

Full Length Research Paper

Impact of locus of control, changes in work load and career prospects on organizational commitment of employees of life insurance companies during merger and acquisition

Chiewei Hung¹ and Ker-Tah Hsu^{2*}

¹Feng Chia University, Department of Risk Management and Insurance, 100 Wen-Hua Road, Seatwen 407, Taichung City 40724, Taiwan.

²National Taichung University of Education, Department of International Business, 140 Min-Shen Road, Taichung City 40306, Taiwan.

Accepted 21 June, 2011

This paper explores employee organizational commitment in the process of merger and acquisition. A case study of a life insurance merge and acquisition case in which the acquiring company was a local life insurance firm and the acquired company was a foreign-owned insurance company in Taiwan is used. The present study explored two issues: (1) whether employees of the acquiring company and the acquired company perceived changes in work load and career prospects differently during the process of absorption and exhibited different levels of organizational commitment to the surviving company; and (2) the structural relationships between organizational commitment, locus of control and the perceived changes in work load and career prospects for employees of the two companies. We found that work load change and career prospects change is perceived by employees of the two groups invariantly; employees of the acquiring company have higher level of organizational commitment than those of the acquired company; the direct influences of work load change and career prospects change on organizational commitment are statistically significant; the direct influences of locus of control on organizational commitment, work load change, and career prospects change are statistically significant; the indirect influence of locus of control on organizational commitment is statistically significant; and the moderating effect of locus of control is not statistically significant.

Key words: Organizational commitment, locus of control, work load, career prospect.

INTRODUCTION

The International Financial Reporting Standards Bulletin IV (IFRS4) to which life insurance companies in EU are subject, came into force in 2005. It mandates more stringent financial norms than in other countries. Many life insurance companies in Europe have since decided to sell overseas assets in order to meet the dramatic increase in reserve requirement under IFRS4. In 2004, European life insurance companies began to withdraw from the life insurance market in Taiwan and to sell their

subsidiaries and branches. Largely for this reason, the number of foreign-owned life insurance companies in Taiwan fell after 2007. Former subsidiary and branch companies of European life insurance companies were often acquired by Taiwanese life insurance companies.

The case being studied includes two companies. The acquiring company was established in the 1990s and was the first new life insurance company established after the restrictions on the number of life insurance companies in Taiwan was lifted. According to the Life Insurance Association in Taiwan, through the end of September 2008, the market share of the acquiring company was 7.06%. After Taiwan opened its life insurance market to foreign firms, the acquired company was the first foreign

*Corresponding author. E-mail: kthsu@ntcu.edu.tw. Tel: +886 4 2218 3934; fax: +886 4 2218 3356

owned insurance firm to enter the market. According to the Life Insurance Association in Taiwan, through the end of September 2008, the market share of the acquired company was 6.82%. After June 1, 2009, all the life insurance policies issued by the acquired company were fully transferred to and borne by the acquiring company. In other words, the acquiring company is the surviving company.

Merger and acquisition is a key type of organizational change. In the process of merger and acquisition, both the employees of the acquired company and those of the acquiring company face changes in work load, job stress, career prospect, income, and management. The extent to which employees are influenced by the change process and whether employees of the acquiring company and the acquired company are affected symmetrically depends on the approach taken by the management of the firms.

Organizational change may influence employee organizational commitment via several factors. For example, Cole et al. (2006) found that employee organizational commitment is positively influenced by their assessments of the appropriateness of organizational change. The present study takes employee perceptions of work load change and career prospects change resulting from the merger into account. These two changes concern employees of both the acquiring company and the acquired company. In this paper, we hypothesize that, changes in perceived work load and perceived career prospects are important antecedents of employees' organizational commitment. Organizational commitment is generally seen as a psychological outcome that is usually associated with personality (Chen and Silverthorn, 2008). Organizational change may interact with individual's personality, and thereby affect psychological outcomes.

In the studied case, the acquired company was absorbed by the acquiring company. Therefore, a high level of change was faced by the acquired company and there was little or no change for the acquiring company during the process of absorption after merger (Steuer and Wood, 2008). We investigated whether, under such conditions, employees of the acquiring company and the acquired company perceive changes of work load and career prospects differently during the process of absorption and had different levels of organizational commitment to the surviving company. We also explored the structural relationships between organizational commitment, locus of control and perceived changes in work load and career prospects for employees of the two companies during the process of absorption. Partial examination of the simple bivariate relationships between any pair of these variables might distort their true relationships due to omitted variable bias. With this in mind, possible competing models are identified further. Of interest is the specification of the "antecedent, mediating or moderating and consequent" relationships among these variables.

Further, two competing models are identified based on

a review of literature. At the same time, the relevant hypotheses derived from these competing models are proposed. Subsequently, the methodology, data collection, scales for measuring relevant variables and their fit indexes are then described. Statistical analyses are conducted from which our research concludes with a discussion of our empirical findings and their managerial implications.

LITERATURE REVIEW AND HYPOTHESES

Organizational commitment

Organizational commitment is believed to be an important antecedent of various psychological or behavioral outcomes, which are indices of organizational efficiency and effectiveness and desirable work-related outcomes. High levels of organizational commitment have been related to lower levels of turnover among employees, absenteeism, tardiness and higher levels of job performance, innovative activities and organizational citizenship (Beck and Wilson, 2000). The study of organizational commitment is thus of great value since results can aid management in promotion of performance, control of turnover, and development of desirable work-related behaviors and attitude.

Turnover and propensity to leave have been found to be negatively related to organizational commitment (Chonko, 1986; Johnston et al., 1990; Bashaw and Grant, 1994; Cohen and Freund, 2005). Lambert and Hogan (2009) surveyed correctional staff at a maximum security private prison and found that age, job satisfaction, and organizational commitment have direct effects on turnover intent, whereas, gender, job satisfaction, role conflict, role ambiguity, role overload, input into decision making, and organizational fairness indirectly influence employee decision to leave the organization. Turnover incurs recruiting and training costs. Increasing employee organizational commitment reduces these costs.

Organizational commitment is positively related to various types of job performance. Employees with a high level of organizational commitment are predicted to achieve higher job performance (Bashaw and Grant, 1994; Tsai et al., 2010). Organizational commitment contributes positively to employee innovative behaviors in an organization, which leads to competitive advantage and organizational success (Jafri, 2010). Employee psychological well-being is also positively influenced by organizational commitment. Positive well-being leads to optimal functioning that is likely beneficial to organizations, while negative well-being has detrimental effects on individuals and organizations, which include reduced performance, absenteeism and turnover (Panaccio and Vandenberghe, 2009). Researchers have explored the relationships between organizational commitment and multiple consequences simultaneously. The impact of

organizational commitment on satisfaction with life, work withdrawal, organizational citizenship and turnover intentions are supported by the results of Wasti (2002). Tsoumbris and Xenikou (2010) found that a portion of variance in turnover intentions, intentions of changing occupation, and organizational citizenship behavior are explained by organizational commitment.

The earliest approach to developing a conceptual framework of organizational commitment focused thoroughly on the individual's relationship with the organization. According to Becker (1960), if they leave the organization, employees lose the accumulation of hidden investments they make by maintaining the membership in a given organization. The term "side-bets" has been used to refer to these hidden investments (Cohen, 2007).

For Porter et al. (1974), organizational commitment refers to the psychological attachment an individual has to the organization. Porter et al. (1974) developed a scale designed to measure organizational commitment, known as the organizational commitment questionnaire (OCQ). It consists of 15 items. A number of researchers have used a shorter version of the OCQ. For example, Iverson (1999) used a 9-item version and Beck and Wilson (2000) used a 12-item version of OCQ.

For Becker (1960) and Porter et al. (1971), organizational commitment is one-dimensional. Organizational commitment may also be operationalized using a multi-dimensional approach. The distinction between attitudinal and behavioral commitment was established first. Mowday et al. (1982) defined the two concepts as follows: "Attitudinal commitment focuses on the process by which people come to think about their relationship with the organization. ... Behavioral commitment on the other hand, relates to the process by which individuals become locked into a certain organization and how they deal with this problem." Following this distinction, organizational commitment was conceptualized bi-dimensionally in Meyer and Allen (1984).

