CORPORATE REPUTATION: EMPIRICAL TESTS OF THE MEASUREMENT AND LINK TO PRIOR FINANCIAL PERFORMANCE IN THE MALAYSIAN BANKING INDUSTRY

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ABSTRACT

Corporate reputation is an interesting intangible asset for a corporation. Recently, its link to financial performance seems to be important in the banking industry. Prior financial performance is hypothesized as an antecedent, a variable that influence the reputation of a company. The purpose of this paper is to empirically examine corporate reputation measurement and the link of prior financial performance to corporate reputation in the Malaysian banking industry. The Reputation Quotient is used in this paper as a measurement of corporate reputation. It is because the Reputation Quotient has been cross cultural tested among countries in the United States, Europe, and Australia. This paper resorts to the typical CFA and SEM tests. The CFA has resulted with a success structure of corporate reputation dimensions and prior financial performance. These include first order and second order tests of Reputation Quotient dimensions and financial performance. The dimensions were successfully accepted the Reputation Quotient as a measurement of corporate reputation. Also, the SEM test of the influence of prior financial performance on corporate reputation has good fit indexes. Empirical results from the SEM are found to support the significant influence of prior financial performance on corporate reputation. This paper is of value by uncovering the issue of the corporate reputation measurement test and influence of prior financial performance on corporate reputation from Malaysian banking stakeholders' perspective that was never explored before. It is a step forward in studies on the antecedent of corporate reputation in Malaysia.

Keywords: Corporate Reputation, Prior Financial Performance, Confirmatory Factor Analysis, Structural Equation Modeling, Malaysian Perspective.

1. INTRODUCTION

Corporate reputation is progressively a more important part in the strategic management literature. An increasing body of research argues that good corporate reputation have strategic meaning for companies that possess them (Roberts & Dowling, 2002; Rumelt, 1989; Weigelt&Camerer, 1988). A good corporate reputation can lead to many strategic benefits for a company, for instance attracting customers, investors, and applicants (Fombrun, 1996; Srivastava*et al.*, 1997; Turban & Greening, 1997; Wang, 2013), pull down firm costs (Deephouse, 2000; Fombrun, 1996), allowing firms to charge first-rate prices (Deephouse, 2000; Fombrun&Shanley, 1990; Fombrun, 1996; Rindova *et al.*, 2005), increasing profitability (Chen, 2016; Roberts & Dowling, 2002), outperform firms (Tracey&French, 2017) and snowballing the likelihood that stakeholders will contract with the firm (Deephouse, 2000; Rhee &Haunschild, 2006).

However, though the significance of corporate reputation, its link to financial performance seems to be important in the banking industry (Sabate& Puente, 2003b). It includes answering the direction of causality as the first is financial performance has an influence on corporate reputation or the second is corporate reputation affects financial performance (Gatzert, 2015). Some contradictory results have been reached on the influence of financial performance on corporate reputation (Sabate & Puente, 2003a).

Therefore, this paper set to test out the influence of prior financial performance on corporate reputation in the Malaysian banking industry. This also includes confirmatory test of the latent variables corporate reputation and prior financial performance. The influence of financial performance on corporate reputation will be performed with structural equation modeling.

The rest of this paper is prearranged as follows: Section 2 reviews related literature about the influence of financial performance on corporate reputation, Section 3 describes the research methodology used, and the data analysis is given in the Section 4. The conclusion remark is given in Section 5.

2. THE INFLUENCE OF FINANCIAL PERFORMANCE ON CORPORATE REPUTATION

An extensive survey of literature on the empirical investigation of the relationship between financial performance and corporate reputation has been issued (Sabate& Puente, 2003a). The survey of literature has been reviewed many empirical studies on the relationship between financial performance and corporate reputation. The survey has taken together individual researches examining the presence or absence of a relationship between financial performance and corporate reputation without supposition concerning the nature of the relationship. The survey found two studies in this first section which were Preston and Sapienza (1990) found a positive relationship between corporate reputation and financial performance and Schultz *et al.* (2000) found no evidence of the relationship. Recently, some scholars found no relationship (De Haan, E., 2017). This circumstance necessarily leads them to contradictory interpretations.

The survey also takes researches which analyze the influence of financial performance on corporate reputation construction. There were some researches in the survey (Fombrun&Shanley, 1990; Hammond & Slocum, 1996; Riahi-Belkaoui&Pavlik, 1991; Sobol&Farelly, 1998). Sobol and Farelly (1998) found the prospective effect of financial performance on the corporate reputation construction. The result of their research showed that the significance of financial performance was different according to the dissimilar attributes of corporate reputation measurement and also from different industry.

