	13	13	F1.0
A14	2	14	14	F1.0
A15	2	15	15	F1.0
A16	2	16	16	F1.0
A17	2	17	17	F1.0
A18	2	18	18	F1.0
A19	2	19	19	F1.0
A20	2	20	20	F1.0
A21	2	21	21	F1.0
A22	2	22	22	F1.0
A23	2	23	23	F1.0
A24	2	24	24	F1.0
A25	2	25	25	F1.0
B01	2	26	26	F1.0
B02	2	27	27	F1.0
B03	2	28	28	F1.0
B04	2	29	29	F1.0
B05	2	30	30	F1.0
B06	2	31	31	F1.0
B07	2	32	32	F1.0
B08	2	33	33	F1.0
B09	2	34	34	F1.0
B10	2	35	35	F1.0
B11	2	36	36	F1.0
B12	2	37	37	F1.0
B13	2	38	38	F1.0
B14	2	39	39	F1.0
B15	2	40	40	F1.0

B16	2	41	41	F1.0
B17	2	42	42	F1.0
B18	2	43	43	F1.0
B19	2	44	44	F1.0
B20	2	45	45	F1.0
B21	2	46	46	F1.0
B22	2	47	47	F1.0
B23	2	48	48	F1.0
B24	2	49	49	F1.0
B25	2	50	50	F1.0
B26	2	51	51	F1.0
B27	2	52	52	F1.0
B28	2	53	53	F1.0
B29	2	54	55	F2.0
B30	2	56	57	F2.0
C01	3	1	1	F1.0
C02	3	2	2	F1.0
C03	3	3	3	F1.0
C04	3	4	4	F1.0
C05	3	5	5	F1.0
C06	3	6	6	F1.0
C07	3	7	7	F1.0
C08	3	8	8	F1.0
C09	3	9	9	F1.0
C10	3	10	10	F1.0
C11	3	11	11	F1.0
C12	3	12	12	F1.0
C13	3	13	13	F1.0
C14	3	14	14	F1.0
C15	3	15	15	F1.0
D01	3	16	16	F1.0
D02	3	17	17	F1.0
D03	3	18	18	F1.0
D04	3	19	19	F1.0
D05	3	20	20	F1.0
D06	3	21	21	F1.0
D07	3	22	22	F1.0
D08	3	23	23	F1.0
D09	3	24	24	F1.0
EA01	3	25	25	F1.0
EA02	3	26	26	F1.0
EA03	3	27	27	F1.0
EA04	3	28	28	F1.0
EA05	3	29	29	F1.0
EA06	3	30	30	F1.0
EA07	3	31	31	F1.0
EA08	3	32	32	F1.0
EA09	3	33	33	F1.0
EA10	3	34	34	F1.0
EA11	3	35	35	F1.0
EA12	3	36	36	F1.0
EA13	3	37	37	F1.0
EA14	3	38	38	F1.0
EA15	3	39	39	F1.0
EA16	3	40	40	F1.0
EA17	3	41	41	F1.0
EA18	3	42	42	F1.0
EA19	3	43	43	F1.0
EA20	3	44	44	F1.0
EA21	3	45	45	F1.0
EA22	3	46	46	F1.0
EB01	3	47	47	F1.0

EB02	3	48	48	F1.0
EB03	3	49	49	F1.0
EB04	3	50	50	F1.0
EB05	3	51	51	F1.0
EB06	3	52	52	F1.0
EB07	3	53	53	F1.0
EB08	3	54	54	F1.0
EB09	3	55	55	F1.0
EB10	3	56	56	F1.0
EB11	3	57	57	F1.0
EB12	3	58	58	F1.0
EB13	3	59	59	F1.0
EB14	3	60	60	F1.0
EB15	3	61	61	F1.0
EB16	3	62	62	F1.0
EB17	3	63	63	F1.0
EB18	3	64	64	F1.0
EB19	3	65	65	F1.0
EB20	3	66	66	F1.0
EB21	3	67	67	F1.0
EB22	3	68	68	F1.0
EC01	4	1	2	F2.0
EC02	4	3	4	F2.0
EC03	4	5	6	F2.0
EC04	4	7	8	F2.0
EC05	4	9	10	F2.0
F01	4	11	11	F1.0
F02	4	12	12	F1.0
F03	4	13	13	F1.0
F04	4	14	14	F1.0
F05	4	15	15	F1.0
F06	4	16	16	F1.0
F07	4	17	17	F1.0
F08	4	18	18	F1.0
F09	4	19	19	F1.0
F10	4	20	20	F1.0
F11	4	21	21	F1.0
F12	4	22	22	F1.0
F13	4	23	23	F1.0
G01	4	24	24	F1.0
G02	4	25	25	F1.0
G03	4	26	26	F1.0
G04	4	27	27	F1.0
G05	4	28	28	F1.0
G06	4	29	30	F2.0
G07	4	31	32	F2.0
G08	4	33	33	F1.0
G09	4	34	35	F2.0

14 VARIABLE LABELS
15 A01 FRIENDLY/
16 A02 GOOD IMAGE/
17 A03 GENERALLY SAFE/
18 A04 SATISFY NEEDS/
19 A05 CONVENIENT/
20 A06 FRUSTRATED DEALING/
21 A07 PLEASANT PLACE/
22 A08 HELPFUL/
23 A09 KNOWLEDGEABLE/
24 A10 HAS ALL SERVICES NEEDED/
25 A11 WELL RESPECTED/
26 A12 KNOW ME WELL/
27 A13 CONVENIENT PARKING/
28 A14 GOOD SOURCE INFO/
29 A15 GOOD REPUTATION/
30 A16 PAYS ATTENTION/
31 A17 LITTLE PERSONAL ATTENTION/
32 A18 PROUD/
33 A19 OFFERS BANK BY PHONE/
34 A20 DOES NOT HAVE ALL SERVICES/
35 A21 SAFE AND SOLID/
36 A22 HAS ALL INFO NEEDED/
37 A23 CUST SVC AVAILABLE 24 HRS/
38 A24 RARELY WAIT LONG/
39 A25 LISTENS TO PROBLEMS COMPLAINTS/
40 B01 FEES WORTH SVC/
41 B02 WILLING TO LISTEN/
42 B03 CHANGING BANKS RESULTS IN DELAY/
43 B04 GET SVC DESERVED/
44 B05 CREDIT RESULTS IS FAIR/
45 B06 MANAGER NEVER AROUND/
46 B07 SWITCHING TOO MUCH TROUBLE/
47 B08 MANAGER AVAILABLE/
48 B09 CHARGES HIGH FEES/
49 B10 RESOLVES COMPLAINTS SATISFACTORILY/
50 B11 BETTER INTEREST RATES/
51 B12 HESITATE TO MOVE/
52 B13 EMPLOYEES BECOME DEFENSIVE/
53 B14 CHECKING/
54 B15 CERTIFICATE OF DEPOSIT/
55 B16 BUSINESS ACCOUNTS/
56 B17 SAFE DEPOSIT/
57 B18 SAVINGS/
58 B19 DIRECT DEPOSIT/
59 B20 PERSONAL LOANS/
60 B21 IRA KEOGH/
61 B22 MONEY MARKET/
62 B23 AUTO LOAN/
63 B24 BILL PAYING SVC/
64 B25 OTHERS/
65 B26 CREDIT CARDS/
66 B27 DIRECT DEBIT/
67 B28 MORTGAGE/
68 B29 YEARS WITH BANK/
69 B30 MONTHS WITH BANK/
70 C01 WAIT FOR SALES/
71 C02 TRY NEW THINGS/
72 C03 EMBARASS TO COMPLAIN/
73 C04 BUY KNOWN BRANDS/
74 C05 SHOP FOR BARGAINS/

75 C06 ANGRY WITH BANK ERRORS/
 76 C07 DONT LIKE TAKING CHANCES/
 77 C08 UPSET WHEN BANK MAKES MISTAKE/
 78 C09 COMPARE PRICES/
 79 C10 EXPECT PROMPT ACTION ON COMPLAINTS/
 80 C11 FIRST TO TRY/
 81 C12 LOOK FOR SPECIALS/
 82 C13 NO NEED TO GET UPSET/
 83 C14 NO BIG DEAL IF CHECK BOUNCES/
 84 C15 LOOK FOR SALES ADS/
 85 D01 VERY SATISFIED WITH BANK/
 86 D02 MEETS MY NEEDS/
 87 D03 BANK IS JUST AS GOOD/
 88 D04 COMPLAINTS ARE DEALT WITH FAIRLY/
 89 D05 BANK IS RELIABLE/
 90 D06 LIKE BANK PEOPLE/
 91 D07 GIVE SVC I EXPECT/
 92 D08 BANK HAS EXCELLENT SVC/
 93 D09 BANK EXPERIENCE IS POSITIVE/
 94 EA01 UP-TO-DATE EQUIP/
 95 EA02 PHY FACILITIES MUST APPEAL/
 96 EA03 LOOK PROFESSIONAL/
 97 EA04 APPEARANCE BEFITS SVC/
 98 EA05 KEEPS PROMISE/
 99 EA06 SYMPATHETIC/
 100 EA07 DEPENDABLE/
 101 EA08 RIGHT FIRST TIME AROUND/
 102 EA09 ACCURATE RECORDS/
 103 EA10 CANT EXPECT WHEN/
 104 EA11 CANT EXPECT PROMPT SVC/
 105 EA12 CANT EXPECT WILLING TO HELP/
 106 EA13 OK IF TOO BUSY TO HELP/
 107 EA14 SHOULD BE POLITE/
 108 EA15 TRUST EMPLOYEES/
 109 EA16 FEEL SAFE TRANSACTING WITH EMP/
 110 EA17 EMP SHLD GET SUPPORT/
 111 EA18 INDIVIDUAL ATTN/
 112 EA19 UNDERSTAND SPECIFIC NEEDS/
 113 EA20 CANT EXPECT PERSONAL ATTN/
 114 EA21 MUST HAVE CONVENIENT HRS/
 115 EA22 CUSTOMER'S BEST INTEREST/
 116 EB01 UP-TO-DATE EQUIP/
 117 EB02 PHY FACILITIES MUST APPEAL/
 118 EB03 LOOK PROFESSIONAL/
 119 EB04 APPEARANCE BEFITS SVC/
 120 EB05 KEEPS PROMISE/
 121 EB06 SYMPATHETIC/
 122 EB07 DEPENDABLE/
 123 EB08 RIGHT FIRST TIME AROUND/
 124 EB09 ACCURATE RECORDS/
 125 EB10 CANT EXPECT WHEN/
 126 EB11 CANT EXPECT PROMPT SVC/
 127 EB12 CANT EXPECT WILLING TO HELP/
 128 EB13 OK IF TOO BUSY TO HELP/
 129 EB14 SHOULD BE POLITE/
 130 EB15 TRUST EMPLOYEES/
 131 EB16 FEEL SAFE TRANSACTING WITH EMP/
 132 EB17 EMP SHLD GET SUPPORT/
 133 EB18 INDIVIDUAL ATTN/
 134 EB19 UNDERSTAND SPECIFIC NEEDS/
 135 EB20 CANT EXPECT PERSONAL ATTN/
 136 EB21 MUST HAVE CONVENIENT HRS/

```

137 EB22 CUSTOMER'S BEST INTEREST/
138 EC01 APPEAR OF BANK EMP MATERIALS/
139 EC02 PERFORM SVC DEPEND AND ACCURATE/
140 EC03 WILLING TO HELP PROMPTLY/
141 EC04 KNOW AND COURTESY/
142 EC05 INDIVIDUAL ATTN/
143 F01 MOVE ACCTS/
144 F02 DO MORE BUSINESS/
145 F03 SAY POSITIVE THINGS/
146 F04 ENCOURAGE OTHERS TO BANK/
147 F05 WILLING TO PAY HIGHER FEES/
148 F06 COMPLAIN TO BBB/
149 F07 FIRST CHOICE/
150 F08 RECOMMEND BANK/
151 F09 SWITCH IF PROBLEMATIC/
152 F10 TELL ABOUT NEGATIVE EXP/
153 F11 REMAIN EVEN WITH HIGHER FEES/
154 F12 COMPLAIN TO MGR/
155 F13 DO LESS BUSINESS/
156 G01 SEX/
157 G02 AGE/
158 G03 EDUCATION/
159 G04 CIVIL STATUS/
160 G05 ETHNICITY/
161 G06 NUM IN HOUSEHOLD/
162 G07 NUM WORKING/
163 G08 GROSS HH INCOME/
164 G09 OCCUPATION/
165 MISSING VALUES A01 TO A25
166 B01 TO B28 (9) / B29 TO B30 (99) /
167 C01 TO C15
168 D01 TO D09
169 EA01 TO EA22
170 EB01 TO EB22 (9) /
171 EC01 TO EC05 (99) /
172 F01 TO F13 (9) /
173 G01 TO G05 (9) / G06 G07 (99) / G08 (9) / G09 (99)
174 DO REPEAT X = A01 TO A05 A07 TO A16 A18 A19 A21 TO A25
175 RECODE X (1=7) (2=6) (3=5) (4=4) (5=3) (6=2) (7=1)
176 END REPEAT
177
178 DO REPEAT X = B01 TO B05 B07 B08 B10 B11 B12
179 RECODE X (1=7) (2=6) (3=5) (4=4) (5=3) (6=2) (7=1)
180 END REPEAT
181
182 DO REPEAT X = C01 TO C02 C04 TO C06 C08 TO C15
183 RECODE X (1=7) (2=6) (3=5) (4=4) (5=3) (6=2) (7=1)
184 END REPEAT
185
186 DO REPEAT X = D01 TO D09
187 RECODE X (1=7) (2=6) (3=5) (4=4) (5=3) (6=2) (7=1)
188 END REPEAT
189
190 DO REPEAT X = EA01 TO EA09 EA14 TO EA19 EA21 EA22
191 RECODE X (1=7) (2=6) (3=5) (4=4) (5=3) (6=2) (7=1)
192 END REPEAT
193
194 DO REPEAT X = EB01 TO EB09 EB14 TO EB19 EB21 EB22
195 RECODE X (1=7) (2=6) (3=5) (4=4) (5=3) (6=2) (7=1)
196 END REPEAT
197 COMMENT HAPPY PERSONS WILL HAVE HIGHER SCORES
198 DO REPEAT X = F02 F03 F04 F05 F07 F08 F11

```

```
199 RECODE X (1=7) (2=6) (3=5) (4=4) (5=3) (6=2) (7=1)
200 END REPEAT
201
202 BEGIN DATA
1518 END DATA
1519 COMMENT CREATING A TEMPORARY VARIABLE
0PRECEDING TASK REQUIRED .17 SECONDS CPU TIME; .46 SECONDS ELAPSED.
```

```

1520 COMPUTE GROUP = 1
1521 IF (IDNUM GE 221) GROUP = 2
1522 VARIABLE LABELS GROUP RESPONDENT GROUPS
1523 VALUE LABELS GROUP (1) MAIL (2) STUDENTS
1524 COMMENT RECODING EDUCATION
1525 RECODE G03 (1=8) (2=10) (3=12) (4=14) (5=15) (6=16)
1526 COMMENT RECODING AGE
1527 RECODE G02 (2=23) (3=39) (4=56) (5=65)
1528 COMMENT RECODING INCOME
1529 RECODE G08 (1=10000) (2=17500) (3=37500) (4=62500) (5=75000)
1530 COMPUTE IMAGE = (A02+A11+A15)/3
1531 COMPUTE WARMRESP = (A01+A07+A12+A08+A16+A25+A09)/7
1532
1533 COMPUTE SERVICE = (A10+A20)/2
1534 COMPUTE TANGIBL = (EB02+EB03+EB04)/3
1535 COMPUTE RELIABL = (EB05+EB06+EB07+EB09)/4
1536 COMPUTE RESPNS = (EB11+EB12+EB13)/3
1537 COMPUTE ASSURAN = (EB14+EB15+EB16)/3
1538 COMPUTE EMPATHY = (EB18+EB19+EB22)/3
1539
1540 COMPUTE SATISFAC = (D01+D02+D03+D04+D05+D06+D07+D08+D09)/9
1541 COMPUTE LOYALTY = (F03+F04+F08+F13)/4
1542 COMPUTE MONTHS = (B29 * 12) + B30
1543 COMPUTE TOT1 = 0
1544 DO REPEAT X = B14 TO B28
1545 IF (X EQ 1) TOT1 = TOT1 + 1
1546 END REPEAT
1547 IF (MONTHS GE 240) MONTHS = 240
1548
1549 COMMENT ***** BEST ONE AUGUST 1 1996 11 PM
1550 PRELIS
1551 /VARIABLES =
1552     EMPATHY RELIABL RESPNS ASSURAN TANGIBL (CO)
1553     D08 D02 D03 D04 D05 D06 D07 D01 D09
1554     F03 F04 F08 F13 (OR)
1555     TOT1 MONTHS (CO)
1556     B01 B04 B05 B02 B06 B08 B10 B13
1557     A08 A15
1558     A02 A07 A12 A01 A16 A25 A09 (OR)
1559     G03
1560     G02 (CO)
1561 /TYPE = CORRELATION
1562 /MATRIX=OUT (*)

```

OTHER ARE 6,107,832 BYTES OF MEMORY AVAILABLE.
 THE LARGEST CONTIGUOUS AREA HAS 5,807,640 BYTES.

1

0

0

```

0          P R E L I S      A PREPROCESSOR FOR LISREL
0          PROGRAM VERSION 1.12      DISTRIBUTED BY
0
0          SCIENTIFIC SOFTWARE, INC.
          1369 NEITZEL ROAD
          MOORESVILLE, INDIANA 46158
          (317) 831-6336
0
0          THIS COPY AUTHORIZED FOR USE IN SPSS-X
0          PROGRAM COPYRIGHT 1987-89 BY SCIENTIFIC SOFTWARE, INC.,
          (A MICHIGAN CORPORATION).
          DISTRIBUTION OR USE UNAUTHORIZED BY SCIENTIFIC SOFTWARE, INC. IS
          PROHIBITED.
1          MVS - P R E L I S  1.12
0          BY
0          KARL G JORESKOG AND DAG SORBOM

```

OTHE FOLLOWING PRELIS CONTROL LINES HAVE BEEN READ :

CESAR DISSERTATION FILE;

```

DA NI=39 NO=0 MI= -0.989898D+37 MC=1 TR=LI
LA
  EMPATHY   RELIABL   RESPONS   ASSURAN   TANGIBL   D08       D02
RA FI=PRLDD21
CO EMPATHY
CO RELIABL
CO RESPONS
CO ASSURAN
CO TANGIBL
OR D08
OR D02
OR D03
OR D04
OR D05
OR D06
OR D07
OR D01
OR D09
OR F03
OR F04
OR F08
OR F13
CO TOT1
CO MONTHS
OR B01
OR B04
OR B05
OR B02
OR B06
OR B08
OR B10
OR B13
OR A08
OR A15
OR A02
OR A07
OR A12

```

OR A01
OR A16
OR A25
OR A09
CO G03
CO G02
OU MA=KM SM=PRLDD22

1

0DISTRIBUTION OF MISSING VALUES

0TOTAL SAMPLE SIZE = 288

0NUMBER OF MISSING VALUES	0	1	2	3	4	5	6	7	8	9	10
NUMBER OF CASES	290	34	4	0	1	0	0	1	0	0	1

0LISTWISE DELETION

0TOTAL EFFECTIVE SAMPLE SIZE = 290

0CONVERSION OF ORIGINAL VALUES TO CATEGORIES

0

0VARIABLE	1	2	3	4	5	6	7

+

D08	1.00	2.00	3.00	4.00	5.00	6.00	7.00
D02	2.00	3.00	4.00	5.00	6.00	7.00	
D03	1.00	2.00	3.00	4.00	5.00	6.00	7.00
D04	2.00	3.00	4.00	5.00	6.00	7.00	
D05	2.00	3.00	4.00	5.00	6.00	7.00	
D06	1.00	2.00	3.00	4.00	5.00	6.00	7.00
D07	1.00	2.00	3.00	4.00	5.00	6.00	7.00
D01	1.00	2.00	3.00	4.00	5.00	6.00	7.00
D09	1.00	2.00	3.00	4.00	5.00	6.00	7.00
F03	1.00	2.00	3.00	4.00	5.00	6.00	7.00
F04	1.00	2.00	3.00	4.00	5.00	6.00	7.00
F08	1.00	2.00	3.00	4.00	5.00	6.00	7.00
F13	1.00	2.00	3.00	4.00	5.00	6.00	7.00
B01	1.00	2.00	3.00	4.00	5.00	6.00	7.00
B04	1.00	2.00	3.00	4.00	5.00	6.00	7.00
B05	1.00	2.00	3.00	4.00	5.00	6.00	7.00
B02	1.00	2.00	3.00	4.00	5.00	6.00	7.00
B06	1.00	2.00	3.00	4.00	5.00	6.00	7.00
B08	1.00	2.00	3.00	4.00	5.00	6.00	7.00
B10	1.00	2.00	3.00	4.00	5.00	6.00	7.00
B13	1.00	2.00	3.00	4.00	5.00	6.00	7.00
A08	1.00	2.00	3.00	4.00	5.00	6.00	7.00
A15	1.00	2.00	3.00	4.00	5.00	6.00	7.00
A02	1.00	2.00	3.00	4.00	5.00	6.00	7.00
A07	1.00	2.00	3.00	4.00	5.00	6.00	7.00
A12	1.00	2.00	3.00	4.00	5.00	6.00	7.00
A01	1.00	2.00	3.00	4.00	5.00	6.00	7.00
A16	1.00	2.00	3.00	4.00	5.00	6.00	7.00
A25	1.00	2.00	3.00	4.00	5.00	6.00	7.00
A09	1.00	2.00	3.00	4.00	5.00	6.00	7.00

UNIVARIATE FREQUENCY DISTRIBUTIONS FOR ORDINAL VARIABLES
 0 CATEGORY

0 VARIABLE +	1	2	3	4	5	6	7
D08	6	8	29	44	61	83	57
D02	10	14	29	75	105	55	
D03	1	3	14	42	57	100	71
D04	3	16	91	57	74	47	
D05	5	15	30	72	104	62	
D06	1	5	15	82	50	68	67
D07	3	8	25	40	63	89	60
D01	1	10	18	45	56	102	56
D09	2	3	20	33	61	95	74
F03	5	18	15	51	59	78	62
F04	11	21	24	70	54	62	46
F08	15	19	32	60	47	67	48
F13	18	19	20	78	40	62	51
B01	50	35	38	54	40	41	30
B04	12	18	30	58	54	72	44
B05	10	10	17	82	40	80	49
B02	2	13	20	83	68	63	39
B06	5	8	20	136	34	54	31
B08	3	10	19	124	27	68	37
B10	4	8	22	88	60	72	34
B13	9	17	24	108	35	57	38
A08	1	7	19	46	66	78	71
A15	2	6	12	40	56	84	88
A02	2	5	12	43	65	92	69
A07	4	7	23	78	66	66	44
A12	80	35	24	50	27	34	38
A01	1	3	13	53	61	83	74
A16	19	15	22	103	43	49	37
A25	10	14	24	83	52	69	36
A09	1	9	22	56	69	84	47

ONORMAL SCORES FOR ORDINAL VARIABLES

0 OVARIABLE	CATEGORY						
+	1	2	3	4	5	6	7
D08	-2.406	-1.826	-1.307	-0.762	-0.236	0.418	1.406
D02	-2.211	-1.575	-1.120	-0.495	0.337	1.425	
D03	-3.005	-2.401	-1.801	-1.124	-0.510	0.209	1.279
D04	-2.651	-1.812	-0.801	-0.048	0.562	1.510	
D05	-2.472	-1.738	-1.181	-0.541	0.275	1.358	
D06	-3.005	-2.286	-1.698	-0.824	-0.141	0.390	1.314
D07	-2.651	-1.994	-1.415	-0.871	-0.328	0.361	1.377
D01	-3.005	-2.090	-1.494	-0.934	-0.378	0.341	1.415
D09	-2.786	-2.263	-1.658	-1.074	-0.511	0.203	1.255
F03	-2.472	-1.689	-1.253	-0.783	-0.226	0.392	1.358
F04	-2.173	-1.459	-1.030	-0.489	0.079	0.632	1.522
F08	-2.046	-1.382	-0.948	-0.437	0.048	0.586	1.499
F13	-1.968	-1.316	-0.985	-0.441	0.096	0.579	1.467
B01	-1.477	-0.729	-0.357	0.053	0.482	0.946	1.736
B04	-2.138	-1.467	-1.018	-0.506	0.009	0.604	1.545
B05	-2.211	-1.632	-1.294	-0.631	-0.044	0.512	1.488
B02	-2.786	-1.932	-1.372	-0.648	0.071	0.706	1.607
B06	-2.472	-1.876	-1.420	-0.415	0.376	0.853	1.720
B08	-2.651	-1.941	-1.430	-0.482	0.224	0.703	1.633
B10	-2.552	-1.931	-1.423	-0.634	0.071	0.717	1.675
B13	-2.252	-1.565	-1.125	-0.372	0.279	0.750	1.620
A08	-3.005	-2.197	-1.570	-0.956	-0.342	0.307	1.279
A15	-2.786	-2.135	-1.671	-1.105	-0.515	0.125	1.147
A02	-2.786	-2.173	-1.708	-1.099	-0.453	0.263	1.296
A07	-2.552	-1.956	-1.437	-0.685	0.009	0.634	1.545
A12	-1.207	-0.418	-0.149	0.176	0.535	0.881	1.620
A01	-3.005	-2.401	-1.820	-1.062	-0.394	0.257	1.255
A16	-1.944	-1.334	-1.014	-0.336	0.325	0.806	1.633
A25	-2.211	-1.575	-1.158	-0.508	0.114	0.709	1.647
A09	-3.005	-2.123	-1.474	-0.829	-0.191	0.514	1.510

OUNIVARIATE SUMMARY STATISTICS FOR CONTINUOUS VARIABLES

OVARIABLE	MEAN	ST. DEV.	SKEWNESS	KURTOSIS	MINIMUM	FREQ.	MAXIMUM	FREQ.
+								
EMPATHY	4.826	1.417	-0.271	-0.674	1.000	1	7.000	26
RELIABL	5.517	1.052	-0.597	0.146	1.250	1	7.000	29
RESPONS	5.123	1.368	-0.455	-0.384	1.000	2	7.000	43
ASSURAN	5.582	1.101	-0.734	0.372	1.667	1	7.000	49
TANGIBL	5.604	1.132	-1.005	1.371	1.000	1	7.000	51
TOT1	4.122	1.756	0.307	-0.246	1.000	19	9.000	3
MONTHS	80.681	68.034	1.051	0.267	1.000	2	240.000	23
G03	13.389	1.761	-0.367	-0.226	8.000	3	16.000	43
G02	36.774	11.710	0.525	-0.221	23.000	93	65.000	11

1CESAR DISSERTATION FILE;

0	ESTIMATED CORRELATION MATRIX					
0	EMPATHY	RELIABL	RESPONS	ASSURAN	TANGIBL	D08
+						
EMPATHY	1.000					
RELIABL	0.724	1.000				
RESPONS	0.637	0.573	1.000			
ASSURAN	0.658	0.628	0.550	1.000		
TANGIBL	0.478	0.572	0.360	0.466	1.000	
D08	0.745	0.710	0.595	0.629	0.461	1.000
D02	0.647	0.615	0.535	0.610	0.444	0.773
D03	0.563	0.547	0.473	0.547	0.430	0.663
D04	0.642	0.641	0.511	0.528	0.424	0.682
D05	0.685	0.744	0.541	0.619	0.475	0.736
D06	0.663	0.625	0.467	0.632	0.422	0.735
D07	0.700	0.672	0.546	0.621	0.478	0.892
D01	0.688	0.671	0.587	0.610	0.439	0.804
D09	0.725	0.717	0.594	0.631	0.449	0.857
F03	0.689	0.738	0.604	0.626	0.432	0.753
F04	0.646	0.663	0.550	0.512	0.423	0.662
F08	0.625	0.640	0.590	0.480	0.409	0.688
F13	0.528	0.531	0.483	0.457	0.356	0.580
TOT1	0.125	0.139	0.103	0.183	0.100	0.157
MONTHS	0.098	0.134	0.128	0.102	0.043	0.117
B01	0.492	0.385	0.381	0.445	0.319	0.496
B04	0.683	0.630	0.544	0.552	0.348	0.730
B05	0.490	0.531	0.326	0.433	0.302	0.495
B02	0.604	0.554	0.492	0.553	0.385	0.610
B06	0.474	0.403	0.522	0.389	0.274	0.413
B08	0.539	0.539	0.492	0.486	0.397	0.544
B10	0.623	0.582	0.492	0.512	0.368	0.660
B13	0.522	0.488	0.486	0.469	0.309	0.544
A08	0.680	0.608	0.566	0.676	0.412	0.745
A15	0.454	0.537	0.352	0.374	0.444	0.486
A02	0.383	0.484	0.323	0.343	0.412	0.515
A07	0.601	0.572	0.461	0.519	0.410	0.659
A12	0.508	0.445	0.370	0.463	0.228	0.502
A01	0.582	0.527	0.441	0.568	0.312	0.671
A16	0.669	0.560	0.513	0.503	0.322	0.614
A25	0.648	0.598	0.536	0.502	0.389	0.674
A09	0.622	0.558	0.536	0.614	0.426	0.672
G03	-0.127	-0.057	-0.163	-0.062	-0.061	-0.142
G02	0.080	0.102	0.087	0.163	0.005	0.086

ESTIMATED CORRELATION MATRIX							
	D02	D03	D04	D05	D06	D07	
D02	1.000						
D03	0.773	1.000					
D04	0.636	0.616	1.000				
D05	0.721	0.688	0.722	1.000			
D06	0.668	0.554	0.596	0.679	1.000		
D07	0.815	0.708	0.676	0.752	0.741	1.000	
D01	0.809	0.732	0.629	0.718	0.663	0.797	
D09	0.778	0.684	0.687	0.740	0.723	0.840	
F03	0.663	0.694	0.657	0.684	0.597	0.724	
F04	0.592	0.619	0.607	0.602	0.561	0.630	
F08	0.607	0.627	0.543	0.599	0.558	0.650	
F13	0.512	0.530	0.465	0.502	0.416	0.593	
TOT1	0.082	0.163	0.134	0.103	0.169	0.126	
MONTHS	0.120	0.153	0.163	0.120	0.099	0.152	
B01	0.498	0.443	0.446	0.430	0.479	0.498	
B04	0.697	0.547	0.557	0.635	0.613	0.692	
B05	0.463	0.430	0.435	0.488	0.450	0.473	
B02	0.556	0.526	0.603	0.554	0.539	0.590	
B06	0.385	0.366	0.442	0.409	0.433	0.393	
B08	0.546	0.431	0.524	0.503	0.487	0.520	
B10	0.624	0.552	0.711	0.619	0.583	0.663	
B13	0.448	0.398	0.486	0.472	0.430	0.502	
A08	0.625	0.538	0.559	0.578	0.709	0.668	
A15	0.508	0.505	0.460	0.579	0.377	0.492	
A02	0.489	0.487	0.463	0.521	0.420	0.468	
A07	0.541	0.452	0.488	0.546	0.612	0.598	
A12	0.449	0.373	0.476	0.400	0.667	0.453	
A01	0.588	0.537	0.544	0.525	0.682	0.622	
A16	0.577	0.524	0.591	0.574	0.601	0.599	
A25	0.574	0.501	0.600	0.581	0.565	0.630	
A09	0.606	0.533	0.602	0.577	0.601	0.645	
G03	-0.148	-0.106	-0.115	-0.079	-0.103	-0.136	
G02	0.118	0.064	0.111	0.053	0.127	0.099	

ESTIMATED CORRELATION MATRIX						
	D01	D09	F03	F04	F08	F13
D01	1.000					
D09	0.813	1.000				
F03	0.758	0.755	1.000			
F04	0.696	0.662	0.847	1.000		
F08	0.683	0.668	0.790	0.852	1.000	
F13	0.618	0.543	0.641	0.550	0.554	1.000
TOT1	0.190	0.139	0.180	0.133	0.096	0.154
MONTHS	0.123	0.111	0.128	0.075	0.086	0.146
B01	0.515	0.496	0.445	0.399	0.405	0.346
B04	0.684	0.747	0.675	0.599	0.591	0.448
B05	0.491	0.480	0.482	0.361	0.395	0.380
B02	0.575	0.585	0.555	0.520	0.544	0.452
B06	0.407	0.373	0.385	0.394	0.388	0.332
B08	0.510	0.477	0.492	0.464	0.500	0.394
B10	0.593	0.630	0.618	0.538	0.513	0.501
B13	0.496	0.488	0.476	0.411	0.390	0.438
A08	0.658	0.718	0.625	0.567	0.552	0.423
A15	0.498	0.467	0.514	0.481	0.499	0.315
A02	0.535	0.486	0.495	0.502	0.492	0.300
A07	0.600	0.630	0.579	0.539	0.514	0.405
A12	0.491	0.442	0.411	0.461	0.403	0.271
A01	0.596	0.664	0.585	0.520	0.511	0.366
A16	0.618	0.601	0.578	0.585	0.528	0.419
A25	0.599	0.621	0.590	0.530	0.542	0.430
A09	0.609	0.664	0.595	0.545	0.532	0.423
G03	-0.125	-0.135	-0.113	-0.102	-0.147	-0.123
G02	0.103	0.086	0.113	0.071	0.054	0.095

	ESTIMATED CORRELATION MATRIX					
	TOT1	MONTHS	B01	B04	B05	B02
TOT1	1.000					
MONTHS	0.228	1.000				
B01	0.033	0.023	1.000			
B04	0.091	0.037	0.540	1.000		
B05	0.168	0.091	0.323	0.461	1.000	
B02	0.132	0.046	0.562	0.627	0.488	1.000
B06	0.048	0.089	0.349	0.388	0.266	0.430
B08	0.024	0.068	0.407	0.520	0.389	0.535
B10	0.162	0.148	0.491	0.645	0.444	0.616
B13	0.042	0.063	0.352	0.432	0.295	0.442
A08	0.166	0.067	0.478	0.639	0.433	0.586
A15	0.101	0.095	0.149	0.373	0.329	0.387
A02	0.116	0.015	0.268	0.430	0.347	0.394
A07	0.145	0.102	0.451	0.610	0.417	0.471
A12	0.211	0.094	0.380	0.447	0.380	0.463
A01	0.158	0.031	0.413	0.611	0.363	0.535
A16	0.088	0.046	0.471	0.640	0.401	0.632
A25	0.105	0.043	0.515	0.680	0.440	0.708
A09	0.164	0.068	0.463	0.611	0.382	0.583
G03	0.135	0.070	-0.122	-0.120	-0.108	-0.138
G02	0.194	0.414	0.043	0.099	0.044	0.080

	ESTIMATED CORRELATION MATRIX					
	B06	B08	B10	B13	A08	A15
B06	1.000					
B08	0.573	1.000				
B10	0.406	0.547	1.000			
B13	0.473	0.460	0.474	1.000		
A08	0.397	0.503	0.552	0.473	1.000	
A15	0.219	0.308	0.343	0.307	0.394	1.000
A02	0.281	0.363	0.413	0.282	0.470	0.631
A07	0.361	0.455	0.503	0.373	0.717	0.374
A12	0.444	0.451	0.448	0.334	0.523	0.238
A01	0.350	0.451	0.504	0.365	0.781	0.360
A16	0.420	0.491	0.582	0.411	0.629	0.447
A25	0.415	0.541	0.637	0.457	0.616	0.367
A09	0.356	0.515	0.588	0.432	0.796	0.439
G03	-0.133	-0.151	-0.159	-0.037	-0.184	-0.085
G02	0.098	0.130	0.143	0.083	0.126	-0.015

	ESTIMATED CORRELATION MATRIX					
0 0 +	A02	A07	A12	A01	A16	A25
A02	1.000					
A07	0.461	1.000				
A12	0.321	0.481	1.000			
A01	0.499	0.643	0.503	1.000		
A16	0.442	0.596	0.574	0.595	1.000	
A25	0.430	0.535	0.434	0.548	0.637	1.000
A09	0.457	0.639	0.459	0.651	0.607	0.562
G03	-0.005	-0.109	-0.137	-0.129	-0.186	-0.135
G02	-0.039	0.123	0.223	0.119	0.103	0.082

0 0 +	ESTIMATED CORRELATION MATRIX		
	A09	G03	G02
A09	1.000		
G03	-0.159	1.000	
G02	0.103	0.028	1.000

OPRECEDING TASK REQUIRED 1.73 SECONDS CPU TIME; 4.96 SECONDS ELAPSED.

```

1563 LISREL
1564 /TITLE TESTING THE MAIN MODEL
1565 /MATRIX=IN (*)
1566 /DA NI=39 NOBS=284 MA=KM
1567 /LA
1568 /'EMPATHY' 'RELIABL' 'RESPONS' 'ASSURAN' 'TANGIBL'
1569 'D08' 'D02' 'D03' 'D04' 'D05' 'D06' 'D07' 'D01' 'D09'
1570 'F03' 'F04' 'F08' 'F13'
1571 'TOT1' 'MONTHS'
1572 'B01' 'B04' 'B05' 'B02' 'B06' 'B08' 'B10' 'B13'
1573 'A08' 'A15' 'A02' 'A07' 'A12' 'A01' 'A16' 'A25' 'A09'
1574 'EDUCATE'
1575 'AGE'
1576 /MODEL NY=18 NE=3 NX=21 NK=6 PH=ST BE=SD PS=DI
1577 /FR LY (2,1) LY(3,1) LY(4,1) LY(5,1)
1578 /FR LY (7,2) LY(8,2) LY(9,2) LY(10,2) LY(11,2) LY(12,2) LY(13,2)
LY(14,2)
1579 /FR LY(16,3) LY(17,3) LY(18,3)
1580 /FR LX(4,3) LX(5,3) LX(6,3) LX(7,3) LX(8,3) LX(9,3) LX(10,3)
1581 /FR LX(12,4) LX(13,4) LX(14,4) LX(15,4) LX(16,4) LX(17,4) LX(18,4)
LX(19,
1582 /VA 1 LY(1,1) LY(6,2) LY(15,3)
1583 /VA 1 LX(1,1) LX(2,2) LX(3,3) LX(11,4) LX(20,5) LX(21,6)
1584 /VA 0.2 TD(1,1) TD(2,2) TD(20,20) TD(21,21)
1585 /FI GA(3,1) GA(3,2) GA(3,3) GA(3,4) GA(1,5) GA(2,5)
1586 GA(1,6) GA(2,6)
1587 /LE
1588 /'SERVQUAL' 'SATISFAC' 'LOYALTY'
1589 /LK
1590 /'ACCOUNTS' 'MONTHS' 'EQUITY' 'FIRMCHAR' 'EDUCATE' 'AGE'
1591 /OU SE TV PC EF MI SS TO
OTHER ARE 6,106,424 BYTES OF MEMORY AVAILABLE.
THE LARGEST CONTIGUOUS AREA HAS 5,807,088 BYTES.

```

1

0

0

0 LISREL 7: ESTIMATION OF LINEAR STRUCTURAL EQUATION
SYSTEMS

- PROGRAM VERSION 7.16 DISTRIBUTED BY

0 SCIENTIFIC SOFTWARE, INC.
1369 NEITZEL ROAD
MOORESVILLE, INDIANA 46158
(317) 831-6336

0 THIS COPY AUTHORIZED FOR USE IN SPSS-X
0 PROGRAM COPYRIGHT 1977-89 BY SCIENTIFIC SOFTWARE, INC.,
(A MICHIGAN CORPORATION).
DISTRIBUTION OR USE UNAUTHORIZED BY SCIENTIFIC SOFTWARE, INC. IS
PROHIBITED.

1 MVS - L I S R E L 7.16
0 BY
0 KARL G JORESKOG AND DAG SORBOM

0THE FOLLOWING LISREL CONTROL LINES HAVE BEEN READ :

TITLE TESTING THE MAIN MODEL

DA NI=39 NOBS=284 MA=KM

KM FI=LSLDD21 FO

(SE14.6)

LA

EMPATHY RELIABL RESPONS ASSURAN TANGIBL

D08 D02 D03 D04 D05 D06 D07 D01 D09

F03 F04 F08 F13

TOT1 MONTHS

B01 B04 B05 B02 B06 B08 B10 B13

A08 A15 A02 A07 A12 A01 A16 A25 A09

EDUCATE

AGE

MODEL NY=18 NE=3 NX=21 NK=6 PH=ST BE=SD PS=DI

FR LY (2,1) LY(3,1) LY(4,1) LY(5,1)

FR LY (7,2) LY(8,2) LY(9,2) LY(10,2) LY(11,2) LY(12,2) LY(13,2) LY(14,2)

FR LY(16,3) LY(17,3) LY(18,3)

FR LX(4,3) LX(5,3) LX(6,3) LX(7,3) LX(8,3) LX(9,3) LX(10,3)

FR LX(12,4) LX(13,4) LX(14,4) LX(15,4) LX(16,4) LX(17,4) LX(18,4) LX(19,4)

VA 1 LY(1,1) LY(6,2) LY(15,3)

VA 1 LX(1,1) LX(2,2) LX(3,3) LX(11,4) LX(20,5) LX(21,6)

VA 0.2 TD(1,1) TD(2,2) TD(20,20) TD(21,21)

FI GA(3,1) GA(3,2) GA(3,3) GA(3,4) GA(1,5) GA(2,5) C

GA(1,6) GA(2,6)

LE

SERVQUAL SATISFAC LOYALTY

LK

ACCOUNTS MONTHS EQUITY FIRMCHAR EDUCATE AGE

OU SE TV PC EF MI SS TO

1TITLE TESTING THE MAIN MODEL

0 NUMBER OF INPUT VARIABLES 39

0 NUMBER OF Y - VARIABLES 18

0 NUMBER OF X - VARIABLES 21

0 NUMBER OF ETA - VARIABLES 3

0 NUMBER OF KSI - VARIABLES 6

0 NUMBER OF OBSERVATIONS 284

1TITLE TESTING THE MAIN MODEL						
0 CORRELATION MATRIX TO BE ANALYZED						
0	EMPATHY	RELIABL	RESPONS	ASSURAN	TANGIBL	D08
+						
EMPATHY	1.000					
RELIABL	0.724	1.000				
RESPONS	0.637	0.573	1.000			
ASSURAN	0.658	0.628	0.550	1.000		
TANGIBL	0.478	0.572	0.360	0.466	1.000	
D08	0.745	0.710	0.595	0.629	0.461	1.000
D02	0.647	0.615	0.535	0.610	0.444	0.773
D03	0.563	0.547	0.473	0.547	0.430	0.663
D04	0.642	0.641	0.511	0.528	0.424	0.682
D05	0.685	0.744	0.541	0.619	0.475	0.736
D06	0.663	0.625	0.467	0.632	0.422	0.735
D07	0.700	0.672	0.546	0.621	0.478	0.892
D01	0.688	0.671	0.587	0.610	0.439	0.804
D09	0.725	0.717	0.594	0.631	0.449	0.857
F03	0.689	0.738	0.604	0.626	0.432	0.753
F04	0.646	0.663	0.550	0.512	0.423	0.662
F08	0.625	0.640	0.590	0.480	0.409	0.688
F13	0.528	0.531	0.483	0.457	0.356	0.580
TOT1	0.125	0.139	0.103	0.183	0.100	0.157
MONTHS	0.098	0.134	0.128	0.102	0.043	0.117
B01	0.492	0.385	0.381	0.445	0.319	0.496
B04	0.683	0.630	0.544	0.552	0.348	0.730
B05	0.490	0.531	0.326	0.433	0.302	0.495
B02	0.604	0.554	0.492	0.553	0.385	0.610
B06	0.474	0.403	0.522	0.389	0.274	0.413
B08	0.539	0.539	0.492	0.486	0.397	0.544
B10	0.623	0.582	0.492	0.512	0.368	0.660
B13	0.522	0.488	0.486	0.469	0.309	0.544
A08	0.680	0.608	0.566	0.676	0.412	0.745
A15	0.454	0.537	0.352	0.374	0.444	0.486
A02	0.383	0.484	0.323	0.343	0.412	0.515
A07	0.601	0.572	0.461	0.519	0.410	0.659
A12	0.508	0.445	0.370	0.463	0.228	0.502
A01	0.582	0.527	0.441	0.568	0.312	0.671
A16	0.669	0.560	0.513	0.503	0.322	0.614
A25	0.648	0.598	0.536	0.502	0.389	0.674
A09	0.622	0.558	0.536	0.614	0.426	0.672
EDUCATE	-0.127	-0.057	-0.163	-0.062	-0.061	-0.142
AGE	0.080	0.102	0.087	0.163	0.005	0.086

CORRELATION MATRIX TO BE ANALYZED						
	D02	D03	D04	D05	D06	D07
D02	1.000					
D03	0.773	1.000				
D04	0.636	0.616	1.000			
D05	0.721	0.688	0.722	1.000		
D06	0.668	0.554	0.596	0.679	1.000	
D07	0.815	0.708	0.676	0.752	0.741	1.000
D01	0.809	0.732	0.629	0.718	0.663	0.797
D09	0.778	0.684	0.687	0.740	0.723	0.840
F03	0.663	0.694	0.657	0.684	0.597	0.724
F04	0.592	0.619	0.607	0.602	0.561	0.630
F08	0.607	0.627	0.543	0.599	0.558	0.650
F13	0.512	0.530	0.465	0.502	0.416	0.593
TOT1	0.082	0.163	0.134	0.103	0.169	0.126
MONTHS	0.120	0.153	0.163	0.120	0.099	0.152
B01	0.498	0.443	0.446	0.430	0.479	0.498
B04	0.697	0.547	0.557	0.635	0.613	0.692
B05	0.463	0.430	0.435	0.488	0.450	0.473
B02	0.556	0.526	0.603	0.554	0.539	0.590
B06	0.385	0.366	0.442	0.409	0.433	0.393
B08	0.546	0.431	0.524	0.503	0.487	0.520
B10	0.624	0.552	0.711	0.619	0.583	0.663
B13	0.448	0.398	0.486	0.472	0.430	0.502
A08	0.625	0.538	0.559	0.578	0.709	0.668
A15	0.508	0.505	0.460	0.579	0.377	0.492
A02	0.489	0.487	0.463	0.521	0.420	0.468
A07	0.541	0.452	0.488	0.546	0.612	0.598
A12	0.449	0.373	0.476	0.400	0.667	0.453
A01	0.588	0.537	0.544	0.525	0.682	0.622
A16	0.577	0.524	0.591	0.574	0.601	0.599
A25	0.574	0.501	0.600	0.581	0.565	0.630
A09	0.606	0.533	0.602	0.577	0.601	0.645
EDUCATE	-0.148	-0.106	-0.115	-0.079	-0.103	-0.136
AGE	0.118	0.064	0.111	0.053	0.127	0.099

CORRELATION MATRIX TO BE ANALYZED						
	D01	D09	F03	F04	F08	F13
0						
+						
	D01	1.000				
	D09	0.813	1.000			
	F03	0.758	0.755	1.000		
	F04	0.696	0.662	0.847	1.000	
	F08	0.683	0.668	0.790	0.852	1.000
	F13	0.618	0.543	0.641	0.550	0.554
	TOT1	0.190	0.139	0.180	0.133	0.096
	MONTHS	0.123	0.111	0.128	0.075	0.086
	B01	0.515	0.496	0.445	0.399	0.405
	B04	0.684	0.747	0.675	0.599	0.591
	B05	0.491	0.480	0.482	0.361	0.395
	B02	0.575	0.585	0.555	0.520	0.544
	B06	0.407	0.373	0.385	0.394	0.388
	B08	0.510	0.477	0.492	0.464	0.500
	B10	0.593	0.630	0.618	0.538	0.513
	B13	0.496	0.488	0.476	0.411	0.390
	A08	0.658	0.718	0.625	0.567	0.552
	A15	0.498	0.467	0.514	0.481	0.499
	A02	0.535	0.486	0.495	0.502	0.492
	A07	0.600	0.630	0.579	0.539	0.514
	A12	0.491	0.442	0.411	0.461	0.403
	A01	0.596	0.664	0.585	0.520	0.511
	A16	0.618	0.601	0.578	0.585	0.528
	A25	0.599	0.621	0.590	0.530	0.542
	A09	0.609	0.664	0.595	0.545	0.532
	EDUCATE	-0.125	-0.135	-0.113	-0.102	-0.147
	AGE	0.103	0.086	0.113	0.071	0.054

CORRELATION MATRIX TO BE ANALYZED						
0	TOT1	MONTHS	B01	B04	B05	B02
0						
+						
	TOT1	1.000				
	MONTHS	0.228	1.000			
	B01	0.033	0.023	1.000		
	B04	0.091	0.037	0.540	1.000	
	B05	0.168	0.091	0.323	0.461	1.000
	B02	0.132	0.046	0.562	0.627	0.488
	B06	0.048	0.089	0.349	0.388	0.266
	B08	0.024	0.068	0.407	0.520	0.389
	B10	0.162	0.148	0.491	0.645	0.444
	B13	0.042	0.063	0.352	0.432	0.295
	A08	0.166	0.067	0.478	0.639	0.433
	A15	0.101	0.095	0.149	0.373	0.329
	A02	0.116	0.015	0.268	0.430	0.347
	A07	0.145	0.102	0.451	0.610	0.417
	A12	0.211	0.094	0.380	0.447	0.380
	A01	0.158	0.031	0.413	0.611	0.363
	A16	0.088	0.046	0.471	0.640	0.401
	A25	0.105	0.043	0.515	0.680	0.440
	A09	0.164	0.068	0.463	0.611	0.382
	EDUCATE	0.135	0.070	-0.122	-0.120	-0.108
	AGE	0.194	0.414	0.043	0.099	0.044

0	CORRELATION MATRIX TO BE ANALYZED						
0		B06	B08	B10	B13	A08	A15
+							
	B06	1.000					
	B08	0.573	1.000				
	B10	0.406	0.547	1.000			
	B13	0.473	0.460	0.474	1.000		
	A08	0.397	0.503	0.552	0.473	1.000	
	A15	0.219	0.308	0.343	0.307	0.394	1.000
	A02	0.281	0.363	0.413	0.282	0.470	0.631
	A07	0.361	0.455	0.503	0.373	0.717	0.374
	A12	0.444	0.451	0.448	0.334	0.523	0.238
	A01	0.350	0.451	0.504	0.365	0.781	0.360
	A16	0.420	0.491	0.582	0.411	0.629	0.447
	A25	0.415	0.541	0.637	0.457	0.616	0.367
	A09	0.356	0.515	0.588	0.432	0.796	0.439
	EDUCATE	-0.133	-0.151	-0.159	-0.037	-0.184	-0.085
	AGE	0.098	0.130	0.143	0.083	0.126	-0.015
0	CORRELATION MATRIX TO BE ANALYZED						
0		A02	A07	A12	A01	A16	A25
+							
	A02	1.000					
	A07	0.461	1.000				
	A12	0.321	0.481	1.000			
	A01	0.499	0.643	0.503	1.000		
	A16	0.442	0.596	0.574	0.595	1.000	
	A25	0.430	0.535	0.434	0.548	0.637	1.000
	A09	0.457	0.639	0.459	0.651	0.607	0.562
	EDUCATE	-0.005	-0.109	-0.137	-0.129	-0.186	-0.135
	AGE	-0.039	0.123	0.223	0.119	0.103	0.082
0	CORRELATION MATRIX TO BE ANALYZED						
0		A09	EDUCATE	AGE			
+							
	A09	1.000					
	EDUCATE	-0.159	1.000				
	AGE	0.103	0.028	1.000			

1TITLE TESTING THE MAIN MODEL
0PARAMETER SPECIFICATIONS

0	LAMBDA Y		
0	SERVQUAL	SATISFAC	LOYALTY
+			
EMPATHY	0	0	0
RELIABL	1	0	0
RESPONS	2	0	0
ASSURAN	3	0	0
TANGIBL	4	0	0
D08	0	0	0
D02	0	5	0
D03	0	6	0
D04	0	7	0
D05	0	8	0
D06	0	9	0
D07	0	10	0
D01	0	11	0
D09	0	12	0
F03	0	0	0
F04	0	0	13
F08	0	0	14
F13	0	0	15

0	LAMBDA X					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	EDUCATE	AGE
+						
TOT1	0	0	0	0	0	0
MONTHS	0	0	0	0	0	0
B01	0	0	0	0	0	0
B04	0	0	16	0	0	0
B05	0	0	17	0	0	0
B02	0	0	18	0	0	0
B06	0	0	19	0	0	0
B08	0	0	20	0	0	0
B10	0	0	21	0	0	0
B13	0	0	22	0	0	0
A08	0	0	0	0	0	0
A15	0	0	0	23	0	0
A02	0	0	0	24	0	0
A07	0	0	0	25	0	0
A12	0	0	0	26	0	0
A01	0	0	0	27	0	0
A16	0	0	0	28	0	0
A25	0	0	0	29	0	0
A09	0	0	0	30	0	0
EDUCATE	0	0	0	0	0	0
AGE	0	0	0	0	0	0

0	BETA		
0	SERVQUAL	SATISFAC	LOYALTY
+			
SERVQUAL	0	0	0
SATISFAC	31	0	0
LOYALTY	32	33	0

0	GAMMA					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	EDUCATE	AGE
+						
SERVQUAL	34	35	36	37	0	0
SATISFAC	38	39	40	41	0	0
LOYALTY	0	0	0	0	42	43

0	PHI					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	EDUCATE	AGE
+						
	ACCOUNTS	0				
	MONTHS	44	0			
	EQUITY	45	46	0		
	FIRMCHAR	47	48	49	0	
	EDUCATE	50	51	52	53	0
	AGE	54	55	56	57	58
0	PSI					0
0	SERVQUAL	SATISFAC	LOYALTY			
+						
	59	60	61			
0	THETA EPS					
0	EMPATHY	RELIABL	RESPONS	ASSURAN	TANGIBL	D08
+						
	62	63	64	65	66	67
0	THETA EPS					
0	D02	D03	D04	D05	D06	D07
+						
	68	69	70	71	72	73
0	THETA EPS					
0	D01	D09	F03	F04	F08	F13
+						
	74	75	76	77	78	79
0	THETA DELTA					
0	TOT1	MONTHS	B01	B04	B05	B02
+						
	80	81	82	83	84	85
0	THETA DELTA					
0	B06	B08	B10	B13	A08	A15
+						
	86	87	88	89	90	91
0	THETA DELTA					
0	A02	A07	A12	A01	A16	A25
+						
	92	93	94	95	96	97
0	THETA DELTA					
0	A09	EDUCATE	AGE			
+						
	98	99	100			

1TITLE TESTING THE MAIN MODEL
0INITIAL ESTIMATES (TSLs)

0 LAMBDA Y

0	SERVQUAL	SATISFAC	LOYALTY
+			
EMPATHY	1.000	0.000	0.000
RELIABL	0.952	0.000	0.000
RESPONS	0.815	0.000	0.000
ASSURAN	0.843	0.000	0.000
TANGIBL	0.600	0.000	0.000
D08	0.000	1.000	0.000
D02	0.000	0.890	0.000
D03	0.000	0.782	0.000
D04	0.000	0.777	0.000
D05	0.000	0.845	0.000
D06	0.000	0.847	0.000
D07	0.000	0.974	0.000
D01	0.000	0.911	0.000
D09	0.000	0.957	0.000
F03	0.000	0.000	1.000
F04	0.000	0.000	0.932
F08	0.000	0.000	0.912
F13	0.000	0.000	0.698

0 LAMBDA X

0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	EDUCATE	AGE
+						
TOT1	0.894	0.000	0.000	0.000	0.000	0.000
MONTHS	0.000	0.894	0.000	0.000	0.000	0.000
B01	0.000	0.000	0.744	0.000	0.000	0.000
B04	0.000	0.000	0.810	0.000	0.000	0.000
B05	0.000	0.000	0.551	0.000	0.000	0.000
B02	0.000	0.000	0.797	0.000	0.000	0.000
B06	0.000	0.000	0.533	0.000	0.000	0.000
B08	0.000	0.000	0.668	0.000	0.000	0.000
B10	0.000	0.000	0.770	0.000	0.000	0.000
B13	0.000	0.000	0.541	0.000	0.000	0.000
A08	0.000	0.000	0.000	0.958	0.000	0.000
A15	0.000	0.000	0.000	0.475	0.000	0.000
A02	0.000	0.000	0.000	0.545	0.000	0.000
A07	0.000	0.000	0.000	0.780	0.000	0.000
A12	0.000	0.000	0.000	0.623	0.000	0.000
A01	0.000	0.000	0.000	0.833	0.000	0.000
A16	0.000	0.000	0.000	0.733	0.000	0.000
A25	0.000	0.000	0.000	0.690	0.000	0.000
A09	0.000	0.000	0.000	0.832	0.000	0.000
EDUCATE	0.000	0.000	0.000	0.000	0.894	0.000
AGE	0.000	0.000	0.000	0.000	0.000	0.894

0 BETA

0	SERVQUAL	SATISFAC	LOYALTY
+			
SERVQUAL	0.000	0.000	0.000
SATISFAC	0.540	0.000	0.000
LOYALTY	0.506	0.422	0.000

0 GAMMA

0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	EDUCATE	AGE
+						
SERVQUAL	-0.056	0.079	-0.477	1.196	0.000	0.000
SATISFAC	-0.049	0.062	-0.351	0.737	0.000	0.000
LOYALTY	0.000	0.000	0.000	0.000	-0.020	-0.005

