

Justice, Dissatisfaction, and Public Confidence in the E-Governance

Yoon Cheong Cho KDI School of Public Policy and Management

> December, 2014 Working Paper 14-11

KDI 국제 정책대 학원

KDI School of Public Policy and Management

This paper can be downloaded without charge at: KDI School of Public Policy and Management Working Paper Series Index: http://www.kdischool.ac.kr/new/eng/faculty/working.jsp The Social Science Network Electronic Paper Collection: http://ssrn.com/abstract=2543418

* We are grateful to the KDI School of Public Policy and Management for providing financial support.

Justice, Dissatisfaction, and Public Confidence in the E-Governance

Submission Date: December 2014

Submitted to: KDI working paper

Submitted by:

Yoon C. Cho* Professor KDI SCHOOL of Public Policy and Management 85 Hoegiro, Dongdaemoongu Seoul 130-650, Korea Tel: 82-2-3299-1087 (O) E-mail, <u>ycho@kdischool.ac.kr</u>

^{*}Corresponding author. KDI School of Public Policy and Management, Tel: +82-2-3299-1087, E-mail addresses: <u>ycho@kdischool.ac.kr</u>, <u>yoonji22e@gmail.com</u>. The authors are grateful for the financial support from the KDI School of Public Policy and Management.

Justice, Dissatisfaction, and Public Confidence in the E-Governance

ABSTRACT

Studies of technology acceptance, public satisfaction, and public confidence have been applied to the field of public administration. However, the relationship of perceived fairness, or justice, to dissatisfaction with electronic adoption in e-governance has been must less examined. The purpose of the study is to investigate the relationships between perceived justice, dissatisfaction, willingness to complain, satisfaction with complaint handling, and public confidence in the context of e-governance. Using factor analysis, regression analysis, t-testing, and ANOVA, we found that perceptions of justice varied depending on gender, age, education level, and socioeconomic status. Overall, procedural and interactional justice, but not distributive justice, were positively associated with dissatisfaction, and the effects of interactional justice were stronger than those of procedural justice. Public confidence was negatively associated with willingness to complain and positively associated with satisfaction with complaint handling. The results also showed that distributive justice was related to satisfaction with complaint handling when complaints were handled offline, but not online. The findings of this study have theoretical and managerial implications for satisfaction and justice theory in the context of e-governance.

Keywords: Justice, Dissatisfaction, Complaining Behavior, Public Confidence, and E-Governance.

I. INTRODUCTION

Why does fairness, or justice, matter in the public sector? To what extent do perceptions of justice and citizen dissatisfaction affect public confidence in the public sector? How do we measure perceptions of justice, particularly public confidence, in the context of electronic governance? Finally, what policy implications arise from the investigation of such matters? The present research explored these questions through an empirical investigation in an attempt to inform and improve public service. Coursey and Norris (2008) has addressed governance roles by exploring the factors

that contribute to high-quality government, including procedures, capacity, and output. With the adoption of technology innovative environment, electronic governance, or e-governance provides electronically enabled services to maximize citizen-centered practices of governance (Malkia Anttiroiko, and Savolainen 2004). The diverse use of e-transformations in governance (Malkia Anttiroiko, and Savolainen 2004), generated by improved technologies (Steuer 1992), is increasingly prevalent in all spheres of citizen's daily lives, including governmental processes, infrastructures, and frameworks (Norris 2008) with increased perception on technology-oriented strategies for reaching the new hybrid citizens (Wind, Mahajan, and Gunther 2002). However, citizen perceptions of fairness, satisfaction, and loyalty in the context of virtualized government services have not been fully explored.

The concept of justice has been widely applied to fields such as employees' attitudes in organizational settings (e.g., job satisfaction, trust in management and leadership, and organizational commitment; Blodgett, Granbois, and Walters 1993) and perceptions of customer fairness in the private sectors. Justice has been defined as the perceived fairness of treatment received from an organization and the behavioral reaction to such perceptions (Choi 2011; Aryee, Budhwar, and Chen 2002). The concept of fairness or justice is a multidimensional construct that involves the subjective evaluation of outcomes in comparison to perceived inputs, or contributions, and the corresponding ratios of other such considerations (Blodgett, Hill, and Tax 1997; Choi 2011; Adams 1965). Perceived justice is supported theoretically by attribution theory (Folks 1984), disconfirmation theory (Oliver and Swan 1989b), and equity theory (Adams 1965). Perceptions of justice caused by conflicts or disputes classified into several dimensions (Blodgett, Granbois, and Walters 1993; Adams 1965). The first dimension, distributive justice, is the perceived fairness of the outcome or decision (Homans 1961). The second dimension, procedural justice, is the perceived fairness of the procedures used in arriving at that outcome (Thibaut and Walker 1975; Lind and Tyler 1988). The third dimension, interactional justice, is the perceived fairness of treatment

throughout the conflict resolution process (Bies and Moag 1986; Bies and Shapiro 1987). These dimensions of justice have been applied to investigation of conflicts and perceptions of unfairness, which often have a negative effect on satisfaction. Previous studies have explored how perceived justice dimensions affect dissatisfaction and service recovery by considering the different types of dissatisfaction (Blodgett, Hill, and Tax 1997; Tax Brown and Chandrashekaran 1998)Gustafsson 2009).

Several studies have explored citizen-oriented management in e-governance, including the use of technology to develop citizen-centric services, increase efficiency, and improve service delivery in public administrative management (Chhabra and Kumar 2009; Nandan 2009). However, how citizen perceptions of the fairness of outcomes arising from services on the Internet have not been explored. In the context of e-governance, the theoretical and practical concepts of satisfaction and dissatisfaction, complaining behavior, loyalty, and public confidence, which are important for customer-centric management, have also been less examined. Few studies have explored the negative aspects of satisfaction, including dissatisfaction and management of complaints, in the field of public administrative management. The purpose of the present study is to investigate-governance in the public sector within the framework of justice theory, specifically the relationships between perceived justice, dissatisfaction, willingness to complain, complaint behavior, satisfaction with the handling of complaints, and public confidence.

II. LITERATURE REVIEW & THEORETIAL BACKGROUND

The topic of e-governance has been explored through studies of virtualized environments based on profit-oriented firms. Adoption of virtualized environment, also referred to as computer-mediated communication, (Hiltz and Turoff 1993), began in the 1980s in various fields, such as education, commerce, and government. Further application of virtualized environments in government organizations has led to virtual states, whereby organizations establish electronic government presences by applying the concept of enactment theory, government theory, and socio-technical systems theory (Norris 2003). Moon (2002) suggested that information technology has become one of the core elements of managerial reform and that e-governance may figure prominently in the future. All levels of government have adopted e-governance as a strategic tool for enhancing the quality of external services and streamlining internal operations (Ho 2002, cited in Kim, Lee, and Kim 2008). E-governance has been applied in various ways , such as offering public information, services, and promotional tools for government policies based on web-based collaborative filtering system.

Theories and models that support the adoption of technology for e-governance include the diffusion of innovation theory (Rogers 1962), the technology acceptance model (Davis 1989), sociotechnical systems theory (Norris 2003), and a highlighted integrated approach for online service systems (Moon 2002). The theoretical background of technology adoption in the context of e-governance and customer satisfaction with the virtualized environment includes the application of these models along with considerations of presence, interaction, transaction, and transformation (Baum and Di Maio 2000; Garson 2006). The technology acceptance model in particular emphasizes ease of use and acceptance of the system (Davis 1989). Equity theory and social exchange theory also support the justice dimensions that are used to measure dissatisfaction with complaint handling.

The equity dimension, which relates to the notion of fairness, implies a form of distributive justice whereby individuals get "what is right" or "what they deserve" (Cook and Messick 1983; Oliver and Swan 1989a). Oliver and Swan (1989b) noted that fairness is conceptualized as an exchange wherein the consumers consider input and outcome comparisons for themselves and merchant as equitable. Other studies ahve addressed equity evaluations in terms of customer satisfaction (Tax, Brown, and Chandrashekaran 1988, Oliver and DeSarbo 1988, Oliver and Swan 1989a). The major variants of equity theory suggest that parties to an exchange will feel equitably

treated and thus satisfied if the ratio of their outcomes to inputs is fair in some sense (Oliver and DeSarbo 1988).

Previous work in the customer satisfaction area has examined exchange equity, a phenomenon long recognized as central to two-party relationships such as those that exist in purchase or acquisition transactions (Adams 1965; Walster, Walster, and Berscheid 1978, cited in Oliver and Swan 1989b). Dissatisfaction, the other side of satisfaction, has been discussed in terms of justice dimensions and service recovery (Blodgett, Hill, and Tax 1997; Tax Brown and Chandrashekaran 1998), including consideration of the different types of dissatisfaction (Gustafsson 2009). The crucial role of satisfaction and dissatisfaction has been widely addressed in both the private and public sector. Previous studies have addressed resolutions to maximize customer satisfaction and minimize dissatisfaction and complaints due to the lack of a physical environment (Steuer 1992).

Virtual environments, also as telepresence or computer-mediated shopping environments (Hoffman and Novak 1996), enable individuals, organizations, and automated systems to coordinate all aspects of the consumer buying process, which affects customer acceptance and willingness to purchase products and services (Jung, Cho, and Lee 2014). Within this context, satisfaction has played a pivotal role in modern management practice and theory (Yi 1990). Recognition of the importance of satisfaction has led to a proliferation of research on customer satisfaction over the past decades (Yi 1990). However, while most researchers agree that satisfaction benefits consumers, firms, industries, and governments, few agree on the definition of satisfaction (Oliver 1997).

Theoretical and practical concepts of satisfaction have been generated from observing relationships between expectations and antecedents to satisfaction, between confirmation level and satisfaction, and between satisfaction and retention and loyalty (Oliver 1980). However, most studies focus on the positive aspects of satisfaction. The opposite of satisfaction is dissatisfaction, where the emphasis is on reducing dissatisfaction and resolving complaints. Dissatisfactions that are trivial in degree or intensity can still be disruptive if they occur frequently and may be worthy of considerable attention, especially by businesses that compete against numerous vendors of nearly identical products and services (Hunt and Hoyer 1976). Long- and short-term indicators of satisfaction and dissatisfaction include repeat purchases and complaints (Oliver 1997). At a higher level of abstraction, expectation and experience can be referred to in terms of over-satisfaction and under-satisfaction (Oliver 1997). Hirschman (1970) considered the links between dissatisfaction, exit, voice (constructive attempts to change conditions), and loyalty and developed a model that explains how voice and dissatisfaction affect loyalty based on how a situation is dealt with and resolved.

Satisfaction studies frequently take place in the context of the private sector, rather than the public sector. Customer satisfaction and loyalty have been described as focal points of successful business exchanges for the private sector. However, studies of the importance of satisfaction and corresponding application of strategic marketing in the public sector (i.e., non-profit organization) have suffered from a kind of myopia (Levitt 1960; Andreasen and Kotler 2008; Burnett 2007). This narrow perspective stems from the belief that consumer behavior can be created and sustained without careful regard to customer satisfaction side which fails to consider the degree to which attitudes influence or predict behavior (Cho 2001). While the concepts of customer-oriented marketing and customer satisfaction have been researched within the private sector, studies in the public sector have often focused on citizen-centered satisfaction rather than customer satisfaction.

Based on the above considerations, the purpose of the present study is to examine how the public perceives online services that are provided by governments, or e-governance, by investigating the different dimensions of justice and dissatisfaction, complaining behavior, and loyalty in the context of public management. Specifically, we explored the relationships between perceived justice, dissatisfaction, willingness to complain, complaint behavior, satisfaction with the handling of complaints, and public confidence, all within the framework of justice theory.