Another research found that the most important signals of corporate reputation were profitability and risk for the duration of the prior period and market valuation (Fombrun and Shanley, 1990). The research also incorporated some non-financial variables. Various non-financial variables, for example property concentration, charitable works, size, dividends payout corresponding to the prior financial year; were shown less significant.

A different research found a number of significant variables regarding corporate reputation development matches to different measures of asset management (Riahi-Belkaoui and Pavlik, 1991). These measures are the size of assets as an indicator of a firm, asset rotation and profit margin as a quality measure of the efficiency of resource usage, and the Tobin's q as a signal of agency cost.

Nevertheless, Hammond and Slocum (1996) demonstrated a negative effect of standard deviation of the market return of the firm on corporate reputation. All of the research which analyzes the influence of financial performance on corporate reputation leads to two basic problems, methodological and theoretical (Sabate& Puente, 2003a).

There were a variety of results concerning the influence of financial performance on corporate reputation. There were two main restrictions were encountered in the survey of literature (Sabate& Puente, 2003a). The first restriction is establishing consistency among the researches undertaken and the requirement for a theoretical framework that would sort out. The second restriction is the need of a methodology which agrees to investigate the influence of financial performance on corporate reputation. Beside both restrictions, however, there is less research on the influence of financial performance on corporate reputation for Malaysian companies.

Therefore, this paper will investigate the influence of prior financial performance on corporate reputation for Malaysian companies, especially for companies in the Malaysian banking industry. To avoid restrictions, this paper uses the same prior financial performance measurement and Reputation Quotient (RQ) as a corporate reputation measurement (Fombrun *et al.*, 2000). The RQ has been cross cultural tested among countries in the US, Europe and Australia (Gardberg, 2006). The RQ is a basis of the RepTrak, a short-form measure of corporate reputation measurement (Ponzi *et al.*, 2011).

3. METHODOLOGY

This section was designed to discuss the research methods used in this study for testing the influence of priorfinancial performance on corporate reputation when applied to Malaysian banking industry. This study uses a quantitative approach with confirmatory factor analysis to test the prior financial performance and corporate reputation measurements, and structural equation modeling to test the influence of prior financial performance on corporate reputation. The confirmatory factor analysis is the best tool to test the measurement model that represents the factor analysis part of the model, and the structural equation modeling is greatest to test path analysis, representing its structural model (Hair *et al.*, 2010).

Population in this research was Malaysian individuals who were identified as banking stakeholders. Therefore, a total of all individual stakeholders in the 8 banks that listed in Bursa Malaysia were the population of this research. The banks were MayBank, RHB Bank, CIMB Bank, Public Bank, HongLeong Bank, Affin Bank, AmBank, and Eon Bank (Bursa Malaysia, 2013).

The sampling techniques were a combination of quota sampling and purposive sampling (Castillo, 2009; Cavan et al., 2001; Ferber, 1977). There were 4 stakeholder groups in the Malaysian banking stakeholders such as functional, normative, diffused, and customer groups (Dowling, 1994). The sampling techniques were adopted with established standards for individual assortment in each stakeholder group. Previous research presented that the quota or purposive sampling techniques were widely used in research that examining similar questions (Sabate& Puente, 2003a).

The final data collection instrument used in this research was divided into 2 sections. In the first section, corporate reputation was measured with the 20 standard questions of Reputation Quotient (Fombrun et al., 2000). While the second section, dealt with prior financial performance, was measured using 4 questions (Gilley &Rasheed, 2000; Martinez-Sanchez *et al.*, 2007). The corporate reputation questions and financial performance questions used 7 (seven) point Likert scales. Therefore, a questionnaire with 24 items questions consisted of 20 questions about corporate reputation and 4 questions about prior financial performance was ready to use for data collection.

The data was collected in Kuala Lumpur and the surrounding areas. For this research, a total sample of 400 respondents was taken in the age category of at least 25 years (Fombrun et al., 2000; Hair et al., 2010). A total of 332 respondents completed the survey out of 400 questionnaires distributed. For the purpose of confirmatory factor analysis and structural equation modeling tests, the sample size of 332 individual respondents is considered as deemed sufficient (Byrne, 2001; Hair et al., 2010; Hatcher, 1994; Malhotra, 1999).