Meyer and Allen (1991) added a third component and proposed a three-component model of organizational commitment. The three components reflect a desire (affective commitment), a need (continuance commitment) and an obligation (normative commitment) to maintain employment in an organization. Employees with a strong affective commitment attach themselves to, identify themselves with, and involve themselves with the organization. They commit to the organization because they "want to do so". Employees with continuance commitment remain with an organization because of awareness of the costs associated with leaving the organization. In other words, they "need to do so". Normative commitment is viewed as a feeling of obligation to remain with the organization. Employees with a high level of normative commitment stay with an organization because they "ought to do so". In fact, organizational commitment for Porter et al. (1974) is a synonym of affective

commitment (Meyer and Allen, 1991). For Meyer and Allen (1991), the side-bet of Becker (1960) is one dimension of continuance commitment.

However, the relationships between indices of organizational efficiency and effectiveness and affective commitment are found to be more consistent than those between these indices and continuance or normative commitment (Allen and Meyer, 1996). In addition, Wasti (2005) combined three components of organizational commitment to create distinct profiles of commitment and explored the implications of different profiles. The results suggest that affective commitment is the major predictor of positive job outcomes. The cross-cultural generalizability of the antecedents and consequences of affective commitment is also confirmed by the results of Wasti (2002). Therefore, affective commitment is used as proxy for organizational commitment.

The influences of the personal characteristics of employees on their organizational commitment are confirmed by many previous studies. Personal characteristics may include such traits as gender, marital status, age, education, family income, tenure, and locus of control (Bashaw and Grant, 1994; Joiner and Bakalis, 2006; Lin et al., 2010).

Job-related variables are other possible antecedents of organizational commitment. Job-related variables may include organizational support, organizational climate, work role, and social interaction. Job involvement could include tenure or a second job. Their influences on organizational commitment have abundant managerial implications and attracted attention of many researchers. Panaccio and Vandenberghe (2009) found that the positive relationship between perceived organizational support and employees' psychological well-being is mediated by organizational commitment. In other words, perceived organizational support is an antecedent of organizational commitment. Coyle-Shapiro and Morrow (2005) examined affective commitment of long-term contracted employees to employing and client organizations. They found that perceived organizational support and attractiveness of the client organization are positively related to employees' affective commitment to the client organization, which is explained by employees' commitment to their own contracting organization. The impacts of organizational climate and work role on organizational commitment were examined by Gormley and Kennerly (2010). Role ambiguity and role conflict are negatively related to all dimensions of organizational commitment. The consideration, intimacy and production emphasis dimensions of organizational climate are positively related to affective and normative commitment and have negative impacts on continuance commitment. Heffner and Rentsch (2001) employed a multiple constituencies approach and hypothesized that work group interaction would influence work group affective commitment; department social interaction and work group affective commitment would independently influence department

affective commitment; organizational social interaction and department affective commitment would independently influence organizational affective commitment. Their results supported the hypothesized relationships between social interaction and affective commitment.

Factors affecting employee organizational commitment during the period of organizational change or merger and acquisition has been relatively less discussed in the literature. Meyer et al. (2010) conducted a longitudinal study to examine the relationships of person-organization fit to employees' affective commitment and intention to stay with an organization during the early stages of strategic organizational change. Person-organization fit is defined as congruence between perceived and preferred organizational culture. The subjects of this study were employees of a large energy company affected by deregulation in the Canadian energy sector that was facing a new requirement to be profit-oriented. Unlike this study, the organizational change in their case was the layoff of permanent employees, the hiring of contract workers, changes in the senior management team and cultural transformation. Organizational commitment during periods of merger and acquisition was examined by Lin et al. (2010), whose subjects were employees of Taiwanese domestic banks that were acquired by foreign banks from 2007 to 2008. Their major aim was to investigate how changes in work characteristics uplift and enforce employee organizational commitment during periods of merger and acquisition. However, Lin et al. (2010) did not explore how the changes resulting from merger and acquisition impacted organizational commitment.

Organizational change

In today's dynamic world, no organization is immune to organizational change. Organizational change is defined as attempts to modify an organization's structure, goals, technology or work task (Carnall, 1986). Merger and acquisition are one form of organizational change and can be further characterized by the clash of cultures (Evans et al., 2002; Steuer and Wood, 2008).

While any organizational change can be a very stressful experience for individuals (Elrod and Tippett, 2002), fundamental changes such as mergers may be more stressful than most changes. The emotional responses to change that an individual can experience during change process may be equilibrium, denial, anger, bargaining, chaos, depression, resignation, openness, readiness and re-emergence (Perlman and Takacs, 1990). Negative attitudes among these responses may have negative consequences for the organization. Increased pressure for change is associated with increased stress, low job satisfaction, and increased intention to withdraw (Rush et al., 1995).

The change process involves going from the known to the unknown. This brings not only a stressful experiences

but also new possibilities for individuals. For some individuals, mergers may mean promotion or better prospect of his or her career. Two outcomes of merger and acquisition, that is changes in work load and changes in perceived career prospect, are chosen as antecedents of organizational commitment, which represent the good and bad side respectively. This study focuses equally on the positive and negative aspects of mergers.

Changes in work load, which might result from layoff of employees or more profit-oriented strategies, frequently follow merger and acquisition. Work load used in this study is one dimension of job overload, which in turn is one dimension of job stress (Rahim, 1996). Vakola and Nikolaou (2005) appear to show that highly stressed employees demonstrate decreased organizational commitment. The relationships between career-related variables and organizational commitment are supported by results of past researches (Alvi and Ahmed, 1987; Liu and Wang, 2001; Long et al., 2002; Bambacas, 2010; Weng et al. 2010). Employees have higher level of organizational commitment, when they perceive high probability of promotion and greater opportunity for learning and personal development.

Managers generally take two approaches in implementing the change progress. The level of change in the organization and its impact on individuals involved in the progress are determined by the approach used. The first approach is absorption, which aims at a high level of change for the acquired firm and little or no change for the acquiring firm. The second approach is integration, which implies change for both firms and for all of their employees (Steuer and Wood, 2008).

For the studied case, the former is implemented. We measure changes in perceived work load and perceived career prospects in the process of merger and acquisition for employees of both the acquiring firm and the acquired. Their effects on employee organizational commitment during merger and acquisition are then assessed.

Locus of control

Locus of control is one aspect of personality that describes the extent to which individuals believe they have the ability to exercise control over their environment. Rotter (1966) developed the internal-external locus of control that yields a single score on a scale from highly internal to highly external. Internals believe that events in their life result from their behaviors. Externals believe that they have very little control over the events in their life. Although several researchers have proposed that locus of control might be multidimensional, most studies of locus of control employ Rotter's single score scale (Chen and Wang, 2007).

The association of personality and psychological or behavioral outcomes is supported by many previous

research results. Job-related variables may be psychological or behavioral outcomes. Chen and Silverthorne (2008) found that locus of control is an important antecedent of job satisfaction, stress and performance. The results of Martin et al. (2005) confirmed that locus of control may directly influence job satisfaction, work-related well-being and organizational commitment. Rahim (1996) argued that internals perceive less stress and strain than externals. Similarly, Chen and Silverthorne (2008) found that internals are likely to have lower levels of job stress and higher level of performance and satisfaction. Job stress, job satisfaction, work-related well-being and organizational commitment are psychological outcomes, and job performance is behavioral outcomes. The main effects of locus of control on job-related variables are broadly supported by many other studies (Daniel and Guppy, 1994; Judge et al., 2003).

Important for this study is the relationship of locus of control to organizational commitment. Werbel et al. (1996) confirmed that job fit and locus of control were the most important antecedents of pre-entry organizational commitment. Luthans et al. (1987) demonstrated that locus of control is significantly associated with organizational commitment. Individuals with a higher internal locus of control are more likely to have a higher level of organizational commitment.

