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A STRUCTURAL EQUATION MODEL OF THE HALAL CERTIFICATION AND ITS BUSINESS PERFORMANCE IMPACT ON FOOD COMPANIES

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ABSTRACT

Despite the overwhelming popularity of *halal* certification, there is considerable confusion surrounding its role and business value as well as its relation to business performance. Thus, the aim of this study is to gain better understanding of the relationship between *halal* certification and the business performance of *halal* certified food companies in the Philippines. The study was based on a survey and the time horizon was cross-sectional. The survey was carried out using stratified sampling on *halal* certified food companies operating in the Philippines. Through a self-administered questionnaire, 141 usable responses were acquired from the responding companies. The theorized relationship of *halal* certification and business performance was tested using confirmatory factor analysis and structural equation modeling (SEM). The findings of this study revealed that *halal* certification significantly affect business performance of *halal* certified food companies in terms of innovative and financial performance. It was also revealed that innovative performance fully mediates the relationship between *halal* certification and financial performance.

JEL Classifications: M38, Z0

Keywords**:** *Halal* certification, Innovative performance, Financial performance, Innovation, Structural Equation Modeling

1. INTRODUCTION

Halal certification has moved to the forefront as consumers all over the world are now becoming more educated, health conscious, and demanding. It has been the strategic measure that many firms have adopted to sustain consumer demand and set them apart from competitors. To facilitate ongoing improvements in business performance, these firms are employing a variety of programs to help them accomplish their goals.

Halal industry represents a very large and rapidly expanding market segment. It is a new force of market organization and identification. *Halal* food is becoming an increasing part of consumers' diet and has become a multi-billion dollar global industry involving multinational companies that have aggressively expanded their *halal*-certified product lines. From a market perspective, the traditional major target markets of *halal* food are the Asia-Pacific and the Middle East. To date, the Muslim market is composed of approximately 25 percent or 2 billion of the entire world population. Muslims represent a majority in more than 50 countries in Asia, Africa, and Europe and their religion, Islam, is considered the fastest growing among all religions on earth both through birth and conversion. Those 2 billion Muslims live in economically feasible numbers in most countries in the world. In US Dollar, the global Muslim consumer market is forecasted to reach a staggering USD30 trillion by 2050 (Alserhan, 2010; Mordor Intelligence Report, 2018).

The largest Islamic body, the Organization of the Islamic Conference (OIC), is composed of the economies of 57 member states, 50 of which are overly Muslim. The remaining members have large Muslim populations, although Muslims form a minority. Those 57 countries have a combined gross domestic product (GDP) of nearly USD8 trillion. The *halal* market (i.e., products that are *Shariah*-compliant) represent a significant portion of these countries' economies. Moreover, other countries that are not members of the OIC but have feasible Muslim minorities also contribute to the global size of the *halal* product market, which is currently estimated at approximately USD2.3 trillion, not including banking, and it is the fastest growing market in the world. Research by the World Halal Forum secretariat found 67 per cent, or USD1.4 trillion of this market is comprised of food and beverage (Alserhan, 2010).

In the Philippines, *halal* is an additionally emerging industry with roughly 12 million local Muslim consumers. The *Halal*

certification became noticeable in this country when *halal* became part of the Codex Alimentarius of the United Nations in 1998 (Linzag, 2011). But while *halal* certification has been sparingly practiced in the last 20 years or so, it was only recently that its importance is beginning to be recognized by the government and the business sector for the tremendous opportunities that a vibrant *halal* industry can bring to the economy (Ebrahim, 2008). It was only in 2003 that the Philippines government initiated a local *halal* food industry by creating the Philippines *Halal* Certification and Regulatory Board. As a result, some producers of food products opened their mind to *halal* certification, therefore permitting Muslims to consume the certified product without doubting its *halal* status. Moreover, the *halal* program provides opportunities for big, medium and small scale businessmen to capture a significant portion of the local and global *halal* market either as *halal* supplier of food and non-food finished products or supplier of raw materials necessary for producing and processing of *halal* end-products.

Today, *halal* certification has gained world-wide popularity and has become one of the most desirable systems adopted by many countries. With its popularity come the many controversies surrounding its implementation. *Halal* certification is periodically criticized for its supposedly lackluster impact on business performance, while others claim it has business value. In the Philippines, to the best of our knowledge, no research has yet been conducted to investigate the impact of *halal* certification on business performance. This research gap has led us to undertake the current study. Through this empirical study, *halal* registered and about-to-register companies would have a wider perspective and a realistic view on what to expect from *halal* certification. More specifically, the study's objectives are:

a. To identify the effect of *halal* certification on innovative performance
b. To identify the effect of innovative performance on financial performance; and
c. To identify the mediating effect of innovative performance in the relationship between *halal* certification and financial performance.