0	COVARIANCE MATRIX OF ETA AND KSI						
0	SERVQUAL	SATISFAC	LOYALTY	ACCOUNTS	MONTHS	EQUITY	
+							
	SERVQUAL	0.794					
	SATISFAC	0.777	0.919				
	LOYALTY	0.732	0.783	0.908			
	ACCOUNTS	0.153	0.157	0.139	1.000		
	MONTHS	0.121	0.143	0.117	0.285	1.000	
	EQUITY	0.605	0.641	0.580	0.144	0.111	
	FIRMCHAR	0.760	0.826	0.736	0.213	0.093	
	EDUCATE	-0.145	-0.157	-0.160	0.168	0.087	
	AGE	0.136	0.152	0.126	0.242	0.517	
0	COVARIANCE MATRIX OF ETA AND KSI						
0	FIRMCHAR	EDUCATE	AGE				
+							
	FIRMCHAR	1.000					
	EDUCATE	-0.199	1.000				
	AGE	0.149	0.035	1.000			
0	PSI						
0	SERVQUAL	SATISFAC	LOYALTY				
+							
		0.172	0.115	0.205			
0	THETA EPS						
0	EMPATHY	RELIABL	RESPONS	ASSURAN	TANGIBL	D08	
+							
		0.206	0.280	0.472	0.436	0.714	
						0.081	
0	THETA EPS						
0	D02	D03	D04	D05	D06	D07	
+							
		0.271	0.437	0.445	0.343	0.341	
						0.128	
0	THETA EPS						
0	D01	D09	F03	F04	F08	F13	
+							
		0.237	0.158	0.093	0.212	0.245	
						0.558	
0	THETA DELTA						
0	TOT1	MONTHS	B01	B04	B05	B02	
+							
		0.200	0.200	0.447	0.345	0.697	
						0.366	
0	THETA DELTA						
0	B06	B08	B10	B13	A08	A15	
+							
		0.716	0.553	0.407	0.707	0.081	
						0.775	
0	THETA DELTA						
0	A02	A07	A12	A01	A16	A25	
+							
		0.703	0.391	0.612	0.306	0.463	
						0.524	
0	THETA DELTA						
0	A09	EDUCATE	AGE				
+							
		0.307	0.200	0.200			
0	SQUARED MULTIPLE CORRELATIONS FOR Y - VARIABLES						
0	EMPATHY	RELIABL	RESPONS	ASSURAN	TANGIBL	D08	
+							
		0.794	0.720	0.528	0.564	0.286	
						0.919	
0	SQUARED MULTIPLE CORRELATIONS FOR Y - VARIABLES						
0	D02	D03	D04	D05	D06	D07	
+							
		0.729	0.563	0.555	0.657	0.659	
						0.872	

```

0      SQUARED MULTIPLE CORRELATIONS FOR Y - VARIABLES
0      D01      D09      F03      F04      F08      F13
+      -----
0      0.763      0.842      0.907      0.788      0.755      0.442
0      TOTAL COEFFICIENT OF DETERMINATION FOR Y - VARIABLES IS 0.998
0      SQUARED MULTIPLE CORRELATIONS FOR X - VARIABLES
0      TOT1      MONTHS      B01      B04      B05      B02
+      -----
0      0.800      0.800      0.553      0.655      0.303      0.634
0      SQUARED MULTIPLE CORRELATIONS FOR X - VARIABLES
0      B06      B08      B10      B13      A08      A15
+      -----
0      0.284      0.447      0.593      0.293      0.919      0.225
0      SQUARED MULTIPLE CORRELATIONS FOR X - VARIABLES
0      A02      A07      A12      A01      A16      A25
+      -----
0      0.297      0.609      0.388      0.694      0.537      0.476
0      SQUARED MULTIPLE CORRELATIONS FOR X - VARIABLES
0      A09      EDUCATE      AGE
+      -----
0      0.693      0.800      0.800
0      TOTAL COEFFICIENT OF DETERMINATION FOR X - VARIABLES IS 1.000
0      SQUARED MULTIPLE CORRELATIONS FOR STRUCTURAL EQUATIONS
0      SERVQUAL      SATISFAC      LOYALTY
+      -----
0      0.783      0.875      0.774

0      TOTAL COEFFICIENT OF DETERMINATION FOR STRUCTURAL EQUATIONS IS
0.844
1TITLE TESTING THE MAIN MODEL
OLISREL ESTIMATES (MAXIMUM LIKELIHOOD)
0      LAMBDA Y
0      SERVQUAL      SATISFAC      LOYALTY
+
0      EMPATHY      1.000      0.000      0.000
0      RELIABL      0.968      0.000      0.000
0      RESPNS      0.822      0.000      0.000
0      ASSURAN      0.877      0.000      0.000
0      TANGIBL      0.660      0.000      0.000
0      D08      0.000      1.000      0.000
0      D02      0.000      0.937      0.000
0      D03      0.000      0.840      0.000
0      D04      0.000      0.824      0.000
0      D05      0.000      0.896      0.000
0      D06      0.000      0.857      0.000
0      D07      0.000      0.996      0.000
0      D01      0.000      0.954      0.000
0      D09      0.000      0.985      0.000
0      F03      0.000      0.000      1.000
0      F04      0.000      0.000      0.978
0      F08      0.000      0.000      0.943
0      F13      0.000      0.000      0.709

```

0	LAMBDA X						
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	EDUCATE	AGE	
+							
	TOT1	0.894	0.000	0.000	0.000	0.000	
	MONTHS	0.000	0.894	0.000	0.000	0.000	
	B01	0.000	0.000	0.744	0.000	0.000	
	B04	0.000	0.000	0.879	0.000	0.000	
	B05	0.000	0.000	0.615	0.000	0.000	
	B02	0.000	0.000	0.828	0.000	0.000	
	B06	0.000	0.000	0.594	0.000	0.000	
	B08	0.000	0.000	0.735	0.000	0.000	
	B10	0.000	0.000	0.832	0.000	0.000	
	B13	0.000	0.000	0.642	0.000	0.000	
	A08	0.000	0.000	0.000	0.958	0.000	
	A15	0.000	0.000	0.000	0.563	0.000	
	A02	0.000	0.000	0.000	0.627	0.000	
	A07	0.000	0.000	0.000	0.827	0.000	
	A12	0.000	0.000	0.000	0.656	0.000	
	A01	0.000	0.000	0.000	0.857	0.000	
	A16	0.000	0.000	0.000	0.824	0.000	
	A25	0.000	0.000	0.000	0.794	0.000	
	A09	0.000	0.000	0.000	0.879	0.000	
	EDUCATE	0.000	0.000	0.000	0.894	0.000	
	AGE	0.000	0.000	0.000	0.000	0.894	
0	BETA						
0	SERVQUAL	SATISFAC	LOYALTY				
+							
	SERVQUAL	0.000	0.000	0.000			
	SATISFAC	0.443	0.000	0.000			
	LOYALTY	0.529	0.400	0.000			
0	GAMMA						
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	EDUCATE	AGE	
+							
	SERVQUAL	0.018	0.040	0.571	0.298	0.000	
	SATISFAC	-0.008	0.039	0.282	0.252	0.000	
	LOYALTY	0.000	0.000	0.000	-0.006	-0.010	
0	COVARIANCE MATRIX OF ETA AND KSI						
0	SERVQUAL	SATISFAC	LOYALTY	ACCOUNTS	MONTHS	EQUITY	
+							
	SERVQUAL	0.850					
	SATISFAC	0.829	0.960				
	LOYALTY	0.780	0.822	0.953			
	ACCOUNTS	0.188	0.188	0.171	1.000		
	MONTHS	0.139	0.155	0.130	0.283	1.000	
	EQUITY	0.851	0.892	0.806	0.163	0.115	
	FIRMCHAR	0.828	0.878	0.789	0.219	0.096	
	EDUCATE	-0.173	-0.186	-0.172	0.163	0.085	
	AGE	0.152	0.165	0.136	0.244	0.508	

0	COVARIANCE MATRIX OF ETA AND KSI						
0	FIRMCHAR	EDUCATE	AGE				
+							
	FIRMCHAR	1.000					
	EDUCATE	-0.216	1.000				
	AGE	0.154	0.031	1.000			
0	PSI						
0	SERVQUAL	SATISFAC	LOYALTY				
+							
		0.108	0.116	0.212			
0	THETA EPS						
0	EMPATHY	RELIABL	RESPONS	ASSURAN	TANGIBL	D08	
+							
		0.245	0.293	0.490	0.419	0.671	
0	THETA EPS					0.145	
0	D02	D03	D04	D05	D06	D07	
+							
		0.249	0.397	0.420	0.313	0.372	
0	THETA EPS					0.152	
0	D01	D09	F03	F04	F08	F13	
+							
		0.222	0.170	0.133	0.170	0.228	
0	THETA DELTA					0.564	
0	TOT1	MONTHS	B01	B04	B05	B02	
+							
		0.204	0.186	0.604	0.324	0.669	
0	THETA DELTA					0.400	
0	B06	B08	B10	B13	A08	A15	
+							
		0.691	0.528	0.394	0.639	0.221	
0	THETA DELTA					0.722	
0	A02	A07	A12	A01	A16	A25	
+							
		0.655	0.399	0.623	0.355	0.404	
0	THETA DELTA					0.446	
0	A09	EDUCATE	AGE				
+							
		0.322	0.204	0.200			
0	SQUARED MULTIPLE CORRELATIONS FOR Y - VARIABLES						
0	EMPATHY	RELIABL	RESPONS	ASSURAN	TANGIBL	D08	
+							
		0.776	0.731	0.540	0.609	0.356	
0	SQUARED MULTIPLE CORRELATIONS FOR Y - VARIABLES					0.869	
0	D02	D03	D04	D05	D06	D07	
+							
		0.772	0.631	0.608	0.711	0.655	
0	SQUARED MULTIPLE CORRELATIONS FOR Y - VARIABLES					0.863	
0	D01	D09	F03	F04	F08	F13	
+							
		0.797	0.846	0.878	0.843	0.788	
						0.459	
0	TOTAL COEFFICIENT OF DETERMINATION FOR Y - VARIABLES IS						
0	SQUARED MULTIPLE CORRELATIONS FOR X - VARIABLES						
0	TOT1	MONTHS	B01	B04	B05	B02	
+							
		0.797	0.811	0.478	0.705	0.361	
0	SQUARED MULTIPLE CORRELATIONS FOR X - VARIABLES					0.631	
0	B06	B08	B10	B13	A08	A15	
+							
		0.338	0.506	0.637	0.393	0.806	
						0.305	


```
- 4 | 0  
- 3 | 65  
- 3 | 4433332221100000  
- 2 | 999888888888777777777777666666666666555555555555555
```

+08

+46

0|9999999999999888888888888888888777777777777777777666666666666666
6555555555555

[illegible]

```
0 111122222222222233333333444
0 55555555556666666666777778888888999999
1 000000011111223444444
1 557778888888999
2 00013
2 55899
3 1
3 6
4
4
5
5 9
```

ORESIDUAL FOR	D02 AND	RELIABL	=	-2.648
ORESIDUAL FOR	D03 AND	EMPATHY	=	-2.666
ORESIDUAL FOR	D03 AND	RELIABL	=	-2.582
ORESIDUAL FOR	D03 AND	D08	=	-2.971
ORESIDUAL FOR	D06 AND	D03	=	-3.006
ORESIDUAL FOR	D07 AND	RESPONS	=	-2.764
ORESIDUAL FOR	D01 AND	D04	=	-2.682
ORESIDUAL FOR	F04 AND	ASSURAN	=	-3.382
ORESIDUAL FOR	F04 AND	D08	=	-2.755
ORESIDUAL FOR	F04 AND	D02	=	-3.225
ORESIDUAL FOR	F04 AND	D06	=	-2.654
ORESIDUAL FOR	F04 AND	D07	=	-3.306
ORESIDUAL FOR	F08 AND	ASSURAN	=	-3.574
ORESIDUAL FOR	F13 AND	F04	=	-3.182
ORESIDUAL FOR	B01 AND	RELIABL	=	-3.316
ORESIDUAL FOR	B01 AND	F04	=	-2.764
ORESIDUAL FOR	B04 AND	TANGIBL	=	-3.275
ORESIDUAL FOR	B05 AND	F04	=	-2.727
ORESIDUAL FOR	B02 AND	D02	=	-2.653
ORESIDUAL FOR	B02 AND	D07	=	-2.785
ORESIDUAL FOR	B02 AND	D09	=	-2.736
ORESIDUAL FOR	B02 AND	F04	=	-2.637
ORESIDUAL FOR	B06 AND	D08	=	-2.713
ORESIDUAL FOR	B06 AND	D07	=	-3.120
ORESIDUAL FOR	B06 AND	D09	=	-3.427
ORESIDUAL FOR	B06 AND	B04	=	-3.230
ORESIDUAL FOR	B08 AND	D07	=	-2.733

ORESIDUAL FOR	B08 AND	D09 =	-3.477
ORESIDUAL FOR	B08 AND	B04 =	-2.726
ORESIDUAL FOR	B13 AND	B04 =	-3.074
ORESIDUAL FOR	A08 AND	D03 =	-2.577
ORESIDUAL FOR	A08 AND	B10 =	-2.659
ORESIDUAL FOR	A15 AND	B01 =	-4.028
ORESIDUAL FOR	A15 AND	A08 =	-2.868
ORESIDUAL FOR	A02 AND	EMPATHY =	-2.891
ORESIDUAL FOR	A02 AND	B01 =	-2.626
ORESIDUAL FOR	A07 AND	D02 =	-2.599
ORESIDUAL FOR	A07 AND	D03 =	-3.044
ORESIDUAL FOR	A07 AND	B02 =	-2.981
ORESIDUAL FOR	A12 AND	TANGIBL =	-2.674
ORESIDUAL FOR	A12 AND	D09 =	-2.606
ORESIDUAL FOR	A12 AND	A15 =	-2.822
ORESIDUAL FOR	A01 AND	RELIABL =	-2.983
ORESIDUAL FOR	A01 AND	RESPONS =	-2.833
ORESIDUAL FOR	A01 AND	TANGIBL =	-3.329
ORESIDUAL FOR	A01 AND	D05 =	-2.779
ORESIDUAL FOR	A01 AND	F04 =	-2.641
ORESIDUAL FOR	A01 AND	B10 =	-2.785
ORESIDUAL FOR	A01 AND	B13 =	-2.895
ORESIDUAL FOR	A01 AND	A15 =	-2.810
ORESIDUAL FOR	A16 AND	TANGIBL =	-2.706
ORESIDUAL FOR	A09 AND	RELIABL =	-2.678
ORESIDUAL FOR	A09 AND	B06 =	-2.605
ORESIDUAL FOR	A09 AND	A25 =	-2.603
ORESIDUAL FOR	AGE AND	A02 =	-2.654
-LARGEST POSITIVE STANDARDIZED RESIDUALS			
ORESIDUAL FOR	B08 AND	B06 =	3.128
ORESIDUAL FOR	A15 AND	TANGIBL =	2.755
ORESIDUAL FOR	A15 AND	D05 =	2.949
ORESIDUAL FOR	A02 AND	A15 =	5.939
ORESIDUAL FOR	A12 AND	D06 =	3.577
ORESIDUAL FOR	AGE AND	A12 =	2.888

1TITLE TESTING THE MAIN MODEL
-STANDARD ERRORS

0	LAMBDA Y		
0	SERVQUAL	SATISFAC	LOYALTY
+			
EMPATHY	0.000	0.000	0.000
RELIABL	0.049	0.000	0.000
RESPONS	0.054	0.000	0.000
ASSURAN	0.052	0.000	0.000
TANGIBL	0.059	0.000	0.000
D08	0.000	0.000	0.000
D02	0.000	0.038	0.000
D03	0.000	0.043	0.000
D04	0.000	0.044	0.000
D05	0.000	0.040	0.000
D06	0.000	0.043	0.000
D07	0.000	0.034	0.000
D01	0.000	0.037	0.000
D09	0.000	0.034	0.000
F03	0.000	0.000	0.000
F04	0.000	0.000	0.035
F08	0.000	0.000	0.038
F13	0.000	0.000	0.050

0	LAMBDA X					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	EDUCATE	AGE
+						
TOT1	0.000	0.000	0.000	0.000	0.000	0.000
MONTHS	0.000	0.000	0.000	0.000	0.000	0.000
B01	0.000	0.000	0.000	0.000	0.000	0.000
B04	0.000	0.000	0.043	0.000	0.000	0.000
B05	0.000	0.000	0.053	0.000	0.000	0.000
B02	0.000	0.000	0.045	0.000	0.000	0.000
B06	0.000	0.000	0.054	0.000	0.000	0.000
B08	0.000	0.000	0.049	0.000	0.000	0.000
B10	0.000	0.000	0.045	0.000	0.000	0.000
B13	0.000	0.000	0.052	0.000	0.000	0.000
A08	0.000	0.000	0.000	0.000	0.000	0.000
A15	0.000	0.000	0.000	0.053	0.000	0.000
A02	0.000	0.000	0.000	0.051	0.000	0.000
A07	0.000	0.000	0.000	0.043	0.000	0.000
A12	0.000	0.000	0.000	0.051	0.000	0.000
A01	0.000	0.000	0.000	0.042	0.000	0.000
A16	0.000	0.000	0.000	0.043	0.000	0.000
A25	0.000	0.000	0.000	0.045	0.000	0.000
A09	0.000	0.000	0.000	0.040	0.000	0.000
EDUCATE	0.000	0.000	0.000	0.000	0.000	0.000
AGE	0.000	0.000	0.000	0.000	0.000	0.000

0	BETA					
0	SERVQUAL	SATISFAC	LOYALTY			
+						
SERVQUAL	0.000	0.000	0.000			
SATISFAC	0.116	0.000	0.000			
LOYALTY	0.120	0.110	0.000			
0	GAMMA					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	EDUCATE	AGE
+						
SERVQUAL	0.035	0.034	0.104	0.103	0.000	0.000
SATISFAC	0.031	0.030	0.118	0.091	0.000	0.000
LOYALTY	0.000	0.000	0.000	0.000	0.037	0.036

0	PHI					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	EDUCATE	AGE
+						
	ACCOUNTS	0.000				
	MONTHS	0.076	0.000			
	EQUITY	0.069	0.069			
	FIRMCHAR	0.068	0.015	0.000		
	EDUCATE	0.075	0.068	0.068	0.000	
	AGE	0.076	0.079	0.068	0.074	0.000
0	PSI					
0	SERVQUAL	SATISFAC	LOYALTY			
+						
	0.021	0.016	0.026			
0	THETA EPS					
0	EMPATHY	RELIABL	RESPONS	ASSURAN	TANGIBL	D08
+						
	0.026	0.029	0.044	0.039	0.058	0.015
0	THETA EPS					
0	D02	D03	D04	D05	D06	D07
+						
	0.023	0.035	0.037	0.028	0.033	0.015
0	THETA EPS					
0	D01	D09	F03	F04	F08	F13
+						
	0.021	0.017	0.018	0.020	0.024	0.050
0	THETA DELTA					
0	TOT1	MONTHS	B01	B04	B05	B02
+						
	0.084	0.082	0.054	0.032	0.058	0.038
0	THETA DELTA					
0	B06	B08	B10	B13	A08	A15
+						
	0.060	0.047	0.037	0.056	0.023	0.062
0	THETA DELTA					
0	A02	A07	A12	A01	A16	A25
+						
	0.057	0.037	0.054	0.033	0.037	0.040
0	THETA DELTA					
0	A09	EDUCATE	AGE			
+						
	0.031	0.084	0.084			

1TITLE TESTING THE MAIN MODEL

0 CORRELATIONS OF ESTIMATES

0	LY 2,1	LY 3,1	LY 4,1	LY 5,1	LY 7,2	LY 8,2
+						
LY 2,1	1.000					
LY 3,1	0.338	1.000				
LY 4,1	0.373	0.285	1.000			
LY 5,1	0.250	0.191	0.211	1.000		
LY 7,2	0.000	0.000	0.000	0.000	1.000	
LY 8,2	0.000	0.000	0.000	0.000	0.265	1.000
LY 9,2	0.000	0.000	0.000	0.000	0.255	0.199
LY 10,2	0.000	0.000	0.000	0.000	0.304	0.237
LY 11,2	0.000	0.000	0.000	0.000	0.276	0.215
LY 12,2	0.000	0.000	0.000	0.000	0.407	0.317
LY 13,2	0.000	0.000	0.000	0.000	0.356	0.278
LY 14,2	0.000	0.000	0.000	0.000	0.393	0.306
LY 16,3	0.000	0.000	0.000	0.000	0.000	0.000
LY 17,3	0.000	0.000	0.000	0.000	0.000	0.000
LY 18,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 4,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 5,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 6,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 7,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 8,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 9,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 10,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 12,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 13,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 14,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 15,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 16,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 17,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 18,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 19,4	0.000	0.000	0.000	0.000	0.000	0.000
BE 2,1	0.090	0.073	0.080	0.055	-0.052	-0.041
BE 3,1	0.101	0.081	0.088	0.061	0.000	-0.001
BE 3,2	-0.004	-0.007	-0.006	-0.006	0.050	0.039
GA 1,1	-0.012	-0.009	-0.010	-0.007	0.000	0.000
GA 1,2	-0.026	-0.020	-0.022	-0.014	0.000	0.000
GA 1,3	-0.121	-0.092	-0.102	-0.068	0.000	0.000
GA 1,4	-0.064	-0.048	-0.053	-0.036	0.000	0.000
GA 2,1	0.000	-0.001	-0.001	-0.001	0.003	0.003
GA 2,2	-0.001	-0.001	-0.001	-0.001	-0.018	-0.014
GA 2,3	-0.003	-0.005	-0.005	-0.004	-0.033	-0.026
GA 2,4	-0.002	-0.003	-0.003	-0.003	-0.038	-0.029
GA 3,5	0.000	0.000	0.000	0.000	0.000	0.000
GA 3,6	0.000	0.000	0.000	0.000	0.000	0.000
PH 2,1	0.000	0.000	0.000	0.000	0.000	0.000
PH 3,1	0.000	0.000	0.000	0.000	0.000	0.000
PH 3,2	0.000	0.000	0.000	0.000	0.000	0.000
PH 4,1	0.000	0.000	0.000	0.000	0.000	0.000
PH 4,2	0.000	0.000	0.000	0.000	0.000	0.000
PH 4,3	0.000	0.000	0.000	0.000	0.000	0.000
PH 5,1	0.000	0.000	0.000	0.000	0.000	0.000
PH 5,2	0.000	0.000	0.000	0.000	0.000	0.000
PH 5,3	0.000	0.000	0.000	0.000	0.000	0.000
PH 5,4	0.000	0.000	0.000	0.000	0.000	0.000
PH 6,1	0.000	0.000	0.000	0.000	0.000	0.000
PH 6,2	0.000	0.000	0.000	0.000	0.000	0.000
PH 6,3	0.000	0.000	0.000	0.000	0.000	0.000
PH 6,4	0.000	0.000	0.000	0.000	0.000	0.000
PH 6,5	0.000	0.000	0.000	0.000	0.000	0.000

PS 1,1	-0.234	-0.184	-0.203	-0.138	0.000	0.000
PS 2,2	-0.002	-0.003	-0.003	-0.003	-0.205	-0.160
PS 3,3	-0.001	-0.002	-0.002	-0.001	0.000	0.000
TE 1,1	0.125	0.095	0.105	0.070	0.000	0.000
TE 2,2	-0.118	-0.001	-0.001	-0.001	0.000	0.000
TE 3,3	0.000	-0.080	-0.001	0.000	0.000	0.000
TE 4,4	0.000	-0.001	-0.091	-0.001	0.000	0.000
TE 5,5	0.000	0.000	0.000	-0.057	0.000	0.000
TE 6,6	0.000	0.000	0.000	0.000	0.064	0.049
TE 7,7	0.000	0.000	0.000	0.000	-0.058	-0.001
TE 8,8	0.000	0.000	0.000	0.000	0.000	-0.043
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TE 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TE 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TE 12,12	0.000	0.000	0.000	0.000	-0.001	-0.001
TE 13,13	0.000	0.000	0.000	0.000	-0.001	-0.001
TE 14,14	0.000	0.000	0.000	0.000	-0.001	-0.001
TE 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TE 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TE 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TE 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TD 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TD 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TD 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TD 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TD 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TD 14,14	0.000	0.000	0.000	0.000	0.000	0.000
TD 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TD 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TD 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TD 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 19,19	0.000	0.000	0.000	0.000	0.000	0.000
TD 20,20	0.000	0.000	0.000	0.000	0.000	0.000
TD 21,21	0.000	0.000	0.000	0.000	0.000	0.000

0 0 +	CORRELATIONS OF ESTIMATES					
	LY 9,2	LY 10,2	LY 11,2	LY 12,2	LY 13,2	LY 14,2
LY 9,2	1.000					
LY 10,2	0.228	1.000				
LY 11,2	0.207	0.247	1.000			
LY 12,2	0.305	0.364	0.330	1.000		
LY 13,2	0.267	0.319	0.289	0.426	1.000	
LY 14,2	0.295	0.352	0.319	0.470	0.412	1.000
LY 16,3	0.000	0.000	0.000	0.000	0.000	0.000
LY 17,3	0.000	0.000	0.000	0.000	0.000	0.000
LY 18,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 4,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 5,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 6,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 7,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 8,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 9,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 10,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 12,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 13,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 14,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 15,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 16,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 17,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 18,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 19,4	0.000	0.000	0.000	0.000	0.000	0.000
BE 2,1	-0.039	-0.047	-0.043	-0.063	-0.055	-0.061
BE 3,1	0.000	-0.001	-0.001	0.000	0.000	0.000
BE 3,2	0.038	0.045	0.041	0.059	0.052	0.058
GA 1,1	0.000	0.000	0.000	0.000	0.000	0.000
GA 1,2	0.000	0.000	0.000	0.000	0.000	0.000
GA 1,3	0.000	0.000	0.000	0.000	0.000	0.000
GA 1,4	0.000	0.000	0.000	0.000	0.000	0.000
GA 2,1	0.003	0.003	0.003	0.004	0.004	0.004
GA 2,2	-0.014	-0.016	-0.015	-0.022	-0.019	-0.021
GA 2,3	-0.025	-0.029	-0.027	-0.039	-0.034	-0.038
GA 2,4	-0.028	-0.034	-0.031	-0.045	-0.040	-0.044
GA 3,5	0.000	0.000	0.000	0.000	0.000	0.000
GA 3,6	0.000	0.000	0.000	0.000	0.000	0.000
PH 2,1	0.000	0.000	0.000	0.000	0.000	0.000
PH 3,1	0.000	0.000	0.000	0.000	0.000	0.000
PH 3,2	0.000	0.000	0.000	0.000	0.000	0.000
PH 4,1	0.000	0.000	0.000	0.000	0.000	0.000
PH 4,2	0.000	0.000	0.000	0.000	0.000	0.000
PH 4,3	0.000	0.000	0.000	0.000	0.000	0.000
PH 5,1	0.000	0.000	0.000	0.000	0.000	0.000
PH 5,2	0.000	0.000	0.000	0.000	0.000	0.000
PH 5,3	0.000	0.000	0.000	0.000	0.000	0.000
PH 5,4	0.000	0.000	0.000	0.000	0.000	0.000
PH 6,1	0.000	0.000	0.000	0.000	0.000	0.000
PH 6,2	0.000	0.000	0.000	0.000	0.000	0.000
PH 6,3	0.000	0.000	0.000	0.000	0.000	0.000
PH 6,4	0.000	0.000	0.000	0.000	0.000	0.000
PH 6,5	0.000	0.000	0.000	0.000	0.000	0.000
PS 1,1	0.000	0.000	0.000	0.000	0.000	0.000
PS 2,2	-0.154	-0.184	-0.167	-0.244	-0.215	-0.236
PS 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TE 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TE 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 4,4	0.000	0.000	0.000	0.000	0.000	0.000

TE 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TE 6,6	0.047	0.057	0.051	0.078	0.067	0.074
TE 7,7	-0.001	-0.001	-0.001	0.000	-0.001	0.000
TE 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TE 9,9	-0.041	0.000	0.000	0.000	0.000	0.000
TE 10,10	0.000	-0.050	0.000	0.000	0.000	0.000
TE 11,11	0.000	0.000	-0.045	0.000	0.000	0.000
TE 12,12	-0.001	-0.001	-0.001	-0.077	-0.001	-0.001
TE 13,13	-0.001	-0.001	-0.001	0.000	-0.062	0.000
TE 14,14	-0.001	-0.001	-0.001	0.000	-0.001	-0.072
TE 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TE 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TE 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TE 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TD 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TD 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TD 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TD 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TD 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TD 14,14	0.000	0.000	0.000	0.000	0.000	0.000
TD 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TD 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TD 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TD 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 19,19	0.000	0.000	0.000	0.000	0.000	0.000
TD 20,20	0.000	0.000	0.000	0.000	0.000	0.000
TD 21,21	0.000	0.000	0.000	0.000	0.000	0.000

0 0 +	CORRELATIONS OF ESTIMATES					
	LY 16,3	LY 17,3	LY 18,3	LX 4,3	LX 5,3	LX 6,3
LY 16,3	1.000					
LY 17,3	0.396	1.000				
LY 18,3	0.224	0.201	1.000			
LX 4,3	0.000	0.000	0.000	1.000		
LX 5,3	0.000	0.000	0.000	0.183	1.000	
LX 6,3	0.000	0.000	0.000	0.288	0.163	1.000
LX 7,3	0.000	0.000	0.000	0.175	0.099	0.156
LX 8,3	0.000	0.000	0.000	0.236	0.134	0.211
LX 9,3	0.000	0.000	0.000	0.291	0.165	0.259
LX 10,3	0.000	0.000	0.000	0.194	0.110	0.173
LX 12,4	0.000	0.000	0.000	0.089	0.050	0.079
LX 13,4	0.000	0.000	0.000	0.103	0.058	0.092
LX 14,4	0.000	0.000	0.000	0.161	0.091	0.144
LX 15,4	0.000	0.000	0.000	0.109	0.062	0.098
LX 16,4	0.000	0.000	0.000	0.174	0.098	0.155
LX 17,4	0.000	0.000	0.000	0.160	0.091	0.143
LX 18,4	0.000	0.000	0.000	0.149	0.084	0.133
LX 19,4	0.000	0.000	0.000	0.184	0.104	0.164
BE 2,1	0.000	0.000	0.000	0.011	0.004	0.008
BE 3,1	-0.068	-0.061	-0.034	0.000	0.000	0.000
BE 3,2	-0.056	-0.050	-0.028	0.000	0.000	0.000
GA 1,1	0.000	0.000	0.000	-0.006	-0.003	-0.005
GA 1,2	0.000	0.000	0.000	0.005	0.002	0.004
GA 1,3	0.000	0.000	0.000	0.054	0.035	0.051
GA 1,4	0.000	0.000	0.000	0.057	0.028	0.048
GA 2,1	0.000	0.000	0.000	-0.004	-0.002	-0.004
GA 2,2	0.000	0.000	0.000	0.001	0.001	0.001
GA 2,3	0.000	0.000	0.000	0.017	0.012	0.017
GA 2,4	0.000	0.000	0.000	0.039	0.020	0.034
GA 3,5	0.002	0.002	0.001	0.000	0.000	0.000
GA 3,6	0.004	0.004	0.002	0.000	0.000	0.000
PH 2,1	0.000	0.000	0.000	0.005	0.003	0.005
PH 3,1	0.000	0.000	0.000	0.006	0.004	0.006
PH 3,2	0.000	0.000	0.000	0.030	0.017	0.026
PH 4,1	0.000	0.000	0.000	-0.002	-0.001	-0.002
PH 4,2	0.000	0.000	0.000	0.034	0.019	0.030
PH 4,3	0.000	0.000	0.000	0.111	0.067	0.102
PH 5,1	0.000	0.000	0.000	-0.005	-0.003	-0.005
PH 5,2	0.000	0.000	0.000	-0.009	-0.005	-0.008
PH 5,3	0.000	0.000	0.000	-0.031	-0.018	-0.028
PH 5,4	0.000	0.000	0.000	-0.030	-0.017	-0.027
PH 6,1	0.000	0.000	0.000	0.004	0.002	0.003
PH 6,2	0.000	0.000	0.000	0.006	0.003	0.005
PH 6,3	0.000	0.000	0.000	0.022	0.013	0.020
PH 6,4	0.000	0.000	0.000	0.021	0.012	0.019
PH 6,5	0.000	0.000	0.000	-0.008	-0.005	-0.007
PS 1,1	0.000	0.000	0.000	0.014	0.005	0.011
PS 2,2	0.000	0.000	0.000	0.004	0.001	0.003
PS 3,3	-0.263	-0.238	-0.136	0.000	0.000	0.000
TE 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TE 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TE 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TE 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TE 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TE 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TE 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TE 10,10	0.000	0.000	0.000	0.000	0.000	0.000

TE 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TE 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TE 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TE 14,14	0.000	0.000	0.000	0.000	0.000	0.000
TE 15,15	0.214	0.181	0.096	0.000	0.000	0.000
TE 16,16	-0.195	-0.024	-0.017	0.000	0.000	0.000
TE 17,17	-0.011	-0.147	-0.010	0.000	0.000	0.000
TE 18,18	-0.002	-0.003	-0.064	0.000	0.000	0.000
TD 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,2	0.000	0.000	0.000	0.004	0.003	0.004
TD 3,3	0.000	0.000	0.000	0.022	0.012	0.019
TD 4,4	0.000	0.000	0.000	-0.118	0.002	0.003
TD 5,5	0.000	0.000	0.000	0.001	-0.060	0.001
TD 6,6	0.000	0.000	0.000	0.003	0.001	-0.101
TD 7,7	0.000	0.000	0.000	0.001	0.000	0.001
TD 8,8	0.000	0.000	0.000	0.002	0.001	0.001
TD 9,9	0.000	0.000	0.000	0.003	0.001	0.002
TD 10,10	0.000	0.000	0.000	0.001	0.000	0.001
TD 11,11	0.000	0.000	0.000	0.043	0.024	0.039
TD 12,12	0.000	0.000	0.000	-0.001	0.000	0.000
TD 13,13	0.000	0.000	0.000	-0.001	0.000	-0.001
TD 14,14	0.000	0.000	0.000	-0.002	-0.001	-0.002
TD 15,15	0.000	0.000	0.000	-0.001	0.000	-0.001
TD 16,16	0.000	0.000	0.000	-0.003	-0.002	-0.002
TD 17,17	0.000	0.000	0.000	-0.002	-0.001	-0.002
TD 18,18	0.000	0.000	0.000	-0.002	-0.001	-0.002
TD 19,19	0.000	0.000	0.000	-0.003	-0.002	-0.003
TD 20,20	0.000	0.000	0.000	0.008	0.005	0.007
TD 21,21	0.000	0.000	0.000	0.004	0.002	0.004

0 CORRELATIONS OF ESTIMATES

0 LX 7,3 LX 8,3 LX 9,3 LX 10,3 LX 12,4 LX 13,4

+						
LX 7,3	1.000					
LX 8,3	0.128	1.000				
LX 9,3	0.157	0.213	1.000			
LX 10,3	0.105	0.142	0.175	1.000		
LX 12,4	0.048	0.065	0.080	0.053	1.000	
LX 13,4	0.055	0.075	0.092	0.062	0.071	1.000
LX 14,4	0.087	0.118	0.145	0.097	0.112	0.129
LX 15,4	0.059	0.080	0.098	0.066	0.076	0.087
LX 16,4	0.094	0.127	0.156	0.104	0.120	0.139
LX 17,4	0.087	0.117	0.144	0.096	0.111	0.128
LX 18,4	0.081	0.109	0.134	0.090	0.103	0.119
LX 19,4	0.099	0.134	0.165	0.110	0.127	0.146
BE 2,1	0.004	0.006	0.008	0.004	-0.001	-0.001
BE 3,1	0.000	0.000	0.000	0.000	0.000	0.000
BE 3,2	0.000	0.000	0.000	0.000	0.000	0.000
GA 1,1	-0.002	-0.003	-0.005	-0.003	0.001	0.001
GA 1,2	0.002	0.003	0.004	0.002	0.000	0.000
GA 1,3	0.034	0.044	0.051	0.037	0.025	0.029
GA 1,4	0.026	0.037	0.048	0.030	0.015	0.018
GA 2,1	-0.002	-0.003	-0.004	-0.002	0.000	0.000
GA 2,2	0.001	0.001	0.001	0.001	0.000	0.000
GA 2,3	0.012	0.015	0.017	0.013	0.011	0.013
GA 2,4	0.019	0.027	0.034	0.022	0.015	0.018
GA 3,5	0.000	0.000	0.000	0.000	0.000	0.000
GA 3,6	0.000	0.000	0.000	0.000	0.000	0.000
PH 2,1	0.003	0.004	0.005	0.003	0.003	0.004
PH 3,1	0.003	0.005	0.006	0.004	0.024	0.028
PH 3,2	0.016	0.022	0.027	0.018	0.005	0.006
PH 4,1	-0.001	-0.002	-0.002	-0.001	0.021	0.024
PH 4,2	0.018	0.024	0.030	0.020	0.007	0.008

PH 4,3	0.064	0.086	0.103	0.071	0.057	0.066
PH 5,1	-0.003	-0.004	-0.005	-0.003	-0.008	-0.009
PH 5,2	-0.005	-0.007	-0.008	-0.006	-0.003	-0.003
PH 5,3	-0.017	-0.023	-0.028	-0.019	-0.019	-0.022
PH 5,4	-0.016	-0.022	-0.027	-0.018	-0.018	-0.021
PH 6,1	0.002	0.003	0.003	0.002	0.005	0.006
PH 6,2	0.003	0.004	0.005	0.004	0.002	0.002
PH 6,3	0.012	0.016	0.020	0.013	0.014	0.016
PH 6,4	0.011	0.015	0.019	0.013	0.013	0.015
PH 6,5	-0.004	-0.006	-0.007	-0.005	-0.005	-0.006
PS 1,1	0.005	0.008	0.011	0.006	-0.001	-0.001
PS 2,2	0.001	0.002	0.003	0.002	0.000	0.000
PS 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TE 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TE 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TE 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TE 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TE 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TE 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TE 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TE 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TE 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TE 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TE 14,14	0.000	0.000	0.000	0.000	0.000	0.000
TE 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TE 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TE 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TE 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	0.000	0.000	0.000	0.000	0.006	0.007
TD 2,2	0.002	0.003	0.004	0.003	0.001	0.001
TD 3,3	0.012	0.016	0.020	0.013	0.006	0.006
TD 4,4	0.002	0.002	0.003	0.002	0.000	0.000
TD 5,5	0.000	0.001	0.001	0.000	0.000	0.000
TD 6,6	0.001	0.002	0.002	0.001	0.000	0.000
TD 7,7	-0.057	0.000	0.001	0.000	0.000	0.000
TD 8,8	0.001	-0.079	0.001	0.001	0.000	0.000
TD 9,9	0.001	0.002	-0.102	0.001	0.000	0.000
TD 10,10	0.000	0.001	0.001	-0.064	0.000	0.000
TD 11,11	0.023	0.032	0.039	0.026	0.035	0.040
TD 12,12	0.000	0.000	0.000	0.000	-0.044	0.000
TD 13,13	0.000	-0.001	-0.001	0.000	0.000	-0.051
TD 14,14	-0.001	-0.002	-0.002	-0.001	0.000	0.000
TD 15,15	0.000	-0.001	-0.001	-0.001	0.000	0.000
TD 16,16	-0.001	-0.002	-0.002	-0.002	0.000	0.000
TD 17,17	-0.001	-0.002	-0.002	-0.001	0.000	0.000
TD 18,18	-0.001	-0.001	-0.002	-0.001	0.000	0.000
TD 19,19	-0.002	-0.002	-0.003	-0.002	0.000	0.000
TD 20,20	0.004	0.006	0.007	0.005	0.005	0.006
TD 21,21	0.002	0.003	0.004	0.002	0.003	0.003

0 0 +	CORRELATIONS OF ESTIMATES					
	LX 14,4	LX 15,4	LX 16,4	LX 17,4	LX 18,4	LX 19,4
LX 14,4	1.000					
LX 15,4	0.137	1.000				
LX 16,4	0.218	0.148	1.000			
LX 17,4	0.201	0.136	0.216	1.000		
LX 18,4	0.187	0.127	0.202	0.186	1.000	
LX 19,4	0.230	0.156	0.247	0.228	0.213	1.000
BE 2,1	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
BE 3,1	0.000	0.000	0.000	0.000	0.000	0.000
BE 3,2	0.000	0.000	0.000	0.000	0.000	0.000
GA 1,1	0.001	0.001	0.001	0.001	0.001	0.002
GA 1,2	0.000	0.000	0.000	0.000	0.000	-0.001
GA 1,3	0.046	0.031	0.050	0.046	0.043	0.053
GA 1,4	0.027	0.019	0.029	0.027	0.025	0.030
GA 2,1	0.000	0.000	0.000	0.000	0.000	0.000
GA 2,2	0.000	0.000	0.000	0.000	0.000	0.000
GA 2,3	0.021	0.014	0.023	0.021	0.019	0.024
GA 2,4	0.027	0.019	0.029	0.027	0.025	0.031
GA 3,5	0.000	0.000	0.000	0.000	0.000	0.000
GA 3,6	0.000	0.000	0.000	0.000	0.000	0.000
PH 2,1	0.006	0.004	0.006	0.006	0.005	0.007
PH 3,1	0.044	0.030	0.047	0.043	0.040	0.049
PH 3,2	0.010	0.007	0.011	0.010	0.009	0.011
PH 4,1	0.038	0.026	0.040	0.037	0.035	0.043
PH 4,2	0.012	0.008	0.013	0.012	0.012	0.014
PH 4,3	0.102	0.070	0.110	0.102	0.095	0.115
PH 5,1	-0.014	-0.009	-0.015	-0.014	-0.013	-0.016
PH 5,2	-0.005	-0.004	-0.006	-0.005	-0.005	-0.006
PH 5,3	-0.035	-0.024	-0.037	-0.035	-0.032	-0.040
PH 5,4	-0.034	-0.023	-0.036	-0.033	-0.031	-0.038
PH 6,1	0.010	0.007	0.011	0.010	0.009	0.011
PH 6,2	0.004	0.002	0.004	0.004	0.003	0.004
PH 6,3	0.025	0.017	0.027	0.024	0.023	0.028
PH 6,4	0.024	0.016	0.026	0.024	0.022	0.027
PH 6,5	-0.009	-0.006	-0.010	-0.009	-0.009	-0.011
PS 1,1	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
PS 2,2	0.000	0.000	0.000	0.000	0.000	0.000
PS 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TE 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TE 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TE 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TE 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TE 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TE 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TE 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TE 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TE 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TE 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TE 14,14	0.000	0.000	0.000	0.000	0.000	0.000
TE 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TE 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TE 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TE 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	0.011	0.007	0.011	0.010	0.010	0.012
TD 2,2	0.002	0.001	0.002	0.002	0.001	0.002
TD 3,3	0.010	0.007	0.011	0.010	0.009	0.011
TD 4,4	0.000	0.000	0.000	0.000	0.000	0.000

TD 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TD 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TD 11,11	0.064	0.043	0.069	0.063	0.059	0.073
TD 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TD 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TD 14,14	-0.085	0.000	0.001	0.001	0.000	0.001
TD 15,15	0.000	-0.054	0.000	0.000	0.000	0.000
TD 16,16	0.001	0.000	-0.093	0.001	0.000	0.001
TD 17,17	0.001	0.000	0.001	-0.084	0.000	0.001
TD 18,18	0.000	0.000	0.001	0.000	-0.077	0.001
TD 19,19	0.001	0.000	0.001	0.001	0.001	-0.100
TD 20,20	0.009	0.006	0.010	0.009	0.009	0.011
TD 21,21	0.005	0.003	0.005	0.005	0.004	0.005

0 CORRELATIONS OF ESTIMATES

0	BE 2,1	BE 3,1	BE 3,2	GA 1,1	GA 1,2	GA 1,3
+						
BE 2,1	1.000					
BE 3,1	0.203	1.000				
BE 3,2	-0.203	-0.929	1.000			
GA 1,1	0.005	-0.013	0.008	1.000		
GA 1,2	-0.014	0.005	-0.005	-0.337	1.000	
GA 1,3	-0.065	-0.037	0.009	0.188	-0.131	1.000
GA 1,4	0.029	-0.001	-0.011	-0.243	0.125	-0.917
GA 2,1	-0.087	-0.011	0.012	-0.080	0.023	-0.009
GA 2,2	-0.144	-0.032	0.030	0.022	-0.067	0.017
GA 2,3	-0.655	-0.104	0.104	-0.015	0.015	-0.016
GA 2,4	-0.247	-0.074	0.072	0.016	-0.005	0.084
GA 3,5	-0.004	0.042	0.030	-0.042	-0.002	-0.014
GA 3,6	0.004	-0.034	-0.031	-0.009	-0.094	0.013
PH 2,1	-0.003	0.000	0.000	-0.007	0.027	0.000
PH 3,1	-0.002	0.000	0.000	-0.101	0.008	0.004
PH 3,2	0.000	0.000	0.000	0.004	-0.095	0.007
PH 4,1	0.000	0.000	0.000	-0.022	0.001	-0.001
PH 4,2	0.000	0.000	0.000	0.002	-0.023	0.010
PH 4,3	-0.016	0.000	0.000	0.018	-0.012	0.214
PH 5,1	0.000	0.000	0.000	0.010	-0.001	-0.001
PH 5,2	-0.001	0.000	0.000	-0.004	0.011	-0.004
PH 5,3	0.001	0.000	0.000	-0.022	-0.002	-0.023
PH 5,4	0.000	0.000	0.000	-0.005	-0.001	-0.008
PH 6,1	-0.001	0.001	0.000	0.013	0.008	0.001
PH 6,2	-0.006	0.001	0.001	-0.016	0.061	-0.002
PH 6,3	0.000	0.002	0.001	-0.005	-0.047	0.017
PH 6,4	0.000	0.001	0.001	-0.001	-0.012	0.006
PH 6,5	0.000	0.000	0.000	0.001	0.004	-0.002
PS 1,1	-0.181	-0.174	0.126	-0.021	0.015	-0.155
PS 2,2	-0.095	-0.054	0.033	0.000	0.000	0.006
PS 3,3	-0.020	-0.128	0.155	0.002	-0.002	0.004
TE 1,1	0.139	0.114	-0.091	-0.003	-0.004	-0.024
TE 2,2	0.084	0.063	-0.067	0.000	0.003	0.008
TE 3,3	0.032	0.024	-0.025	0.000	0.001	0.003
TE 4,4	0.044	0.033	-0.035	0.000	0.001	0.004
TE 5,5	0.014	0.011	-0.012	0.000	0.000	0.001
TE 6,6	-0.008	-0.013	0.021	0.000	0.000	0.000
TE 7,7	0.001	-0.006	0.005	0.000	0.000	0.000
TE 8,8	0.000	-0.003	0.003	0.000	0.000	0.000
TE 9,9	0.000	-0.002	0.002	0.000	0.000	0.000
TE 10,10	0.001	-0.004	0.004	0.000	0.000	0.000
TE 11,11	0.001	-0.003	0.003	0.000	0.000	0.000

TE 12,12	0.002	-0.012	0.011	0.000	0.000	0.000
TE 13,13	0.001	-0.007	0.006	0.000	0.000	0.000
TE 14,14	0.002	-0.010	0.009	0.000	0.000	0.000
TE 15,15	0.000	-0.019	-0.016	0.000	0.000	0.000
TE 16,16	0.000	0.011	0.009	0.000	0.000	0.000
TE 17,17	0.000	0.006	0.005	0.000	0.000	0.000
TE 18,18	0.000	0.001	0.001	0.000	0.000	0.000
TD 1,1	0.000	0.000	0.000	0.049	-0.011	0.005
TD 2,2	-0.011	0.000	0.001	-0.031	0.103	-0.007
TD 3,3	-0.011	0.000	0.000	0.004	-0.003	0.031
TD 4,4	-0.033	0.000	0.000	0.013	-0.011	0.080
TD 5,5	-0.007	0.000	0.000	0.003	-0.002	0.017
TD 6,6	-0.022	0.000	0.000	0.009	-0.007	0.055
TD 7,7	-0.006	0.000	0.000	0.002	-0.002	0.015
TD 8,8	-0.013	0.000	0.000	0.005	-0.004	0.031
TD 9,9	-0.023	0.000	0.000	0.009	-0.007	0.056
TD 10,10	-0.008	0.000	0.000	0.003	-0.003	0.019
TD 11,11	-0.011	0.000	0.000	-0.007	0.003	-0.017
TD 12,12	-0.001	0.000	0.000	-0.001	0.000	-0.003
TD 13,13	-0.001	0.000	0.000	-0.001	0.000	-0.004
TD 14,14	-0.004	0.000	0.000	-0.003	0.001	-0.011
TD 15,15	-0.001	0.000	0.000	-0.001	0.000	-0.004
TD 16,16	-0.005	0.000	0.000	-0.003	0.001	-0.013
TD 17,17	-0.004	0.000	0.000	-0.003	0.001	-0.011
TD 18,18	-0.003	0.000	0.000	-0.002	0.001	-0.009
TD 19,19	-0.005	0.000	0.000	-0.004	0.001	-0.016
TD 20,20	0.000	-0.001	0.000	0.001	0.000	0.002
TD 21,21	-0.002	0.001	0.001	-0.003	0.022	0.000
0	CORRELATIONS OF ESTIMATES					
0	GA 1,4	GA 2,1	GA 2,2	GA 2,3	GA 2,4	GA 3,5
+						
GA 1,4	1.000					
GA 2,1	0.014	1.000				
GA 2,2	-0.013	-0.324	1.000			
GA 2,3	0.028	0.195	-0.002	1.000		
GA 2,4	-0.073	-0.212	0.156	-0.510	1.000	
GA 3,5	0.019	0.010	0.001	0.005	-0.003	1.000
GA 3,6	-0.009	0.002	0.019	-0.005	0.000	-0.081
PH 2,1	0.000	-0.040	0.053	-0.001	0.006	-0.001
PH 3,1	0.007	-0.070	0.010	0.005	0.008	0.001
PH 3,2	0.001	-0.004	-0.043	-0.001	0.004	0.000
PH 4,1	0.005	-0.046	0.009	-0.003	0.014	0.000
PH 4,2	-0.004	-0.004	-0.019	0.005	-0.003	0.000
PH 4,3	-0.184	0.008	-0.002	0.073	-0.054	-0.001
PH 5,1	-0.003	-0.006	0.005	-0.001	-0.002	-0.005
PH 5,2	0.001	-0.009	0.013	-0.002	0.003	-0.004
PH 5,3	0.011	-0.015	0.000	-0.010	0.004	-0.014
PH 5,4	-0.004	-0.009	0.000	-0.004	-0.004	-0.001
PH 6,1	0.000	-0.013	0.022	-0.001	0.004	0.001
PH 6,2	0.003	-0.024	0.069	0.000	0.006	0.001
PH 6,3	-0.006	-0.006	-0.023	0.007	-0.001	0.002
PH 6,4	0.004	-0.005	-0.010	0.003	0.004	0.001
PH 6,5	-0.002	-0.003	0.006	-0.001	-0.001	0.004
PS 1,1	0.195	0.012	0.023	0.095	0.048	-0.013
PS 2,2	-0.003	0.017	0.011	0.024	0.120	0.002
PS 3,3	-0.001	0.001	0.004	0.011	0.008	-0.011
TE 1,1	-0.011	-0.008	-0.019	-0.069	-0.047	0.005
TE 2,2	0.006	-0.006	-0.014	-0.051	-0.034	0.003
TE 3,3	0.002	-0.002	-0.005	-0.019	-0.013	0.001
TE 4,4	0.003	-0.003	-0.007	-0.026	-0.018	0.002
TE 5,5	0.001	-0.001	-0.002	-0.009	-0.006	0.001
TE 6,6	0.000	0.000	-0.003	-0.005	-0.006	0.001

TE 7,7	0.000	0.000	0.000	0.001	0.001	0.000
TE 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TE 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TE 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TE 12,12	0.000	0.000	0.001	0.001	0.001	0.001
TE 13,13	0.000	0.000	0.000	0.001	0.001	0.000
TE 14,14	0.000	0.000	0.001	0.001	0.001	0.001
TE 15,15	0.000	0.000	0.000	0.000	0.000	0.001
TE 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TE 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TE 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	-0.007	-0.027	0.016	-0.003	0.006	-0.002
TD 2,2	0.006	-0.040	0.118	0.000	0.012	0.000
TD 3,3	-0.025	0.003	0.000	0.020	-0.009	0.000
TD 4,4	-0.082	0.010	-0.001	0.054	-0.033	0.000
TD 5,5	-0.017	0.002	0.000	0.011	-0.007	0.000
TD 6,6	-0.055	0.007	-0.001	0.036	-0.023	0.000
TD 7,7	-0.015	0.002	0.000	0.010	-0.006	0.000
TD 8,8	-0.031	0.004	0.000	0.021	-0.013	0.000
TD 9,9	-0.057	0.007	-0.001	0.037	-0.023	0.000
TD 10,10	-0.019	0.002	0.000	0.013	-0.008	0.000
TD 11,11	0.037	-0.006	0.004	-0.010	0.040	0.001
TD 12,12	0.002	-0.001	0.000	-0.001	0.003	0.000
TD 13,13	0.003	-0.001	0.000	-0.002	0.004	0.000
TD 14,14	0.010	-0.002	0.001	-0.006	0.011	0.000
TD 15,15	0.004	-0.001	0.001	-0.002	0.004	0.000
TD 16,16	0.012	-0.003	0.002	-0.007	0.014	0.000
TD 17,17	0.010	-0.002	0.001	-0.006	0.011	0.000
TD 18,18	0.008	-0.002	0.001	-0.005	0.009	0.000
TD 19,19	0.015	-0.003	0.002	-0.009	0.016	0.000
TD 20,20	0.001	-0.001	0.001	0.001	0.002	-0.013
TD 21,21	0.002	-0.008	0.024	0.000	0.003	0.002
CORRELATIONS OF ESTIMATES						
0	GA 3,6	PH 2,1	PH 3,1	PH 3,2	PH 4,1	PH 4,2
0						
+						
GA 3,6	1.000					
PH 2,1	-0.006	1.000				
PH 3,1	-0.001	0.124	1.000			
PH 3,2	-0.002	0.155	0.218	1.000		
PH 4,1	-0.001	0.120	0.841	0.184	1.000	
PH 4,2	-0.003	0.201	0.185	0.843	0.218	1.000
PH 4,3	0.001	0.007	0.067	0.008	-0.007	0.029
PH 5,1	0.000	0.095	-0.145	-0.025	-0.152	-0.024
PH 5,2	0.000	0.142	-0.021	-0.162	-0.027	-0.179
PH 5,3	0.001	0.026	0.166	0.085	0.142	0.070
PH 5,4	0.000	0.029	0.139	0.071	0.167	0.084
PH 6,1	-0.010	0.433	0.142	0.080	0.161	0.102
PH 6,2	-0.020	0.258	0.041	0.149	0.040	0.154
PH 6,3	-0.019	0.068	0.179	0.406	0.150	0.342
PH 6,4	-0.010	0.087	0.150	0.340	0.176	0.404
PH 6,5	0.001	0.065	-0.010	-0.058	-0.011	-0.064
PS 1,1	0.012	-0.003	-0.001	0.000	-0.001	-0.001
PS 2,2	-0.002	-0.003	-0.002	0.000	-0.001	0.000
PS 3,3	0.015	0.000	0.000	0.000	0.000	0.000
TE 1,1	-0.004	0.000	0.000	0.000	0.000	0.000
TE 2,2	-0.003	0.000	0.000	0.000	0.000	0.000
TE 3,3	-0.001	0.000	0.000	0.000	0.000	0.000
TE 4,4	-0.001	0.000	0.000	0.000	0.000	0.000
TE 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TE 6,6	-0.001	0.000	0.000	0.000	0.000	0.000
TE 7,7	0.000	0.000	0.000	0.000	0.000	0.000

TE 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TE 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TE 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TE 12,12	-0.001	0.000	0.000	0.000	0.000	0.000
TE 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TE 14,14	-0.001	0.000	0.000	0.000	0.000	0.000
TE 15,15	0.001	0.000	0.000	0.000	0.000	0.000
TE 16,16	-0.001	0.000	0.000	0.000	0.000	0.000
TE 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TE 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	-0.002	0.313	0.192	0.042	0.264	0.057
TD 2,2	-0.013	0.312	0.030	0.139	0.026	0.118
TD 3,3	0.000	0.000	0.001	0.003	0.000	0.002
TD 4,4	0.000	0.000	0.003	0.002	0.000	0.000
TD 5,5	0.000	0.000	0.001	0.000	0.000	0.000
TD 6,6	0.000	0.000	0.002	0.001	0.000	0.000
TD 7,7	0.000	0.000	0.001	0.000	0.000	0.000
TD 8,8	0.000	0.000	0.001	0.001	0.000	0.000
TD 9,9	0.000	0.000	0.002	0.001	0.000	0.000
TD 10,10	0.000	0.000	0.001	0.000	0.000	0.000
TD 11,11	0.000	0.001	0.012	0.003	0.013	0.005
TD 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TD 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TD 14,14	0.000	0.000	-0.001	0.000	0.000	0.000
TD 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TD 16,16	0.000	0.000	-0.001	0.000	0.001	0.000
TD 17,17	0.000	0.000	-0.001	0.000	0.000	0.000
TD 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 19,19	0.000	0.000	-0.001	0.000	0.001	0.000
TD 20,20	0.001	0.012	-0.039	-0.020	-0.043	-0.022
TD 21,21	-0.025	0.109	0.030	0.069	0.033	0.075
CORRELATIONS OF ESTIMATES						
PH 4,3	PH 5,1	PH 5,2	PH 5,3	PH 5,4	PH 6,1	
PH 4,3	1.000					
PH 5,1	-0.004	1.000				
PH 5,2	-0.006	0.233	1.000			
PH 5,3	-0.047	0.108	0.079	1.000		
PH 5,4	-0.024	0.155	0.065	0.845	1.000	
PH 6,1	0.003	0.050	0.058	0.026	0.030	1.000
PH 6,2	0.004	0.018	0.048	0.013	0.014	0.278
PH 6,3	0.034	-0.024	-0.066	0.048	0.040	0.155
PH 6,4	0.017	-0.024	-0.072	0.040	0.048	0.207
PH 6,5	-0.006	0.195	0.409	0.113	0.122	0.133
PS 1,1	-0.025	0.000	-0.001	0.002	0.000	-0.002
PS 2,2	-0.005	0.000	-0.001	0.000	0.000	-0.001
PS 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TE 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TE 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TE 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TE 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TE 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TE 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TE 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TE 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TE 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TE 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TE 14,14	0.000	0.000	0.000	0.000	0.000	0.000

TE 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TE 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TE 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TE 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	-0.003	0.184	0.042	0.031	0.044	0.269
TD 2,2	0.002	0.022	0.095	0.010	0.009	0.128
TD 3,3	0.035	0.000	-0.001	-0.003	-0.002	0.000
TD 4,4	0.079	0.000	0.000	-0.004	0.000	0.000
TD 5,5	0.016	0.000	0.000	-0.001	0.000	0.000
TD 6,6	0.054	0.000	0.000	-0.003	0.000	0.000
TD 7,7	0.015	0.000	0.000	-0.001	0.000	0.000
TD 8,8	0.030	0.000	0.000	-0.001	0.000	0.000
TD 9,9	0.055	0.000	0.000	-0.003	0.000	0.000
TD 10,10	0.019	0.000	0.000	-0.001	0.000	0.000
TD 11,11	0.083	-0.004	-0.001	-0.008	-0.011	0.003
TD 12,12	0.004	0.000	0.000	0.000	0.000	0.000
TD 13,13	0.006	0.000	0.000	0.000	0.000	0.000
TD 14,14	0.018	0.000	0.000	0.001	0.000	0.000
TD 15,15	0.007	0.000	0.000	0.000	0.000	0.000
TD 16,16	0.022	0.000	0.000	0.001	0.000	0.000
TD 17,17	0.018	0.000	0.000	0.001	0.000	0.000
TD 18,18	0.015	0.000	0.000	0.001	0.000	0.000
TD 19,19	0.026	0.000	0.000	0.001	-0.001	0.000
TD 20,20	0.006	0.184	0.097	-0.241	-0.261	0.003
TD 21,21	0.003	0.007	0.014	0.008	0.009	0.269
0	CORRELATIONS OF ESTIMATES					
0	PH 6,2	PH 6,3	PH 6,4	PH 6,5	PS 1,1	PS 2,2
+						
PH 6,2	1.000					
PH 6,3	0.127	1.000				
PH 6,4	0.122	0.844	1.000			
PH 6,5	0.073	-0.166	-0.180	1.000		
PS 1,1	-0.004	-0.001	-0.001	0.000	1.000	
PS 2,2	-0.005	0.000	0.000	0.000	0.025	1.000
PS 3,3	0.000	0.000	0.000	0.000	-0.002	0.007
TE 1,1	0.000	0.000	0.000	0.000	-0.190	-0.045
TE 2,2	0.000	0.000	0.000	0.000	-0.091	-0.033
TE 3,3	0.000	0.000	0.000	0.000	-0.035	-0.012
TE 4,4	0.000	0.000	0.000	0.000	-0.047	-0.017
TE 5,5	0.000	0.000	0.000	0.000	-0.016	-0.006
TE 6,6	0.000	0.000	0.000	0.000	0.001	-0.065
TE 7,7	0.000	0.000	0.000	0.000	0.001	-0.012
TE 8,8	0.000	0.000	0.000	0.000	0.000	-0.006
TE 9,9	0.000	0.000	0.000	0.000	0.000	-0.005
TE 10,10	0.000	0.000	0.000	0.000	0.000	-0.008
TE 11,11	0.000	0.000	0.000	0.000	0.000	-0.006
TE 12,12	0.000	0.000	0.000	0.000	0.001	-0.024
TE 13,13	0.000	0.000	0.000	0.000	0.001	-0.014
TE 14,14	0.000	0.000	0.000	0.000	0.001	-0.020
TE 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TE 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TE 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TE 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	0.057	0.033	0.046	0.037	-0.002	-0.001
TD 2,2	0.532	0.044	0.042	0.039	-0.007	-0.009
TD 3,3	0.000	0.002	0.001	-0.001	-0.013	-0.004
TD 4,4	0.000	0.003	0.000	0.000	-0.040	-0.013
TD 5,5	0.000	0.001	0.000	0.000	-0.008	-0.003
TD 6,6	0.000	0.002	0.000	0.000	-0.027	-0.009
TD 7,7	0.000	0.001	0.000	0.000	-0.007	-0.002
TD 8,8	0.000	0.001	0.000	0.000	-0.015	-0.005
TD 9,9	0.000	0.002	0.000	0.000	-0.028	-0.009

