# **Exploring the Assessment Model of Corporate Ethics**

# **Influencing Organizational Performance**

Cheng-Wen Lee<sup>1</sup> and Chin Kun Chang<sup>2</sup>

# Abstract

The purpose of this paper is to explore the appropriate assessment model for examining the relationship between corporate ethics and organizational performance. First, this study discusses the level of ethical cognition of employees, and then, discusses whether corporate ethics whatever internal and external factors is related to organizational performance. Also, this paper states the ethics of employees from the aspects of laws and regulations, employee's interests, organizational mission, and so on. Company's ability of implementing corporate ethics is also an important factor of affecting the practitioner's corporate ethics cognition and further manipulating organizational business performance.

### JEL classification numbers: A10, D71, H51.

Keywords: Corporate social responsibility, Business ethics, Organizational performance

# I. Introduction

Nowadays, with the development of global economy, enterprises are going to be internationalized, and faced the challenge of more complex and difficult management and regulation. It has been the traditional belief that profits and ethics are at odds with each other in the world of business. Corporate governance appears to be a hindrance or a drag on profit maximization. However, some literature indicate that moral codes, public interest and social values pose no threat to profit maximization of any firm (Ghosh, Ghosh, and Zaher, 2011). More and more people think that ethics is the most important basic principle of running the business, so they pay attention to ethics much more than ever before. Business ethics issue also causes disputes between enterprises and workers, which makes many enterprises and the public begin to strengthen and train the knowledge of workplace ethics for employees.

# **II.** Literature review

2.1 Corporate ethics

This paper categories the content of corporate ethics into internal part and external

<sup>&</sup>lt;sup>1</sup> Professor, Department of International Business, Chung Yuan Christian University, Taiwan.

<sup>&</sup>lt;sup>2</sup> Ph.D program in Business, College of Business, Chung Yuan Christian University, Taiwan.

part. Internal part includes labor ethics (Hussey, 2011), shareholder ethics (Smith, 2019) and workplace ethics (Pereira et al., 2012). On the other hand, external part includes customer ethics (Le Ray and Pinson, 2020), competition ethics (Ferrell et al., 2019), and social responsibility/welfare (Roth, 1997). Labor ethics between enterprises and employees involves: how to trust each other, how to have a harmonious relationship between labor and ethical leadership/top management, and how to give employees' vocational training (e.g., improvement of employee quality including pre-job training and on-the-job training). Normally, employees do not want to move to a competitor for a small amount of salary. There is a significant relationship between job satisfaction and employee turnover determinants (Stamolampros et al., 2019). Regarding shareholder ethics between enterprises and shareholders, the most fundamental responsibility of an enterprise is to pursue profits. Therefore, an enterprise must actively operate and seek more profits in order to create more shareholders' rights and interests, as well as clearly and strictly divide the operation right and ownership of the enterprise, so that professional managers can give full play to their roles of ensuring the free operation of the enterprise. Without interference in the management rights, professional managers leads to wrong decisions. Professional managers adhere to the workplace ethics of creating the maximum profits for the company, but not to enrich their own private pockets (Pereira et al., 2012).

As for customer ethics between enterprises and customers, the most important is "service" ethics. The characteristics of service includes intangibility, indivisibility, heterogeneity and perishability. Speaking of the core spirit of customer ethics, to meet the needs of customers is the basis for the survival of enterprises. "Customer" plays the crucial role in the enterprise management strategy and identifies the important value of an enterprise existence. In short, customer confidence is the basic requirement of customer ethics (Bunting and Galyean, 2015) and therefore, customers will not change suppliers or manufacturers casually. Speaking the competition ethics between enterprises and peers involves those without price cutting competition (vicious competition), spreading false rumors (black letter, malicious slander), vicious corner digging, and stealing trade secrets. The core R&D personnel in the industry shall not be robbed of customers or poached from competitors by inferior means (Ferrell et al., 2019).

With regard to social responsibility between enterprise and society, the enterprise is closely related to the society, and the enterprise cannot operate independently from the society. Take it for the society and use it for the society. The company attaches social responsibility importance to social welfare, enhances the corporate image, and improves the visibility of the company's brand. Seeking the balance between enterprise development and environmental protection carries forward the spirit of circular economy (Rashid, Khalid, and Rahman, 2015). Political and corporate ethics between enterprises and governments involves: the government's policies being suitable for the cooperation and support of the enterprise community. Business tax is one of the important sources of national economic development, so business tax can develop the focus of government governance. Enterprises must not only abide by the relevant laws and regulations of the government, but also respond to and cooperate with the government's business tax policies (Stuebs, Wilkinson, and Arnold, 2012).