The whole article has been structured into seven sections. Section 2 gives the overview of *halal* certification; Section 3 presents the measurement of business performance and the studies made to examine the relationship between *halal* certification and business

performance; Section 4 illustrates the theoretical framework; Section 5 outlines the methodology of the study; Section 6 present the findings from the empirical data; and Section 7 presents the concluding notes.

2. *HALAL* CERTIFICATION

Competition within most industries is becoming increasingly intense; hence, companies emphasize the need to identify sources of sustainable competitive advantage to counter this threat. Competitive advantage can arise from leveraging a firm's unique skills and resources to implement a value-creating process that competitors cannot execute as effectively. A source of competitive advantage that is getting increasing attention among food manufacturing industries worldwide comes from creating, communicating, and delivering superior value to customers through acquiring *halal* certification for food products.

Mahmod (2011) defined *halal* certification as a certification issued for food products, beverages, use of goods and food premises. Under the Codex Alimentarius (1997), *halal* certification is a process that food companies undertake to establish that they are manufacturing products based on Islamic law. Foods qualified for *halal* certification do not contain pork or other pig products, alcoholic beverages or intoxicants, blood, and meat from carnivorous animals. In addition, *halal* meat needs to be slaughtered according to Islamic law, which requires religious supervision during the butchering process.

The concept of *halal* certification is a recent phenomenon. It started in the mid-1960s by Muslim food and technical experts when immigrant Muslim populations began to settle in the West, particularly in the United States, Europe and in some parts of Asia and the Pacific. The practical safety measure of Muslims living in non-Muslim societies is important to preserve their Muslim identity and fulfill their religious obligation (Linzag, 2011). Globalization has changed the world trading system as food and other products are exported globally without any specific mechanism preventing the importing country from accepting products from the other. Food started coming from various countries such as Europe, China and anywhere in the world. These foods contained meat or animal derivatives that need to be certified to fit for Muslim consumption (Mohd. Noor, 2009). This led to the demand for *halal* certification

and eventually the introduction of a few certification bodies in the USA, Europe, Australia, New Zealand, China, and Taiwan.

Several factors have driven *halal* market forces as highlighted by Sungkar (2008). Firstly, Muslim populations are now increasing and many Muslim nations are reaching a stage of development whereby they can begin to influence world markets, both as producers and consumers. Sungkar (2008) stressed that, as the world and Muslims get richer, the appetite for trade increases. And when the consumer incomes of Muslims rise, they become fussier about the products that they want to buy. As a general rule, the rise in income typically correlates to an increase in the demand for more value-added and differentiated products. When Muslims have higher purchasing power, they are able to be more selective about what *halal* foods they want to buy. Secondly, products such as *halal* meat are increasingly popular among non-Muslims too and this has significantly enhanced the *halal* industry sector. *Halal* certified products are attracting non-Muslims consumers aware of the wholesome hygienic and contamination free principles underlying halal food production. Lastly, requirements for food exporters to comply with *halal* requirements and to provide *halal* certificate also lead to the growth of *halal* food industry (Al-Harran and Low, 2008).

Halal certification is administered according to Islamic Law with the main purpose of overcoming the problems of Muslim consumers concerning the status of a product. It is also a trade commercial value of winning in local and overseas markets (Mahmod, 2011). In the Philippines, for instance, the process of *halal* certification is subject to the guidelines made by *ulamas* that are incorporated in the Philippine National Standard on *Halal* Food. The *halal* certification system in the Philippines consists of two aspects to harmonize the role of the religious sector and the government on this matter.

In the Philippines, the application for *halal* certification starts from a written letter of the company to the certifier with the relevant product specification. Subsequently, the business registration, Bureau of Food and Drugs (BFAD) registration, product samples, ingredients list, Bureau of Food and Drugs certification, chemical and laboratory analysis should be submitted to the certifier. Laboratory and ingredient lists are mandatory to ensure absence of *haram* components. The manufacturing centers must be inspected to ensure that no *haram* products are stored, handled, and so forth, and that there is no chance for product contamination (Linzag, 2011).

Halal certification will only be given after the certifying agencies verify that the product in question does not use any *haram* or impure ingredients. Once the company has got a *halal* certificate, it can be utilized officially for applying a *halal* logo.

The *halal* certification in this study was conceptualized as an innovation strategy employed by *halal* certified food companies in the Philippines that brings emphasis on raw material improvement, product improvement, process improvement, and marketing improvement.