TD 10,10	0.000	0.001	0.000	0.000	-0.009	-0.003
TD 11,11	0.001	0.006	0.008	-0.003	-0.008	-0.007
TD 12,12	0.000	0.000	0.000	0.000	-0.001	-0.001
TD 13,13	0.000	0.000	0.000	0.000	-0.001	-0.001
TD 14,14	0.000	0.000	0.000	0.000	-0.003	-0.002
TD 15,15	0.000	0.000	0.000	0.000	-0.001	-0.001
TD 16,16	0.000	-0.001	0.000	0.000	-0.003	-0.003
TD 17,17	0.000	0.000	0.000	0.000	-0.003	-0.002
TD 18,18	0.000	0.000	0.000	0.000	-0.002	-0.002
TD 19,19	0.000	-0.001	0.000	0.000	-0.004	-0.004
TD 20,20	0.002	-0.011	-0.013	0.036	0.000	0.000
TD 21,21	0.536	0.170	0.186	0.035	-0.002	-0.002
0	CORRELATIONS OF ESTIMATES					
0	PS 3,3	TE 1,1	TE 2,2	TE 3,3	TE 4,4	TE 5,5
+						
	PS 3,3	1.000				
	TE 1,1	-0.023	1.000			
	TE 2,2	-0.017	-0.019	1.000		
	TE 3,3	-0.006	-0.007	-0.005	1.000	
	TE 4,4	-0.009	-0.010	-0.007	-0.003	1.000
	TE 5,5	-0.003	-0.003	-0.002	-0.001	-0.001
	TE 6,6	-0.002	-0.001	0.000	0.000	0.000
	TE 7,7	-0.001	0.000	0.000	0.000	0.000
	TE 8,8	0.000	0.000	0.000	0.000	0.000
	TE 9,9	0.000	0.000	0.000	0.000	0.000
	TE 10,10	-0.001	0.000	0.000	0.000	0.000
	TE 11,11	0.000	0.000	0.000	0.000	0.000
	TE 12,12	-0.002	0.000	0.000	0.000	0.000
	TE 13,13	-0.001	0.000	0.000	0.000	0.000
	TE 14,14	-0.002	0.000	0.000	0.000	0.000
	TE 15,15	-0.171	0.000	0.000	0.000	0.000
	TE 16,16	-0.013	0.000	0.000	0.000	0.000
	TE 17,17	-0.007	0.000	0.000	0.000	0.000
	TE 18,18	-0.001	0.000	0.000	0.000	0.000
	TD 1,1	0.000	0.000	0.000	0.000	0.000
	TD 2,2	0.000	0.000	0.000	0.000	0.000
	TD 3,3	0.000	0.000	0.000	0.000	0.000
	TD 4,4	0.000	0.000	0.000	0.000	0.000
	TD 5,5	0.000	0.000	0.000	0.000	0.000
	TD 6,6	0.000	0.000	0.000	0.000	0.000
	TD 7,7	0.000	0.000	0.000	0.000	0.000
	TD 8,8	0.000	0.000	0.000	0.000	0.000
	TD 9,9	0.000	0.000	0.000	0.000	0.000
	TD 10,10	0.000	0.000	0.000	0.000	0.000
	TD 11,11	0.000	0.000	0.000	0.000	0.000
	TD 12,12	0.000	0.000	0.000	0.000	0.000
	TD 13,13	0.000	0.000	0.000	0.000	0.000
	TD 14,14	0.000	0.000	0.000	0.000	0.000
	TD 15,15	0.000	0.000	0.000	0.000	0.000
	TD 16,16	0.000	0.000	0.000	0.000	0.000
	TD 17,17	0.000	0.000	0.000	0.000	0.000
	TD 18,18	0.000	0.000	0.000	0.000	0.000
	TD 19,19	0.000	0.000	0.000	0.000	0.000
	TD 20,20	0.000	0.000	0.000	0.000	0.000
	TD 21,21	-0.001	0.000	0.000	0.000	0.000
0	CORRELATIONS OF ESTIMATES					
0	TE 6,6	TE 7,7	TE 8,8	TE 9,9	TE 10,10	TE 11,11
+						
	TE 6,6	1.000				
	TE 7,7	-0.016	1.000			
	TE 8,8	-0.008	-0.004	1.000		
	TE 9,9	-0.007	-0.003	-0.002	1.000	

TE 10,10	-0.012	-0.005	-0.003	-0.002	1.000	
TE 11,11	-0.009	-0.004	-0.002	-0.002	-0.003	1.000
TE 12,12	-0.034	-0.015	-0.007	-0.007	-0.011	-0.008
TE 13,13	-0.019	-0.009	-0.004	-0.004	-0.006	-0.005
TE 14,14	-0.029	-0.013	-0.006	-0.006	-0.009	-0.007
TE 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TE 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TE 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TE 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TD 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TD 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TD 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TD 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TD 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TD 14,14	0.000	0.000	0.000	0.000	0.000	0.000
TD 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TD 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TD 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TD 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 19,19	0.000	0.000	0.000	0.000	0.000	0.000
TD 20,20	0.000	0.000	0.000	0.000	0.000	0.000
TD 21,21	0.000	0.000	0.000	0.000	0.000	0.000
0	CORRELATIONS OF ESTIMATES					
0	TE 12,12	TE 13,13	TE 14,14	TE 15,15	TE 16,16	TE 17,17
+						
TE 12,12	1.000					
TE 13,13	-0.018	1.000				
TE 14,14	-0.027	-0.015	1.000			
TE 15,15	0.000	0.000	0.000	1.000		
TE 16,16	0.000	0.000	0.000	-0.186	1.000	
TE 17,17	0.000	0.000	0.000	-0.108	-0.057	1.000
TE 18,18	0.000	0.000	0.000	-0.020	-0.011	-0.006
TD 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TD 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TD 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TD 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TD 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TD 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TD 14,14	0.000	0.000	0.000	0.000	0.000	0.000
TD 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TD 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TD 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TD 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 19,19	0.000	0.000	0.000	0.000	0.000	0.000
TD 20,20	0.000	0.000	0.000	0.000	0.000	0.000
TD 21,21	0.000	0.000	0.000	0.000	0.000	0.000

0	CORRELATIONS OF ESTIMATES						
0	TE 18,18	TD 1,1	TD 2,2	TD 3,3	TD 4,4	TD 5,5	
+							
	TE 18,18	1.000					
	TD 1,1	0.000	1.000				
	TD 2,2	0.000	0.051	1.000			
	TD 3,3	0.000	0.000	0.000	1.000		
	TD 4,4	0.000	0.000	0.000	-0.004	1.000	
	TD 5,5	0.000	0.000	0.000	-0.001	-0.002	1.000
	TD 6,6	0.000	0.000	0.000	-0.003	-0.008	-0.002
	TD 7,7	0.000	0.000	0.000	-0.001	-0.002	0.000
	TD 8,8	0.000	0.000	0.000	-0.001	-0.005	-0.001
	TD 9,9	0.000	0.000	0.000	-0.003	-0.008	-0.002
	TD 10,10	0.000	0.000	0.000	-0.001	-0.003	-0.001
	TD 11,11	0.000	0.003	0.000	0.003	0.000	0.000
	TD 12,12	0.000	0.000	0.000	0.000	0.000	0.000
	TD 13,13	0.000	0.000	0.000	0.000	0.000	0.000
	TD 14,14	0.000	0.000	0.000	0.000	0.000	0.000
	TD 15,15	0.000	0.000	0.000	0.000	0.000	0.000
	TD 16,16	0.000	0.000	0.000	0.000	0.000	0.000
	TD 17,17	0.000	0.000	0.000	0.000	0.000	0.000
	TD 18,18	0.000	0.000	0.000	0.000	0.000	0.000
	TD 19,19	0.000	0.000	0.000	0.000	0.000	0.000
	TD 20,20	0.000	0.016	0.004	0.001	0.000	0.000
	TD 21,21	0.000	0.037	0.166	0.000	0.000	0.000
0	CORRELATIONS OF ESTIMATES						
0	TD 6,6	TD 7,7	TD 8,8	TD 9,9	TD 10,10	TD 11,11	
+							
	TD 6,6	1.000					
	TD 7,7	-0.001	1.000				
	TD 8,8	-0.003	-0.001	1.000			
	TD 9,9	-0.006	-0.002	-0.003	1.000		
	TD 10,10	-0.002	-0.001	-0.001	-0.002	1.000	
	TD 11,11	0.000	0.000	0.000	0.000	0.000	1.000
	TD 12,12	0.000	0.000	0.000	0.000	0.000	-0.004
	TD 13,13	0.000	0.000	0.000	0.000	0.000	-0.006
	TD 14,14	0.000	0.000	0.000	0.000	0.000	-0.019
	TD 15,15	0.000	0.000	0.000	0.000	0.000	-0.007
	TD 16,16	0.000	0.000	0.000	0.000	0.000	-0.023
	TD 17,17	0.000	0.000	0.000	0.000	0.000	-0.018
	TD 18,18	0.000	0.000	0.000	0.000	0.000	-0.015
	TD 19,19	0.000	0.000	0.000	0.000	0.000	-0.027
	TD 20,20	0.000	0.000	0.000	0.000	0.000	0.002
	TD 21,21	0.000	0.000	0.000	0.000	0.000	0.001
0	CORRELATIONS OF ESTIMATES						
0	TD 12,12	TD 13,13	TD 14,14	TD 15,15	TD 16,16	TD 17,17	
+							
	TD 12,12	1.000					
	TD 13,13	-0.001	1.000				
	TD 14,14	-0.002	-0.002	1.000			
	TD 15,15	-0.001	-0.001	-0.002	1.000		
	TD 16,16	-0.002	-0.003	-0.008	-0.003	1.000	
	TD 17,17	-0.002	-0.002	-0.006	-0.002	-0.008	1.000
	TD 18,18	-0.001	-0.002	-0.005	-0.002	-0.006	-0.005
	TD 19,19	-0.002	-0.003	-0.009	-0.004	-0.012	-0.009
	TD 20,20	0.000	0.000	0.000	0.000	0.000	0.000
	TD 21,21	0.000	0.000	0.000	0.000	0.000	0.000

0	CORRELATIONS OF ESTIMATES			
0	TD 18,18	TD 19,19	TD 20,20	TD 21,21
+				
TD 18,18	1.000			
TD 19,19	-0.008	1.000		
TD 20,20	0.000	0.000	1.000	
TD 21,21	0.000	0.000	0.000	1.000

1TITLE TESTING THE MAIN MODEL
-T-VALUES

0	LAMBDA Y		
0	SERVQUAL	SATISFAC	LOYALTY
+			
EMPATHY	0.000	0.000	0.000
RELIABL	19.906	0.000	0.000
RESPONS	15.201	0.000	0.000
ASSURAN	16.803	0.000	0.000
TANGIBL	11.250	0.000	0.000
D08	0.000	0.000	0.000
D02	0.000	24.792	0.000
D03	0.000	19.329	0.000
D04	0.000	18.599	0.000
D05	0.000	22.206	0.000
D06	0.000	20.142	0.000
D07	0.000	29.673	0.000
D01	0.000	25.990	0.000
D09	0.000	28.651	0.000
F03	0.000	0.000	0.000
F04	0.000	0.000	27.740
F08	0.000	0.000	25.068
F13	0.000	0.000	14.209

0	LAMBDA X					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	EDUCATE	AGE
+						
TOT1	0.000	0.000	0.000	0.000	0.000	0.000
MONTHS	0.000	0.000	0.000	0.000	0.000	0.000
B01	0.000	0.000	0.000	0.000	0.000	0.000
B04	0.000	0.000	20.526	0.000	0.000	0.000
B05	0.000	0.000	11.603	0.000	0.000	0.000
B02	0.000	0.000	18.293	0.000	0.000	0.000
B06	0.000	0.000	11.091	0.000	0.000	0.000
B08	0.000	0.000	14.976	0.000	0.000	0.000
B10	0.000	0.000	18.455	0.000	0.000	0.000
B13	0.000	0.000	12.318	0.000	0.000	0.000
A08	0.000	0.000	0.000	0.000	0.000	0.000
A15	0.000	0.000	0.000	10.541	0.000	0.000
A02	0.000	0.000	0.000	12.171	0.000	0.000
A07	0.000	0.000	0.000	19.122	0.000	0.000
A12	0.000	0.000	0.000	12.977	0.000	0.000
A01	0.000	0.000	0.000	20.582	0.000	0.000
A16	0.000	0.000	0.000	18.973	0.000	0.000
A25	0.000	0.000	0.000	17.705	0.000	0.000
A09	0.000	0.000	0.000	21.731	0.000	0.000
EDUCATE	0.000	0.000	0.000	0.000	0.000	0.000
AGE	0.000	0.000	0.000	0.000	0.000	0.000

0	BETA		
0	SERVQUAL	SATISFAC	LOYALTY
+			
SERVQUAL	0.000	0.000	0.000
SATISFAC	3.834	0.000	0.000
LOYALTY	4.390	3.617	0.000

0	GAMMA					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	EDUCATE	AGE
+						
SERVQUAL	0.519	1.168	5.467	2.878	0.000	0.000
SATISFAC	-0.251	1.317	2.394	2.762	0.000	0.000
LOYALTY	0.000	0.000	0.000	0.000	-0.151	-0.288

0	PHI					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	EDUCATE	AGE
+						
	ACCOUNTS	0.000				
	MONTHS	3.736	0.000			
	EQUITY	2.361	1.661	0.000		
	FIRMCHAR	3.237	1.410	61.937	0.000	
	EDUCATE	2.172	1.142	-2.950	-3.200	0.000
	AGE	3.214	6.390	2.081	2.263	0.412
0	PSI					0.000
0	SERVQUAL	SATISFAC	LOYALTY			
+						
	5.167	7.440	8.149			
0	THETA EPS					
0	EMPATHY	RELIABL	RESPONS	ASSURAN	TANGIBL	D08
+						
	9.333	9.921	11.072	10.793	11.512	9.898
0	THETA EPS					
0	D02	D03	D04	D05	D06	D07
+						
	10.880	11.385	11.432	11.158	11.328	10.003
0	THETA EPS					
0	D01	D09	F03	F04	F08	F13
+						
	10.717	10.242	7.437	8.543	9.613	11.392
0	THETA DELTA					
0	TOT1	MONTHS	B01	B04	B05	B02
+						
	2.419	2.254	11.265	10.119	11.490	10.639
0	THETA DELTA					
0	B06	B08	B10	B13	A08	A15
+						
	11.529	11.155	10.607	11.431	9.504	11.643
0	THETA DELTA					
0	A02	A07	A12	A01	A16	A25
+						
	11.551	10.904	11.498	10.694	10.924	11.078
0	THETA DELTA					
0	A09	EDUCATE	AGE			
+						
	10.501	2.422	2.377			
1TITLE TESTING THE MAIN MODEL						
-TOTAL AND INDIRECT EFFECTS						
0	TOTAL EFFECTS OF KSI ON			ETA		
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	EDUCATE	AGE
+						
	SERVQUAL	0.018	0.040	0.571	0.298	0.000
	SATISFAC	0.000	0.057	0.535	0.384	0.000
	LOYALTY	0.010	0.044	0.516	0.311	-0.006
0	STANDARD ERRORS FOR TOTAL EFFECTS OF KSI ON			ETA		
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	EDUCATE	AGE
+						
	SERVQUAL	0.035	0.034	0.104	0.103	0.000
	SATISFAC	0.033	0.032	0.098	0.098	0.000
	LOYALTY	0.027	0.026	0.082	0.080	0.037
0	INDIRECT EFFECTS OF KSI ON			ETA		
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	EDUCATE	AGE
+						
	SERVQUAL	0.000	0.000	0.000	0.000	0.000
	SATISFAC	0.008	0.018	0.253	0.132	0.000
	LOYALTY	0.010	0.044	0.516	0.311	0.000

0	STANDARD ERRORS FOR INDIRECT EFFECTS OF KSI ON				ETA	
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	EDUCATE	AGE
+						
	SERVQUAL	0.000	0.000	0.000	0.000	0.000
	SATISFAC	0.016	0.016	0.078	0.000	0.000
	LOYALTY	0.027	0.026	0.082	0.000	0.000
0	TOTAL EFFECTS OF ETA ON				ETA	
0	SERVQUAL		SATISFAC		LOYALTY	
+						
	SERVQUAL	0.000	0.000	0.000		
	SATISFAC	0.443	0.000	0.000		
	LOYALTY	0.706	0.400	0.000		
0	LARGEST EIGENVALUE OF B*B' (STABILITY INDEX) IS				0.582	
0	STANDARD ERRORS FOR TOTAL EFFECTS OF ETA ON				ETA	
0	SERVQUAL		SATISFAC		LOYALTY	
+						
	SERVQUAL	0.000	0.000	0.000		
	SATISFAC	0.116	0.000	0.000		
	LOYALTY	0.097	0.110	0.000		
0	INDIRECT EFFECTS OF ETA ON				ETA	
0	SERVQUAL		SATISFAC		LOYALTY	
+						
	SERVQUAL	0.000	0.000	0.000		
	SATISFAC	0.000	0.000	0.000		
	LOYALTY	0.177	0.000	0.000		
0	STANDARD ERRORS FOR INDIRECT EFFECTS OF ETA ON				ETA	
0	SERVQUAL		SATISFAC		LOYALTY	
+						
	SERVQUAL	0.000	0.000	0.000		
	SATISFAC	0.000	0.000	0.000		
	LOYALTY	0.060	0.000	0.000		
0	TOTAL EFFECTS OF ETA ON				Y	
0	SERVQUAL		SATISFAC		LOYALTY	
+						
	EMPATHY	1.000	0.000	0.000		
	RELIABL	0.968	0.000	0.000		
	RESPONS	0.822	0.000	0.000		
	ASSURAN	0.877	0.000	0.000		
	TANGIBL	0.660	0.000	0.000		
	D08	0.443	1.000	0.000		
	D02	0.415	0.937	0.000		
	D03	0.372	0.840	0.000		
	D04	0.365	0.824	0.000		
	D05	0.397	0.896	0.000		
	D06	0.380	0.857	0.000		
	D07	0.442	0.996	0.000		
	D01	0.423	0.954	0.000		
	D09	0.437	0.985	0.000		
	F03	0.706	0.400	1.000		
	F04	0.691	0.391	0.978		
	F08	0.666	0.377	0.943		
	F13	0.500	0.283	0.709		

0 0 +	STANDARD ERRORS FOR TOTAL EFFECTS OF ETA ON Y		
	SERVQUAL	SATISFAC	LOYALTY
EMPATHY	0.000	0.000	0.000
RELIABL	0.049	0.000	0.000
RESPONS	0.054	0.000	0.000
ASSURAN	0.052	0.000	0.000
TANGIBL	0.059	0.000	0.000
D08	0.116	0.000	0.000
D02	0.109	0.038	0.000
D03	0.098	0.043	0.000
D04	0.096	0.044	0.000
D05	0.104	0.040	0.000
D06	0.100	0.043	0.000
D07	0.115	0.034	0.000
D01	0.111	0.037	0.000
D09	0.114	0.034	0.000
F03	0.097	0.110	0.000
F04	0.095	0.108	0.035
F08	0.093	0.105	0.038
F13	0.076	0.080	0.050
INDIRECT EFFECTS OF ETA ON Y			
0 0 +	SERVQUAL	SATISFAC	LOYALTY
EMPATHY	0.000	0.000	0.000
RELIABL	0.000	0.000	0.000
RESPONS	0.000	0.000	0.000
ASSURAN	0.000	0.000	0.000
TANGIBL	0.000	0.000	0.000
D08	0.443	0.000	0.000
D02	0.415	0.000	0.000
D03	0.372	0.000	0.000
D04	0.365	0.000	0.000
D05	0.397	0.000	0.000
D06	0.380	0.000	0.000
D07	0.442	0.000	0.000
D01	0.423	0.000	0.000
D09	0.437	0.000	0.000
F03	0.706	0.400	0.000
F04	0.691	0.391	0.000
F08	0.666	0.377	0.000
F13	0.500	0.283	0.000

0 STANDARD ERRORS FOR INDIRECT EFFECTS OF ETA ON Y
0 SERVQUAL SATISFAC LOYALTY
+

EMPATHY	0.000	0.000	0.000
RELIABL	0.000	0.000	0.000
RESPONS	0.000	0.000	0.000
ASSURAN	0.000	0.000	0.000
TANGIBL	0.000	0.000	0.000
D08	0.116	0.000	0.000
D02	0.109	0.000	0.000
D03	0.098	0.000	0.000
D04	0.096	0.000	0.000
D05	0.104	0.000	0.000
D06	0.100	0.000	0.000
D07	0.115	0.000	0.000
D01	0.111	0.000	0.000
D09	0.114	0.000	0.000
F03	0.097	0.110	0.000
F04	0.095	0.108	0.000
F08	0.093	0.105	0.000
F13	0.076	0.080	0.000

0 TOTAL EFFECTS OF KSI ON Y						
0 ACCOUNTS MONTHS EQUITY FIRMCHAR EDUCATE AGE						
+						
EMPATHY	0.018	0.040	0.571	0.298	0.000	0.000
RELIABL	0.018	0.039	0.553	0.288	0.000	0.000
RESPONS	0.015	0.033	0.470	0.245	0.000	0.000
ASSURAN	0.016	0.035	0.501	0.261	0.000	0.000
TANGIBL	0.012	0.026	0.377	0.197	0.000	0.000
D08	0.000	0.057	0.535	0.384	0.000	0.000
D02	0.000	0.054	0.501	0.360	0.000	0.000
D03	0.000	0.048	0.449	0.322	0.000	0.000
D04	0.000	0.047	0.440	0.316	0.000	0.000
D05	0.000	0.051	0.479	0.344	0.000	0.000
D06	0.000	0.049	0.458	0.329	0.000	0.000
D07	0.000	0.057	0.533	0.382	0.000	0.000
D01	0.000	0.055	0.510	0.366	0.000	0.000
D09	0.000	0.056	0.527	0.378	0.000	0.000
F03	0.010	0.044	0.516	0.311	-0.006	-0.010
F04	0.010	0.043	0.504	0.304	-0.005	-0.010
F08	0.009	0.041	0.487	0.293	-0.005	-0.010
F13	0.007	0.031	0.365	0.220	-0.004	-0.007

0 0 +	STANDARD ERRORS FOR TOTAL EFFECTS OF KSI ON Y					
	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	EDUCATE	AGE
EMPATHY	0.035	0.034	0.104	0.103	0.000	0.000
RELIABL	0.034	0.033	0.102	0.100	0.000	0.000
RESPONS	0.029	0.028	0.089	0.086	0.000	0.000
ASSURAN	0.031	0.030	0.093	0.091	0.000	0.000
TANGIBL	0.023	0.023	0.075	0.070	0.000	0.000
D08	0.033	0.032	0.098	0.098	0.000	0.000
D02	0.031	0.030	0.092	0.092	0.000	0.000
D03	0.028	0.027	0.084	0.083	0.000	0.000
D04	0.028	0.027	0.083	0.082	0.000	0.000
D05	0.030	0.029	0.089	0.088	0.000	0.000
D06	0.029	0.028	0.086	0.085	0.000	0.000
D07	0.033	0.032	0.098	0.097	0.000	0.000
D01	0.032	0.031	0.094	0.093	0.000	0.000
D09	0.033	0.032	0.097	0.096	0.000	0.000
F03	0.027	0.026	0.082	0.080	0.037	0.036
F04	0.026	0.026	0.081	0.079	0.036	0.036
F08	0.026	0.025	0.078	0.076	0.035	0.034
F13	0.019	0.019	0.062	0.059	0.026	0.026

1TITLE TESTING THE MAIN MODEL
-STANDARDIZED SOLUTION

0	LAMBDA Y		
0	SERVQUAL	SATISFAC	LOYALTY
+			
EMPATHY	0.922	0.000	0.000
RELIABL	0.892	0.000	0.000
RESPONS	0.758	0.000	0.000
ASSURAN	0.809	0.000	0.000
TANGIBL	0.609	0.000	0.000
D08	0.000	0.980	0.000
D02	0.000	0.918	0.000
D03	0.000	0.823	0.000
D04	0.000	0.807	0.000
D05	0.000	0.878	0.000
D06	0.000	0.840	0.000
D07	0.000	0.976	0.000
D01	0.000	0.935	0.000
D09	0.000	0.966	0.000
F03	0.000	0.000	0.976
F04	0.000	0.000	0.955
F08	0.000	0.000	0.921
F13	0.000	0.000	0.692

0	LAMBDA X					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	EDUCATE	AGE
+						
TOT1	0.894	0.000	0.000	0.000	0.000	0.000
MONTHS	0.000	0.894	0.000	0.000	0.000	0.000
B01	0.000	0.000	0.744	0.000	0.000	0.000
B04	0.000	0.000	0.879	0.000	0.000	0.000
B05	0.000	0.000	0.615	0.000	0.000	0.000
B02	0.000	0.000	0.828	0.000	0.000	0.000
B06	0.000	0.000	0.594	0.000	0.000	0.000
B08	0.000	0.000	0.735	0.000	0.000	0.000
B10	0.000	0.000	0.832	0.000	0.000	0.000
B13	0.000	0.000	0.642	0.000	0.000	0.000
A08	0.000	0.000	0.000	0.958	0.000	0.000
A15	0.000	0.000	0.000	0.563	0.000	0.000
A02	0.000	0.000	0.000	0.627	0.000	0.000
A07	0.000	0.000	0.000	0.827	0.000	0.000
A12	0.000	0.000	0.000	0.656	0.000	0.000
A01	0.000	0.000	0.000	0.857	0.000	0.000
A16	0.000	0.000	0.000	0.824	0.000	0.000
A25	0.000	0.000	0.000	0.794	0.000	0.000
A09	0.000	0.000	0.000	0.879	0.000	0.000
EDUCATE	0.000	0.000	0.000	0.000	0.894	0.000
AGE	0.000	0.000	0.000	0.000	0.000	0.894

0	BETA		
0	SERVQUAL	SATISFAC	LOYALTY
+			
SERVQUAL	0.000	0.000	0.000
SATISFAC	0.417	0.000	0.000
LOYALTY	0.500	0.401	0.000

0	GAMMA					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	EDUCATE	AGE
+						
SERVQUAL	0.020	0.043	0.619	0.323	0.000	0.000
SATISFAC	-0.008	0.040	0.287	0.257	0.000	0.000
LOYALTY	0.000	0.000	0.000	0.000	-0.006	-0.011

0	CORRELATION MATRIX OF ETA AND KSI						
0	SERVQUAL	SATISFAC	LOYALTY	ACCOUNTS	MONTHS	EQUITY	
+							
	SERVQUAL	1.000					
	SATISFAC	0.917	1.000				
	LOYALTY	0.867	0.859	1.000			
	ACCOUNTS	0.204	0.192	0.175	1.000		
	MONTHS	0.151	0.159	0.133	0.283	1.000	
	EQUITY	0.923	0.911	0.826	0.163	0.115	1.000
	FIRMCHAR	0.898	0.896	0.808	0.219	0.096	0.915
	EDUCATE	-0.188	-0.190	-0.176	0.163	0.085	-0.201
	AGE	0.165	0.168	0.139	0.244	0.508	0.143
0	CORRELATION MATRIX OF ETA AND KSI						
0	FIRMCHAR	EDUCATE	AGE				
+							
	FIRMCHAR	1.000					
	EDUCATE	-0.216	1.000				
	AGE	0.154	0.031	1.000			
0	PSI						
0	SERVQUAL	SATISFAC	LOYALTY				
+							
		0.127	0.121	0.223			
0	REGRESSION MATRIX ETA ON KSI (STANDARDIZED)						
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	EDUCATE	AGE	
+							
	SERVQUAL	0.020	0.043	0.619	0.323	0.000	0.000
	SATISFAC	0.000	0.058	0.546	0.392	0.000	0.000
	LOYALTY	0.010	0.045	0.528	0.318	-0.006	-0.011
1	TITLE TESTING THE MAIN MODEL						
-	MODIFICATION INDICES AND ESTIMATED CHANGE						
0	MODIFICATION INDICES FOR LAMBDA Y						
0	SERVQUAL	SATISFAC	LOYALTY				
+							
	EMPATHY	0.000	0.001	1.261			
	RELIABL	0.000	0.260	8.181			
	RESPONS	0.000	0.767	2.513			
	ASSURAN	0.000	0.299	4.080			
	TANGIBL	0.000	0.218	0.736			
	D08	0.455	0.000	0.004			
	D02	6.881	0.000	6.754			
	D03	2.125	0.000	8.443			
	D04	10.179	0.000	2.663			
	D05	10.739	0.000	0.113			
	D06	4.815	0.000	2.769			
	D07	15.164	0.000	6.824			
	D01	0.126	0.000	11.602			
	D09	0.255	0.000	0.165			
	F03	14.511	14.535	0.000			
	F04	14.120	20.917	0.000			
	F08	2.463	0.818	0.000			
	F13	6.321	8.290	0.000			

0	ESTIMATED CHANGE FOR LAMBDA Y					
0	SERVQUAL	SATISFAC	LOYALTY			
+						
	EMPATHY	0.000	-0.005	-0.105		
	RELIABL	0.000	0.072	0.275		
	RESPONS	0.000	-0.135	0.177		
	ASSURAN	0.000	0.081	-0.214		
	TANGIBL	0.000	-0.079	-0.108		
	D08	0.063	0.000	0.004		
	D02	-0.299	0.000	-0.187		
	D03	-0.203	0.000	0.256		
	D04	0.455	0.000	0.147		
	D05	0.411	0.000	0.027		
	D06	0.296	0.000	-0.142		
	D07	-0.371	0.000	-0.155		
	D01	0.039	0.000	0.234		
	D09	0.050	0.000	0.025		
	F03	0.333	0.281	0.000		
	F04	-0.331	-0.340	0.000		
	F08	-0.143	-0.070	0.000		
	F13	0.309	0.300	0.000		
0	MODIFICATION INDICES FOR LAMBDA X					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	EDUCATE	AGE
+						
	TOT1	0.677	0.677	0.677	1.199	0.101
	MONTHS	3.277	3.277	3.278	0.479	3.509
	B01	2.207	1.373	2.182	0.012	1.095
	B04	0.333	1.958	0.000	0.224	0.014
	B05	3.712	0.569	0.000	0.024	0.116
	B02	0.611	0.860	0.000	0.063	0.179
	B06	0.293	0.500	0.000	0.686	0.457
	B08	2.644	0.001	0.000	0.881	1.125
	B10	3.073	5.133	0.000	0.546	2.831
	B13	0.556	0.019	0.000	1.831	0.047
	A08	0.000	0.053	5.074	0.755	0.150
	A15	0.009	0.962	0.441	0.051	2.106
	A02	0.020	0.670	0.049	4.643	5.704
	A07	0.034	1.261	1.973	0.821	0.546
	A12	4.705	1.818	1.963	0.215	9.855
	A01	0.076	0.861	10.847	0.248	0.112
	A16	2.771	0.219	9.631	1.882	0.001
	A25	1.125	0.160	60.304	0.004	0.198
	A09	0.111	0.002	0.716	0.098	0.006
	EDUCATE	0.337	0.000	0.847	0.655	0.000
	AGE	0.238	0.000	0.468	0.000	0.001

0	ESTIMATED CHANGE FOR LAMBDA X						
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	EDUCATE	AGE	
+							
	TOT1	-2.548	-9.002	-15.634	-11.635	-1.592	0.543
	MONTHS	2.780	0.787	6.856	8.218	-0.334	0.644
	B01	-0.081	-0.063	-0.078	-0.083	-0.006	-0.056
	B04	-0.026	-0.061	0.000	0.343	0.021	-0.005
	B05	0.110	0.042	0.000	0.005	-0.009	-0.019
	B02	0.037	-0.043	0.000	0.111	-0.012	-0.019
	B06	-0.031	0.040	0.000	-0.209	-0.048	0.039
	B08	-0.084	0.001	0.000	-0.125	-0.049	0.054
	B10	0.082	0.104	0.000	-0.131	-0.034	0.077
	B13	-0.042	0.008	0.000	-0.139	0.076	0.012
	A08	0.000	-0.008	-0.101	-0.038	-0.032	0.014
	A15	0.005	0.056	0.117	0.000	0.013	-0.084
	A02	0.008	-0.045	-0.037	0.000	0.122	-0.132
	A07	0.008	0.050	-0.197	0.000	0.042	0.033
	A12	0.120	0.072	0.233	0.000	-0.026	0.170
	A01	0.012	-0.039	-0.445	0.000	0.022	0.014
	A16	-0.077	-0.021	0.438	0.000	-0.063	-0.001
	A25	-0.051	-0.018	1.135	0.000	-0.003	-0.021
	A09	0.014	0.002	-0.111	0.000	-0.013	-0.003
	EDUCATE	3.463	0.000	-17.534	-12.827	9.891	0.000
	AGE	1.437	0.000	-7.216	-5.482	0.000	0.073
0	MODIFICATION INDICES FOR BETA						
0	SERVQUAL	SATISFAC	LOYALTY				
+							
	SERVQUAL	0.000	0.000	0.765			
	SATISFAC	0.000	0.000	1.019			
	LOYALTY	0.000	0.000	0.000			
0	ESTIMATED CHANGE FOR BETA						
0	SERVQUAL	SATISFAC	LOYALTY				
+							
	SERVQUAL	0.000	0.000	0.075			
	SATISFAC	0.000	0.000	0.147			
	LOYALTY	0.000	0.000	0.000			
0	MODIFICATION INDICES FOR GAMMA						
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	EDUCATE	AGE	
+							
	SERVQUAL	0.000	0.000	0.000	0.000	1.567	1.558
	SATISFAC	0.000	0.000	0.000	0.000	0.014	2.384
	LOYALTY	0.307	0.001	0.601	0.572	0.000	0.000
0	ESTIMATED CHANGE FOR GAMMA						
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	EDUCATE	AGE	
+							
	SERVQUAL	0.000	0.000	0.000	0.000	0.043	-0.050
	SATISFAC	0.000	0.000	0.000	0.000	0.004	-0.054
	LOYALTY	0.022	-0.001	-0.106	-0.079	0.000	0.000
0	MODIFICATION INDICES FOR PHI						
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	EDUCATE	AGE	
+							
	ACCOUNTS	0.677					
	MONTHS	0.000	3.277				
	EQUITY	0.000	0.000	2.183			
	FIRMCHAR	0.000	0.000	0.000	0.690		
	EDUCATE	0.000	0.000	0.000	0.000	0.655	
	AGE	0.000	0.000	0.000	0.000	0.001	

```

0      ESTIMATED CHANGE FOR PHI
0      ACCOUNTS      MONTHS      EQUITY      FIRMCHAR      EDUCATE      AGE
+
ACCOUNTS      -5.697
MONTHS      0.000      1.759
EQUITY      0.000      0.000      -0.210
FIRMCHAR      0.000      0.000      0.000      -0.080
EDUCATE      0.000      0.000      0.000      0.000      22.116
AGE      0.000      0.000      0.000      0.000      0.000      0.164
0NO NON-ZERO MODIFICATION INDICES FOR PSI
0NO NON-ZERO MODIFICATION INDICES FOR THETA EPS
0NO NON-ZERO MODIFICATION INDICES FOR THETA DELTA
0      MAXIMUM MODIFICATION INDEX IS 60.30 FOR ELEMENT (18, 3) OF LAMBDA X
-      THE PROBLEM USED 129536 BYTES (= 2.2% OF AVAILABLE WORKSPACE)
-      TIME USED : 0.00 SECONDS
129-AUG-96 CESAR DISSERTATION FILE PAGE
10

```

OPRECEDING TASK REQUIRED 16.80 SECONDS CPU TIME; 30.19 SECONDS ELAPSED.

```

1592 FINISH
0 1592 COMMAND LINES READ.
0 ERRORS DETECTED.
0 WARNINGS ISSUED.
19 SECONDS CPU TIME.
36 SECONDS ELAPSED TIME.
END OF JOB.

```

APPENDIX C

The LISREL Output for The First Sample

TRY THE NEW SPSS RELEASE 4 FEATURES:

0* LOGISTIC REGRESSION PROCEDURE
 * EXAMINE PROCEDURE TO EXPLORE DATA
 * FLIP TO TRANSPOSE DATA FILES
 * MATRIX TRANSFORMATIONS LANGUAGE

* CATEGORIES OPTION:
 * CONJOINT ANALYSIS
 * CORRESPONDENCE ANALYSIS
 * NEW LISREL AND PRELIS

OPTIONS

* GRAPH INTERFACE TO SPSS GRAPHICS

0SEE THE NEW SPSS DOCUMENTATION FOR MORE INFORMATION ON THESE NEW FEATURES.

```

1 0 SET WIDTH = 80
2 TITLE 'CESAR DISSERTATION FILE'
3 DATA LIST FIXED RECORDS = 4
4   /1 IDNUM 1-3
5   /2 A01 TO A25 1-25
6     B01 TO B28 26-53 B29 54-55 B30 56-57
7   /3 C01 TO C15 1-15
8     D01 TO D09 16-24
9     EA01 TO EA22 25-46
10    EB01 TO EB22 47-68
11   /4 EC01 TO EC05 1-10
12     F01 TO F13 11-23
13     G01 TO G05 24-28 G06 G07 29-32 G08 33 G09 34-35
0THIS COMMAND WILL READ 4 RECORDS FROM THE COMMAND FILE
0VARIABLE   REC   START   END   FORMAT

```

IDNUM	1	1	3	F3.0
A01	2	1	1	F1.0
A02	2	2	2	F1.0
A03	2	3	3	F1.0
A04	2	4	4	F1.0
A05	2	5	5	F1.0
A06	2	6	6	F1.0
A07	2	7	7	F1.0
A08	2	8	8	F1.0
A09	2	9	9	F1.0
A10	2	10	10	F1.0
A11	2	11	11	F1.0
A12	2	12	12	F1.0
A13	2	13	13	F1.0
A14	2	14	14	F1.0
A15	2	15	15	F1.0
A16	2	16	16	F1.0
A17	2	17	17	F1.0
A18	2	18	18	F1.0
A19	2	19	19	F1.0
A20	2	20	20	F1.0
A21	2	21	21	F1.0
A22	2	22	22	F1.0
A23	2	23	23	F1.0
A24	2	24	24	F1.0
A25	2	25	25	F1.0
B01	2	26	26	F1.0
B02	2	27	27	F1.0
B03	2	28	28	F1.0
B04	2	29	29	F1.0
B05	2	30	30	F1.0
B06	2	31	31	F1.0
B07	2	32	32	F1.0
B08	2	33	33	F1.0

B09	2	34	34	F1.0
B10	2	35	35	F1.0
B11	2	36	36	F1.0
B12	2	37	37	F1.0
B13	2	38	38	F1.0
B14	2	39	39	F1.0
B15	2	40	40	F1.0
B16	2	41	41	F1.0
B17	2	42	42	F1.0
B18	2	43	43	F1.0
B19	2	44	44	F1.0
B20	2	45	45	F1.0
B21	2	46	46	F1.0
B22	2	47	47	F1.0
B23	2	48	48	F1.0
B24	2	49	49	F1.0
B25	2	50	50	F1.0
B26	2	51	51	F1.0
B27	2	52	52	F1.0
B28	2	53	53	F1.0
B29	2	54	55	F2.0
B30	2	56	57	F2.0
C01	3	1	1	F1.0
C02	3	2	2	F1.0
C03	3	3	3	F1.0
C04	3	4	4	F1.0
C05	3	5	5	F1.0
C06	3	6	6	F1.0
C07	3	7	7	F1.0
C08	3	8	8	F1.0
C09	3	9	9	F1.0
C10	3	10	10	F1.0
C11	3	11	11	F1.0
C12	3	12	12	F1.0
C13	3	13	13	F1.0
C14	3	14	14	F1.0
C15	3	15	15	F1.0
D01	3	16	16	F1.0
D02	3	17	17	F1.0
D03	3	18	18	F1.0
D04	3	19	19	F1.0
D05	3	20	20	F1.0
D06	3	21	21	F1.0
D07	3	22	22	F1.0
D08	3	23	23	F1.0
D09	3	24	24	F1.0
EA01	3	25	25	F1.0
EA02	3	26	26	F1.0
EA03	3	27	27	F1.0
EA04	3	28	28	F1.0
EA05	3	29	29	F1.0
EA06	3	30	30	F1.0
EA07	3	31	31	F1.0
EA08	3	32	32	F1.0
EA09	3	33	33	F1.0
EA10	3	34	34	F1.0
EA11	3	35	35	F1.0
EA12	3	36	36	F1.0
EA13	3	37	37	F1.0
EA14	3	38	38	F1.0
EA15	3	39	39	F1.0
EA16	3	40	40	F1.0

EA17	3	41	41	F1.0
EA18	3	42	42	F1.0
EA19	3	43	43	F1.0
EA20	3	44	44	F1.0
EA21	3	45	45	F1.0
EA22	3	46	46	F1.0
EB01	3	47	47	F1.0
EB02	3	48	48	F1.0
EB03	3	49	49	F1.0
EB04	3	50	50	F1.0
EB05	3	51	51	F1.0
EB06	3	52	52	F1.0
EB07	3	53	53	F1.0
EB08	3	54	54	F1.0
EB09	3	55	55	F1.0
EB10	3	56	56	F1.0
EB11	3	57	57	F1.0
EB12	3	58	58	F1.0
EB13	3	59	59	F1.0
EB14	3	60	60	F1.0
EB15	3	61	61	F1.0
EB16	3	62	62	F1.0
EB17	3	63	63	F1.0
EB18	3	64	64	F1.0
EB19	3	65	65	F1.0
EB20	3	66	66	F1.0
EB21	3	67	67	F1.0
EB22	3	68	68	F1.0
EC01	4	1	2	F2.0
EC02	4	3	4	F2.0
EC03	4	5	6	F2.0
EC04	4	7	8	F2.0
EC05	4	9	10	F2.0
F01	4	11	11	F1.0
F02	4	12	12	F1.0
F03	4	13	13	F1.0
F04	4	14	14	F1.0
F05	4	15	15	F1.0
F06	4	16	16	F1.0
F07	4	17	17	F1.0
F08	4	18	18	F1.0
F09	4	19	19	F1.0
F10	4	20	20	F1.0
F11	4	21	21	F1.0
F12	4	22	22	F1.0
F13	4	23	23	F1.0
G01	4	24	24	F1.0
G02	4	25	25	F1.0
G03	4	26	26	F1.0
G04	4	27	27	F1.0
G05	4	28	28	F1.0
G06	4	29	30	F2.0
G07	4	31	32	F2.0
G08	4	33	33	F1.0
G09	4	34	35	F2.0

14	VARIABLE LABELS
15	A01 FRIENDLY/
16	A02 GOOD IMAGE/
17	A03 GENERALLY SAFE/
18	A04 SATISFY NEEDS/
19	A05 CONVENIENT/
20	A06 FRUSTRATED DEALING/
21	A07 PLEASANT PLACE/
22	A08 HELPFUL/
23	A09 KNOWLEDGEABLE/
24	A10 HAS ALL SERVICES NEEDED/
25	A11 WELL RESPECTED/
26	A12 KNOW ME WELL/
27	A13 CONVENIENT PARKING/
28	A14 GOOD SOURCE INFO/
29	A15 GOOD REPUTATION/
30	A16 PAYS ATTENTION/
31	A17 LITTLE PERSONAL ATTENTION/
32	A18 PROUD/
33	A19 OFFERS BANK BY PHONE/
34	A20 DOES NOT HAVE ALL SERVICES/
35	A21 SAFE AND SOLID/
36	A22 HAS ALL INFO NEEDED/
37	A23 CUST SVC AVAILABLE 24 HRS/
38	A24 RARELY WAIT LONG/
39	A25 LISTENS TO PROBLEMS COMPLAINTS/
40	B01 FEES WORTH SVC/
41	B02 WILLING TO LISTEN/
42	B03 CHANGING BANKS RESULTS IN DELAY/
43	B04 GET SVC DESERVED/
44	B05 CREDIT RESULTS IS FAIR/
45	B06 MANAGER NEVER AROUND/
46	B07 SWITCHING TOO MUCH TROUBLE/
47	B08 MANAGER AVAILABLE/
48	B09 CHARGES HIGH FEES/
49	B10 RESOLVES COMPLAINTS SATISFACTORILY/
50	B11 BETTER INTEREST RATES/
51	B12 HESITATE TO MOVE/
52	B13 EMPLOYEES BECOME DEFENSIVE/
53	B14 CHECKING/
54	B15 CERTIFICATE OF DEPOSIT/
55	B16 BUSINESS ACCOUNTS/
56	B17 SAFE DEPOSIT/
57	B18 SAVINGS/
58	B19 DIRECT DEPOSIT/
59	B20 PERSONAL LOANS/
60	B21 IRA KEOGH/
61	B22 MONEY MARKET/
62	B23 AUTO LOAN/
63	B24 BILL PAYING SVC/
64	B25 OTHERS/
65	B26 CREDIT CARDS/
66	B27 DIRECT DEBIT/
67	B28 MORTGAGE/
68	B29 YEARS WITH BANK/
69	B30 MONTHS WITH BANK/
70	C01 WAIT FOR SALES/
71	C02 TRY NEW THINGS/
72	C03 EMBARASS TO COMPLAIN/
73	C04 BUY KNOWN BRANDS/
74	C05 SHOP FOR BARGAINS/

75 C06 ANGRY WITH BANK ERRORS/
76 C07 DONT LIKE TAKING CHANCES/
77 C08 UPSET WHEN BANK MAKES MISTAKE/
78 C09 COMPARE PRICES/
79 C10 EXPECT PROMPT ACTION ON COMPLAINTS/
80 C11 FIRST TO TRY/
81 C12 LOOK FOR SPECIALS/
82 C13 NO NEED TO GET UPSET/
83 C14 NO BIG DEAL IF CHECK BOUNCES/
84 C15 LOOK FOR SALES ADS/
85 D01 VERY SATISFIED WITH BANK/
86 D02 MEETS MY NEEDS/
87 D03 BANK IS JUST AS GOOD/
88 D04 COMPLAINTS ARE DEALT WITH FAIRLY/
89 D05 BANK IS RELIABLE/
90 D06 LIKE BANK PEOPLE/
91 D07 GIVE SVC I EXPECT/
92 D08 BANK HAS EXCELLENT SVC/
93 D09 BANK EXPERIENCE IS POSITIVE/
94 EA01 UP-TO-DATE EQUIP/
95 EA02 PHY FACILITIES MUST APPEAL/
96 EA03 LOOK PROFESSIONAL/
97 EA04 APPEARANCE BEFITS SVC/
98 EA05 KEEPS PROMISE/
99 EA06 SYMPATHETIC/
100 EA07 DEPENDABLE/
101 EA08 RIGHT FIRST TIME AROUND/
102 EA09 ACCURATE RECORDS/
103 EA10 CANT EXPECT WHEN/
104 EA11 CANT EXPECT PROMPT SVC/
105 EA12 CANT EXPECT WILLING TO HELP/
106 EA13 OK IF TOO BUSY TO HELP/
107 EA14 SHOULD BE POLITE/
108 EA15 TRUST EMPLOYEES/
109 EA16 FEEL SAFE TRANSACTING WITH EMP/
110 EA17 EMP SHLD GET SUPPORT/
111 EA18 INDIVIDUAL ATTN/
112 EA19 UNDERSTAND SPECIFIC NEEDS/
113 EA20 CANT EXPECT PERSONAL ATTN/
114 EA21 MUST HAVE CONVENIENT HRS/
115 EA22 CUSTOMER'S BEST INTEREST/
116 EB01 UP-TO-DATE EQUIP/
117 EB02 PHY FACILITIES MUST APPEAL/
118 EB03 LOOK PROFESSIONAL/
119 EB04 APPEARANCE BEFITS SVC/
120 EB05 KEEPS PROMISE/
121 EB06 SYMPATHETIC/
122 EB07 DEPENDABLE/
123 EB08 RIGHT FIRST TIME AROUND/
124 EB09 ACCURATE RECORDS/
125 EB10 CANT EXPECT WHEN/
126 EB11 CANT EXPECT PROMPT SVC/
127 EB12 CANT EXPECT WILLING TO HELP/
128 EB13 OK IF TOO BUSY TO HELP/
129 EB14 SHOULD BE POLITE/
130 EB15 TRUST EMPLOYEES/
131 EB16 FEEL SAFE TRANSACTING WITH EMP/
132 EB17 EMP SHLD GET SUPPORT/
133 EB18 INDIVIDUAL ATTN/
134 EB19 UNDERSTAND SPECIFIC NEEDS/
135 EB20 CANT EXPECT PERSONAL ATTN/
136 EB21 MUST HAVE CONVENIENT HRS/


```

137     EB22 CUSTOMER'S BEST INTEREST/
138     EC01 APPEAR OF BANK EMP MATERIALS/
139     EC02 PERFORM SVC DEPEND AND ACCURATE/
140     EC03 WILLING TO HELP PROMPTLY/
141     EC04 KNOW AND COURTESY/
142     EC05 INDIVIDUAL ATTN/
143     F01 MOVE ACCTS/
144     F02 DO MORE BUSINESS/
145     F03 SAY POSITIVE THINGS/
146     F04 ENCOURAGE OTHERS TO BANK/
147     F05 WILLING TO PAY HIGHER FEES/
148     F06 COMPLAIN TO BBB/
149     F07 FIRST CHOICE/
150     F08 RECOMMEND BANK/
151     F09 SWITCH IF PROBLEMATIC/
152     F10 TELL ABOUT NEGATIVE EXP/
153     F11 REMAIN EVEN WITH HIGHER FEES/
154     F12 COMPLAIN TO MGR/
155     F13 DO LESS BUSINESS/
156     G01 SEX/
157     G02 AGE/
158     G03 EDUCATION/
159     G04 CIVIL STATUS/
160     G05 ETHNICITY/
161     G06 NUM IN HOUSEHOLD/
162     G07 NUM WORKING/
163     G08 GROSS HH INCOME/
164     G09 OCCUPATION/
165 MISSING VALUES A01 TO A25
166             B01 TO B28 (9)/ B29 TO B30 (99)/
167             C01 TO C15
168             D01 TO D09
169             EA01 TO EA22
170             EB01 TO EB22 (9)/
171             EC01 TO EC05 (99)/
172             F01 TO F13 (9)/
173             G01 TO G05 (9)/G06 G07 (99)/G08 (9)/G09 (99)
174 DO REPEAT X = A01 TO A05 A07 TO A16 A18 A19 A21 TO A25
175 RECODE X (1=7) (2=6) (3=5) (4=4) (5=3) (6=2) (7=1)
176 END REPEAT
177 DO REPEAT X = B01 TO B05 B07 B08 B10 B11 B12
178 RECODE X (1=7) (2=6) (3=5) (4=4) (5=3) (6=2) (7=1)
179 END REPEAT
180 DO REPEAT X = C01 TO C02 C04 TO C06 C08 TO C15
181 RECODE X (1=7) (2=6) (3=5) (4=4) (5=3) (6=2) (7=1)
182 END REPEAT
183 DO REPEAT X = D01 TO D09
184 RECODE X (1=7) (2=6) (3=5) (4=4) (5=3) (6=2) (7=1)
185 END REPEAT
186 DO REPEAT X = EA01 TO EA09 EA14 TO EA19 EA21 EA22
187 RECODE X (1=7) (2=6) (3=5) (4=4) (5=3) (6=2) (7=1)
188 END REPEAT
189 DO REPEAT X = EB01 TO EB09 EB14 TO EB19 EB21 EB22
190 RECODE X (1=7) (2=6) (3=5) (4=4) (5=3) (6=2) (7=1)
191 END REPEAT
192 COMMENT HAPPY PERSONS WILL HAVE HIGHER SCORES
193 DO REPEAT X = F02 F03 F04 F05 F07 F08 F11
194 RECODE X (1=7) (2=6) (3=5) (4=4) (5=3) (6=2) (7=1)
195 END REPEAT
196 BEGIN DATA
1512 END DATA
1513 COMMENT CREATING A TEMPORARY VARIABLE

```

OPRECEDING TASK REQUIRED .17 SECONDS CPU TIME; .69 SECONDS ELAPSED.

```
1514 COMPUTE GROUP = 1
1515 IF (IDNUM GE 226) GROUP = 2
1516 VARIABLE LABELS GROUP RESPONDENT GROUPS
1517 VALUE LABELS GROUP (1) MAIL (2) STUDENTS
1518 COMMENT RECODING EDUCATION
1519 RECODE G03 (1=8) (2=10) (3=12) (4=14) (5=15) (6=16)
1520 COMMENT RECODING AGE
1521 RECODE G02 (2=23) (3=39) (4=56) (5=65)
1522 COMMENT RECODING INCOME
1523 RECODE G08 (1=10000) (2=17500) (3=37500) (4=62500) (5=75000)
1524 COMPUTE IMAGE = (A02+A11+A15)/3
1525 COMPUTE WARMRESP = (A01+A07+A12+A08+A16+A25+A09)/7
1526 COMPUTE SERVICE = (A10+A20)/2
1527 COMPUTE TANGIBL = (EB02+EB03+EB04)/3
1528 COMPUTE RELIABL = (EB05+EB06+EB07+EB09)/4
1529 COMPUTE RESPONS = (EB11+EB12+EB13)/3
1530 COMPUTE ASSURAN = (EB14+EB15+EB16)/3
1531 COMPUTE EMPATHY = (EB18+EB19+EB22)/3
1532 COMPUTE SATISFAC = (D01+D02+D03+D04+D05+D06+D07+D08+D09)/9
1533 COMPUTE LOYALTY = (F03+F04+F08+F13)/4
1534 COMPUTE MONTHS = (B29 * 12) + B30
1535 COMPUTE TOT1 = 0
1536 DO REPEAT X = B14 TO B28
1537 IF (X EQ 1) TOT1 = TOT1 + 1
1538 END REPEAT
1539 IF (MONTHS GE 240) MONTHS = 240
1540 SELECT IF (GROUP EQ 1)
1541 COMMENT **** BEST MODEL WITHOUTH CONSUMER CHAR SEPT
1542 PRELIS
1543 /VARIABLES =
1544     EMPATHY RELIABL RESPONS ASSURAN TANGIBL (CO)
1545     D08 D02 D03 D04 D05 D06 D07 D01 D09
1546     F03 F04 F08 F13 (OR)
1547     TOT1 MONTHS (CO)
1548     B01 B04 B05 B02 B06 B08 B10 B13
1549     A08 A15
1550     A02 A07 A12 A01 A16 A25 A09 (OR)
1551     G02 G03 (CO)
1552 /TYPE = CORRELATION
1553 /MATRIX=OUT (*)
```

OTHER ARE 6,107,720 BYTES OF MEMORY AVAILABLE.
THE LARGEST CONTIGUOUS AREA HAS 5,807,528 BYTES.

