DOES FEMALE DIRECTOR MODERATES THE RELATIONSHIP BETWEEN CEO OVERCONFIDENCE AND FINANCING-MIX DECISION?

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ABSTRACT

Effective internal governance is always associated with reducing the agency problem arise between CEOs and shareholders of the firms. Thus, board of directors become an effective mechanism of internal governance as they are key persons for monitoring the CEOs behaviour. However, recent studies revealed that female directors improve the board monitoring function, resulting to effective corporate strategic decision-making as well as increase the firms' performance. Thus, this study intends to examine the moderating effects of female directors on the relationship between CEO overconfidence and Sharia-compliance (SC) industrial firm's financing-mix decision. A 2-step system-GMM panel regression model is applied on annual data of 67 firms during the period of 2009-2017. The empirical results reveal that female directors significantly play a moderating role between CEO overconfidence and financing-mix decision. Specifically, female directors influence the financing decision related to usage of long-term debt compared with short-term debt.

Keywords: Corporate Governance, Female Director, Financing-Mix Decision, CEO Overconfidence, Sharia-Compliant Firm.

INTRODUCTION

Extensive research has shown that corporate governance plays an important role in firms' strategic decisions. The previous studies suggest that board of directors (BOD) are the mechanism for internal corporate governance for the purpose of monitoring function, protect shareholders' interest (Shahid & Abbas, 2019) and making the firm's strategic decision as well as firm's financial policy (Heng, Azrbaijani, & San, 2012), resulting to better firms' performance (Gurusamy, 2017), and increase investor confidence level on firm's investment decisions (Shahid & Abbas, 2019). However, in a recent year, there has been growing concern on the female participation in corporate boards and become significant issues faced by modern corporations (Rao & Tilt, 2016). This is a reflection of global awareness on gender

equality in corporation and has caused the enactment of certain policy to promote gender equality (Martínez & Rambaud, 2019). The same thing also occurs in Malaysia whereby the latest enactment of Malaysia Code of Corporate Governance 2017 (MCCG, 2017) required the board to disclose gender diversity in firm's annual report and mandatory are given to the large firms to have minimum 30 percent of female directors.

Parallel to globally enforcement, there is growing research on female participation in the boardroom. The previous studies argued female directors are different from male directors. Female directors bring the heterogeneity in term of difference value and perspective in the boardroom (Alves, Couto, & Francisco, 2015; and Bear, Rahman, & Post, 2010); stimulate more participative communication among board member (Bear et al., 2010) resulting to effective decision-making (Terjesen, Couto, & Francisco, 2016; and Bear et al., 2010) and board meeting (Adams & Ferreira, 2009); allocate more time in the monitoring roles by attending frequent board meetings (Adams & Ferreira, 2009); more likely to take their roles of boards (Virtanen, 2012); risk-averse (Huang & Kisgen, 2013); create greater board independence (Alves et al., 2015; Terjesen et al., 2016; and Adams & Ferreira, 2009), less aggressive in investment policy; and better acquisition decisions (Chen, Leung, Song, & Goergen, 2019). On that note, it is plausible that female directors can mitigate the agency problems arise between CEO overconfidence and shareholders relating to corporate strategic financing-decisions. However, in the best of our knowledge, no prior study has investigated the role of female directors on the relationship between CEO overconfidence and financing-mix decision. Besides that, since industrial sector is a backbone to the Malaysia economy and crucial in Malaysia Vision 2020, thus, study on female directors in the industrial sector will be a valuable contribution. On top of that, we find that industrial firms listed in Bursa Malaysia are dominated by SC firms where 85 percent of them are SC firms during the period of 2009 to 2017. Since SC firms need to comply with Islamic principles and imposed certain restrictions on acquiring debt financing, thus, their financing behaviour might differ with non-Sharia compliance firms. Given that note, it is important to understand the moderating effects of female directors on the relationship between CEO overconfidence and financing-mix decision particularly on SC industrial firms.