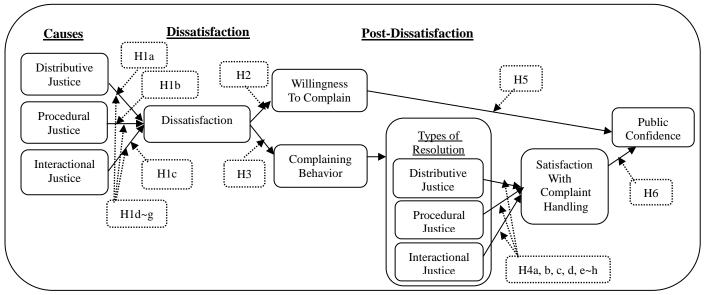
III. HYPOTHESES DEVELOPMENT

Customer satisfaction and loyalty has been widely investigated in the context of the private sector; however, few studies have explored these topics in the context of the public sector. In particular, research into the negative aspects of satisfaction, which includes consideration of the confirmation/disconfirmation paradigm (Oliver 1980), defensive marketing (Chu, Gerstner, and Hess 1998), and Hirschman's (1970) theory of exit, have largely failed to consider voice and loyalty in the context of the public sector.

Since the development of digitalized systems in the 1980s, diverse applications in e-governance have been increasingly prevalent in all spheres of citizen life, including governmental processes, infrastructure, and frameworks (Norris 2008). The virtual state of the central public administration is as a portal that provides cross-agency services in a citizen-oriented way (Garson 2006). Governmental entities face accelerating public demand for electronic services and the internal need to employ technology to achieve superior outcomes and operational efficiency (Mehdi 2009). Traditional techniques and tools are being radically reshaping and are evolving into innovate electronic methods for conducting governmental activities (Mehdi 2009). Compared to the traditional offline environment, citizen perceptions and attitudes have been affected by the use of e-governance to provide advanced services at all stages of decision making, such as interaction, transaction, and transformation flow (White 2007; Garson 2006). The application of advanced and integrated government services through web-based, electronic, or virtualized environments has its roots in customer relationship management, whereby a citizen-centered management approach is employed to influence public behavior and improve public-sector performance (Cho 2001; West 2007). With the development of a customer-centric approach, e-governance aims to improve quality of life for its citizens and satisfaction with government services (Mehra 2004; Nandan 2009).

Issues on e-governance have been explored by various scholars. For example, Kim and Lee (2012) addressed the relationship between electronic participation and trust in local government by

focusing on satisfaction and different dimensions of the electronic participation process. Welch, Hinnant, and Moon (2004) addressed citizen trust and satisfaction with e-government by examining transparency and interactivity in electronic transactions. However, while the emergence of e-governance has undoubtedly changed governance practices (Malkia Anttiroiko, and Savolainen 2004), the adoption rate by citizens and their corresponding satisfaction levels remain unclear. The present study explores the relationships between perceived justice, dissatisfaction, willingness to complain, complaining behavior, satisfaction with complaint handing, and public confidence in the context of e-governance and the online environment. The model upon which this study is based was adapted from previous models (Blodgett, Hill, and Tax 1997; Tax, Brown, and Chandrashekaran 1988; Oliver 1980) and is presented in Figure 1. The model describes the proposed relationships between the types of justice experienced during online service transactions, dissatisfaction with public service websites, and post-dissatisfaction processes (satisfaction with complaint handling and public confidence).



* Hypotheses 1d through 1g and 4d through 4h refer to distributive, procedural, and interactional dimensions based on online vs. offline (4d) and demographics (4e~h).

Figure 1. Model of Dissatisfaction, Complaining Behavior, & Public Confidence: Role of Justice Dimension (Modified from Blodgett, Hill, and Tax 1997, Tax, Brown, and Chandrashekaran 1988, and Oliver 1980)

3.1 Effects of Perceived Justice on Dissatisfaction

The concept of justice arises from studies of equity that date back to the early of 1960s (Cho and Sai 2012). Perceived justice, fairness, and equity are valuable frameworks for explaining customer reactions to complaint episodes in organizational behavior and in federal workplace (Blodgett, Hill, and Tax 1997; Cho and Sai 2013). In elementary terms, equity is fairness, rightness, or deservingness in comparison to other entities (Oliver 1997), and discrepancy, disconfirmation, and inequity imply a negative deficit. Equity and justice are classical experimental paradigms; researchers can manipulate outcome-to-input ratios and observe a direct path between outcome and input combinations and satisfaction that includes fairness in purchasing and consumption (Oliver 1980; Oliver 1997). Studies across several contexts (e.g., legal, organizational, and buyer-seller) have found the concept of justice valuable for explaining reactions to conflict situations (e.g., Gilliand 1993; Goodwin and Ross 1992; Lind and Tyler 1988; cited in Tax, Brown, and Chandrashekaran 1998). For example, Cho (2013) applies the concept of perceived justice to and examination of the causes of complaints, repeat purchase intention, and loyalty in private sector. Perceived justice is a broad, multifaceted construct that encompasses three dimensions: distributive justice, interactional justice, and procedural justice (Bies and Shapiro 1987; Clemmer and Schneider 1996). The present study explored the effects of each justice dimension on dissatisfaction, handling complaints, and confidence in public sector.

3.1.1 Effects of Distributive Justice on Dissatisfaction

Theories of distributive justice focus on the allocation of benefits and costs (Deutsch 1985, cited in Tax, Brown, and Chandrashekaran 1998). Developed from *social exchange theory*, marketing exchanges are an example of benefits and costs that involve consumers (Blodgett, Hill, and Tax 1997; Deutsch 1985). Distributive justice explains the expectations of each party regarding the role of the other (Berger, Conner, and Fisek 1974; Oliver 1997; Cho 2013) and its concepts are classified into three dimensions: equity, equality, and need. Equity is defined as the provision of outcomes that are proportional to the inputs to an exchange (Goodwin and Roos 1992; Oliver and

Desarbo 1988; Oliver 1997), equality is defined as equal outcomes regardless of the contributions to an exchange (Greenberg 1990, Deutsch 1985), and need is defined as outcome based on requirements, regardless of contributions (Deutsch 1985, as cited in Tax, Brown, and Chandrashekaran 1998). In the context of consumer complaints, distributive justice encompasses the perceived fairness of policies and procedures used by the seller (Blodgett, Hill, and Tax 1997, as cited in Cho 2013). The notion of fairness is almost synonymous with equity in that it explicitly implies a form of distributive justice whereby individuals get what they deserve based on their inputs (Oliver 1997).

Dissatisfaction is a negative aspect of satisfaction that can be explained by theories that address psychologically uncomfortable tension states, such as dissonance theory (Festinger 1957). Equity, equality, and need are concepts of distributive justice that affect dissatisfaction (Tax, Brown, and Chandrashekaran 1998). This study hypothesized that the higher expectation of perceived distributive justice from public websites significantly affects dissatisfaction.

H1a: Higher expectations of perceived distributive justice from public websites are related to higher levels of dissatisfaction.

3.1.2 Effects of Procedural Justice on Dissatisfaction

Procedural justice relates to the manner in which the outcomes are delivered (Oliver 1997) and refers to the perceived fairness of the policies, procedures, and criteria used by decision makers in deciding the outcome of a dispute or negotiation (Thibaut and Walker 1975; Lind and Typer 1988; cited in Blodgett, Hill, and Tax 1997). The concepts of procedural justice are defined and classified according to the following dimensions: i) process control, which is freedom to communicate views on a decision process (Goodwin and Ross 1992; Lynd and Tyler 1988), ii) decision control, which includes the extent to which a person is free to accept or reject a decision outcome (Brett 1986, Heide and John 1992), iii) accessibility which is defined as the ease of engaging in a process (Bitner, Booms, and Tetreault 1990), iv) timing, or speed, which refers to the perceived amount of time taken to complete a procedure (Fisk and Conet 1982, Taylor 1994), and iv) flexibility, which is defined as the adaptability of procedures to reflect individual circumstances (Tax, Brown, and Chandrashekaran 1998). Prior studies (Folger 1987; Greenberg 1990) have shown that procedural justice is meaningful because it aims to resolve conflicts in ways that encourage the continuation of a productive relationship between disputants, even when outcomes are unsatisfactory to one or both parties. By considering procedural justice as a cause of dissatisfaction, this study hypothesized that the higher expectations of perceived procedural justice from public websites significantly affects dissatisfaction.

H1b: Higher expectations of perceived procedural justice from public websites are related to higher levels of dissatisfaction.

3.1.3 Effects of Interactional Justice on Dissatisfaction

Interactional justice refers to the manner in which people are treated during the conflict-resolution process (e.g., courtesy, respect, rudeness; Bies and Shapiro 1987; Blodgett, Hill, and Tax 1997). As the third dimension of perceived justice, interactional justice refers broadly to the fairness of the interpersonal treatment that people receive during the enactment of procedures (Bies and Shapiro 1987; Gilliard 1993; cited in Tax, Brown, and Chandrashekaran 1998). Oliver (1997) stated that interactional justice pertains to the person-to-person dealings that are the crucial elements of complaint handling (Maxham and Netemeyer 2002) and relationship marketing (Tax, Brown, and Chandrashekaran 1998). As reviewed in Tax, Brown, and Chandrashekaran (1998), the concepts of interactional justice are defined and classified according to the following dimensions: i) provision of reason for failure that is related to the attributions for failure, satisfaction, and fairness (Bies and Shapiro 1987; Bitner, Booms, and Tetreault 1990), ii) honesty, which includes the perceived veracity of information provided (Goodwin and Ross 1989), iii) politeness, including well-mannered and courteous behavior (Blodgett, Hill, and Tax 1997; Goodwin and Roos 1989), iv)

including provision of caring, individual attention (Parasuraman, Zeithaml, and Berry 1988). Based on these considerations, this study hypothesized that the higher expectations of perceived interactional justice from public websites significantly affects dissatisfaction.

H1c: Higher expectations of perceived interactional justice from public websites affect higher levels of dissatisfaction.

This study also examined effects of justice dimensions on dissatisfaction based on demographics, including gender, age, education, and income. Therefore, the following hypotheses were developed for this study:

H1d: The effects of each of the three justice dimensions on dissatisfaction differ based on gender.H1e: The effects of each of the three justice dimensions on dissatisfaction differ based on age group.

H1f: The effects of each of the three justice dimensions on dissatisfaction differ based on education level.

H1g: The effects of each of the three justice dimensions on dissatisfaction differ based on income level.

3.2 DISSATISFACTION, WILLINGNESS TO COMPLAIN, & COMPLAINING BEHAVIOR

This study investigated the effects of justice dimension on dissatisfaction, willingness to complain, and complaining behavior in the context of e-governance using the model described above (see Figure 1) and the traditional criteria of attitudes and intentions (Oliver 1980; Bearden and Teel 1983; Cho 2013). A previous study by Welch, Hinnant, and Moon (2004) found that e-government satisfaction is associated with citizens' perceptions of online service convenience (transactions), information reliability (i.e., transparency), and engaged electronic communication (i.e., interactivity). The relationships between dissatisfaction with public websites, willingness to complain, and complaining behavior, are described in the following hypotheses:

H2: Higher levels of dissatisfaction from public websites are associated with higher levels of willingness to complain.

H3: Higher levels of dissatisfaction from public websites are associated with higher levels of complaining behavior.

