INTERNATIONAL DIVERSIFICATION, AUDIT QUALITY AND FIRM VALUE OF JORDANIAN PUBLIC LISTED FIRM

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ABSTRACT

This study examines the moderating role of audit quality on the relationship of international diversification and firm value of Jordanian Public Listed Firm that is listed on Amman Stock Exchange in 2016. The data is compared between financial and non-financial industries. We chose data from Public Listed Firm in Jordan because the findings contribute to the phenomena of the diversification and firm value relationship in the MENA countries. We apply agency theory to explain the importance of mitigating agency cost in international location decisions. By using regression analysis, we find that international diversification negatively influences the firm value of Jordanian diversified firms. Even though there are insignificant results on the role of audit quality but it shows a positive coefficient value. Thus it is open for further discussion. Overall, this paper suggests that in order to diversify globally, it is necessary for the manager in the guest country to evaluate and fully understand the host country's characteristics.

Keywords: Global diversification, Audit Firm Size, Firm Value, Amman Stock Exchange.

INTRODUCTION

International diversification has been widely discussed in finance and economics literature with a debate on whether it is value enhancement or value destroyed. Historically, previous researchers argued in favour of diversification citing factors such as reduce portfolio risk, lower taxes cost and value stability (Berger & Ofek, 1995; Bodnar, Tang & Weintrop, 1997; Heston & Rouwenhorst, 1994). In contrast, some studies proved that diversification reduced firm value because of agency problems, misallocation of assets and informational asymmetry between managers and stakeholders (Doukas & Kan, 2006; Lins & Servaes, 2002; Rajan, Servaes & Zingales, 2000). More recently, arguments have been advanced and new evidence presented that corporate diversification alone does not drive the discount or premium and obviously, the effect is heterogeneous across certain economic conditions, governance structures and industry settings (Erdorf et al., 2013). Thus, the debate of the impact of diversification on firm value still continues in the literature.

Currently, there has been a substantial body of literature on the effects of diversification strategy in emerging market economy such as in MENA countries. However, the evidence of diversification effects has produced mixed results. Comparing between emerging markets and developed markets, most of the literature concludes that emerging markets gaining more benefits than developed markets because of the less developed capital market in the emerging countries demand sources of funding from internal capital markets (Lee, Hooy & Hooy, 2012; Mathew, 2016). Thus, firms in the emerging countries tend to diversify and thus benefits gaining from diversification should be greater. However, the issues of agency problems such as ownership concentrations, pyramidal business groups and political ties in emerging markets motivated international diversification strategy to value discounts. To mitigate agency problems there is a need to control a good quality of audit in emerging markets in order to control the benefits of an international diversification strategy.

This study explores the role of agency costs in explaining the impact of international diversification on firm value. Specifically, this study examines the impact of audit quality on the diversification discount of companies that are incorporated in emerging markets countries such as Jordan. We argue that companies that have a high quality of audit may minimize audit failures, fraud and earnings management. If this is the case, it should help attenuate agency costs and discourage value-reducing diversification that is motivated by agency conflicts.

Jordan offers a unique environment for examining the relationship between international diversification, audit quality and firm value for several reasons. First, having undergone macro stabilization during the 1990s, Jordan is indeed in the process of developing its stock markets through waves of privatization and regulatory improvements. Second, As opposed to the rich, oil-exporting GCC countries, Jordan market constitute small, capital-scarce economies sharing a common economic trajectory through their inclusion in the Euro-Mediterranean partnership and third, the development and segmentation in the Jordan capital markets suggests the presence of diversification benefits for investors in Jordan (Lagoarde-Segot & Lucey, 2007).

This paper is differing from many other studies in the following aspects. First, guided by agency theory, audit quality is included as the additional explanatory variables. Second, highlight the presence of outstanding potential diversification benefits in Jordanian Public Listed Firm and third, compared the financial and non-financial industries to check the endogeneity biases. The rest of the paper is organized as follows. Section two reviews the literature. Section three delineates the sample selection procedure and methodology consideration. Section four presents the empirical results and finally, section five offered a conclusions remarks.

LITERATURE REVIEW

Currently, corporate diversification has empirically discussed by many researchers in developing countries such as in MENA countries. Two important issues that have been discussed are; first, does diversification is value destroying or enhancing? And second what is the main source that contributed to diversification discount? (Jiraporn, Kim & Davidson III, 2008). The evidence on the first question has produced mixed results. Studies have shown that international diversification results in reduced portfolio risks and risk-averse investors tend to select securities with a low correlation of risk. Second, diversification allows firms to bypass external capital market in favour of an internal market where divisions that have high cash flow and poor investment opportunities finance the investment of divisions that have low cash flow but have excellent investment opportunities. Thus, the diversification hypothesis predicts a positive relationship between international diversification and firm value. Empirical evidence, however, is inconsistent with this conjecture. (Deng, Tian, Li & Abrar, 2012; Denis, Denis & Yost, 2002) and (Chen & Yu, 2012) find a negative relationship between international diversification and firm value. One source of the discount is that the effect of higher agency costs as a result of imperfect capital and labour market, the complexity of international operations and the problems of ownership concentrations exceeds the possible benefits of international diversification and leads to firm value reduction. In recent literature, diversification discounts can be mitigated by correcting for measurement errors in Tobin's q and when considering factors that cause firms to diversify and the decision to diversify as endogenous (Jiraporn et al., 2008). However, evidence of the diversification discount continues to be reported (Raffestin, 2014; Salama & Putnam, 2013; Yusoff, Salleh, Ahmad & Basnan, 2016).