3. *HALAL* CERTIFICATION AND BUSINESS PERFORMANCE

Sin and Tse (2000) conceptualized performance in the business context. They defined business performance as comprising of profitability performance (margin profit), market performance (sales volume, market share), growth rate and customer satisfaction. On the other hand, Ling (2000, in Bontis, Keow, and Richardson, 2001) considered four elements of business performance such as financial, marketing, production and innovative performance. Bontis et al. (2001) also highlighted five indicators of business performance: profit; profit growth; sales growth; after-tax return on assets; and after-tax return on sales. Freel (2003, in Gunday et al., 2011), on the other hand, used innovation as indicator in its association to business performance and found that the influences of various forms of innovation-related networks have significant effects on business performance in general. Similarly, Henderson and Clark (1990, in Smith, 2006) emphasized that innovation strategy drives innovative performance improvement, market performance improvements, and increase financial benefits or profitability, which is one of the determining factors in business performance. In this study, business performance of *halal* certified food companies in the Philippines is measured using both financial and non-financial measures such as innovative performance and financial performance. This is also in line with Said (2005) and Phongpetra (2009) who argued that firms can measure their business performance using the financial and non-financial measures.

The innovative performance in this study was conceptualized as the result of overall combination of business achievements from various aspects of *halal* innovativeness such as in raw materials, processes, products, and marketing. Meeus and Oerlemans (2000) noted that a company innovative performance namely production and innovation process contributes to the business performance.

Innovative performance refers to the company's results to the degree that they really deliver inventions to market, for example, the extent of introducing new products, new processes and systems or new tools (Gunday et al., 2011). In a recent study, Khalili and Nejadhussein (2013) used marketing of new products, introducing new production lines, new project introduction, improving the quality of goods and services, registered innovation, and organizational restructuring as indicators for measuring innovative performance. However, in this study, innovative performance includes newness (*halal*) in existing product (NEHP), new *halal* product development (NHP), percentage of new *halal* product in the market portfolio (PNH), and quality of new *halal* product (QNH).

The financial performance in this study used indicators extracted from the literature, such as return on sales (ROS), return on assets (ROA), company general profitability (GP), and company cash flows excluding investments (CF) (Gunday et al., 2011; Hiloma, 2006; O'Sullivan and Dooley, 2009). Return on sales was conceptualized as the statistics measuring profitability against sales; return on assets was defined as the statistics measuring profitability against assets. This measure specifies how gainful a company is in relation to its total assets. The cash flow was considered as the flow of money in and out of the business. This measure gauges how successful a company is at generating a positive cash flow given its current sales.

A few studies in the literature on the *halal* certification and business performance relationship present an affirmative assessment of *halal* certification innovation leading to improved business performance (Al-Harran and Low, 2008; Chan, 2011; Marzuki, Hall, and Ballantine, 2011; and Rajagopal, et al., 2011). For instance, Chan (2011) argued that *halal* certification has a significant effect on business performance by providing an enhanced quality product that conveys competitive benefit and better performance. In his study, he revealed that Currumbin Wildlife Sanctuary in Australia, Hilton Glasgow, and the Intercontinental Hotel in Prague have reported significant improvement in their innovative business performance since they started to offer new *halal* food products such as meat and beverages. According to him, these places have become attractive destinations especially for Muslim travellers. Similarly, Rajagopal et al. (2011) also revealed that food companies in the United Arab Emirates have improved innovative performance after acquiring *halal* certification. Among these big companies and retailers are

Nestle, French supermarket chain Casino, Tesco, and Sainsbury. Rajagopal et al. (2011) argued that products of these companies are quite unique in terms of quality because of their *halal* certification logo where religious values and beliefs are upheld during the entire product chain process. In the light of the above discussions, it is proposed that:

H1: Halal certification is positively related to innovative performance.

Marzuki et al. (2011) revealed that innovative companies with quality *halal* products significantly improved their financial performance. This is in line with the Gulf Marketing Review (2009) statement that Nestle has increased its profit since it moved its *halal* range into mainstream retail channels in Swiss supermarkets. Nestle has been offering *halal* versions of many brands since 2004 in countries such as France, the UK and Germany. *Halal* products are sold in 1,000 stores in five European countries. The product range includes Nido, Smarties, Maggi soups, Kit Kat, Milo and Nescafe accounting for annual sales of around USD5.2 billion. Out of 456 factories, 85 are *halal* certified. These factories are mainly in Indonesia, South Africa and the Middle East (Rajagopal, 2011). This indicates that *halal* certification improves product quality, hygiene and safety which encourages more customers, thus increasing the firm's profitability. Hence, the following hypothesis is proposed:

H2: Higher level of innovative performance results in improved financial performance.