1

```
0          P R E L I S      A PREPROCESSOR FOR LISREL
0          PROGRAM VERSION 1.12      DISTRIBUTED BY
0
0          SCIENTIFIC SOFTWARE, INC.
0          1369 NEITZEL ROAD
0          MOORESVILLE, INDIANA 46158
0          (317) 831-6336
```

```
0          THIS COPY AUTHORIZED FOR USE IN SPSS-X
0          PROGRAM COPYRIGHT 1987-89 BY SCIENTIFIC SOFTWARE, INC.,
0          (A MICHIGAN CORPORATION).
0          DISTRIBUTION OR USE UNAUTHORIZED BY SCIENTIFIC SOFTWARE, INC. IS
0          PROHIBITED.
```

```
1          MVS - P R E L I S  1.12
0          BY
```

0THE FOLLOWING PRELIS CONTROL LINES HAVE BEEN READ :

CESAR DISSERTATION FILE;

DA NI=39 NO=0 MI= -0.989898D+37 MC=1 TR=LI

LA

 EMPATHY RELIABL RESPONS ASSURAN TANGIBL D08 D02

RA FI=PRLDD21

CO EMPATHY

CO RELIABL

CO RESPONS

CO ASSURAN

CO TANGIBL

OR D08

OR D02

OR D03

OR D04

OR D05

OR D06

OR D07

OR D01

OR D09

OR F03

OR F04

OR F08

OR F13

CO TOT1

CO MONTHS

OR B01

OR B04

OR B05

OR B02

OR B06

OR B08

OR B10

OR B13

OR A08

OR A15

OR A02

OR A07

OR A12

OR A01

OR A16

OR A25

OR A09

CO G02

CO G03

OU MA=KM SM=PRLDD22

1

0DISTRIBUTION OF MISSING VALUES

0TOTAL SAMPLE SIZE = 201

0NUMBER OF MISSING VALUES	0	1	2	3	4	5	6	7	8	9	10
NUMBER OF CASES	201	21	1	0	0	0	0	1	0	0	1

0LISTWISE DELETION

0TOTAL EFFECTIVE SAMPLE SIZE = 201

CONVERSION OF ORIGINAL VALUES TO CATEGORIES

0	CATEGORY						
OVARIABLE	1	2	3	4	5	6	7
+							
D08	1.00	2.00	3.00	4.00	5.00	6.00	7.00
D02	2.00	3.00	4.00	5.00	6.00	7.00	
D03	1.00	2.00	3.00	4.00	5.00	6.00	7.00
D04	2.00	3.00	4.00	5.00	6.00	7.00	
D05	2.00	3.00	4.00	5.00	6.00	7.00	
D06	2.00	3.00	4.00	5.00	6.00	7.00	
D07	1.00	2.00	3.00	4.00	5.00	6.00	7.00
D01	1.00	2.00	3.00	4.00	5.00	6.00	7.00
D09	1.00	2.00	3.00	4.00	5.00	6.00	7.00
F03	1.00	2.00	3.00	4.00	5.00	6.00	7.00
F04	1.00	2.00	3.00	4.00	5.00	6.00	7.00
F08	1.00	2.00	3.00	4.00	5.00	6.00	7.00
F13	1.00	2.00	3.00	4.00	5.00	6.00	7.00
B01	1.00	2.00	3.00	4.00	5.00	6.00	7.00
B04	1.00	2.00	3.00	4.00	5.00	6.00	7.00
B05	1.00	2.00	3.00	4.00	5.00	6.00	7.00
B02	1.00	2.00	3.00	4.00	5.00	6.00	7.00
B06	1.00	2.00	3.00	4.00	5.00	6.00	7.00
B08	1.00	2.00	3.00	4.00	5.00	6.00	7.00
B10	1.00	2.00	3.00	4.00	5.00	6.00	7.00
B13	1.00	2.00	3.00	4.00	5.00	6.00	7.00
A08	2.00	3.00	4.00	5.00	6.00	7.00	
A15	2.00	3.00	4.00	5.00	6.00	7.00	
A02	2.00	3.00	4.00	5.00	6.00	7.00	
A07	1.00	2.00	3.00	4.00	5.00	6.00	7.00
A12	1.00	2.00	3.00	4.00	5.00	6.00	7.00
A01	2.00	3.00	4.00	5.00	6.00	7.00	
A16	1.00	2.00	3.00	4.00	5.00	6.00	7.00
A25	1.00	2.00	3.00	4.00	5.00	6.00	7.00
A09	2.00	3.00	4.00	5.00	6.00	7.00	

UNIVARIATE FREQUENCY DISTRIBUTIONS FOR ORDINAL VARIABLES

0	CATEGORY						
OVARIABLE	1	2	3	4	5	6	7
+							
D08	6	7	16	27	37	59	49
D02	8	9	15	50	73	46	
D03	1	1	10	26	32	76	55
D04	2	10	58	35	60	36	
D05	3	11	19	43	74	51	
D06	3	9	49	32	54	54	
D07	3	7	15	22	38	70	46
D01	1	7	13	26	35	73	46
D09	2	1	15	19	35	72	57
F03	4	11	10	31	41	54	50
F04	9	15	15	48	36	43	35
F08	13	13	17	47	26	47	38
F13	14	12	12	55	24	45	39
B01	35	20	29	30	33	29	25
B04	10	12	19	34	35	55	36
B05	8	6	12	56	23	58	38
B02	2	9	15	50	43	50	32
B06	4	3	13	87	24	43	27
B08	3	9	15	82	14	52	26
B10	3	7	14	56	37	55	29
B13	5	14	16	69	23	41	33

A08	5	15	29	35	60	57	
A15		4	9	28	39	58	63
A02		4	9	30	44	63	51
A07		3	4	16	46	42	56 34
A12		49	26	18	30	17	27 34
A01		2	8	34	31	63	63
A16		10	13	18	67	21	41 31
A25		7	11	17	54	35	46 31
A09		6	18	37	37	64	39

ONORMAL SCORES FOR ORDINAL VARIABLES

				CATEGORY			
0 O VARIABLE	1	2	3	4	5	6	7
+							
D08	-2.270	-1.681	-1.267	-0.809	-0.333	0.285	1.286
D02	-2.156	-1.546	-1.172	-0.586	0.235	1.323	
D03	-2.894	-2.440	-1.852	-1.174	-0.623	0.098	1.216
D04	-2.667	-1.852	-0.870	-0.164	0.458	1.460	
D05	-2.526	-1.755	-1.203	-0.620	0.163	1.262	
D06	-2.526	-1.808	-0.947	-0.300	0.251	1.228	
D07	-2.526	-1.867	-1.372	-0.926	-0.450	0.255	1.323
D01	-2.894	-2.051	-1.474	-0.968	-0.470	0.235	1.323
D09	-2.667	-2.246	-1.663	-1.104	-0.617	0.097	1.194
F03	-2.423	-1.696	-1.289	-0.847	-0.308	0.304	1.274
F04	-2.108	-1.406	-1.012	-0.496	0.057	0.590	1.476
F08	-1.953	-1.307	-0.952	-0.446	0.031	0.517	1.431
F13	-1.920	-1.291	-1.000	-0.463	0.056	0.516	1.417
B01	-1.476	-0.763	-0.399	-0.019	0.387	0.864	1.649
B04	-2.065	-1.418	-1.015	-0.563	-0.101	0.492	1.460
B05	-2.156	-1.606	-1.291	-0.637	-0.088	0.443	1.431
B02	-2.667	-1.882	-1.340	-0.681	-0.038	0.586	1.523
B06	-2.423	-1.926	-1.514	-0.515	0.234	0.717	1.611
B08	-2.526	-1.808	-1.309	-0.442	0.195	0.666	1.630
B10	-2.526	-1.867	-1.387	-0.669	-0.025	0.597	1.574
B13	-2.340	-1.582	-1.113	-0.412	0.189	0.635	1.507
A08	-2.340	-1.563	-0.961	-0.442	0.173	1.194	
A15	-2.423	-1.744	-1.127	-0.529	0.109	1.131	
A02	-2.423	-1.744	-1.106	-0.466	0.233	1.262	
A07	-2.526	-1.972	-1.463	-0.762	-0.133	0.514	1.491
A12	-1.286	-0.503	-0.208	0.094	0.398	0.724	1.491
A01	-2.667	-1.914	-1.138	-0.540	0.077	1.131	
A16	-2.065	-1.402	-1.004	-0.342	0.227	0.667	1.540
A25	-2.210	-1.550	-1.125	-0.513	0.076	0.630	1.540
A09	-2.270	-1.469	-0.816	-0.268	0.389	1.417	

OUNIVARIATE SUMMARY STATISTICS FOR CONTINUOUS VARIABLES

O	VARIABLE	MEAN	ST. DEV.	SKEWNESS	KURTOSIS	MINIMUM	FREQ.	MAXIMUM	FREQ.
+									
	EMPATHY	4.983	1.471	-0.483	-0.625	1.000	1	7.000	22
	RELIABL	5.553	1.036	-0.554	-0.300	2.250	1	7.000	23
	RESPONS	5.153	1.457	-0.574	-0.321	1.000	2	7.000	37
	ASSURAN	5.750	1.059	-1.023	1.271	1.667	1	7.000	41
	TANGIBL	5.617	1.139	-0.987	1.248	1.000	1	7.000	37
	TOT1	4.279	1.784	0.357	-0.201	1.000	11	9.000	3
	MONTHS	85.010	72.820	0.979	-0.121	1.000	1	240.000	21
	G02	38.756	11.597	0.362	-0.319	23.000	49	65.000	8
	G03	13.428	1.870	-0.560	-0.153	8.000	3	16.000	32

1CESAR DISSERTATION FILE;

0 0 +	ESTIMATED CORRELATION MATRIX					
	EMPATHY	RELIABL	RESPONS	ASSURAN	TANGIBL	D08
EMPATHY	1.000					
RELIABL	0.773	1.000				
RESPONS	0.688	0.598	1.000			
ASSURAN	0.671	0.666	0.542	1.000		
TANGIBL	0.516	0.534	0.372	0.490	1.000	
D08	0.768	0.719	0.643	0.670	0.451	1.000
D02	0.679	0.653	0.576	0.643	0.457	0.795
D03	0.607	0.593	0.526	0.570	0.445	0.688
D04	0.698	0.721	0.547	0.587	0.470	0.702
D05	0.722	0.790	0.575	0.636	0.480	0.749
D06	0.681	0.644	0.511	0.608	0.411	0.738
D07	0.733	0.685	0.600	0.665	0.463	0.908
D01	0.715	0.698	0.636	0.632	0.431	0.831
D09	0.732	0.723	0.632	0.645	0.430	0.872
F03	0.726	0.751	0.620	0.634	0.422	0.788
F04	0.667	0.655	0.559	0.502	0.417	0.672
F08	0.662	0.635	0.636	0.485	0.398	0.691
F13	0.566	0.567	0.526	0.453	0.368	0.605
TOT1	0.071	0.084	0.056	0.140	0.037	0.095
MONTHS	0.143	0.163	0.134	0.157	0.046	0.123
B01	0.500	0.402	0.418	0.423	0.360	0.503
B04	0.711	0.679	0.574	0.581	0.376	0.769
B05	0.545	0.579	0.380	0.484	0.297	0.511
B02	0.638	0.601	0.528	0.571	0.438	0.638
B06	0.514	0.452	0.558	0.357	0.308	0.464
B08	0.611	0.610	0.538	0.585	0.455	0.605
B10	0.666	0.633	0.544	0.592	0.408	0.669
B13	0.607	0.579	0.556	0.532	0.345	0.630
A08	0.698	0.633	0.601	0.707	0.428	0.762
A15	0.527	0.567	0.367	0.424	0.429	0.520
A02	0.459	0.516	0.353	0.393	0.433	0.566
A07	0.592	0.542	0.496	0.538	0.406	0.655
A12	0.493	0.454	0.414	0.453	0.267	0.516
A01	0.578	0.535	0.487	0.602	0.333	0.681
A16	0.657	0.581	0.557	0.494	0.340	0.635
A25	0.723	0.617	0.593	0.571	0.404	0.730
A09	0.643	0.599	0.562	0.637	0.459	0.691
G02	0.106	0.137	0.105	0.188	0.043	0.106
G03	-0.143	-0.087	-0.226	-0.127	-0.142	-0.166
0 0 +	ESTIMATED CORRELATION MATRIX					
	D02	D03	D04	D05	D06	D07
D02	1.000					
D03	0.792	1.000				
D04	0.654	0.581	1.000			
D05	0.718	0.694	0.758	1.000		
D06	0.675	0.557	0.635	0.672	1.000	
D07	0.856	0.725	0.695	0.763	0.740	1.000
D01	0.832	0.748	0.645	0.718	0.678	0.823
D09	0.805	0.708	0.692	0.743	0.725	0.856
F03	0.710	0.712	0.679	0.687	0.609	0.745
F04	0.610	0.621	0.617	0.593	0.574	0.618
F08	0.643	0.647	0.571	0.618	0.565	0.644
F13	0.552	0.558	0.479	0.504	0.401	0.584
TOT1	0.037	0.120	0.076	0.040	0.100	0.075
MONTHS	0.148	0.179	0.200	0.162	0.165	0.191

B01	0.497	0.425	0.450	0.419	0.438	0.481
B04	0.724	0.569	0.582	0.640	0.642	0.727
B05	0.501	0.458	0.472	0.508	0.482	0.483
B02	0.589	0.544	0.616	0.564	0.560	0.616
B06	0.398	0.358	0.493	0.416	0.433	0.409
B08	0.618	0.544	0.629	0.590	0.521	0.592
B10	0.641	0.538	0.704	0.639	0.622	0.682
B13	0.534	0.451	0.574	0.555	0.469	0.589
A08	0.665	0.544	0.569	0.590	0.765	0.694
A15	0.542	0.584	0.535	0.634	0.435	0.534
A02	0.525	0.508	0.514	0.558	0.514	0.520
A07	0.572	0.461	0.501	0.548	0.615	0.610
A12	0.440	0.392	0.525	0.417	0.691	0.482
A01	0.619	0.537	0.541	0.505	0.703	0.643
A16	0.612	0.550	0.614	0.603	0.625	0.639
A25	0.639	0.547	0.652	0.631	0.623	0.700
A09	0.633	0.527	0.594	0.595	0.659	0.669
G02	0.153	0.122	0.181	0.068	0.185	0.160
G03	-0.184	-0.128	-0.097	-0.108	-0.151	-0.152

0	ESTIMATED CORRELATION MATRIX						
0		D01	D09	F03	F04	F08	F13
+							
	D01	1.000					
	D09	0.836	1.000				
	F03	0.800	0.768	1.000			
	F04	0.718	0.641	0.819	1.000		
	F08	0.719	0.673	0.791	0.864	1.000	
	F13	0.632	0.531	0.660	0.547	0.570	1.000
	TOT1	0.109	0.053	0.160	0.097	0.063	0.097
	MONTHS	0.144	0.130	0.179	0.129	0.129	0.183
	B01	0.521	0.487	0.423	0.356	0.349	0.355
	B04	0.745	0.762	0.691	0.592	0.605	0.470
	B05	0.512	0.494	0.544	0.394	0.430	0.405
	B02	0.587	0.597	0.575	0.530	0.554	0.460
	B06	0.441	0.394	0.396	0.427	0.426	0.380
	B08	0.584	0.518	0.580	0.524	0.558	0.460
	B10	0.612	0.630	0.651	0.537	0.521	0.515
	B13	0.551	0.562	0.569	0.495	0.461	0.522
	A08	0.680	0.750	0.626	0.561	0.574	0.435
	A15	0.542	0.522	0.580	0.538	0.572	0.363
	A02	0.568	0.519	0.521	0.544	0.551	0.327
	A07	0.612	0.629	0.568	0.531	0.548	0.432
	A12	0.517	0.445	0.446	0.505	0.434	0.297
	A01	0.603	0.688	0.578	0.507	0.510	0.379
	A16	0.649	0.610	0.597	0.599	0.561	0.425
	A25	0.664	0.669	0.622	0.536	0.545	0.458
	A09	0.630	0.683	0.616	0.555	0.583	0.441
	G02	0.116	0.142	0.189	0.146	0.110	0.138
	G03	-0.181	-0.179	-0.145	-0.105	-0.160	-0.173

0	ESTIMATED CORRELATION MATRIX						
0		TOT1	MONTHS	B01	B04	B05	B02
+							
	TOT1	1.000					
	MONTHS	0.196	1.000				
	B01	0.001	0.071	1.000			
	B04	0.082	0.076	0.558	1.000		
	B05	0.158	0.095	0.370	0.545	1.000	
	B02	0.104	0.070	0.566	0.683	0.516	1.000
	B06	0.003	0.095	0.376	0.443	0.283	0.465
	B08	-0.020	0.089	0.457	0.576	0.476	0.579
	B10	0.129	0.176	0.513	0.674	0.497	0.649
	B13	-0.012	0.063	0.365	0.538	0.353	0.479

```

0      A08      0.120      0.054      0.509      0.677      0.475      0.620
0      A15      0.082      0.105      0.197      0.434      0.387      0.445
+      A02      0.080      -0.027      0.301      0.463      0.354      0.444
      A07      0.063      0.123      0.522      0.641      0.414      0.503
      A12      0.183      0.146      0.358      0.467      0.452      0.481
      A01      0.092      0.011      0.415      0.620      0.392      0.559
      A16      0.019      0.099      0.484      0.664      0.480      0.674
      A25      0.085      0.093      0.558      0.724      0.460      0.739
      A09      0.143      0.062      0.487      0.648      0.440      0.612
      G02      0.180      0.396      0.070      0.154      0.119      0.125
      G03      0.099      0.021      -0.146      -0.144      -0.130      -0.142
0      ESTIMATED CORRELATION MATRIX
0      B06      B08      B10      B13      A08      A15
+
      B06      1.000
      B08      0.641      1.000
      B10      0.478      0.631      1.000
      B13      0.506      0.552      0.593      1.000
      A08      0.428      0.547      0.574      0.543      1.000
      A15      0.284      0.395      0.380      0.347      0.415      1.000
      A02      0.365      0.478      0.423      0.352      0.469      0.641
      A07      0.411      0.542      0.518      0.444      0.739      0.381
      A12      0.487      0.463      0.482      0.374      0.525      0.270
      A01      0.345      0.511      0.518      0.419      0.794      0.360
      A16      0.478      0.548      0.602      0.460      0.629      0.472
      A25      0.476      0.606      0.688      0.533      0.681      0.418
      A09      0.399      0.609      0.606      0.509      0.800      0.476
      G02      0.090      0.148      0.207      0.118      0.158      0.014
      G03      -0.165      -0.193      -0.165      -0.088      -0.217      -0.104
0      ESTIMATED CORRELATION MATRIX
0      A02      A07      A12      A01      A16      A25
+
      A02      1.000
      A07      0.451      1.000
      A12      0.395      0.470      1.000
      A01      0.519      0.641      0.460      1.000
      A16      0.477      0.622      0.577      0.594      1.000
      A25      0.470      0.584      0.478      0.585      0.698      1.000
      A09      0.477      0.678      0.475      0.683      0.625      0.601
      G02      0.002      0.169      0.225      0.116      0.161      0.154
      G03      -0.045      -0.149      -0.142      -0.145      -0.199      -0.158
0      ESTIMATED CORRELATION MATRIX
0      A09      G02      G03
+
      A09      1.000
      G02      0.113      1.000
      G03      -0.190      -0.042      1.000
0      THE PROBLEM USED 230928 BYTES (= 4.0% OF AVAILABLE WORKSPACE)

```



```

1554 LISREL
1555 /TITLE TESTING THE MAIN MODEL
1556 /MATRIX=IN (*)
1557 /DA NI=39 NOBS=201 MA=KM
1558 /LA
1559 /'EMPATHY' 'RELIABL' 'RESPONS' 'ASSURAN' 'TANGIBL'
1560 'D08' 'D02' 'D03' 'D04' 'D05' 'D06' 'D07' 'D01' 'D09'
1561 'F03' 'F04' 'F08' 'F13'
1562 'TOT1' 'MONTHS'
1563 'B01' 'B04' 'B05' 'B02' 'B06' 'B08' 'B10' 'B13'
1564 'A08' 'A15' 'A02' 'A07' 'A12' 'A01' 'A16' 'A25' 'A09'
1565 'AGE' 'EDUCATE'
1566 /MODEL NY=18 NE=3 NX=21 NK=6 PH=ST BE=SD PS=DI
1567 /FR LY (2,1) LY(3,1) LY(4,1) LY(5,1)
1568 /FR LY (7,2) LY(8,2) LY(9,2) LY(10,2) LY(11,2) LY(12,2) LY(13,2)
1569 /FR LY(14,2)
1570 /FR LY(16,3) LY(17,3) LY(18,3)
1571 /FR LX(4,3) LX(5,3) LX(6,3) LX(7,3) LX(8,3) LX(9,3) LX(10,3)
1572 /FR LX(12,4) LX(13,4) LX(14,4) LX(15,4) LX(16,4) LX(17,4) LX(18,4)
LX(19,
1573 /VA 1 LY(1,1) LY(6,2) LY(15,3)
1574 /VA 1 LX(1,1) LX(2,2) LX(3,3) LX(11,4) LX(20,5) LX(21,6)
1575 /VA 0.2 TD(1,1) TD(2,2) TD(20,20) TD(21,21)
1576 /FI GA(3,1) GA(3,2) GA(3,3) GA(3,4) GA(1,5) GA(2,5) GA(1,6) GA(2,6)
1577 /LE
1578 /'SERVQUAL' 'SATISFAC' 'LOYALTY'
1579 /LK
1580 /'ACCOUNTS' 'MONTHS' 'EQUITY' 'FIRMCHAR' 'AGE' 'EDUCATE'
1581 /OU SE TV PC EF MI SS TO

```

OTHERE ARE 6,106,344 BYTES OF MEMORY AVAILABLE.
 THE LARGEST CONTIGUOUS AREA HAS 5,807,056 BYTES.

1

```

0
SYSTEMS
-
0
LISREL 7: ESTIMATION OF LINEAR STRUCTURAL EQUATION
PROGRAM VERSION 7.16 DISTRIBUTED BY
SCIENTIFIC SOFTWARE, INC.
1369 NEITZEL ROAD
MOORESVILLE, INDIANA 46158
(317) 831-6336

```

```

0
0
THIS COPY AUTHORIZED FOR USE IN SPSS-X
PROGRAM COPYRIGHT 1977-89 BY SCIENTIFIC SOFTWARE, INC.,
(A MICHIGAN CORPORATION).
DISTRIBUTION OR USE UNAUTHORIZED BY SCIENTIFIC SOFTWARE, INC. IS
PROHIBITED.

```

```

1
0
0
MVS - L I S R E L 7.16
BY
KARL G JORESKOG AND DAG SORBOM

```

OTHE FOLLOWING LISREL CONTROL LINES HAVE BEEN READ :

TITLE TESTING THE MAIN MODEL

DA NI=39 NOBS=201 MA=KM

KM FI=LSLDD21 FO

(5E14.6)

LA

EMPATHY RELIABL RESPONS ASSURAN TANGIBL
D08 D02 D03 D04 D05 D06 D07 D01 D09
F03 F04 F08 F13
TOT1 MONTHS
B01 B04 B05 B02 B06 B08 B10 B13
A08 A15 A02 A07 A12 A01 A16 A25 A09
AGE EDUCATE

MODEL NY=18 NE=3 NX=21 NK=6 PH=ST BE=SD PS=DI

FR LY (2,1) LY(3,1) LY(4,1) LY(5,1)

FR LY (7,2) LY(8,2) LY(9,2) LY(10,2) LY(11,2) LY(12,2) LY(13,2)

FR LY(14,2)

FR LY(16,3) LY(17,3) LY(18,3)

FR LX(4,3) LX(5,3) LX(6,3) LX(7,3) LX(8,3) LX(9,3) LX(10,3)

FR LX(12,4) LX(13,4) LX(14,4) LX(15,4) LX(16,4) LX(17,4) LX(18,4) LX(19,4)

VA 1 LY(1,1) LY(6,2) LY(15,3)

VA 1 LX(1,1) LX(2,2) LX(3,3) LX(11,4) LX(20,5) LX(21,6)

VA 0.2 TD(1,1) TD(2,2) TD(20,20) TD(21,21)

FI GA(3,1) GA(3,2) GA(3,3) GA(3,4) GA(1,5) GA(2,5) GA(1,6) GA(2,6)

LE

SERVQUAL SATISFAC LOYALTY

LK

ACCOUNTS MONTHS EQUITY FIRMCHAR AGE EDUCATE

OU SE TV PC EF MI SS TO

1TITLE TESTING THE MAIN MODEL

0 NUMBER OF INPUT VARIABLES 39
0 NUMBER OF Y - VARIABLES 18
0 NUMBER OF X - VARIABLES 21
0 NUMBER OF ETA - VARIABLES 3
? NUMBER OF KSI - VARIABLES 6
\ NUMBER OF OBSERVATIONS 201

1TITLE TESTING THE MAIN MODEL

0 CORRELATION MATRIX TO BE ANALYZED

	EMPATHY	RELIABL	RESPONS	ASSURAN	TANGIBL	D08
EMPATHY	1.000					
RELIABL	0.773	1.000				
RESPONS	0.688	0.598	1.000			
ASSURAN	0.671	0.666	0.542	1.000		
TANGIBL	0.516	0.534	0.372	0.490	1.000	
D08	0.768	0.719	0.643	0.670	0.451	1.000
D02	0.679	0.653	0.576	0.643	0.457	0.795
D03	0.607	0.593	0.526	0.570	0.445	0.688
D04	0.698	0.721	0.547	0.587	0.470	0.702
D05	0.722	0.790	0.575	0.636	0.480	0.749
D06	0.681	0.644	0.511	0.608	0.411	0.738
D07	0.733	0.685	0.600	0.665	0.463	0.908
D01	0.715	0.698	0.636	0.632	0.431	0.831
D09	0.732	0.723	0.632	0.645	0.430	0.872
F03	0.726	0.751	0.620	0.634	0.422	0.788
F04	0.667	0.655	0.559	0.502	0.417	0.672
F08	0.662	0.635	0.636	0.485	0.398	0.691
F13	0.566	0.567	0.526	0.453	0.368	0.605
TOT1	0.071	0.084	0.056	0.140	0.037	0.095
MONTHS	0.143	0.163	0.134	0.157	0.046	0.123
B01	0.500	0.402	0.418	0.423	0.360	0.503
B04	0.711	0.679	0.574	0.581	0.376	0.769
B05	0.545	0.579	0.380	0.484	0.297	0.511

	B02	0.638	0.601	0.528	0.571	0.438	0.638
	B06	0.514	0.452	0.558	0.357	0.308	0.464
	B08	0.611	0.610	0.538	0.585	0.455	0.605
	B10	0.666	0.633	0.544	0.592	0.408	0.669
	B13	0.607	0.579	0.556	0.532	0.345	0.630
	A08	0.698	0.633	0.601	0.707	0.428	0.762
	A15	0.527	0.567	0.367	0.424	0.429	0.520
	A02	0.459	0.516	0.353	0.393	0.433	0.566
	A07	0.592	0.542	0.496	0.538	0.406	0.655
	A12	0.493	0.454	0.414	0.453	0.267	0.516
	A01	0.578	0.535	0.487	0.602	0.333	0.681
	A16	0.657	0.581	0.557	0.494	0.340	0.635
	A25	0.723	0.617	0.593	0.571	0.404	0.730
	A09	0.643	0.599	0.562	0.637	0.459	0.691
	AGE	0.106	0.137	0.105	0.188	0.043	0.106
	EDUCATE	-0.143	-0.087	-0.226	-0.127	-0.142	-0.166
0	CORRELATION MATRIX TO BE ANALYZED						
0		D02	D03	D04	D05	D06	D07
+							
	D02	1.000					
	D03	0.792	1.000				
	D04	0.654	0.581	1.000			
	D05	0.718	0.694	0.758	1.000		
	D06	0.675	0.557	0.635	0.672	1.000	
	D07	0.856	0.725	0.695	0.763	0.740	1.000
	D01	0.832	0.748	0.645	0.718	0.678	0.823
	D09	0.805	0.708	0.692	0.743	0.725	0.856
	F03	0.710	0.712	0.679	0.687	0.609	0.745
	F04	0.610	0.621	0.617	0.593	0.574	0.618
	F08	0.643	0.647	0.571	0.618	0.565	0.644
	F13	0.552	0.558	0.479	0.504	0.401	0.584
	TOT1	0.037	0.120	0.076	0.040	0.100	0.075
	MONTHS	0.148	0.179	0.200	0.162	0.165	0.191
	B01	0.497	0.425	0.450	0.419	0.438	0.481
	B04	0.724	0.569	0.582	0.640	0.642	0.727
	B05	0.501	0.458	0.472	0.508	0.482	0.483
	B02	0.589	0.544	0.616	0.564	0.560	0.616
	B06	0.398	0.358	0.493	0.416	0.433	0.409
	B08	0.618	0.544	0.629	0.590	0.521	0.592
	B10	0.641	0.538	0.704	0.639	0.622	0.682
	B13	0.534	0.451	0.574	0.555	0.469	0.589
	A08	0.665	0.544	0.569	0.590	0.765	0.694
	A15	0.542	0.584	0.535	0.634	0.435	0.534
	A02	0.525	0.508	0.514	0.558	0.514	0.520
	A07	0.572	0.461	0.501	0.548	0.615	0.610
	A12	0.440	0.392	0.525	0.417	0.691	0.482
	A01	0.619	0.537	0.541	0.505	0.703	0.643
	A16	0.612	0.550	0.614	0.603	0.625	0.639
	A25	0.639	0.547	0.652	0.631	0.623	0.700
	A09	0.633	0.527	0.594	0.595	0.659	0.669
	AGE	0.153	0.122	0.181	0.068	0.185	0.160
	EDUCATE	-0.184	-0.128	-0.097	-0.108	-0.151	-0.152
0	CORRELATION MATRIX TO BE ANALYZED						
0		D01	D09	F03	F04	F08	F13
+							
	D01	1.000					
	D09	0.836	1.000				
	F03	0.800	0.768	1.000			
	F04	0.718	0.641	0.819	1.000		
	F08	0.719	0.673	0.791	0.864	1.000	
	F13	0.632	0.531	0.660	0.547	0.570	1.000
	TOT1	0.109	0.053	0.160	0.097	0.063	0.097

MONTHS	0.144	0.130	0.179	0.129	0.129	0.183
B01	0.521	0.487	0.423	0.356	0.349	0.355
B04	0.745	0.762	0.691	0.592	0.605	0.470
B05	0.512	0.494	0.544	0.394	0.430	0.405
B02	0.587	0.597	0.575	0.530	0.554	0.460
B06	0.441	0.394	0.396	0.427	0.426	0.380
B08	0.584	0.518	0.580	0.524	0.558	0.460
B10	0.612	0.630	0.651	0.537	0.521	0.515
B13	0.551	0.562	0.569	0.495	0.461	0.522
A08	0.680	0.750	0.626	0.561	0.574	0.435
A15	0.542	0.522	0.580	0.538	0.572	0.363
A02	0.568	0.519	0.521	0.544	0.551	0.327
A07	0.612	0.629	0.568	0.531	0.548	0.432
A12	0.517	0.445	0.446	0.505	0.434	0.297
A01	0.603	0.688	0.578	0.507	0.510	0.379
A16	0.649	0.610	0.597	0.599	0.561	0.425
A25	0.664	0.669	0.622	0.536	0.545	0.458
A09	0.630	0.683	0.616	0.555	0.583	0.441
AGE	0.116	0.142	0.189	0.146	0.110	0.138
EDUCATE	-0.181	-0.179	-0.145	-0.105	-0.160	-0.173
0	CORRELATION MATRIX TO BE ANALYZED					
0	TOT1	MONTHS	B01	B04	B05	B02
+						
	TOT1	1.000				
	MONTHS	0.196	1.000			
	B01	0.001	0.071	1.000		
	B04	0.082	0.076	0.558	1.000	
	B05	0.158	0.095	0.370	0.545	1.000
	B02	0.104	0.070	0.566	0.683	0.516
	B06	0.003	0.095	0.376	0.443	0.283
	B08	-0.020	0.089	0.457	0.576	0.476
	B10	0.129	0.176	0.513	0.674	0.497
	B13	-0.012	0.063	0.365	0.538	0.353
	A08	0.120	0.054	0.509	0.677	0.475
	A15	0.082	0.105	0.197	0.434	0.387
	A02	0.080	-0.027	0.301	0.463	0.354
	A07	0.063	0.123	0.522	0.641	0.414
	A12	0.183	0.146	0.358	0.467	0.452
	A01	0.092	0.011	0.415	0.620	0.392
	A16	0.019	0.099	0.484	0.664	0.480
	A25	0.085	0.093	0.558	0.724	0.460
	A09	0.143	0.062	0.487	0.648	0.440
	AGE	0.180	0.396	0.070	0.154	0.119
	EDUCATE	0.099	0.021	-0.146	-0.144	-0.130
0	CORRELATION MATRIX TO BE ANALYZED					
0	B06	B08	B10	B13	A08	A15
+						
	B06	1.000				
	B08	0.641	1.000			
	B10	0.478	0.631	1.000		
	B13	0.506	0.552	0.593	1.000	
	A08	0.428	0.547	0.574	0.543	1.000
	A15	0.284	0.395	0.380	0.347	0.415
	A02	0.365	0.478	0.423	0.352	0.469
	A07	0.411	0.542	0.518	0.444	0.739
	A12	0.487	0.463	0.482	0.374	0.525
	A01	0.345	0.511	0.518	0.419	0.794
	A16	0.478	0.548	0.602	0.460	0.629
	A25	0.476	0.606	0.688	0.533	0.681
	A09	0.399	0.609	0.606	0.509	0.800
	AGE	0.090	0.148	0.207	0.118	0.158
	EDUCATE	-0.165	-0.193	-0.165	-0.088	-0.217

```

0      CORRELATION MATRIX TO BE ANALYZED
0      A02      A07      A12      A01      A16      A25
+
  A02      1.000
  A07      0.451      1.000
  A12      0.395      0.470      1.000
  A01      0.519      0.641      0.460      1.000
  A16      0.477      0.622      0.577      0.594      1.000
  A25      0.470      0.584      0.478      0.585      0.698      1.000
  A09      0.477      0.678      0.475      0.683      0.625      0.601
  AGE      0.002      0.169      0.225      0.116      0.161      0.154
  EDUCATE  -0.045      -0.149      -0.142      -0.145      -0.199      -0.158
0      CORRELATION MATRIX TO BE ANALYZED
0      A09      AGE      EDUCATE
+
  A09      1.000
  AGE      0.113      1.000
  EDUCATE  -0.190      -0.042      1.000

```

1TITLE TESTING THE MAIN MODEL
0PARAMETER SPECIFICATIONS

0 LAMBDA Y

	SERVQUAL	SATISFAC	LOYALTY
+			
EMPATHY	0	0	0
RELIABL	1	0	0
RESPONS	2	0	0
ASSURAN	3	0	0
TANGIBL	4	0	0
D08	0	0	0
D02	0	5	0
D03	0	6	0
D04	0	7	0
D05	0	8	0
D06	0	9	0
D07	0	10	0
D01	0	11	0
D09	0	12	0
F03	0	0	0
F04	0	0	13
F08	0	0	14
F13	0	0	15

0 LAMBDA X

	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	AGE	EDUCATE
+						
TOT1	0	0	0	0	0	0
MONTHS	0	0	0	0	0	0
B01	0	0	0	0	0	0
B04	0	0	16	0	0	0
B05	0	0	17	0	0	0
B02	0	0	18	0	0	0
B06	0	0	19	0	0	0
B08	0	0	20	0	0	0
B10	0	0	21	0	0	0
B13	0	0	22	0	0	0
A08	0	0	0	0	0	0
A15	0	0	0	23	0	0
A02	0	0	0	24	0	0
A07	0	0	0	25	0	0
A12	0	0	0	26	0	0
A01	0	0	0	27	0	0
A16	0	0	0	28	0	0
A25	0	0	0	29	0	0
A09	0	0	0	30	0	0
AGE	0	0	0	0	0	0
EDUCATE	0	0	0	0	0	0

0 BETA

	SERVQUAL	SATISFAC	LOYALTY
+			
SERVQUAL	0	0	0
SATISFAC	31	0	0
LOYALTY	32	33	0

0 GAMMA

	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	AGE	EDUCATE
+						
SERVQUAL	34	35	36	37	0	0
SATISFAC	38	39	40	41	0	0
LOYALTY	0	0	0	0	42	43

0	PHI					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	AGE	EDUCATE
+						
	ACCOUNTS	0				
	MONTHS	44	0			
	EQUITY	45	46	0		
	FIRMCHAR	47	48	49	0	
	AGE	50	51	52	53	0
	EDUCATE	54	55	56	57	58
0	PSI					0
0	SERVQUAL	SATISFAC	LOYALTY			
+						
	59	60	61			
0	THETA EPS					
0	EMPATHY	RELIABL	RESPONS	ASSURAN	TANGIBL	D08
+						
	62	63	64	65	66	67
0	THETA EPS					
0	D02	D03	D04	D05	D06	D07
+						
	68	69	70	71	72	73
0	THETA EPS					
0	D01	D09	F03	F04	F08	F13
+						
	74	75	76	77	78	79
0	THETA DELTA					
0	TOT1	MONTHS	B01	B04	B05	B02
+						
	80	81	82	83	84	85
0	THETA DELTA					
0	B06	B08	B10	B13	A08	A15
+						
	86	87	88	89	90	91
0	THETA DELTA					
0	A02	A07	A12	A01	A16	A25
+						
	92	93	94	95	96	97
0	THETA DELTA					
0	A09	AGE	EDUCATE			
+						
	98	99	100			

1TITLE TESTING THE MAIN MODEL
0INITIAL ESTIMATES (TSLs)

0	LAMBDA Y		
0	SERVQUAL	SATISFAC	LOYALTY
+			
EMPATHY	1.000	0.000	0.000
RELIABL	0.951	0.000	0.000
RESPONS	0.822	0.000	0.000
ASSURAN	0.818	0.000	0.000
TANGIBL	0.598	0.000	0.000
D08	0.000	1.000	0.000
D02	0.000	0.908	0.000
D03	0.000	0.776	0.000
D04	0.000	0.779	0.000
D05	0.000	0.831	0.000
D06	0.000	0.825	0.000
D07	0.000	0.972	0.000
D01	0.000	0.921	0.000
D09	0.000	0.949	0.000
F03	0.000	0.000	1.000
F04	0.000	0.000	0.908
F08	0.000	0.000	0.911
F13	0.000	0.000	0.720

0	LAMBDA X					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	AGE	EDUCATE
+						
TOT1	0.894	0.000	0.000	0.000	0.000	0.000
MONTHS	0.000	0.894	0.000	0.000	0.000	0.000
B01	0.000	0.000	0.793	0.000	0.000	0.000
B04	0.000	0.000	0.848	0.000	0.000	0.000
B05	0.000	0.000	0.559	0.000	0.000	0.000
B02	0.000	0.000	0.804	0.000	0.000	0.000
B06	0.000	0.000	0.564	0.000	0.000	0.000
B08	0.000	0.000	0.736	0.000	0.000	0.000
B10	0.000	0.000	0.783	0.000	0.000	0.000
B13	0.000	0.000	0.611	0.000	0.000	0.000
A08	0.000	0.000	0.000	0.986	0.000	0.000
A15	0.000	0.000	0.000	0.479	0.000	0.000
A02	0.000	0.000	0.000	0.558	0.000	0.000
A07	0.000	0.000	0.000	0.780	0.000	0.000
A12	0.000	0.000	0.000	0.619	0.000	0.000
A01	0.000	0.000	0.000	0.851	0.000	0.000
A16	0.000	0.000	0.000	0.736	0.000	0.000
A25	0.000	0.000	0.000	0.733	0.000	0.000
A09	0.000	0.000	0.000	0.842	0.000	0.000
AGE	0.000	0.000	0.000	0.000	0.894	0.000
EDUCATE	0.000	0.000	0.000	0.000	0.000	0.894

0	BETA					
0	SERVQUAL	SATISFAC	LOYALTY			
+						
SERVQUAL	0.000	0.000	0.000			
SATISFAC	0.313	0.000	0.000			
LOYALTY	0.426	0.462	0.000			
0	GAMMA					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	AGE	EDUCATE
+						
SERVQUAL	-0.071	0.109	-0.484	1.250	0.000	0.000
SATISFAC	-0.086	0.112	-0.641	1.211	0.000	0.000
LOYALTY	0.000	0.000	0.000	0.000	0.034	-0.009

0	COVARIANCE MATRIX OF ETA AND KSI						
0	SERVQUAL	SATISFAC	LOYALTY	ACCOUNTS	MONTHS	EQUITY	
+							
	SERVQUAL	0.834					
	SATISFAC	0.819	0.943				
	LOYALTY	0.742	0.793	0.889			
	ACCOUNTS	0.093	0.087	0.086	1.000		
	MONTHS	0.156	0.178	0.165	0.246	1.000	
	EQUITY	0.671	0.687	0.613	0.087	0.142	
	FIRMCHAR	0.808	0.876	0.758	0.143	0.106	
	AGE	0.181	0.196	0.202	0.225	0.495	
	EDUCATE	-0.185	-0.201	-0.183	0.124	0.026	
0	COVARIANCE MATRIX OF ETA AND KSI						
0	FIRMCHAR	AGE	EDUCATE				
+							
	FIRMCHAR	1.000					
	AGE	0.192	1.000				
	EDUCATE	-0.231	-0.052	1.000			
0	PSI						
0	SERVQUAL	SATISFAC	LOYALTY				
+							
		0.138	0.054	0.198			
0	THETA EPS						
0	EMPATHY	RELIABL	RESPONS	ASSURAN	TANGIBL	D08	
+							
		0.166	0.246	0.437	0.443	0.702	
						0.057	
0	THETA EPS						
0	D02	D03	D04	D05	D06	D07	
+							
		0.224	0.432	0.427	0.349	0.358	
						0.110	
0	THETA EPS						
0	D01	D09	F03	F04	F08	F13	
+							
		0.200	0.151	0.089	0.249	0.243	
						0.527	
0	THETA DELTA						
0	TOT1	MONTHS	B01	B04	B05	B02	
+							
		0.200	0.200	0.372	0.282	0.687	
						0.353	
0	THETA DELTA						
0	B06	B08	B10	B13	A08	A15	
+							
		0.682	0.458	0.387	0.627	0.027	
						0.771	
0	THETA DELTA						
0	A02	A07	A12	A01	A16	A25	
+							
		0.688	0.391	0.617	0.276	0.458	
						0.462	
0	THETA DELTA						
0	A09	AGE	EDUCATE				
+							
		0.291	0.200	0.200			
0	SQUARED MULTIPLE CORRELATIONS FOR Y - VARIABLES						
0	EMPATHY	RELIABL	RESPONS	ASSURAN	TANGIBL	D08	
+							
		0.834	0.754	0.563	0.557	0.298	
						0.943	
0	SQUARED MULTIPLE CORRELATIONS FOR Y - VARIABLES						
0	D02	D03	D04	D05	D06	D07	
+							
		0.776	0.568	0.573	0.651	0.642	
						0.890	

```

0      SQUARED MULTIPLE CORRELATIONS FOR Y - VARIABLES
0      D01      D09      F03      F04      F08      F13
+      -----
0      0.800      0.849      0.909      0.747      0.752      0.467
0      TOTAL COEFFICIENT OF DETERMINATION FOR Y - VARIABLES IS 0.998
0      SQUARED MULTIPLE CORRELATIONS FOR X - VARIABLES
0      TOT1      MONTHS      B01      B04      B05      B02
+      -----
0      0.800      0.800      0.628      0.718      0.313      0.647
0      SQUARED MULTIPLE CORRELATIONS FOR X - VARIABLES
0      B06      B08      B10      B13      A08      A15
+      -----
0      0.318      0.542      0.613      0.373      0.973      0.229
0      SQUARED MULTIPLE CORRELATIONS FOR X - VARIABLES
0      A02      A07      A12      A01      A16      A25
+      -----
0      0.312      0.609      0.383      0.724      0.542      0.538
0      SQUARED MULTIPLE CORRELATIONS FOR X - VARIABLES
0      A09      AGE      EDUCATE
+      -----
0      0.709      0.800      0.800
0      TOTAL COEFFICIENT OF DETERMINATION FOR X - VARIABLES IS 1.000
0      SQUARED MULTIPLE CORRELATIONS FOR STRUCTURAL EQUATIONS
0      SERVQUAL      SATISFAC      LOYALTY
+      -----
0      0.834      0.943      0.778
0      TOTAL COEFFICIENT OF DETERMINATION FOR STRUCTURAL EQUATIONS IS
0.936

```

1TITLE TESTING THE MAIN MODEL

0LISREL ESTIMATES (MAXIMUM LIKELIHOOD)

```

0      LAMBDA Y
0      SERVQUAL      SATISFAC      LOYALTY
+      -----
0      EMPATHY      1.000      0.000      0.000
0      RELIABL      0.959      0.000      0.000
0      RESPON      0.828      0.000      0.000
0      ASSURAN      0.859      0.000      0.000
0      TANGIBL      0.640      0.000      0.000
0      D08      0.000      1.000      0.000
0      D02      0.000      0.947      0.000
0      D03      0.000      0.840      0.000
0      D04      0.000      0.824      0.000
0      D05      0.000      0.884      0.000
0      D06      0.000      0.846      0.000
0      D07      0.000      0.999      0.000
0      D01      0.000      0.959      0.000
0      D09      0.000      0.980      0.000
0      F03      0.000      0.000      1.000
0      F04      0.000      0.000      0.965
0      F08      0.000      0.000      0.955
0      F13      0.000      0.000      0.731

```

0	LAMBDA X					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	AGE	EDUCATE
+						
	TOT1	0.894	0.000	0.000	0.000	0.000
	MONTHS	0.000	0.894	0.000	0.000	0.000
	B01	0.000	0.000	0.793	0.000	0.000
	B04	0.000	0.000	0.927	0.000	0.000
	B05	0.000	0.000	0.680	0.000	0.000
	B02	0.000	0.000	0.870	0.000	0.000
	B06	0.000	0.000	0.658	0.000	0.000
	B08	0.000	0.000	0.831	0.000	0.000
	B10	0.000	0.000	0.884	0.000	0.000
	B13	0.000	0.000	0.748	0.000	0.000
	A08	0.000	0.000	0.000	0.986	0.000
	A15	0.000	0.000	0.000	0.613	0.000
	A02	0.000	0.000	0.000	0.671	0.000
	A07	0.000	0.000	0.000	0.852	0.000
	A12	0.000	0.000	0.000	0.670	0.000
	A01	0.000	0.000	0.000	0.873	0.000
	A16	0.000	0.000	0.000	0.857	0.000
	A25	0.000	0.000	0.000	0.877	0.000
	A09	0.000	0.000	0.000	0.915	0.000
	AGE	0.000	0.000	0.000	0.894	0.000
	EDUCATE	0.000	0.000	0.000	0.000	0.894
0	BETA					
0	SERVQUAL	SATISFAC	LOYALTY			
+						
	SERVQUAL	0.000	0.000	0.000		
	SATISFAC	0.480	0.000	0.000		
	LOYALTY	0.467	0.437	0.000		
0	GAMMA					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	AGE	EDUCATE
+						
	SERVQUAL	-0.002	0.059	0.664	0.258	0.000
	SATISFAC	-0.032	0.053	0.085	0.423	0.000
	LOYALTY	0.000	0.000	0.000	0.034	0.004
0	COVARIANCE MATRIX OF ETA AND KSI					
0	SERVQUAL	SATISFAC	LOYALTY	ACCOUNTS	MONTHS	EQUITY
+						
	SERVQUAL	0.948				
	SATISFAC	0.912	1.028			
	LOYALTY	0.847	0.882	0.984		
	ACCOUNTS	0.122	0.111	0.114	1.000	
	MONTHS	0.187	0.196	0.190	0.243	1.000
	EQUITY	0.913	0.922	0.835	0.108	0.150
	FIRMCHAR	0.883	0.927	0.823	0.148	0.113
	AGE	0.220	0.227	0.236	0.231	0.484
	EDUCATE	-0.224	-0.240	-0.208	0.118	0.022
0	COVARIANCE MATRIX OF ETA AND KSI					
0	FIRMCHAR	AGE	EDUCATE			
+						
	FIRMCHAR	1.000				
	AGE	0.203	1.000			
	EDUCATE	-0.259	-0.062	1.000		
0	PSI					
0	SERVQUAL	SATISFAC	LOYALTY			
+						
		0.103	0.114	0.196		

0	THETA EPS					
0	EMPATHY	RELIABL	RESPONS	ASSURAN	TANGIBL	D08
+	0.198	0.262	0.450	0.407	0.672	0.125
0	THETA EPS					
0	D02	D03	D04	D05	D06	D07
+	0.215	0.382	0.406	0.317	0.373	0.127
0	THETA EPS					
0	D01	D09	F03	F04	F08	F13
+	0.195	0.160	0.141	0.199	0.217	0.540
0	THETA DELTA					
0	TOT1	MONTHS	B01	B04	B05	B02
+	0.202	0.179	0.610	0.287	0.616	0.372
0	THETA DELTA					
0	B06	B08	B10	B13	A08	A15
+	0.641	0.427	0.351	0.536	0.220	0.687
0	THETA DELTA					
0	A02	A07	A12	A01	A16	A25
+	0.625	0.394	0.625	0.365	0.388	0.359
0	THETA DELTA					
0	A09	AGE	EDUCATE			
+	0.302	0.204	0.209			
0	SQUARED MULTIPLE CORRELATIONS FOR Y - VARIABLES					
0	EMPATHY	RELIABL	RESPONS	ASSURAN	TANGIBL	D08
+	0.827	0.769	0.591	0.632	0.366	0.892
0	SQUARED MULTIPLE CORRELATIONS FOR Y - VARIABLES					
0	D02	D03	D04	D05	D06	D07
+	0.811	0.655	0.632	0.717	0.664	0.889
0	SQUARED MULTIPLE CORRELATIONS FOR Y - VARIABLES					
0	D01	D09	F03	F04	F08	F13
+	0.829	0.861	0.875	0.821	0.805	0.494
0	TOTAL COEFFICIENT OF DETERMINATION FOR Y - VARIABLES IS 0.998					
0	SQUARED MULTIPLE CORRELATIONS FOR X - VARIABLES					
0	TOT1	MONTHS	B01	B04	B05	B02
+	0.798	0.817	0.507	0.750	0.429	0.670
0	SQUARED MULTIPLE CORRELATIONS FOR X - VARIABLES					
0	B06	B08	B10	B13	A08	A15
+	0.403	0.618	0.690	0.510	0.816	0.353
0	SQUARED MULTIPLE CORRELATIONS FOR X - VARIABLES					
0	A02	A07	A12	A01	A16	A25
+	0.419	0.648	0.418	0.676	0.654	0.682
0	SQUARED MULTIPLE CORRELATIONS FOR X - VARIABLES					
0	A09	AGE	EDUCATE			
+	0.735	0.797	0.793			

```

0      TOTAL COEFFICIENT OF DETERMINATION FOR X - VARIABLES IS 1.000
0      SQUARED MULTIPLE CORRELATIONS FOR STRUCTURAL EQUATIONS
0      SERVQUAL    SATISFAC    LOYALTY
+      _____
0      0.891      0.889      0.801
0      TOTAL COEFFICIENT OF DETERMINATION FOR STRUCTURAL EQUATIONS IS
0.918

0      CHI-SQUARE WITH 680 DEGREES OF FREEDOM = 1569.42 (P = .000)
0      GOODNESS OF FIT INDEX =0.705
      ADJUSTED GOODNESS OF FIT INDEX =0.662
      ROOT MEAN SQUARE RESIDUAL = 0.118
1TITLE TESTING THE MAIN MODEL
-SUMMARY STATISTICS FOR FITTED RESIDUALS
SMALLEST FITTED RESIDUAL = -0.292
MEDIAN FITTED RESIDUAL = -0.103
LARGEST FITTED RESIDUAL = 0.230

```

[illegible]

ORESIDUAL FOR	D03 AND	D08 =	-2.770
ORESIDUAL FOR	D06 AND	D03 =	-2.984
ORESIDUAL FOR	D07 AND	RELIABL =	-2.687
ORESIDUAL FOR	D01 AND	D04 =	-2.726
ORESIDUAL FOR	D09 AND	TANGIBL =	-2.629
ORESIDUAL FOR	F04 AND	ASSURAN =	-3.377
ORESIDUAL FOR	F04 AND	D08 =	-2.708
ORESIDUAL FOR	F04 AND	D02 =	-3.045
ORESIDUAL FOR	F04 AND	D07 =	-3.511
ORESIDUAL FOR	F04 AND	D09 =	-2.950
ORESIDUAL FOR	F08 AND	ASSURAN =	-3.540
ORESIDUAL FOR	F08 AND	D07 =	-2.993
ORESIDUAL FOR	F08 AND	F03 =	-2.630
ORESIDUAL FOR	F13 AND	F04 =	-3.217
ORESIDUAL FOR	B01 AND	RELIABL =	-3.293
ORESIDUAL FOR	B01 AND	D05 =	-2.627
ORESIDUAL FOR	B01 AND	D07 =	-2.699
ORESIDUAL FOR	B01 AND	F03 =	-2.745
ORESIDUAL FOR	B01 AND	F04 =	-3.315
ORESIDUAL FOR	B01 AND	F08 =	-3.332
ORESIDUAL FOR	B04 AND	TANGIBL =	-3.002
ORESIDUAL FOR	B05 AND	F04 =	-2.649
ORESIDUAL FOR	B02 AND	D07 =	-2.669
ORESIDUAL FOR	B02 AND	D01 =	-2.687
ORESIDUAL FOR	B02 AND	D09 =	-2.751
ORESIDUAL FOR	B02 AND	F04 =	-2.649
ORESIDUAL FOR	B06 AND	ASSURAN =	-2.814
ORESIDUAL FOR	B06 AND	D02 =	-3.052
ORESIDUAL FOR	B06 AND	D03 =	-2.608
ORESIDUAL FOR	B06 AND	D07 =	-3.409
ORESIDUAL FOR	B06 AND	D09 =	-3.468
ORESIDUAL FOR	B06 AND	F03 =	-2.680
ORESIDUAL FOR	B06 AND	B04 =	-3.056
ORESIDUAL FOR	B06 AND	B05 =	-2.974
ORESIDUAL FOR	B08 AND	D07 =	-2.577
ORESIDUAL FOR	B08 AND	D09 =	-3.500
ORESIDUAL FOR	B08 AND	B04 =	-3.068
ORESIDUAL FOR	B10 AND	F04 =	-2.700
ORESIDUAL FOR	B10 AND	F08 =	-2.836
ORESIDUAL FOR	B13 AND	B01 =	-2.838
ORESIDUAL FOR	B13 AND	B04 =	-2.619
ORESIDUAL FOR	B13 AND	B05 =	-2.810
ORESIDUAL FOR	B13 AND	B02 =	-2.947
ORESIDUAL FOR	A08 AND	D03 =	-2.691
ORESIDUAL FOR	A08 AND	F04 =	-2.618
ORESIDUAL FOR	A08 AND	B08 =	-2.632
ORESIDUAL FOR	A08 AND	B10 =	-2.754
ORESIDUAL FOR	A15 AND	B01 =	-3.478
ORESIDUAL FOR	A15 AND	A08 =	-2.853
ORESIDUAL FOR	A02 AND	A08 =	-2.693
ORESIDUAL FOR	A07 AND	RELIABL =	-2.646
ORESIDUAL FOR	A07 AND	D03 =	-3.104
ORESIDUAL FOR	A07 AND	B02 =	-2.828
ORESIDUAL FOR	A07 AND	B10 =	-2.749
ORESIDUAL FOR	A12 AND	D09 =	-2.741
ORESIDUAL FOR	A01 AND	EMPATHY =	-2.742
ORESIDUAL FOR	A01 AND	RELIABL =	-2.971
ORESIDUAL FOR	A01 AND	TANGIBL =	-2.748
ORESIDUAL FOR	A01 AND	D05 =	-3.110
ORESIDUAL FOR	A01 AND	F04 =	-2.777
ORESIDUAL FOR	A01 AND	F08 =	-2.625
ORESIDUAL FOR	A01 AND	B01 =	-2.645

ORESIDUAL FOR A01 AND B05 = -2.680
 ORESIDUAL FOR A01 AND B06 = -3.207
 ORESIDUAL FOR A01 AND B10 = -2.962
 ORESIDUAL FOR A01 AND B13 = -3.019
 ORESIDUAL FOR A01 AND A15 = -3.125
 ORESIDUAL FOR A25 AND A01 = -2.645
 ORESIDUAL FOR A09 AND D03 = -2.747
 ORESIDUAL FOR A09 AND B06 = -2.731
 ORESIDUAL FOR A09 AND A25 = -2.862
 ORESIDUAL FOR AGE AND D08 = -2.841
 ORESIDUAL FOR AGE AND F08 = -2.775
 -LARGEST POSITIVE STANDARDIZED RESIDUALS
 ORESIDUAL FOR A02 AND A15 = 4.058
 ORESIDUAL FOR A12 AND D06 = 2.783

1TITLE TESTING THE MAIN MODEL

-STANDARD ERRORS

0	LAMBDA Y		
0	SERVQUAL	SATISFAC	LOYALTY
+			
EMPATHY	0.000	0.000	0.000
RELIABL	0.050	0.000	0.000
RESPONS	0.057	0.000	0.000
ASSURAN	0.056	0.000	0.000
TANGIBL	0.065	0.000	0.000
D08	0.000	0.000	0.000
D02	0.000	0.040	0.000
D03	0.000	0.048	0.000
D04	0.000	0.049	0.000
D05	0.000	0.045	0.000
D06	0.000	0.048	0.000
D07	0.000	0.036	0.000
D01	0.000	0.039	0.000
D09	0.000	0.037	0.000
F03	0.000	0.000	0.000
F04	0.000	0.000	0.043
F08	0.000	0.000	0.044
F13	0.000	0.000	0.058

0	LAMBDA X					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	AGE	EDUCATE
+						
TOT1	0.000	0.000	0.000	0.000	0.000	0.000
MONTHS	0.000	0.000	0.000	0.000	0.000	0.000
B01	0.000	0.000	0.000	0.000	0.000	0.000
B04	0.000	0.000	0.049	0.000	0.000	0.000
B05	0.000	0.000	0.061	0.000	0.000	0.000
B02	0.000	0.000	0.052	0.000	0.000	0.000
B06	0.000	0.000	0.062	0.000	0.000	0.000
B08	0.000	0.000	0.054	0.000	0.000	0.000
B10	0.000	0.000	0.051	0.000	0.000	0.000
B13	0.000	0.000	0.058	0.000	0.000	0.000
A08	0.000	0.000	0.000	0.000	0.000	0.000
A15	0.000	0.000	0.000	0.062	0.000	0.000
A02	0.000	0.000	0.000	0.060	0.000	0.000
A07	0.000	0.000	0.000	0.051	0.000	0.000
A12	0.000	0.000	0.000	0.060	0.000	0.000
A01	0.000	0.000	0.000	0.050	0.000	0.000
A16	0.000	0.000	0.000	0.051	0.000	0.000
A25	0.000	0.000	0.000	0.049	0.000	0.000
A09	0.000	0.000	0.000	0.047	0.000	0.000
AGE	0.000	0.000	0.000	0.000	0.000	0.000
EDUCATE	0.000	0.000	0.000	0.000	0.000	0.000

0	BETA					
0	SERVQUAL	SATISFAC	LOYALTY			
+						
	SERVQUAL	0.000	0.000	0.000		
	SATISFAC	0.138	0.000	0.000		
	LOYALTY	0.131	0.123	0.000		
0	GAMMA					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	AGE	EDUCATE
+						
	SERVQUAL	0.040	0.040	0.137	0.135	0.000
	SATISFAC	0.035	0.036	0.160	0.118	0.000
	LOYALTY	0.000	0.000	0.000	0.043	0.043
0	PHI					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	AGE	EDUCATE
+						
	ACCOUNTS	0.000				
	MONTHS	0.089	0.000			
	EQUITY	0.082	0.000			
	FIRMCHAR	0.081	0.080	0.014	0.000	
	AGE	0.090	0.093	0.081	0.080	0.000
	EDUCATE	0.089	0.088	0.080	0.080	0.000
0	PSI					
0	SERVQUAL	SATISFAC	LOYALTY			
+						
		0.023	0.018	0.029		
0	THETA EPS					
0	EMPATHY	RELIABL	RESPONS	ASSURAN	TANGIBL	D08
+						
		0.026	0.031	0.048	0.044	0.069
0	THETA EPS					
0	D02	D03	D04	D05	D06	D07
+						
		0.024	0.040	0.042	0.033	0.039
0	THETA EPS					
0	D01	D09	F03	F04	F08	F13
+						
		0.022	0.018	0.022	0.026	0.028
0	THETA DELTA					
0	TOT1	MONTHS	B01	B04	B05	B02
+						
		0.100	0.097	0.064	0.034	0.064
0	THETA DELTA					
0	B06	B08	B10	B13	A08	A15
+						
		0.066	0.046	0.039	0.056	0.027
0	THETA DELTA					
0	A02	A07	A12	A01	A16	A25
+						
		0.064	0.043	0.064	0.040	0.042
0	THETA DELTA					
0	A09	AGE	EDUCATE			
+						
		0.034	0.100	0.101		

1TITILE TESTING THE MAIN MODEL

0 CORRELATIONS OF ESTIMATES

0	LY 2,1	LY 3,1	LY 4,1	LY 5,1	LY 7,2	LY 8,2
+						
LY 2,1	1.000					
LY 3,1	0.313	1.000				
LY 4,1	0.334	0.253	1.000			
LY 5,1	0.214	0.162	0.173	1.000		
LY 7,2	0.000	0.000	0.000	0.000	1.000	
LY 8,2	0.000	0.000	0.000	0.000	0.255	1.000
LY 9,2	0.000	0.000	0.000	0.000	0.245	0.181
LY 10,2	0.000	0.000	0.000	0.000	0.285	0.212
LY 11,2	0.000	0.000	0.000	0.000	0.259	0.192
LY 12,2	0.000	0.000	0.000	0.000	0.412	0.306
LY 13,2	0.000	0.000	0.000	0.000	0.358	0.265
LY 14,2	0.000	0.000	0.000	0.000	0.384	0.285
LY 16,3	0.000	0.000	0.000	0.000	0.000	0.000
LY 17,3	0.000	0.000	0.000	0.000	0.000	0.000
LY 18,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 4,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 5,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 6,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 7,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 8,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 9,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 10,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 12,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 13,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 14,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 15,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 16,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 17,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 18,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 19,4	0.000	0.000	0.000	0.000	0.000	0.000
BE 2,1	0.083	0.067	0.071	0.047	-0.051	-0.038
BE 3,1	0.082	0.065	0.069	0.045	0.000	-0.001
BE 3,2	-0.005	-0.006	-0.006	-0.005	0.053	0.039
GA 1,1	0.001	0.001	0.001	0.001	0.000	0.000
GA 1,2	-0.032	-0.024	-0.026	-0.016	0.000	0.000
GA 1,3	-0.105	-0.079	-0.084	-0.054	0.000	0.000
GA 1,4	-0.041	-0.031	-0.033	-0.021	0.000	0.000
GA 2,1	0.000	0.000	0.000	0.000	0.013	0.010
GA 2,2	-0.002	-0.002	-0.002	-0.002	-0.022	-0.016
GA 2,3	-0.004	-0.006	-0.006	-0.005	-0.008	-0.006
GA 2,4	-0.002	-0.003	-0.003	-0.003	-0.053	-0.039
GA 3,5	0.000	0.000	0.000	0.000	0.000	0.000
GA 3,6	0.000	0.000	0.000	0.000	0.000	0.000
PH 2,1	0.000	0.000	0.000	0.000	0.000	0.000
PH 3,1	0.000	0.000	0.000	0.000	0.000	0.000
PH 3,2	0.000	0.000	0.000	0.000	0.000	0.000
PH 4,1	0.000	0.000	0.000	0.000	0.000	0.000
PH 4,2	0.000	0.000	0.000	0.000	0.000	0.000
PH 4,3	0.000	0.000	0.000	0.000	0.000	0.000
PH 5,1	0.000	0.000	0.000	0.000	0.000	0.000
PH 5,2	0.000	0.000	0.000	0.000	0.000	0.000
PH 5,3	0.000	0.000	0.000	0.000	0.000	0.000
PH 5,4	0.000	0.000	0.000	0.000	0.000	0.000
PH 6,1	0.000	0.000	0.000	0.000	0.000	0.000
PH 6,2	0.000	0.000	0.000	0.000	0.000	0.000
PH 6,3	0.000	0.000	0.000	0.000	0.000	0.000
PH 6,4	0.000	0.000	0.000	0.000	0.000	0.000
PH 6,5	0.000	0.000	0.000	0.000	0.000	0.000