Hyatt and Prawitt (2001) examined how auditors' job performance is influenced by the interaction between individual auditors' locus of control and the employing firm's audit structure. Results indicate that internals perform at a higher level in unstructured firms than in structured firms, while externals perform at a higher level in structured firms than in unstructured firms. This implies that locus of control may interact with characteristics of the work environment and affect job-related variables. A similar study of Lin et al. (2010) found that work characteristic change has a greater effect on the organizational commitment of internals than externals. In other words, the aforementioned results imply a moderating effect of locus of control on job-related variables. Rahim (1996) argued that locus of control moderates the relationship between stress and strain. This hypothesis was partially supported by results from hierarchical regression analyses. However, the mediating effect of locus of control on the relationships between other variables is another possibility. Following this approach, Chen and Silverthorne (2008) posited that locus of control mediates the relationship between job stress and job performance, locus of control mediates the relationship between job satisfaction and job performance, and locus of control mediates the relationship between job satisfaction and job stress. The possible moderating effect and mediating effect of locus of control will be discussed in more detail.

Merger and acquisition may place employees of both the acquiring firm and the acquired firm in an uncertain environment. Employees' locus of control will influence their psychological reactions to organizational change.

Internals believe that their own behavior can affect what happens to them. We therefore, expect that internals would perceive greater improvement in or less increase of work load after a merger than externals. We also posit that internals would perceive a greater increase in career prospects after a merger than externals. Internals should also report more organizational commitment after a merger than externals.

Models and hypotheses

When two autonomous firms are merged together, culture clashes inevitably occur. For the employees involved, anxieties and stress are associated with the merger. The merger and acquisition process is not only a series of rational decisions but also a chaotic set of events that profoundly affect employees' lives and future prospects (Ashkenas and Francis, 2000; Buono, 2003). For our case, the post-acquisition process was determined by the logic of absorption. Employees of the acquiring firm and the acquired firm are affected asymmetrically. The respondents in this study are divided into two groups, that is, employees of the acquiring firm and the acquired firm in order to evaluate the extent to which they were influenced by the merger process invariantly.

The perceived changes of work load and career prospects are two of the concomitant changes associated with the post-acquisition process that concern employees of both firms. Organizational commitment is a psychological outcome of merger and acquisition. One goal of this study is to assess group differences in the means of work load change, career prospects change, and organizational commitment. For this test the first hypothesis is formulated thus:

H₁: The means of work load change, career prospects change, and organizational commitment are invariant across employees of the acquiring firm and the acquired firm.

Another focus of this study is the structural relationships between the perceived changes of work load and career prospect, organizational commitment and locus of control in the process of merger and acquisition. Two competing models are proposed to describe these structural relationships. In the two models, locus of control acts as an independent variable and a moderating variable, respectively.

The first model is depicted in Figure 1. An organizational change such as merger and acquisition often leads to negative psychological outcomes such as low job satisfaction and organizational commitment (Schweiger and DeNisi, 1991). As discussed, the direct influences of locus of control on organizational commitment and other job-related variables are supported by

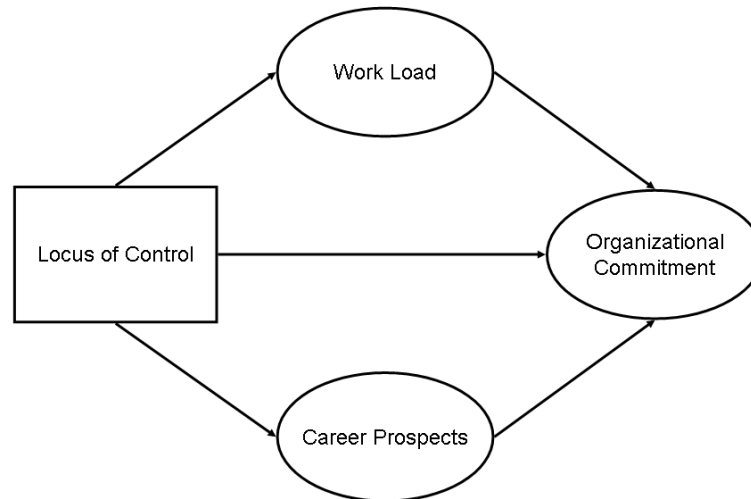


Figure 1. Structural relationships of Model 1.

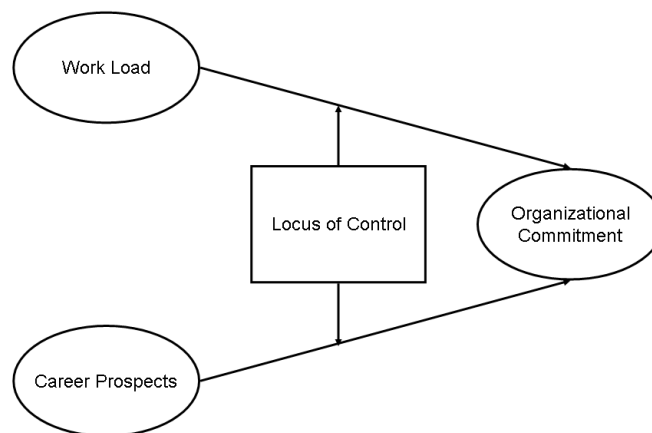


Figure 2. Structural relationships of Model 2.

many previous research results. Therefore, it is assumed that employees' locus of control affects their organizational commitment and perceived changes of work load and career prospects directly. In addition, the possible influences of work load change and career prospects change on employee organizational commitment are implied in the literature review. In the first model, it is posited that locus of control of employees affects employee perceptions of work load change and career prospects and that the perceived change in work load and career prospects in turn affects their organizational commitment. In other words, changes in perceived work load and career prospects act as mediating variables. The first model is denominated Model 1 in the following text.

The second model is specified in Figure 2 and the structural relationship is described as follows. The employee perceptions of changes in work load and

career prospects affect their organizational commitment. However, these relationships are moderated by the locus of control. This model is denominated in Model 2. As mentioned, previous research has found that locus of control may interact with characteristics of the work environment and affect job-related variables. Therefore, this study proposes that the changes in work load and career prospects resulting from mergers may interact with the individual employee's locus of control, affecting organizational commitment. More specifically, it is hypothesized that the relationship between employee organizational commitment and perceived changes in work load and career prospects may be moderated by the employee's individual locus of control. This approach is supported by the results of other studies. Lin et al. (2010) observed that the effect of work characteristic change on organizational commitment for employees with external locus of control is greater than for those with

internal locus of control. Similarly, Hsu et al. (2010) indicated that internal locus of control moderates the relationship between service-oriented organizational citizenship behavior, service climate and service delivery; the relationship between service climate and service-oriented organizational citizenship behavior is moderated by external locus of control.

As indicated earlier, another possibility is that locus of control acts as a mediating variable. The possible structural relationships may then be described as follows. Employee perceptions of changes in work load and career prospects affect their locus of control and organizational commitment, and locus of control influences organizational commitment. However, it seems impossible that the perceived work load and career prospects change could affect employee locus of control itself, which is shaped early in life, certainly before the changes in work load and career prospects. That means that changes in the work load and career prospects perceived by employees must not be able to affect their locus of control in the short term or for single instances of change. For this reason, the relationships between variables described by this possibility are considered unreasonable in this study and will be ignored.

In Models 1 and 2, we expect that employee perceptions of changes in work load change and career prospects associated with the process of merger and acquisition have a direct influence on their organizational commitment. This leads to the second research hypothesis:

H₂: The direct effects of work load change and career prospects change on organizational commitment are statistically insignificant.

In Model 1 we expect that the locus of control of employees has a direct effect on their perceived organizational commitment, work load change and career prospects change. These relationships are presented in the third hypothesis:

H₃: The direct effects of locus of control on organizational commitment, work load change, and career prospects change are statistically insignificant.

In addition to the direct links described earlier, two indirect relationships are possible in Model 1. They are of both theoretical and practical interest to the current study. Both are related to the relationship between locus of control and organizational commitment. From a practical standpoint, one question is whether the locus of control has a significant indirect influence on the organizational commitment of the employees through their perceived work load change and career prospects change. These indirect relationships are presented in the fourth hypothesis:

H₄: The indirect effect of locus of control on organizational commitment is statistically significant.