3.3 JUSTICE, COMPLAINT HANDING, & PUBLIC CONFIDENCE

In addition to dissatisfaction and complaint behaviors, this study investigates the events that follow complaints, specifically satisfaction with complaint handling and public confidence. Tax, Brown, and Chandrashekaran (1998) suggested that satisfaction with complaint handling is the central mediator that links perceptions of the fairness to post-complaint attitudes and behavior. Complaint handling can be viewed as a sequence of events whereby a procedure, beginning with communication of the complaint, generates a process of interaction from which a decision is made, resulting in a specific outcome (Tax, Brown, and Chandrashekaran 1998). Previous studies have addressed the relationships between satisfaction with the handling of complaints and perceived justice, including distributive justice (dealing with decision outcomes), procedural justice (dealing with decision-making procedures), and interactional justice (dealing with interpersonal behavior in the enactment of procedures and delivery of outcomes; Tax, Brown, and Chandrashekaran 1998; Cho 2013). Complaint handling is addressed by defensive marketing strategies that are designed to handle complaints by dissatisfaction customers (Chu, Gerstner, and Hess 1998) and to manage the long-term relationships by examining structural constraints (Ping 1993; cited in Cho 2013). This study explored how the handling of complaints through government website affects citizen confidence and overall perceptions of e-government.

Multiplicative expectancy value models that incorporate a confidence component have consistently related confidence to attitudes and behavior (Bennett and Harrell 1975, as cited in Dick and Basu 1994). Confidence refers to the overall confidence of buyers (i.e., the degree of certainty) and the ability to judge or evaluate attributes (Bennett and Harrell 1975; Howard and Sheth 1969). A decline of public trust in government implies the loss of public confidence in political and administrative performance as well as dissatisfaction with public services (Welch, Hinnant, and Moon 2004). This study examines how willingness to complain and complaint behavior affect public confidence and how complaint handling affects overall satisfaction. The effects of complaining behavior on overall satisfaction in the case of resolved cases are based on the three types of perceived justice: distributive, procedural, and interactional. Accordingly, this study developed the following hypotheses:

H4a: Higher levels of complaining behavior are associated with higher levels of overall satisfaction when the complaints are resolved based on distributive justice.

H4b: Higher levels of complaining behavior are associated with higher levels of overall satisfaction when the complaints are resolved based on procedural justice.

H4c: Higher levels of complaining behavior are associated with higher levels of overall satisfaction when the complaints are resolved based on interactional justice.

This study developed hypotheses related to demographics and whether complaints were resolved online or offline. This study also hypothesized the effects of justice dimension satisfaction with complaint handling based on demographics.

H4d: The effects of each of the three justice dimensions on satisfaction with complaint handling differ when complaints are handled online versus offline.

H4e: The effects of each of the three justice dimensions on satisfaction with complaint handling differ based on gender.

H4f: The effects of each of the three justice dimensions on satisfaction with complaint handling differ based on age group.

H4g: The effects of each of the three justice dimensions on satisfaction with complaint handling differ based on education level.

H4h: The effects of each of the three justice dimensions on satisfaction with complaint handling differ based on income level.

Finally, this study also developed hypotheses regarding the relationship between willingness to complain, overall satisfaction, and public confidence:

H5: Higher level of willingness to complain affects lower level of public confidence.

H6: Higher level of overall satisfaction affects higher level public confidence.

IV. METHODOLOGY

This study examined the effects of justice dimensions on customer dissatisfaction, willingness to complain, and complaining behavior by examining online services that are provided by government websites. This study developed online survey to collect data with the assistance of a well-known research firm. This survey included questions regarding demographic factors such as gender, age, education, income, field of work, and geographical location based on residency. A total of 470 respondents completed the survey, yielding a response rate of 6.3%. Multi-item scales were used to measure each of the constructs that served as the basis for the questionnaire items. The survey employed a 7-point Likert scale where 1 = strongly disagree and 7 = strongly agree (Cho 2013).

The items developed for this survey were based on scales from previous studies (Oliver 1997, 1980; Cho 2013; Blodgett, Hill, and Tax 1997; Blodgett, Granbois, and Walters 1993) and were modified to serve the objectives of this study. Specifically, this study developed questionnaire items for the concept of distributive justice by considering qualitative measures (fairness, accessibility, and subjective invisible perception) and quantitative measures (time and cost). This study applied the concepts of efficiency and effectiveness to items for procedural and interactional justice, and for procedural justice we considered entry, execution, and results. Survey items for measuring justice followed the dimensions outlined by Tax, Brown, and Chandrashekaran (1998). The following

criteria were applied to each category: i) equity, equality, and need for distributive justice; ii) process control, decision control, accessibility, timing/speed, and flexibility for procedural justice; and iii) explanation/causal account, honesty, politeness, effort, and empathy for interactional justice (Tax, Brown, and Chandrashekaran 1998). Items for measuring confidence included the concepts of public trust in general and in the government.

After review and a pilot study, Cronbach's alpha was calculated for each major construct to test the construct reliability for each multi-item scale. Cronbach's alpha values were 0.83 for distributive justice, 0.83 for procedural justice, 0.91 for interactional justice, 0.95 for dissatisfaction, 0.90 for willingness to complain, and 0.80 for complaining behavior. In regard to the handling of complaints, Cronbach's alpha values were 0.82 for distributive justice, 0.90 for procedural justice, and 0.93 for interactional justice. Finally, the Cronbach's alpha for public confidence was 0.92.

V. DATA ANALYSIS

5.1 DEMOGRAPHICS

Of the 470 respondents, 50.4% were female and 49.6% were male, 21.9% were 20-29 years old, 27.2% were 30-39 years old, 24.5% were in their 40s, and 26.4% were 50 years or older. In regard to highest education level, 13.8% were high school graduates, 68.1% had an undergraduate degree, and 18.1% had a graduate degree. In terms of income, 3.8% of respondents had an annual household income of less than \$10,000, 12.8% had annual incomes between \$10,000 and \$30,000, 31.9% had annual incomes between \$30,000 and \$50,000, 26.4% had annual incomes between \$50,000 and \$70,000, and 25.1% had annual incomes above \$70,000. In regard to employment, 8.7% were self-employed, 10.6% were housewives, 5.1% were blue-collar workers, 48.6% were white-collar workers, and 4.3% were students.

5.2 HYPOTHESES TESTING

The study applied factor analysis to check validity of major constructs. Using principal components analyses as the extraction method and Varimax rotation methods with Kaiser

Normalization, the most relevant data emerged. The results of factor analyses show that successfully represented the major constructs, with Eigen values greater than 1.00.

Regression analysis was used to test the various hypotheses using factor scores. Table 1 provides the results of multiple regression analysis for the effects of three justice dimension on dissatisfaction. Overall, the results of the ANOVA indicated that the models were significant at the .01 level with F = 598.829 (*r-square* = .794). Based on these findings, hypotheses 1b and 1c were accepted, but hypothesis 1a was rejected. In other words, higher expectations of procedural and interactional justice, but not distributive justice, from public websites were related to higher levels of dissatisfaction. The effect was stronger for interactional justice than for procedural justice.

Variable (Independent -> dependent)	Standardized Coefficient (t-value-Sig)
Distributive Justice-> Dissatisfaction (H1a)	0.049 (1.517)
Procedural Justice -> Dissatisfaction (H1b)	0.227 (6.217***)
Interactional Justice -> Dissatisfaction (H1c)	0.669 (19.694***)
*** Significant at 0.01 lavel (2 tailed)	

*** Significant at 0.01 level (2-tailed).

This study also examined effects of three justice dimension on dissatisfaction based on demographics and the results are shown in Table 2. The effects of procedural and interactional justice, but not distributive justice, on dissatisfaction are affected by gender (H1d); specifically, the effects were stronger for female respondents. The effects of procedural and interactional justice on dissatisfaction were affected by various age groups (H1e). The effects of distributive justice on dissatisfaction were significantly associated with an undergraduate degree as highest level of education, while the effects of while procedural and interactional justice on dissatisfaction were significantly associated degree as highest level of education (H1f). Finally, the effects of procedural and interactive justice, but not interactional justice, on dissatisfaction were significantly associated with an undergraduate degree, or dissatisfaction were significantly associated with a graduate degree as highest level of education (H1f). Finally, the effects of procedural and interactive justice, but not interactional justice, on dissatisfaction were significantly associated with annual income (H1g).

Table 1. Effects of Justice Dimension on Dissatisfaction

Variable (Independent ->	Standardized Coefficient (t-value-Sig)				
dependent)	Gender	Age	Education Level	Income Level	
Distributive	Male: 0.067	20s: -0.010 (-0.115)	High school: -0.007 (-0.062)	Below 30k: 0.075 (1.401)	
Justice->	(1.324)	30s: 0.089 (1.729)	Undergraduate: 0.079 (2.147**)	30k-50k: 0.061 (1.352)	
Dissatisfaction	Female: 0.052	40s: 0.167 (2.876***)	Graduate: 0.045 (0.631)	50k-70k: 0.002 (0.026)	
	(1.231)	50s: -0.083 (-1.309)		Above 70k: -0.040 (-0.297)	
Procedural	Male: 0.273	20s: 0.417 (5.307***)	High school: 0.170 (1.454)	Below 30k: 0.207 (3.503***)	
Justice ->	(4.911***)	30s: 0.171 (3.155***)	Undergraduate: 0.222	30k-50k: 0.263 (4.240***)	
Dissatisfaction	Female: 0.175	40s: -0.035 (-0.456)	(5.135***)	50k-70k: 0.238 (2.759***)	
	(3.708***)	50s: 0.263 (3.156***)	Graduate: 0.183 (2.194*)	Above 70k: 0.329 (1.672)	
Interactional	Male: 0.597	20s: 0.563 (8.342***)	High school: 0.730 (6.422***)	Below 30k: 0.650 (12.684***)	
Justice ->	(11.399***)	30s: 0.715 (11.470***)	Undergraduate: 0.657	30k-50k: 0.641 (11.219***)	
Dissatisfaction	Female: 0.726	40s: 0.819 (11.262***)	(16.613***)	50k-70k: 0.703 (7.065***)	
	(16.250***)	50s: 0.709 (9.086***)	Graduate: 0.711 (8.240***)	Above 70k: 0.641 (3.554***)	

*** Significant at 0.01 level (2-tailed).

Table 2. Effects of Justice Dimension on Dissatisfaction based on Demographics

This study conducted factor and regression analysis for willingness to complain and actual complaining behavior and the results are shown in Table 3. Overall, the results of the ANOVA find the models significant at the .01 level with F = 585.911 (*r-square* = .556) and F = 120.853 (*r-square* = .231). Based on these findings, hypotheses H2 and H3 were accepted.

Variable (Independent -> dependent)	Standardized Coefficient (t-value-Sig)
Dissatisfaction -> Willingness to Complain (H2)	0.746 (24.206***)
Dissatisfaction -> Complaining Behavior (H3)	0.480 (10.993***)

*** Significant at 0.01 level (2-tailed).

 Table 3. Effects of Dissatisfaction on Willingness to Complain and Actual Complaining Behavior

This study also examined the effects of justice dimension on overall satisfaction with complaint handling. Additional factor analyses were applied to valid constructs for three justice dimension on resolution and satisfaction with complaint handling. The results of multiple regression analyses are shown in Table 4. Overall, the results of ANOVA indicated that the models were significant at the 01 level with F = 37.182 (*r-square* = .443). The effects distributive and interactional justice dimensions, but not procedural justice, on satisfaction with complaint handling were significant. Thus, hypotheses 4a & 4c were accepted, and hypothesis 4b was rejected. In other words, higher levels of complaining behavior were associated with higher levels of satisfaction when the complaints were resolved based on distributive and interactive justice, but not when the complaints were resolved based on procedural justice. This study examined the effects of three justice dimensions on satisfaction with complaint handling in offline and online environments

(H4d). As shown in Table 4, only the effect of distributive dimension on satisfaction with complaint handling were significant when complaints were handled offline (F = 24.356, *r-square* = .562), while both distributive and interactional dimension on satisfaction with complaint handling were significant when complaints were handled online (F = 37.182, *r-square* = .443).