PS 1,1	-0.201	-0.157	-0.166	-0.108	0.000	0.000
PS 2,2	-0.003	-0.004	-0.004	-0.003	-0.188	-0.140
PS 3,3	-0.001	-0.001	-0.001	-0.001	0.000	0.000
TE 1,1	0.125	0.093	0.099	0.063	0.000	0.000
TE 2,2	-0.113	-0.002	-0.002	-0.002	0.000	0.000
TE 3,3	-0.001	-0.076	-0.001	-0.001	0.000	0.000
TE 4,4	-0.001	-0.001	-0.082	-0.001	0.000	0.000
TE 5,5	0.000	0.000	0.000	-0.049	0.000	0.000
TE 6,6	0.000	0.000	0.000	0.000	0.061	0.045
TE 7,7	0.000	0.000	0.000	0.000	-0.056	-0.001
TE 8,8	0.000	0.000	0.000	0.000	0.000	-0.039
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TE 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TE 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TE 12,12	0.000	0.000	0.000	0.000	-0.001	-0.001
TE 13,13	0.000	0.000	0.000	0.000	-0.001	-0.001
TE 14,14	0.000	0.000	0.000	0.000	-0.001	-0.001
TE 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TE 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TE 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TE 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TD 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TD 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TD 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TD 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TD 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TD 14,14	0.000	0.000	0.000	0.000	0.000	0.000
TD 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TD 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TD 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TD 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 19,19	0.000	0.000	0.000	0.000	0.000	0.000
TD 20,20	0.000	0.000	0.000	0.000	0.000	0.000
TD 21,21	0.000	0.000	0.000	0.000	0.000	0.000
0	CORRELATIONS OF ESTIMATES					
0	LY 9,2	LY 10,2	LY 11,2	LY 12,2	LY 13,2	LY 14,2
+						
LY 9,2	1.000					
LY 10,2	0.203	1.000				
LY 11,2	0.184	0.215	1.000			
LY 12,2	0.293	0.342	0.310	1.000		
LY 13,2	0.255	0.297	0.269	0.429	1.000	
LY 14,2	0.273	0.319	0.289	0.461	0.400	1.000
LY 16,3	0.000	0.000	0.000	0.000	0.000	0.000
LY 17,3	0.000	0.000	0.000	0.000	0.000	0.000
LY 18,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 4,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 5,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 6,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 7,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 8,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 9,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 10,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 12,4	0.000	0.000	0.000	0.000	0.000	0.000

LX 13,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 14,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 15,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 16,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 17,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 18,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 19,4	0.000	0.000	0.000	0.000	0.000	0.000
BE 2,1	-0.036	-0.042	-0.038	-0.061	-0.053	-0.057
BE 3,1	-0.001	-0.001	-0.001	0.000	0.000	0.000
BE 3,2	0.038	0.044	0.040	0.063	0.055	0.059
GA 1,1	0.000	0.000	0.000	0.000	0.000	0.000
GA 1,2	0.000	0.000	0.000	0.000	0.000	0.000
GA 1,3	0.000	0.000	0.000	0.000	0.000	0.000
GA 1,4	0.000	0.000	0.000	0.000	0.000	0.000
GA 2,1	0.010	0.011	0.010	0.016	0.014	0.015
GA 2,2	-0.016	-0.018	-0.016	-0.026	-0.023	-0.024
GA 2,3	-0.006	-0.006	-0.006	-0.009	-0.008	-0.009
GA 2,4	-0.037	-0.044	-0.040	-0.063	-0.055	-0.059
GA 3,5	0.000	0.000	0.000	0.000	0.000	0.000
GA 3,6	0.000	0.000	0.000	0.000	0.000	0.000
PH 2,1	0.000	0.000	0.000	0.000	0.000	0.000
PH 3,1	0.000	0.000	0.000	0.000	0.000	0.000
PH 3,2	0.000	0.000	0.000	0.000	0.000	0.000
PH 4,1	0.000	0.000	0.000	0.000	0.000	0.000
PH 4,2	0.000	0.000	0.000	0.000	0.000	0.000
PH 4,3	0.000	0.000	0.000	0.000	0.000	0.000
PH 5,1	0.000	0.000	0.000	0.000	0.000	0.000
PH 5,2	0.000	0.000	0.000	0.000	0.000	0.000
PH 5,3	0.000	0.000	0.000	0.000	0.000	0.000
PH 5,4	0.000	0.000	0.000	0.000	0.000	0.000
PH 6,1	0.000	0.000	0.000	0.000	0.000	0.000
PH 6,2	0.000	0.000	0.000	0.000	0.000	0.000
PH 6,3	0.000	0.000	0.000	0.000	0.000	0.000
PH 6,4	0.000	0.000	0.000	0.000	0.000	0.000
PH 6,5	0.000	0.000	0.000	0.000	0.000	0.000
PS 1,1	0.000	0.000	0.000	0.000	0.000	0.000
PS 2,2	-0.134	-0.157	-0.142	-0.225	-0.196	-0.210
PS 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TE 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TE 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TE 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TE 6,6	0.043	0.050	0.046	0.075	0.064	0.069
TE 7,7	-0.001	-0.001	-0.001	0.000	-0.001	0.000
TE 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TE 9,9	-0.037	0.000	0.000	0.000	0.000	0.000
TE 10,10	0.000	-0.044	0.000	0.000	0.000	0.000
TE 11,11	0.000	0.000	-0.039	0.000	0.000	0.000
TE 12,12	-0.001	-0.002	-0.002	-0.075	-0.001	-0.001
TE 13,13	-0.001	-0.001	-0.001	0.000	-0.059	0.000
TE 14,14	-0.001	-0.001	-0.001	0.000	-0.001	-0.066
TE 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TE 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TE 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TE 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TD 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,6	0.000	0.000	0.000	0.000	0.000	0.000

TD 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TD 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TD 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TD 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TD 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TD 14,14	0.000	0.000	0.000	0.000	0.000	0.000
TD 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TD 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TD 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TD 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 19,19	0.000	0.000	0.000	0.000	0.000	0.000
TD 20,20	0.000	0.000	0.000	0.000	0.000	0.000
TD 21,21	0.000	0.000	0.000	0.000	0.000	0.000
0	CORRELATIONS OF ESTIMATES					
0	LY 16,3	LY 17,3	LY 18,3	LX 4,3	LX 5,3	LX 6,3
+						
LY 16,3	1.000					
LY 17,3	0.397	1.000				
LY 18,3	0.231	0.224	1.000			
LX 4,3	0.000	0.000	0.000	1.000		
LX 5,3	0.000	0.000	0.000	0.209	1.000	
LX 6,3	0.000	0.000	0.000	0.312	0.184	1.000
LX 7,3	0.000	0.000	0.000	0.200	0.118	0.175
LX 8,3	0.000	0.000	0.000	0.287	0.169	0.252
LX 9,3	0.000	0.000	0.000	0.322	0.190	0.283
LX 10,3	0.000	0.000	0.000	0.241	0.142	0.211
LX 12,4	0.000	0.000	0.000	0.107	0.063	0.094
LX 13,4	0.000	0.000	0.000	0.121	0.071	0.107
LX 14,4	0.000	0.000	0.000	0.182	0.107	0.159
LX 15,4	0.000	0.000	0.000	0.121	0.071	0.106
LX 16,4	0.000	0.000	0.000	0.190	0.112	0.167
LX 17,4	0.000	0.000	0.000	0.183	0.108	0.161
LX 18,4	0.000	0.000	0.000	0.192	0.113	0.169
LX 19,4	0.000	0.000	0.000	0.212	0.124	0.186
BE 2,1	0.000	0.000	0.000	0.001	0.000	0.000
BE 3,1	-0.064	-0.062	-0.036	0.000	0.000	0.000
BE 3,2	-0.064	-0.062	-0.036	0.000	0.000	0.000
GA 1,1	0.000	0.000	0.000	-0.005	-0.002	-0.004
GA 1,2	0.000	0.000	0.000	0.007	0.004	0.006
GA 1,3	0.000	0.000	0.000	0.062	0.041	0.058
GA 1,4	0.000	0.000	0.000	0.050	0.025	0.041
GA 2,1	0.000	0.000	0.000	-0.002	-0.001	-0.002
GA 2,2	0.000	0.000	0.000	0.003	0.002	0.003
GA 2,3	0.000	0.000	0.000	0.002	0.002	0.002
GA 2,4	0.000	0.000	0.000	0.048	0.028	0.042
GA 3,5	-0.014	-0.014	-0.008	0.001	0.001	0.001
GA 3,6	-0.002	-0.001	-0.001	0.000	0.000	0.000
PH 2,1	0.000	0.000	0.000	0.006	0.003	0.005
PH 3,1	0.000	0.000	0.000	0.000	0.000	0.000
PH 3,2	0.000	0.000	0.000	0.049	0.029	0.043
PH 4,1	0.000	0.000	0.000	-0.006	-0.004	-0.006
PH 4,2	0.000	0.000	0.000	0.056	0.033	0.049
PH 4,3	0.000	0.000	0.000	0.120	0.074	0.108
PH 5,1	0.000	0.000	0.000	0.004	0.003	0.004
PH 5,2	0.000	0.000	0.000	0.015	0.009	0.013
PH 5,3	0.000	0.000	0.000	0.044	0.026	0.039
PH 5,4	0.000	0.000	0.000	0.046	0.027	0.041
PH 6,1	0.000	0.000	0.000	-0.003	-0.002	-0.003
PH 6,2	0.000	0.000	0.000	-0.016	-0.010	-0.014
PH 6,3	0.000	0.000	0.000	-0.036	-0.021	-0.032

PH 6,4	0.000	0.000	0.000	-0.034	-0.020	-0.030
PH 6,5	0.000	0.000	0.000	-0.017	-0.010	-0.015
PS 1,1	0.000	0.000	0.000	0.013	0.005	0.010
PS 2,2	0.000	0.000	0.000	-0.002	-0.001	-0.002
PS 3,3	-0.254	-0.247	-0.146	0.000	0.000	0.000
TE 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TE 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TE 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TE 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TE 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TE 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TE 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TE 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TE 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TE 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TE 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TE 14,14	0.000	0.000	0.000	0.000	0.000	0.000
TE 15,15	0.191	0.183	0.099	0.000	0.000	0.000
TE 16,16	-0.168	-0.016	-0.013	0.000	0.000	0.000
TE 17,17	-0.013	-0.155	-0.011	0.000	0.000	0.000
TE 18,18	-0.002	-0.003	-0.068	0.000	0.000	0.000
TD 1,1	0.000	0.000	0.000	-0.001	0.000	-0.001
TD 2,2	0.000	0.000	0.000	0.009	0.006	0.008
TD 3,3	0.000	0.000	0.000	0.020	0.012	0.017
TD 4,4	0.000	0.000	0.000	-0.104	0.002	0.004
TD 5,5	0.000	0.000	0.000	0.001	-0.055	0.001
TD 6,6	0.000	0.000	0.000	0.003	0.001	-0.087
TD 7,7	0.000	0.000	0.000	0.001	0.000	0.001
TD 8,8	0.000	0.000	0.000	0.002	0.001	0.002
TD 9,9	0.000	0.000	0.000	0.003	0.001	0.003
TD 10,10	0.000	0.000	0.000	0.001	0.001	0.001
TD 11,11	0.000	0.000	0.000	0.042	0.025	0.037
TD 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TD 13,13	0.000	0.000	0.000	-0.001	0.000	-0.001
TD 14,14	0.000	0.000	0.000	-0.002	-0.001	-0.002
TD 15,15	0.000	0.000	0.000	-0.001	0.000	-0.001
TD 16,16	0.000	0.000	0.000	-0.002	-0.001	-0.002
TD 17,17	0.000	0.000	0.000	-0.002	-0.001	-0.002
TD 18,18	0.000	0.000	0.000	-0.002	-0.001	-0.002
TD 19,19	0.000	0.000	0.000	-0.003	-0.002	-0.002
TD 20,20	0.000	0.000	0.000	0.012	0.007	0.011
TD 21,21	0.000	0.000	0.000	0.011	0.006	0.010
0	CORRELATIONS OF ESTIMATES					
0	LX 7,3	LX 8,3	LX 9,3	LX 10,3	LX 12,4	LX 13,4
+						
LX 7,3	1.000					
LX 8,3	0.161	1.000				
LX 9,3	0.181	0.260	1.000			
LX 10,3	0.135	0.194	0.218	1.000		
LX 12,4	0.060	0.086	0.097	0.072	1.000	
LX 13,4	0.068	0.098	0.110	0.082	0.081	1.000
LX 14,4	0.102	0.146	0.164	0.123	0.121	0.137
LX 15,4	0.068	0.098	0.110	0.082	0.081	0.092
LX 16,4	0.107	0.154	0.173	0.129	0.127	0.144
LX 17,4	0.103	0.148	0.166	0.124	0.122	0.139
LX 18,4	0.108	0.155	0.174	0.130	0.128	0.146
LX 19,4	0.119	0.171	0.192	0.143	0.141	0.160
BE 2,1	0.000	0.000	0.001	0.000	0.000	0.000
BE 3,1	0.000	0.000	0.000	0.000	0.000	0.000
BE 3,2	0.000	0.000	0.000	0.000	0.000	0.000

GA 1,1	-0.002	-0.004	-0.004	-0.003	0.000	0.000
GA 1,2	0.003	0.005	0.006	0.004	0.000	0.000
GA 1,3	0.039	0.054	0.059	0.046	0.029	0.033
GA 1,4	0.024	0.036	0.042	0.029	0.012	0.014
GA 2,1	-0.001	-0.002	-0.002	-0.001	0.000	0.000
GA 2,2	0.002	0.003	0.003	0.002	0.000	0.000
GA 2,3	0.002	0.002	0.002	0.002	0.003	0.004
GA 2,4	0.027	0.038	0.043	0.032	0.025	0.029
GA 3,5	0.001	0.001	0.001	0.001	0.000	0.000
GA 3,6	0.000	0.000	0.000	0.000	0.000	0.000
PH 2,1	0.003	0.004	0.005	0.004	0.003	0.003
PH 3,1	0.000	0.000	0.000	0.000	0.018	0.020
PH 3,2	0.027	0.039	0.044	0.033	0.004	0.005
PH 4,1	-0.004	-0.005	-0.006	-0.004	0.015	0.017
PH 4,2	0.031	0.045	0.051	0.038	0.007	0.008
PH 4,3	0.071	0.100	0.111	0.085	0.060	0.068
PH 5,1	0.002	0.004	0.004	0.003	0.005	0.006
PH 5,2	0.008	0.012	0.013	0.010	0.003	0.003
PH 5,3	0.025	0.036	0.040	0.030	0.016	0.018
PH 5,4	0.026	0.037	0.042	0.031	0.017	0.019
PH 6,1	-0.002	-0.002	-0.003	-0.002	-0.007	-0.008
PH 6,2	-0.009	-0.013	-0.015	-0.011	-0.004	-0.005
PH 6,3	-0.020	-0.029	-0.033	-0.025	-0.025	-0.028
PH 6,4	-0.019	-0.027	-0.030	-0.023	-0.024	-0.027
PH 6,5	-0.009	-0.014	-0.015	-0.011	-0.008	-0.009
PS 1,1	0.005	0.008	0.010	0.006	-0.001	-0.001
PS 2,2	-0.001	-0.002	-0.002	-0.001	0.000	0.000
PS 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TE 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TE 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TE 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TE 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TE 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TE 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TE 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TE 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TE 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TE 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TE 14,14	0.000	0.000	0.000	0.000	0.000	0.000
TE 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TE 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TE 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TE 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	0.000	-0.001	-0.001	0.000	0.003	0.003
TD 2,2	0.005	0.008	0.008	0.006	0.001	0.001
TD 3,3	0.011	0.016	0.018	0.013	0.005	0.006
TD 4,4	0.002	0.003	0.004	0.002	0.000	0.000
TD 5,5	0.000	0.001	0.001	0.001	0.000	0.000
TD 6,6	0.001	0.002	0.002	0.002	0.000	0.000
TD 7,7	-0.053	0.001	0.001	0.000	0.000	0.000
TD 8,8	0.001	-0.079	0.002	0.001	0.000	0.000
TD 9,9	0.001	0.002	-0.091	0.002	0.000	0.000
TD 10,10	0.001	0.001	0.001	-0.064	0.000	0.000
TD 11,11	0.024	0.034	0.038	0.029	0.032	0.036
TD 12,12	0.000	0.000	0.000	0.000	-0.041	0.000
TD 13,13	0.000	-0.001	-0.001	0.000	0.000	-0.047
TD 14,14	-0.001	-0.001	-0.002	-0.001	0.000	0.000
TD 15,15	0.000	-0.001	-0.001	0.000	0.000	0.000
TD 16,16	-0.001	-0.002	-0.002	-0.001	0.000	0.000

TD 17,17	-0.001	-0.001	-0.002	-0.001	0.000	0.000
TD 18,18	-0.001	-0.002	-0.002	-0.001	0.000	0.000
TD 19,19	-0.002	-0.002	-0.003	-0.002	0.000	0.000
TD 20,20	0.007	0.010	0.011	0.008	0.004	0.005
TD 21,21	0.006	0.009	0.010	0.007	0.008	0.009
0	CORRELATIONS OF ESTIMATES					
0	LX 14,4	LX 15,4	LX 16,4	LX 17,4	LX 18,4	LX 19,4
+						
LX 14,4	1.000					
LX 15,4	0.137	1.000				
LX 16,4	0.215	0.144	1.000			
LX 17,4	0.207	0.139	0.217	1.000		
LX 18,4	0.217	0.145	0.228	0.220	1.000	
LX 19,4	0.239	0.160	0.251	0.241	0.253	1.000
BE 2,1	0.000	0.000	0.000	0.000	0.000	0.000
BE 3,1	0.000	0.000	0.000	0.000	0.000	0.000
BE 3,2	0.000	0.000	0.000	0.000	0.000	0.000
GA 1,1	0.000	0.000	0.000	0.000	0.000	0.001
GA 1,2	0.000	0.000	0.000	0.000	0.000	0.000
GA 1,3	0.049	0.033	0.052	0.050	0.052	0.058
GA 1,4	0.020	0.014	0.021	0.021	0.021	0.023
GA 2,1	0.000	0.000	0.000	0.000	0.000	0.000
GA 2,2	0.000	0.000	0.000	0.000	0.000	0.000
GA 2,3	0.006	0.004	0.007	0.006	0.007	0.008
GA 2,4	0.042	0.029	0.044	0.043	0.045	0.048
GA 3,5	0.001	0.000	0.001	0.001	0.001	0.001
GA 3,6	0.000	0.000	0.000	0.000	0.000	0.000
PH 2,1	0.004	0.003	0.005	0.004	0.005	0.005
PH 3,1	0.030	0.020	0.032	0.031	0.032	0.035
PH 3,2	0.007	0.005	0.008	0.008	0.008	0.009
PH 4,1	0.026	0.017	0.027	0.026	0.027	0.030
PH 4,2	0.012	0.008	0.013	0.012	0.013	0.014
PH 4,3	0.101	0.068	0.105	0.102	0.106	0.116
PH 5,1	0.009	0.006	0.009	0.009	0.009	0.010
PH 5,2	0.005	0.003	0.005	0.005	0.005	0.006
PH 5,3	0.027	0.018	0.029	0.028	0.029	0.032
PH 5,4	0.029	0.019	0.030	0.029	0.030	0.033
PH 6,1	-0.011	-0.008	-0.012	-0.011	-0.012	-0.013
PH 6,2	-0.007	-0.005	-0.007	-0.007	-0.007	-0.008
PH 6,3	-0.042	-0.028	-0.044	-0.042	-0.045	-0.049
PH 6,4	-0.040	-0.027	-0.042	-0.040	-0.042	-0.047
PH 6,5	-0.014	-0.009	-0.015	-0.014	-0.015	-0.016
PS 1,1	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
PS 2,2	0.000	0.000	0.001	0.001	0.001	0.001
PS 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TE 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TE 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TE 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TE 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TE 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TE 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TE 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TE 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TE 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TE 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TE 14,14	0.000	0.000	0.000	0.000	0.000	0.000
TE 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TE 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TE 17,17	0.000	0.000	0.000	0.000	0.000	0.000

TE 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	0.005	0.003	0.005	0.005	0.005	0.006
TD 2,2	0.002	0.001	0.002	0.002	0.002	0.002
TD 3,3	0.009	0.006	0.010	0.009	0.010	0.011
TD 4,4	0.000	0.000	0.000	0.000	0.000	-0.001
TD 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TD 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TD 11,11	0.055	0.036	0.057	0.055	0.058	0.064
TD 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TD 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TD 14,14	-0.074	0.000	0.001	0.000	0.001	0.001
TD 15,15	0.000	-0.047	0.000	0.000	0.000	0.000
TD 16,16	0.001	0.000	-0.078	0.001	0.001	0.001
TD 17,17	0.000	0.000	0.001	-0.075	0.001	0.001
TD 18,18	0.001	0.000	0.001	0.001	-0.079	0.001
TD 19,19	0.001	0.000	0.001	0.001	0.001	-0.090
TD 20,20	0.007	0.005	0.008	0.007	0.008	0.009
TD 21,21	0.013	0.009	0.014	0.013	0.014	0.015

0 CORRELATIONS OF ESTIMATES

0	BE 2,1	BE 3,1	BE 3,2	GA 1,1	GA 1,2	GA 1,3
+						
BE 2,1	1.000					
BE 3,1	0.164	1.000				
BE 3,2	-0.165	-0.928	1.000			
GA 1,1	0.040	-0.012	0.012	1.000		
GA 1,2	-0.045	0.006	-0.007	-0.303	1.000	
GA 1,3	0.076	-0.051	0.032	0.179	-0.199	1.000
GA 1,4	-0.102	0.026	-0.033	-0.209	0.181	-0.938
GA 2,1	-0.010	0.004	-0.002	-0.130	0.031	-0.022
GA 2,2	-0.213	-0.036	0.034	0.022	-0.095	0.003
GA 2,3	-0.682	-0.083	0.085	-0.044	0.045	-0.152
GA 2,4	-0.144	-0.053	0.048	0.020	-0.013	0.117
GA 3,5	0.002	-0.056	-0.022	-0.016	-0.071	0.006
GA 3,6	-0.007	0.033	0.052	-0.028	-0.003	-0.013
PH 2,1	-0.007	0.000	0.000	-0.039	0.054	-0.005
PH 3,1	-0.003	0.000	0.000	-0.108	0.012	0.002
PH 3,2	-0.002	0.000	0.000	-0.004	-0.069	0.008
PH 4,1	-0.002	0.000	0.000	-0.033	0.007	-0.004
PH 4,2	-0.002	0.000	0.000	-0.005	-0.004	0.014
PH 4,3	0.014	0.000	0.000	0.019	-0.020	0.235
PH 5,1	-0.003	-0.002	0.000	-0.009	0.020	-0.001
PH 5,2	-0.011	-0.002	-0.002	-0.027	0.084	-0.007
PH 5,3	0.000	-0.005	0.000	-0.011	-0.035	0.019
PH 5,4	0.000	-0.003	-0.003	-0.005	-0.005	0.011
PH 6,1	0.000	0.000	0.000	-0.001	0.001	-0.001
PH 6,2	-0.001	0.000	0.000	-0.005	0.005	-0.006
PH 6,3	-0.001	-0.001	-0.001	-0.018	0.002	-0.025
PH 6,4	0.000	0.000	-0.001	-0.005	0.001	-0.009
PH 6,5	0.000	0.000	0.000	0.000	0.002	-0.004
PS 1,1	-0.243	-0.133	0.096	-0.017	0.019	-0.181
PS 2,2	-0.168	-0.041	0.020	-0.006	0.004	-0.012
PS 3,3	-0.012	-0.086	0.119	0.002	0.000	0.005
TE 1,1	0.155	0.105	-0.085	-0.001	-0.005	-0.022
TE 2,2	0.080	0.049	-0.052	-0.001	0.003	0.006
TE 3,3	0.031	0.019	-0.020	0.000	0.001	0.002
TE 4,4	0.037	0.023	-0.024	0.000	0.001	0.003
TE 5,5	0.012	0.007	-0.008	0.000	0.000	0.001
TE 6,6	-0.007	-0.014	0.022	0.000	0.000	0.000

TE 7,7	0.001	-0.006	0.006	0.000	0.000	0.000
TE 8,8	0.000	-0.003	0.002	0.000	0.000	0.000
TE 9,9	0.000	-0.002	0.002	0.000	0.000	0.000
TE 10,10	0.001	-0.004	0.003	0.000	0.000	0.000
TE 11,11	0.000	-0.003	0.003	0.000	0.000	0.000
TE 12,12	0.002	-0.013	0.013	0.000	0.000	0.000
TE 13,13	0.001	-0.007	0.007	0.000	0.000	0.000
TE 14,14	0.002	-0.010	0.009	0.000	0.000	0.000
TE 15,15	0.000	-0.018	-0.017	0.000	0.000	0.000
TE 16,16	0.000	0.008	0.008	0.000	0.000	0.000
TE 17,17	0.000	0.007	0.007	0.000	0.000	0.000
TE 18,18	0.000	0.001	0.001	0.000	0.000	0.000
TD 1,1	-0.002	0.000	0.000	-0.008	0.009	-0.002
TD 2,2	-0.023	0.001	-0.001	-0.047	0.157	-0.019
TD 3,3	-0.003	0.000	0.000	0.004	-0.005	0.028
TD 4,4	-0.009	0.000	0.000	0.013	-0.017	0.080
TD 5,5	-0.002	0.000	0.000	0.003	-0.004	0.017
TD 6,6	-0.006	0.000	0.000	0.008	-0.011	0.051
TD 7,7	-0.002	0.000	0.000	0.002	-0.003	0.016
TD 8,8	-0.004	0.000	0.000	0.006	-0.008	0.040
TD 9,9	-0.006	0.000	0.000	0.009	-0.012	0.057
TD 10,10	-0.003	0.000	0.000	0.004	-0.005	0.025
TD 11,11	-0.013	0.000	0.000	-0.005	0.003	-0.013
TD 12,12	-0.001	0.000	0.000	0.000	0.000	-0.003
TD 13,13	-0.002	0.000	0.000	-0.001	0.000	-0.003
TD 14,14	-0.005	0.000	0.000	-0.002	0.001	-0.009
TD 15,15	-0.002	0.000	0.000	-0.001	0.000	-0.003
TD 16,16	-0.005	0.000	0.000	-0.002	0.001	-0.010
TD 17,17	-0.005	0.000	0.000	-0.002	0.001	-0.009
TD 18,18	-0.006	0.000	0.000	-0.002	0.001	-0.011
TD 19,19	-0.008	0.000	0.000	-0.003	0.002	-0.014
TD 20,20	-0.004	-0.005	-0.003	-0.009	0.023	0.000
TD 21,21	0.000	0.000	0.001	0.000	0.000	0.003
0	CORRELATIONS OF ESTIMATES					
0	GA 1,4	GA 2,1	GA 2,2	GA 2,3	GA 2,4	GA 3,5
+						
GA 1,4	1.000					
GA 2,1	0.026	1.000				
GA 2,2	0.002	-0.299	1.000			
GA 2,3	0.157	0.138	0.000	1.000		
GA 2,4	-0.106	-0.209	0.211	-0.581	1.000	
GA 3,5	-0.002	0.002	0.015	-0.002	0.001	1.000
GA 3,6	0.016	0.006	0.002	0.007	-0.001	0.006
PH 2,1	0.006	-0.072	0.078	-0.003	0.013	0.007
PH 3,1	0.005	-0.033	0.012	0.005	0.009	0.004
PH 3,2	0.003	-0.012	0.022	-0.008	0.009	0.009
PH 4,1	0.007	-0.080	0.015	-0.004	0.021	0.004
PH 4,2	-0.005	-0.008	-0.026	0.002	-0.002	0.008
PH 4,3	-0.206	-0.010	0.007	-0.090	0.127	0.001
PH 5,1	0.003	-0.035	0.036	-0.002	0.009	0.021
PH 5,2	0.008	-0.033	0.092	-0.002	0.013	0.038
PH 5,3	-0.003	-0.007	0.006	0.001	0.007	0.013
PH 5,4	0.004	-0.011	-0.013	-0.001	0.010	0.021
PH 6,1	-0.001	-0.014	0.005	0.000	-0.003	-0.002
PH 6,2	0.003	-0.009	0.006	-0.001	0.002	-0.003
PH 6,3	0.012	-0.005	0.002	-0.001	-0.007	0.000
PH 6,4	-0.004	-0.012	0.001	-0.001	-0.008	0.000
PH 6,5	-0.001	-0.004	0.003	0.000	-0.003	-0.008
PS 1,1	0.206	0.001	0.047	0.147	0.042	0.015
PS 2,2	0.014	0.050	-0.002	0.193	-0.042	-0.001
PS 3,3	-0.003	0.000	0.003	0.006	0.004	-0.001
TE 1,1	-0.005	0.001	-0.032	-0.080	-0.043	-0.006

TE 2,2	0.005	0.001	-0.020	-0.049	-0.026	-0.003
TE 3,3	0.002	0.000	-0.008	-0.019	-0.010	-0.001
TE 4,4	0.002	0.000	-0.009	-0.023	-0.012	-0.002
TE 5,5	0.001	0.000	-0.003	-0.007	-0.004	0.000
TE 6,6	-0.001	0.002	-0.003	-0.001	-0.007	-0.001
TE 7,7	0.000	0.000	0.000	0.000	0.001	0.000
TE 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TE 10,10	0.000	0.000	0.000	0.000	0.001	0.000
TE 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TE 12,12	-0.001	-0.001	0.001	0.000	0.002	-0.001
TE 13,13	0.000	0.000	0.000	0.000	0.001	0.000
TE 14,14	0.000	0.000	0.001	0.000	0.002	0.000
TE 15,15	0.000	0.000	0.000	0.000	0.000	-0.004
TE 16,16	0.000	0.000	0.000	0.000	0.000	0.002
TE 17,17	0.000	0.000	0.000	0.000	0.000	0.002
TE 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	0.002	-0.103	0.038	-0.008	0.016	0.003
TD 2,2	0.016	-0.053	0.163	-0.003	0.024	0.005
TD 3,3	-0.023	0.000	0.000	0.004	0.000	0.000
TD 4,4	-0.082	0.002	0.000	0.014	-0.009	0.000
TD 5,5	-0.018	0.000	0.000	0.003	-0.002	0.000
TD 6,6	-0.052	0.001	0.000	0.009	-0.006	0.000
TD 7,7	-0.016	0.000	0.000	0.003	-0.002	0.000
TD 8,8	-0.040	0.001	0.000	0.007	-0.005	0.000
TD 9,9	-0.057	0.001	0.000	0.010	-0.007	0.000
TD 10,10	-0.025	0.001	0.000	0.004	-0.003	0.000
TD 11,11	0.029	-0.009	0.009	-0.025	0.060	0.000
TD 12,12	0.002	-0.001	0.001	-0.003	0.005	0.000
TD 13,13	0.003	-0.001	0.001	-0.004	0.007	0.000
TD 14,14	0.009	-0.003	0.003	-0.009	0.018	0.000
TD 15,15	0.003	-0.001	0.001	-0.004	0.006	0.000
TD 16,16	0.010	-0.004	0.004	-0.011	0.020	0.000
TD 17,17	0.009	-0.003	0.003	-0.010	0.018	0.000
TD 18,18	0.010	-0.004	0.004	-0.011	0.021	0.000
TD 19,19	0.014	-0.005	0.005	-0.015	0.028	0.000
TD 20,20	0.003	-0.011	0.032	-0.001	0.006	0.078
TD 21,21	0.002	-0.001	0.000	0.000	0.003	0.000
0	CORRELATIONS OF ESTIMATES					
0	GA 3,6	PH 2,1	PH 3,1	PH 3,2	PH 4,1	PH 4,2
+						
GA 3,6	1.000					
PH 2,1	0.000	1.000				
PH 3,1	0.000	0.144	1.000			
PH 3,2	0.000	0.114	0.188	1.000		
PH 4,1	0.000	0.120	0.871	0.164	1.000	
PH 4,2	0.000	0.143	0.165	0.871	0.187	1.000
PH 4,3	-0.001	0.009	0.042	-0.001	-0.009	0.045
PH 5,1	-0.002	0.411	0.191	0.067	0.193	0.080
PH 5,2	-0.001	0.235	0.052	0.212	0.046	0.197
PH 5,3	0.001	0.053	0.170	0.380	0.147	0.333
PH 5,4	0.001	0.062	0.148	0.331	0.168	0.381
PH 6,1	0.001	0.036	-0.192	-0.034	-0.206	-0.037
PH 6,2	-0.003	0.096	-0.023	-0.199	-0.030	-0.219
PH 6,3	-0.019	0.019	0.122	0.041	0.108	0.033
PH 6,4	-0.007	0.017	0.106	0.035	0.124	0.040
PH 6,5	-0.015	0.040	-0.013	-0.070	-0.016	-0.077
PS 1,1	-0.010	-0.004	-0.002	-0.001	-0.001	-0.002
PS 2,2	0.002	-0.007	-0.002	-0.003	-0.004	-0.001
PS 3,3	-0.013	0.000	0.000	0.000	0.000	0.000
TE 1,1	0.004	0.000	0.000	0.000	0.000	0.000
TE 2,2	0.002	0.000	0.000	0.000	0.000	0.000

TE 3,3	0.001	0.000	0.000	0.000	0.000	0.000
TE 4,4	0.001	0.000	0.000	0.000	0.000	0.000
TE 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TE 6,6	0.001	0.000	0.000	0.000	0.000	0.000
TE 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TE 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TE 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TE 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TE 12,12	0.001	0.000	0.000	0.000	0.000	0.000
TE 13,13	0.001	0.000	0.000	0.000	0.000	0.000
TE 14,14	0.001	0.000	0.000	0.000	0.000	0.000
TE 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TE 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TE 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TE 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	0.000	0.272	0.131	0.025	0.181	0.034
TD 2,2	0.000	0.270	0.035	0.183	0.026	0.139
TD 3,3	0.000	0.000	0.000	0.003	0.000	0.003
TD 4,4	0.000	0.000	0.002	0.002	0.000	0.000
TD 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,6	0.000	0.000	0.001	0.001	0.000	0.000
TD 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TD 8,8	0.000	0.000	0.001	0.001	0.000	0.000
TD 9,9	0.000	0.000	0.001	0.001	0.000	0.000
TD 10,10	0.000	0.000	0.000	0.001	0.000	0.000
TD 11,11	0.001	0.001	0.007	0.002	0.008	0.004
TD 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TD 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TD 14,14	0.000	0.000	0.000	0.000	0.000	0.000
TD 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TD 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TD 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TD 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 19,19	0.000	0.000	0.000	0.000	0.000	0.000
TD 20,20	-0.001	0.098	0.042	0.095	0.041	0.093
TD 21,21	0.009	0.002	-0.034	-0.011	-0.038	-0.012
CORRELATIONS OF ESTIMATES						
0	PH 4,3	PH 5,1	PH 5,2	PH 5,3	PH 5,4	PH 6,1
0						
+						
PH 4,3	1.000					
PH 5,1	0.005	1.000				
PH 5,2	0.005	0.246	1.000			
PH 5,3	0.028	0.120	0.175	1.000		
PH 5,4	0.034	0.154	0.147	0.874	1.000	
PH 6,1	-0.002	-0.030	-0.005	-0.036	-0.039	1.000
PH 6,2	-0.010	0.028	-0.039	-0.080	-0.086	0.197
PH 6,3	-0.051	0.020	0.005	-0.014	-0.013	0.067
PH 6,4	-0.022	0.020	0.005	-0.012	-0.013	0.100
PH 6,5	-0.010	0.085	0.000	-0.206	-0.224	0.177
PS 1,1	-0.029	-0.001	-0.007	0.000	0.000	0.000
PS 2,2	-0.009	-0.004	-0.009	-0.001	-0.001	0.000
PS 3,3	0.000	-0.001	-0.002	0.000	0.000	0.000
TE 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TE 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TE 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TE 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TE 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TE 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TE 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.000

TE 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TE 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TE 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TE 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TE 14,14	0.000	0.000	0.000	0.000	0.000	0.000
TE 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TE 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TE 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TE 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	-0.003	0.255	0.048	0.022	0.031	0.132
TD 2,2	-0.001	0.107	0.507	0.058	0.044	0.005
TD 3,3	0.029	0.000	0.001	0.003	0.002	0.000
TD 4,4	0.074	0.000	0.000	0.003	0.000	0.000
TD 5,5	0.016	0.000	0.000	0.001	0.000	0.000
TD 6,6	0.047	0.000	0.000	0.002	0.000	0.000
TD 7,7	0.014	0.000	0.000	0.001	0.000	0.000
TD 8,8	0.036	0.000	0.000	0.001	0.000	0.000
TD 9,9	0.052	0.000	0.000	0.002	0.000	0.000
TD 10,10	0.023	0.000	0.000	0.001	0.000	0.000
TD 11,11	0.081	0.002	0.001	0.006	0.009	-0.003
TD 12,12	0.006	0.000	0.000	0.000	0.000	0.000
TD 13,13	0.007	0.000	0.000	0.000	0.000	0.000
TD 14,14	0.020	0.000	0.000	0.000	0.000	0.000
TD 15,15	0.007	0.000	0.000	0.000	0.000	0.000
TD 16,16	0.023	0.000	0.000	0.000	0.000	0.000
TD 17,17	0.020	0.000	0.000	0.000	0.000	0.000
TD 18,18	0.023	0.000	0.000	0.000	0.001	0.000
TD 19,19	0.031	0.000	0.000	-0.001	0.001	0.000
TD 20,20	0.006	0.255	0.514	0.251	0.244	-0.012
TD 21,21	0.007	-0.008	-0.002	0.004	0.004	0.134
CORRELATIONS OF ESTIMATES						
PH 6,2		PH 6,3	PH 6,4	PH 6,5	PS 1,1	PS 2,2
PH 6,2	1.000					
PH 6,3	0.117	1.000				
PH 6,4	0.086	0.874	1.000			
PH 6,5	0.388	0.180	0.175	1.000		
PS 1,1	0.000	0.002	0.000	0.000	1.000	
PS 2,2	-0.001	0.000	-0.001	0.000	0.035	1.000
PS 3,3	0.000	0.000	0.000	0.000	-0.005	0.005
TE 1,1	0.000	0.000	0.000	0.000	-0.200	-0.055
TE 2,2	0.000	0.000	0.000	0.000	-0.086	-0.033
TE 3,3	0.000	0.000	0.000	0.000	-0.033	-0.013
TE 4,4	0.000	0.000	0.000	0.000	-0.040	-0.015
TE 5,5	0.000	0.000	0.000	0.000	-0.013	-0.005
TE 6,6	0.000	0.000	0.000	0.000	0.001	-0.060
TE 7,7	0.000	0.000	0.000	0.000	0.001	-0.012
TE 8,8	0.000	0.000	0.000	0.000	0.000	-0.005
TE 9,9	0.000	0.000	0.000	0.000	0.000	-0.004
TE 10,10	0.000	0.000	0.000	0.000	0.000	-0.007
TE 11,11	0.000	0.000	0.000	0.000	0.000	-0.005
TE 12,12	0.000	0.000	0.000	0.000	0.001	-0.025
TE 13,13	0.000	0.000	0.000	0.000	0.001	-0.014
TE 14,14	0.000	0.000	0.000	0.000	0.001	-0.018
TE 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TE 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TE 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TE 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	0.027	0.017	0.023	0.025	-0.001	-0.007
TD 2,2	0.025	0.007	0.005	0.010	-0.016	-0.017
TD 3,3	-0.001	-0.003	-0.002	-0.001	-0.012	0.000
TD 4,4	0.000	-0.003	0.000	0.000	-0.043	-0.001

TD 5,5	0.000	-0.001	0.000	0.000	-0.009	0.000
TD 6,6	0.000	-0.002	0.000	0.000	-0.027	-0.001
TD 7,7	0.000	-0.001	0.000	0.000	-0.008	0.000
TD 8,8	0.000	-0.002	0.000	0.000	-0.021	0.000
TD 9,9	0.000	-0.002	0.000	0.000	-0.030	-0.001
TD 10,10	0.000	-0.001	0.000	0.000	-0.013	0.000
TD 11,11	-0.001	-0.009	-0.012	-0.003	-0.005	-0.017
TD 12,12	0.000	0.000	0.000	0.000	0.000	-0.002
TD 13,13	0.000	0.000	0.000	0.000	-0.001	-0.002
TD 14,14	0.000	0.001	0.000	0.000	-0.002	-0.006
TD 15,15	0.000	0.000	0.000	0.000	-0.001	-0.002
TD 16,16	0.000	0.001	0.000	0.000	-0.002	-0.007
TD 17,17	0.000	0.001	0.000	0.000	-0.002	-0.006
TD 18,18	0.000	0.001	0.000	0.000	-0.002	-0.007
TD 19,19	0.000	0.001	-0.001	0.000	-0.003	-0.010
TD 20,20	-0.026	-0.003	-0.003	-0.068	-0.002	-0.003
TD 21,21	0.026	-0.285	-0.310	-0.067	0.000	0.000
0	CORRELATIONS OF ESTIMATES					
0	PS 3,3	TE 1,1	TE 2,2	TE 3,3	TE 4,4	TE 5,5
+						
PS 3,3	1.000					
TE 1,1	-0.018	1.000				
TE 2,2	-0.011	-0.029	1.000			
TE 3,3	-0.004	-0.011	-0.007	1.000		
TE 4,4	-0.005	-0.013	-0.008	-0.003	1.000	
TE 5,5	-0.002	-0.004	-0.003	-0.001	-0.001	1.000
TE 6,6	-0.003	0.000	0.000	0.000	0.000	0.000
TE 7,7	-0.001	0.000	0.000	0.000	0.000	0.000
TE 8,8	-0.001	0.000	0.000	0.000	0.000	0.000
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TE 10,10	-0.001	0.000	0.000	0.000	0.000	0.000
TE 11,11	-0.001	0.000	0.000	0.000	0.000	0.000
TE 12,12	-0.003	0.000	0.000	0.000	0.000	0.000
TE 13,13	-0.001	0.000	0.000	0.000	0.000	0.000
TE 14,14	-0.002	0.000	0.000	0.000	0.000	0.000
TE 15,15	-0.181	0.000	0.000	0.000	0.000	0.000
TE 16,16	-0.020	0.000	0.000	0.000	0.000	0.000
TE 17,17	-0.017	0.000	0.000	0.000	0.000	0.000
TE 18,18	-0.003	0.000	0.000	0.000	0.000	0.000
TD 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,2	-0.001	0.000	0.000	0.000	0.000	0.000
TD 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TD 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TD 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TD 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TD 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TD 14,14	0.000	0.000	0.000	0.000	0.000	0.000
TD 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TD 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TD 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TD 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 19,19	0.000	0.000	0.000	0.000	0.000	0.000
TD 20,20	-0.003	0.000	0.000	0.000	0.000	0.000
TD 21,21	0.000	0.000	0.000	0.000	0.000	0.000

0	CORRELATIONS OF ESTIMATES					
0	TE 6,6	TE 7,7	TE 8,8	TE 9,9	TE 10,10	TE 11,11
+						
TE 6,6	1.000					
TE 7,7	-0.019	1.000				
TE 8,8	-0.008	-0.004	1.000			
TE 9,9	-0.007	-0.003	-0.001	1.000		
TE 10,10	-0.011	-0.005	-0.002	-0.002	1.000	
TE 11,11	-0.008	-0.004	-0.002	-0.001	-0.002	1.000
TE 12,12	-0.040	-0.018	-0.008	-0.007	-0.010	-0.008
TE 13,13	-0.022	-0.010	-0.004	-0.004	-0.006	-0.004
TE 14,14	-0.029	-0.013	-0.005	-0.005	-0.007	-0.006
TE 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TE 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TE 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TE 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TD 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TD 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TD 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TD 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TD 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TD 14,14	0.000	0.000	0.000	0.000	0.000	0.000
TD 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TD 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TD 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TD 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 19,19	0.000	0.000	0.000	0.000	0.000	0.000
TD 20,20	0.000	0.000	0.000	0.000	0.000	0.000
TD 21,21	0.000	0.000	0.000	0.000	0.000	0.000
0	CORRELATIONS OF ESTIMATES					
0	TE 12,12	TE 13,13	TE 14,14	TE 15,15	TE 16,16	TE 17,17
+						
TE 12,12	1.000					
TE 13,13	-0.021	1.000				
TE 14,14	-0.028	-0.015	1.000			
TE 15,15	0.000	0.000	0.000	1.000		
TE 16,16	0.000	0.000	0.000	-0.139	1.000	
TE 17,17	0.000	0.000	0.000	-0.119	-0.053	1.000
TE 18,18	0.000	0.000	0.000	-0.022	-0.010	-0.009
TD 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TD 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TD 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TD 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TD 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TD 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TD 14,14	0.000	0.000	0.000	0.000	0.000	0.000
TD 15,15	0.000	0.000	0.000	0.000	0.000	0.000

TD 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TD 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TD 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 19,19	0.000	0.000	0.000	0.000	0.000	0.000
TD 20,20	0.000	0.000	0.000	0.000	0.000	0.000
TD 21,21	0.000	0.000	0.000	0.000	0.000	0.000
0	CORRELATIONS OF ESTIMATES					
0	TE 18,18	TD 1,1	TD 2,2	TD 3,3	TD 4,4	TD 5,5
+						
TE 18,18	1.000					
TD 1,1	0.000	1.000				
TD 2,2	0.000	0.040	1.000			
TD 3,3	0.000	0.000	0.000	1.000		
TD 4,4	0.000	0.000	0.000	-0.004	1.000	
TD 5,5	0.000	0.000	0.000	-0.001	-0.003	1.000
TD 6,6	0.000	0.000	0.000	-0.003	-0.010	-0.002
TD 7,7	0.000	0.000	0.000	-0.001	-0.003	-0.001
TD 8,8	0.000	0.000	0.000	-0.002	-0.007	-0.002
TD 9,9	0.000	0.000	0.000	-0.003	-0.011	-0.002
TD 10,10	0.000	0.000	0.000	-0.001	-0.005	-0.001
TD 11,11	0.000	0.001	0.000	0.002	0.000	0.000
TD 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TD 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TD 14,14	0.000	0.000	0.000	0.000	0.000	0.000
TD 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TD 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TD 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TD 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 19,19	0.000	0.000	0.000	0.000	0.000	0.000
TD 20,20	0.000	0.034	0.151	0.001	0.000	0.000
TD 21,21	0.000	0.008	0.000	0.001	0.000	0.000
0	CORRELATIONS OF ESTIMATES					
0	TD 6,6	TD 7,7	TD 8,8	TD 9,9	TD 10,10	TD 11,11
+						
TD 6,6	1.000					
TD 7,7	-0.002	1.000				
TD 8,8	-0.005	-0.001	1.000			
TD 9,9	-0.007	-0.002	-0.005	1.000		
TD 10,10	-0.003	-0.001	-0.002	-0.003	1.000	
TD 11,11	0.000	0.000	0.000	0.000	0.000	1.000
TD 12,12	0.000	0.000	0.000	0.000	0.000	-0.004
TD 13,13	0.000	0.000	0.000	0.000	0.000	-0.005
TD 14,14	0.000	0.000	0.000	0.000	0.000	-0.014
TD 15,15	0.000	0.000	0.000	0.000	0.000	-0.005
TD 16,16	0.000	0.000	0.000	0.000	0.000	-0.016
TD 17,17	0.000	0.000	0.000	0.000	0.000	-0.014
TD 18,18	0.000	0.000	0.000	0.000	0.000	-0.017
TD 19,19	0.000	0.000	0.000	0.000	0.000	-0.022
TD 20,20	0.000	0.000	0.000	0.000	0.000	0.002
TD 21,21	0.000	0.000	0.000	0.000	0.000	0.003

0	CORRELATIONS OF ESTIMATES					
0	TD 12,12	TD 13,13	TD 14,14	TD 15,15	TD 16,16	TD 17,17
+						
	TD 12,12	1.000				
	TD 13,13	-0.001	1.000			
	TD 14,14	-0.001	-0.002	1.000		
	TD 15,15	-0.001	-0.001	-0.002	1.000	
	TD 16,16	-0.002	-0.002	-0.006	-0.002	1.000
	TD 17,17	-0.001	-0.002	-0.005	-0.002	-0.006
	TD 18,18	-0.002	-0.002	-0.006	-0.002	-0.007
	TD 19,19	-0.002	-0.003	-0.008	-0.003	-0.009
	TD 20,20	0.000	0.000	0.000	0.000	0.000
	TD 21,21	0.000	0.000	0.000	0.000	0.000

0	CORRELATIONS OF ESTIMATES			
0	TD 18,18	TD 19,19	TD 20,20	TD 21,21
+				
	TD 18,18	1.000		
	TD 19,19	-0.009	1.000	
	TD 20,20	0.000	0.000	1.000
	TD 21,21	0.000	0.001	1.000

1TITLE TESTING THE MAIN MODEL

-T-VALUES

0	LAMBDA Y		
0	SERVQUAL	SATISFAC	LOYALTY
+			
	EMPATHY	0.000	0.000
	RELIABL	19.087	0.000
	RESPONS	14.451	0.000
	ASSURAN	15.410	0.000
	TANGIBL	9.884	0.000
	D08	0.000	0.000
	D02	0.000	23.409
	D03	0.000	17.353
	D04	0.000	16.653
	D05	0.000	19.434
	D06	0.000	17.623
	D07	0.000	28.076
	D01	0.000	24.375
	D09	0.000	26.160
	F03	0.000	0.000
	F04	0.000	22.330
	F08	0.000	21.686
	F13	0.000	12.678

0	LAMBDA X					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	AGE	EDUCATE
+						
	TOT1	0.000	0.000	0.000	0.000	0.000
	MONTHS	0.000	0.000	0.000	0.000	0.000
	B01	0.000	0.000	0.000	0.000	0.000
	B04	0.000	0.000	19.032	0.000	0.000
	B05	0.000	0.000	11.186	0.000	0.000
	B02	0.000	0.000	16.698	0.000	0.000
	B06	0.000	0.000	10.683	0.000	0.000
	B08	0.000	0.000	15.347	0.000	0.000
	B10	0.000	0.000	17.238	0.000	0.000
	B13	0.000	0.000	12.872	0.000	0.000
	A08	0.000	0.000	0.000	0.000	0.000
	A15	0.000	0.000	0.000	9.865	0.000
	A02	0.000	0.000	0.000	11.196	0.000
	A07	0.000	0.000	0.000	16.726	0.000
	A12	0.000	0.000	0.000	11.186	0.000
	A01	0.000	0.000	0.000	17.551	0.000
	A16	0.000	0.000	0.000	16.900	0.000
	A25	0.000	0.000	0.000	17.732	0.000
	A09	0.000	0.000	0.000	19.496	0.000
	AGE	0.000	0.000	0.000	0.000	0.000
	EDUCATE	0.000	0.000	0.000	0.000	0.000
0	BETA					
0	SERVQUAL	SATISFAC	LOYALTY			
+						
	SERVQUAL	0.000	0.000	0.000		
	SATISFAC	3.487	0.000	0.000		
	LOYALTY	3.573	3.548	0.000		
0	GAMMA					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	AGE	EDUCATE
+						
	SERVQUAL	-0.052	1.495	4.849	1.914	0.000
	SATISFAC	-0.913	1.491	0.533	3.593	0.000
	LOYALTY	0.000	0.000	0.000	0.801	0.085
0	PHI					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	AGE	EDUCATE
+						
	ACCOUNTS	0.000				
	MONTHS	2.723	0.000			
	EQUITY	1.327	1.858	0.000		
	FIRMCHAR	1.833	1.406	65.879	0.000	
	AGE	2.559	5.174	2.602	2.529	0.000
	EDUCATE	1.321	0.250	-2.982	-3.249	-0.694
0	PSI					
0	SERVQUAL	SATISFAC	LOYALTY			
+						
	4.448	6.384	6.743			
0	THETA EPS					
0	EMPATHY	RELIABL	RESPONS	ASSURAN	TANGIBL	D08
+						
	7.523	8.326	9.294	9.157	9.721	8.235
0	THETA EPS					
0	D02	D03	D04	D05	D06	D07
+						
	9.086	9.596	9.635	9.461	9.581	8.274

0	THETA EPS					
0	D01	D09	F03	F04	F08	F13
+						
	8.962	8.680	6.402	7.630	7.875	9.517
0	THETA DELTA					
0	TOT1	MONTHS	B01	B04	B05	B02
+						
	2.020	1.846	9.519	8.504	9.637	8.999
0	THETA DELTA					
0	B06	B08	B10	B13	A08	A15
+						
	9.674	9.208	8.902	9.494	8.180	9.776
0	THETA DELTA					
0	A02	A07	A12	A01	A16	A25
+						
	9.705	9.240	9.706	9.139	9.220	9.115
0	THETA DELTA					
0	A09	AGE	EDUCATE			
+						
	8.851	2.036	2.074			

1TITLE TESTING THE MAIN MODEL

-TOTAL AND INDIRECT EFFECTS

0	TOTAL EFFECTS OF KSI ON	ETA				
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	AGE	EDUCATE
+						
	SERVQUAL	-0.002	0.059	0.664	0.258	0.000
	SATISFAC	-0.033	0.082	0.404	0.546	0.000
	LOYALTY	-0.015	0.063	0.486	0.359	0.034
0	STANDARD ERRORS FOR TOTAL EFFECTS OF KSI ON	ETA				
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	AGE	EDUCATE
+						
	SERVQUAL	0.040	0.040	0.137	0.135	0.000
	SATISFAC	0.038	0.038	0.126	0.126	0.000
	LOYALTY	0.029	0.030	0.107	0.104	0.043
0	INDIRECT EFFECTS OF KSI ON	ETA				
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	AGE	EDUCATE
+						
	SERVQUAL	0.000	0.000	0.000	0.000	0.000
	SATISFAC	-0.001	0.028	0.319	0.124	0.000
	LOYALTY	-0.015	0.063	0.486	0.359	0.000
0	STANDARD ERRORS FOR INDIRECT EFFECTS OF KSI ON	ETA				
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	AGE	EDUCATE
+						
	SERVQUAL	0.000	0.000	0.000	0.000	0.000
	SATISFAC	0.019	0.020	0.117	0.070	0.000
	LOYALTY	0.029	0.030	0.107	0.104	0.000
0	TOTAL EFFECTS OF ETA ON	ETA				
0	SERVQUAL	SATISFAC	LOYALTY			
+						
	SERVQUAL	0.000	0.000	0.000		
	SATISFAC	0.480	0.000	0.000		
	LOYALTY	0.676	0.437	0.000		
0	LARGEST EIGENVALUE OF B*B' (STABILITY INDEX) IS	0.561				
0	STANDARD ERRORS FOR TOTAL EFFECTS OF ETA ON	ETA				
0	SERVQUAL	SATISFAC	LOYALTY			
+						
	SERVQUAL	0.000	0.000	0.000		
	SATISFAC	0.138	0.000	0.000		
	LOYALTY	0.106	0.123	0.000		

0	INDIRECT EFFECTS OF ETA ON ETA			
0	SERVQUAL	SATISFAC	LOYALTY	
+				
	SERVQUAL	0.000	0.000	0.000
	SATISFAC	0.000	0.000	0.000
	LOYALTY	0.210	0.000	0.000
0	STANDARD ERRORS FOR INDIRECT EFFECTS OF ETA ON ETA			
0	SERVQUAL	SATISFAC	LOYALTY	
+				
	SERVQUAL	0.000	0.000	0.000
	SATISFAC	0.000	0.000	0.000
	LOYALTY	0.077	0.000	0.000
0	TOTAL EFFECTS OF ETA ON Y			
0	SERVQUAL	SATISFAC	LOYALTY	
+				
	EMPATHY	1.000	0.000	0.000
	RELIABL	0.959	0.000	0.000
	RESPONS	0.828	0.000	0.000
	ASSURAN	0.859	0.000	0.000
	TANGIBL	0.640	0.000	0.000
	D08	0.480	1.000	0.000
	D02	0.454	0.947	0.000
	D03	0.403	0.840	0.000
	D04	0.395	0.824	0.000
	D05	0.424	0.884	0.000
	D06	0.406	0.846	0.000
	D07	0.479	0.999	0.000
	D01	0.460	0.959	0.000
	D09	0.470	0.980	0.000
	F03	0.676	0.437	1.000
	F04	0.653	0.422	0.965
	F08	0.646	0.417	0.955
	F13	0.495	0.320	0.731
0	STANDARD ERRORS FOR TOTAL EFFECTS OF ETA ON Y			
0	SERVQUAL	SATISFAC	LOYALTY	
+				
	EMPATHY	0.000	0.000	0.000
	RELIABL	0.050	0.000	0.000
	RESPONS	0.057	0.000	0.000
	ASSURAN	0.056	0.000	0.000
	TANGIBL	0.065	0.000	0.000
	D08	0.138	0.000	0.000
	D02	0.131	0.040	0.000
	D03	0.117	0.048	0.000
	D04	0.115	0.049	0.000
	D05	0.123	0.045	0.000
	D06	0.118	0.048	0.000
	D07	0.137	0.036	0.000
	D01	0.132	0.039	0.000
	D09	0.135	0.037	0.000
	F03	0.106	0.123	0.000
	F04	0.103	0.119	0.043
	F08	0.102	0.118	0.044
	F13	0.085	0.093	0.058

0	INDIRECT EFFECTS OF ETA ON Y			
0	SERVQUAL	SATISFAC	LOYALTY	
+				
EMPATHY	0.000	0.000	0.000	
RELIABL	0.000	0.000	0.000	
RESPONS	0.000	0.000	0.000	
ASSURAN	0.000	0.000	0.000	
TANGIBL	0.000	0.000	0.000	
D08	0.480	0.000	0.000	
D02	0.454	0.000	0.000	
D03	0.403	0.000	0.000	
D04	0.395	0.000	0.000	
D05	0.424	0.000	0.000	
D06	0.406	0.000	0.000	
D07	0.479	0.000	0.000	
D01	0.460	0.000	0.000	
D09	0.470	0.000	0.000	
F03	0.676	0.437	0.000	
F04	0.653	0.422	0.000	
F08	0.646	0.417	0.000	
F13	0.495	0.320	0.000	

0	STANDARD ERRORS FOR INDIRECT EFFECTS OF ETA ON Y			
0	SERVQUAL	SATISFAC	LOYALTY	
+				
EMPATHY	0.000	0.000	0.000	
RELIABL	0.000	0.000	0.000	
RESPONS	0.000	0.000	0.000	
ASSURAN	0.000	0.000	0.000	
TANGIBL	0.000	0.000	0.000	
D08	0.138	0.000	0.000	
D02	0.131	0.000	0.000	
D03	0.117	0.000	0.000	
D04	0.115	0.000	0.000	
D05	0.123	0.000	0.000	
D06	0.118	0.000	0.000	
D07	0.137	0.000	0.000	
D01	0.132	0.000	0.000	
D09	0.135	0.000	0.000	
F03	0.106	0.123	0.000	
F04	0.103	0.119	0.000	
F08	0.102	0.118	0.000	
F13	0.085	0.093	0.000	