Finally, the moderating effect of locus of control is assessed in Model 2. This leads to the fifth hypothesis:

H₅: Locus of control has no significant moderating effects on the path from work load change to organizational commitment and that from career prospects change to organizational commitment.

METHODOLOGY

Structural equation modeling and tests

Structural equation modeling (SEM) is the primary method of this study. The term structural equation modeling refers to a family of related procedures rather than a single statistical technique (Kline, 2005). In SEM various theoretical models that hypothesize how sets of observed indicators defining constructs (the underlying latent variables that the indicators are presumed to measure) and how these latent constructs are related to each other may be tested (Schumacker and Lomax, 2004).

Whether the means of work load change, career prospects change and organizational commitment representing the various companies are statistically significantly different from each other is to be tested in H₁. However, these variables are latent constructs, whose means are unobservable. The structures of these latent constructs are derived indirectly from their indicators, which are directly measurable in turn. More specifically, equivalency of the latent construct means related to work load change, career prospects change, and organizational commitment across employees of the acquiring firm and the acquired firm are evaluated. H₁ can be reformulated as follows:

H₁: The latent construct means of work load change, career prospects change, and organizational commitment are invariant across employees of the acquiring firm and the acquired firm.

The other hypotheses of this study focus on the structural relationships between work load change, career prospects change, organizational commitment, and locus of control. Again, most of these are unobservable. For this reason, structural regression (SR) models were used to evaluate these structural relationships. SR models, which can be viewed as syntheses of path and measurement models, were used in this study to test the hypotheses of the structural and measurement relations proposed earlier. The structural component of a SR model depicts patterns of causal effects. The observed indicators and the constructs, that is, the underlying latent variables that the indicators are presumed to measure, make up measurement components of SR models (Kline, 2005).

Sample

A total of 495 survey instruments were distributed with a cover letter indicating that completion was voluntary and responses would be kept confidential. To ensure confidentiality, a preaddressed, stamped envelope was mailed with each questionnaire and all responses were returned anonymously. A pilot study based on 50 returned questionnaires revealed that participants understood the content of the questions and no change was necessary for the questionnaire to be used in the main study. After removing incomplete questionnaires, 438 fully completed questionnaires were returned for an effective return rate of 88.5%. Data were collected from two groups of participants. Group A consisted of 184 employees who worked in the acquiring company. Group B consisted of 254 employees who worked in the acquired company.

Prior to analysis, variables were examined through various SPSS 18 programs for accuracy of data entry, missing values, and fit between their distributions and the assumptions of structural equation modeling. 19 cases were identified through Mahalanobis distance as multivariate outliers with a p-value less than 0.001. All of these were deleted, leaving 419 cases for analysis. The overall sample consisted of 68% female, with the average age and organizational tenure being 35.45 and 7.36 years, respectively. Before the merger, 53% of respondents were administrative staff members, with the remainder being salespeople. After the merger, 50.4% respondents were administrative staff members. Before the merger, 25.1% of respondents were managerial level employees. After the merger, this figure fell to 23.2%.

Measurements

The psychometric properties of work load, career prospects and organizational commitment were evaluated by employing the method of confirmatory factor analysis via the use of AMOS 16. The model fit was evaluated using the model chi-square (χ^2), normed chi-square (χ^2/DF), goodness of fit index (GFI), standardized root mean square residual (SRMR), and root mean square error of approximation (RMSEA) (Byrne, 2010).

Bollen (1989) suggested that values for the normed chi-square of less than 5.0 indicate reasonable fit, while GFI values higher than 0.9 may indicate good fit. Values for the SRMR of less than 0.1 generally indicate favorable model fit (Kline, 2005). RMSEA values of less than 0.05 indicate good fit, values between 0.05 and 0.08 reasonable fit, and values higher than 0.1 suggest poor fit (Kline, 2005). The composite reliability (CR) and the average variance extracted (AVE) for each construct were employed to evaluate the convergent validity of each construct.

Work load change

We developed a four-item scale to capture respondents' perceptions of work load changes after the merger for employees of both companies. They are (W1): after the merger, my working hours are lower than before; (W2): after the merger, my work load is lower than before; (W3): after the merger, my working stress is lower than before; (W4): after the merger, my company asks for lower work quality than before. Respondents were asked to indicate the extent of their agreement/disagreement along a 5-point Likert scale ranging from "strongly disagree" to "strongly agree".

Values of selected fit indexes are as follows: $\chi^2(2) = 4.310$, $\chi^2/DF = 2.115$, $p = 0.116$, GFI = 0.995, SRMR = 0.0190 and RMSEA = 0.053, with the 90% confidence interval 0.000 to 0.122. These results are generally favorable. The composite reliability for work load is 0.4758, which is close to the critical value suggested by Hair et al. (2009), with average variance extracted of 0.7524, which is higher than that suggested by Fornell and Larcker (1981). These values are at least minimally high enough to suggest convergent validity. Overall, the fit of the model seems acceptable.

The equivalence of means related to work load change perceived by employees of the acquiring company and the acquired company is then tested. Employees of the acquired company are chosen as the reference group. The latent mean difference between the two groups is 0.045 with a p value of 0.443. This indicates that there is no statistical difference between the work load change perceived by employees of the acquiring company and employees of the acquired company.

Career prospects change

Four items were developed for this study to capture respondents'

perceptions of changes of their career prospects after merger for employees of both life companies. They are (C1): after the merger, my position in our company is higher than before; (C2): after the merger, more work resources are available to me than before; (C3): after the merger, I perceive that my contributions to our company are considered more important than before; (C4): after the merger, my probability of getting promoted is increased. A 5-point Likert-type was used ranging from "strongly disagree" to "strongly agree".

Values of selected fit indexes are as follows: $\chi^2(2) = 2.419$, $\chi^2/DF = 1.209$, $p = 0.298$, GFI = 0.997, SRMR = 0.0168 and RMSEA = 0.022, with the 90% confidence interval 0.000 to 0.102. These results are generally favorable. The composite reliability for career prospects is 0.4053, with an average variance extracted of 0.7120. These values are at least minimally high enough to suggest convergent validity.

The invariance of means related to career prospects change perceived by employees of the acquiring company and the acquired company is then tested. Employees of the acquired company are chosen as the reference group. The latent mean difference between the two groups is 0.021 with a p value of 0.41. This indicates that, there is no significant difference in career prospects change perceived by employees of the acquiring company and employees of the acquired company.

Organizational commitment

The scale used to measure organizational commitment for this study was a slightly reworded version of Meyer et al. (1993) 6-item scale. These items are named from COM1 to COM6. A five-point Likert response format ranging from "strongly disagree" to "strongly agree" was used for all six items.

Values of selected fit indexes are as follows: $\chi^2(9) = 30.183$, $\chi^2/DF = 3.354$, $p = 0.000$, GFI = 0.975, SRMR = 0.0251 and RMSEA = 0.075, with the 90% confidence interval 0.047 to 0.105. The p value of model chi-square seems to be unfavorable. According to Kline (2005), values of χ^2/DF lower than 5.0 are recommended as indicating reasonable fit. Therefore, these results are generally favorable.

We then proceed to test for differences in the latent means of organizational commitment across employees of the acquiring and the acquired company. Employees of the acquired company are chosen as the reference group in this step. The latent mean difference between the two groups is 0.138 with a p value of 0.026. This indicates that there is no statistical difference between the organizational commitment perceived by employees of the acquiring company and employees of the acquired company.

Locus of control

The scale used to measure locus of control is a revised version of Rotter's (1966) locus of control scale. It includes 11 items directly accepted from Rotter's (1966) locus of control scale. They are item 2, 4, 6, 11, 13, 15, 16, 18, 21, 25 and 28. Each item is constituted by a pair of statements. One statement expresses the external locus of control, the other the internal locus of control. Respondents are required to choose one statement of each pair. An internal control statement is scored as 1, whereas an external one is scored as 0. Hence, higher scores indicate stronger internal tendencies, and lower scores indicate stronger external tendencies.

A single score for each respondent is obtained by summing the number of internal statements chosen from the 11 statement pairs and is denominated as LOC sum in the following text. The total score can range from 0 to 11.