Variable (Independent -> dependent)	Standardized Coefficient (t-value-Sig)		
	Online	Offline	
Distributive Justice-> Satisfaction with Complaint Handling (H4a)	0.444 (4.750***)	0.495 (3.744***)	
Procedural Justice -> Satisfaction with Complaint Handling (H4b)	-0.054 (-0.461)	0.186 (1.168)	
Interactional Justice -> Satisfaction with Complaint Handling (H4c)	0.349 (3.535***)	0.134 (0.779)	

*** Significant at 0.01 level (2-tailed).

Table 4. Summary of the Effects of Justice Dimension on Satisfaction with Complaint Handling (Online vs. Offline)

Variable (Independent ->		Standardize	ed Coefficient (t-value-Sig)	
dependent)	Gender	Age	Education	Income
Distributive Justice->	Male: 0.360	20s: 0.574 (2.449**)	High school: 0.388 (1.618)	Below 30k: 0.521 (4.801***)
Satisfaction with	(3.148***)	30s: 0.386 (2.875 ***)	Undergraduate: 0.473	30k-50k: 0.402 (3.484***)
Complaint Handling	Female: 0.428	40s: 0.387 (1.972*)	(5.047***)	50k-70k: 0.440 (2.384**)
	(3.888***)	50s: 0.457 (3.649***)	Graduate: 0.306 (1.660)	Above 70k: 1.019 (3.590***)
Procedural Justice ->	Male: 0.187	20s: -0.241 (-1.118)	High school: 0.213 (0.953)	Below 30k: -0.125 (-0.844)
Satisfaction with	(1.322)	30s: 0.059 (0.319)	Undergraduate: -0.012	30k-50k: 0.104 (0.827)
Complaint Handling	Female: -0.078	40s: 0.266 (0.916)	(-0.109)	50k-70k: 0.112 (0.447)
	(-0.604)	50s: (0.132 (0.966)	Graduate: 0.205 (0.811)	Above 70k: 0.207 (0.476)
Interactional Justice	Male: 0.205	20s: 0.408 (7.995*)	High school: 0.096 (0.511)	Below 30k: 0.406 (3.179***)
-> Satisfaction with	(1.850*)	30s: 0.315 (1.906*)	Undergraduate: 0.310	30k-50k: 0.315 (2.465*)
Complaint Handling	Female: 0.384	40s: 0.045 (0.195	(3.022***)	50k-70k: 0.176 (0.802)
	(2.748***)	50s: 0.236 (1.624)	Graduate: 0.206 (1.043)	Above 70k: -0.332 (-0.692)

*** Significant at 0.01 level (2-tailed); ** Significant at 0.05 level (2-tailed); * Significant at 0.10 level (2-tailed). Table 5. Effects of Justice Dimension on Satisfaction with Complaint Handling based on Demographics

This study examined effects of three justice dimension on satisfaction with complaint

handling based on demographics, and the results are shown in Table 5. The effects of distributive and interactional justice on satisfaction with complaint handling are affected by gender; specifically, the effects were stronger for female respondents (H4e). The effects of justice dimension on satisfaction with complaint handling were significantly associated with respondents in their 20s and 30s, and the effects of distributive justice were also significantly associated with respondents in their 40s and 50s (H4f). The effects of distributive and interactional justice on satisfaction with complaint handling were significantly associated with an undergraduate degree as the highest level of education (H4g). Finally, the effects of distributive and interactional justice on satisfaction with complaint handling were significantly associated with an undergraduate degree as the highest level \$30,000 and \$50,000, while the effects of distributional justice were significantly associated with annual incomes between \$50,000 and \$70,000 and above \$70,000 (H4h).

This study also examined the effects of willingness to complain and satisfaction with complaint handling on public confidence. The results of regression analyses are shown in Table 6. Overall, the results of the ANOVA find the models significant at the 01 level with F = 17.876 (*r-square* = .037) and with F = 62.490 (*r-square* = .214). Therefore, hypotheses 5 and 6 were accepted. In other words, higher levels of willingness to complain were associated with lower levels of public confidence, and higher levels of satisfaction with complaint handling were associated with higher levels of public confidence.

Variable (Independent -> dependent)	Standardized Coefficient (t-value-Sig)
Willingness to Complain ->Public Confidence (H5)	-0.192 (-4.228***)
Satisfaction with Complaint Handling -> Public Confidence (H6)	0.463(7.905***)
*** Significant at 0.01 level (2-tailed).	·

Table 6. Effects of Willingness to Complain and Satisfaction with Complaint Handling on Public Confidence

V. CONCLUSION

The effects of three justice dimensions on dissatisfaction and satisfaction with handling complaints showed different characteristics. Overall, procedural and interactional justice, but not distributive justice, had significant effects on dissatisfaction, and the effects of interactional justice were stronger than those of procedural justice. In regard to satisfaction with complaint handling, the effects of distributive and interactional justice, but not procedural justice, were significant, and the effects of distributive justice were stronger than those of interactional justice. These findings suggest that citizens are more sensitive to equity and equality issues, or distributive justice, even though the primary functions of online public service are to improve efficiency and cost effectiveness. The results also showed that willingness to complain was negatively associated with public confidence, while satisfaction with complaint handling was positively associated with public confidence. These findings suggest that the employment of online service systems by public management should not be limited to the technical aspects of e-governance, but should focus more

attention on the subjective domain of distributive justice, or "what is right" to society.

This study investigated the effects of the three justice dimensions on satisfaction with complaint handling online and offline and also looked at the impact of demographic variables. The results showed that distributive justice affects satisfaction with complaint handling when complaints are resolved offline. One explanation for this finding is that the public encounters dissatisfaction with procedural and interactive justice in regard to complaint handling procedures and interactions with online help desks to resolve complaints.

In terms of demographics, the results of this study showed that a) the impact of interactive justice on dissatisfaction was stronger with female respondents; b) all three justice dimensions affected dissatisfaction for those with undergraduate degrees, but none of the three justice dimensions affected satisfaction with complaint handling for those with graduate degrees; c) distributive justice affected satisfaction with complaint handling for those in their 40s and 50s; and d) distributive justice affected satisfaction with complaint handling for respondents with annual incomes above \$70,000. People in their 40s and 50s grew up during a period of democratization, so their perceptions of distributive justice may be stronger than those for the other justice dimensions and those of other age groups. In the context of economic development, various social problems such as income inequality, class conflict, and injustice have emerged. In this context, generations that experienced economic growth and democratization have placed more emphasis on distributive issues. The findings of this study suggest that rather than just expanding the availability of technologically friendly functions, sophisticated e-governance systems should be developed that address citizens' complaints and provide more customized public services that focus on the distributive dimension, which ultimately enhances public confidence.

This study also found interaction effects between demographic variables and the five major dependent variables (dissatisfaction, willingness to complain, complaining behavior, satisfaction with complaint handling, and public confidence, appendix). Significant interactions were found

between a) gender and age and gender and income level in the context of complaining behavior, b) gender and marital status and gender and age in the context of satisfaction with complaint handling, and c) gender and marital status and gender and income level in the context of public confidence. In addition, significant associations were found between a) higher levels of complaining behavior, male respondents in their 30s, and female respondents in their 40s; b) higher levels of complaining behavior, higher satisfaction with complaint handling, female respondents, and respondents with annual incomes above \$30,000; c) higher satisfaction with complaint handling, female respondents in their 40s, and single males; d) higher satisfaction with complaint handling, female respondents in their 40s, and male respondents in their 20s; e) higher levels of public confidence and married females; f) lower levels of public confidence, males, and respondents with graduate degrees; and f) lower levels of public confidence, female respondents, and respondents with graduate degrees. In addition, the levels of complaining behavior and satisfaction with complaint handling were higher for female respondents at all income levels.

Interpretation of these complex findings is difficult. One tentative explanation is possible if we link the socioeconomic status of males in their 30s and females with higher education to sensitivity toward social issues. Given labor market tightness, for example, we can speculate that males in their 30s and single females with higher education levels tend to be more sensitive to social issues and are therefore more likely to complain about low quality public service. This interpretation implies that complaints from the two groups stem from inefficient online service systems, social status, and livelihood.

This study provides implications for policy makers and future research. Few previous studies have investigated the effects of complaint handling on public confidence. By applying the three dimensions of justice, this study contributes information about the post-stage of dissatisfaction and its effects on public confidence. The results of this study also have important implications for public complaint handling in terms of increasing public satisfaction with services offered by

government. The importance of the successful management of dissatisfaction for stability and profitable growth and the determination of how comprehensive a complaint response strategy must be to satisfy the public and gain their confidence has not been well addressed in the context of public services (Cho et al., 2001; Levesque and McDougall, 1996). By addressing dissatisfaction, complaint handling, and confidence from public websites, the present study provides information for e-governance that can be used to improve citizen-centered management in the virtual environment.

This study has a few limitations. The sample size was relatively small; future studies should consider increasing the sample size and including a cross-cultural environment for comparison and generalizability. Future studies might also examine interaction effects between complaint behavior and socioeconomic status.

Reference:

- Adams, J. S. (1965), "Inequity in Social Change," in L. Berkowitz (ed.), Advances in Experimental Social Psychology, Vol.2, pp.267-299, New York: Academic Press.
- Andreasen, Alan R. and Kotler, Philip (2008), *Strategic Marketing for Nonprofit Organizations*, 7th edition, Prentice Hall, New Jersey.
- Aryee, S., Budhwar, P. S., and Chen, Z. X. (2002), "Trust as a Mediator of the Relationship between Organizational Justice and Work Outcomes: Test of a Social Exchange Model," *Journal of Organizational Behavior*, 23, pp.267-286.
- Baum, Christopher H. and Andrea Di Maio (2000), Gartner's Four Phases of E-government Model. <u>http://www.gartner.com</u>.
- Bearden, William O. and Jesse E. Teel (1983), "Selected Determinants of Consumer Satisfaction and Complaint Reports," *Journal of Marketing Research*, 20, February, 21-8.
- Bennett, Peter D. and Harrell, Gilbert D. (1975), "The Role of Confidence in Understanding and Predicting Buyers' Attitudes and Purchase Intention," *Journal of Consumer Research*, 2, September, 110-117.
- Berger, Joseph, Thomas L. Conner, and Hamit M. Fisek (1974), *Expectation States Theory: A Theoretical Research Program*, Winthrop Publishers, Cambridge, MA.
- Bies, Robert J. and Debra L. Shapiro (1987), "International Fairness Judgments: The Influence of Causal Accounts," *Social Justice Research*, 1, 199-218.

_____ and Moag, D. L. (1986), "Interactional Communication Criteria Fairness," pp.289-319 in Lewicki, R. J., Sheppard, B. H., and Bazerman, M. H. (eds.), *Research in Organizational Behavior*, Greenwich, CT: JAI Press.