Finally, Abdul Hamid (2005) argued that *halal* innovative companies tend to achieve good business performance by achieving an increase in financial benefits. He stressed that *halal* certification has been good for food companies in Malaysia, resulting in increased financial benefits such as return on assets and investments; and allowing them to position their products as safe and acceptable for the Muslim community. Likewise, Rajagopal (2011) also argued that companies such as KFC in France that possess *halal* certificate and maintain *halal* raw material and *halal* process have increased their innovative performance. It was reported that product quality improvement in KFC France resulted in increased customers leading to higher profitability or financial business performance. Al-Harran and Low (2008) proved that companies such as KFC, Burger King

and Taco Bell, in Singapore are successful through *halal* innovation strategy. According to them, what "these organizations have in common is that their success derives in large measure from *halal* innovation". The following factors characterize these successful companies according to Al-Harran and Low (2008): *halal* innovation is consistently found to be one of the most important characteristics associated with success, *halal* innovative companies typically achieve stronger growth or are more successful than those without *halal* certification, and companies that gain market share and increasing profitability are those that have products with *halal* certification. Based on the preceding discussion, it is proposed that:

H3: Innovative performance mediates the relationship between halal certification and financial performance.

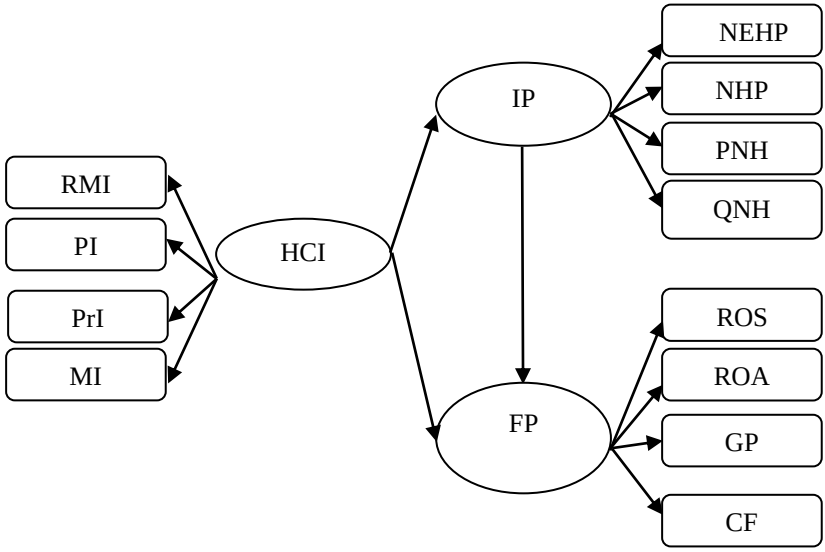
4. THEORETICAL FRAMEWORK

The link between *halal* certification and innovation may arguably be traced to Schumpeter's work. Schumpeter determined five main sources of innovation: raw materials innovation (the conquest of a new source of raw materials or half manufactured goods); product innovation (introducing new goods or significant improvement in quality of existing goods); process innovation (introducing a new method of production, or a process innovation); marketing innovation (a new form of marketing or general market behavior, such as an export market in a new territory, advertising, branding); and organizational innovation or creation of a new type of industrial organization, or an administrative innovation (Smith, 2006). However, this study concentrates only on four types of innovation (raw materials, product, process, and marketing) since they are directly related to *halal* production.

The theoretical framework of this study illustrates the two dependent variables representing business performance, namely innovative performance (IP) and financial performance (FP). The theoretical framework proposes that different *halal* innovations, such as raw material innovation (RMI), process innovation (PI), product innovation (PrI), and marketing innovation (MI) bring an increased emphasis on the business performance of *halal* certified food companies. The efficiencies created through adopting *halal* certification should drive innovative performance improvements. This innovative performance improvement leads to financial

performance improvement which is one of the determining factors in business performance.

FIGURE 1
Theoretical Framework



Note: Raw material innovation (RMI), Process innovation (PI), Product innovation (PrI), Marketing innovation (MI), *Halal* certification Innovation (HCI), Innovative performance (IP), Financial performance (FP, Newness (halal) in existing product (NEHP), New halal product development (NHP), Percentage of new halal product (PNH), Quality of new halal product (QNH), Return on sales (ROS), Return on assets (ROA), Company general profitability (GP), Company cash flows excluding investments (CF), Innovative performance (IP) and financial performance (FP).

5. METHODOLOGY

This study employed quantitative methods along with hypothesis testing. The survey method is administered to assess the research questions and hypotheses previously stated as surveys provide a quick, efficient, and accurate means of assessing information about a population, especially in cases where secondary data does not exist (Zikmund, 2003).

Data were collected using stratified sampling and the sampling frame is based on the list of *halal* food companies whose store name, address, owner name, and nature of merchandise was provided by the Department of Trade and Industry (DTI). The food

companies are chosen because of their significance in the Philippine economy and it is an industry that dominates in *halal* certification. Stratified sampling based on product type is used to select potential participating companies for this research as this form of sampling results in a more efficient sample than can be obtained using simple random sampling and ensures that the sample accurately reflects the population based on the stratification criteria used (Zikmund, 2010).