#### 2.2 Organizational performance

Organizational performance refers to the quantity, quality, efficiency and profitability

of tasks assigned by an organization in a certain period of time (Ittner and Larcker, 1997). The realization of organizational performance should be based on the realization of individual performance, but the realization of individual performance does not necessarily guarantee that the organization has performance. If an organization's performance is broken down to every job and every person according to a certain logical relationship, as long as each person meets the requirements of the organization, the organization's performance can be fully realized.

## 2.2.1 Evaluation criteria of organizational performance

The evaluation standard of organizational performance is full of a comprehensive criteria (Madu, Kuei, and Jacob, 1996), evaluation of the overall operation effect of an organization made by managers using a certain indicator system with Key Performance Indicators (KPIs) (Carchen and Atlar, 2020). Through the effective evaluation standard with KPIs, it can reveal the organization's information ranging over operation ability, debt paying ability, cash flow ability, profitability and the contribution of the enterprise to the society, provide relevant information for the operation and management personnel and stakeholders, and make clear direction for improving the achievement of the organization's performance. Stanley E. seashore believes that the goals of most organizations are not single, but diverse, and some of them are conflicting. If the ultimate goal of an organization itself may be multiple, then the short-term goal and sub-goal of an organization are more likely to be multiple. According to Kishor (1981), the decision-making of managers should be based on the evaluation of business performance from various perspectives. It is impossible to maximize all objectives at the same time.

2.2.2 Classification of indicators

In order to ensure the comprehensiveness of all information, when evaluating organizational performance, we should consider using a variety of indicators to measure the degree of completion of organizational goals, make corrections at any time, and make the weight of the indicators (Hallahan, 2015). Therefore, first of all, indicators should be differentiated according to different standards and purposes.

(1) Objectives and means

Some indicators represent the results or goals of the organization's business activities, while others are the conditions or means for the organization to achieve its goals. Generally speaking, the target index should occupy a larger weight in the index system, while the relative weight of the means index is smaller (Hallahan, 2015).

(2) Time

First of all, we should pay attention to whether the indicators look at the past, the present or the future. Secondly, the time span of indicators should be considered. For enterprises with large changes in demand, long-term and short-term indicators are often very different, and their short-term objectives are particularly important (Mourtzis, Boli, and Fotia, 2017).

(3) Hard index and soft index

Hard indicators are usually quantitative indicators, which can objectively reflect the tangible aspects of organizational performance. However, the hard indicators are

mostly applicable to the short-term objectives of the organization, which cannot reflect such situations as customers' recognition of the enterprise and employees' satisfaction. These are usually measured by the soft indicators, so sometimes the soft indicators may be more suitable for evaluating the business activities of the enterprise (Yeung, Chan, and Chan, 2009).

#### (4) Leading and lagging indicators

Leading indicators are also called leading indicators. The change of this kind of economic target index precedes the change of market in time; that is to say, the economic target index changes firstly, and the market changes after a period of time. This function enables the leading indicators to predict or warn the changes of general economic activities all the time. Many leading indicators reflect the commitment to economic activities in the near future and in the future. For example, it is expected that the economy will be improved in the future, and the sales volume will increase greatly. Therefore, production will be increased in advance, new orders will be increased, and meanwhile contracts will be increased. Some leading indicators reflect very sensitive economic activities, such as inventory changes, stock prices, raw material prices etc. (Yeung, Chan, and Chan, 2009) The changes of these indicators are often months ahead of the changes of general economic or market conditions, so the future market changes can be predicted according to the changes of leading indicators. On the contrary, backwardness index is also called delay index. In terms of time, the changes of these target economic indicators lag behind the market economic activities. For example, unit product labor cost, mortgage interest rate, outstanding debt, total inventory level, insufficient employees, total investment expenditure, etc. Lagging indicators are not only driven indicators, but in many cases, they cause the leading indicators to flip.

#### (5) Value judgment

Many indicators are high or low, usually there is no unified standard, different people's value judgments are often different. At this time, the internal and external environment of the organization and the change rule of the index itself should be comprehensively weighed to determine its applicability (Marr, 2006).

#### 2.2.3 Performance management ethics

Performance management ethics is the sum of moral consciousness, moral norms and moral behaviors that employees and organizations show in the process of performance management, in accordance with the role determined by social division of labor and in the process of faithfully performing their own social responsibilities. Corporate social responsibility (CSR) generally refers to the idea that enterprises should bear the responsibility of all stakeholders while creating profits and taking responsibility for the interests of shareholders in order to achieve economic prosperity, social public welfare and sustainable environmental protection (Cho, Chung, and Young, 2019).