- Bitner, M. J., B. M. Booms, and M. S. Tetreault (1990), "The Service Encounter: Diagnosing Favorable and Unfavorable Incidents," *Journal of Marketing*, 54 (January), 71-85.
- Blodgett, Jeffrey G., Donna J. Hill, and Stephen S. Tax (1997), "The Effects of Distributive, Procedural, and Interactional Justice on Postcomplaint Behavior," *Journal of Retailing*, 73 (2), 185-210.
- Blodgett Jeffrey G., Donald. H. Granbois, and Rockney. G. Walters (1993), "The Effects of Perceived Justice on Negative Word-of-Mouth and Repatronage Intentions," *Journal of Retailing*, 69 (Winter), 399-428.
- Brett, Jeanne M. (1986), "Commentary on Procedural Justice Papers," in *Research on Negotiation in Organizations*, 1, Roy Lewicki. Max Bazerman, and Blair Sheppard, eds. Greenwich, CT: JAI Press, 81-90.
- Burnett, John J. (2007), Nonprofit Marketing Best Practices, John Wiley & Sons, New Jersey.
- Coates, G. (1992), "Program from Invisible Site a Virtual Sho, a Multiple Performance Work," presented by George Coates Performance Works, (March), San Francisco, CA.
- Chhabra, Susheel and Kumar, Muneesh (2009), Integrating E-Business Models for Government Solutions, Information Science Reference. Hershey, New York.
- Cho, Yoon C. (2013), "Exploring Relationship among Customer Dissatisfaction, Complaints, and Loyalty in the Virtualized Environment: Roles of Advanced Services," *International Business* and Economics Research Journal, Vol.12, No.11, November, pp.1343-1360.
- Cho, Yoon C. (2011), "Analysis of Customer Dissatisfaction toward Perishable Grocery Goods," *Journal of Business Research*, Vol. 64, pp.1245-1250.
- Cho, Yoon C. (2001), "A Hybrid Approach to Customer Satisfaction Measurement that also accounts for the realities of E-Commerce," Working paper.
- Cho, Yoon C. (2013), "Exploring Relationship among Customer Dissatisfaction, Complaints, and Loyalty in the Virtualized Environment: Roles of Advanced Services," *International Business* and Economics Research Journal, Vol.12, No.11, November, pp.1343-1360.
- Cho, Yoon Jik and Sai, Na (2013), "Does Organizational Justice Matter in the Federal Workplace?" *Review of Public Personnel Administration*," 33(3), 227-251.
- Choi, Sungjoo (2001), "Organizational Justice and Employee Work Attitudes: The Federal Case," *The American Review of Public Administration*, 41(2), pp.185-204.
- Chu, Wujin, Eitan Gerstner, and James D. Hess (1998), "Managing Dissatisfaction: How to Decrease Customer Opportunism by Partial Refunds," *Journal of Service Research*, 1(2), 140-155.

- Clemmer, E. C. and B. Schneider (1996), Fair Service, in: Swartz T.A., Bowen, D.E., Brown, S.W., editors. *Advances in Services Marketing and Management: Research and Practice*, 5, Greenwich, CT:1 JAI Press, 109-126.
- Cook, Karen S. and David M. Messick (1983), "Psychological and Sociological Perspectives on Distributive Justice: Convergent, Divergent, and Parallel Lines," in Equity Theory: Psychological and Sociological Perspectives, David M. Messick and Karen S. Cook. Eds. New York: Praeger Publisher, 1-12.
- Coursey, David and Norris, Donald F. (2008), "Models of E-Government: Are They Correct? An Empirical Assessment," *Public Administration Review*, May/June, 523-536.
- Davis, F. D (1989), "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology," *MIS Quarterly*, 13(3), 319-340.
- Deutsch, Morten (1985), Distributive Justice, New Haven, CT: Yale University Press.
- Dick, Alan S. and Basu, Kunal (1994), "Customer Loyalty: Toward and Integrated Conceptual Framework," *Journal of the Academy of Marketing Science*, 22(2), 99-113.
- Festinger, Leon (1957), A Theory of Cognitive Dissonance, Stanford, California: Stanford University Press.
- Fisk. Raymond P. and Kenneth A. Coney (1982), "Postchoice Evaluation: An Equity Theory Analysis of Consumer Satisfaction/Dissatisfaction with Service Choices," in *Conceptual and Empirical Contributions to Consumer Satisfaction and Complaining Behavior*, Keith Hunt and Ralph L. Day, eds., Bloomington: Indiana University, 9-16.
- Folger, Robert (1987), "Distributive and Procedural Justice in the Workplace," Social Justice Research, 1, 143-160.
- Folkes, Valerie S. (1984), "Consumer Reactions to Product Failures: An Attributional Approach," *Journal of Consumer Research*, 10 (March), 398-409.
- Garson, G. David (2006), *Public Information Technology and E-Governance: Managing the Virtual State*, Jones and Bartlett Publishers Inc.
- Gilliand, Stephen W. (1993), "The Perceived Fairness of Selection Systems: An Organizational Justice Perspective," *Academy of Management Review*, 18(4), 694-734.
- Greenberg, Jerald (1990), "Looking Fair Versus Being Fair: Managing Impressions of Organizational Justice," *Research in Organizational Behavior*, 12, 111-157.
- Goodwin, Cathy and Ross, Ivan (1992), "Consumer Responses to Service Failures: Influence of Procedural and Interactional Fairness Perceptions," *Journal of Business Research*, 25, pp. 149–163.
- Goodwin, C., & Ross, Ivan. (1989). Salient dimensions of perceived fairness in resolution of service complaints. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining*

Behavior, 2, 87-92.

- Gustafsson, Anders (2009), "Customer Satisfaction with Service Recovery," Journal of Business Research, 62, 1220-1222.
- Kwon Jung, Yoon C. Cho, & Sun Lee (2014), "Online Shoppers' Response to Price Comparison Sites: Moderating Role of Product Type and Price Consciousness on Price and Value Perceptions," *Journal of Business Research*, 67(10), October, 2079-2087.
- Heide, Jan B. and John, George (1992), "Do Norms Matter in Marketing Relationships?" *Journal of Marketing*, 56, April, 32-44.
- Hiltz, Roxanne Starr and Turoff, Murray (1993), *The Network Nation* (rev. ed.), Cambridge: MIT Press.
- Hirschman, A. O. (1970). *Exit, Voice, and Loyalty: Responses to Decline in Firms*. Organizations and States. Cambridge, MA: Harvard University Press.
- Ho, A. T. (2002), "Reinventing Local Governments and the E-Government Initiative," *Public Administration Review*, 62(4), 434-441.
- Hoffman Donna. L. and Novak, Thomas P. (1996), "Marketing in Hypermedia Computer-Mediated Environments: Conceptual Foundations," *Journal of Marketing*, 60, pp.50-68.
- Homans (1961), Social Behavior: Its Elementary Forms, New York: Harcourt, Brace & World.
- Howard, John A. and Jagdish N. Sheth (1969), *The Theory of Buyer Behavior*, New York, John Wiley and Sons.
- Hunt, George, W. and Hoyer, Wayne D. (1976), "CS/D: The Program Planning and Evaluation Perspective," in Beverlee B. Anderson (ed.), *Advances in Consumer Research*, 3, Cincinnati: Association for Consumer Research, 159-60.
- Kim, Hyun Joon, Lee, Jooho, and Kim, Soonhee (2008), "Making the Connection between Local Electronic-Government Development States and Collaboration Strategy: A Case Study of Gangnam District, Seoul, Korea," *International Journal of Government Research*, 4(3), July-September, 36-56.
- Kim, Soonhee and Lee, Jooho (2012), "E-Participation, Transparency, and Trust in Local Government," *Public Administration Review*," 72(6), 819-828.
- Koch, James L. and Steers, Richard M. (1978), "Job Attachment, Satisfaction, and Turnover among Public Sector Employees," *Journal of Vocational Behavior*, 12, pp. 119 128.
- Levitt, Theodore (1960), "Marketing Myopia," *Harvard Business Review*, Republished in July August 2004, Best of HBR 1960.
- Lind, E. A., & Tyler, T. R. (1988), The social Psychology of Procedural Justice. New York: Plenum.
- Malkia, Matti, Anttiroiko, Ari-Veikko, and Savolainen, Reijo (2004), *eTransformation in Governance*, Idea Group Publishing, Hershey, London.

- Maxham, James G. III and Richard G. Netemeyer (2002), "Modeling Customer Perceptions of Complaint Handling over Time: the Effects of Perceived Justice on Satisfaction and Intent," *Journal of Retailing*, 78, 239-252.
- Mehdi, Khosrow-Pour (2009), E-Government Diffusion, Policy, and Impact: Advanced Issues and Practices, Information Science Reference, Hershey, New York.
- Mehra, R. (2004), *Getting to Transformation, a Management Handbook*, New Delhi: Mecmillan India Limited.
- Moon, Jae M. (2002), "The Evolution of E-Government among Municipalities: Rhetoric or Reality?," *Public Administration Review*, July/August, Vol.62, No.4, pp.424-433.
- Nandan, Shefali (2009), "E-Government: Good Deliverance through Effective Performance Management," published in the chapter of the book, *Integrating E-Business Models for Government Solutions*, Information Science Reference, Hershey, New York.
- Norris, Donald F. (2003), "Building the Virtual State...or Not?" *Social Science Computer Review*, Vol.21, No.4, Winter, pp.417-424.
- Norris, Donald (2008), *E-Government Research: Policy and Management*, IGI Publishing, Hershey, New York.
- Oliver, Richard L. (1980), A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions. *Journal of Marketing Research*, 17 (November), 460-469.
- Oliver, Richard L. (1997), *Satisfaction: A Behavioral Perspective on the Consumer*, Irwin McGraw-Hill.
- Oliver, Richard L. and DeSarbo Wayne S. (1988), "Response Determinants in Satisfaction Judgments," *Journal of Consumer Research*, 14 (March), 495-507.
- Oliver, Richard L. and Swan, John E. (1989a), "Consumer Perceptions of Interpersonal Equity and Satisfaction in Transactions: A Field Survey Approach," *Journal of Marketing*, 53 (April), 21-35.
- Oliver, Richard L. and Swan, John E. (1989b), "Equity and Disconfirmation Perceptions as Influences on Merchant and Product Satisfaction," *Journal of Consumer Research*, 16 (December), 372-383.
- Parasuraman, A., Valarie Zeithaml, and Leonard Berry (1988), "Servqual: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality," *Journal of Retailing*, 64 (1), 12-40
- Ping, Robert A. Jr. (1993), "The Effects of Satisfaction and Structural Constraints on Retailer Existing, Voice, Loyalty, Opportunism, and Neglect," *Journal of Retaining*, 69 (3), 320-352.
- Rogers, E.M. (1962), Diffusion of innovations, New York: Free Press.
- Steuer, Jonathan (1992), "Defining Virtual Reality: Dimensions Determining Telepresence," *Journal of Communication*, (December), 42(4), 73-93.

- Tax, Stephan S., Brown, Stephen W., and Chandrashekaran, Murali (1998), "Customer Evaluations of Service Complaint Experiences: Implications for Relationship Marketing," *Journal of Marketing*, 62, 60-76.
- Taylor, Shirley (1994), "Waiting for Service: The Relationship Between Delays and Evaluations of Service," *Journal of Marketing*, 58, April, 56-69.
- Thibaut, J. and Walker, L. (1975), *Procedural Justice: A Psychological Analysis*, Hillsdale, NJ: Erlbaum.
- Welch, Eric W., Hinnant, Charles, C., and Moon, Jae M. (2004), "Liking Citizen Satisfaction with E-Government and Trust in Government," *Journal of Public Administration Research and Theory*, 15(3), December, 371-391.
- West, Darrell M. (2007), "Global Perspectives on E-Government," *Governance and Information Technology*, edited by Viktor Mayer-Schonberger and David Lazer.
- White, Jay (2007), Managing information in the public sector, Routledge.
- Wind, Y., Mahajan, V., & Gunther, R. E. (2002). *Convergence marketing: Strategies for Reaching the New Hybrid Consumer*. Upper Saddle River, NJ: Prentice-Hall.

Yi, Y. (1990). A Critical Review of Consumer Satisfaction. In Valarie A. Zeithaml (ed.), *Review of Marketing*, 68-123. American Marketing Association, Chicago.