Actual scores for the 419 respondents ranged from 0 to 11 with a mean score of 7.29. For testing for the moderating effect of locus of control, internals and externals were selected from all respondents.

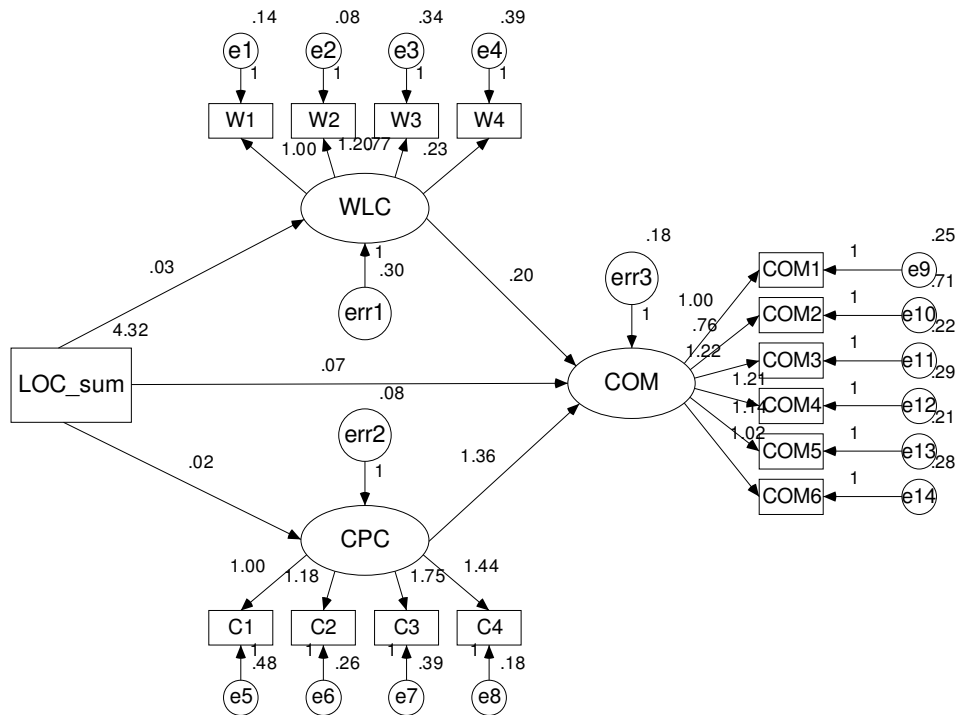


Figure 3. Unstandardized estimates of SR for Model 1.

Kelly (1939) reported that “twenty-seven percent should be selected at each extreme to yield upper and lower groups which are most indubitably different with respect to the trait in question.” This rule was verified by Curenlo (1957) again.

For this reason, we split the locus of control measure into three groups at the 27th and the 73rd percentiles. Thus, 117 respondents with scores higher than 9 were classified as internals and 141 respondents with scores less than 6 are classified as externals. The 161 respondents with scores between 6 and 9 were left untested.

ANALYSIS AND RESULTS

In the preceding discussion, the latent mean differences of work load change, career prospects change and organizational commitment between employees of the acquiring company and those of the acquired company are tested. The results indicate that differences in the latent means of work load change and career prospects change and organizational commitment across two groups are statistically insignificant; employees of the acquiring company have higher level of organizational commitment than those of the acquired company.

Next, the structural relationships proposed in Models 1 and 2 are evaluated. Since work load change, career prospects change and organizational commitment are latent variables, SR models were used to test the structural relationships.

Model 1 was tested on the overall sample. Testing was accomplished through SR via the use of AMOS 16. Values of selected fit indexes are as follows: $\chi^2(86) =$

347.950, $\chi^2/DF = 4.046$, $p = 0.000$, $GFI = 0.902$, $SRMR = 0.0967$ and $RMSEA = 0.085$, with the 90% confidence interval 0.076 to 0.095. Some results are not favorable. The value of SRMR is higher than 0.05; the value of RMSEA is higher than 0.08. However, the value of RMSEA is very close to the critical value. The proposed model seems to be at least minimally adequate. The unstandardized estimates of SR for Model 1 are depicted in Figure 3.

We used the method of bootstrapping to estimate the two-tailed significance for unstandardized or standardized total effects, total indirect effects, and direct effects. The number of bootstrap samples is set to be 1000. The results of the bias-corrected percentile method are reported in Table 1.

For the path leading from work load change to organizational commitment (WLC--->COM), the unstandardized estimate of the direct effect is 0.197, statistically significant at the 0.01 level. This result indicates that employees perceiving a greater decrease in work load tend to have a higher level of organizational commitment to the surviving company.

For the path leading from career prospects change to organizational commitment (CPC--->COM), the unstandardized estimate of the direct effect is 1.358, statistically significant at the 0.01 level. This result indicates that employees perceiving more improved career prospects tend to have a higher level of organizational commitment to the surviving company.

For the path leading from locus of control to work load

Table 1. Effect decomposition for Model 1.

Effect	Unstandardized	S.E.	P	Standardized
Direct effect				
LOC_sum---> WLC	0.033	0.014	0.040	0.123
LOC_sum---> CPC	0.021	0.008	0.009	0.157
LOC_sum--->COM	0.071	0.015	0.007	0.119
WLC--->COM	0.197	0.058	0.002	0.176
CPC--->COM	1.358	0.331	0.003	0.622
Total indirect effect				
LOC_sum--->COM	0.035	0.012	0.007	0.119
Total effect				
LOC_sum---> WLC	0.033	0.014	0.040	0.123
LOC_sum---> CPC	0.021	0.008	0.009	0.157
LOC_sum--->COM	0.107	0.014	0.002	0.358
WLC--->COM	0.197	0.058	0.002	0.176
CPC--->COM	1.358	0.331	0.003	0.622

change (LOC_sum---> WLC), the unstandardized estimate of the direct effect is 0.033, statistically significant at the 0.05 level. This result indicates that employees with a greater tendency toward internal locus of control appear to more easily to perceive decreased work load in the process of merger and acquisition.

For the path leading from locus of control to career prospects change (LOC_sum---> CPC), the unstandardized estimate of the direct effect is 0.021, statistically significant at the 0.01 level. This result indicates that employees with greater internal locus of control tendencies appear to more easily perceive improved career prospects in the process of merger and acquisition.

For the path leading from locus of control to organizational commitment (LOC_sum--->COM), there are one direct effect and two indirect effects. The unstandardized estimate of the direct effect is 0.071, statistically significant at the 0.01 level. The total indirect effects of locus of control on organizational commitment are the sum of the effect of locus of control on organizational commitment through work load change and through career prospects change. The unstandardized estimate of the total indirect effect from locus of control to organizational commitment is 0.035, statistically significant at the 0.01 level. The total effect is the sum of the direct and indirect effects. The unstandardized estimate of total effect is 0.107, statistically significant at the 0.01 level. This result indicates that employees with greater internal locus of control tendencies appear to have a higher level of organizational commitment to the surviving company. Further, the relationship between locus of control and organizational commitment is partially mediated by work load change and career prospects change.

The unstandardized regression weights cannot be directly compared, while the standardized regression

weights may be. The estimated standardized regression weight of locus of control on work load change is 0.123. That is, a level of locus of control one full standard deviation above the mean predicts a work load change level 0.123 standard deviations above the mean. The estimated standardized regression weight of locus of control on career prospects is 0.157. These results indicate that locus of control has a stronger influence on career prospects change than on work load change.

As for organizational commitment, the standardized estimate of the total effect from locus of control is 0.358, from work load change is 0.176, and from career prospects change is 0.622. A comparison of these standardized total effects on organizational commitment from three antecedents shows that the total effect of career prospects change on organizational commitment is greater than the effect of either of the other two and the total effect of locus of control on organizational commitment is greater than that of work load change on organizational commitment.

The squared multiple correlation of career prospects change is 0.025. This means that the predictor of career prospects change, locus of control, explains 2.5% of its variance. The proportion of explained variance of work load change by locus of control is 0.015. The proportion of explained variance of organizational commitment by locus of control, work load change, and career prospects is 0.536.