All data are then examined using confirmatory factor analysis (CFA) and structural equation modeling (SEM) tests. The CFA was a proper measurement tool when the scholar had initial information about the appropriate and dependable observed variables within a certain latent variable (Arbuckle, 2015; Sureschandar et al., 2002). The CFA was used to test the uni-dimensionality of

prior financial performance, and also to test the uni-dimensionality and multi-dimensionality of corporate reputation dimensions. This includes both first and second order tests. Long-Tolbert (2000) has used and has also tested this approach in his past research.

The SEM provides maximum efficiency by simultaneously examining the measurement model and structural relationship between corporate reputation and financial performance (Hair *et al.*, 2010). The structural model in SEM is symbolized by the path diagram that represents causal relationships between different latent variables (Bollen, 1989). In the measurement model of SEM, there were testing validity and reliability of a latent variable (Byrne, 2001).To minimize the changes of avoiding any interaction between the structural and the measurement model, this research have a preference to use two stage approaches (Hair *et al.*, 2010). In the two stage approach, the measurement models are confirmed first before testing the structural relationship between the latent variables. Therefore, this research has confirmed first the measurement model of prior financial performance and Reputation Quotient before testing the structural relationship between prior financial performance and Reputation Quotient.

4. DATA ANALYSIS
The CFA starts with assessing the uni-dimensionality of prior financial performance and the uni-dimensionality of each factor of Reputation Quotient. The measurement model for each factor of Reputation Quotient and the measurement model of prior financial performance were independently tested. A measurement model can simply be detected when it is represented by three or more indicators and the model was re-specified if the end result of measurement model was not reliable with the prior specified model (Kline, 2005; Tabacknick&Fidell, 2001).

The data from this research were directly applied into the measurement models using Amos software (Arbuckle, 2015; Byrne, 2001). The test results were found to support all of the six measurement models for each of single factors of Reputation Quotient and also a measurement model of prior financial performance (see Table 1). All of the measurement model in Table 1 have good fit measures and surpass the cut-off point of fit measures which were P>.05, CMIN/df<3, GFI>.90, AGFI>.90, RMSEA<.08, CFI>.95, and NFI>.90 (Byrne, 2001; Hair *et al.*, 2010; Meyers *et al.*,2006; Schreiber *et al.*, 2006).

**Table 1. Goodness of Fit Index of the Measurement Model for the Reputation Quotient**

Model *)	Chi Sq	df	P	CMIN/df	GFI	AGFI	CFI	NFI	RMSEA
EA	2.040	1	.190	2.040	1.000	.978	1.000	1.000	.052
PS	2.388	2	.304	1.194	.998	.983	1.000	.999	.023
FP	2.422	2	.298	1.211	.996	.982	1.000	.999	.025
VL	1.840	1	.180	1.840	1.000	.980	1.000	1.000	.046
WE	2.160	1	.140	2.160	1.000	.980	1.000	1.000	.057
SR	0.020	1	.904	0.020	1.000	1.000	1.000	1.000	.000
PFP	4.814	2	0.09	2.407	.992	.962	.999	.999	.065

*) EA=emotional appeal, PS=products and services, FP=financial performance, VL=vision and leadership, WE=workplace environment, SR=social and environmental responsibility, PFP= Prior Financial Performance

A model with three indicators is a just identified model and has zero degree of freedom (Byrne, 2001; Hair *et al.*, 2010). Therefore, emotional appeal, vision and leadership, workplace environment, and social and environmental responsibility models in Figure 1 have zero degree of freedom and does not have the capability to report model fit, but can create the factor loading. To overcome this specific problem, then researcher can constrain these error terms equally (Byrne, 2001; Hair *et al.*, 2010).

Figure1 is an illustration of the measurement model of the first order confirmatory factor analysis for the Reputation Quotient factors. The output of model-fit from Amos software had shown a realistic fit with the data. This indicates all six factors were similar to the first order model as proposed by Fombrun*et al.* (2000). All standardized parameters of the first order measurement model and the standardized factor loading for each observed factor was well, P < .001 and factor loading > .50 (Byrne, 2001; Hair *et al.*, 2010, Meyer *et al.*, 2006). The CFA of the first order model has successful to meet the critical values of the fit indexes (χ^2 = 153.663, df = 155, P = .515; CMIN/df = .991, GFI = .955, AGFI = .938, CFI = 1.000, RMSEA = .000). These results indicate that this model have fulfilled the criteria of model-fit.