0	TOTAL EFFECTS OF KSI ON Y					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	AGE	EDUCATE
+						
EMPATHY	-0.002	0.059	0.664	0.258	0.000	0.000
RELIABL	-0.002	0.057	0.637	0.247	0.000	0.000
RESPONS	-0.002	0.049	0.550	0.213	0.000	0.000
ASSURAN	-0.002	0.051	0.570	0.222	0.000	0.000
TANGIBL	-0.001	0.038	0.425	0.165	0.000	0.000
D08	-0.033	0.082	0.404	0.546	0.000	0.000
D02	-0.031	0.077	0.382	0.517	0.000	0.000
D03	-0.028	0.069	0.339	0.459	0.000	0.000
D04	-0.027	0.067	0.332	0.450	0.000	0.000
D05	-0.029	0.072	0.357	0.483	0.000	0.000
D06	-0.028	0.069	0.342	0.462	0.000	0.000
D07	-0.033	0.082	0.403	0.545	0.000	0.000
D01	-0.032	0.078	0.387	0.524	0.000	0.000
D09	-0.032	0.080	0.395	0.535	0.000	0.000
F03	-0.015	0.063	0.486	0.359	0.034	0.004
F04	-0.015	0.061	0.469	0.347	0.033	0.003
F08	-0.015	0.060	0.464	0.343	0.033	0.003
F13	-0.011	0.046	0.356	0.263	0.025	0.003
0	STANDARD ERRORS FOR TOTAL EFFECTS OF KSI ON Y					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	AGE	EDUCATE
+						
EMPATHY	0.040	0.040	0.137	0.135	0.000	0.000
RELIABL	0.038	0.038	0.132	0.129	0.000	0.000
RESPONS	0.033	0.033	0.117	0.112	0.000	0.000
ASSURAN	0.034	0.034	0.120	0.116	0.000	0.000
TANGIBL	0.025	0.026	0.095	0.087	0.000	0.000
D08	0.038	0.038	0.126	0.126	0.000	0.000
D02	0.036	0.036	0.120	0.120	0.000	0.000
D03	0.032	0.032	0.107	0.108	0.000	0.000
D04	0.031	0.031	0.105	0.106	0.000	0.000
D05	0.033	0.034	0.112	0.113	0.000	0.000
D06	0.032	0.032	0.108	0.109	0.000	0.000
D07	0.038	0.038	0.126	0.126	0.000	0.000
D01	0.036	0.036	0.122	0.122	0.000	0.000
D09	0.037	0.037	0.124	0.124	0.000	0.000
F03	0.029	0.030	0.107	0.104	0.043	0.043
F04	0.028	0.029	0.103	0.101	0.041	0.041
F08	0.028	0.028	0.102	0.100	0.041	0.041
F13	0.021	0.022	0.082	0.078	0.031	0.031

1TITLE TESTING THE MAIN MODEL
-STANDARDIZED SOLUTION

0	LAMBDA Y		
0	SERVQUAL	SATISFAC	LOYALTY
+			
	EMPATHY	0.973	0.000
	RELIABL	0.934	0.000
	RESPONS	0.806	0.000
	ASSURAN	0.837	0.000
	TANGIBL	0.623	0.000
	D08	0.000	1.014
	D02	0.000	0.960
	D03	0.000	0.852
	D04	0.000	0.835
	D05	0.000	0.896
	D06	0.000	0.858
	D07	0.000	1.012
	D01	0.000	0.973
	D09	0.000	0.993
	F03	0.000	0.000
	F04	0.000	0.992
	F08	0.000	0.957
	F13	0.000	0.947
		0.000	0.726

0	LAMBDA X					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	AGE	EDUCATE
+						
	TOT1	0.894	0.000	0.000	0.000	0.000
	MONTHS	0.000	0.894	0.000	0.000	0.000
	B01	0.000	0.000	0.793	0.000	0.000
	B04	0.000	0.000	0.927	0.000	0.000
	B05	0.000	0.000	0.680	0.000	0.000
	B02	0.000	0.000	0.870	0.000	0.000
	B06	0.000	0.000	0.658	0.000	0.000
	B08	0.000	0.000	0.831	0.000	0.000
	B10	0.000	0.000	0.884	0.000	0.000
	B13	0.000	0.000	0.748	0.000	0.000
	A08	0.000	0.000	0.000	0.986	0.000
	A15	0.000	0.000	0.000	0.613	0.000
	A02	0.000	0.000	0.000	0.671	0.000
	A07	0.000	0.000	0.000	0.852	0.000
	A12	0.000	0.000	0.000	0.670	0.000
	A01	0.000	0.000	0.000	0.873	0.000
	A16	0.000	0.000	0.000	0.857	0.000
	A25	0.000	0.000	0.000	0.877	0.000
	A09	0.000	0.000	0.000	0.915	0.000
	AGE	0.000	0.000	0.000	0.894	0.000
	EDUCATE	0.000	0.000	0.000	0.000	0.894

0	BETA		
0	SERVQUAL	SATISFAC	LOYALTY
+			
	SERVQUAL	0.000	0.000
	SATISFAC	0.461	0.000
	LOYALTY	0.458	0.447

0	GAMMA					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	AGE	EDUCATE
+						
	SERVQUAL	-0.002	0.061	0.682	0.265	0.000
	SATISFAC	-0.032	0.052	0.084	0.417	0.000
	LOYALTY	0.000	0.000	0.000	0.034	0.004

0	CORRELATION MATRIX OF ETA AND KSI						
0	SERVQUAL	SATISFAC	LOYALTY	ACCOUNTS	MONTHS	EQUITY	
+							
	SERVQUAL	1.000					
	SATISFAC	0.924	1.000				
	LOYALTY	0.878	0.877	1.000			
	ACCOUNTS	0.126	0.110	0.115	1.000		
	MONTHS	0.192	0.193	0.191	0.243	1.000	
	EQUITY	0.938	0.909	0.842	0.108	0.150	
	FIRMCHAR	0.907	0.914	0.830	0.148	0.113	
	AGE	0.226	0.224	0.238	0.231	0.484	
	EDUCATE	-0.231	-0.237	-0.210	0.118	0.022	
0	CORRELATION MATRIX OF ETA AND KSI						
0	FIRMCHAR	AGE	EDUCATE				
+							
	FIRMCHAR	1.000					
	AGE	0.203	1.000				
	EDUCATE	-0.259	-0.062	1.000			
0	PSI						
0	SERVQUAL	SATISFAC	LOYALTY				
+		0.109	0.111	0.199			
0	REGRESSION MATRIX ETA ON KSI (STANDARDIZED)						
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	AGE	EDUCATE	
+							
	SERVQUAL	-0.002	0.061	0.682	0.265	0.000	
	SATISFAC	-0.033	0.081	0.398	0.539	0.000	
	LOYALTY	-0.016	0.064	0.490	0.362	0.034	
1	TITLE TESTING THE MAIN MODEL						
-	MODIFICATION INDICES AND ESTIMATED CHANGE						
0	MODIFICATION INDICES FOR LAMBDA Y						
0	SERVQUAL	SATISFAC	LOYALTY				
+							
	EMPATHY	0.000	0.719	0.068			
	RELIABL	0.000	0.004	3.214			
	RESPONS	0.000	0.045	2.559			
	ASSURAN	0.000	1.862	3.491			
	TANGIBL	0.000	0.752	1.105			
	D08	0.120	0.000	0.221			
	D02	3.960	0.000	2.186			
	D03	0.333	0.000	7.367			
	D04	21.674	0.000	3.337			
	D05	15.041	0.000	0.078			
	D06	3.215	0.000	1.551			
	D07	12.844	0.000	13.359			
	D01	0.033	0.000	16.547			
	D09	0.906	0.000	0.358			
	F03	13.597	19.317	0.000			
	F04	10.221	16.292	0.000			
	F08	3.880	2.779	0.000			
	F13	4.871	3.469	0.000			

0 0 +	ESTIMATED CHANGE FOR LAMBDA Y					
	SERVQUAL	SATISFAC	LOYALTY			
EMPATHY	0.000	-0.128	-0.027			
RELIABL	0.000	0.009	0.198			
RESPONS	0.000	0.036	0.208			
ASSURAN	0.000	0.227	-0.235			
TANGIBL	0.000	-0.170	-0.160			
D08	0.034	0.000	0.032			
D02	-0.240	0.000	-0.125			
D03	-0.089	0.000	0.296			
D04	0.739	0.000	0.205			
D05	0.551	0.000	0.028			
D06	0.274	0.000	-0.134			
D07	-0.358	0.000	-0.254			
D01	0.021	0.000	0.331			
D09	-0.103	0.000	-0.045			
F03	0.389	0.418	0.000			
F04	-0.341	-0.388	0.000			
F08	-0.212	-0.162	0.000			
F13	0.312	0.237	0.000			
0 0 +	MODIFICATION INDICES FOR LAMBDA X					
	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	AGE	EDUCATE
TOT1	0.166	0.166	0.166	0.166	1.184	0.084
MONTHS	3.076	3.076	3.076	3.076	3.200	0.360
B01	1.415	0.393	2.944	2.358	1.281	0.006
B04	0.072	0.710	0.000	6.534	0.028	0.253
B05	3.703	0.182	0.000	0.079	0.114	0.013
B02	0.854	0.770	0.000	1.429	0.123	0.080
B06	0.793	0.054	0.000	2.055	0.047	0.813
B08	3.821	0.054	0.000	0.410	0.114	1.383
B10	2.604	4.623	0.000	3.000	3.902	0.033
B13	2.046	0.166	0.000	0.986	0.008	0.710
A08	0.072	0.867	3.657	0.639	0.033	0.791
A15	0.025	0.992	1.157	0.000	1.247	0.089
A02	0.001	2.284	0.000	0.000	3.481	2.524
A07	0.419	1.435	1.578	0.000	1.084	0.117
A12	4.170	3.570	1.872	0.000	5.984	0.027
A01	0.033	2.497	12.602	0.000	0.329	0.306
A16	3.440	0.452	6.258	0.000	0.616	0.796
A25	0.178	0.459	38.336	0.000	0.357	0.084
A09	1.127	0.193	0.570	0.000	0.432	0.109
AGE	0.840	0.043	0.268	0.193	0.098	0.098
EDUCATE	0.958	0.022	1.382	0.850	0.000	1.415

0	ESTIMATED CHANGE FOR LAMBDA X					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	AGE	EDUCATE
+						
	TOT1	-0.901	-3.711	-8.307	-6.081	0.266
	MONTHS	2.737	0.664	4.427	5.904	-0.235
	B01	-0.077	-0.040	-0.108	-0.096	-0.005
	B04	0.013	-0.041	0.000	0.454	0.025
	B05	0.124	0.027	0.000	-0.063	-0.008
	B02	0.049	-0.046	0.000	0.226	0.015
	B06	-0.058	0.015	0.000	-0.323	-0.061
	B08	-0.109	-0.013	0.000	-0.126	-0.067
	B10	0.084	0.111	0.000	-0.322	-0.010
	B13	-0.087	-0.025	0.000	-0.210	0.053
	A08	0.012	-0.040	-0.102	-0.044	-0.039
	A15	0.011	0.066	0.247	0.000	0.021
	A02	-0.002	-0.096	-0.002	0.000	0.106
	A07	-0.034	0.062	-0.233	0.000	0.019
	A12	0.132	0.120	0.303	0.000	-0.011
	A01	-0.009	-0.080	-0.640	0.000	0.029
	A16	-0.098	0.035	0.460	0.000	-0.049
	A25	-0.022	0.034	1.110	0.000	0.015
	A09	0.051	-0.021	-0.128	0.000	-0.016
	AGE	-0.935	-0.169	1.752	1.289	5.169
	EDUCATE	-10.272	-1.832	40.396	24.634	-30.449
0	MODIFICATION INDICES FOR BETA					
0	SERVQUAL	SATISFAC	LOYALTY			
+						
	SERVQUAL	0.000	0.000	0.696		
	SATISFAC	0.000	0.000	0.686		
	LOYALTY	0.000	0.000	0.000		
0	ESTIMATED CHANGE FOR BETA					
0	SERVQUAL	SATISFAC	LOYALTY			
+						
	SERVQUAL	0.000	0.000	0.082		
	SATISFAC	0.000	0.000	0.138		
	LOYALTY	0.000	0.000	0.000		
0	MODIFICATION INDICES FOR GAMMA					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	AGE	EDUCATE
+						
	SERVQUAL	0.000	0.000	0.000	2.863	0.469
	SATISFAC	0.000	0.000	0.000	1.058	0.082
	LOYALTY	0.918	0.019	0.870	0.501	0.000
0	ESTIMATED CHANGE FOR GAMMA					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	AGE	EDUCATE
+						
	SERVQUAL	0.000	0.000	0.000	-0.078	0.027
	SATISFAC	0.000	0.000	0.000	-0.041	0.010
	LOYALTY	0.042	0.007	-0.153	0.000	0.000
0	MODIFICATION INDICES FOR PHI					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	AGE	EDUCATE
+						
	ACCOUNTS	0.166				
	MONTHS	0.000	3.076			
	EQUITY	0.000	2.944			
	FIRMCHAR	0.000	0.000	0.639		
	AGE	0.000	0.000	0.000	0.098	
	EDUCATE	0.000	0.000	0.000	0.000	1.415

```

0      ESTIMATED CHANGE FOR PHI
0      ACCOUNTS      MONTHS      EQUITY      FIRMCHAR      AGE      EDUCATE
+
ACCOUNTS      -2.015
MONTHS      0.000      1.486
EQUITY      0.000      0.000      -0.273
FIRMCHAR      0.000      0.000      0.000      -0.089
AGE      0.000      0.000      0.000      0.000      -0.714
EDUCATE      0.000      0.000      0.000      0.000      0.000      -68.087
0NO NON-ZERO MODIFICATION INDICES FOR PSI
0NO NON-ZERO MODIFICATION INDICES FOR THETA EPS
0NO NON-ZERO MODIFICATION INDICES FOR THETA DELTA
0      MAXIMUM MODIFICATION INDEX IS 38.34 FOR ELEMENT (18, 3) OF LAMBDA X
-      THE PROBLEM USED 129536 BYTES (= 2.2% OF AVAILABLE WORKSPACE)
-      TIME USED : 0.00 SECONDS

```

0PRECEDING TASK REQUIRED 17.30 SECONDS CPU TIME; 21.92 SECONDS ELAPSED.

```

1582 FINISH
0 1582 COMMAND LINES READ.
0 ERRORS DETECTED.
0 WARNINGS ISSUED.
85 SECONDS CPU TIME.
3476 SECONDS ELAPSED TIME.
END OF JOB.

```

APPENDIX D

The LISREL Output Without Consumer Characteristics

TRY THE NEW SPSS RELEASE 4 FEATURES:

0* LOGISTIC REGRESSION PROCEDURE
 * EXAMINE PROCEDURE TO EXPLORE DATA
 * FLIP TO TRANSPOSE DATA FILES
 * MATRIX TRANSFORMATIONS LANGUAGE

* CATEGORIES OPTION:
 * CONJOINT ANALYSIS
 * CORRESPONDENCE ANALYSIS
 * NEW LISREL AND PRELIS

OPTIONS

* GRAPH INTERFACE TO SPSS GRAPHICS

0SEE THE NEW SPSS DOCUMENTATION FOR MORE INFORMATION ON THESE NEW FEATURES.

```

1 0 SET WIDTH = 80
2 TITLE 'CESAR DISSERTATION FILE'
3 DATA LIST FIXED RECORDS = 4
4   /1 IDNUM 1-3
5   /2 A01 TO A25 1-25
6     B01 TO B28 26-53 B29 54-55 B30 56-57
7   /3 C01 TO C15 1-15
8     D01 TO D09 16-24
9     EA01 TO EA22 25-46
10    EB01 TO EB22 47-68
11  /4 EC01 TO EC05 1-10
12    F01 TO F13 11-23
13    G01 TO G05 24-28 G06 G07 29-32 G08 33 G09 34-35

```

0THIS COMMAND WILL READ 4 RECORDS FROM THE COMMAND FILE

OVARIABLE	REC	START	END	FORMAT

IDNUM	1	1	3	F3.0
A01	2	1	1	F1.0
A02	2	2	2	F1.0
A03	2	3	3	F1.0
A04	2	4	4	F1.0
A05	2	5	5	F1.0
A06	2	6	6	F1.0
A07	2	7	7	F1.0
A08	2	8	8	F1.0
A09	2	9	9	F1.0
A10	2	10	10	F1.0
A11	2	11	11	F1.0
A12	2	12	12	F1.0
A13	2	13	13	F1.0
A14	2	14	14	F1.0
A15	2	15	15	F1.0
A16	2	16	16	F1.0
A17	2	17	17	F1.0
A18	2	18	18	F1.0
A19	2	19	19	F1.0
A20	2	20	20	F1.0
A21	2	21	21	F1.0
A22	2	22	22	F1.0
A23	2	23	23	F1.0
A24	2	24	24	F1.0
A25	2	25	25	F1.0
B01	2	26	26	F1.0
B02	2	27	27	F1.0
B03	2	28	28	F1.0
B04	2	29	29	F1.0
B05	2	30	30	F1.0

B06	2	31	31	F1.0
B07	2	32	32	F1.0
B08	2	33	33	F1.0
B09	2	34	34	F1.0
B10	2	35	35	F1.0
B11	2	36	36	F1.0
B12	2	37	37	F1.0
B13	2	38	38	F1.0
B14	2	39	39	F1.0
B15	2	40	40	F1.0
B16	2	41	41	F1.0
B17	2	42	42	F1.0
B18	2	43	43	F1.0
B19	2	44	44	F1.0
B20	2	45	45	F1.0
B21	2	46	46	F1.0
B22	2	47	47	F1.0
B23	2	48	48	F1.0
B24	2	49	49	F1.0
B25	2	50	50	F1.0
B26	2	51	51	F1.0
B27	2	52	52	F1.0
B28	2	53	53	F1.0
B29	2	54	55	F2.0
B30	2	56	57	F2.0
C01	3	1	1	F1.0
C02	3	2	2	F1.0
C03	3	3	3	F1.0
C04	3	4	4	F1.0
C05	3	5	5	F1.0
C06	3	6	6	F1.0
C07	3	7	7	F1.0
C08	3	8	8	F1.0
C09	3	9	9	F1.0
C10	3	10	10	F1.0
C11	3	11	11	F1.0
C12	3	12	12	F1.0
C13	3	13	13	F1.0
C14	3	14	14	F1.0
C15	3	15	15	F1.0
D01	3	16	16	F1.0
D02	3	17	17	F1.0
D03	3	18	18	F1.0
D04	3	19	19	F1.0
D05	3	20	20	F1.0
D06	3	21	21	F1.0
D07	3	22	22	F1.0
D08	3	23	23	F1.0
D09	3	24	24	F1.0
EA01	3	25	25	F1.0
EA02	3	26	26	F1.0
EA03	3	27	27	F1.0
EA04	3	28	28	F1.0
EA05	3	29	29	F1.0
EA06	3	30	30	F1.0
EA07	3	31	31	F1.0
EA08	3	32	32	F1.0
EA09	3	33	33	F1.0
EA10	3	34	34	F1.0
EA11	3	35	35	F1.0
EA12	3	36	36	F1.0
EA13	3	37	37	F1.0

EA14	3	38	38	F1.0
EA15	3	39	39	F1.0
EA16	3	40	40	F1.0
EA17	3	41	41	F1.0
EA18	3	42	42	F1.0
EA19	3	43	43	F1.0
EA20	3	44	44	F1.0
EA21	3	45	45	F1.0
EA22	3	46	46	F1.0
EB01	3	47	47	F1.0
EB02	3	48	48	F1.0
EB03	3	49	49	F1.0
EB04	3	50	50	F1.0
EB05	3	51	51	F1.0
EB06	3	52	52	F1.0
EB07	3	53	53	F1.0
EB08	3	54	54	F1.0
EB09	3	55	55	F1.0
EB10	3	56	56	F1.0
EB11	3	57	57	F1.0
EB12	3	58	58	F1.0
EB13	3	59	59	F1.0
EB14	3	60	60	F1.0
EB15	3	61	61	F1.0
EB16	3	62	62	F1.0
EB17	3	63	63	F1.0
EB18	3	64	64	F1.0
EB19	3	65	65	F1.0
EB20	3	66	66	F1.0
EB21	3	67	67	F1.0
EB22	3	68	68	F1.0
EC01	4	1	2	F2.0
EC02	4	3	4	F2.0
EC03	4	5	6	F2.0
EC04	4	7	8	F2.0
EC05	4	9	10	F2.0
F01	4	11	11	F1.0
F02	4	12	12	F1.0
F03	4	13	13	F1.0
F04	4	14	14	F1.0
F05	4	15	15	F1.0
F06	4	16	16	F1.0
F07	4	17	17	F1.0
F08	4	18	18	F1.0
F09	4	19	19	F1.0
F10	4	20	20	F1.0
F11	4	21	21	F1.0
F12	4	22	22	F1.0
F13	4	23	23	F1.0
G01	4	24	24	F1.0
G02	4	25	25	F1.0
G03	4	26	26	F1.0
G04	4	27	27	F1.0
G05	4	28	28	F1.0
G06	4	29	30	F2.0
G07	4	31	32	F2.0
G08	4	33	33	F1.0
G09	4	34	35	F2.0

```

14 VARIABLE LABELS
15     A01 FRIENDLY/
16     A02 GOOD IMAGE/
17     A03 GENERALLY SAFE/
18     A04 SATISFY NEEDS/
19     A05 CONVENIENT/
20     A06 FRUSTRATED DEALING/
21     A07 PLEASANT PLACE/
22     A08 HELPFUL/
23     A09 KNOWLEDGEABLE/
24     A10 HAS ALL SERVICES NEEDED/
25     A11 WELL RESPECTED/
26     A12 KNOW ME WELL/
27     A13 CONVENIENT PARKING/
28     A14 GOOD SOURCE INFO/
29     A15 GOOD REPUTATION/
30     A16 PAYS ATTENTION/
31     A17 LITTLE PERSONAL ATTENTION/
32     A18 PROUD/
33     A19 OFFERS BANK BY PHONE/
34     A20 DOES NOT HAVE ALL SERVICES/
35     A21 SAFE AND SOLID/
36     A22 HAS ALL INFO NEEDED/
37     A23 CUST SVC AVAILABLE 24 HRS/
38     A24 RARELY WAIT LONG/
39     A25 LISTENS TO PROBLEMS COMPLAINTS/
40     B01 FEES WORTH SVC/
41     B02 WILLING TO LISTEN/
42     B03 CHANGING BANKS RESULTS IN DELAY/
43     B04 GET SVC DESERVED/
44     B05 CREDIT RESULTS IS FAIR/
45     B06 MANAGER NEVER AROUND/
46     B07 SWITCHING TOO MUCH TROUBLE/
47     B08 MANAGER AVAILABLE/
48     B09 CHARGES HIGH FEES/
49     B10 RESOLVES COMPLAINTS SATISFACTORILY/
50     B11 BETTER INTEREST RATES/
51     B12 HESITATE TO MOVE/
52     B13 EMPLOYEES BECOME DEFENSIVE/
53     B14 CHECKING/
54     B15 CERTIFICATE OF DEPOSIT/
55     B16 BUSINESS ACCOUNTS/
56     B17 SAFE DEPOSIT/
57     B18 SAVINGS/
58     B19 DIRECT DEPOSIT/
59     B20 PERSONAL LOANS/
60     B21 IRA KEOGH/
61     B22 MONEY MARKET/
62     B23 AUTO LOAN/
63     B24 BILL PAYING SVC/
64     B25 OTHERS/
65     B26 CREDIT CARDS/
66     B27 DIRECT DEBIT/
67     B28 MORTGAGE/
68     B29 YEARS WITH BANK/
69     B30 MONTHS WITH BANK/
70     C01 WAIT FOR SALES/
71     C02 TRY NEW THINGS/
72     C03 EMBARASS TO COMPLAIN/
73     C04 BUY KNOWN BRANDS/

```


74 C05 SHOP FOR BARGAINS/
75 C06 ANGRY WITH BANK ERRORS/
76 C07 DONT LIKE TAKING CHANCES/
77 C08 UPSET WHEN BANK MAKES MISTAKE/
78 C09 COMPARE PRICES/
79 C10 EXPECT PROMPT ACTION ON COMPLAINTS/
80 C11 FIRST TO TRY/
81 C12 LOOK FOR SPECIALS/
82 C13 NO NEED TO GET UPSET/
83 C14 NO BIG DEAL IF CHECK BOUNCES/
84 C15 LOOK FOR SALES ADS/
85 D01 VERY SATISFIED WITH BANK/
86 D02 MEETS MY NEEDS/
87 D03 BANK IS JUST AS GOOD/
88 D04 COMPLAINTS ARE DEALT WITH FAIRLY/
89 D05 BANK IS RELIABLE/
90 D06 LIKE BANK PEOPLE/
91 D07 GIVE SVC I EXPECT/
92 D08 BANK HAS EXCELLENT SVC/
93 D09 BANK EXPERIENCE IS POSITIVE/
94 EA01 UP-TO-DATE EQUIP/
95 EA02 PHY FACILITIES MUST APPEAL/
96 EA03 LOOK PROFESSIONAL/
97 EA04 APPEARANCE BEFITS SVC/
98 EA05 KEEPS PROMISE/
99 EA06 SYMPATHETIC/
100 EA07 DEPENDABLE/
101 EA08 RIGHT FIRST TIME AROUND/
102 EA09 ACCURATE RECORDS/
103 EA10 CANT EXPECT WHEN/
104 EA11 CANT EXPECT PROMPT SVC/
105 EA12 CANT EXPECT WILLING TO HELP/
106 EA13 OK IF TOO BUSY TO HELP/
107 EA14 SHOULD BE POLITE/
108 EA15 TRUST EMPLOYEES/
109 EA16 FEEL SAFE TRANSACTING WITH EMP/
110 EA17 EMP SHLD GET SUPPORT/
111 EA18 INDIVIDUAL ATTN/
112 EA19 UNDERSTAND SPECIFIC NEEDS/
113 EA20 CANT EXPECT PERSONAL ATTN/
114 EA21 MUST HAVE CONVENIENT HRS/
115 EA22 CUSTOMER'S BEST INTEREST/
116 EB01 UP-TO-DATE EQUIP/
117 EB02 PHY FACILITIES MUST APPEAL/
118 EB03 LOOK PROFESSIONAL/
119 EB04 APPEARANCE BEFITS SVC/
120 EB05 KEEPS PROMISE/
121 EB06 SYMPATHETIC/
122 EB07 DEPENDABLE/
123 EB08 RIGHT FIRST TIME AROUND/
124 EB09 ACCURATE RECORDS/
125 EB10 CANT EXPECT WHEN/
126 EB11 CANT EXPECT PROMPT SVC/
127 EB12 CANT EXPECT WILLING TO HELP/
128 EB13 OK IF TOO BUSY TO HELP/
129 EB14 SHOULD BE POLITE/
130 EB15 TRUST EMPLOYEES/
131 EB16 FEEL SAFE TRANSACTING WITH EMP/
132 EB17 EMP SHLD GET SUPPORT/
133 EB18 INDIVIDUAL ATTN/
134 EB19 UNDERSTAND SPECIFIC NEEDS/
135 EB20 CANT EXPECT PERSONAL ATTN/

```

136      EB21 MUST HAVE CONVENIENT HRS/
137      EB22 CUSTOMER'S BEST INTEREST/
138      EC01 APPEAR OF BANK EMP MATERIALS/
139      EC02 PERFORM SVC DEPEND AND ACCURATE/
140      EC03 WILLING TO HELP PROMPTLY/
141      EC04 KNOW AND COURTESY/
142      EC05 INDIVIDUAL ATTN/
143      F01 MOVE ACCTS/
144      F02 DO MORE BUSINESS/
145      F03 SAY POSITIVE THINGS/
146      F04 ENCOURAGE OTHERS TO BANK/
147      F05 WILLING TO PAY HIGHER FEES/
148      F06 COMPLAIN TO BBB/
149      F07 FIRST CHOICE/
150      F08 RECOMMEND BANK/
151      F09 SWITCH IF PROBLEMATIC/
152      F10 TELL ABOUT NEGATIVE EXP/
153      F11 REMAIN EVEN WITH HIGHER FEES/
154      F12 COMPLAIN TO MGR/
155      F13 DO LESS BUSINESS/
156      G01 SEX/
157      G02 AGE/
158      G03 EDUCATION/
159      G04 CIVIL STATUS/
160      G05 ETHNICITY/
161      G06 NUM IN HOUSEHOLD/
162      G07 NUM WORKING/
163      G08 GROSS HH INCOME/
164      G09 OCCUPATION/
165      MISSING VALUES A01 TO A25
166              B01 TO B28 (9)/ B29 TO B30 (99)/
167              C01 TO C15
168              D01 TO D09
169              EA01 TO EA22
170              EB01 TO EB22 (9)/
171              EC01 TO EC05 (99)/
172              F01 TO F13 (9)/
173              G01 TO G05 (9)/G06 G07 (99)/G08 (9)/G09 (99)
174      DO REPEAT X = A01 TO A05 A07 TO A16 A18 A19 A21 TO A25
175      RECODE X (1=7) (2=6) (3=5) (4=4) (5=3) (6=2) (7=1)
176      END REPEAT
177      DO REPEAT X = B01 TO B05 B07 B08 B10 B11 B12
178      RECODE X (1=7) (2=6) (3=5) (4=4) (5=3) (6=2) (7=1)
179      END REPEAT
180      DO REPEAT X = C01 TO C02 C04 TO C06 C08 TO C15
181      RECODE X (1=7) (2=6) (3=5) (4=4) (5=3) (6=2) (7=1)
182      END REPEAT
183      DO REPEAT X = D01 TO D09
184      RECODE X (1=7) (2=6) (3=5) (4=4) (5=3) (6=2) (7=1)
185      END REPEAT
186      DO REPEAT X = EA01 TO EA09 EA14 TO EA19 EA21 EA22
187      RECODE X (1=7) (2=6) (3=5) (4=4) (5=3) (6=2) (7=1)
188      END REPEAT
189      DO REPEAT X = EB01 TO EB09 EB14 TO EB19 EB21 EB22
190      RECODE X (1=7) (2=6) (3=5) (4=4) (5=3) (6=2) (7=1)
191      END REPEAT
192      COMMENT HAPPY PERSONS WILL HAVE HIGHER SCORES
193      DO REPEAT X = F02 F03 F04 F05 F07 F08 F11
194      RECODE X (1=7) (2=6) (3=5) (4=4) (5=3) (6=2) (7=1)
195      END REPEAT
196      BEGIN DATA
1512     END DATA

```

```

1513 COMMENT CREATING A TEMPORARY VARIABLE
OPRECEDING TASK REQUIRED .17 SECONDS CPU TIME; .53 SECONDS ELAPSED.
1514 COMPUTE GROUP = 1
1515 IF (IDNUM GE 221) GROUP = 2
1516 VARIABLE LABELS GROUP RESPONDENT GROUPS
1517 VALUE LABELS GROUP (1) MAIL (2) STUDENTS
1518 COMMENT RECODING EDUCATION
1519 RECODE G03 (1=8) (2=10) (3=12) (4=14) (5=15) (6=16)
1520 COMMENT RECODING AGE
1521 RECODE G02 (2=23) (3=39) (4=56) (5=65)
1522 COMMENT RECODING INCOME
1523 RECODE G08 (1=10000) (2=17500) (3=37500) (4=62500) (5=75000)
1524 COMPUTE IMAGE = (A02+A11+A15)/3
1525 COMPUTE WARMRESP = (A01+A07+A12+A08+A16+A25+A09)/7
1526 COMPUTE SERVICE = (A10+A20)/2
1527 COMPUTE TANGIBL = (EB02+EB03+EB04)/3
1528 COMPUTE RELIABL = (EB05+EB06+EB07+EB09)/4
1529 COMPUTE RESPON = (EB11+EB12+EB13)/3
1530 COMPUTE ASSURAN = (EB14+EB15+EB16)/3
1531 COMPUTE EMPATHY = (EB18+EB19+EB22)/3
1532 COMPUTE SATISFAC = (D01+D02+D03+D04+D05+D06+D07+D08+D09)/9
1533 COMPUTE LOYALTY = (F03+F04+F08+F13)/4
1534 COMPUTE MONTHS = (B29 * 12) + B30
1535 COMPUTE TOT1 = 0
1536 DO REPEAT X = B14 TO B28
1537 IF (X EQ 1) TOT1 = TOT1 + 1
1538 END REPEAT
1539 IF (MONTHS GE 240) MONTHS = 240
1540 COMMENT ***** BEST MODEL WITHOUTH CONSUMER CHAR SEPT
1541 PRELIS
1542 /VARIABLES =
1543 EMPATHY RELIABL RESPON ASSURAN TANGIBL (CO)
1544 D08 D02 D03 D04 D05 D06 D07 D01 D09
1545 F03 F04 F08 F13 (OR)
1546 TOT1 MONTHS (CO)
1547 B01 B04 B05 B02 B06 B08 B10 B13
1548 A08 A15
1549 A02 A07 A12 A01 A16 A25 A09 (OR)
1550 /TYPE = CORRELATION
1551 /MATRIX=OUT (*)
OTHER ARE 6,110,296 BYTES OF MEMORY AVAILABLE.
THE LARGEST CONTIGUOUS AREA HAS 5,810,288 BYTES.
1

```

```

0 P R E L I S A PREPROCESSOR FOR LISREL
0 PROGRAM VERSION 1.12 DISTRIBUTED BY
0 SCIENTIFIC SOFTWARE, INC.
1369 NEITZEL ROAD
MOORESVILLE, INDIANA 46158
(317) 831-6336

```

```

0 THIS COPY AUTHORIZED FOR USE IN SPSS-X
0 PROGRAM COPYRIGHT 1987-89 BY SCIENTIFIC SOFTWARE, INC.,
(A MICHIGAN CORPORATION).
DISTRIBUTION OR USE UNAUTHORIZED BY SCIENTIFIC SOFTWARE, INC. IS
PROHIBITED.

```

```

1 MVS - P R E L I S 1.12
0 BY
0 KARL G JORESKOG AND DAG SORBOM

```

OTHE FOLLOWING PRELIS CONTROL LINES HAVE BEEN READ :

CESAR DISSERTATION FILE;

DA NI=37 NO=0 MI= -0.989898D+37 MC=1 TR=LI

LA

EMPATHY RELIABL RESPONS ASSURAN TANGIBL D08 D02

RA FI=PRLDD21

CO EMPATHY

CO RELIABL

CO RESPONS

CO ASSURAN

CO TANGIBL

OR D08

OR D02

OR D03

OR D04

OR D05

OR D06

OR D07

OR D01

OR D09

OR F03

OR F04

OR F08

OR F13

CO TOT1

CO MONTHS

OR B01

OR B04

OR B05

OR B02

OR B06

OR B08

OR B10

OR B13

OR A08

OR A15

OR A02

OR A07

OR A12

OR A01

OR A16

OR A25

OR A09

OU MA=KM SM=PRLDD22

1

0DISTRIBUTION OF MISSING VALUES

0TOTAL SAMPLE SIZE = 292

0NUMBER OF MISSING VALUES	0	1	2	3	4	5	6	7	8	9	10
NUMBER OF CASES	292	32	2	0	1	0	0	1	0	0	1

0LISTWISE DELETION

0TOTAL EFFECTIVE SAMPLE SIZE = 292

0CONVERSION OF ORIGINAL VALUES TO CATEGORIES

0 VARIABLE +	CATEGORY						
	1	2	3	4	5	6	7
D08	1.00	2.00	3.00	4.00	5.00	6.00	7.00
D02	1.00	2.00	3.00	4.00	5.00	6.00	7.00
D03	1.00	2.00	3.00	4.00	5.00	6.00	7.00
D04	2.00	3.00	4.00	5.00	6.00	7.00	
D05	2.00	3.00	4.00	5.00	6.00	7.00	
D06	1.00	2.00	3.00	4.00	5.00	6.00	7.00
D07	1.00	2.00	3.00	4.00	5.00	6.00	7.00
D01	1.00	2.00	3.00	4.00	5.00	6.00	7.00
D09	1.00	2.00	3.00	4.00	5.00	6.00	7.00
F03	1.00	2.00	3.00	4.00	5.00	6.00	7.00
F04	1.00	2.00	3.00	4.00	5.00	6.00	7.00
F08	1.00	2.00	3.00	4.00	5.00	6.00	7.00
F13	1.00	2.00	3.00	4.00	5.00	6.00	7.00
B01	1.00	2.00	3.00	4.00	5.00	6.00	7.00
B04	1.00	2.00	3.00	4.00	5.00	6.00	7.00
B05	1.00	2.00	3.00	4.00	5.00	6.00	7.00
B02	1.00	2.00	3.00	4.00	5.00	6.00	7.00
B06	1.00	2.00	3.00	4.00	5.00	6.00	7.00
B08	1.00	2.00	3.00	4.00	5.00	6.00	7.00
B10	1.00	2.00	3.00	4.00	5.00	6.00	7.00
B13	1.00	2.00	3.00	4.00	5.00	6.00	7.00
A08	1.00	2.00	3.00	4.00	5.00	6.00	7.00
A15	1.00	2.00	3.00	4.00	5.00	6.00	7.00
A02	1.00	2.00	3.00	4.00	5.00	6.00	7.00
A07	1.00	2.00	3.00	4.00	5.00	6.00	7.00
A12	1.00	2.00	3.00	4.00	5.00	6.00	7.00
A01	1.00	2.00	3.00	4.00	5.00	6.00	7.00
A16	1.00	2.00	3.00	4.00	5.00	6.00	7.00
A25	1.00	2.00	3.00	4.00	5.00	6.00	7.00
A09	1.00	2.00	3.00	4.00	5.00	6.00	7.00

OUNIVARIATE FREQUENCY DISTRIBUTIONS FOR ORDINAL VARIABLES

0 VARIABLE	CATEGORY						
+	1	2	3	4	5	6	7
D08	7	8	29	44	63	84	57
D02	1	10	14	29	76	106	56
D03	1	4	15	42	58	101	71
D04	4	16	91	58	76	47	
D05	5	15	31	75	104	62	
D06	1	6	15	82	52	68	68
D07	4	8	25	40	65	90	60
D01	2	10	18	45	57	103	57
D09	3	3	20	33	63	95	75
F03	6	18	15	51	60	80	62
F04	12	21	24	70	56	63	46
F08	16	19	32	61	48	68	48
F13	19	19	20	78	42	63	51
B01	51	35	38	55	42	41	30
B04	13	18	30	59	55	73	44
B05	10	10	17	84	42	80	49
B02	3	13	20	84	69	64	39
B06	6	9	20	136	34	55	32
B08	4	10	19	125	27	69	38
B10	5	8	22	89	60	73	35
B13	9	20	24	108	35	58	38
A08	1	9	19	46	67	78	72
A15	2	7	12	40	58	84	89
A02	2	5	12	43	67	93	70
A07	4	8	23	79	67	66	45
A12	82	35	24	52	27	34	38
A01	1	3	13	55	62	83	75
A16	20	15	22	106	43	49	37
A25	11	14	24	83	54	70	36
A09	2	9	22	58	69	84	48

ONORMAL SCORES FOR ORDINAL VARIABLES

0 OVARIABLE +	CATEGORY						
	1	2	3	4	5	6	7
D08	-2.354	-1.787	-1.294	-0.760	-0.233	0.426	1.413
D02	-3.010	-2.095	-1.552	-1.112	-0.493	0.337	1.423
D03	-3.010	-2.344	-1.744	-1.099	-0.498	0.219	1.288
D04	-2.557	-1.770	-0.798	-0.052	0.564	1.518	
D05	-2.477	-1.744	-1.181	-0.528	0.289	1.366	
D06	-3.010	-2.244	-1.667	-0.821	-0.139	0.394	1.313
D07	-2.557	-1.937	-1.398	-0.868	-0.323	0.370	1.385
D01	-2.791	-2.014	-1.475	-0.930	-0.378	0.341	1.413
D09	-2.656	-2.166	-1.629	-1.067	-0.504	0.209	1.255
F03	-2.411	-1.658	-1.242	-0.781	-0.228	0.397	1.366
F04	-2.143	-1.441	-1.024	-0.491	0.078	0.639	1.529
F08	-2.024	-1.367	-0.943	-0.435	0.052	0.593	1.506
F13	-1.950	-1.303	-0.980	-0.444	0.095	0.586	1.474
B01	-1.474	-0.729	-0.361	0.048	0.485	0.955	1.742
B04	-2.111	-1.449	-1.012	-0.503	0.013	0.611	1.552
B05	-2.216	-1.639	-1.302	-0.632	-0.035	0.525	1.495
B02	-2.656	-1.878	-1.357	-0.643	0.074	0.711	1.614
B06	-2.411	-1.812	-1.380	-0.408	0.370	0.845	1.711
B08	-2.557	-1.890	-1.413	-0.479	0.221	0.697	1.627
B10	-2.477	-1.882	-1.406	-0.630	0.070	0.711	1.668
B13	-2.258	-1.534	-1.085	-0.356	0.284	0.755	1.627
A08	-3.010	-2.128	-1.517	-0.938	-0.333	0.312	1.279
A15	-2.791	-2.105	-1.643	-1.097	-0.508	0.132	1.149
A02	-2.791	-2.179	-1.715	-1.108	-0.456	0.264	1.296
A07	-2.557	-1.937	-1.419	-0.680	0.013	0.635	1.540
A12	-1.200	-0.412	-0.147	0.183	0.547	0.891	1.627
A01	-3.010	-2.406	-1.827	-1.057	-0.383	0.262	1.255
A16	-1.928	-1.321	-1.009	-0.327	0.339	0.816	1.640
A25	-2.178	-1.552	-1.150	-0.510	0.113	0.715	1.654
A09	-2.791	-2.042	-1.455	-0.815	-0.180	0.516	1.506

OUNIVARIATE SUMMARY STATISTICS FOR CONTINUOUS VARIABLES

OVARIABLE +	MEAN	ST. DEV.	SKEWNESS	KURTOSIS	MINIMUM	FREQ.	MAXIMUM	FREQ.
EMPATHY	4.804	1.429	-0.286	-0.618	1.000	2	7.000	26
RELIABL	5.509	1.058	-0.617	0.175	1.250	1	7.000	29
RESPONS	5.110	1.384	-0.498	-0.282	1.000	3	7.000	43
ASSURAN	5.570	1.113	-0.721	0.290	1.667	1	7.000	50
TANGIBL	5.616	1.131	-1.015	1.393	1.000	1	7.000	53
TOT1	4.116	1.745	0.317	-0.212	1.000	19	9.000	3
MONTHS	80.887	68.026	1.034	0.232	1.000	2	240.000	23

ICESAR DISSERTATION FILE;

0 0 +	ESTIMATED CORRELATION MATRIX					
	EMPATHY	RELIABL	RESPONS	ASSURAN	TANGIBL	D08
EMPATHY	1.000					
RELIABL	0.724	1.000				
RESPONS	0.646	0.579	1.000			
ASSURAN	0.655	0.633	0.544	1.000		
TANGIBL	0.451	0.553	0.336	0.448	1.000	
D08	0.748	0.718	0.600	0.636	0.445	1.000
D02	0.646	0.626	0.539	0.621	0.426	0.778
D03	0.577	0.548	0.488	0.542	0.402	0.663
D04	0.645	0.649	0.522	0.536	0.409	0.690
D05	0.683	0.735	0.536	0.609	0.460	0.730
D06	0.660	0.634	0.471	0.639	0.410	0.741
D07	0.704	0.681	0.554	0.630	0.459	0.895
D01	0.687	0.680	0.589	0.620	0.423	0.808
D09	0.724	0.725	0.595	0.644	0.433	0.861
F03	0.691	0.743	0.612	0.631	0.416	0.759
F04	0.649	0.668	0.558	0.515	0.409	0.668
F08	0.631	0.643	0.598	0.481	0.394	0.691
F13	0.533	0.538	0.492	0.461	0.343	0.585
TOT1	0.124	0.139	0.100	0.182	0.098	0.157
MONTHS	0.086	0.116	0.116	0.079	0.045	0.100
B01	0.494	0.392	0.387	0.448	0.311	0.502
B04	0.685	0.637	0.548	0.561	0.335	0.736
B05	0.490	0.528	0.329	0.427	0.294	0.495
B02	0.609	0.565	0.501	0.565	0.366	0.621
B06	0.470	0.418	0.517	0.400	0.262	0.426
B08	0.539	0.550	0.496	0.498	0.383	0.554
B10	0.620	0.591	0.494	0.525	0.356	0.667
B13	0.526	0.486	0.489	0.458	0.288	0.542
A08	0.672	0.612	0.556	0.680	0.395	0.746
A15	0.443	0.534	0.336	0.379	0.435	0.484
A02	0.375	0.483	0.315	0.347	0.411	0.514
A07	0.585	0.570	0.444	0.519	0.405	0.654
A12	0.514	0.444	0.379	0.455	0.215	0.503
A01	0.574	0.530	0.432	0.573	0.307	0.672
A16	0.674	0.566	0.520	0.508	0.307	0.622
A25	0.649	0.606	0.542	0.510	0.377	0.681
A09	0.622	0.571	0.536	0.628	0.410	0.681
0 0 +	ESTIMATED CORRELATION MATRIX					
	D02	D03	D04	D05	D06	D07
D02	1.000					
D03	0.762	1.000				
D04	0.648	0.617	1.000			
D05	0.703	0.686	0.711	1.000		
D06	0.678	0.549	0.606	0.666	1.000	
D07	0.818	0.709	0.685	0.745	0.748	1.000
D01	0.815	0.722	0.640	0.702	0.674	0.801
D09	0.785	0.678	0.694	0.727	0.731	0.845
F03	0.671	0.694	0.666	0.676	0.605	0.731
F04	0.598	0.621	0.616	0.597	0.567	0.637
F08	0.610	0.632	0.551	0.597	0.561	0.655
F13	0.518	0.534	0.476	0.499	0.423	0.598
TOT1	0.082	0.161	0.131	0.104	0.168	0.127
MONTHS	0.093	0.143	0.145	0.120	0.080	0.134
B01	0.505	0.444	0.454	0.426	0.485	0.504
B04	0.704	0.549	0.567	0.629	0.621	0.700

	B05	0.458	0.432	0.432	0.488	0.446	0.473
	B02	0.571	0.529	0.614	0.546	0.552	0.602
	B06	0.403	0.359	0.451	0.398	0.449	0.408
	B08	0.564	0.430	0.539	0.489	0.503	0.532
	B10	0.639	0.546	0.718	0.603	0.595	0.670
	B13	0.437	0.406	0.480	0.475	0.425	0.502
	A08	0.628	0.527	0.560	0.567	0.712	0.673
	A15	0.501	0.487	0.452	0.572	0.380	0.491
	A02	0.490	0.473	0.462	0.512	0.424	0.468
	A07	0.537	0.434	0.483	0.535	0.612	0.596
	A12	0.444	0.383	0.477	0.402	0.660	0.456
	A01	0.588	0.525	0.544	0.518	0.684	0.624
	A16	0.582	0.531	0.596	0.574	0.604	0.608
	A25	0.584	0.502	0.609	0.574	0.574	0.638
	A09	0.623	0.529	0.612	0.565	0.614	0.657

0
0
+ ESTIMATED CORRELATION MATRIX
D01 D09 F03 F04 F08 F13

	D01	1.000					
	D09	0.818	1.000				
	F03	0.763	0.759	1.000			
	F04	0.700	0.665	0.849	1.000		
	F08	0.684	0.668	0.793	0.854	1.000	
	F13	0.622	0.548	0.647	0.557	0.560	1.000
	TOT1	0.188	0.138	0.178	0.131	0.095	0.151
MONTHS		0.098	0.087	0.112	0.063	0.077	0.134
	B01	0.522	0.503	0.453	0.407	0.411	0.354
	B04	0.691	0.752	0.681	0.605	0.595	0.455
	B05	0.487	0.475	0.481	0.363	0.397	0.381
	B02	0.589	0.598	0.565	0.528	0.551	0.460
	B06	0.424	0.395	0.394	0.398	0.388	0.336
	B08	0.529	0.495	0.504	0.474	0.505	0.404
	B10	0.609	0.641	0.627	0.546	0.518	0.507
	B13	0.484	0.483	0.473	0.410	0.392	0.436
	A08	0.659	0.725	0.624	0.562	0.545	0.422
	A15	0.492	0.468	0.505	0.469	0.486	0.308
	A02	0.536	0.486	0.494	0.500	0.488	0.301
	A07	0.595	0.631	0.571	0.528	0.501	0.398
	A12	0.487	0.438	0.413	0.465	0.410	0.276
	A01	0.598	0.668	0.585	0.517	0.506	0.366
	A16	0.622	0.606	0.584	0.589	0.534	0.426
	A25	0.608	0.629	0.598	0.537	0.548	0.438
	A09	0.624	0.679	0.603	0.550	0.534	0.430

0
0
+ ESTIMATED CORRELATION MATRIX
TOT1 MONTHS B01 B04 B05 B02

	TOT1	1.000					
MONTHS		0.226	1.000				
	B01	0.032	0.014	1.000			
	B04	0.091	0.022	0.545	1.000		
	B05	0.168	0.089	0.323	0.460	1.000	
	B02	0.132	0.029	0.568	0.636	0.484	1.000
	B06	0.051	0.071	0.354	0.399	0.262	0.443
	B08	0.023	0.046	0.418	0.532	0.384	0.551
	B10	0.157	0.123	0.499	0.653	0.437	0.627
	B13	0.046	0.063	0.348	0.429	0.298	0.438
	A08	0.169	0.049	0.477	0.641	0.426	0.590
	A15	0.105	0.086	0.147	0.373	0.323	0.385
	A02	0.115	0.006	0.271	0.431	0.343	0.396
	A07	0.147	0.091	0.446	0.606	0.410	0.467
	A12	0.210	0.092	0.381	0.447	0.383	0.464
	A01	0.159	0.020	0.414	0.614	0.359	0.538

A16	0.089	0.037	0.475	0.645	0.402	0.637
A25	0.105	0.029	0.522	0.686	0.439	0.714
A09	0.163	0.045	0.469	0.619	0.379	0.597

0

ESTIMATED CORRELATION MATRIX

	B06	B08	B10	B13	A08	A15
B06	1.000					
B08	0.579	1.000				
B10	0.418	0.564	1.000			
B13	0.472	0.445	0.457	1.000		
A08	0.421	0.507	0.554	0.472	1.000	
A15	0.237	0.306	0.341	0.306	0.409	1.000
A02	0.284	0.369	0.418	0.269	0.466	0.626
A07	0.379	0.452	0.499	0.370	0.722	0.388
A12	0.435	0.447	0.443	0.341	0.513	0.229
A01	0.363	0.455	0.508	0.361	0.783	0.370
A16	0.425	0.496	0.584	0.416	0.629	0.443
A25	0.427	0.552	0.645	0.454	0.617	0.365
A09	0.381	0.532	0.601	0.429	0.801	0.445

ESTIMATED CORRELATION MATRIX

	A02	A07	A12	A01	A16	A25
A02	1.000					
A07	0.460	1.000				
A12	0.314	0.468	1.000			
A01	0.500	0.647	0.494	1.000		
A16	0.438	0.589	0.576	0.593	1.000	
A25	0.431	0.532	0.436	0.550	0.641	1.000
A09	0.459	0.640	0.452	0.655	0.610	0.572

ESTIMATED CORRELATION MATRIX

A09

A09	1.000

THE PROBLEM USED 225896 BYTES (= 3.9% OF AVAILABLE WORKSPACE)

OPRECEDING TASK REQUIRED 1.62 SECONDS CPU TIME; 7.38 SECONDS ELAPSED.

```

1552 LISREL
1553 /TITLE TESTING THE MAIN MODEL
1554 /MATRIX=IN (*)
1555 /DA NI=37 NOBS=292 MA=KM
1556 /LA
1557 /'EMPATHY' 'RELIABL' 'RESPONS' 'ASSURAN' 'TANGIBL'
1558 'D08' 'D02' 'D03' 'D04' 'D05' 'D06' 'D07' 'D01' 'D09'
1559 'F03' 'F04' 'F08' 'F13'
1560 'TOT1' 'MONTHS'
1561 'B01' 'B04' 'B05' 'B02' 'B06' 'B08' 'B10' 'B13'
1562 'A08' 'A15' 'A02' 'A07' 'A12' 'A01' 'A16' 'A25' 'A09'
1563 /MODEL NY=18 NE=3 NX=19 NK=4 PH=ST BE=SD PS=DI
1564 /FR LY (2,1) LY(3,1) LY(4,1) LY(5,1)
1565 /FR LY (7,2) LY(8,2) LY(9,2) LY(10,2) LY(11,2) LY(12,2) LY(13,2)
1566 /FR LY(14,2)
1567 /FR LY(16,3) LY(17,3) LY(18,3)
1568 /FR LX(4,3) LX(5,3) LX(6,3) LX(7,3) LX(8,3) LX(9,3) LX(10,3)
1569 /FR LX(12,4) LX(13,4) LX(14,4) LX(15,4) LX(16,4) LX(17,4) LX(18,4)
1570 /FR LX(19,4)
1571 /VA 1 LY(1,1) LY(6,2) LY(15,3)
1572 /VA 1 LX(1,1) LX(2,2) LX(3,3) LX(11,4)
1573 /VA 0.2 TD(1,1) TD(2,2)
1574 /FI GA(3,1) GA(3,2) GA(3,3) GA(3,4)

```

```

1575      /LE
1576      /'SERVQUAL' 'SATISFAC' 'LOYALTY'
1577      /LK
1578      /'ACCOUNTS' 'MONTHS' 'EQUITY' 'FIRMCHAR'
1579      /OU SE TV PC EF MI SS TO
OTHERE ARE 6,112,296 BYTES OF MEMORY AVAILABLE.
THE LARGEST CONTIGUOUS AREA HAS 5,813,008 BYTES.
1
0
0
0
0
SYSTEMS      LISREL 7:  ESTIMATION OF LINEAR STRUCTURAL EQUATION
-
PROGRAM VERSION 7.16      DISTRIBUTED BY
0
SCIENTIFIC SOFTWARE, INC.
1369 NEITZEL ROAD
MOORESVILLE, INDIANA 46158
(317) 831-6336
0
0
THIS COPY AUTHORIZED FOR USE IN SPSS-X
PROGRAM COPYRIGHT 1977-89 BY SCIENTIFIC SOFTWARE, INC.,
(A MICHIGAN CORPORATION).
DISTRIBUTION OR USE UNAUTHORIZED BY SCIENTIFIC SOFTWARE, INC. IS
PROHIBITED.
1
MVS - L I S R E L 7.16
0
BY
0
KARL G JORESKOG AND DAG SORBOM

OTHE FOLLOWING LISREL CONTROL LINES HAVE BEEN READ :

TITLE TESTING THE MAIN MODEL
DA NI=37 NOBS=292 MA=KM
KM FI=LSLDD21 FO
(5E14.6)
LA
EMPATHY      RELIABL      RESPONS      ASSURAN      TANGIBL
D08 D02 D03 D04 D05 D06 D07 D01 D09
F03 F04 F08 F13
TOT1 MONTHS
B01 B04 B05 B02 B06 B08 B10 B13
A08 A15 A02 A07 A12 A01 A16 A25 A09
MODEL NY=18 NE=3 NX=19 NK=4 PH=ST BE=SD PS=DI
FR LY (2,1) LY(3,1) LY(4,1) LY(5,1)
FR LY (7,2) LY(8,2) LY(9,2) LY(10,2) LY(11,2) LY(12,2) LY(13,2)
FR LY(14,2)
FR LY(16,3) LY(17,3) LY(18,3)
FR LX(4,3) LX(5,3) LX(6,3) LX(7,3) LX(8,3) LX(9,3) LX(10,3)
FR LX(12,4) LX(13,4) LX(14,4) LX(15,4) LX(16,4) LX(17,4) LX(18,4)
FR LX(19,4)
VA 1 LY(1,1) LY(6,2) LY(15,3)
VA 1 LX(1,1) LX(2,2) LX(3,3) LX(11,4)
VA 0.2 TD(1,1) TD(2,2)
FI GA(3,1) GA(3,2) GA(3,3) GA(3,4)
LE
SERVQUAL      SATISFAC      LOYALTY
LK
ACCOUNTS      MONTHS      EQUITY      FIRMCHAR

```

OU SE TV PC EF MI SS TO

1TITLE TESTING THE MAIN MODEL

0 NUMBER OF INPUT VARIABLES 37
 0 NUMBER OF Y - VARIABLES 18
 0 NUMBER OF X - VARIABLES 19
 0 NUMBER OF ETA - VARIABLES 3
 0 NUMBER OF KSI - VARIABLES 4
 0 NUMBER OF OBSERVATIONS 292

1TITLE TESTING THE MAIN MODEL

0 CORRELATION MATRIX TO BE ANALYZED

0 EMPATHY RELIABL RESPONS ASSURAN TANGIBL D08
 +

EMPATHY	1.000					
RELIABL	0.724	1.000				
RESPONS	0.646	0.579	1.000			
ASSURAN	0.655	0.633	0.544	1.000		
TANGIBL	0.451	0.553	0.336	0.448	1.000	
D08	0.748	0.718	0.600	0.636	0.445	1.000
D02	0.646	0.626	0.539	0.621	0.426	0.778
D03	0.577	0.548	0.488	0.542	0.402	0.663
D04	0.645	0.649	0.522	0.536	0.409	0.690
D05	0.683	0.735	0.536	0.609	0.460	0.730
D06	0.660	0.634	0.471	0.639	0.410	0.741
D07	0.704	0.681	0.554	0.630	0.459	0.895
D01	0.687	0.680	0.589	0.620	0.423	0.808
D09	0.724	0.725	0.595	0.644	0.433	0.861
F03	0.691	0.743	0.612	0.631	0.416	0.759
F04	0.649	0.668	0.558	0.515	0.409	0.668
F08	0.631	0.643	0.598	0.481	0.394	0.691
F13	0.533	0.538	0.492	0.461	0.343	0.585
TOT1	0.124	0.139	0.100	0.182	0.098	0.157
MONTHS	0.086	0.116	0.116	0.079	0.045	0.100
B01	0.494	0.392	0.387	0.448	0.311	0.502
B04	0.685	0.637	0.548	0.561	0.335	0.736
B05	0.490	0.528	0.329	0.427	0.294	0.495
B02	0.609	0.565	0.501	0.565	0.366	0.621
B06	0.470	0.418	0.517	0.400	0.262	0.426
B08	0.539	0.550	0.496	0.498	0.383	0.554
B10	0.620	0.591	0.494	0.525	0.356	0.667
B13	0.526	0.486	0.489	0.458	0.288	0.542
A08	0.672	0.612	0.556	0.680	0.395	0.746
A15	0.443	0.534	0.336	0.379	0.435	0.484
A02	0.375	0.483	0.315	0.347	0.411	0.514
A07	0.585	0.570	0.444	0.519	0.405	0.654
A12	0.514	0.444	0.379	0.455	0.215	0.503
A01	0.574	0.530	0.432	0.573	0.307	0.672
A16	0.674	0.566	0.520	0.508	0.307	0.622
A25	0.649	0.606	0.542	0.510	0.377	0.681
A09	0.622	0.571	0.536	0.628	0.410	0.681

0 CORRELATION MATRIX TO BE ANALYZED

0 D02 D03 D04 D05 D06 D07
 +

D02	1.000					
D03	0.762	1.000				
D04	0.648	0.617	1.000			
D05	0.703	0.686	0.711	1.000		
D06	0.678	0.549	0.606	0.666	1.000	
D07	0.818	0.709	0.685	0.745	0.748	1.000
D01	0.815	0.722	0.640	0.702	0.674	0.801
D09	0.785	0.678	0.694	0.727	0.731	0.845
F03	0.671	0.694	0.666	0.676	0.605	0.731
F04	0.598	0.621	0.616	0.597	0.567	0.637