The composition of the population sampling for *halal* certified food companies was gathered from two major *halal* certifying bodies (HCB), namely, the Islamic Da'wah Council of the Philippines (IDCP) and the National Commission on Muslim Filipino (NCMF). Using the stratified random sampling procedure, this study determined the number of responding companies from each stratum which was directly proportionate to the total number of companies under such stratum in the total population to give equal representation in the sample size. Since most of the 350 *halal* certified food companies nationwide are operating in major cities of Metro Manila and Mindanao, this study considered Metro Manila and Mindanao as the geographical locations of the study.

A total of 200 questionnaires were distributed to 200 *halal* certified food companies in the Philippines (N = 200). The distribution of questionnaires to the *halal* certified companies through their Quality Management Representatives (QMRs) was directly to their offices. The questionnaires were dropped and collected after completion.

The collected data were then analyzed by using the quantitative approach such as confirmatory factor analysis (CFA) and structural equation modeling (SEM).

6. FINDINGS FROM EMPIRICAL DATA

A total of 164 questionnaires were gathered from the responding companies. This generated an 82% raw response rate. The percentage of unusable questionnaires in this study was 14%. This result produced 141 usable questionnaires representing an adjusted response rate of 86%. The usable data were analyzed using CFA and SEM approach. Kline (2011) highlighted that CFA is an essential tool in identifying construct validity. It is, therefore considered necessary to conduct CFA before the full-fledged structural modeling is tested.

6.1 COMFIRMATION FACTOR ANALYSIS

The measurement models were evaluated according to the suggestion by Hair et al. (2010) using three to four fit indices and not to report all goodness-of-fit indices because they are often redundant. Therefore, measurement models in this study were evaluated by Chi-Square (χ^2), Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and Root Mean Square Error of Approximation (RMSEA) as recommended by Hair et al. (2010).

FIGURE 2
CFA of *Halal* Certification Innovation Model

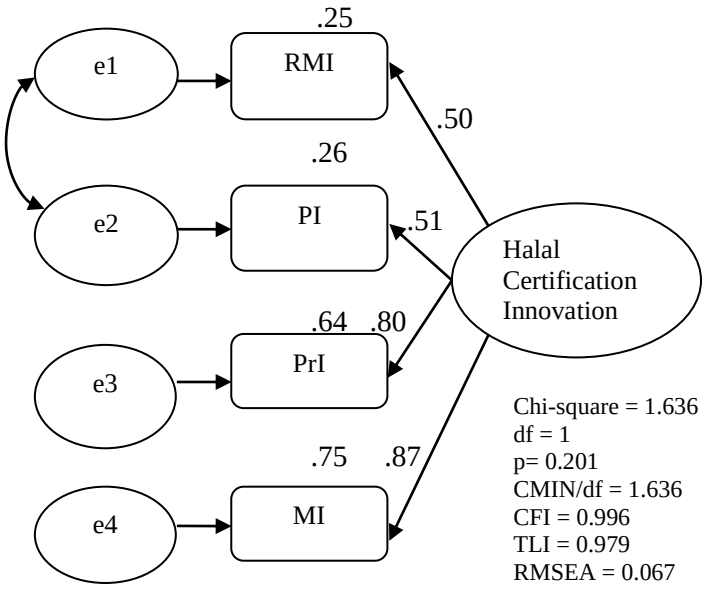


Figure 2 shows a measurement model of *halal* certification innovation. According to Kline (2011) the modification index (MI) is utilized to amend the model for refining its fit to the data. This study follows the guidelines to re-specify the model as suggested by Hair et al. (2010) to check with the modification index whether items correlated with others with so-called "cross loading". Its factor loadings indicate convergent validity. However, the RMSEA index exceeded the cut-off value of 0.08. In order to improve the RMSEA index (0.261), based on the modification index, e1 and e2 were co-variated. The result of the revised model showed: χ^2/df = 1.636 (χ^2 = 1.636, df = 1). The goodness of fit indices (RMSEA = 0.067, TLI =

0.979, CFI = 0.996) also indicate that the measurement model is a good fit.

Figure 3 shows a measurement model of innovative performance. The model's overall goodness-of-fit statistics showed acceptable fit. The model Chi-square was statistically non-significant, χ^2/df = 1.844 (χ^2 = 3.689, df = 2) and the RMSEA = 0.078 indicated the model's adequacy. The value of CFI was 0.995 and the TLI value was 0.985. The results show that the standardized factor demonstrated loading ranging from 0.67 to 0.91, indicating statistically significant indicators.