Figure 1. The First Order Measurement Model of the CFA for the Reputation Quotient Factors
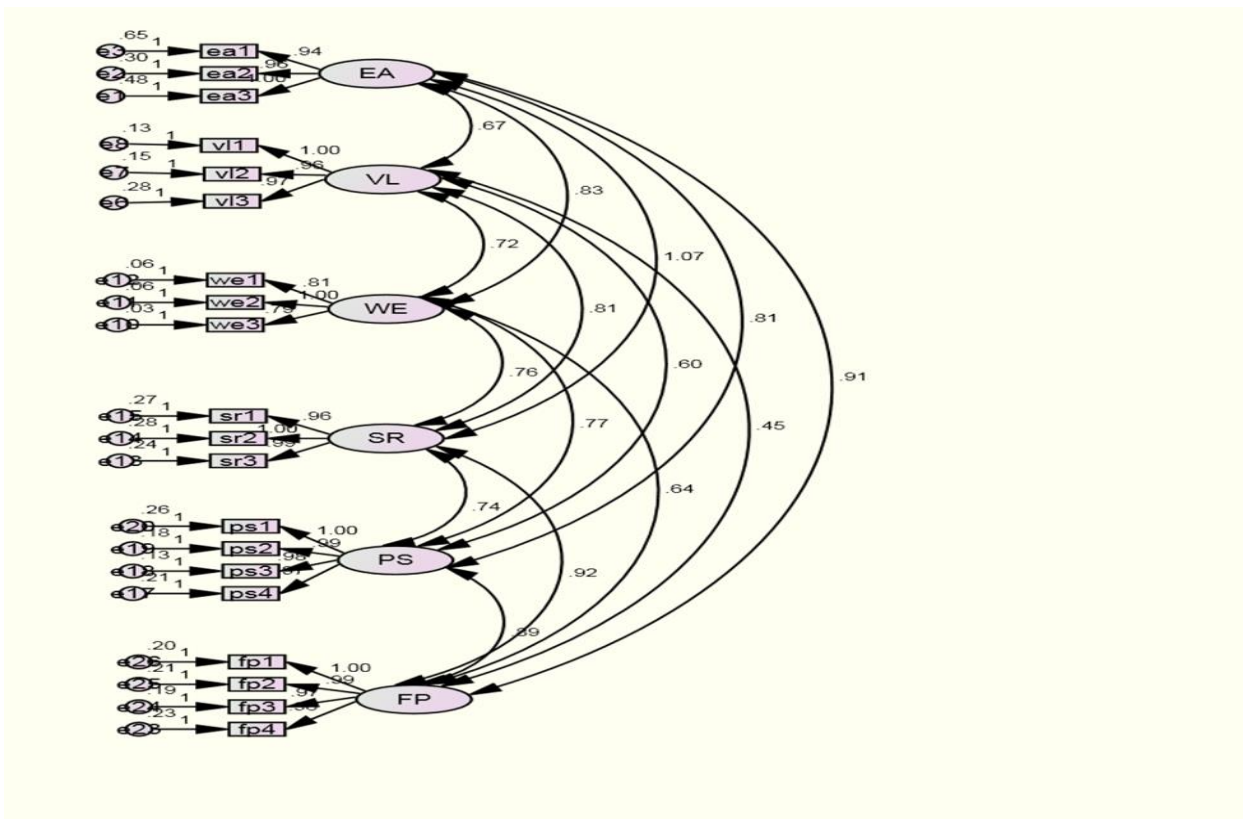
The second order model is the indirect test that the Reputation Quotient construct governs the correlation among all of the six factors of the Reputation Quotient and performances as the higher order latent factor. The model of second order level is presented in Figure 2. All standardized parameters and factor loadings for each observed variable performed very good, where P < .001 and factor loadings above the cut-off point of .50. The results of the CFA model fit on these six factors of Reputation Quotient had shown a good representation of the data because they can surpass all the critical values of the fit measures (χ^2 = 176.466, df =164, P = .239); CMIN/df = 1.076, GFI = .948, AGFI = .933, CFI = 0.999, RMSEA = .015). Therefore, the second order model of Reputation Quotient has fulfilled all of the required scores of model-fit(Byrne, 2001; Hair *et al.*, 2010; Meyer *et al.*, 2006).