## **III. Methodology**

#### 3.1 Research methods

This study suggests using structural equation modeling (SEM), a multivariate statistical technology which combines factor analysis and path analysis to conduct the analysis of relationship between corporate ethics and organizational performance. An alternative analysis utilizing SEM has been implemented to circumvent confirmatory factor analysis (CFA) shortcomings (Asparouhov and Muth'en, 2009; Marsh et al., 2009). The strength of SEM lies in the quantitative study of the interaction between variables. In the past 30 years, SEM has been widely used in social science and behavioral science, and gradually applied in market research in recent years. SEM is one of the model methods used in its research. Its purpose is to explore the causal relationship between things, and to express this relationship in the form of causal model, path map, and so on.

3.2 Analysis and result

SEM can be divided into observed variables and latent variables. The observed variables are to find out the relationship between the organizational performance indicators and the ethical status of enterprises (or the relationship between the achievements of three subjects and the effectiveness of the organizational performance indicators). That is, the relationship between the explicit indicators and the latent variables are the relationship between the ethical status of enterprises and the effectiveness of the organizational performance indicators. That means the relationship between the latent variables and the latent variables. Indicators (explicit variables) contain random (or systematic) measurement errors, but latent variables do not. SEM can be expressed by the following matrix equation (Bollen, 1989; Joreskog and Sorbom, 1993):

η=βη+Γξ+ζ

(a) As for the relationship between latent variables (e.g. the ethical status of enterprises and the effectiveness of organizational performance indicators), the latent variables are as follows:

 $\eta$  - endogenous (dependent) latent variable (e.g., organizational performance indicator effectiveness)

 $\xi$  - external (independent) latent variables (e.g. corporate ethical status )

 $\beta$  - the relationship between endogenous latent variables (such as the relationship between the effectiveness of organizational performance indicators and other endogenous latent variables)

 $\gamma$  - the effect of exogenous variables on endogenous variables (e.g., the effect of corporate ethical status on organizational performance indicators)

 $\zeta$  - unexplained part of the pattern (i.e. the unexplained part of the variables contained in the pattern and the relationship between variables)

(b) For the relationship between indicators and latent variables (for example, the relationship between organizational performance indicators and corporate ethical status, i.e. the measurement model part:

Χ=Λxξ+δ

Υ=Λγη+ε

Y is an external (e.g. organizational performance indicator) and an internal (e.g. corporate ethics achievement) indicator.  $\delta$ .  $\epsilon$  is the error in X, y measurements.

 $\Lambda$  x is the relationship between X index and  $\xi$  latent variable (for example, the relationship between organizational performance management project and enterprise ethical status and latent enterprise ethical status).  $\Lambda$  y is the relationship between Y indicators and  $\eta$  latent variables (for example, the relationship between the effectiveness of organizational performance indicators and the ethical status of

enterprises). In a typical analysis process, we input: covariance matrix of each index variable, total number of subjects, subordination between index and latent variable (how index belongs to each latent variable). The program (e.g. LISREL) can estimate the specified parameters such as index and latency, latency and latency, unexplained part of the model, error in index measurement, etc., and its value also reflects the strength of each relationship. In addition, the program also calculates whether the model proposed by the researcher is consistent with the sample data (i.e. whether the data can be represented by a schema).

#### 3.3 SEM advantages

Bollen and Long (1993) pointed out several advantages of SEM (Jiang, Hou, and Inouye, 1997), including: (1) Multiple dependent variables can be considered and processed simultaneously; (2) The allowable independent variable and dependent (exogenous/endogenous) terms include measurement error; (3) Similar to factor analysis, SEM allows latent variables (e.g., corporate ethical status) to be composed of multiple organizational performance observation index variables (e.g., operational capability, solvency, profitability, etc.), and can simultaneously estimate the reliability and validity of index variables; (4) SEM can adopt a more flexible measurement model than the traditional method, for example, a certain index variable/topic belongs to two latent factors; in the traditional method, the project mostly depends on a single factor; (5) Researchers can construct the relationship between latent variables and estimate whether the whole model fits the data. One of the advantages of structural models is that they allow us to compare different models to determine which theory is more reasonable. In order to test whether this hypothesis is supported, we use the same data (correlation matrix) to compare three models: M1 is five factors each with five topics, and the factors are allowed in correlation; M2 is similar to M1, but the factors are completely independent (not allowed in correlation). Supposed that the goodness of fit of M1 and M2 is similar, M2 is a more economical model which can express the relationship of variables with fewer parameters, and thus M2 should be adopted.