FIGURE 3
CFA of Innovative Performance Model

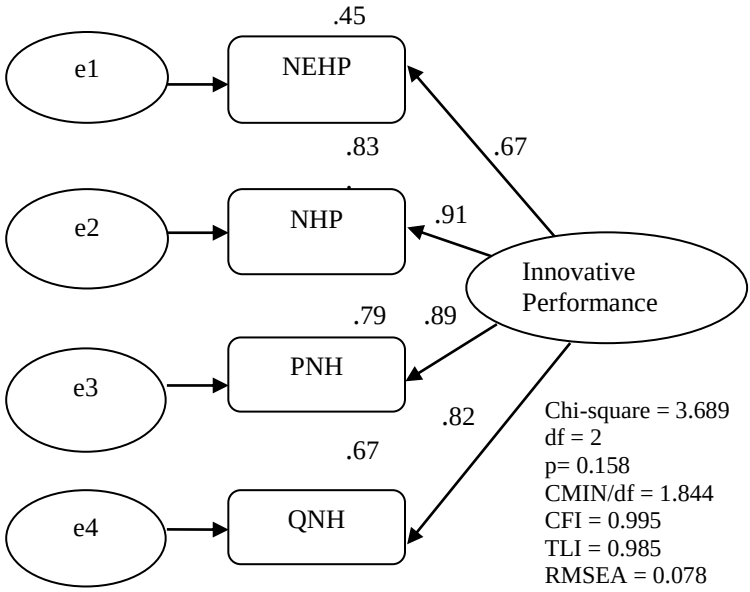
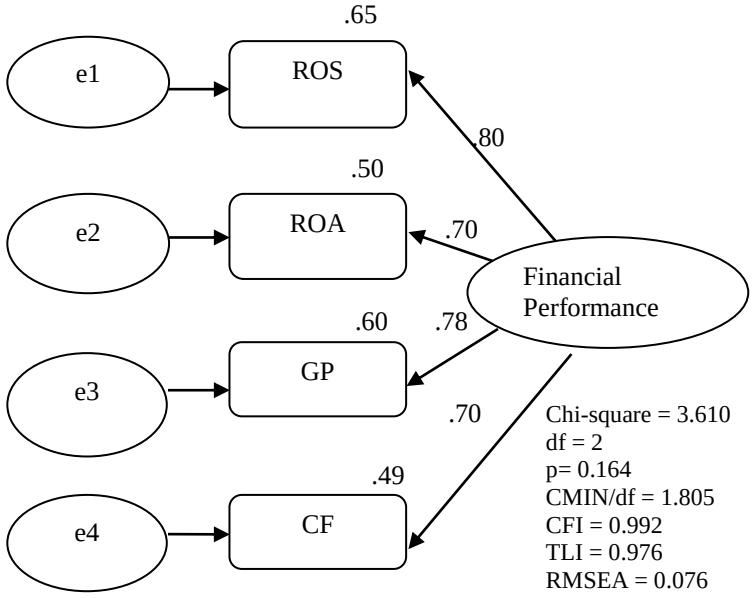


Figure 4 shows a measurement model of financial performance. The model's overall goodness-of-fit statistics showed excellent fit. The model Chi-square was statistically non-significant, χ^2/df = 1.805 (χ^2 = 3.610, df = 2) and RMSEA = 0.076 indicated the model's adequacy. The value of CFI was 0.992 and the TLI value was 0.976. The results show that the standardized factor demonstrated loading ranging from 0.70 to 0.80, indicating statistically significant indicators.