Next, we tested the possibility that the relationships between organizational commitment and its two antecedents, work load change and career prospects change, are moderated by locus of control. In other words, we evaluated whether the regression weights of work load change and career prospects change on organizational commitment are significantly invariant across internals

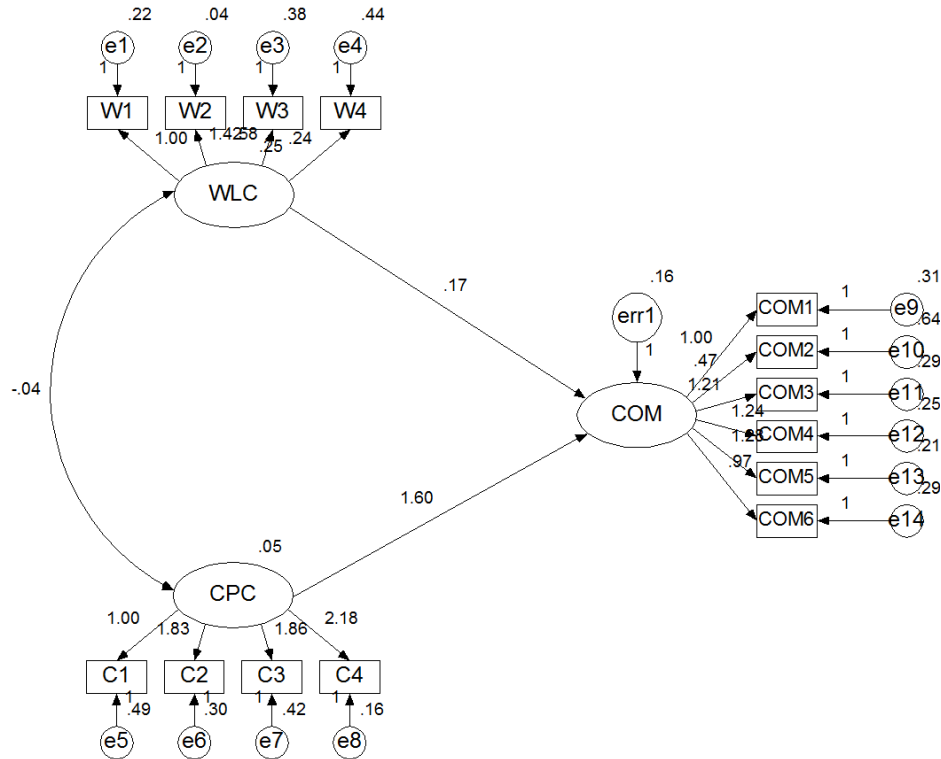


Figure 4. Unstandardized estimates of SR for externals in Model 2.

and externals. This test is based on a multigroup analysis. How participants were classified into each group is described in the preceding text. The initial step is to determine a baseline model for externals and internals separately. In the baseline model we hypothesize that work load change and career prospects change are interrelated and these two latent variables influence organizational commitment directly. The model being tested can be considered as a multigroup representation of the baseline models. It incorporates the baseline models for internals and externals within the same file and is commonly termed the configural model (Byrne, 2010). For externals, values of selected fit indexes are as follows: $\chi^2(74) = 125.556$, $\chi^2/DF = 1.697$, $p = 0.000$, $GFI = 0.889$, $SRMR = 0.0866$ and $RMSEA = 0.071$, with the 90% confidence interval from 0.049 to 0.090. Some results are not favorable. The value of GFI is lower than 0.900, while the value of $SRMR$ is higher than 0.05. However, their values are very close to the critical values. For internals, values of selected fit indexes are as follows: $\chi^2(74) = 150.679$, $\chi^2/DF = 2.036$, $p = 0.000$, $GFI = 0.853$, $SRMR = 0.1135$ and $RMSEA = 0.095$, with the 90% confidence interval from 0.073 to 0.116. Some results are not favorable. The value of $SRMR$ exceeds 0.05 while the value of $RMSEA$ exceeds 0.08. However, the value of $RMSEA$ is close to the critical values. In summary, the baseline model seems to be at least minimally well fitting across the two groups. The unstandardized estimates of SR for externals and

internals are depicted in Figures 4 and 5, respectively.

The next step is to impose the equality constraints in the configural model, that is the constrained model. Here the influence of work load change on organizational commitment ($WLC \rightarrow COM$) and the influence of career prospects change on organizational commitment ($CPC \rightarrow COM$) were set to be invariant across two groups. The fit of the configural model without equality constraints provides the baseline values against which the constrained model is compared.

Invariance decisions are based on the χ^2 difference test. The value of χ^2 difference represents the difference between the χ^2 values for the configural model and the constrained model. Evidence of non-invariance is found when the χ^2 difference value is statistically significant (Byrne, 2010). The p-value of the χ^2 difference for Model 2 is 0.832. This result indicates that the moderating effect of locus of control is not statistically significant and confirms the H_5 .

The estimates of regression weights, covariance and correlation for externals and internals are reported in Table 2. These results are very similar for both groups. For the path leading from work load change to organizational commitment ($WLC \rightarrow COM$), the unstandardized estimate of the direct effect is 0.210 for externals and 0.106 for internals respectively. For externals, it is statistically significant, and for internals, insignificant at the 0.05 level. For the path leading from career prospects change to organizational commitment ($CPC \rightarrow COM$), the

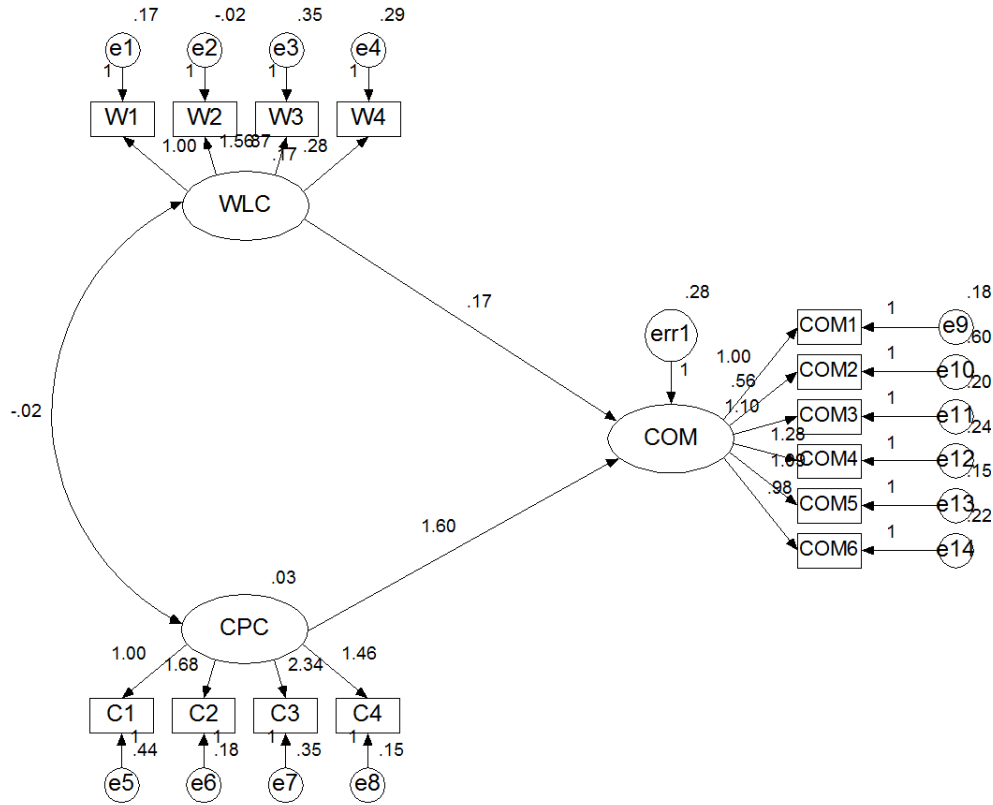


Figure 5. Unstandardized estimates of SR for internals in Model 2.

Table 2. Estimates of regression weights, covariance and correlation for externals and internals.