### 4. The concept of model fit

When the first simulation is tested, we are studying the model proposed by this study, whether latent variables are significantly co-related or not. The input of SEM is the sample covariance matrix of index variables. Although in some SEM analysis, we must use covariance matrix, for the convenience of understanding, the reader can also assume that all the following covariance matrices are correlation matrix. Besides, according to our specified priori mode, we can calculate an optimal derivative matrix. CFI is a general index used to reflect the difference between E and s. There are many indexes used to express the degree of agreement between the data and the model (Marsh, Balla, and Hau, 1996). For the sake of simplicity, we only use RMS, CFI, GFI, NFI, TLI, and *chi-square/df* in the further empirical research. The closer the index of CFI, GFI, NFI, and TLI are to 1 respectively, the better the model of this research framework becomes. These results show that the structure of the whole questionnaire conforms to the original design.

#### 5. Confirmatory factor analysis

Assuming that we are not only interested in the promotion of the ethical status of enterprises, we will make continuous improvement and revision from performance

indicators through performance management. We will design a questionnaire with proper question items in total, using a 5-point liker scale, very agree (5) to very disagree. Different from the traditional exploratory factor analysis (EFA), in the confirmatory factor analysis (CFA), we can limit the subordination between the questions and each factor. Generally speaking, each question only depends on one factor; on the contrary, in the EFA, each question has a load of large or small for each factor. To model the latent variables - corporate ethics and organizational performance, we need to specify an interrelationship between corporate ethics and organizational performance and observed variables. Path diagram is a good tool to display such interrelationship and it is worthwhile to first draw the path diagram on the conceptual level before formulating it using SEMs. When drawing the path diagram, the following key conventions are summarized by J oreskog and S orbom (1996) and Lee and Song (2012). Those are: (1) Observed variables are enclosed in rectangles. Latent variables are enclosed in ellipses. (2) A one-way arrow between two variables indicates a postulated direct influence of one variable on another. (3) All direct influences of one variable on another are included in the path diagram. Hence the nonexistence of an arrow between two variables.

#### **IV.** Conclusion

Those companies with belief in doing good corporate ethics have created better organizational performance. On the contrary, companies with poor corporate ethics pay less attention to organizational performance, and tend to be conservative for relatively hindering the growth of companies.

In future research, we will use a series of examples about organizational performance to illustrate the application of structural equation model. The fitting results and road factors of all models are only designed to assist in the discussion and are not derived from real data. In the theory of learning motivation, we know that the process of enterprise ethics is mainly from the organizational performance indicators through the organizational performance management to achieve the ethical status of enterprises. Structural model method has gradually become an important analytical tool in quantitative research. Almost all the concepts of psychology, education and society are difficult to be measured directly and accurately. Therefore, SEM provides a method to deal with measurement errors, uses multiple indicators to reflect potential variables, and makes it more accurate and reasonable to estimate the relationship between the whole model concepts (factors) than traditional regression methods (Marks, Sibley, and Arbaugh, 2005).

In the construction of research tools, we can generally use confirmatory factor model to add and delete index variables, and verify the validity of the tools. Then we can compare multiple models to understand which is more able to explain and conform to the relationship between variables in the data. In some cases, we can also find out the causal and intermediary relationships among factors. The traditional ANOVA also can be replaced by SEM, and some latent factors can be compared more intensively. In this study, many common methods are not described, so as to promote the application of structural equation.