FIGURE 4
CFA of Financial Performance Model

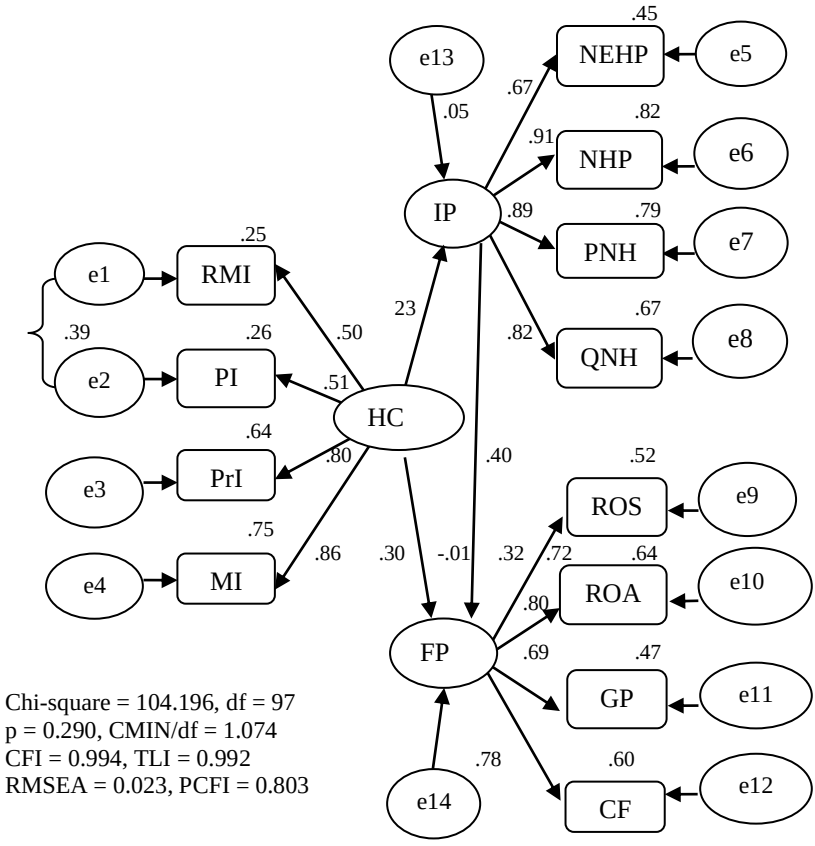


6.2 ASSESSMENT OF THE STRUCTURAL MODEL

The structural model was evaluated based on the fit measures suggested by Hair et al. (2010) to report the χ^2, degrees of freedom (df) and at least one incremental index such as TLI, NFI or CFI and one absolute index such as RMSEA.

The hypothesized relationship model was integrated by the three measurement models of the latent constructs, namely, *halal* certification, innovative performance and financial performance as tested individually by the CFA in their overall goodness-of-fit of the models. The hypothesized structural equation model contains three latent variables, 12 observed variables, and 14 error variances. In this model, the majority of the items exhibited a loading greater than 0.50.

FIGURE 5
Hypothesized Structural Model



The overall statistical analysis demonstrated an excellent fit of the hypothesized model to the empirical data. The χ^2 test was statistically not significant, with *p* value = 0.290, the normed Chi-square value was 1.074 which is well below the value of 2. Equally, other goodness-of-fit indices such as: CFI yielded a satisfactory value of 0.994, TLI = 0.992, whereas the RMSEA resulted in a value of 0.023, which is below the cut-off point of 0.08. The results exhibit that the parameter estimates of the hypothesized model were free from offending values. Out of three structural paths only two achieved statistical significance of $p = 0.05$ (where the critical ratio =

1.96). These include structural path between *halal* certification to innovative performance and innovative performance to financial performance.

TABLE 1
Estimates of the Hypothesized Model

Structural Path		Std. Reg. Weight	S.E.	C.R.	*p*
Halal Certification Innovation Innovative Performance	→	0.404	0.173	2.332	0.020
Innovative Performance Financial Performance	→	0.246	0.062	4.004	***
Halal Certification Financial Performance	→	-0.013	0.100	-0.131	0.896

Note: Standardized Regression Weight (Std. Reg. Weight), Standard Error of Regression Weight (S.E.), Critical Ratio of Regression Weight (C.R.), Level of Significance for Regression Weight (*p*).

6.3. DISCUSSION

Objective 1: To identify the effect of *halal* certification on innovative performance.

Hypothesis 1 examined the relationship between *halal* certification and innovative performance. As shown in the outcomes of the hypothesized model, the structural path from *halal* certification to innovative performance demonstrated a significant result. These findings indicated that the standardized regression weight of 0.404, standard error of 0.173, critical ratio of 2.332, and level of significance of 0.020, supported the structural path. It is also important to note that, as expected, *halal* certification resulted in a positive direction with statistical significance, confirming the positive impact of *halal* certification on innovative performance. The results revealed that *halal* certified responding companies indicated that the significant improvements in their innovative performance were attributed to the overall combination of *halal* raw materials, *halal* processing, *halal* packaging, and *halal* product in general. These findings are in line with the previous research of Gunday et. al. (2011). Therefore, the results suggest rejection of the null hypothesis and it can be concluded that *halal* certification positively affects the innovative performance of *halal* certified food companies in the Philippines. Therefore, H1 is supported.

Objective 2: To identify the effect of innovative performance on financial performance.

Hypothesis 2 examined the relationship between innovative performance and financial performance. With the standardized regression weight = 0.246, standard error = 0.062, critical ratio = 4.004, and level of significance = 0.00, the structural path between innovative performance and financial performance is fully supported. The results of data analysis revealed that *halal* certification had improved innovative performance and the success derived from it may have greater impact and contribute much to the overall financial performance. The results also revealed that improved financial performance was due to the success in developing current product through *halal* certification, developing new *halal* products, increasing the quality of *halal* product and increasing the percentage level of new *halal* product in the market portfolio which may be an indicator of growth or better business performance. Therefore, the null hypothesis is rejected and it is concluded that improved innovative performance leads to financial performance improvement. H2 is supported. These findings are in line with the literature that innovative performance, as a combination of achievements done in all its elements -- total company effort, strong planning, current product development and a systematic new-product development process -- is one of the direct drivers of profitability; thus effectiveness and efficiency in innovation would generate profitability. Further empirical studies confirm this assertion. For instance, Fullerton and Wempe (2009) indicated firms that have invested more in product innovation activities benefit with significantly higher financial rewards. They found a positive relationship between innovative manufacturing performance and financial performance. Li (2000, in Gunday et al., 2011) also argued that innovative competence is seen as one of the most important sources of financial performance since new product and process success may directly contribute to the company financial goals.