Appendix:

Figure 1. Interaction Effects on Complaining Behavior between Gender and Age

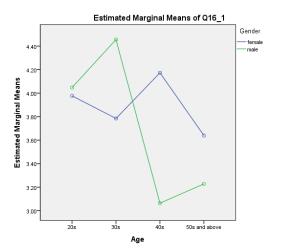


Figure 2. Interaction Effects on Complaining Behavior between Gender and Income Level

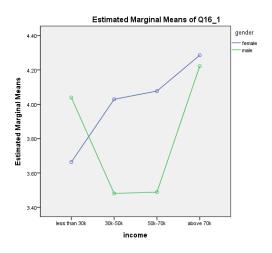


Figure 3. Interaction Effects on Satisfaction with Complaint Handling between Gender and Marital Status

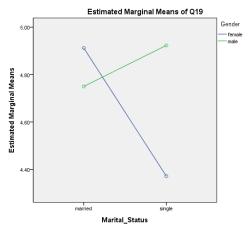


Figure 3. Interaction Effects on Satisfaction with Complaint Handling between Gender and Income Level

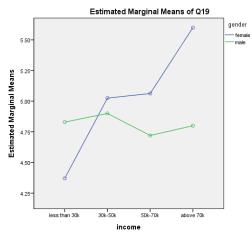


Figure 4. Interaction Effects on Public Confidence between Gender and Marital Status

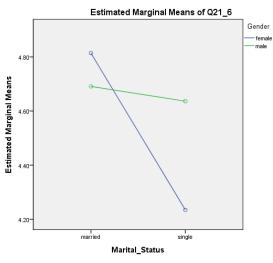
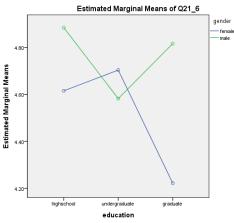


Figure 5. Interaction Effects on Public Confidence between Gender and Education Level



Category	Serial #	Author	Title
Working Paper	99-01	Se-Il Park	Labor Market Policy and The Social Safety Net in Korea: After 1997 Crisis
Working Paper	99-02	Sang-Woo Nam	Korea's Economic Crisis and Corporate Governance
Working Paper	99-03	Sangmoon Hahm	Monetary Bands and Monetary Neutrality
Working Paper	99-04	Jong-Il You Ju-Ho Lee	Economic and Social Consequences of globalization: The Case of South Korea
Working Paper	99-05	Sang-Woo Nam	Reform of the Financial Sector in East Asia
Working Paper	99-06	Hun-Joo Park	Dirigiste Modernization, Coalition Politics, and Financial Policy Towards Small Business: Korea, Japan, and Taiwan Compared
Working Paper	99-07	Kong-Kyun Ro	Mother's Education and Child's Health: Economic Anlaysis of Korean Data
Working Paper	99-08	Euysung Kim	Trade Liberalization and Productivity Growth in Korean Manufacturing Industries: Price Protection, Market Power, and Scale Efficiency
Working Paper	99-09	Gill-Chin Lim	Global Political-Economic System and Financial Crisis: Korea, Brazil and the IMF
Working Paper	99-10 (C99-01)	Seung-Joo Lee	LG Household & Health Care: Building a High-Performing Organization
Working Paper	00-01	Sangmoon Hahm Kyung-Soo Kim Ho-Mou Wu	Gains from Currency Convertibility: A Case of Incomplete Markets
Working Paper	00-02	Jong-Il You	The Bretton Woods Institutions: Evolution, Reform and Change
Working Paper	00-03	Dukgeun Ahn	Linkages between International Financial and Trade Institutions: IMF, World Bank and WTO
Working Paper	00-04	Woochan Kim	Does Capital Account Liberalization Discipline Budget Deficit?
Working Paper	00-05	Sunwoong Kim Shale Horowitz	Public Interest "blackballing" in South Korea's Elections: One-Trick Pony, or Wave of the Future?
Working Paper	00-06	Woochan Kim	Do Foreign Investors Perform Better than Locals? Information Asymmetry versus Investor Sophistication
Working Paper	00-07	Gill-Chin Lim Joon Han	North-South Cooperation for Food Supply: Demographic Analysis and Policy Directions
Working Paper	00-08 (C00-01)	Seung-Joo Lee	Strategic Newspaper Management: Case Study of Maeil Business
Working Paper	01-01	Seung-Joo Lee	Nokia: Strategic Transformation and Growth
Working Paper	01-02	Woochan Kim Shang-Jin Wei	Offshore Investment Funds: Monsters in Emerging Markets?
Working Paper	01-03	Dukgeun Ahn	Comparative Analysis of the SPS and the TBT Agreements
Working Paper	01-04	Sunwoong Kim Ju-Ho Lee	Demand for Education and Developmental State: Private Tutoring in South Korea
Working Paper	01-05	Ju-Ho Lee Young-Kyu Moh Doo Il Kim	Lessons from Korea
Working Paper	01-06	Woochan Kim Yangho Byeon	Restructuring Korean Bank's Short-Term Debts in 1998 - Detailed Accounts and Their Implications -
Working Paper	01-07	Yoon-Ha YOO	Private Tutoring as Rent Seeking Activity Under Tuition Control

Category	Serial #	Author	Title
Working Paper	01-08	Kong-Kyun Ro	경제활동인구 변동의 요인분석: 선진국과의 비교분석
Working Paper	02-01	Sangmoon Hahm	Restructuring of the Public Enterprise after the Crisis : The Case of Deposit Insurance Fund
Working Paper	02-02	Kyong-Dong KIM	The Culture of Industrial Relations in Korea : An alternative Sociological Approach
Working Paper	02-03	Dukgeun Ahn	Korean Experience of the Dispute Settlement in the world Trading System
Working Paper	02-04	BERNARD S. BLACK Hasung Jang Woochan Kim	Does Corporate Governance Matter? (Evidence from the Korean Market)
Working Paper	02-05	Sunwoong Kim Ju-Ho Lee	Secondary School Equalization Policies in South Korea
Working Paper	02-06	Yoon-Ha YOO	Penalty for Mismatch Between Ability and Quality, and School Choice
Working Paper	02-07	Dukgeun Ahn Han-Young Lie	Legal Issues of Privatization in Government Procurement Agreements: Experience of Korea from Bilateral and WTO Agreements
Working Paper	02-08	David J. Behling Kyong Shik Eom	U.S. Mortgage Markets and Institutions and Their Relevance for Korea
Working Paper	03-01	Sang-Moon Hahm	Transmission of Stock Returns and Volatility: the Case of Korea
Working Paper	03-02	Yoon Ha Yoo	Does Evidentiary Uncertainty Induce Excessive Injurer Care?
Working Paper	03-03	Yoon Ha Yoo	Competition to Enter a Better School and Private Tutoring
Working Paper	03-04	Sunwoong Kim Ju-Ho Lee	Hierarchy and Market Competition in South Korea's Higher Education Sector
Working Paper	03-05	Chul Chung	Factor Content of Trade: Nonhomothetic Preferences and "Missing Trade"
Working Paper	03-06	Hun Joo Park	RECASTING KOREAN DIRIGISME
Working Paper	03-07	Ju-Ho Lee	Mixing <i>versus</i> Sorting in Schooling: Evidence from the Equalization Policy in South Korea
Working Paper	03-08	Naohito Abe	Managerial Incentive Mechanisms and Turnover of Company Presidents and Director in Japan
Working Paper	03-09	Naohito Abe Noel Gaston Katsuyuki Kubo	EXECUTIVE PAY IN JAPAN: THE ROLE OF BANK-APPOINTED MONITORS AND THE MAIN BANK RELATIONSHIP
Working Paper	03-10	Chai-On Lee	Foreign Exchange Rates Determination in the light of Marx's Labor-Value Theory
Working Paper	03-11	Taejong Kim	Political Economy and Population Growth in Early Modern Japan
Working Paper	03-12	Il-Horn Hann Kai-Lung Hui Tom S. Lee I.P.L. Png	Direct Marketing: Privacy and Competition
Working Paper	03-13	Marcus Noland	RELIGION, CULTURE, AND ECONOMIC PERFORMANCE
Working Paper	04-01	Takao Kato Woochan Kim Ju Ho Lee	EXECUTIVE COMPENSATION AND FIRM PERFORMANCE IN KOREA
Working Paper	04-02	Kyoung-Dong Kim	Korean Modernization Revisited: An Alternative View from the Other Side of History

Category	Serial #	Author	Title
Working Paper	04-03	Lee Seok Hwang	Ultimate Ownership, Income Management, and Legal and Extra-Legal Institutions
Working Paper	04-04	Dongsoo Kang	Key Success Factors in the Revitalization of Distressed Firms : A Case of the Korean Corporate Workouts
Working Paper	04-05	Il Chong Nam Woochan Kim	The Remaining Issues in Korea
Working Paper	04-06	Hee Soo Chung Jeong Ho Kim Hyuk II Kwon	Housing Speculation and Housing Price Bubble in Korea
Working Paper	04-07	Yoon-Ha Yoo	Uncertainty and Negligence Rules
Working Paper	04-08	Young Ki Lee	Pension and Retirement Fund Management
Working Paper	04-09	Wooheon Rhee Tack Yun	Implications of Quasi-Geometric Discountingon the Observable Sharp e Ratio
Working Paper	04-10	Seung-Joo Lee	Growth Strategy: A Conceptual Framework
Working Paper	04-11	Boon-Young Lee Seung-Joo Lee	Case Study of Samsung's Mobile Phone Business
Working Paper	04-12	Sung Yeung Kwack Young Sun Lee	What Determines Saving Rate in Korea?: the Role of Demography
Working Paper	04-13	Ki-Eun Rhee	Collusion in Repeated Auctions with Externalities
Working Paper	04-14	Jaeun Shin Sangho Moon	IMPACT OF DUAL ELIGIBILITY ON HEALTHCARE USE BY MEDICARE BENEFICIARIES
Working Paper	04-15	Hun Joo Park Yeun-Sook Park	Kiding into the Sunset: The Pontical Economy of Bicycles as a Decining industry in Korea
Working Paper	04-16	Woochan Kim Hasung Jang Bernard S. Black	Predicting Firm's Corporate Governance Choices: Evidence from Korea
Working Paper	04-17	Tae Hee Choi	Characteristics of Firms that Persistently Meet or Beat Analysts' Forecasts
Working Paper	04-18	Taejong Kim Yoichi Okita	Is There a Premium for Elite College Education: Evidence from a Natural Experiment in Japan
Working Paper	04-19	Leonard K. Cheng Jae Nahm	Product Boundary, Vertical Competition, and the Double Mark-up Problem
Working Paper	04-20	Woochan Kim Young-Jae Lim Taeyoon Sung	What Determines the Ownership Structure of Business Conglomerates? On the Cash Flow Rights of Korea's Chaebol
Working Paper	04-21	Taejong Kim	Shadow Education: School Quality and Demand for Private Tutoring in Korea
Working Paper	04-22	Ki-Eun Rhee Raphael Thomadsen	Costly Collusion in Differentiated Industries
Working Paper	04-23	Jaeun Shin Sangho Moon	HMO plans, Self-selection, and Utilization of Health Care Services
Working Paper	04-24	Yoon-Ha Yoo	Risk Aversion and Incentive to Abide By Legal Rules
Working Paper	04-25	Ji Hong Kim	Speculative Attack and Korean Exchange Rate Regime
Working Paper	05-01	Woochan Kim Taeyoon Sung	What Makes Firms Manage FX Risk? : Evidence from an Emerging Market
Working Paper	05-02	Janghyuk Lee Laoucine Kerbache	Internet Media Planning: An Optimization Model