Figure 2: The Second Order Measurement Model of the CFA Model for the Reputation Quotient
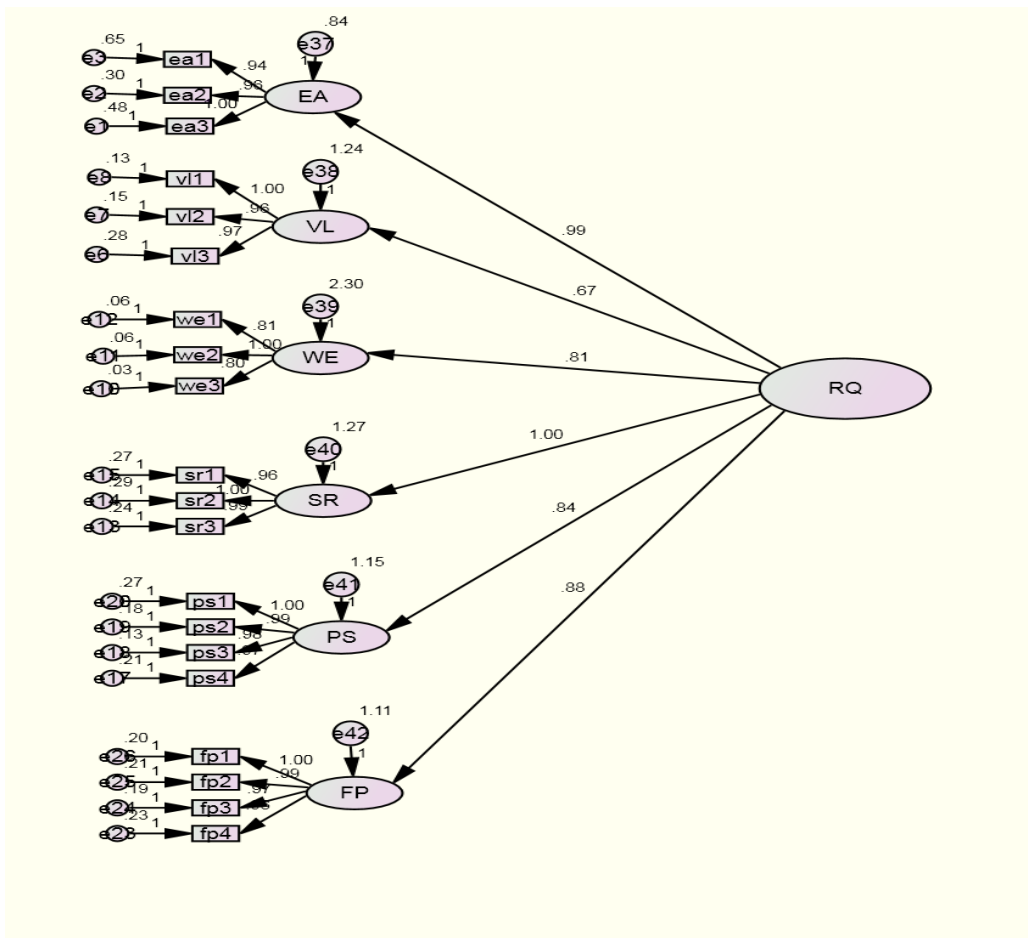
The measurement model of Reputation Quotient including uni-dimensionality, first order and second order, and also the measurement model of prior financial performance have been achieved, thus allowing this research to proceed to the next stage of SEM. It also means the first stage of SEM has finished. The second stage of SEM is the stage of testing the structural relationships between different concepts (Byrne, 2001).Therefore,the structural model was tested to examine the structural relationship between constructs for prior financial performance and Reputation Quotient. Figure 3 presented the result forthe structural relationship.