The second question is concerned with the source of the discount and one theme in this research is that diversification results from agency problems and creates agency costs. Financial theories indicate that agency conflicts motivate negative effects on the firm value of the diversified firm (Berger & Ofek, 1995; Hoechle, Schmid, Walter & Yermack, 2012; Laeven & Levine, 2007). The increases in the number of segments of diversified firm raise interest conflicts between headquarters and division managers; administrative cost and unallocated of resources viewed as a major cause of diversification discounts (Doukas & Pantzalis, 2003; Jiraporn et al., 2008; Jory & Ngo, 2012; Karolyi, 2012). Indeed, one purpose of corporate governance reform is to mitigate the agency costs by improving the quality of good corporate governance.

To mitigate agency cost, corporate firm demand for external audit. As stated by (Abidin, Bakar & Haseeb, 2014 & 2015; Lin & Hwang, 2010) external auditors are responsible for verifying that the financial statements are fairly stated and reflecting the 'true' economic condition and operating results of the entity, able to discuss and communicate with the audit committee about the quality, not just the acceptability, of accounting principles applied by the client company. Therefore, a quality audit is expected to constrain opportunistic earnings management as well as to reduce information risk that the financial reports contain material misstatements or omissions. However, whether or not there is a diversification discount and whether the source is related to agency problems or lapse in governance structure, are still debatable issues. It is our argument that audit quality may reduce agency problems, material misstatements and informational asymmetry between managers and stakeholders of international diversified firms and, hence, influence positive firm value. Based on the above arguments, this study provides two hypotheses as follows:

H1: International diversification negatively influences the firm value of Jordan's public listed diversified firm.

H2: Audit quality moderate the relationship between international diversification and firm value of Jordan's public listed diversified firm.

SAMPLE AND METHODOLOGY CONSIDERATIONS

The initial sample is obtained from annual reports and DataStream database which contained a set of annual financial data for Jordan publicly listed firms over the period of 2016. Based on Amman Stock Exchange classification standard and DataStream database, a firm is classified as industrially diversified if its report more than one segment in the two-digit SIC codes. The samples were split into two categories which are financial and nonfinancial industrial firms since these two categories are subject to different regulations. Based on the availability of the data, the year 2016 is chosen. Any firms that have missing data were also been excluded. The final sample consists of 46 companies.

To measure the variables, this study use excess value model proposes by Berger & Ofek (1995) to determine the firm value of diversified firms and correcting the measurement error of Tobin's Q. The excess value measure is computed as follows:

$$EV = \log(MV/\text{Imputed Value}) \quad (1)$$

Where:
EV: Firm i's exceed value in year 2016;
MV: Firm's market capitalization (Market value common equity + book value of debt) for firm i in year 2016;
Imputed Value: ∑(SSale x Multiplier)
SSale: Segment sales.
Multiplier: Is measured as the median total market capitalization to sales for the single-segment firms in the same industry in the same year.

This research uses single-segment firm as the benchmark to compute an excess value. A positive excess value indicates that the firm is worth more than the sum of its segments whereas a negative excess value implies that the firm as a whole is worth less than the sum of its segments. Thus, a positive excess value implies a diversification premium while a negative excess value indicates a diversification discount.

In measuring the international diversification engagements, this study used the ratio of segment sales to total sales of the companies (DVS). Following the study of (Francis, 2004) this study use audit firm size (Big4) as a proxy for measuring audit quality of the firm. A dummy variable of 1 is used if a company is audited by Big 4 auditors' firms and 0 if otherwise. Generally, large audit firms with international brand names (i.e., Big 4 auditors) or industry expertise provide higher-quality audit services than small audit firms which lack such brand names or industry expertise (Francis, 2004). To control firm characteristics, we follow several variables widely used by earlier studies (Denis et al., 2002; Lee et al., 2012; Salleh, Wan Sallha & Basnan, 2016), which are, first, Firm size (TA) proxy by the logarithm of total assets. Second, Profitability (ROA) calculated by EBIT/total assets. Third, Leverage (LOA) measured by total debt/total assets and Dividend Yield (Divyld), calculated by Total dividend yield. Based on the above measurement variables, the equation of this study is as follows:

$$EV_i = DVS_i + Divyld_i + TA_i + ROA_i + LOA_i + \varepsilon \quad (2)$$

$$EV_i = DVS_i + Big4_i + Big4{*}DVS_i + Divyld_i + TA_i + ROA_i + LOA_i + \varepsilon \quad (3)$$

Equation 2 measures hypothesis 1 and equation 3 measures hypothesis 2.