Objective 3: To identify the mediating effect of innovative performance in the relationship between *halal* certification and financial performance.

Hypothesis 3 examined the mediation of innovative performance in the relationship between *halal* certification and financial performance. The structural path between *halal* certification and innovative performance came up with the standardized regression weight of 0.404, whereas the structural path between innovative performance and financial performance resulted in a standardized weight of 0.246. In order to find the mediating effects, Hair et al. (2010) recommended a threshold value of greater than 0.08 when both the coefficients of indirect paths are multiplied. In the present study, the multiplication of indirect paths (0.404 x 0.246) resulted in 0.099, confirming the role of innovative performance as a mediator (Hair et al., 2010). Furthermore, it is also important to mention that the direct path between *halal* certification and financial performance resulted in standardized regression weight of -0.013 which is below the threshold value of 0.20. The direct path is not significant; therefore, full mediation was established. The result above revealed that the indirect effects of *halal* certification innovations can be expected to lead to improved financial performance through the mediation of innovative performance. In this respect, innovative performance plays the role of an effective hub that carries the positive effects of *halal* certification innovations to financial performance. Therefore, H3 is supported.

7. CONCLUSION

This study was designed to find out the effect of *halal* innovativeness in the business performance of *halal* certified food companies in the Philippines utilizing about 141 food companies. The results of the study not only revealed how the *halal* certification affect diverse business performances but it also emphasized that innovative performance serves as a mediator between *halal* certification and business performance indicators.

The results supported the claim that *halal* certification implemented in the Philippines *halal* certified food companies has positive effect on innovative performance. Thus, H1 is supported. The findings of the analyses also revealed that innovative performance has direct effect on financial performance; thus H2 is definitely supported. Furthermore, the results revealed that innovative performance plays the role of an effective hub that carries the positive effects of *halal* certification innovations to financial performance; thus H3 is supported.

Therefore, this study rejected the null hypotheses that *halal* certification has no significant impact on the business performance of *halal* certified food companies in the Philippines in terms of innovative performance and financial performance. Based on the gathered data and the overall findings, the significant effects of *halal* certification are mostly realized in the overall business performance of *halal* certified food companies in the Philippines.

7.1 IMPLICATIONS FOR THEORY

The findings of this study will be useful as an important insight for policy makers, practitioners and academic researchers interested in *halal* management in the small, medium and large business sector. Specifically, the managerial implications of this study point to the need for firms to explore a combination of the four forms of innovation (i.e., raw materials innovation, product innovation, process innovation, and marketing innovation) to achieve competitive advantage and improved business performance.

7.2 LIMITATIONS, FUTURE RESEARCH AND RECOMMENDATIONS

This study provides empirical evidence for the relationship between *halal* certification and business performance of *halal* certified food companies in the Philippines. The first limitation is that the population of this study consisted of only food companies in the Philippines listed in the Bureau of Product and Standard (BPS); therefore, the ability to generalize the reported results to all types of industry is restricted. Second, the respective QMRs of the responding companies were asked to assess *halal* certification and its effect on business performance. It is probable that evaluations from the top managers would be much more accurate compared to the QMRs' assessments since they are the ones who initiated the adoption of *halal* certification. Third, the use of sample from the Philippines only establishes another limitation of this study. Accordingly, in order to generalize the results of this study, additional research is suggested to test the proposed model in various countries where Muslims are a minority, such as Thailand and Singapore.

Future research should attempt to overcome the limitations of this study. For instance, to develop this model it is possible to

consider other significant latent constructs, for example, production performance. Furthermore, the effect of *halal* certification can be assessed from other nature of business, for example, service industry (e.g., restaurants) to determine the dynamics between the three latent concepts in the service industry. Future research should also explore how *halal* certification in other types of product such as personal care and cosmetics influence business performance.

This study highly recommends the following: First, for the Philippine government to provide more incentives to food processing companies locating or relocating in Mindanao for *halal* food production and marketing. Second, since Filipino-Muslims are mainly located in Mindanao, the Philippine government should convert Mindanao into a hub or center of *halal* food production and export. It has a relatively bigger local *halal* market, abundant raw materials and is highly accessible to other major Muslim markets. Third, hosting or sponsorship of more *halal* related promotional forums, seminars and exhibits locally would be beneficial. Finally, *halal* food manufacturers need more active participation in international *halal* exhibitions and activities; promotion of *halal* food in non-Muslim country should emphasize it as a safer and healthier alternative to non- *halal* food instead of just treating it as a religious issue; and a major effort is needed to study, research and identify possible export food items with high potential and demand in *halal* markets abroad where the Philippines has an advantage in terms of cost and raw material availability.

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