Reference

- [1] Asparouhov, T. and Muth'en, B. (2009). Exploratory structural equation modeling. Structural Equation Modeling, 16, pp. 397-438.
- [2] Bollen, K. A. (1989). A new incremental fit index for general structural equation models. Sociological Methods and Research, 17(3), pp. 303-316.
- [3] Bollen, K. A. and Long, J. S. (1993). Testing Structural Equation Models (Vol. 154). Sage.
- [4] Bunting, L. D. and Galyean, M. L. (2015). Customer and consumer confidence in the livestock industry: Professional ethics. The Professional Animal Scientist, 31(4), pp. 309-314.
- [5] Carchen, A. and Atlar, M. (2020). Four KPIs for the assessment of biofouling effect on ship performance. Ocean Engineering, 217, p. 107971.
- [6] Cho, S. J., Chung, C. Y., and Young, J. (2019). Study on the relationship between CSR and financial performance. Sustainability, 11(2), p. 343.
- [7] Ferrell, O. C., Harrison, D. E., Ferrell, L., and Hair, J. F. (2019). Business ethics, corporate social responsibility, and brand attitudes: An exploratory study. Journal of Business Research, 95, pp. 491-501.
- [8] Ghosh, D., Ghosh, D. K., and Zaher, A. A. (2011). Business, ethics, and profit: Are they compatible under corporate governance in our global economy? Global Finance Journal, 22(1), pp. 72-79.
- [9] Hallahan, K. (2015). Organizational goals and communication objectives in strategic communication. The Routledge Handbook of Strategic Communication, pp. 244-266.
- [10] Hussey, A. (2011). The effect of ethics on labor market success: Evidence from MBAs. Journal of Economic Behavior & Organization, 80(1), pp. 168-180.
- [11] Ittner, C. D. and Larcker, D. F. (1997). Quality strategy, strategic control systems, and organizational performance. Accounting, Organizations and Society, 22(3-4), pp. 293-314.
- [12] Jiang, W., Hou, Y., and Inouye, M. (1997). CspA, the major cold-shock protein of Escherichia coli, is an RNA chaperone. Journal of Biological Chemistry, 272(1), pp. 196-202.
- [13] Jöreskog, K. G. and Sörbom, D. (1993). LISREL 8: Structural Equation Modeling with the SIMPLIS Command Language. Scientific Software International.
- [14] Kishor, N. (1981). The effect of self-esteem and locus of control in career decision making of adolescents in Fiji. Journal of Vocational Behavior, 19(2), pp. 227-232.
- [15] Le Ray, G. and Pinson, P. (2020). The ethical smart grid: Enabling a fruitful and long-lasting relationship between utilities and customers. Energy Policy, 140, p. 111258.
- [16] Lee, S. Y., and Song, X. Y. (2012). Basic and Advanced Bayesian Structural Equation Modeling: With Applications in the Medical and Behavioral Sciences. John Wiley & Sons.
- Made, C. N., Kuei, C. H., and Jacob, R. A. (1996). An empirical assessment of [17] the influence of quality dimensions on organizational performance. International journal of production research, 34(7), pp. 1943-1962.
- [18] Marks, R. B., Sibley, S. D., and Arbaugh, J. B. (2005). A structural equation model of predictors for effective online learning. *Journal of management education*, 29(4), 531-563.Marr, W. A. (2006). Using our best judgment. *Civil*

Engineering Magazine Archive, 76(9), 46-98.

- [19] Marsh, H. W., Balla, J. R., and Hau, K. T. (1996). An evaluation of incremental fit indices: A clarification of mathematical and empirical properties. Advanced Structural Equation Modeling: Issues and Techniques, pp. 315-353.
- [20] Marsh, H. W., Muth'en, B., Asparouhov, T., Lüdtke, O., Robitzsch, A., Morin, A. J. S., and Trautwein, U. (2009). Exploratory structural equation modeling, integrating CFA and EFA: Application to students' evaluations of university teaching. Structural Equation Modeling, 16, pp. 439–476.
- [21] Mourtzis, D., Boli, N., and Fotia, S. (2017). Knowledge-based estimation of maintenance time for complex engineered-to-order products based on KPIs Monitoring: APSS Approach. Procedia CIRP, 63, pp. 236-241.
- [22] Pereira, G., Brisson, A., Prada, R., Paiva, A., Bellotti, F., Kravcik, M., and Klamma, R. (2012). Serious games for personal and social learning & ethics: status and trends. Procedia Computer Science, 15, pp. 53-65.
- [23] Rashid, N. R. N. A., Khalid, S. A., and Rahman, N. I. A. (2015). Environmental corporate social responsibility (ECSR): Exploring its influence on customer loyalty. Procedia Economics and Finance, 31, pp. 705-713.
- [24] Roth, T. P. (1997). Competence-difficulty gaps, ethics and the new social welfare theory. The Journal of Socio-Economics, 26(5), pp. 533-552.
- [25] Smith, J. M. (2019). The ethics of material provisioning: Insiders' views of work in the extractive industries. The Extractive Industries and Society, 6(3), pp. 807-814.
- [26] Stamolampros, P., Korfiatis, N., Chalvatzis, K., and Buhalis, D. (2019). Job satisfaction and employee turnover determinants in high contact services: Insights from Employees' Online reviews. Tourism Management, 75, pp. 130-147
- [27] Stuebs, M., Wilkinson, B., and Arnold, A. (2012). An ethical tax dilemma: Support of hobby versus trade or business in the presence of competing incentives and client pressure. Journal of Accounting Education, 30(3-4), pp. 380-396.
- [28]Yeung, J. F., Chan, A. P., and Chan, D. W. (2009). Developing a performance index for relationship-based construction projects in Australia: Delphi study. Journal of Management in Engineering, 25(2), pp. 59-68.