EMPIRICAL RESULTS

Table 1 provides summary statistics for all international diversified firms that listed in Amman Stock Exchange in 2016. This summary illustrates the breakdown of financial industries and non-financial industries characteristics. As expected, the table shows that the mean of excess value in financial industries exceed the non-financial industries. This shows that capital market in financial industries of diversified firms in Amman Stock Exchange exceeds the capital market in non-financial markets of a diversified firm. The mean of audit quality, international diversification, firm size and leverage in financial industries is also more than non-financial industries. In terms of profit, however, Table 1 shows that non-financial industries outperform financial industries on yearly dividend payment and return on assets.

Next, this study proceeds with correlation analysis and regression analysis. Based on the correlation analysis, the four measures of variables namely DVS, ROA, LOA and Divlyd are highly correlated and significant at the one percent level, implying that our measures are consistent and suitable for examining the hypotheses in a multivariate framework. Table 2 represents the results of regression analysis for international diversification, audit quality and firm value of Jordanian Public Listed firms that listing in Amman Stock Exchange. The results are classified by two, Part A financial industry and Part B non-financial industry. Based on Part A-Model 1, the direct effects between international diversification and firm value are negatively significant at 5% level with the coefficient value of -0.310. The same result shows in Part B-Model 1 with the coefficient value of -0.156. Thus, H_1 is accepted. The results are similar those of Yusoff et al., 2016; Sahaym & Nam, 2013; and Lee et al., 2012; which conduct a study in emerging market economy and conclude that agency cost may matter for diversification discount.

Table 1
SUMMARY STATISTICS OF ALL INTERNATIONAL DIVERSIFIED FIRM THAT LISTED IN AMMAN STOCK EXCHANGE IN 2016

Variables	Financial industry	Non-financial industry
Excess Value (EV)	1.310	0.253
International Diversification (DVS)	0.852	0.790
Big 4	0.767	0.588
Dividend yield (Divyld)	2.827	3.062
Firm size (TA)	5.726	5.178
ROA	0.013	0.041
LOA	0.695	0.416

Table 2
INTERNATIONAL DIVERSIFICATION, AUDIT QUALITY AND FIRM VALUE OF NON-FINANCIAL INDUSTRY DIVERSIFIED FIRMS

	Part A Non-Financial Industry			Part B Financial Industry		
Variables	**Model 1**	**Model 2**	**Model 3**	**Model 1**	**Model 2**	**Model 3**
Constant	1.463*	1.473*	1.557*	0.703*	0.645*	0.651*
DVS	-0.310**	-0.313**	-0.433**	-0.156**	-0.138**	-0.11
TA	-0.189*	-0.191**	-0.190**	-0.119*	-0.100*	-0.106*
ROA	0.378	0.394	0.398	-1.824*	-2.034*	-1.990*
LOA	0.316***	0.315	0.324***	0.347*	0.335*	0.335*
Divyld	-0.043**	-0.043*	-0.044***		0.01	0.01
Big4		0.004	-0.18		-0.084***	0.001
Big4*DVS			0.232			0.094
R^2	0.8103	0.8103	0.8378	0.5791	0.6339	0.6409
Ad R^2	0.724	0.6965	0.7116	0.4914	0.5383	0.5267
No of obv.	17	17	17	30	30	30
F statistics	0.0011	0.0037	0.0057	0.0005	0.0004	0.0008

To answer the second question of this study, further analysis has been done by analysing the moderating role of audit quality on the relationship of international diversification and firm value. The results are shown in model 2 and 3. Model 2 shows that audit quality significantly influences the firm value of the financial diversified firm in Jordan Public Listed Firms and insignificantly influence non-financial diversified firm. Even though the moderating effects of audit quality on the relationship of international diversification and firm value for both non-financial diversified firms are insignificant and hypothesis 2 is rejected but the coefficient value is positive at 0.232 and 0.094 respectively. Thus, the results are open for further discussion.

CONCLUSION

Our study addresses the phenomenon of a recent study in the international diversification efforts engaged by Jordanian Public Listed Firms. Our study is mainly motivated by the lack of attention given to one of the MENA countries despite the steady growth of diversification taken by firms from these countries. This paper, by all means, lays the foundations for any further research in this topic on MENA countries with more focus on audit characteristic dimensions. This paper extends the existing studies on diversification and firm value nexus. We adopted the model developed by Berger and Ofek (1995) & Fauver et al. (2004) with slight modifications in measures and definitions. Our results bring implications about certain conceptualized frameworks that show the differences between international diversification in advanced countries and emerging countries within the context of this research area. In addition, our study also controls for the audit quality as a proxy for agency problems in Jordan’s public listed diversified firm by extending it further to include the audit firm size. Another contributing aspect of our study is that we compare financial and non-financial industries in the same study. However, all our findings need to be validated by further research on other MENA countries in order to verify some facts about certain common characteristics embedded in the emerging markets as compared to advanced markets.

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