	Unstandardized	S.E.	P	Standardized
Regression weights of baseline model for externals				
WLC--->COM	0.210	0.101	0.038	0.202
CPC--->COM	1.610	0.574	0.005	0.683
Covariance				
WLC<-->CPC	-0.037	0.017	0.032	Correlation -0.337
	Unstandardized	S.E.	P	Standardized
Regression weights of baseline model for internals				
WLC--->COM	0.106	0.135	0.434	0.074
CPC--->COM	1.585	0.781	0.042	0.481
Covariance				
WLC<-->CPC	-0.017	0.012	0.148	Correlation -0.219

unstandardized estimate of the direct effect is 1.610 for externals and 1.585 for internals, and is statistically significant for both groups at the 0.05 level. For both groups, the estimated standardized regression weight of work load change on organizational commitment (WLC--->COM) is less than the estimated standardized regression weight of career prospects change on organizational

commitment (CPC--->COM). In sum, these results are similar with those in Model 1.

It is worth noting that the covariance and correlation between work load change and career prospects change (WLC<-->CPC) are negative for both groups and statistically significant for externals. This result indicates that employees who perceive more work load after merger

are more optimistic about their career prospects.

IMPLICATIONS AND CONCLUSIONS

The process of merger and acquisition brings both stress and possibility for employees of the acquiring and acquired firms. It also affects the organizational commitment of employees of both companies at the same time. In the case studied, the acquiring firm absorbed rather than integrated the acquired firm. Theoretically, as Steuer and Wood (2008) suggested, changes faced by employees of the acquiring company and the acquired company are not symmetric. There should be little or no change for the acquiring company, while the acquired company may face a high level of change.

In this study, we investigated whether in the process of merger after acquisition, employees of the acquiring company and those of the acquired company perceive changes in work load and career prospects invariantly and whether employees of the acquiring company have a different level of organizational commitment to the surviving company than those of the acquired company. Three relevant results are obtained. H_1 is thereby partially rejected.

Firstly, work load change is perceived by employees of the two groups invariantly. This result is somewhat surprising. It might be expected that employees of the acquired company would perceive more changes of work load. However, work load is associated with costs. For financial industries in Taiwan, merger and acquisition for cost reduction is often followed by layoff of employees and increased work load for the remaining employees of both the acquiring company and the acquired company.

Secondly, change in career prospects is also perceived by employees of the two groups invariantly. This result needs to be explained. The employees of the acquiring company should be expected to have a better career prospects than those of the acquired company. Generally speaking, after a merger the employees of the acquired company face a higher probability of losing their jobs than those of the acquiring company. One explanation for this result might be that after the process of the merger, under cost minimization, employees of both firms may face the same probability of job loss in a case involving life insurance companies.

Thirdly, employees of the acquiring company have a higher level of organizational commitment than those of the acquired company. Since the acquiring company is the surviving company, this result is logically consistent, especially when the absorption approach was implemented in the process of merger. The acquired company was a foreign-owned company. The process of absorption means a severe clash of cultures for the employees originally hired by B insurance life company. That explains why employees of the acquiring company have higher level of organizational commitment than those of

the acquired company, even when they all perceive change in work load change and career prospects invariantly.

The other focus of this study is the structural relations in the proposed models. Six results pertaining to these models were obtained and the relevant hypotheses evaluated. First, employees perceiving greater decreased work load tend to have higher level of organizational commitment to the surviving company. Second, employees perceiving improved career prospects tend to have a higher level of organizational commitment to the surviving company. Thus, H_2 is rejected. These two results appear to be logical and need no further explanation. Third, employees with greater internal locus of control tendencies appear to more easily perceive decreased work load in the process of merger and acquisition. Fourth, employees with greater internal locus of control tendencies appear to more easily perceive improved career prospects in the process of merger and acquisition. Fifth, employees with greater internal locus of control tendencies appear to have higher levels of organizational commitment to the surviving company. These results are consistent with what we derived from the definition of locus of control and from the previous literature (Rotter, 1990). The impact of personality on organizational commitment is confirmed again in this study as in the previous literature (Luthans et al., 1987; Werbel et al., 1996). H_3 is therefore rejected. Sixth, the relationship between locus of control and organizational commitment is mediated partially by work load change and career prospects change. This result demonstrates that organizational change may interact with the individual's personality, affecting psychological outcomes. H_4 is thus rejected.

In Model 2, the moderating effect of locus of control is not statistically significant. H_5 is thereby confirmed. This result points out that we can limit our focus on Model 1. As for Model 1, all direct effects and indirect effect are statistically significant at the 0.05 level. These evidences reject H_2 , H_3 and H_4 . In addition to that, six relevant results are obtained.

Comparing the standardized total effects of the antecedents on organizational commitment, we found that the change in career prospects of employees has the more important influence on their organizational commitment after the merger than work load change and locus of control. It is an additional result of this study and implies that in order to maintain organizational commitment to the surviving company, employees give more weight to their career prospects than work load. However, the relationship from career prospects to organizational commitment appears to have eluded previous studies. It thus represents a novel finding of this study. This result may be enhanced by another finding. Testing Model 2 yields a negative covariance between work load change and career prospects change. Employees perceiving greater work load are more optimistic about their career

prospects. In other words, less work load is not always desirable and is associated with organizational commitment, especially when there is possibility of layoff after merger.

There are several limitations of this study. It is a case study and its results are, theoretically, not easily generalized. However, they do have some general managerial implications for cases which are similar to ours. Further, the cross-sectional research design normally does not allow affirmative causal inferences. But for several variables, whose causal relationships are already specified in psychology or other theories, the determination of their causal relationships is not impossible. Therefore, the causal relationships proposed in the present study are not groundless.

The study of organizational commitment has had a long history and continues to be a major focus of research. However, employees' organizational commitment in the process of merger and acquisition is less well studied. Employee work load and career prospects lack treatment in previous research. The present study covers these gaps. For further study, we would suggest that the approach used to implement the change progress after merger may be important for the study of employee organizational commitment in the process of merger and acquisition.