Figure 3: Structural Model for the Influence of Prior Financial Performance on Corporate Reputation
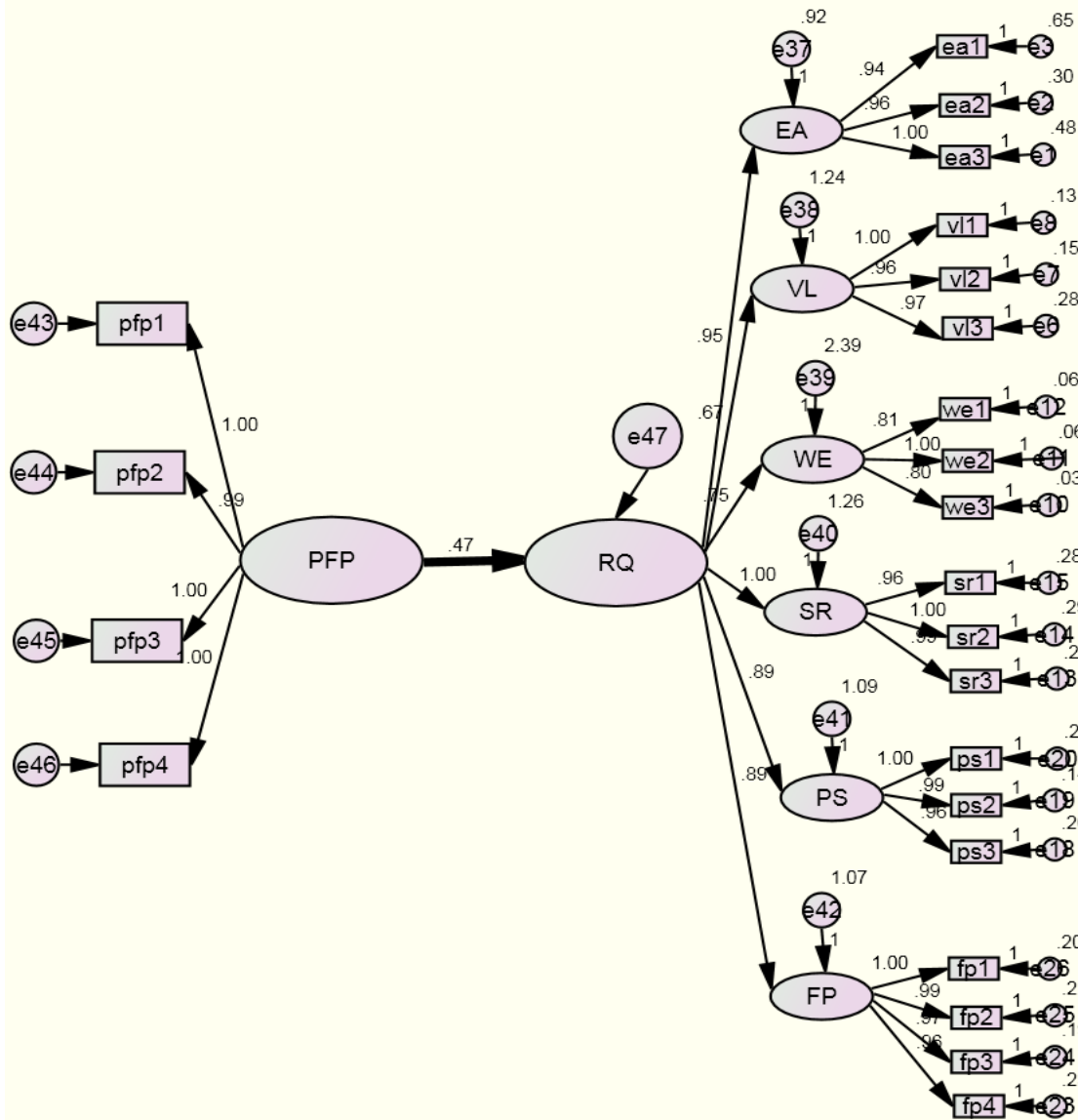
The structural model was tested using the AMOS Software. Figure 3 presents structural model for the influence of prior financial performance (PFP) on corporate reputation after removing the indicator ps4. The parameter estimates for the measurement model indicates that the path between financial performance (PFP) and Reputation Quotient (RQ) was significant (p<.001). The results of the model point out that the data fit well. Chi-square was significant (χ^2 = 225.637, df = 223, p = .438). CMIN/df was 1.012, well below the maximum limit of 2.0, GFI = .946 and AGFI = .933 well above .90, CFI = 1.000 also well above .95, and RMSEA = .006 was also excellent fit below .05. From Figure 3, it can conclude that prior financial performance has positive influence on corporate reputation.

5. CONCLUSION

The purpose of this paper was to examine the influence of prior financial performance on corporate reputation in the Malaysian banking industry. Corporate reputation was measured by Reputation Quotient. This research foundsthat Malaysian banking stakeholders have confirmed all of the six factors of Reputation Quotient that were introduced by Fombrun *et al.* (2000). The Structural Equation Modeling has concluded that prior financial performance has positive influence on corporate reputation.This paper suggests that prior financial performance is an antecedent of corporate reputation.

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