Category	Serial #	Author	Title
Working Paper	05-03	Kun-Ho Lee	Risk in the Credit Card Industry When Consumer Types are Not Observable
Working Paper	05-04	Kyong-Dong KIM	Why Korea Is So Prone To Conflict: An Alternative Sociological Analysis
Working Paper	05-05	Dukgeun AHN	Why Should Non-actionable Subsidy Be Non-actionable?
Working Paper	05-06	Seung-Joo LEE	Case Study of L'Oréal: Innovation and Growth Strategy
Working Paper	05-07	Seung-Joo LEE	Case Study of BMW: The Ultimate Driving Machine
Working Paper	05-08	Taejong KIM	Do School Ties Matter? Evidence from the Promotion of Public Prosecutors in Korea
Working Paper	05-09	Hun Joo PARK	Paradigms and Fallacies: Rethinking Northeast Asian Security
Working Paper	05-10	WOOCHAN KIM TAEYOON SUNG	What Makes Group-Affiliated Firms Go Public?
Working Paper	05-11	BERNARD S. BLACK WOOCHAN KIM HASUNG JANG KYUNG-SUH PARK	Does Corporate Governance Predict Firms' Market Values? Time Series Evidence from Korea
Working Paper	05-12	Kun-Ho Lee	Estimating Probability of Default For the Foundation IRB Approach In Countries That Had Experienced Extreme Credit Crises
Working Paper	05-13	Ji-Hong KIM	Optimal Policy Response To Speculative Attack
Working Paper	05-14	Kwon Jung Boon Young Lee	Coupon Redemption Behaviors among Korean Consumers: Effects of Distribution Method, Face Value, and Benefits on Coupon Redemption Rates in Service Sector
Working Paper	06-01	Kee-Hong Bae Seung-Bo Kim Woochan Kim	Family Control and Expropriation of Not-for-Profit Organizations: Evidence from Korean Private Universities
Working Paper	06-02	Jaeun Shin	How Good is Korean Health Care? An International Comparison of Health Care Systems
Working Paper	06-03	Tae Hee Choi	Timeliness of Asset Write-offs
Working Paper	06-04	Jin PARK	Conflict Resolution Case Study: The National Education Information System (NEIS)
Working Paper	06-05	YuSang CHANG	DYNAMIC COMPETITIVE PARADIGM OF MANAGING MOVING TARGETS; IMPLICATIONS FOR KOREAN INDUSTY
Working Paper	06-06	Jin PARK	A Tale of Two Government Reforms in Korea
Working Paper	06-07	Ilho YOO	Fiscal Balance Forecast of Cambodia 2007-2011
Working Paper	06-08	Ilho YOO	PAYG pension in a small open economy
Working Paper	06-09	Kwon JUNG Clement LIM	IMPULSE BUYING BEHAVIORS ON THE INTERNET
Working Paper	06-10	Joong H. HAN	Liquidation Value and Debt Availability: An Empirical Investigation
Working Paper	06-11	Brandon Julio, Woojin Kim Michael S. Weisbach	Uses of Funds and the Sources of Financing: Corporate Investment and Debt Contract Design
Working Paper	06-12	Hun Joo Park	Toward People-centered Development: A Reflection on the Korean Experience

Category	Serial #	Author	Title
Working Paper	06-13	Hun Joo Park	The Perspective of Small Business in South Korea
Working Paper	06-14	Younguck KANG	Collective Experience and Civil Society in Governance
Working Paper	06-15	Dong-Young KIM	The Roles of Government Officials as Policy Entrepreneurs in Consensus Building Process
Working Paper	06-16	Ji Hong KIM	Military Service : draft or recruit
Working Paper	06-17	Ji Hong KIM	Korea-US FTA
Working Paper	06-18	Ki-Eun RHEE	Reevaluating Merger Guidelines for the New Economy
Working Paper	06-19	Taejong KIM Ji-Hong KIM Insook LEE	Economic Assimilation of North Korean Refugees in South Korea: Survey Evidence
Working Paper	06-20	Seong Ho CHO	ON THE STOCK RETURN METHOD TO DETERMINING INDUSTRY SUBSTRUCTURE: AIRLINE, BANKING, AND OIL INDUSTRIES
Working Paper	06-21	Seong Ho CHO	DETECTING INDUSTRY SUBSTRUCTURE: - Case of Banking, Steel and Pharmaceutical Industries-
Working Paper	06-22	Tae Hee Choi	Ethical Commitment, Corporate Financial Factors: A Survey Study of Korean Companies
Working Paper	06-23	Tae Hee Choi	Aggregation, Uncertainty, and Discriminant Analysis
Working Paper	07-01	Jin PARK Seung-Ho JUNG	Ten Years of Economic Knowledge Cooperation with North Korea: Trends and Strategies
Working Paper	07-02	BERNARD S. BLACK WOOCHAN KIM	The Effect of Board Structure on Firm Value in an Emerging Market: IV, DiD, and Time Series Evidence from Korea
Working Paper	07-03	Jong Bum KIM	FTA Trade in Goods Agreements: 'Entrenching' the benefits of reciprocal tariff concessions
Working Paper	07-04	Ki-Eun Rhee	Price Effects of Entries
Working Paper	07-05	Tae H. Choi	Economic Crises and the Evolution of Business Ethics in Japan and Korea
Working Paper	07-06	Kwon JUNG Leslie TEY	Extending the Fit Hypothesis in Brand Extensions: Effects of Situational Involvement, Consumer Innovativeness and Extension Incongruity on Evaluation of Brand Extensions
Working Paper	07-07	Younguck KANG	Identifying the Potential Influences on Income Inequality Changes in Korea – Income Factor Source Analysis
Working Paper	07-08	WOOCHAN KIM TAEYOON SUNG SHANG-JIN WEI	Home-country Ownership Structure of Foreign Institutional Investors and Control- Ownership Disparity in Emerging Markets
Working Paper	07-09	Ilho YOO	The Marginal Effective Tax Rates in Korea for 45 Years : 1960-2004
Working Paper	07-10	Jin PARK	Crisis Management for Emergency in North Korea
Working Paper	07-11	Ji Hong KIM	Three Cases of Foreign Investment in Korean Banks
Working Paper	07-12	Jong Bum Kim	Territoriality Principle under Preferential Rules of Origin
Working Paper	07-13	Seong Ho CHO	THE EFFECT OF TARGET OWNERSHIP STRUCTURE ON THE TAKEOVER PREMIUM IN OWNER-MANAGER DOMINANT ACQUISITIONS: EVIDENCE FROM KOREAN CASES

Category	Serial #	Author	Title
Working Paper	07-14	Seong Ho CHO Bill McKelvey	Determining Industry Substructure: A Stock Return Approach
Working Paper	07-15	Dong-Young KIM	Enhancing BATNA Analysis in Korean Public Disputes
Working Paper	07-16	Dong-Young KIM	The Use of Integrated Assessment to Support Multi-Stakeholder negotiations for Complex Environmental Decision-Making
Working Paper	07-17	Yuri Mansury	Measuring the Impact of a Catastrophic Event: Integrating Geographic Information System with Social Accounting Matrix
Working Paper	07-18	Yuri Mansury	Promoting Inter-Regional Cooperation between Israel and Palestine: A Structural Path Analysis Approach
Working Paper	07-19	Ilho YOO	Public Finance in Korea since Economic Crisis
Working Paper	07-20	Li GAN Jaeun SHIN Qi LI	Initial Wage, Human Capital and Post Wage Differentials
Working Paper	07-21	Jin PARK	Public Entity Reform during the Roh Administration: Analysis through Best Practices
Working Paper	07-22	Tae Hee Choi	The Equity Premium Puzzle: An Empirical Investigation of Korean Stock Market
Working Paper	07-23	Joong H. HAN	The Dynamic Structure of CEO Compensation: An Empirical Study
Working Paper	07-24	Ki-Eun RHEE	Endogenous Switching Costs in the Face of Poaching
Working Paper	08-01	Sun LEE Kwon JUNG	Effects of Price Comparison Site on Price and Value Perceptions in Online Purchase
Working Paper	08-02	Ilho YOO	Is Korea Moving Toward the Welfare State?: An IECI Approach
Working Paper	08-03	Ilho YOO Inhyouk KOO	DO CHILDREN SUPPORT THEIR PARENTS' APPLICATION FOR THE REVERSE MORTGAGE?: A KOREAN CASE
Working Paper	08-04	Seong-Ho CHO	Raising Seoul's Global Competitiveness: Developing Key Performance Indicators
Working Paper	08-05	Jin PARK	A Critical Review for Best Practices of Public Entities in Korea
Working Paper	08-06	Seong-Ho CHO	How to Value a Private Company? -Case of Miele Korea-
Working Paper	08-07	Yoon Ha Yoo	The East Asian Miracle: Export-led or Investment-led?
Working Paper	08-08	Man Cho	Subprime Mortgage Market: Rise, Fall, and Lessons for Korea
Working Paper	08-09	Woochan KIM Woojin KIM Kap-sok KWON	Value of shareholder activism: evidence from the switchers
Working Paper	08-10	Kun-Ho Lee	Risk Management in Korean Financial Institutions: Ten Years after the Financial Crisis
Working Paper	08-11	Jong Bum KIM	Korea's Institutional Framework for FTA Negotiations and Administration: Tariffs and Rules of Origin
Working Paper	08-12	Yu Sang CHANG	Strategy, Structure, and Channel of Industrial Service Leaders: A Flow Chart Analysis of the Expanded Value Chain
Working Paper	08-13	Younguck KANG	Sensitivity Analysis of Equivalency Scale in Income Inequality Studies
Working Paper	08-14	Younguck KANG	Case Study: Adaptive Implementation of the Five-Year Economic Development Plans

Category	Serial #	Author	Title
Working Paper	08-15	Joong H. HAN	Is Lending by Banks and Non-banks Different? Evidence from Small Business Financing
Working Paper	08-16	Joong H. HAN	Checking Accounts and Bank Lending
Working Paper	08-17	Seongwuk MOON	How Does the Management of Research Impact the Disclosure of Knowledge? Evidence from Scientific Publications and Patenting Behavior
Working Paper	08-18	Jungho YOO	How Korea's Rapid Export Expansion Began in the 1960s: The Role of Foreign Exchange Rate
Working Paper	08-19	BERNARD S. BLACK WOOCHAN KIM HASUNG JANG KYUNG SUH PARK	How Corporate Governance Affects Firm Value: Evidence on Channels from Korea
Working Paper	08-20	Tae Hee CHOI	Meeting or Beating Analysts' Forecasts: Empirical Evidence of Firms' Characteristics, Persistence Patterns and Post-scandal Changes
Working Paper	08-21	Jaeun SHIN	Understanding the Role of Private Health Insurance in the Universal Coverage System: Macro and Micro Evidence
Working Paper	08-22	Jin PARK	Indonesian Bureaucracy Reform: Lessons from Korea
Working Paper	08-23	Joon-Kyung KIM	Recent Changes in Korean Households' Indebtedness and Debt Service Capacity
Working Paper	08-24	Yuri Mansury	What Do We Know about the Geographic Pattern of Growth across Cities and Regions in South Korea?
Working Paper	08-25	Yuri Mansury & Jae Kyun Shin	Why Do Megacities Coexist with Small Towns? Historical Dependence in the Evolution of Urban Systems
Working Paper	08-26	Jinsoo LEE	When Business Groups Employ Analysts: Are They Biased?
Working Paper	08-27	Cheol S. EUN Jinsoo LEE	Mean-Variance Convergence Around the World
Working Paper	08-28	Seongwuk MOON	How Does Job Design Affect Productivity and Earnings? Implications of the Organization of Production
Working Paper	08-29	Jaeun SHIN	Smoking, Time Preference and Educational Outcomes
Working Paper	08-30	Dong Young KIM	Reap the Benefits of the Latecomer: From the story of a political, cultural, and social movement of ADR in US
Working Paper	08-31	Ji Hong KIM	Economic Crisis Management in Korea: 1998 & 2008
Working Paper	08-32	Dong-Young KIM	Civility or Creativity?: Application of Dispute Systems Design (DSD) to Korean Public Controversies on Waste Incinerators
Working Paper	08-33	Ki-Eun RHEE	Welfare Effects of Behavior-Based Price Discrimination
Working Paper	08-34	Ji Hong KIM	State Owned Enterprise Reform
Working Paper	09-01	Yu Sang CHANG	Making Strategic Short-term Cost Estimation by Annualized Experience Curve
Working Paper	09-02	Dong Young KIM	When Conflict Management is Institutionalized: A Review of the Executive Order 19886 and government practice
Working Paper	09-03	Man Cho	Managing Mortgage Credit Risk: What went wrong with the subprime and Alt-A markets?
Working Paper	09-04	Tae H. Choi	Business Ethics, Cost of Capital, and Valuation