	F08	0.610	0.632	0.551	0.597	0.561	0.655
	F13	0.518	0.534	0.476	0.499	0.423	0.598
	TOT1	0.082	0.161	0.131	0.104	0.168	0.127
	MONTHS	0.093	0.143	0.145	0.120	0.080	0.134
	B01	0.505	0.444	0.454	0.426	0.485	0.504
	B04	0.704	0.549	0.567	0.629	0.621	0.700
	B05	0.458	0.432	0.432	0.488	0.446	0.473
	B02	0.571	0.529	0.614	0.546	0.552	0.602
	B06	0.403	0.359	0.451	0.398	0.449	0.408
	B08	0.564	0.430	0.539	0.489	0.503	0.532
	B10	0.639	0.546	0.718	0.603	0.595	0.670
	B13	0.437	0.406	0.480	0.475	0.425	0.502
	A08	0.628	0.527	0.560	0.567	0.712	0.673
	A15	0.501	0.487	0.452	0.572	0.380	0.491
	A02	0.490	0.473	0.462	0.512	0.424	0.468
	A07	0.537	0.434	0.483	0.535	0.612	0.596
	A12	0.444	0.383	0.477	0.402	0.660	0.456
	A01	0.588	0.525	0.544	0.518	0.684	0.624
	A16	0.582	0.531	0.596	0.574	0.604	0.608
	A25	0.584	0.502	0.609	0.574	0.574	0.638
	A09	0.623	0.529	0.612	0.565	0.614	0.657
0	CORRELATION MATRIX TO BE ANALYZED						
0		D01	D09	F03	F04	F08	F13
+							
	D01	1.000					
	D09	0.818	1.000				
	F03	0.763	0.759	1.000			
	F04	0.700	0.665	0.849	1.000		
	F08	0.684	0.668	0.793	0.854	1.000	
	F13	0.622	0.548	0.647	0.557	0.560	1.000
	TOT1	0.188	0.138	0.178	0.131	0.095	0.151
	MONTHS	0.098	0.087	0.112	0.063	0.077	0.134
	B01	0.522	0.503	0.453	0.407	0.411	0.354
	B04	0.691	0.752	0.681	0.605	0.595	0.455
	B05	0.487	0.475	0.481	0.363	0.397	0.381
	B02	0.589	0.598	0.565	0.528	0.551	0.460
	B06	0.424	0.395	0.394	0.398	0.388	0.336
	B08	0.529	0.495	0.504	0.474	0.505	0.404
	B10	0.609	0.641	0.627	0.546	0.518	0.507
	B13	0.484	0.483	0.473	0.410	0.392	0.436
	A08	0.659	0.725	0.624	0.562	0.545	0.422
	A15	0.492	0.468	0.505	0.469	0.486	0.308
	A02	0.536	0.486	0.494	0.500	0.488	0.301
	A07	0.595	0.631	0.571	0.528	0.501	0.398
	A12	0.487	0.438	0.413	0.465	0.410	0.276
	A01	0.598	0.668	0.585	0.517	0.506	0.366
	A16	0.622	0.606	0.584	0.589	0.534	0.426
	A25	0.608	0.629	0.598	0.537	0.548	0.438
	A09	0.624	0.679	0.603	0.550	0.534	0.430
0	CORRELATION MATRIX TO BE ANALYZED						
0		TOT1	MONTHS	B01	B04	B05	B02
+							
	TOT1	1.000					
	MONTHS	0.226	1.000				
	B01	0.032	0.014	1.000			
	B04	0.091	0.022	0.545	1.000		
	B05	0.168	0.089	0.323	0.460	1.000	
	B02	0.132	0.029	0.568	0.636	0.484	1.000
	B06	0.051	0.071	0.354	0.399	0.262	0.443
	B08	0.023	0.046	0.418	0.532	0.384	0.551
	B10	0.157	0.123	0.499	0.653	0.437	0.627
	B13	0.046	0.063	0.348	0.429	0.298	0.438

A08	0.169	0.049	0.477	0.641	0.426	0.590
A15	0.105	0.086	0.147	0.373	0.323	0.385
A02	0.115	0.006	0.271	0.431	0.343	0.396
A07	0.147	0.091	0.446	0.606	0.410	0.467
A12	0.210	0.092	0.381	0.447	0.383	0.464
A01	0.159	0.020	0.414	0.614	0.359	0.538
A16	0.089	0.037	0.475	0.645	0.402	0.637
A25	0.105	0.029	0.522	0.686	0.439	0.714
A09	0.163	0.045	0.469	0.619	0.379	0.597

0	CORRELATION MATRIX TO BE ANALYZED						
0		B06	B08	B10	B13	A08	A15
+							
	B06	1.000					
	B08	0.579	1.000				
	B10	0.418	0.564	1.000			
	B13	0.472	0.445	0.457	1.000		
	A08	0.421	0.507	0.554	0.472	1.000	
	A15	0.237	0.306	0.341	0.306	0.409	1.000
	A02	0.284	0.369	0.418	0.269	0.466	0.626
	A07	0.379	0.452	0.499	0.370	0.722	0.388
	A12	0.435	0.447	0.443	0.341	0.513	0.229
	A01	0.363	0.455	0.508	0.361	0.783	0.370
	A16	0.425	0.496	0.584	0.416	0.629	0.443
	A25	0.427	0.552	0.645	0.454	0.617	0.365
	A09	0.381	0.532	0.601	0.429	0.801	0.445

0	CORRELATION MATRIX TO BE ANALYZED						
0		A02	A07	A12	A01	A16	A25
+							
	A02	1.000					
	A07	0.460	1.000				
	A12	0.314	0.468	1.000			
	A01	0.500	0.647	0.494	1.000		
	A16	0.438	0.589	0.576	0.593	1.000	
	A25	0.431	0.532	0.436	0.550	0.641	1.000
	A09	0.459	0.640	0.452	0.655	0.610	0.572

0	CORRELATION MATRIX TO BE ANALYZED						
0		A09					
+							
	A09	1.000					

1TITLE TESTING THE MAIN MODEL
0PARAMETER SPECIFICATIONS

0	LAMBDA Y			
0	SERVQUAL	SATISFAC	LOYALTY	
+				
EMPATHY	0	0	0	
RELIABL	1	0	0	
RESPONS	2	0	0	
ASSURAN	3	0	0	
TANGIBL	4	0	0	
D08	0	0	0	
D02	0	5	0	
D03	0	6	0	
D04	0	7	0	
D05	0	8	0	
D06	0	9	0	
D07	0	10	0	
D01	0	11	0	
D09	0	12	0	
F03	0	0	0	
F04	0	0	13	
F08	0	0	14	
F13	0	0	15	

0	LAMBDA X			
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR
+				
TOT1	0	0	0	0
MONTHS	0	0	0	0
B01	0	0	0	0
B04	0	0	16	0
B05	0	0	17	0
B02	0	0	18	0
B06	0	0	19	0
B08	0	0	20	0
B10	0	0	21	0
B13	0	0	22	0
A08	0	0	0	0
A15	0	0	0	23
A02	0	0	0	24
A07	0	0	0	25
A12	0	0	0	26
A01	0	0	0	27
A16	0	0	0	28
A25	0	0	0	29
A09	0	0	0	30

0	BETA			
0	SERVQUAL	SATISFAC	LOYALTY	
+				
SERVQUAL	0	0	0	
SATISFAC	31	0	0	
LOYALTY	32	33	0	

0	GAMMA			
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR
+				
SERVQUAL	34	35	36	37
SATISFAC	38	39	40	41
LOYALTY	0	0	0	0

0	PHI					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR		
+						
	ACCOUNTS	0				
	MONTHS	42	0			
	EQUITY	43	44	0		
	FIRMCHAR	45	46	47	0	
0	PSI					
0	SERVQUAL	SATISFAC	LOYALTY			
+						
		48	49	50		
0	THETA EPS					
0	EMPATHY	RELIABL	RESPONS	ASSURAN	TANGIBL	D08
+						
		51	52	53	54	55
0	THETA EPS					
0	D02	D03	D04	D05	D06	D07
+						
		57	58	59	60	61
0	THETA EPS					
0	D01	D09	F03	F04	F08	F13
+						
		63	64	65	66	67
0	THETA DELTA					
0	TOT1	MONTHS	B01	B04	B05	B02
+						
		69	70	71	72	73
0	THETA DELTA					
0	B06	B08	B10	B13	A08	A15
+						
		75	76	77	78	79
0	THETA DELTA					
0	A02	A07	A12	A01	A16	A25
+						
		81	82	83	84	85
0	THETA DELTA					
0	A09					
+						
		87				

1TITLE TESTING THE MAIN MODEL
0INITIAL ESTIMATES (TSLs)
0 LAMBDA Y

0	SERVQUAL	SATISFAC	LOYALTY
+			
	EMPATHY	1.000	0.000
	RELIABL	0.953	0.000
	RESPONS	0.817	0.000
	ASSURAN	0.843	0.000
	TANGIBL	0.567	0.000
	D08	0.000	1.000
	D02	0.000	0.892
	D03	0.000	0.780
	D04	0.000	0.783
	D05	0.000	0.833
	D06	0.000	0.851
	D07	0.000	0.975
	D01	0.000	0.912
	D09	0.000	0.959
	F03	0.000	0.000
	F04	0.000	0.000
	F08	0.000	0.000
	F13	0.000	0.000

0	LAMBDA X						
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR			
+							
	TOT1	0.894	0.000	0.000	0.000		
	MONTHS	0.000	0.894	0.000	0.000		
	B01	0.000	0.000	0.747	0.000		
	B04	0.000	0.000	0.813	0.000		
	B05	0.000	0.000	0.545	0.000		
	B02	0.000	0.000	0.803	0.000		
	B06	0.000	0.000	0.538	0.000		
	B08	0.000	0.000	0.681	0.000		
	B10	0.000	0.000	0.777	0.000		
	B13	0.000	0.000	0.527	0.000		
	A08	0.000	0.000	0.000	0.961		
	A15	0.000	0.000	0.000	0.482		
	A02	0.000	0.000	0.000	0.546		
	A07	0.000	0.000	0.000	0.781		
	A12	0.000	0.000	0.000	0.608		
	A01	0.000	0.000	0.000	0.832		
	A16	0.000	0.000	0.000	0.731		
	A25	0.000	0.000	0.000	0.691		
	A09	0.000	0.000	0.000	0.839		
0	BETA						
0	SERVQUAL	SATISFAC	LOYALTY				
+							
	SERVQUAL	0.000	0.000	0.000			
	SATISFAC	0.563	0.000	0.000			
	LOYALTY	0.522	0.411	0.000			
0	GAMMA						
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR			
+							
	SERVQUAL	-0.057	0.075	-0.465	1.190		
	SATISFAC	-0.047	0.054	-0.330	0.704		
	LOYALTY	0.000	0.000	0.000	0.000		
0	COVARIANCE MATRIX OF ETA AND KSI						
0	SERVQUAL	SATISFAC	LOYALTY	ACCOUNTS	MONTHS	EQUITY	
+							
	SERVQUAL	0.795					
	SATISFAC	0.782	0.920				
	LOYALTY	0.737	0.787	0.910			
	ACCOUNTS	0.151	0.156	0.143	1.000		
	MONTHS	0.106	0.123	0.106	0.283	1.000	
	EQUITY	0.610	0.648	0.585	0.143	0.088	1.000
	FIRMCHAR	0.763	0.829	0.740	0.213	0.074	0.904
0	COVARIANCE MATRIX OF ETA AND KSI						
0	FIRMCHAR						
+							
	FIRMCHAR	1.000					
0	PSI						
0	SERVQUAL	SATISFAC	LOYALTY				
+							
		0.171	0.110	0.201			
0	THETA EPS						
0	EMPATHY	RELIABL	RESPONS	ASSURAN	TANGIBL	D08	
+							
		0.205	0.279	0.469	0.435	0.744	0.080
0	THETA EPS						
0	D02	D03	D04	D05	D06	D07	
+							
		0.267	0.440	0.436	0.362	0.334	0.126

0	THETA EPS					
0	D01	D09	F03	F04	F08	F13
+						
	<u>0.234</u>	<u>0.154</u>	<u>0.090</u>	<u>0.209</u>	<u>0.244</u>	<u>0.550</u>
0	THETA DELTA					
0	TOT1	MONTHS	B01	B04	B05	B02
+						
	<u>0.200</u>	<u>0.200</u>	<u>0.442</u>	<u>0.339</u>	<u>0.703</u>	<u>0.355</u>
0	THETA DELTA					
0	B06	B08	B10	B13	A08	A15
+						
	<u>0.710</u>	<u>0.536</u>	<u>0.397</u>	<u>0.723</u>	<u>0.076</u>	<u>0.767</u>
0	THETA DELTA					
0	A02	A07	A12	A01	A16	A25
+						
	<u>0.702</u>	<u>0.389</u>	<u>0.631</u>	<u>0.308</u>	<u>0.465</u>	<u>0.523</u>
0	THETA DELTA					
0	A09					
+						
	<u>0.296</u>					
0	SQUARED MULTIPLE CORRELATIONS FOR Y - VARIABLES					
0	EMPATHY	RELIABL	RESPONS	ASSURAN	TANGIBL	D08
+						
	<u>0.795</u>	<u>0.721</u>	<u>0.531</u>	<u>0.565</u>	<u>0.256</u>	<u>0.920</u>
0	SQUARED MULTIPLE CORRELATIONS FOR Y - VARIABLES					
0	D02	D03	D04	D05	D06	D07
+						
	<u>0.733</u>	<u>0.560</u>	<u>0.564</u>	<u>0.638</u>	<u>0.666</u>	<u>0.874</u>
0	SQUARED MULTIPLE CORRELATIONS FOR Y - VARIABLES					
0	D01	D09	F03	F04	F08	F13
+						
	<u>0.766</u>	<u>0.846</u>	<u>0.910</u>	<u>0.791</u>	<u>0.756</u>	<u>0.450</u>
0	TOTAL COEFFICIENT OF DETERMINATION FOR Y - VARIABLES IS					0.998
0	SQUARED MULTIPLE CORRELATIONS FOR X - VARIABLES					
0	TOT1	MONTHS	B01	B04	B05	B02
+						
	<u>0.800</u>	<u>0.800</u>	<u>0.558</u>	<u>0.661</u>	<u>0.297</u>	<u>0.645</u>
0	SQUARED MULTIPLE CORRELATIONS FOR X - VARIABLES					
0	B06	B08	B10	B13	A08	A15
+						
	<u>0.290</u>	<u>0.464</u>	<u>0.603</u>	<u>0.277</u>	<u>0.924</u>	<u>0.233</u>
0	SQUARED MULTIPLE CORRELATIONS FOR X - VARIABLES					
0	A02	A07	A12	A01	A16	A25
+						
	<u>0.298</u>	<u>0.611</u>	<u>0.369</u>	<u>0.692</u>	<u>0.535</u>	<u>0.477</u>
0	SQUARED MULTIPLE CORRELATIONS FOR X - VARIABLES					
0	A09					
+						
	<u>0.704</u>					
0	TOTAL COEFFICIENT OF DETERMINATION FOR X - VARIABLES IS					0.999
0	SQUARED MULTIPLE CORRELATIONS FOR STRUCTURAL EQUATIONS					
0	SERVQUAL	SATISFAC	LOYALTY			
+						
	<u>0.785</u>	<u>0.880</u>	<u>0.779</u>			
0	TOTAL COEFFICIENT OF DETERMINATION FOR STRUCTURAL EQUATIONS IS					
0.842						

1TITLE TESTING THE MAIN MODEL
0 LISREL ESTIMATES (MAXIMUM LIKELIHOOD)

0	LAMBDA Y			
0	SERVQUAL	SATISFAC	LOYALTY	
+				
EMPATHY	1.000	0.000	0.000	
RELIABL	0.976	0.000	0.000	
RESPONS	0.828	0.000	0.000	
ASSURAN	0.881	0.000	0.000	
TANGIBL	0.634	0.000	0.000	
D08	0.000	1.000	0.000	
D02	0.000	0.936	0.000	
D03	0.000	0.830	0.000	
D04	0.000	0.827	0.000	
D05	0.000	0.878	0.000	
D06	0.000	0.860	0.000	
D07	0.000	0.996	0.000	
D01	0.000	0.952	0.000	
D09	0.000	0.985	0.000	
F03	0.000	0.000	1.000	
F04	0.000	0.000	0.977	
F08	0.000	0.000	0.941	
F13	0.000	0.000	0.714	

0	LAMBDA X				
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	
+					
TOT1	0.894	0.000	0.000	0.000	
MONTHS	0.000	0.894	0.000	0.000	
B01	0.000	0.000	0.747	0.000	
B04	0.000	0.000	0.885	0.000	
B05	0.000	0.000	0.608	0.000	
B02	0.000	0.000	0.836	0.000	
B06	0.000	0.000	0.605	0.000	
B08	0.000	0.000	0.745	0.000	
B10	0.000	0.000	0.838	0.000	
B13	0.000	0.000	0.633	0.000	
A08	0.000	0.000	0.000	0.961	
A15	0.000	0.000	0.000	0.569	
A02	0.000	0.000	0.000	0.627	
A07	0.000	0.000	0.000	0.826	
A12	0.000	0.000	0.000	0.646	
A01	0.000	0.000	0.000	0.860	
A16	0.000	0.000	0.000	0.824	
A25	0.000	0.000	0.000	0.799	
A09	0.000	0.000	0.000	0.887	

0	BETA				
0	SERVQUAL	SATISFAC	LOYALTY		
+					
SERVQUAL	0.000	0.000	0.000		
SATISFAC	0.451	0.000	0.000		
LOYALTY	0.548	0.385	0.000		
0	GAMMA				
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	
+					
SERVQUAL	0.015	0.046	0.583	0.285	
SATISFAC	-0.008	0.040	0.286	0.251	
LOYALTY	0.000	0.000	0.000	0.000	

0	COVARIANCE MATRIX OF ETA AND KSI						
0	SERVQUAL	SATISFAC	LOYALTY	ACCOUNTS	MONTHS	EQUITY	
+							
	SERVQUAL	0.846					
	SATISFAC	0.835	0.970				
	LOYALTY	0.785	0.831	0.960			
	ACCOUNTS	0.185	0.189	0.174	1.000		
	MONTHS	0.123	0.137	0.120	0.285	1.000	
	EQUITY	0.851	0.901	0.813	0.162	0.089	
	FIRMCHAR	0.825	0.885	0.794	0.220	0.074	
0	COVARIANCE MATRIX OF ETA AND KSI						
0	FIRMCHAR						
+							
	FIRMCHAR	1.000					
0	PSI						
0	SERVQUAL	SATISFAC	LOYALTY				
+							
		0.106	0.111	0.209			
0	THETA EPS						
0	EMPATHY	RELIABL	RESPONS	ASSURAN	TANGIBL	D08	
+							
		0.250	0.286	0.486	0.418	0.699	
0	THETA EPS						
0	D02	D03	D04	D05	D06	D07	
+							
		0.246	0.406	0.411	0.337	0.364	
0	THETA EPS						
0	D01	D09	F03	F04	F08	F13	
+							
		0.219	0.165	0.129	0.169	0.228	
0	THETA DELTA						
0	TOT1	MONTHS	B01	B04	B05	B02	
+							
		0.204	0.201	0.599	0.316	0.677	
0	THETA DELTA						
0	B06	B08	B10	B13	A08	A15	
+							
		0.680	0.516	0.387	0.650	0.220	
0	THETA DELTA						
0	A02	A07	A12	A01	A16	A25	
+							
		0.656	0.403	0.635	0.353	0.406	
0	THETA DELTA						
0	A09						
+							
		0.311					
0	SQUARED MULTIPLE CORRELATIONS FOR Y - VARIABLES						
0	EMPATHY	RELIABL	RESPONS	ASSURAN	TANGIBL	D08	
+							
		0.772	0.738	0.544	0.611	0.327	
0	SQUARED MULTIPLE CORRELATIONS FOR Y - VARIABLES						
0	D02	D03	D04	D05	D06	D07	
+							
		0.776	0.622	0.618	0.689	0.664	
0	SQUARED MULTIPLE CORRELATIONS FOR Y - VARIABLES						
0	D01	D09	F03	F04	F08	F13	
+							
		0.800	0.851	0.882	0.844	0.789	

ORESIDUAL FOR A08 AND F08 = -2.619
 ORESIDUAL FOR A08 AND B10 = -2.749
 ORESIDUAL FOR A15 AND B01 = -4.205
 ORESIDUAL FOR A15 AND A08 = -2.719
 ORESIDUAL FOR A02 AND EMPATHY = -3.066
 ORESIDUAL FOR A02 AND B01 = -2.652
 ORESIDUAL FOR A07 AND D02 = -2.752
 ORESIDUAL FOR A07 AND D03 = -3.386
 ORESIDUAL FOR A07 AND B02 = -3.176
 ORESIDUAL FOR A07 AND B10 = -2.576
 ORESIDUAL FOR A12 AND D09 = -2.647
 ORESIDUAL FOR A12 AND A15 = -3.008
 ORESIDUAL FOR A01 AND RELIABL = -3.037
 ORESIDUAL FOR A01 AND RESPONS = -3.095
 ORESIDUAL FOR A01 AND TANGIBL = -3.099
 ORESIDUAL FOR A01 AND D05 = -2.823
 ORESIDUAL FOR A01 AND F04 = -2.791
 ORESIDUAL FOR A01 AND F08 = -2.576
 ORESIDUAL FOR A01 AND B08 = -2.601
 ORESIDUAL FOR A01 AND B10 = -2.858
 ORESIDUAL FOR A01 AND B13 = -2.910
 ORESIDUAL FOR A01 AND A15 = -2.737
 ORESIDUAL FOR A16 AND TANGIBL = -2.660
 ORESIDUAL FOR A25 AND A01 = -2.653
 ORESIDUAL FOR A09 AND RELIABL = -2.633
 ORESIDUAL FOR A09 AND A12 = -2.636
 ORESIDUAL FOR A09 AND A25 = -2.616

-LARGEST POSITIVE STANDARDIZED RESIDUALS

ORESIDUAL FOR B08 AND B06 = 2.965
 ORESIDUAL FOR A15 AND TANGIBL = 2.821
 ORESIDUAL FOR A15 AND D05 = 2.833
 ORESIDUAL FOR A02 AND A15 = 5.832
 ORESIDUAL FOR A12 AND D06 = 3.526

1TITLE TESTING THE MAIN MODEL

-STANDARD ERRORS

	LAMBDA Y		
0	SERVQUAL	SATISFAC	LOYALTY
+			
EMPATHY	0.000	0.000	0.000
RELIABL	0.048	0.000	0.000
RESPONS	0.054	0.000	0.000
ASSURAN	0.052	0.000	0.000
TANGIBL	0.059	0.000	0.000
D08	0.000	0.000	0.000
D02	0.000	0.037	0.000
D03	0.000	0.043	0.000
D04	0.000	0.043	0.000
D05	0.000	0.040	0.000
D06	0.000	0.041	0.000
D07	0.000	0.032	0.000
D01	0.000	0.036	0.000
D09	0.000	0.033	0.000
F03	0.000	0.000	0.000
F04	0.000	0.000	0.034
F08	0.000	0.000	0.037
F13	0.000	0.000	0.049

0	LAMBDA X						
0	ACCOUNTS		MONTHS	EQUITY	FIRMCHAR		
+							
	TOT1	0.000	0.000	0.000	0.000		
	MONTHS	0.000	0.000	0.000	0.000		
	B01	0.000	0.000	0.000	0.000		
	B04	0.000	0.000	0.042	0.000		
	B05	0.000	0.000	0.052	0.000		
	B02	0.000	0.000	0.044	0.000		
	B06	0.000	0.000	0.052	0.000		
	B08	0.000	0.000	0.048	0.000		
	B10	0.000	0.000	0.044	0.000		
	B13	0.000	0.000	0.052	0.000		
	A08	0.000	0.000	0.000	0.000		
	A15	0.000	0.000	0.000	0.053		
	A02	0.000	0.000	0.000	0.051		
	A07	0.000	0.000	0.000	0.043		
	A12	0.000	0.000	0.000	0.050		
	A01	0.000	0.000	0.000	0.041		
	A16	0.000	0.000	0.000	0.043		
	A25	0.000	0.000	0.000	0.044		
	A09	0.000	0.000	0.000	0.039		
0	BETA						
0	SERVQUAL		SATISFAC	LOYALTY			
+							
	SERVQUAL	0.000	0.000	0.000			
	SATISFAC	0.114	0.000	0.000			
	LOYALTY	0.122	0.111	0.000			
0	GAMMA						
0	ACCOUNTS		MONTHS	EQUITY	FIRMCHAR		
+							
	SERVQUAL	0.035	0.034	0.102	0.101		
	SATISFAC	0.030	0.030	0.116	0.088		
	LOYALTY	0.000	0.000	0.000	0.000		
0	PHI						
0	ACCOUNTS		MONTHS	EQUITY	FIRMCHAR		
+							
	ACCOUNTS	0.000					
	MONTHS	0.075	0.000				
	EQUITY	0.068	0.069	0.000			
	FIRMCHAR	0.067	0.068	0.014	0.000		
0	PSI						
0	SERVQUAL		SATISFAC	LOYALTY			
+							
		0.020	0.015	0.025			
0	THETA EPS						
0	EMPATHY		RELIABL	RESPONS	ASSURAN	TANGIBL	D08
+							
		0.026	0.029	0.043	0.038	0.060	0.014
0	THETA EPS						
0	D02		D03	D04	D05	D06	D07
+							
		0.022	0.035	0.035	0.030	0.032	0.014
0	THETA EPS						
0	D01		D09	F03	F04	F08	F13
+							
		0.020	0.016	0.017	0.019	0.023	0.048
0	THETA DELTA						
0	TOT1		MONTHS	B01	B04	B05	B02
+							
		0.083	0.083	0.052	0.031	0.058	0.036

0	THETA DELTA					
0	B06	B08	B10	B13	A08	A15
+	0.058	0.046	0.036	0.056	0.023	0.061
0	THETA DELTA					
0	A02	A07	A12	A01	A16	A25
+	0.056	0.036	0.054	0.033	0.037	0.039
0	THETA DELTA					
0	A09					
+	0.029					
1	TITLE TESTING THE MAIN MODEL					
0	CORRELATIONS OF ESTIMATES					
0	LY 2,1	LY 3,1	LY 4,1	LY 5,1	LY 7,2	LY 8,2
+						
	LY 2,1	1.000				
	LY 3,1	0.348	1.000			
	LY 4,1	0.383	0.292	1.000		
	LY 5,1	0.243	0.185	0.204	1.000	
	LY 7,2	0.000	0.000	0.000	0.000	1.000
	LY 8,2	0.000	0.000	0.000	0.253	0.191
	LY 9,2	0.000	0.000	0.000	0.251	0.216
	LY 10,2	0.000	0.000	0.000	0.284	0.206
	LY 11,2	0.000	0.000	0.000	0.272	0.306
	LY 12,2	0.000	0.000	0.000	0.402	0.265
	LY 13,2	0.000	0.000	0.000	0.349	0.294
	LY 14,2	0.000	0.000	0.000	0.387	0.000
	LY 16,3	0.000	0.000	0.000	0.000	0.000
	LY 17,3	0.000	0.000	0.000	0.000	0.000
	LY 18,3	0.000	0.000	0.000	0.000	0.000
	LX 4,3	0.000	0.000	0.000	0.000	0.000
	LX 5,3	0.000	0.000	0.000	0.000	0.000
	LX 6,3	0.000	0.000	0.000	0.000	0.000
	LX 7,3	0.000	0.000	0.000	0.000	0.000
	LX 8,3	0.000	0.000	0.000	0.000	0.000
	LX 9,3	0.000	0.000	0.000	0.000	0.000
	LX 10,3	0.000	0.000	0.000	0.000	0.000
	LX 12,4	0.000	0.000	0.000	0.000	0.000
	LX 13,4	0.000	0.000	0.000	0.000	0.000
	LX 14,4	0.000	0.000	0.000	0.000	0.000
	LX 15,4	0.000	0.000	0.000	0.000	0.000
	LX 16,4	0.000	0.000	0.000	0.000	0.000
	LX 17,4	0.000	0.000	0.000	0.000	0.000
	LX 18,4	0.000	0.000	0.000	0.000	0.000
	LX 19,4	0.000	0.000	0.000	0.000	0.000
	BE 2,1	0.092	0.076	0.082	-0.051	-0.039
	BE 3,1	0.104	0.083	0.091	0.000	0.000
	BE 3,2	-0.003	-0.007	-0.006	0.045	0.035
	GA 1,1	-0.010	-0.007	-0.008	0.000	0.000
	GA 1,2	-0.030	-0.023	-0.025	0.000	0.000
	GA 1,3	-0.128	-0.097	-0.107	0.000	0.000
	GA 1,4	-0.063	-0.048	-0.053	0.000	0.000
	GA 2,1	0.000	0.000	0.000	0.003	0.002
	GA 2,2	-0.001	-0.002	-0.001	-0.018	-0.013
	GA 2,3	-0.002	-0.005	-0.005	-0.032	-0.024
	GA 2,4	-0.001	-0.003	-0.003	-0.037	-0.028
	PH 2,1	0.000	0.000	0.000	0.000	0.000
	PH 3,1	0.000	0.000	0.000	0.000	0.000
	PH 3,2	0.000	0.000	0.000	0.000	0.000
	PH 4,1	0.000	0.000	0.000	0.000	0.000
	PH 4,2	0.000	0.000	0.000	0.000	0.000

PH 4,3	0.000	0.000	0.000	0.000	0.000	0.000
PS 1,1	-0.238	-0.187	-0.205	-0.132	0.000	0.000
PS 2,2	-0.001	-0.003	-0.003	-0.003	-0.195	-0.149
PS 3,3	-0.001	-0.002	-0.002	-0.001	0.000	0.000
TE 1,1	0.123	0.093	0.102	0.064	0.000	0.000
TE 2,2	-0.117	-0.001	-0.001	-0.001	0.000	0.000
TE 3,3	0.000	-0.079	0.000	0.000	0.000	0.000
TE 4,4	0.000	-0.001	-0.089	0.000	0.000	0.000
TE 5,5	0.000	0.000	0.000	-0.053	0.000	0.000
TE 6,6	0.000	0.000	0.000	0.000	0.063	0.048
TE 7,7	0.000	0.000	0.000	0.000	-0.057	-0.001
TE 8,8	0.000	0.000	0.000	0.000	0.000	-0.041
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TE 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TE 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TE 12,12	0.000	0.000	0.000	0.000	-0.001	-0.001
TE 13,13	0.000	0.000	0.000	0.000	-0.001	-0.001
TE 14,14	0.000	0.000	0.000	0.000	-0.001	-0.001
TE 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TE 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TE 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TE 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TD 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TD 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TD 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TD 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TD 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TD 14,14	0.000	0.000	0.000	0.000	0.000	0.000
TD 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TD 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TD 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TD 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 19,19	0.000	0.000	0.000	0.000	0.000	0.000
0	CORRELATIONS OF ESTIMATES					
0	LY 9,2	LY 10,2	LY 11,2	LY 12,2	LY 13,2	LY 14,2
+						
LY 9,2	1.000					
LY 10,2	0.214	1.000				
LY 11,2	0.205	0.232	1.000			
LY 12,2	0.304	0.344	0.329	1.000		
LY 13,2	0.263	0.298	0.285	0.422	1.000	
LY 14,2	0.292	0.331	0.316	0.468	0.406	1.000
LY 16,3	0.000	0.000	0.000	0.000	0.000	0.000
LY 17,3	0.000	0.000	0.000	0.000	0.000	0.000
LY 18,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 4,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 5,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 6,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 7,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 8,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 9,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 10,3	0.000	0.000	0.000	0.000	0.000	0.000
LX 12,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 13,4	0.000	0.000	0.000	0.000	0.000	0.000

LX 14,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 15,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 16,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 17,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 18,4	0.000	0.000	0.000	0.000	0.000	0.000
LX 19,4	0.000	0.000	0.000	0.000	0.000	0.000
BE 2,1	-0.039	-0.044	-0.042	-0.062	-0.054	-0.060
BE 3,1	0.000	-0.001	-0.001	0.000	0.000	0.000
BE 3,2	0.034	0.039	0.037	0.055	0.048	0.053
GA 1,1	0.000	0.000	0.000	0.000	0.000	0.000
GA 1,2	0.000	0.000	0.000	0.000	0.000	0.000
GA 1,3	0.000	0.000	0.000	0.000	0.000	0.000
GA 1,4	0.000	0.000	0.000	0.000	0.000	0.000
GA 2,1	0.002	0.003	0.003	0.004	0.003	0.004
GA 2,2	-0.013	-0.015	-0.014	-0.021	-0.018	-0.020
GA 2,3	-0.024	-0.027	-0.026	-0.039	-0.034	-0.037
GA 2,4	-0.028	-0.032	-0.030	-0.045	-0.039	-0.043
PH 2,1	0.000	0.000	0.000	0.000	0.000	0.000
PH 3,1	0.000	0.000	0.000	0.000	0.000	0.000
PH 3,2	0.000	0.000	0.000	0.000	0.000	0.000
PH 4,1	0.000	0.000	0.000	0.000	0.000	0.000
PH 4,2	0.000	0.000	0.000	0.000	0.000	0.000
PH 4,3	0.000	0.000	0.000	0.000	0.000	0.000
PS 1,1	0.000	0.000	0.000	0.000	0.000	0.000
PS 2,2	-0.148	-0.167	-0.160	-0.235	-0.205	-0.227
PS 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TE 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TE 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TE 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TE 6,6	0.047	0.054	0.051	0.078	0.066	0.074
TE 7,7	-0.001	-0.001	-0.001	0.000	-0.001	0.000
TE 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TE 9,9	-0.041	0.000	0.000	0.000	0.000	0.000
TE 10,10	0.000	-0.047	0.000	0.000	0.000	0.000
TE 11,11	0.000	0.000	-0.045	0.000	0.000	0.000
TE 12,12	-0.001	-0.001	-0.001	-0.077	-0.001	-0.001
TE 13,13	-0.001	-0.001	-0.001	0.000	-0.061	0.000
TE 14,14	-0.001	-0.001	-0.001	0.000	-0.001	-0.072
TE 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TE 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TE 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TE 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TD 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TD 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TD 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TD 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TD 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TD 14,14	0.000	0.000	0.000	0.000	0.000	0.000
TD 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TD 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TD 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TD 18,18	0.000	0.000	0.000	0.000	0.000	0.000

TD 19,19	0.000	0.000	0.000	0.000	0.000	0.000
0	CORRELATIONS OF ESTIMATES					
0	LY 16,3	LY 17,3	LY 18,3	LX 4,3	LX 5,3	LX 6,3
+						
LY 16,3	1.000					
LY 17,3	0.390	1.000				
LY 18,3	0.222	0.199	1.000			
LX 4,3	0.000	0.000	0.000	1.000		
LX 5,3	0.000	0.000	0.000	0.182	1.000	
LX 6,3	0.000	0.000	0.000	0.297	0.163	1.000
LX 7,3	0.000	0.000	0.000	0.181	0.099	0.162
LX 8,3	0.000	0.000	0.000	0.244	0.134	0.218
LX 9,3	0.000	0.000	0.000	0.298	0.164	0.267
LX 10,3	0.000	0.000	0.000	0.192	0.106	0.172
LX 12,4	0.000	0.000	0.000	0.091	0.050	0.081
LX 13,4	0.000	0.000	0.000	0.103	0.057	0.093
LX 14,4	0.000	0.000	0.000	0.162	0.089	0.145
LX 15,4	0.000	0.000	0.000	0.108	0.059	0.097
LX 16,4	0.000	0.000	0.000	0.176	0.097	0.157
LX 17,4	0.000	0.000	0.000	0.161	0.088	0.144
LX 18,4	0.000	0.000	0.000	0.152	0.083	0.136
LX 19,4	0.000	0.000	0.000	0.188	0.104	0.169
BE 2,1	0.000	0.000	0.000	0.011	0.004	0.008
BE 3,1	-0.067	-0.059	-0.034	0.000	0.000	0.000
BE 3,2	-0.052	-0.046	-0.026	0.000	0.000	0.000
GA 1,1	0.000	0.000	0.000	-0.006	-0.002	-0.005
GA 1,2	0.000	0.000	0.000	0.004	0.002	0.003
GA 1,3	0.000	0.000	0.000	0.058	0.036	0.055
GA 1,4	0.000	0.000	0.000	0.056	0.026	0.047
GA 2,1	0.000	0.000	0.000	-0.004	-0.002	-0.003
GA 2,2	0.000	0.000	0.000	0.001	0.000	0.001
GA 2,3	0.000	0.000	0.000	0.018	0.013	0.018
GA 2,4	0.000	0.000	0.000	0.040	0.020	0.034
PH 2,1	0.000	0.000	0.000	0.004	0.002	0.004
PH 3,1	0.000	0.000	0.000	0.005	0.003	0.004
PH 3,2	0.000	0.000	0.000	0.023	0.013	0.020
PH 4,1	0.000	0.000	0.000	-0.004	-0.002	-0.004
PH 4,2	0.000	0.000	0.000	0.026	0.014	0.023
PH 4,3	0.000	0.000	0.000	0.114	0.067	0.105
PS 1,1	0.000	0.000	0.000	0.014	0.005	0.011
PS 2,2	0.000	0.000	0.000	0.004	0.001	0.003
PS 3,3	-0.256	-0.232	-0.133	0.000	0.000	0.000
TE 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TE 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TE 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TE 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TE 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TE 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TE 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TE 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TE 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TE 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TE 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TE 14,14	0.000	0.000	0.000	0.000	0.000	0.000
TE 15,15	0.214	0.180	0.096	0.000	0.000	0.000
TE 16,16	-0.193	-0.024	-0.017	0.000	0.000	0.000
TE 17,17	-0.011	-0.145	-0.010	0.000	0.000	0.000
TE 18,18	-0.002	-0.003	-0.063	0.000	0.000	0.000
TD 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,2	0.000	0.000	0.000	0.003	0.001	0.002

TD 3,3	0.000	0.000	0.000	0.022	0.012	0.019
TD 4,4	0.000	0.000	0.000	-0.117	0.002	0.003
TD 5,5	0.000	0.000	0.000	0.001	-0.057	0.001
TD 6,6	0.000	0.000	0.000	0.003	0.001	-0.100
TD 7,7	0.000	0.000	0.000	0.001	0.000	0.001
TD 8,8	0.000	0.000	0.000	0.002	0.001	0.001
TD 9,9	0.000	0.000	0.000	0.003	0.001	0.002
TD 10,10	0.000	0.000	0.000	0.001	0.000	0.001
TD 11,11	0.000	0.000	0.000	0.044	0.024	0.039
TD 12,12	0.000	0.000	0.000	-0.001	0.000	0.000
TD 13,13	0.000	0.000	0.000	-0.001	0.000	-0.001
TD 14,14	0.000	0.000	0.000	-0.002	-0.001	-0.002
TD 15,15	0.000	0.000	0.000	-0.001	0.000	-0.001
TD 16,16	0.000	0.000	0.000	-0.003	-0.002	-0.003
TD 17,17	0.000	0.000	0.000	-0.002	-0.001	-0.002
TD 18,18	0.000	0.000	0.000	-0.002	-0.001	-0.002
TD 19,19	0.000	0.000	0.000	-0.003	-0.002	-0.003
0	CORRELATIONS OF ESTIMATES					
0	LX 7,3	LX 8,3	LX 9,3	LX 10,3	LX 12,4	LX 13,4
+						
LX 7,3	1.000					
LX 8,3	0.133	1.000				
LX 9,3	0.162	0.219	1.000			
LX 10,3	0.105	0.141	0.173	1.000		
LX 12,4	0.049	0.067	0.081	0.053	1.000	
LX 13,4	0.056	0.076	0.093	0.060	0.071	1.000
LX 14,4	0.088	0.119	0.145	0.094	0.112	0.127
LX 15,4	0.059	0.079	0.097	0.063	0.074	0.085
LX 16,4	0.096	0.129	0.158	0.102	0.121	0.138
LX 17,4	0.088	0.118	0.145	0.093	0.111	0.127
LX 18,4	0.083	0.112	0.136	0.088	0.105	0.120
LX 19,4	0.103	0.138	0.169	0.109	0.130	0.148
BE 2,1	0.004	0.006	0.008	0.004	-0.001	-0.001
BE 3,1	0.000	0.000	0.000	0.000	0.000	0.000
BE 3,2	0.000	0.000	0.000	0.000	0.000	0.000
GA 1,1	-0.002	-0.003	-0.005	-0.003	0.001	0.001
GA 1,2	0.002	0.002	0.003	0.002	0.000	0.000
GA 1,3	0.036	0.047	0.055	0.038	0.026	0.030
GA 1,4	0.026	0.036	0.047	0.028	0.015	0.017
GA 2,1	-0.002	-0.003	-0.004	-0.002	0.000	0.000
GA 2,2	0.000	0.001	0.001	0.000	0.000	0.000
GA 2,3	0.013	0.016	0.018	0.013	0.012	0.013
GA 2,4	0.020	0.027	0.034	0.021	0.016	0.018
PH 2,1	0.002	0.003	0.004	0.002	0.002	0.003
PH 3,1	0.003	0.004	0.004	0.003	0.025	0.028
PH 3,2	0.012	0.017	0.020	0.013	0.004	0.005
PH 4,1	-0.002	-0.003	-0.004	-0.002	0.021	0.024
PH 4,2	0.014	0.019	0.023	0.015	0.005	0.006
PH 4,3	0.067	0.088	0.105	0.071	0.058	0.066
PS 1,1	0.005	0.008	0.011	0.006	-0.001	-0.001
PS 2,2	0.001	0.002	0.003	0.001	0.000	0.000
PS 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TE 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TE 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TE 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TE 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TE 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TE 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TE 10,10	0.000	0.000	0.000	0.000	0.000	0.000

TE 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TE 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TE 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TE 14,14	0.000	0.000	0.000	0.000	0.000	0.000
TE 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TE 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TE 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TE 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	0.000	0.000	0.000	0.000	0.006	0.007
TD 2,2	0.001	0.002	0.002	0.002	0.001	0.001
TD 3,3	0.012	0.016	0.019	0.012	0.006	0.006
TD 4,4	0.002	0.002	0.003	0.002	0.000	0.000
TD 5,5	0.000	0.000	0.001	0.000	0.000	0.000
TD 6,6	0.001	0.002	0.002	0.001	0.000	0.000
TD 7,7	-0.057	0.000	0.001	0.000	0.000	0.000
TD 8,8	0.001	-0.079	0.001	0.001	0.000	0.000
TD 9,9	0.001	0.002	-0.101	0.001	0.000	0.000
TD 10,10	0.000	0.001	0.001	-0.061	0.000	0.000
TD 11,11	0.024	0.032	0.039	0.025	0.035	0.040
TD 12,12	0.000	0.000	0.000	0.000	-0.044	0.000
TD 13,13	0.000	-0.001	-0.001	0.000	0.000	-0.050
TD 14,14	-0.001	-0.002	-0.002	-0.001	0.000	0.000
TD 15,15	0.000	-0.001	-0.001	0.000	0.000	0.000
TD 16,16	-0.002	-0.002	-0.003	-0.002	0.000	0.000
TD 17,17	-0.001	-0.002	-0.002	-0.001	0.000	0.000
TD 18,18	-0.001	-0.001	-0.002	-0.001	0.000	0.000
TD 19,19	-0.002	-0.003	-0.003	-0.002	0.000	0.000
0	CORRELATIONS OF ESTIMATES					
0	LX 14,4	LX 15,4	LX 16,4	LX 17,4	LX 18,4	LX 19,4
+						
LX 14,4	1.000					
LX 15,4	0.133	1.000				
LX 16,4	0.216	0.144	1.000			
LX 17,4	0.198	0.132	0.215	1.000		
LX 18,4	0.187	0.125	0.203	0.186	1.000	
LX 19,4	0.232	0.155	0.252	0.231	0.218	1.000
BE 2,1	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
BE 3,1	0.000	0.000	0.000	0.000	0.000	0.000
BE 3,2	0.000	0.000	0.000	0.000	0.000	0.000
GA 1,1	0.001	0.001	0.001	0.001	0.001	0.001
GA 1,2	0.000	0.000	0.000	0.000	0.000	0.000
GA 1,3	0.047	0.031	0.051	0.047	0.044	0.055
GA 1,4	0.026	0.017	0.028	0.026	0.024	0.029
GA 2,1	0.000	0.000	0.000	0.000	0.000	0.000
GA 2,2	0.000	0.000	0.000	0.000	0.000	0.000
GA 2,3	0.021	0.014	0.023	0.021	0.020	0.025
GA 2,4	0.027	0.019	0.030	0.027	0.026	0.031
PH 2,1	0.004	0.003	0.005	0.004	0.004	0.005
PH 3,1	0.044	0.029	0.048	0.044	0.041	0.051
PH 3,2	0.008	0.005	0.008	0.008	0.007	0.009
PH 4,1	0.038	0.025	0.041	0.037	0.035	0.044
PH 4,2	0.009	0.006	0.010	0.009	0.009	0.011
PH 4,3	0.102	0.069	0.110	0.102	0.096	0.118
PS 1,1	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
PS 2,2	0.000	0.000	0.000	0.000	0.000	0.000
PS 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TE 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TE 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TE 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TE 6,6	0.000	0.000	0.000	0.000	0.000	0.000

TE 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TE 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TE 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TE 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TE 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TE 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TE 14,14	0.000	0.000	0.000	0.000	0.000	0.000
TE 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TE 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TE 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TE 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	0.011	0.007	0.011	0.011	0.010	0.012
TD 2,2	0.001	0.001	0.001	0.001	0.001	0.001
TD 3,3	0.010	0.007	0.011	0.010	0.009	0.011
TD 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TD 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TD 11,11	0.063	0.042	0.069	0.063	0.059	0.075
TD 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TD 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TD 14,14	-0.084	0.000	0.001	0.000	0.000	0.001
TD 15,15	0.000	-0.053	0.000	0.000	0.000	0.000
TD 16,16	0.001	0.000	-0.093	0.001	0.000	0.001
TD 17,17	0.000	0.000	0.001	-0.083	0.000	0.001
TD 18,18	0.000	0.000	0.001	0.000	-0.077	0.001
TD 19,19	0.001	0.000	0.001	0.001	0.001	-0.102
0	CORRELATIONS OF ESTIMATES					
0	BE 2,1	BE 3,1	BE 3,2	GA 1,1	GA 1,2	GA 1,3
+						
BE 2,1	1.000					
BE 3,1	0.216	1.000				
BE 3,2	-0.214	-0.937	1.000			
GA 1,1	0.006	-0.010	0.009	1.000		
GA 1,2	-0.020	0.000	-0.007	-0.346	1.000	
GA 1,3	-0.066	-0.039	0.012	0.190	-0.112	1.000
GA 1,4	0.029	0.000	-0.014	-0.249	0.117	-0.916
GA 2,1	-0.073	-0.009	0.010	-0.082	0.024	-0.010
GA 2,2	-0.174	-0.037	0.036	0.022	-0.063	0.017
GA 2,3	-0.667	-0.112	0.113	-0.016	0.017	-0.017
GA 2,4	-0.235	-0.077	0.076	0.017	-0.003	0.086
PH 2,1	-0.005	0.000	0.000	-0.016	0.038	-0.001
PH 3,1	-0.002	0.000	0.000	-0.102	0.008	0.004
PH 3,2	0.001	0.000	0.000	0.004	-0.096	0.002
PH 4,1	-0.001	0.000	0.000	-0.023	0.002	-0.002
PH 4,2	0.000	0.000	0.000	0.002	-0.023	0.009
PH 4,3	-0.016	0.000	0.000	0.019	-0.011	0.220
PS 1,1	-0.188	-0.182	0.134	-0.018	0.005	-0.155
PS 2,2	-0.104	-0.065	0.047	0.000	0.000	0.006
PS 3,3	-0.023	-0.143	0.169	0.002	0.000	0.005
TE 1,1	0.139	0.116	-0.094	-0.003	-0.005	-0.024
TE 2,2	0.091	0.070	-0.075	0.000	0.003	0.008
TE 3,3	0.034	0.026	-0.028	0.000	0.001	0.003
TE 4,4	0.046	0.036	-0.038	0.000	0.001	0.004
TE 5,5	0.013	0.010	-0.011	0.000	0.000	0.001
TE 6,6	-0.008	-0.013	0.021	0.000	0.000	0.000
TE 7,7	0.001	-0.006	0.005	0.000	0.000	0.000
TE 8,8	0.000	-0.002	0.002	0.000	0.000	0.000

TE 9,9	0.000	-0.002	0.002	0.000	0.000	0.000
TE 10,10	0.001	-0.003	0.003	0.000	0.000	0.000
TE 11,11	0.001	-0.003	0.003	0.000	0.000	0.000
TE 12,12	0.002	-0.012	0.011	0.000	0.000	0.000
TE 13,13	0.001	-0.007	0.006	0.000	0.000	0.000
TE 14,14	0.002	-0.010	0.009	0.000	0.000	0.000
TE 15,15	0.000	-0.019	-0.014	0.000	0.000	0.000
TE 16,16	0.000	0.011	0.008	0.000	0.000	0.000
TE 17,17	0.000	0.006	0.005	0.000	0.000	0.000
TE 18,18	0.000	0.001	0.001	0.000	0.000	0.000
TD 1,1	0.000	0.000	0.000	0.040	-0.006	0.004
TD 2,2	-0.015	0.000	0.000	-0.039	0.124	-0.009
TD 3,3	-0.011	0.000	0.000	0.004	-0.003	0.031
TD 4,4	-0.034	0.000	0.000	0.013	-0.009	0.081
TD 5,5	-0.007	0.000	0.000	0.003	-0.002	0.016
TD 6,6	-0.023	0.000	0.000	0.009	-0.006	0.056
TD 7,7	-0.006	0.000	0.000	0.002	-0.002	0.015
TD 8,8	-0.013	0.000	0.000	0.005	-0.004	0.032
TD 9,9	-0.024	0.000	0.000	0.009	-0.006	0.056
TD 10,10	-0.007	0.000	0.000	0.003	-0.002	0.018
TD 11,11	-0.011	0.000	0.000	-0.007	0.003	-0.016
TD 12,12	-0.001	0.000	0.000	-0.001	0.000	-0.003
TD 13,13	-0.001	0.000	0.000	-0.001	0.000	-0.003
TD 14,14	-0.003	0.000	0.000	-0.003	0.001	-0.010
TD 15,15	-0.001	0.000	0.000	-0.001	0.000	-0.004
TD 16,16	-0.004	0.000	0.000	-0.003	0.001	-0.013
TD 17,17	-0.003	0.000	0.000	-0.003	0.001	-0.010
TD 18,18	-0.003	0.000	0.000	-0.002	0.001	-0.009
TD 19,19	-0.005	0.000	0.000	-0.004	0.001	-0.016
0	CORRELATIONS OF ESTIMATES					
0	GA 1,4	GA 2,1	GA 2,2	GA 2,3	GA 2,4	PH 2,1
+						
GA 1,4	1.000					
GA 2,1	0.015	1.000				
GA 2,2	-0.014	-0.328	1.000			
GA 2,3	0.029	0.188	0.034	1.000		
GA 2,4	-0.075	-0.224	0.155	-0.507	1.000	
PH 2,1	0.001	-0.043	0.057	0.000	0.007	1.000
PH 3,1	0.008	-0.070	0.009	0.004	0.009	0.102
PH 3,2	0.002	-0.003	-0.046	-0.003	0.003	0.150
PH 4,1	0.006	-0.045	0.008	-0.003	0.014	0.103
PH 4,2	-0.006	-0.003	-0.021	0.004	-0.005	0.199
PH 4,3	-0.189	0.008	-0.001	0.073	-0.054	0.006
PS 1,1	0.198	0.010	0.027	0.101	0.048	-0.004
PS 2,2	-0.003	0.018	0.007	0.030	0.120	-0.004
PS 3,3	-0.001	0.001	0.004	0.012	0.009	0.000
TE 1,1	-0.010	-0.007	-0.022	-0.071	-0.046	0.000
TE 2,2	0.006	-0.005	-0.017	-0.056	-0.036	0.000
TE 3,3	0.002	-0.002	-0.006	-0.021	-0.014	0.000
TE 4,4	0.003	-0.003	-0.009	-0.028	-0.018	0.000
TE 5,5	0.001	-0.001	-0.003	-0.008	-0.005	0.000
TE 6,6	0.000	0.000	-0.003	-0.005	-0.006	0.000
TE 7,7	0.000	0.000	0.000	0.001	0.001	0.000
TE 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TE 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TE 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TE 12,12	0.000	0.000	0.001	0.001	0.001	0.000
TE 13,13	0.000	0.000	0.000	0.001	0.001	0.000
TE 14,14	0.000	0.000	0.001	0.001	0.001	0.000
TE 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TE 16,16	0.000	0.000	0.000	0.000	0.000	0.000

TE 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TE 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	-0.006	-0.027	0.016	-0.003	0.007	0.313
TD 2,2	0.008	-0.043	0.128	0.001	0.014	0.313
TD 3,3	-0.025	0.003	0.000	0.020	-0.009	0.000
TD 4,4	-0.083	0.009	0.001	0.055	-0.034	0.000
TD 5,5	-0.016	0.002	0.000	0.010	-0.006	0.000
TD 6,6	-0.057	0.007	0.001	0.038	-0.023	0.000
TD 7,7	-0.016	0.002	0.000	0.010	-0.006	0.000
TD 8,8	-0.032	0.004	0.000	0.021	-0.013	0.000
TD 9,9	-0.057	0.007	0.001	0.038	-0.024	0.000
TD 10,10	-0.018	0.002	0.000	0.012	-0.007	0.000
TD 11,11	0.036	-0.007	0.005	-0.010	0.041	0.001
TD 12,12	0.002	-0.001	0.000	-0.001	0.003	0.000
TD 13,13	0.003	-0.001	0.001	-0.002	0.004	0.000
TD 14,14	0.009	-0.002	0.002	-0.006	0.011	0.000
TD 15,15	0.003	-0.001	0.001	-0.002	0.004	0.000
TD 16,16	0.012	-0.003	0.002	-0.007	0.014	0.000
TD 17,17	0.009	-0.002	0.002	-0.006	0.011	0.000
TD 18,18	0.008	-0.002	0.001	-0.005	0.009	0.000
TD 19,19	0.015	-0.004	0.002	-0.009	0.017	0.000

0 CORRELATIONS OF ESTIMATES

0 PH 3,1 PH 3,2 PH 4,1 PH 4,2 PH 4,3 PS 1,1

+						
PH 3,1	1.000					
PH 3,2	0.221	1.000				
PH 4,1	0.843	0.186	1.000			
PH 4,2	0.187	0.845	0.220	1.000		
PH 4,3	0.068	0.006	-0.008	0.022	1.000	
PS 1,1	-0.001	0.001	-0.001	0.000	-0.026	1.000
PS 2,2	-0.002	0.000	-0.001	0.000	-0.005	0.028
PS 3,3	0.000	0.000	0.000	0.000	0.000	-0.002
TE 1,1	0.000	0.000	0.000	0.000	0.000	-0.185
TE 2,2	0.000	0.000	0.000	0.000	0.000	-0.096
TE 3,3	0.000	0.000	0.000	0.000	0.000	-0.036
TE 4,4	0.000	0.000	0.000	0.000	0.000	-0.048
TE 5,5	0.000	0.000	0.000	0.000	0.000	-0.014
TE 6,6	0.000	0.000	0.000	0.000	0.000	0.002
TE 7,7	0.000	0.000	0.000	0.000	0.000	0.001
TE 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TE 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TE 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TE 12,12	0.000	0.000	0.000	0.000	0.000	0.001
TE 13,13	0.000	0.000	0.000	0.000	0.000	0.001
TE 14,14	0.000	0.000	0.000	0.000	0.000	0.001
TE 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TE 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TE 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TE 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	0.192	0.042	0.265	0.058	-0.004	-0.002
TD 2,2	0.024	0.107	0.020	0.091	0.001	-0.010
TD 3,3	0.001	0.002	0.000	0.002	0.034	-0.013
TD 4,4	0.003	0.002	0.000	0.000	0.079	-0.041
TD 5,5	0.001	0.000	0.000	0.000	0.015	-0.008
TD 6,6	0.002	0.001	0.000	0.000	0.054	-0.028
TD 7,7	0.001	0.000	0.000	0.000	0.015	-0.008
TD 8,8	0.001	0.001	0.000	0.000	0.031	-0.016
TD 9,9	0.002	0.001	0.000	0.000	0.054	-0.029
TD 10,10	0.001	0.000	0.000	0.000	0.017	-0.009
TD 11,11	0.012	0.002	0.013	0.004	0.083	-0.007
TD 12,12	0.000	0.000	0.000	0.000	0.004	-0.001

TD 13,13	0.000	0.000	0.000	0.000	0.006	-0.001
TD 14,14	-0.001	0.000	0.000	0.000	0.017	-0.002
TD 15,15	0.000	0.000	0.000	0.000	0.006	-0.001
TD 16,16	-0.001	0.000	0.001	0.000	0.022	-0.003
TD 17,17	-0.001	0.000	0.000	0.000	0.017	-0.002
TD 18,18	-0.001	0.000	0.000	0.000	0.015	-0.002
TD 19,19	-0.001	0.000	0.001	0.000	0.027	-0.004
0	CORRELATIONS OF ESTIMATES					
0	PS 2,2	PS 3,3	TE 1,1	TE 2,2	TE 3,3	TE 4,4
+						
PS 2,2	1.000					
PS 3,3	0.010	1.000				
TE 1,1	-0.047	-0.025	1.000			
TE 2,2	-0.037	-0.019	-0.017	1.000		
TE 3,3	-0.014	-0.007	-0.006	-0.005	1.000	
TE 4,4	-0.019	-0.010	-0.009	-0.007	-0.003	1.000
TE 5,5	-0.005	-0.003	-0.002	-0.002	-0.001	-0.001
TE 6,6	-0.065	-0.002	-0.001	0.000	0.000	0.000
TE 7,7	-0.012	-0.001	0.000	0.000	0.000	0.000
TE 8,8	-0.005	0.000	0.000	0.000	0.000	0.000
TE 9,9	-0.005	0.000	0.000	0.000	0.000	0.000
TE 10,10	-0.007	0.000	0.000	0.000	0.000	0.000
TE 11,11	-0.007	0.000	0.000	0.000	0.000	0.000
TE 12,12	-0.026	-0.002	0.000	0.000	0.000	0.000
TE 13,13	-0.014	-0.001	0.000	0.000	0.000	0.000
TE 14,14	-0.021	-0.001	0.000	0.000	0.000	0.000
TE 15,15	0.000	-0.172	0.000	0.000	0.000	0.000
TE 16,16	0.000	-0.012	0.000	0.000	0.000	0.000
TE 17,17	0.000	-0.007	0.000	0.000	0.000	0.000
TE 18,18	0.000	-0.001	0.000	0.000	0.000	0.000
TD 1,1	-0.001	0.000	0.000	0.000	0.000	0.000
TD 2,2	-0.011	0.000	0.000	0.000	0.000	0.000
TD 3,3	-0.004	0.000	0.000	0.000	0.000	0.000
TD 4,4	-0.014	0.000	0.000	0.000	0.000	0.000
TD 5,5	-0.003	0.000	0.000	0.000	0.000	0.000
TD 6,6	-0.009	0.000	0.000	0.000	0.000	0.000
TD 7,7	-0.003	0.000	0.000	0.000	0.000	0.000
TD 8,8	-0.005	0.000	0.000	0.000	0.000	0.000
TD 9,9	-0.009	0.000	0.000	0.000	0.000	0.000
TD 10,10	-0.003	0.000	0.000	0.000	0.000	0.000
TD 11,11	-0.007	0.000	0.000	0.000	0.000	0.000
TD 12,12	-0.001	0.000	0.000	0.000	0.000	0.000
TD 13,13	-0.001	0.000	0.000	0.000	0.000	0.000
TD 14,14	-0.002	0.000	0.000	0.000	0.000	0.000
TD 15,15	-0.001	0.000	0.000	0.000	0.000	0.000
TD 16,16	-0.003	0.000	0.000	0.000	0.000	0.000
TD 17,17	-0.002	0.000	0.000	0.000	0.000	0.000
TD 18,18	-0.002	0.000	0.000	0.000	0.000	0.000
TD 19,19	-0.004	0.000	0.000	0.000	0.000	0.000
0	CORRELATIONS OF ESTIMATES					
0	TE 5,5	TE 6,6	TE 7,7	TE 8,8	TE 9,9	TE 10,10
+						
TE 5,5	1.000					
TE 6,6	0.000	1.000				
TE 7,7	0.000	-0.017	1.000			
TE 8,8	0.000	-0.008	-0.003	1.000		
TE 9,9	0.000	-0.007	-0.003	-0.001	1.000	
TE 10,10	0.000	-0.010	-0.004	-0.002	-0.002	1.000
TE 11,11	0.000	-0.009	-0.004	-0.002	-0.002	-0.002
TE 12,12	0.000	-0.036	-0.016	-0.007	-0.007	-0.010
TE 13,13	0.000	-0.020	-0.009	-0.004	-0.004	-0.005
TE 14,14	0.000	-0.030	-0.013	-0.006	-0.006	-0.008