REFERENCES

- Allen NJ, Meyer JP (1996). Affective, continuance and normative commitment to the organization: an examination of construct validity. *J. Vocat. Behav.*, 49: 252-276.
- Alvi HL, Ahmed SW (1987). Assessing organizational commitment in a developing country: Pakistan—a case study. *Hum. Relat.*, 40: 267-280.
- Ashkenas RN, Francis SC (2000). Integration managers: special leaders for special times. *Harv. Bus. Rev.*, 78(6): 108-116.
- Bambacas M (2010). Organizational handling of careers influences managers' organizational commitment. *J. Manage. Dev.*, 29 (9): 807-827.
- Bashaw RE, Grant ES (1994). Exploring the distinctive nature of work commitments: their relationships with personal characteristics, job performance, and propensity to leave. *J. Pers. Sell. Sales Manage.*, 14(2): 41-56.
- Beck K, Wilson C (2000). Development of affective organizational commitment: a cross-sequential examination of change with tenure. *J. Vocat. Behav.*, 56: 114-136.
- Becker HS (1960). Notes on the concept of commitment. *Am. J. Soc.*, 66: 32-40.
- Bollen, KA (1989). *Structural equations with latent variables*. Wiley, New York.
- Bollen, KA, Stine R (1990). Direct and indirect effects: classical and bootstrap estimates of variability. *Socio. Method.*, 20: 115-140.
- Buono AF (2003). SEAM-less post-merger integration strategies: a cause for concern. *J. Organ. Change Manage.*, 16(1): 90-98.
- Byrne BM (2010). *Structural equation modeling with AMOS: basic concept, applications, and programming* (Second Edition). Routledge, New York.
- Carnall CA (1986). Toward a theory for the evaluation of organizational change. *Hum. Relat.*, 39(8): 745-766.
- Chen JC, Silverthorne C (2008). The impact of locus of control on job stress, job performance and job satisfaction in Taiwan. *Leadersh. Organ. Dev. J.*, 29(7): 572-582.
- Chen JQ, Wang L (2007). Locus of control and the three components of commitment to change. *Pers. Individ. Differ.*, 42: 503-512.
- Chonko LB (1986). Organizational commitment in the sales force. *J. Pers. Sell. Sales Manage.*, 6(3): 19-27.
- Cole M, Harris S, Bernerth J (2006). Exploring the implications of vision, appropriateness, and execution of organizational change. *Leadersh. Organ. Dev. J.* 27(5): 352-367.
- Cohen A (2007). Commitment before and after: an evaluation and reconceptualization of organizational commitment. *Hum. Res. Manage. Rev.*, 17: 336-354.
- Cohen A, Freund A (2005). A longitudinal analysis of the relationship between multiple commitments and withdrawal cognitions. *Scand. J. Manage.*, 21: 329-351.
- Coyle-Shapiro JAM, Morrow PC (2005). Organizational and client commitment among contracted employees. *J. Vocat. Behav.*, 68: 416-431.
- Curento E (1957). The upper and lower twenty-seven per cent rule. *Psychometrika*, 22(3): 293-296.
- Daniels K, Guppy A (1994). Occupational stress, social support, job control and psychological well-being. *Hum. Relat.*, 47(12): 1523-1544.
- Elrod D, Tippett D (2002). The 'death valley' of change. *J. Organ. Change Manage.*, 15(3): 273-91.
- Evans P, Pucik V, Barsoux JL (2002). *The global challenge: frameworks for international human resources management*. McGraw-Hill, London.
- Fornell C, Larcker DF (1981). Evaluating structural equation models with unobservable variables and measurement error. *J. Market. Res.*, 18: 39-50.
- Gormley DK, Kennerly, SK (2010). Influence of work role and perceptions of climate on faculty organizational commitment. *J. Prof. Nurs.*, 26: 108-115.
- Hair JF, Black WC, Babin BJ, Anderson RE (2009). *Multivariate data analysis* (Seventh Edition). Prentice Hall Int. Editions, N. J..
- Heffner TS, Rentsch JR (2001). Organizational commitment and social interaction: a multiple constituencies approach. *J. Vocat. Behav.*, 59: 471-490.
- Hsu SW, Lin LL, Chang HH (2010). Study of transformational leadership, service climate and service-oriented citizenship behavior in the international airline. *J. Hum. Res. Manage.*, 10(1): 53-77.
- Hyatt TA, Prawitt DF (2001). Does congruence between audit structure and auditors locus-of-control affect job performance? *T. Account. Rev.*, 76(2): 263-274.
- Iverson S (1999). An event history analysis of employee turnover: the case of hospital employees in Australia. *Hum. Res. Manage. Rev.*, 9: 397-418.
- Jafri MH (2010). Organizational commitment and employee's innovative behavior. *J. Manage. Res.*, 10(1): 62-68.
- Johnston MW, Parasuraman A, Furell CM, Black WC (1990). A longitudinal assessment of the impact of selected organizational influences on salespeople's organizational commitment during early employment. *J. Mark. Res.*, 27(3): 333-344.
- Joiner TA, Bakalis S (2006). The antecedents of organizational commitment: the case of Australia casual academics. *International J. Educ. Manage.*, 20(6): 439-452.
- Judge TA, Erez A, Bono JE, Thoresen CJ (2003). The core self-evaluations scale: development of a measure. *Pers. Psychol.*, 56(2): 303-31.
- Kelly TR (1939). The selection of upper and lower groups for the validation of test items. *T.J. Educ. Psychol.*, 30(1): 17-24.
- Kline RB (2005). *Principles and practice of structural equation modeling* (Second Edition). The Guilford Press, New York
- Lambert E, Hogan N (2009). The importance of job satisfaction and organizational commitment in shaping turnover intent. *Crim. Justice Rev.*, 34(1): 96-118.
- Lin JSJ, Lin SC, Lin BT (2010). The moderating effects of employee personality characteristics on organizational commitment during periods of organizational change. *Afr. J. Bus. Manage.*, 4(17): 3681-3690.
- Liu XP, Wang ZM (2001). The study of organizational commitment and its development mechanism. *Nankai Bus. Rev.*, 4(6): 58-62.
- Luthans F, Baack D, Taylor L (1987). Organizational commitment:

- analysis of antecedents. *Hum. Relat.*, 40(4): 219-235.
- Long LL, Fang LL, Ling WQ (2002). Organizational career management: measurement and its effects on employees' behavior and feelings in China. *Acta Psychol. Sin.*, 24(1): 97-105.
- Martin R, Thomas G, Charles K, Epitropaki O, McNamara R, (2005). The role of leader-member exchanges in mediating the relationship between locus of control and work reactions. *J. Occup. Organ. Psychol.*, 78: 141-147
- Meyer JP, Allen NJ (1984). Testing the side-bet theory of organizational commitment: some methodological considerations. *J. Appl. Psychol.*, 69: 372-378.
- Meyer JP, Allen NJ (1991). A three-component conceptualization of organizational commitment. *Hum. Res. Manage. Rev.*, 1: 61-89.
- Meyer JP, Allen NJ, Smith CA (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *J. Appl. Psychol.*, 78: 538-551.
- Meyer JP, Hech TD, Grill H, Toplonysky L (2010). Person-organization (culture) fit and employee commitment under conditions of organizational change: a longitudinal study. *J. Vocat. Behav.*, 76: 458-473.
- Mowday RT, Porter LW, Steers RM (1982). Employee-organization linkages: the psychology of commitment, absenteeism and turnover. Academic Press, New York.
- Panaccio A, Vandenberghe C (2009). Perceived organizational support, organizational commitment and psychological well-being: A longitudinal study. *J. Vocat. Behav.*, 75: 224-236.
- Perlman D, Takacs GJ (1990). The ten stages of change. *Nurs. Manage.*, 21(4): 33-38.
- Porter LW, Steers RM, Mowday RT, Boulian PV (1974). Organizational commitment, job satisfaction and turnover among psychiatric technicians. *J. Appl. Psychol.* 59: 603-609.
- Rahim A (1996). Stress, strain and their moderators: An empirical comparison of entrepreneurs and managers. *J. Small Bus. Manage.*, 34(1): 46-58.
- Rotter JB (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychol. Monogr.* 80: 1-28.
- Rotter JB (1990). Internal versus external control of reinforcement. *Am. Psychol.*, 45(4): 489-93.
- Rush M, Schoel W, Barnard S (1995). Psychological resiliency in the public sector: 'hardiness' and pressure for change. *J. Vocat. Behav.*, 46: 17-39.
- Schumacker RE, Lomax RG (2004). A beginner's guide to structural equation modeling (Second Edition). Lawrence Erlbaum Associates, Mahwah, NJ.
- Schweiger DM, DeNisi AS (1991). Communications with employees following a merger: a longitudinal field experiment. *Acad. Manage. J.*, 34 (1): 110-135.
- Steuer R, Wood T (2008). Storytellers and their discursive strategies in a post-acquisition process. *J. Organ. Change Manage.*, 21(5): 574-588.
- Tsai MC, Cheng CC, Chang YY (2010). Drivers of hospitality industry employees' job satisfaction, organizational commitment and job performance. *Afr. J. Bus. Manage.*, 4(18): 4118-4134.
- Tsoumbis P, Xenikou A (2010). Commitment profiles: the configural effect of the forms and foci of commitment on work outcomes. *J. Vocat. Behav.*, 77: 401-411.
- Vakola M, Nikolaou I (2005). Attitudes towards organizational change : what is the role of employees' stress and commitment?. *Empl. Relat.*, 27(2): 160-174.
- Wasti SA (2002). Affective and continuance commitment to the organization: test of an integrated model in the Turkish context. *Int. J. Intercul. Rel.*, 26, 525-550.
- Wasti SA (2005). Commitment profiles: Combinations of organizational commitment forms and job outcomes. *J. Vocat. Behav.*, 67: 290-308.
- Weng Q, McElory JC, Morrow PC, Liu R (2010). The relationship between career growth and organizational commitment. *J. Vocat. Behav.*, 77: 391-400.
- Werbel J, Landau J, DeCarlo T (1996). The relationship of pre-entry variables to early employment organizational commitment. *J. Person. Sell. Sales Manage.*, 16: 25-36.