Category	Serial #	Author	Title
Working Paper	09-05	Woochan KIM Woojin KIM Hyung-Seok KIM	What makes firms issue death spirals? A control enhancing story
Working Paper	09-06	Yu Sang CHANG Seung Jin BAEK	Limit to Improvement: Myth or Reality? Empirical Analysis of Historical Improvement on Three Technologies Influential in the Evolution of Civilization
Working Paper	09-07	Ji Hong KIM	G20: Global Imbalance and Financial Crisis
Working Paper	09-08	Ji Hong KIM	National Competitiveness in the Globalized Era
Working Paper	09-09	Hao Jiang , Woochan Kim , Ramesh K. S. Rao	Contract Heterogeneity, Operating Shortfalls, and Corporate Cash Holdings
Working Paper	09-10	Man CHO	Home Price Cycles: A Tale of Two Countries
Working Paper	09-11	Dongcul CHO	The Republic of Korea's Economy in the Swirl of Global Crisis
Working Paper	09-12	Dongcul CHO	House Prices in ASEAN+3: Recent Trends and Inter-Dependence
Working Paper	09-13	Seung-Joo LEE Eun-Hyung LEE	Case Study of POSCO - Analysis of its Growth Strategy and Key Success Factors
Working Paper	09-14	Woochan KIM Taeyoon SUNG Shang-Jin WEI	The Value of Foreign Blockholder Activism: Which Home Country Governance Characteristics Matter?
Working Paper	09-15	Joon-Kyung KIM	Post-Crisis Corporate Reform and Internal Capital Markets in Chaebols
Working Paper	09-16	Jin PARK	Lessons from SOE Management and Privatization in Korea
Working Paper	09-17	Tae Hee CHOI	Implied Cost of Equity Capital, Firm Valuation, and Firm Characteristics
Working Paper	09-18	Kwon JUNG	Are Entrepreneurs and Managers Different? Values and Ethical Perceptions of Entrepreneurs and Managers
Working Paper	09-19	Seongwuk MOON	When Does a Firm Seek External Knowledge? Limitations of External Knowledge
Working Paper	09-20	Seongwuk MOON	Earnings Inequality within a Firm: Evidence from a Korean Insurance Company
Working Paper	09-21	Jaeun SHIN	Health Care Reforms in South Korea: What Consequences in Financing?
Working Paper	09-22	Younguck KANG	Demand Analysis of Public Education: A Quest for New Public Education System for Next Generation
Working Paper	09-23	Seong-Ho CHO Jinsoo LEE	Valuation and Underpricing of IPOs in Korea
Working Paper	09-24	Seong-Ho CHO	Kumho Asiana's LBO Takeover on Korea Express
Working Paper	10-01	Yun-Yeong KIM Jinsoo LEE	Identification of Momentum and Disposition Effects Through Asset Return Volatility
Working Paper	10-02	Kwon JUNG	Four Faces of Silver Consumers: A Typology, Their Aspirations, and Life Satisfaction of Older Korean Consumers
Working Paper	10-03	Jinsoo LEE Seongwuk MOON	Corporate Governance and International Portfolio Investment in Equities
Working Paper	10-04	Jinsoo LEE	Global Convergence in Tobin's Q Ratios
Working Paper	10-05	Seongwuk MOON	Competition, Capability Buildup and Innovation: The Role of Exogenous Intra-firm Revenue Sharing

Category	Serial #	Author	Title
Working Paper	10-06	Kwon JUNG	Credit Card Usage Behaviors among Elderly Korean Consumers
Working Paper	10-07	Yu-Sang CHANG Jinsoo LEE	Forecasting Road Fatalities by the Use of Kinked Experience Curve
Working Paper	10-08	Man CHO	Securitization and Asset Price Cycle: Causality and Post-Crisis Policy Reform
Working Paper	10-09	Man CHO Insik MIN	Asset Market Correlation and Stress Testing: Cases for Housing and Stock Markets
Working Paper	10-10	Yu-Sang CHANG Jinsoo LEE	Is Forecasting Future Suicide Rates Possible? - Application of the Experience Curve -
Working Paper	10-11	Seongwuk MOON	What Determines the Openness of Korean Manufacturing Firms to External Knowledge?
Working Paper	10-12	Joong Ho HAN Kwangwoo PARK George PENNACCHI	Corporate Taxes and Securitization
Working Paper	10-13	Younguck KANG	Housing Policy of Korea: Old Paradigm, New Approach
Working Paper	10-14	Il Chong NAM	A Proposal to Reform the Korean CBP Market
Working Paper	10-15	Younguck KANG	Balanced Regional Growth Strategy based on the Economies of Agglomeration: the Other Side of Story
Working Paper	10-16	Joong Ho HAN	CEO Equity versus Inside Debt Holdings and Private Debt Contracting
Working Paper	11-01	Yeon-Koo CHE Rajiv SETHI	Economic Consequences of Speculative Side Bets: The Case of Naked Credit Default Swaps
Working Paper	11-02	Tae Hee CHOI Martina SIPKOVA	Business Ethics in the Czech Republic
Working Paper	11-03	Sunwoo HWANG Woochan KIM	Anti-Takeover Charter Amendments and Managerial Entrenchment: Evidence from Korea
Working Paper	11-04	Yu Sang CHANG Jinsoo LEE Yun Seok JUNG	The Speed and Impact of a New Technology Diffusion in Organ Transplantation: A Case Study Approach
Working Paper	11-05	Jin PARK Jiwon LEE	The Direction of Inter-Korean Cooperation Fund Based on ODA Standard
Working Paper	11-06	Woochan KIM	Korea Investment Corporation: Its Origin and Evolution
Working Paper	11-07	Seung-Joo LEE	Dynamic Capabilities at Samsung Electronics: Analysis of its Growth Strategy in Semiconductors
Working Paper	11-08	Joong Ho HAN	Deposit Insurance and Industrial Volatility
Working Paper	11-09	Dong-Young KIM	Transformation from Conflict to Collaboration through Multistakeholder Process: Shihwa Sustainable Development Committee in Korea
Working Paper	11-10	Seongwuk MOON	How will Openness to External Knowledge Impact Service Innovation? Evidence from Korean Service Sector
Working Paper	11-11	Jin PARK	Korea's Technical Assistance for Better Governance: A Case Study in Indonesia
Working Paper	12-01	Seongwuk MOON	How Did Korea Catch Up with Developed Countries in DRAM Industry? The Role of Public Sector in Demand Creation: PART 1
Working Paper	12-02	Yong S. Lee Young U. Kang Hun J Park	The Workplace Ethics of Public Servants in Developing Countries
Working Paper	12-03	Ji-Hong KIM	Deposit Insurance System in Korea and Reform

Category	Serial #	Author	Title
Working Paper	12-04	Yu Sang Chang Jinsoo Lee Yun Seok Jung	Technology Improvement Rates of Knowledge Industries following Moore's Law? -An Empirical Study of Microprocessor, Mobile Cellular, and Genome Sequencing Technologies-
Working Paper	12-05	Man Cho	Contagious Real Estate Cycles: Causes, Consequences, and Policy Implications
Working Paper	12-06	Younguck KANG Dhani Setvawan	INTERGOVERNMENTAL TRANSFER AND THE FLYPAPER EFFECT – Evidence from Municipalities/Regencies in Indonesia –
Working Paper	12-07	Younguck KANG	Civil Petitions and Appeals in Korea : Investigating Rhetoric and Institutional settings
Working Paper	12-08	Yu Sang Chang Jinsoo Lee	Alternative Projection of the World Energy Consumption -in Comparison with the 2010 International Energy Outlook
Working Paper	12-09	Hyeok Jeong	The Price of Experience
Working Paper	12-10	Hyeok Jeong	Complementarity and Transition to Modern Economic Growth
Working Paper	13-01	Yu Sang CHANG Jinsoo LEE Hyuk Ju KWON	When Will the Millennium Development Goal on Infant Mortality Rate Be Realized? - Projections for 21 OECD Countries through 2050-
Working Paper	13-02	Yoon-Ha Yoo	Stronger Property Rights Enforcement Does Not Hurt Social Welfare -A Comment on Gonzalez' "Effective Property Rights, Conflict and Growth (JET, 2007)"-
Working Paper	13-03	Yu Sang CHANG Changyong CHOI	Will the Stop TB Partnership Targets on TB Control be Realized on Schedule? - Projection of Future Incidence, Prevalence and Death Rates -
Working Paper	13-04	Yu Sang CHANG Changyong CHOI	Can We Predict Long-Term Future Crime Rates? – Projection of Crime Rates through 2030 for Individual States in the U.S. –
Working Paper	13-05	Chrysostomos Tabakis	Free-Trade Areas and Special Protection
Working Paper	13-06	Hyeok Jeong	Dynamics of Firms and Trade in General Equilibrium
Working Paper	13-07	Hyeok Jeong	Testing Solow's Implications on the Effective Development Policy
Working Paper	13-08	Jaeun SHIN	Long-Term Care Insurance and Health Care Financing in South Korea
Working Paper	13-09	Ilchong Nam	Investment Incentives for Nuclear Generators and Competition in the Electricity Market of Korea
Working Paper	13-10	Ilchong Nam	Market Structure of the Nuclear Power Industry in Korea and Incentives of Major Firms
Working Paper	13-11	Ji Hong KIM	Global Imbalances
Working Paper	14-01	Woochan KIM	When Heirs Become Major Shareholders
Working Paper	14-02	Chrysostomos Tabakis	Antidumping Echoing
Working Paper	14-03	Ju Ho Lee	Is Korea Number One in Human Capital Accumulation?: Education Bubble Formation and its Labor Market Evidence
Working Paper	14-04	Chrysostomos Tabakis	Regionalism and Conict: Peace Creation and Peace Diversion
Working Paper	14-05	Ju Ho Lee	Making Education Reform Happen: Removal of Education Bubble through Education Diversification
Working Paper	14-06	Sung Joon Paik	Pre-employment VET Investment Strategy in Developing Countries - Based on the Experiences of Korea -

Category	Serial #	Author	Title
Working Paper	14-07	Ju Ho Lee Josh Sung-Chang Ryoo Sam-Ho Lee	From Multiple Choices to Performance Assessment: Theory, Practice, and Strategy
Working Paper	14-08	Sung Joon Paik	Changes in the effect of education on the earnings differentials between men and women in Korea (1990-2010)
Working Paper	14-09	Shun Wang	Social Capital and Rotating Labor Associations: Evidence from China
Working Paper	14-10	Hun Joo Park	Recasting the North Korean Problem: Towards Critically Rethinking about the Perennial Crisis of the Amoral Family State and How to Resolve It
Working Paper	14-11	Yooncheong Cho	Justice, Dissatisfaction, and Public Confidence in the E-Governance)