TE 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TE 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TE 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TE 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TD 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TD 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TD 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TD 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TD 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TD 14,14	0.000	0.000	0.000	0.000	0.000	0.000
TD 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TD 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TD 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TD 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 19,19	0.000	0.000	0.000	0.000	0.000	0.000
0	CORRELATIONS OF ESTIMATES					
0	TE 11,11	TE 12,12	TE 13,13	TE 14,14	TE 15,15	TE 16,16
+						
TE 11,11	1.000					
TE 12,12	-0.009	1.000				
TE 13,13	-0.005	-0.018	1.000			
TE 14,14	-0.007	-0.028	-0.015	1.000		
TE 15,15	0.000	0.000	0.000	0.000	1.000	
TE 16,16	0.000	0.000	0.000	0.000	-0.188	1.000
TE 17,17	0.000	0.000	0.000	0.000	-0.108	-0.054
TE 18,18	0.000	0.000	0.000	0.000	-0.021	-0.010
TD 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TD 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TD 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 10,10	0.000	0.000	0.000	0.000	0.000	0.000
TD 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TD 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TD 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TD 14,14	0.000	0.000	0.000	0.000	0.000	0.000
TD 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TD 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TD 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TD 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 19,19	0.000	0.000	0.000	0.000	0.000	0.000
0	CORRELATIONS OF ESTIMATES					
0	TE 17,17	TE 18,18	TD 1,1	TD 2,2	TD 3,3	TD 4,4
+						
TE 17,17	1.000					
TE 18,18	-0.006	1.000				
TD 1,1	0.000	0.000	1.000			
TD 2,2	0.000	0.000	0.052	1.000		
TD 3,3	0.000	0.000	0.000	0.000	1.000	
TD 4,4	0.000	0.000	0.000	0.000	-0.004	1.000

TD 5,5	0.000	0.000	0.000	0.000	-0.001	-0.002
TD 6,6	0.000	0.000	0.000	0.000	-0.003	-0.008
TD 7,7	0.000	0.000	0.000	0.000	-0.001	-0.002
TD 8,8	0.000	0.000	0.000	0.000	-0.002	-0.005
TD 9,9	0.000	0.000	0.000	0.000	-0.003	-0.008
TD 10,10	0.000	0.000	0.000	0.000	-0.001	-0.003
TD 11,11	0.000	0.000	0.003	0.000	0.003	0.000
TD 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TD 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TD 14,14	0.000	0.000	0.000	0.000	0.000	0.000
TD 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TD 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TD 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TD 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 19,19	0.000	0.000	0.000	0.000	0.000	0.000

0 CORRELATIONS OF ESTIMATES

0 TD 5,5 TD 6,6 TD 7,7 TD 8,8 TD 9,9 TD 10,10

+						
TD 5,5	1.000					
TD 6,6	-0.002	1.000				
TD 7,7	0.000	-0.002	1.000			
TD 8,8	-0.001	-0.003	-0.001	1.000		
TD 9,9	-0.002	-0.006	-0.002	-0.003	1.000	
TD 10,10	-0.001	-0.002	0.000	-0.001	-0.002	1.000
TD 11,11	0.000	0.000	0.000	0.000	0.000	0.000
TD 12,12	0.000	0.000	0.000	0.000	0.000	0.000
TD 13,13	0.000	0.000	0.000	0.000	0.000	0.000
TD 14,14	0.000	0.000	0.000	0.000	0.000	0.000
TD 15,15	0.000	0.000	0.000	0.000	0.000	0.000
TD 16,16	0.000	0.000	0.000	0.000	0.000	0.000
TD 17,17	0.000	0.000	0.000	0.000	0.000	0.000
TD 18,18	0.000	0.000	0.000	0.000	0.000	0.000
TD 19,19	0.000	0.000	0.000	0.000	0.000	0.000

0 CORRELATIONS OF ESTIMATES

0 TD 11,11 TD 12,12 TD 13,13 TD 14,14 TD 15,15 TD 16,16

+						
TD 11,11	1.000					
TD 12,12	-0.005	1.000				
TD 13,13	-0.006	-0.001	1.000			
TD 14,14	-0.018	-0.002	-0.002	1.000		
TD 15,15	-0.007	-0.001	-0.001	-0.002	1.000	
TD 16,16	-0.023	-0.002	-0.003	-0.008	-0.003	1.000
TD 17,17	-0.018	-0.002	-0.002	-0.006	-0.002	-0.008
TD 18,18	-0.015	-0.001	-0.002	-0.005	-0.002	-0.007
TD 19,19	-0.029	-0.002	-0.003	-0.010	-0.004	-0.012

0 CORRELATIONS OF ESTIMATES

0 TD 17,17 TD 18,18 TD 19,19

+			
TD 17,17	1.000		
TD 18,18	-0.005	1.000	
TD 19,19	-0.010	-0.008	1.000

1TITLE TESTING THE MAIN MODEL
-T-VALUES

0	LAMBDA Y			
0	SERVQUAL	SATISFAC	LOYALTY	
+				
EMPATHY	0.000	0.000	0.000	
RELIABL	20.291	0.000	0.000	
RESPONS	15.471	0.000	0.000	
ASSURAN	17.035	0.000	0.000	
TANGIBL	10.785	0.000	0.000	
D08	0.000	0.000	0.000	
D02	0.000	25.548	0.000	
D03	0.000	19.422	0.000	
D04	0.000	19.278	0.000	
D05	0.000	21.821	0.000	
D06	0.000	20.858	0.000	
D07	0.000	30.908	0.000	
D01	0.000	26.800	0.000	
D09	0.000	29.721	0.000	
F03	0.000	0.000	0.000	
F04	0.000	0.000	28.472	
F08	0.000	0.000	25.646	
F13	0.000	0.000	14.682	

0	LAMBDA X			
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR
+				
TOT1	0.000	0.000	0.000	0.000
MONTHS	0.000	0.000	0.000	0.000
B01	0.000	0.000	0.000	0.000
B04	0.000	0.000	21.134	0.000
B05	0.000	0.000	11.612	0.000
B02	0.000	0.000	18.923	0.000
B06	0.000	0.000	11.523	0.000
B08	0.000	0.000	15.523	0.000
B10	0.000	0.000	18.977	0.000
B13	0.000	0.000	12.252	0.000
A08	0.000	0.000	0.000	0.000
A15	0.000	0.000	0.000	10.822
A02	0.000	0.000	0.000	12.344
A07	0.000	0.000	0.000	19.313
A12	0.000	0.000	0.000	12.881
A01	0.000	0.000	0.000	20.962
A16	0.000	0.000	0.000	19.229
A25	0.000	0.000	0.000	18.139
A09	0.000	0.000	0.000	22.478

0	BETA			
0	SERVQUAL	SATISFAC	LOYALTY	
+				
SERVQUAL	0.000	0.000	0.000	
SATISFAC	3.956	0.000	0.000	
LOYALTY	4.481	3.459	0.000	

0	GAMMA			
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR
+				
SERVQUAL	0.435	1.353	5.701	2.812
SATISFAC	-0.251	1.352	2.469	2.841
LOYALTY	0.000	0.000	0.000	0.000

0	PHI					
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR		
+						
	ACCOUNTS	0.000				
	MONTHS	3.780	0.000			
	EQUITY	2.385	1.292	0.000		
	FIRMCHAR	3.303	1.102	63.618	0.000	
0	PSI					
0	SERVQUAL	SATISFAC	LOYALTY			
+						
		5.207	7.462	8.233		
0	THETA EPS					
0	EMPATHY	RELIABL	RESPONS	ASSURAN	TANGIBL	D08
+						
		9.559	10.004	11.224	10.948	11.725
0	THETA EPS					
0	D02	D03	D04	D05	D06	D07
+						
		11.041	11.578	11.587	11.409	11.482
0	THETA EPS					
0	D01	D09	F03	F04	F08	F13
+						
		10.877	10.371	7.479	8.697	9.788
0	THETA DELTA					
0	TOT1	MONTHS	B01	B04	B05	B02
+						
		2.452	2.420	11.429	10.240	11.676
0	THETA DELTA					
0	B06	B08	B10	B13	A08	A15
+						
		11.682	11.295	10.749	11.626	9.628
0	THETA DELTA					
0	A02	A07	A12	A01	A16	A25
+						
		11.715	11.076	11.681	10.841	11.087
0	THETA DELTA					
0	A09					
+						
		10.582				
1TITLE TESTING THE MAIN MODEL						
-TOTAL AND INDIRECT EFFECTS						
0	TOTAL EFFECTS OF KSI ON	ETA				
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR		
+						
	SERVQUAL	0.015	0.046	0.583	0.285	
	SATISFAC	-0.001	0.061	0.548	0.379	
	LOYALTY	0.008	0.048	0.531	0.302	
0	STANDARD ERRORS FOR TOTAL EFFECTS OF KSI ON	ETA				
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR		
+						
	SERVQUAL	0.035	0.034	0.102	0.101	
	SATISFAC	0.033	0.032	0.095	0.095	
	LOYALTY	0.027	0.026	0.081	0.079	
0	INDIRECT EFFECTS OF KSI ON	ETA				
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR		
+						
	SERVQUAL	0.000	0.000	0.000	0.000	
	SATISFAC	0.007	0.021	0.263	0.129	
	LOYALTY	0.008	0.048	0.531	0.302	

0	STANDARD ERRORS FOR INDIRECT EFFECTS OF KSI ON				ETA
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR	
+					
	SERVQUAL	0.000	0.000	0.000	0.000
	SATISFAC	0.016	0.016	0.078	0.057
	LOYALTY	0.027	0.026	0.081	0.079
0	TOTAL EFFECTS OF ETA ON				ETA
0	SERVQUAL	SATISFAC	LOYALTY		
+					
	SERVQUAL	0.000	0.000	0.000	
	SATISFAC	0.451	0.000	0.000	
	LOYALTY	0.722	0.385	0.000	
0	LARGEST EIGENVALUE OF B*B' (STABILITY INDEX) IS				0.602
0	STANDARD ERRORS FOR TOTAL EFFECTS OF ETA ON				ETA
0	SERVQUAL	SATISFAC	LOYALTY		
+					
	SERVQUAL	0.000	0.000	0.000	
	SATISFAC	0.114	0.000	0.000	
	LOYALTY	0.096	0.111	0.000	
0	INDIRECT EFFECTS OF ETA ON				ETA
0	SERVQUAL	SATISFAC	LOYALTY		
+					
	SERVQUAL	0.000	0.000	0.000	
	SATISFAC	0.000	0.000	0.000	
	LOYALTY	0.174	0.000	0.000	
0	STANDARD ERRORS FOR INDIRECT EFFECTS OF ETA ON				ETA
0	SERVQUAL	SATISFAC	LOYALTY		
+					
	SERVQUAL	0.000	0.000	0.000	
	SATISFAC	0.000	0.000	0.000	
	LOYALTY	0.059	0.000	0.000	
0	TOTAL EFFECTS OF ETA ON				Y
0	SERVQUAL	SATISFAC	LOYALTY		
+					
	EMPATHY	1.000	0.000	0.000	
	RELIABL	0.976	0.000	0.000	
	RESPONS	0.828	0.000	0.000	
	ASSURAN	0.881	0.000	0.000	
	TANGIBL	0.634	0.000	0.000	
	D08	0.451	1.000	0.000	
	D02	0.422	0.936	0.000	
	D03	0.374	0.830	0.000	
	D04	0.373	0.827	0.000	
	D05	0.396	0.878	0.000	
	D06	0.387	0.860	0.000	
	D07	0.449	0.996	0.000	
	D01	0.429	0.952	0.000	
	D09	0.444	0.985	0.000	
	F03	0.722	0.385	1.000	
	F04	0.705	0.376	0.977	
	F08	0.680	0.362	0.941	
	F13	0.515	0.275	0.714	

0 STANDARD ERRORS FOR TOTAL EFFECTS OF ETA ON Y
0 SERVQUAL SATISFAC LOYALTY
+

EMPATHY	0.000	0.000	0.000
RELIABL	0.048	0.000	0.000
RESPONS	0.054	0.000	0.000
ASSURAN	0.052	0.000	0.000
TANGIBL	0.059	0.000	0.000
D08	0.114	0.000	0.000
D02	0.107	0.037	0.000
D03	0.096	0.043	0.000
D04	0.095	0.043	0.000
D05	0.101	0.040	0.000
D06	0.099	0.041	0.000
D07	0.114	0.032	0.000
D01	0.109	0.036	0.000
D09	0.112	0.033	0.000
F03	0.096	0.111	0.000
F04	0.095	0.109	0.034
F08	0.092	0.105	0.037
F13	0.075	0.081	0.049

0 INDIRECT EFFECTS OF ETA ON Y
0 SERVQUAL SATISFAC LOYALTY
+

EMPATHY	0.000	0.000	0.000
RELIABL	0.000	0.000	0.000
RESPONS	0.000	0.000	0.000
ASSURAN	0.000	0.000	0.000
TANGIBL	0.000	0.000	0.000
D08	0.451	0.000	0.000
D02	0.422	0.000	0.000
D03	0.374	0.000	0.000
D04	0.373	0.000	0.000
D05	0.396	0.000	0.000
D06	0.387	0.000	0.000
D07	0.449	0.000	0.000
D01	0.429	0.000	0.000
D09	0.444	0.000	0.000
F03	0.722	0.385	0.000
F04	0.705	0.376	0.000
F08	0.680	0.362	0.000
F13	0.515	0.275	0.000

0 STANDARD ERRORS FOR INDIRECT EFFECTS OF ETA ON Y
0 SERVQUAL SATISFAC LOYALTY
+

EMPATHY	0.000	0.000	0.000
RELIABL	0.000	0.000	0.000
RESPONS	0.000	0.000	0.000
ASSURAN	0.000	0.000	0.000
TANGIBL	0.000	0.000	0.000
D08	0.114	0.000	0.000
D02	0.107	0.000	0.000
D03	0.096	0.000	0.000
D04	0.095	0.000	0.000
D05	0.101	0.000	0.000
D06	0.099	0.000	0.000
D07	0.114	0.000	0.000
D01	0.109	0.000	0.000
D09	0.112	0.000	0.000
F03	0.096	0.111	0.000
F04	0.095	0.109	0.000
F08	0.092	0.105	0.000
F13	0.075	0.081	0.000

0 TOTAL EFFECTS OF KSI ON Y
0 ACCOUNTS MONTHS EQUITY FIRMCHAR
+

EMPATHY	0.015	0.046	0.583	0.285
RELIABL	0.015	0.045	0.569	0.278
RESPONS	0.013	0.038	0.483	0.236
ASSURAN	0.013	0.040	0.514	0.251
TANGIBL	0.010	0.029	0.370	0.181
D08	-0.001	0.061	0.548	0.379
D02	-0.001	0.057	0.513	0.355
D03	-0.001	0.050	0.455	0.315
D04	-0.001	0.050	0.454	0.314
D05	-0.001	0.053	0.481	0.333
D06	-0.001	0.052	0.471	0.326
D07	-0.001	0.060	0.546	0.378
D01	-0.001	0.058	0.522	0.361
D09	-0.001	0.060	0.540	0.373
F03	0.008	0.048	0.531	0.302
F04	0.008	0.047	0.519	0.295
F08	0.008	0.046	0.500	0.285
F13	0.006	0.035	0.379	0.216

0	STANDARD ERRORS FOR TOTAL EFFECTS OF KSI ON Y			
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR
+				
EMPATHY	0.035	0.034	0.102	0.101
RELIABL	0.034	0.033	0.100	0.099
RESPONS	0.029	0.028	0.087	0.085
ASSURAN	0.031	0.030	0.092	0.090
TANGIBL	0.022	0.022	0.071	0.066
D08	0.033	0.032	0.095	0.095
D02	0.031	0.030	0.090	0.089
D03	0.027	0.027	0.081	0.080
D04	0.027	0.027	0.081	0.080
D05	0.029	0.028	0.085	0.084
D06	0.028	0.028	0.084	0.083
D07	0.033	0.032	0.095	0.095
D01	0.031	0.030	0.091	0.091
D09	0.032	0.032	0.094	0.094
F03	0.027	0.026	0.081	0.079
F04	0.026	0.026	0.080	0.078
F08	0.025	0.025	0.077	0.075
F13	0.019	0.019	0.062	0.058

1TITLE TESTING THE MAIN MODEL
-STANDARDIZED SOLUTION

0	LAMBDA Y		
0	SERVQUAL	SATISFAC	LOYALTY
+			
EMPATHY	0.920	0.000	0.000
RELIABL	0.898	0.000	0.000
RESPONS	0.762	0.000	0.000
ASSURAN	0.811	0.000	0.000
TANGIBL	0.583	0.000	0.000
D08	0.000	0.985	0.000
D02	0.000	0.922	0.000
D03	0.000	0.818	0.000
D04	0.000	0.815	0.000
D05	0.000	0.864	0.000
D06	0.000	0.847	0.000
D07	0.000	0.981	0.000
D01	0.000	0.938	0.000
D09	0.000	0.970	0.000
F03	0.000	0.000	0.980
F04	0.000	0.000	0.957
F08	0.000	0.000	0.922
F13	0.000	0.000	0.699

0	LAMBDA X						
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR			
+							
	TOT1	0.894	0.000	0.000	0.000		
	MONTHS	0.000	0.894	0.000	0.000		
	B01	0.000	0.000	0.747	0.000		
	B04	0.000	0.000	0.885	0.000		
	B05	0.000	0.000	0.608	0.000		
	B02	0.000	0.000	0.836	0.000		
	B06	0.000	0.000	0.605	0.000		
	B08	0.000	0.000	0.745	0.000		
	B10	0.000	0.000	0.838	0.000		
	B13	0.000	0.000	0.633	0.000		
	A08	0.000	0.000	0.000	0.961		
	A15	0.000	0.000	0.000	0.569		
	A02	0.000	0.000	0.000	0.627		
	A07	0.000	0.000	0.000	0.826		
	A12	0.000	0.000	0.000	0.646		
	A01	0.000	0.000	0.000	0.860		
	A16	0.000	0.000	0.000	0.824		
	A25	0.000	0.000	0.000	0.799		
	A09	0.000	0.000	0.000	0.887		
0	BETA						
0	SERVQUAL	SATISFAC	LOYALTY				
+							
	SERVQUAL	0.000	0.000	0.000			
	SATISFAC	0.421	0.000	0.000			
	LOYALTY	0.515	0.387	0.000			
0	GAMMA						
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR			
+							
	SERVQUAL	0.017	0.050	0.634	0.310		
	SATISFAC	-0.008	0.041	0.290	0.254		
	LOYALTY	0.000	0.000	0.000	0.000		
0	CORRELATION MATRIX OF ETA AND KSI						
0	SERVQUAL	SATISFAC	LOYALTY	ACCOUNTS	MONTHS	EQUITY	
+							
	SERVQUAL	1.000					
	SATISFAC	0.921	1.000				
	LOYALTY	0.872	0.861	1.000			
	ACCOUNTS	0.202	0.192	0.178	1.000		
	MONTHS	0.134	0.139	0.123	0.285	1.000	
	EQUITY	0.925	0.914	0.830	0.162	0.089	1.000
	FIRMCHAR	0.897	0.899	0.810	0.220	0.074	0.915
0	CORRELATION MATRIX OF ETA AND KSI						
0	FIRMCHAR						
+							
	FIRMCHAR	1.000					
0	PSI						
0	SERVQUAL	SATISFAC	LOYALTY				
+							
		0.126	0.115	0.218			
0	REGRESSION MATRIX ETA ON KSI (STANDARDIZED)						
0	ACCOUNTS	MONTHS	EQUITY	FIRMCHAR			
+							
	SERVQUAL	0.017	0.050	0.634	0.310		
	SATISFAC	-0.001	0.062	0.557	0.385		
	LOYALTY	0.008	0.049	0.542	0.309		

1TITLE TESTING THE MAIN MODEL

-MODIFICATION INDICES AND ESTIMATED CHANGE

0 MODIFICATION INDICES FOR LAMBDA Y
0 SERVQUAL SATISFAC LOYALTY

+			
EMPATHY	0.000	0.006	1.083
RELIABL	0.000	0.173	7.948
RESPONS	0.000	1.046	3.111
ASSURAN	0.000	0.669	4.452
TANGIBL	0.000	0.206	0.668
D08	0.316	0.000	0.003
D02	6.702	0.000	6.506
D03	1.133	0.000	10.074
D04	10.699	0.000	3.201
D05	11.483	0.000	0.251
D06	4.171	0.000	3.044
D07	15.988	0.000	7.116
D01	0.193	0.000	12.066
D09	0.241	0.000	0.071
F03	15.621	15.480	0.000
F04	15.123	21.360	0.000
F08	2.590	1.004	0.000
F13	6.310	8.163	0.000

0 ESTIMATED CHANGE FOR LAMBDA Y
0 SERVQUAL SATISFAC LOYALTY

+			
EMPATHY	0.000	-0.011	-0.098
RELIABL	0.000	0.059	0.271
RESPONS	0.000	-0.159	0.197
ASSURAN	0.000	0.123	-0.224
TANGIBL	0.000	-0.079	-0.105
D08	0.053	0.000	0.003
D02	-0.299	0.000	-0.180
D03	-0.152	0.000	0.280
D04	0.470	0.000	0.158
D05	0.446	0.000	0.041
D06	0.278	0.000	-0.146
D07	-0.381	0.000	-0.154
D01	0.048	0.000	0.235
D09	0.049	0.000	0.016
F03	0.348	0.286	0.000
F04	-0.344	-0.338	0.000
F08	-0.147	-0.076	0.000
F13	0.309	0.292	0.000

0 MODIFICATION INDICES FOR LAMBDA X
0 ACCOUNTS MONTHS EQUITY FIRMCHAR

+				
TOT1	0.000	0.000	0.000	0.000
MONTHS	0.000	0.000	0.000	0.000
B01	2.215	1.011	2.166	2.628
B04	0.378	1.832	0.000	5.507
B05	4.196	1.344	0.000	0.001
B02	0.669	0.855	0.000	0.430
B06	0.223	0.292	0.000	0.621
B08	2.994	0.083	0.000	0.886
B10	2.897	4.256	0.000	0.950
B13	0.440	0.180	0.000	0.238
A08	0.004	0.090	5.687	0.775
A15	0.041	1.565	0.044	0.000
A02	0.006	0.319	0.087	0.000
A07	0.043	1.420	3.397	0.000
A12	4.681	1.734	2.978	0.000

	A01	0.064	0.849	11.657	0.000
	A16	2.678	0.134	11.747	0.000
	A25	1.269	0.175	65.212	0.000
	A09	0.072	0.045	0.307	0.000
0	ESTIMATED CHANGE FOR LAMBDA X				
0	ACCOUNTS		MONTHS	EQUITY	FIRMCHAR
+					
	TOT1	0.000	0.000	0.000	0.000
	MONTHS	0.000	0.000	0.000	0.000
	B01	-0.079	-0.054	-0.077	-0.084
	B04	-0.027	-0.058	0.000	0.324
	B05	0.116	0.065	0.000	0.005
	B02	0.038	-0.042	0.000	0.095
	B06	-0.027	0.030	0.000	-0.135
	B08	-0.088	-0.014	0.000	-0.147
	B10	0.078	0.093	0.000	-0.140
	B13	-0.037	0.023	0.000	-0.082
	A08	0.002	-0.011	-0.105	-0.040
	A15	0.012	0.071	0.036	0.000
	A02	0.004	-0.031	-0.049	0.000
	A07	0.009	0.053	-0.255	0.000
	A12	0.119	0.070	0.284	0.000
	A01	0.011	-0.039	-0.453	0.000
	A16	-0.075	-0.016	0.476	0.000
	A25	-0.053	-0.019	1.155	0.000
	A09	0.011	-0.009	-0.071	0.000
0	MODIFICATION INDICES FOR BETA				
0	SERVQUAL		SATISFAC	LOYALTY	
+					
	SERVQUAL	0.000	0.000	1.204	
	SATISFAC	0.000	0.000	1.439	
	LOYALTY	0.000	0.000	0.000	
0	ESTIMATED CHANGE FOR BETA				
0	SERVQUAL		SATISFAC	LOYALTY	
+					
	SERVQUAL	0.000	0.000	0.093	
	SATISFAC	0.000	0.000	0.167	
	LOYALTY	0.000	0.000	0.000	
0	MODIFICATION INDICES FOR GAMMA				
0	ACCOUNTS		MONTHS	EQUITY	FIRMCHAR
+					
	SERVQUAL	0.000	0.000	0.000	0.000
	SATISFAC	0.000	0.000	0.000	0.000
	LOYALTY	0.161	0.014	0.728	1.078
0	ESTIMATED CHANGE FOR GAMMA				
0	ACCOUNTS		MONTHS	EQUITY	FIRMCHAR
+					
	SERVQUAL	0.000	0.000	0.000	0.000
	SATISFAC	0.000	0.000	0.000	0.000
	LOYALTY	0.015	-0.004	-0.115	-0.105
0	MODIFICATION INDICES FOR PHI				
0	ACCOUNTS		MONTHS	EQUITY	FIRMCHAR
+					
	ACCOUNTS	0.000			
	MONTHS	0.000	0.000		
	EQUITY	0.000	0.000	2.166	
	FIRMCHAR	0.000	0.000	0.000	0.775

```

0      ESTIMATED CHANGE FOR PHI
0      ACCOUNTS      MONTHS      EQUITY      FIRMCHAR
+
ACCOUNTS      0.000
MONTHS      0.000      0.000
EQUITY      0.000      0.000      -0.205
FIRMCHAR      0.000      0.000      0.000      -0.083
0NO NON-ZERO MODIFICATION INDICES FOR PSI
0NO NON-ZERO MODIFICATION INDICES FOR THETA EPS
0NO NON-ZERO MODIFICATION INDICES FOR THETA DELTA
0      MAXIMUM MODIFICATION INDEX IS 65.21 FOR ELEMENT (18, 3) OF LAMBDA X
-      THE PROBLEM USED 108632 BYTES (= 1.9% OF AVAILABLE WORKSPACE)
-      TIME USED : 0.00 SECONDS
OPRECEDING TASK REQUIRED 10.54 SECONDS CPU TIME; 26.04 SECONDS ELAPSED.

1580 FINISH
0 1580 COMMAND LINES READ.
0 ERRORS DETECTED.
0 WARNINGS ISSUED.
13 SECONDS CPU TIME.
35 SECONDS ELAPSED TIME.
END OF JOB.

```

BIBLIOGRAPHY

- Aaker, David A. (1992) Strategic Market Management (3rd ed.) New York, New York: John Wiley, 1992.
- _____ and George Day (1986), "The Perils of High-Growth Markets," Strategic Management Journal, (September-October), 409-421.
- Allport, G. W. (1935), "Attitudes," in A Handbook of Social Psychology, C. A. Murchinson, ed. Worcester, MA: Clark University Press, 798-844.
- Alreck, Pamela L. and Robert B. Settle (1995). The Survey Research Handbook. Homewood, IL: Richard Irwin.
- Anderson, Carl R. and Frank T. Paine (1978), "PIMS: A Reexamination," Academy of Management Review, (July), 602-612.
- Anderson, Eugene W. and Mary W. Sullivan (1993), "The Antecedents and Consequences of Customer Satisfaction for Firms," Marketing Science, 12 (Spring), 125-43.
- _____, Claes Fornell, and Donald R. Lehmann (1994), "Customer Satisfaction, Market Share, and Profitability: Findings from Sweden," Journal of Marketing, 58 (July), 53-66.
- Anderson, Rolph E. (1973), "Consumer Dissatisfaction: The Effect of Disconfirmed Expectancy on Perceived Product Performance," Journal of Marketing Research, 10 (February), 38-44.
- Anderson, W., E.P. Cox, and D.G. Fulcher (1977), "Bank Selection Decisions and Market Segmentation," Journal of Marketing, 40 (January), 85-87.
- Andreassen, Alan R. (1984), "Life Status Changes and Changes in Consumer Preferences and Satisfaction," Journal of Consumer Research, 11 (December), 784-793.
- Babakus E. and G. W. Boller (1992), An Empirical Assessment of the SERVQUAL Scale, " Journal of Business Research, 24, 253-268.
- _____ and W. G. Mangold (1989), "Adapting the SERVQUAL Scale to the Health Care Environment: An Empirical Assessment," in AMA Educators' Proceedings, Paul Bloom, ed. Chicago, IL: American Marketing Association.

Bateson, John E.G. (1989) Managing Services Marketing: Text and Readings. Hinsdale, Illinois: The Dryden Press: 1989.

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

_____, Melissa Crockett, and Jesse E. Teel (1981), "Disconfirmation of Purchase Expectations and Subsequent Consumer Attitudes and Patronage Intentions," (May), American Marketing Association Retail Patronage Theory Conference.

Berry, Leonard L. (1983), "Relationship Marketing," in Emerging Perspectives on Services Marketing, Leonard L. Berry, et al., (eds.) Chicago, Illinois: American Marketing Association, 25-28.

_____, (1980), "Services Marketing is Different," in Marketing Classics, Ben M. Enis and Keith K. Cox, eds. Boston, MA: Allyn and Bacon, 392-400.

_____ and Terry Clark (1986), "Four Ways to Make Services More Tangible," Business (October-December), 53-4.

Bhattacharya, C.B., Hayagreeva Rao, and Mary Ann Glynn (1995), "Understanding the Bond of Identification: An Investigation of Its Correlates Among Art Museum Members," Journal of Marketing, 59 (October), 46-57.

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

_____, (1992), "Servicescapes: The Impact of Physical Surroundings on Customers and Employees," Journal of Marketing, 56 (April), 57-71.

_____, Bernard H. Booms, and Mary Stanfield Tetreault (1990), "The Service Encounter: Diagnosing Favorable and Unfavorable Incidents," Journal of Marketing, 54 (January), 71-84.

_____, and Amy R. Hubbert (1994), "Encounter Satisfaction versus Overall Satisfaction versus Quality," in Service Quality, R. Rust and R. Oliver, eds. Thousand Oaks, CA: Sage Publications, 72-94.

- Bloch, Peter H. and Marsha L. Richins (1983), "A Theoretical Model for the Study of Product Importance Perceptions," Journal of Marketing, 47 (Summer), 69-81.
- Bloom, Paul N. and Philip Kotler (1975), "Strategies for High Market Share Companies," Harvard Business Review, (November-December), 63-72.
- Bolton, Ruth N. and James H. Drew (1994), "Linking Customer Satisfaction to Service Operations and Outcomes," in Service Quality, R. Rust and R. Oliver, eds. Thousand Oaks, CA: Sage Publications, 173-200.
- ____ (1992), "Mitigating the Effect of Service Encounters," Marketing Letters, 3, 57-70.
- ____ and ____ (1991a), "A Longitudinal Analysis of the Impact of Service Changes on Consumer Attitudes," Journal of Marketing, 55 (January), 1-9.
- ____ and ____ (1991b), "A Multi-Stage Model of Customers' Assessments of Service Quality and Value," Journal of Consumer Research, 17 (March), 375-84.
- Boston Consulting Group (1968). Perspectives on Experience. Boston, Massachusetts: Boston Consulting Group, 1968.
- Boulding, William, Ajay Kalra, Richard Staelin, and Valarie A. Zeithaml (1993), "A Dynamic Process Model of Service Quality: From expectations to Behavioral Intentions," Journal of Marketing Research, 30 (February), 7-27).
- Brown, Stephen W. and Teresa A. Swartz (1989), "A Gap Analysis of Professional Service Quality," Journal of Marketing, 53 (April), 92-98.
- Brown, Tom J., Gilbert A. Churchill, Jr., and J. Peter Paul (1993), "Improving the Measurement of Service Quality," Journal of Retailing, 69 (Spring), 127-39.
- Buzzell, Robert D., and Bradley T. Gale (1987). The PIMS Principles: Linking Strategy to Performance. New York, New York: The Free Press.
- ____, Bradley T. Gale, and Ralph G. M. Sultan (1975), "Market Share-A Key to Profitability," Harvard Business Review, (January-February), 97-106.
- Bunn, Michele D. (1993), "Taxonomy of Buying Decisions," Journal of Marketing, 57 (January), 38-56.

- Calori, R. and J. M. Ardisson (1988), "Differentiation Strategies in 'Stalemate' Industries," Strategic Management Journal, 9 (May-June), 255-269.
- Carman, James M. (1990), "Consumer Perceptions of Service Quality: An Assessment of The SERVQUAL Dimensions," Journal of Retailing, 66 (Spring), 33-55.
- _____ and Eric Langeard (1980), "Growth Strategies for Service Firms," Strategic Management Journal, 1 (January/February/March), 7-22.
- Carroll, Peter (1980), "Upgrading the Retail Customer Mix," Journal of Retail Banking, 12, (Winter), 25-29.
- _____ (1991), "The Fallacy of Customer Retention," Journal of Retail Banking, 8, (Winter), 15-20.
- Caves, R. and Michael Porter (1978), "Market Structure, Oligopoly, and Stability of Market Shares," Journal of Industrial Economics, 2, 289-313.
- Churchill, Gilbert A. and Carol Suprenant (1982), "An Investigation Into the Determinants of Customer Satisfaction," Journal of Marketing Research, 14 (November), 491-504.
- Clow, Kenneth E. and John L. Beisel (1995), "Managing Expectations of Low-Margin, High-Volume Services," Journal of Services Marketing, 9 (1), 33-46.
- Clow, K. E., D. L. Kurtz, and J. Ozment (1991), "How Consumers Form Expectations of Service Quality Prior to a First Time Purchase," in Symposium on Patronage Behavior and Retail Strategy: Cutting Edge II, W. Darden, R. Lusch, and B. Mason, eds. Baton Rouge, LA: American Marketing Association and Louisiana State University.
- Council on Financial Competition (1989), Service Quality. Washington, DC: Council on Financial Competition.
- Coyne, Kevin P. (1989), "Beyond Service Fads--Meaningful Strategies for the Real World," Sloan Management Review, 69 (Summer), 69-76.
- Cravens, David W. (1991). Strategic Marketing (3rd ed.) Homewood, Illinois: Richard D. Irwin.
- Cronin, J. Joseph, Jr. and Steven A. Taylor (1992), "Measuring Service Quality: A Reexamination and Extension, " Journal of Marketing, 56 (July), 55-68.

- Crosby, Lawrence A., Kenneth R. Evans and Deborah Cowles (1990), "Relationship Quality in Services Selling: An Interpersonal Influence Perspective," Journal of Marketing, 54 (July), 68-81.
- Crossen, Cynthia (1991), "Studies Galore Support Products and Positions, But are They Reliable?" Wall Street Journal, CCXVIII, (November 14), 1+.
- Czepiel, John A. (1992). Competitive Marketing Strategy. Englewood Cliffs, NJ: Prentice-Hall.
- Dabholkar, Pratibha A. and Dayle I. Thorpe (1994), "Does Customer Satisfaction Predict Shopper Intentions?" Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior, 7, 161-171.
- Day, George (1981) "Strategic Market Analysis and Definition," Strategic Management Journal, 2, 281-299.
- Day, Ralph (1977), "Toward a Process Model of Consumer Satisfaction," in Conceptualization and Measurement of Consumer Satisfaction and Dissatisfaction, H. Keith Hunt, ed. Cambridge, MA: Marketing Science Institute (May), 153-86.
- _____ (1984), "Modeling Choices Among Alternative Responses to Dissatisfaction," in Advances in Consumer Research, T. Kinnear, ed. Provo, UT: Association for Consumer Research, 496-499.
- Demsetz, Harold (1973), "Industry Structure, Market Rivalry, and Public Policy," Journal of Law and Economics, 16 (April), 1-10.
- Dwyer, F. Robert, Paul H. Schurr, and Sejo Oh (1987), "Developing Buyer-Seller Relationships," Journal of Marketing, 51 (April, 11-27).
- Engel, James F. and Roger D. Blackwell (1982). Consumer Behavior, 4th ed. New York, NY: Dryden Press.
- Ferrell, O.C., George H. Lucas, Jr. and David Luck (1994). Strategic Marketing Management: Text and Cases. Cincinnati, OH: Southwestern Publishing.
- Fierman, Jaclyn (1985), "How to Make Money in Mature Markets," Fortune, (November 25), 47-53.

- Finn, David W. and Charles W. Lamb, Jr. (1991), "An Evaluation of the SERVQUAL Scales in a Retail Setting," in Advances in Consumer Research, Rebecca Holman and Michael Solomon, eds. Provo, UT: Association for Consumer Research.
- Fisk, Raymond P. (1981), "Toward a Consumption/Evaluation Process Model for Services," in Marketing of Services, J. H. Donnelly and W.R. George, eds. Chicago, IL: American Marketing Association, 191-95.
- Folkes, Valerie S. (1984), "Consumer Reaction to Product Failure: An Attributional Approach," Journal of Consumer Research, 10, 398-409.
- Fornell, Claes (1992), "A National Customer Satisfaction Barometer: The Swedish Experience," Journal of Marketing, 55 (January), 1-21.
- _____ and David F. Larcker (1981a), "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error," Journal of Marketing Research, 18 (February), 39-50.
- _____ and David F. Larcker (1981b), "Structural Equation Models With Unobservable Variables and Measurement Error: Algebra and Statistics," Journal of Marketing Research, 18 (August), 382-388.
- _____ and Birger Wernerfelt (1987), "Defensive Marketing Strategy by Customer Complaint Management: A Thorough Analysis," Journal of Marketing Research, 24, (November), 337-346.
- _____ and _____ (1988), "A Model for Customer Complaint Management," Marketing Science, 7, (Summer), 271-286.
- Fruhan, William E. Jr. (1972), "Pyrrhic Victories in Fights for Market Share," Harvard Business Review, (September-October), 100-107.
- Gale, Bradley T. (1994), "Customer Satisfaction-Relative to Competitors-Is Where It's At," Marketing and Research Today, 22 (February), 39-53.
- _____ (1992), "Monitoring Customer Satisfaction and Market Perceived Quality," AMA Worth repeating series, No. 922CSO. Chicago, IL: American Marketing Association.

- Garvin, David A. (1987), "Competing on the Eighth Dimensions of Quality," Harvard Business Review, 65 (November-December), 101-9.
- Goldshlager, Arie (1993), "Traditional Retention Tools are Too Little, Too Late," Marketing News, 27 (April 12), 15.
- Goodman, John (1989), "The Nature of Customer Satisfaction," Quality Progress, 22 (February), 37-40.
- Grant, Robert M. (1992) Contemporary Strategy Analysis. Cambridge, Massachusetts: Blackwell, 1992.
- Gronroos, Christian (1982), "A Service-Oriented Approach to Marketing of Services," European Journal of Marketing, 12(8), 589-601.
- _____. (1990). Service Management and Marketing: Managing the Moments of Truth in Service Competition. Lexington, MA: Lexington Books.
- Guadagni, Peter and John D. Little (1983), "A Logit Model of Brand Choice Calibrated on Scanner Data," Marketing Science, 3 (Summer), 208-38.
- Gutman, Jonathan (1982), "A Means-End Chain Model Based on Consumer Categorization Processes," Journal of Marketing, 46 (Spring), 60-72.
- Hair, Joseph F., Jr., Rolph E. Anderson and Ronald L. Tatham (1987). Multivariate Data Analysis. New York, NY: Macmillan.
- Hall, William K. (1980), "Survival Strategies in A Hostile Environment," Harvard Business Review, (September-October), 75-85.
- Halstead, Diane (1989), "Expectations and Disconfirmation Beliefs as Predictors of Consumer Satisfaction, Repurchase Intention, and Complaining Behavior: An Empirical Study," Journal of Consumer Satisfaction, Dissatisfaction, and Complaining Behavior, 2, 17-21.
- Hamermesh, R. G., M. J. Anderson, Jr. and J. E. Harris (1978), "Strategies for Low Market Share Businesses," Harvard Business Review, (May-June), 95-102.
- Hart, Christopher W. L., James L. Heskett, and W. Earl Sasser, Jr. (1990), "The Profitable Art of Service Recovery," Harvard Business Review, 68 (July-August), 148-156.

- Henderson, Bruce D. (1983), "The Anatomy of Competition," Journal of Marketing, vol.47 (Spring), 7-11.
- _____. (1981). Henderson on Corporate Strategy. Cambridge, Massachusetts: Abt Books.
- Heskett, James L. (1987), "Lessons in the Service Sector," Harvard Business Review, (March-April), 118-126.
- Hirschman, A. O. (1970). Exit, Voice and Loyalty Responses to Declines in Firms, Organizations, and States. Cambridge, MA: Harvard University Press.
- Hoch, Stephen J. and John Deighton (1989), "Managing What Consumers Learn from Experience," Journal of Marketing, 53 (April), 1-20.
- _____. and Y. Ha (1986), "Consumer Learning: Advertising and The Ambiguity of Product Experience," Journal of Consumer Research, 13 (September), 221-33.
- Holbrook, Morris B. and K. P. Corfman (1985), "Quality and Value in The Consumption Experience: Phaedrus Rides Again," in Perceived Quality: How Consumers View Stores and Merchandise, J. Jacoby and J. Olson, eds. Lexington, MA: D.C. Heath.
- Howard, John A. and Jagdish N. Sheth (1969), The Theory of Buyer Behavior, New York: John Wiley.
- Huppertz, John W., Sidney J. Arenson, and Richard H. Evans (1978), "An Application of Equity Theory to Buyer-Seller Exchange Situations," Journal of Marketing Research, 15 (May), 250-60.
- Iyer, Gopalkrishnan R. (1995), "Incentives, Identity and Institutions in Relationship Continuity and Stability," Baruch College Working Paper.
- Jacoby, Jacob and R.W. Chestnut (1978), Brand Loyalty: Measurement and Management, New York: John Wiley.
- Jacobson, Robert (1988), "Distinguishing Among Competing Theories of the Market Share Effect," Journal of Marketing, 52 (October), 68-80.
- Jones, J. Morgan, and Fred S. Zufryden (1982), "An Approach for Assessing Demographic and Price Influences on Brand Purchase Behavior," Journal of Marketing, 46 (Winter), 36-46.

- Jones, Thomas O. and W. Earl Sasser, Jr. (1995), "Why Satisfied Customers Defect," Harvard Business Review, (November-December), 88-99.
- Joreskog, Karl G. and Dag Sorbom (1989). LISREL 7: A Guide to the Program and Applications. Chicago, IL: Scientific Software International.
- Kanter, Rosabeth M. (1991), "Service Quality: You Get What You Pay For," Harvard Business Review, (September-October), 8-9 .
- _____ (1991), "Even Closer to the Customer," Harvard Business Review, (January-February), 9-10.
- Kearns, David T. and David A. Nadler (1992). Prophets in the Dark: How Xerox Reinvented Itself and Beat Back the Japanese. New York, NY: Harper Collins Publishers.
- Keaveney, Susan M. (1995), "Customer Switching Behavior in Service Industries: An Exploratory Study," Journal of Marketing, 59 (April), 71-82.
- Kotler, Philip (1991). Marketing Management: Analysis, Planning, Implementation, and Control (7th ed.). Englewood Cliffs, New Jersey: Prentice-Hall.
- _____ (1973), and Sidney J. Levy, "Buying is Marketing Too," Journal of Marketing, 37 (January), 54-59.
- LaBarbera, Priscilla and David Mazursky (1983), "A Longitudinal Assessment of Consumer Satisfaction/Dissatisfaction: The Dynamic Aspect of the Cognitive Process," Journal of Marketing Research, .20 (November), 393-404.
- LaTour, Stephen and Nancy Peat (1980), "The Role of Situationally Produced Expectations, Others Experiences and Prior Experiences in Determining Consumer Satisfaction," in Advances in Consumer Research, Jerry Olson, ed. Ann Arbor, Michigan: Association for Consumer Research.
- LaTour, Stephen and Nancy Peat (1979), "Conceptual and Methodological Issues in Consumer Satisfaction Research," in Advances in Consumer Research, William L. Wilkie, ed. Ann Arbor, Michigan: Association for Consumer Research, 432-37.

- Lehmann, Donald R., William L. Moore, and Terry Elrod 1982), "The Development of Distinct Choice Process Segments over Time: A Stochastic Modeling Approach," Journal of Marketing, 46 (Spring), 48-59.
- Lewis, Robert C. and Bernard H. Booms (1983), "The Marketing Aspects of Service Quality," in Emerging Perspectives on Services Marketing, L. Berry, L. Shostack, and G. Upah, eds. Chicago, IL: American Marketing association, 99-107.
- Liswood, Laura A. (1990) Serving Them Right: Innovative and Powerful Customer Retention Strategies. New York, New York: Harper Business Publishers.
- Loudon, David L. and albert J. Della Bitta (1993). Consumer Behavior: Concepts and Applications. New York, NY: McGraw Hill.
- Lovelock, Christopher H. (1983), "Classifying Services to Gain Strategic Marketing Insights," Journal of Marketing, 47 (Summer), 9-20.
- Macmillam, Ian C., Donald Hambrick and George Day (1982), "The Product Portfolio and Profitability--A PIMS-based Analysis of Industrial-Product Businesses," Academy of Management Journal, 25, 733-755.
- Martin, John (1981), Seven Determinant Problems Behind Bank Retention and Selection Decisions," in Marketing of Services, J. Donnelly and W. George (eds.), Chicago, IL: American Marketing Association, 16-20.
- Martin, Stephen (1988), "Market Power and/or Efficiency," The Review of Economics and Statistics, 70, 331-335.
- Maynes, E. Scott (1985), "Quality as a Normative Concept: A Consumer Economist's Views" in Perceived Quality, Jacob Jacoby and Jerry C. Olson, eds., Lexington, MA: Lexington Books, 193-206.
- Mentzer, John T., Carol C. Bienstock, and Kenneth B. Kahn (1993), "Customer Satisfaction/Service Quality Research: The Defense Logistics Agency," Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior, 6, 43-49.

- Miller, John A. (1977), "Exploring Satisfaction, Modifying Models, Eliciting Expectations, Posing Problems, and Making Meaningful Measurements," in Conceptualization and Measurement of Consumer Satisfaction and Dissatisfaction, H. Keith Hunt, ed. Cambridge, MA: Marketing Science Institute (May), 72-91.
- Morgan, Michael S. and Chekitan S. Dev (1994), "An Empirical Study of Brand Switching for a Retail Service," Journal of Retailing, 70 (3), 267-293.
- Murray, Keith B. (1991), "A Test of Services Marketing Theory," Journal of Marketing, 55 (January), 10-25.
- Nunnally, Jum C. (1978). Psychometric Theory, 2nd ed. New York, NY: McGraw Hill.
- Oliver, Richard L. (1977), "Effect of Expectation and Disconfirmation on Post Exposure Product Evaluation: An Alternative Interpretation," Journal of Applied Psychology, 62, (April), 480-486.
- _____ (1989), "Cognitive, Affective, and Attribute Bases of the Satisfaction Response," Journal of Consumer Research, 20 (December), 418-30.
- _____ (1980), "A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions," Journal of Marketing Research, 17, (November), 460-469.
- _____ (1979), "Product Satisfaction as a Function of Prior Expectation and Subsequent Disconfirmation: New Evidence," in New Dimensions of Consumer Satisfaction and Complaining Behavior, Ralph Day and H. Keith Hunt, eds. Bloomington, IN: Indiana University (October) 66-71.
- _____ and John E. Swan (1989), "Consumer Perceptions of Interpersonal Equity and Satisfaction in Transactions: A Field Survey Approach," Journal of Marketing, 47 (Winter), 68-78.
- _____ and R. S. Winer (1987), "A framework for the Formation and Structure of Consumer Expectations: Review and Propositions," Journal of Economic Psychology, 23 (8), 14-26.
- Olshavsky, Richard W. and John A. Miller (1972), "Consumer Expectations, Product Performance, and Perceived Product Quality," Journal of Marketing Research, 9, (February), 19-21.

- Oliva, Terence A., Richard L. Oliver and Ian C. MacMillan (1992), "A Catastrophe Model for Developing Service Satisfaction Strategies," Journal of Marketing, 56, (July), 83-95.
- Olson, Jerry C. and Philip Dover (1979), "Disconfirmation of Consumer Expectations Through Product Trial," Journal of Applied Psychology, 64 (April), 179-89.
- Ostrom, Amy and Dawn Iacobucci (1995), "Consumer Trade-offs and the Evaluation of Services," Journal of Marketing, 59 (1), 17-38.
- Parasuraman, A, Leonard L. Berry, and Valarie A. Zeithaml (1991), "Refinement and Reassessment of the SERVQUAL Scale," Journal of Retailing, 67 (4), 420-50.
- _____, _____, and _____, (1993), "More on Improving Service Quality Measurement," Journal of Retailing, 69 (Spring), 140-47.
- _____, Valarie A. Zeithaml, and Leonard L. Berry (1985), "A Conceptual Model of Service Quality and Its Implications for Future Research," Journal of Marketing, 49 (Fall), 41-50.
- _____, _____, and _____ (1988), "SERVQUAL: A Multiple Item Scale for Measuring Consumer Perceptions of Service Quality," Journal of Retailing, 64 (1), 12-40.
- _____, _____, and _____ (1994), "Reassessment of Expectations as a Comparison Standard in Measuring Service Quality: Implications for Future Research," Journal of Marketing, 58 (January), 111-24.
- Pfaff, Martin (1976), "The Index of Consumer Satisfaction Measurement Problems and Opportunities in Conceptualization and Measurement of Consumer Satisfaction and Dissatisfaction, H. Keith Hunt, ed. Cambridge, MA: Marketing Science Institute.
- Phillips, Lynn W., Dae R. Chang, and Robert D. Buzzell (1983), "Product Quality, Cost Position and Business Performance: A Test of Some Key Hypotheses," Journal of Marketing, 47 (Spring), 26-43.
- Prakash, Ved and John W. Lounsbury (1984), "The Role of Expectations in The Determination of Consumer Satisfaction," Journal of the Academy of Marketing Science, 12 (Summer), 1-17.

- Prescott, John E., Ajay K. Kohli, and N. Venkatraman (1986), "The Market Share-Profitability Relationship: An Empirical Assessment of Major Assertions and Contradictions," Strategic Management Journal, 7, 377-394.
- Qualls, William, Richard W. Olshavsky, and Ronald E. Michaels (1981), "Shortening of the PLC-An Empirical Test," Journal of Marketing, 45 (Fall), 76-80.
- Raj, S. P. (1985), "Striking a Balance between Brand "Popularity" and Brand Loyalty," Journal of Marketing, 49 (Winter), 53-59.
- Reichheld, Frederick F. (1996), Learning from Customer Defections," Harvard Business Review, (March-April), 56-72.
- _____, (1991), "The Truth of Customer Retention," Journal of Retail Banking, 8 (Winter), 21-25.
- _____, and David W. Kenny (1990), "The Hidden Advantages of Customer Retention," Journal of Retail Banking, 12, (Winter), 19-23.
- _____, and W. Earl Sasser, Jr. (1990), "Zero Defections: Quality Comes to Services," Harvard Business Review, (September-October), 105-111.
- Richins, Marsha (1983), "Negative Word of Mouth by Dissatisfied Consumers: A Pilot Study," Journal of Marketing, 47 (Winter), 68-78.
- Rink, David R., and John E. Swan (1979), "Product Life Cycle Research: A Literature Review," Journal of Business Research, (September), 219-242.
- Ross, Ivan and Richard Oliver (1984), "The Accuracy of Unsolicited Consumer Communications as Indicators of True Satisfaction/Dissatisfaction," in Advances in Consumer Research, T. Kinnear, ed. Ann Arbor, MI: Association for Consumer Research, 504-8.
- Rust, Roland T. and Richard L. Oliver (1994). Service Quality: New Directions in Theory and Practice. Thousand Oaks, CA: Sage Publications.

- _____ and David C. Williams (1994), "How Length of Patronage Affects the Impact of Customer Satisfaction on Repurchase Intention, Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior, 7, 107-113.
- _____ and "Anthony J. Zahorik (1993), "Customer Satisfaction, Customer Retention and Market Share," Journal of Retailing, 69 (Summer), 193-215.
- Schiffman, Leon G. and Leslie L. Kanuk (1993). Consumer Behavior (5th ed.). Englewood Cliffs, New Jersey: Prentice-Hall.
- Schofield, Malcolm and David Arnold (1988), "Strategies for Mature Businesses," Long Range Planning, 21 (October), 69-76.
- Schwalbach, Joachim (1991), "Profitability and Market Share: A Reflection on the Functional Relationship," Strategic Management Journal, 12, 299-306.
- Schoeffler, Sidney, Robert Buzzell, and Donald Heany (1974), "Impact of Strategic Planning on Profit Performance," Harvard Business Review, (March-April), 137-145.
- Shapiro, Benson P., V. Kasturi Rangan, Rowland T. Moriarty and Elliot B. Ross (1987), "Manage Customers for Profits (Not Just Sales), Harvard Business Review, (September-October), 101-108.
- Sheth, Jagdish N. (1992), "A Normative Model of Retaining Customer Satisfaction," P. D. Converse Awards Symposium, Urbana-Champaign, IL: University of Illinois.
- Shostack, G. Lynn (1987), "Service Positioning Through Structural Change," Journal of Marketing, 51 (January) 34-43 .
- _____ (1985), "Planning The Service Encounter," in The Service Encounter, J.Czepiel, M. Solomon, and C. Suprenant, eds. Lexington, MA: Lexington Books.
- _____ (1977), "Breaking Free from Product Marketing," Journal of Marketing, 41 (April), 73-80.
- Singh, Jagdip (1988), "Consumer Complaint Intentions and Behavior: Definitional and Taxonomical Issues, "Journal of Marketing, 52 (January), 93-107.

- Slama, Mark E. and Armen Taschian (1985), "Selected Socioeconomic and Demographic Characteristics Associated with Purchasing Involvement," Journal of Marketing, 49 (Winter), 72-82.
- Spreng, Richard A., Scott B. Mackenzie, and Richard W. Olshavsky (1996), "A Reexamination of the Determinants of Consumer Satisfaction," Journal of Marketing, 60 (July), 15-32.
- Srinivasan, N. (1987). A Causal Model of External Search for Information for Durables--A Particular Investigation in the Case of New Automobiles. unpublished dissertation SUNY, Buffalo.
- _____ and Brian Ratchford (1991), "An Empirical Test of A Model of External Search for Automobiles," Journal of Consumer Research, 18, (September), 233-42.
- Summers, John O. and Donald H. Granbois (1977), "Predictive and Normative Expectations in Consumer Dissatisfaction and Complaining Behavior," Advances in Consumer Research, 4, W.D. Perrealt, ed., Ann Arbor, MI: Association for Consumer Research, 155-8.
- Swan, John E. and Frederick I. Trawick (1980), Satisfaction Related to Predictive vs. Desired Expectations," Retaining Concepts and Measures in Consumer Satisfaction and Complaining Behavior. Ralph Day and Keith Hunt, eds. Bloomington IN: School of Business, Indiana University, 7-12.
- Swinyard, William R. and David B. Whitlark (1992), "pRospect Theory and Its Effects on Customer Expectations, Satisfaction and Intentions," in Frontiers in Services, Roland Rust and Richard L. Oliver, eds. Nashville, TN: American Marketing Association and Center for Services Marketing at Vanderbilt University
- Takeuchi, Hirotaka, and John A. Quelch (1983), "Quality is More Than Making a Good Product," Harvard Business Review, (July-August), 139-145.
- Teas, R. Kenneth (1993), "Expectations, Performance Evaluations, and Consumer's Perception of Quality," Journal of Marketing, 57 (October), 18-34.
- Technical Assistance Research Program (1986), Consumer Complaint Handling in America: Summary of Findings and Recommendations. Washington, DC: U. S. Office of Consumer Affairs.

- Tse, David K. and Peter C. Wilton (1988), "Models of Consumer Satisfaction Formation: An Extension," Journal of Marketing Research, 25 (May), 204-12.
- Vavra, Terry G. (1992). Aftermarketing: How to Keep Customers for Life Through Relationship Marketing. Homewood, Illinois: Richard D. Irwin.
- Walker, James L. (1995), Service Encounter Satisfaction: Conceptualized," Journal of Services Marketing, 9, 5-14.
- Walker, Orville Jr., Harper W. Boyd, Jr. and Jean Claude Larreche (1992). Marketing Strategy: Planning and Implementation. Homewood, IL: Richard Irwin.
- Webster, F.E. (1994), "Defining the New Marketing Concept," Marketing Management, 2 (40, 22-31.
- Wells, William D. and David Prensky (1996). Consumer Behavior. New York, NY: John Wiley and Sons.
- Wernerfelt, Birger, "The Relation Between Market Share and Profitability," Journal of Business Strategy, 6 (Spring), 67-74.
- Westbrook, Robert A. (1980a), "A Rating Scale for Measuring Product/Service Satisfaction," Journal of Marketing, 44, (Fall), 58-72.
- _____ (1980b), "Intrapersonal Affective Influences on Consumer Satisfaction with Products," Journal of Consumer Research, 7, (June), 49-54.
- _____ (1981), "Sources of Consumer Satisfaction with Retail Outlets," Journal of Retailing, 57 (3), 68-85.
- Woo, Carolyn Y. and Arnold C. Cooper (1982), "The Surprising Case for Low Market Share," Harvard Business Review, (November-December), 106-113.
- Woodruff, Robert B., Ernest R. Cadotte, and Roger L. Jenkins (1983), "Modeling Consumer Satisfaction Processes Using Experience-Based Norms," Journal of Marketing Research, 20 (August), 296-304.
- Woodside, A., L. Frey, and R. Daly (1989), "Linking Service Quality, Customer Satisfaction, and Behavioral Intention," Journal of Health Care Marketing, 9 (December), 5-17.

Yi, Youjae (1990), "A Critical Review of Consumer Satisfaction," in Review of Marketing 1990, Valarie A. Zeithaml, ed. Chicago, IL: American Marketing Association, 68-123.

Zeithaml, Valarie (1988), "Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence," Journal of Marketing, 52 (July), 2-22.

_____, Leonard L. Berry, and A Parasuraman, "The Behavioral Consequences of Service Quality," Journal of Marketing, 60 (April), 31-46.

_____, _____, and _____ (1993), "The Nature and Determinants of Customer Expectations of Service," Journal of the Academy of Marketing Science, 21 (1), 1-12.

_____, A. Parasuraman, and Leonard L. Berry (1985), "Problems and Strategies in Services Marketing," Journal of Marketing, 49, (Spring), 33-46.