LITERATURE REVIEW

A conflict between managers and shareholders is suggested to be mitigated through the effective internal corporate governance with the presence BOD. The literatures suggest that BOD is a body to monitor, discipline and advice the top management (Chow, Muhammad, Bany-Ariffin, & Cheng, 2018; Nuhu & Ahmad, 2017; Sheikh & Wang, 2012; and Hoskisson, Hitt, Johnson, & Grossman, 2002); participate in strategic decision process (Kamardin & Haron, 2011); became resource dependence roles (Ntim, 2015); have the authority to appoint, dismiss, evaluate and compensate the management team including CEOs (Baysinger & Butler, 1985); and monitor the firm's performance (Kamardin & Haron, 2011). These duties are closely related to the fundamental roles of BOD in mitigating the agency cost arise between managers and shareholders; and therefore, would increase the firm's performance and protect the shareholders' wealth. For that reason, most of the past evidences show that BOD have significant influence on strategic decision-making (Heng et al., 2012; Tarus & Ayabei, 2016; and Hasan & Butt, 2009) and positively related to firm's performance (Gurusamy, 2017; and Erhardt, Werbel, & Shrader, 2003). On the other hand, many studies discovered that debt was an instrument used by the BOD to control the CEO behaviour (Tarus & Ayabei, 2016; and La Rocca, 2007) and conclude that BOD is a significant body in firm's financial policy (Heng, Azrbaijani, & San, 2012).

In the corporate strategic decision-making process, top management is required to present all the decisions in the boardroom for approval (Tarus & Ayabei, 2016; and Nadler, 2004). Given that note, it shows that BOD is actively involved and have an authority in the firm's strategic policies proposed by CEO. Therefore, the existence of BOD might influence the CEO behaviour relating to financing decisions. Referring to the role of BOD, board composition has been recognized as crucial function of monitoring managers (Nuhu &Ahmad, 2017; and Bear et al., 2010) and firm's financing-decision (Badru, Ahmad-Zaluki, & Wan-Hussin, 2017). Board independence (Chow et al., 2018; Boateng, Cai, Borgia, Gang Bi, & Ngwu, 2017; Bhatt, 2016; Tarus & Ayabei, 2016; Terjesen et al., 2016; and Şahin, Artan, & Tuysuz, 2015), board size (Chow et al., 2018; Bhatt, 2016; Tarus & Ayabei, 2016; Şahin et al., 2015; and Sheikh & Wang, 2012), CEO duality board (Chow et al., 2018; and Bhatt, 2016) and gender diversified board (Sundarasen, Je-Yen, & Rajangam, 2016; Terjesen et al., 2016; Alves et al., 2015; Ntim, 2015; and Bear et al., 2010) are the common proxies used in the previous studies. Starting MCCG (2012), CEO duality was not allowed in Malaysia as it would create bias in the boardroom and previous studies find that board size is less effective for internal control as the requirement to have large or small board size depend on the complexity of the firms. While, evidences show that independent director and female director are found to be an effective mechanism for monitoring. However, in recent years, there is a growing interest on female directors in the monitoring role function. Several studies report that female directors leading to be greater board independence and might substitute the independent directors (Terjesen et al., 2016; and Adams & Ferreira, 2009); increase the effectiveness of monitoring role function (Chen, Leung, & Evans, 2018; and Adams & Ferreira, 2009); greater innovation (Chen et al., 2018); and resulting to higher firm's financial performance (Martínez & Cruz Rambaud, 2019; and Chen et al., 2018). Based on the above arguments, it is plausible that female directors can reduce the agency problem arise between CEO overconfidence and shareholders by providing an effective monitoring on CEO overconfidence behaviour in deciding the firm's financing choice.

Recent study finds that female directors moderate the actions of CEO overconfidence as they hold fewer deep-in-the money options (Chen et al., 2019). Furthermore, they also revealed that female directors are less aggressive in investment policies, better acquisitions and increase firm's performance. In term of financing-mix decision, previous study finds that female directors tend to use more long-term debt than short-term debt (Alves et al., 2015). Thus, it shows that female directors are risk averse and less aggressive in investment policies. Conversely, CEO overconfidence are associate with more aggressive (Adam et al., 2015); risk-taker (Hirshleifer, Low, & Teoh, 2012); overestimate return (Lin, Hu, & Chen, 2005; Malmendier & Malmendier, 2005; and Nofsinger, 2003); and underestimate the risk of decision outcome (Ben & Ben, 2016; Hackbarth, 2008; and Nofsinger, 2003). These behaviour (overconfidence) is due to the cognitive bias (Hilary & Hsu, 2011) which explained in the upper echelon theory. This theory further explains that managerial characteristics such as age, experience, gender, and education are the efficient proxies for psychological constructs (Carpenter, Geletkancz, & Sanders, 2004) and proxies for underlying cognitive capacities (Aharoni, Tihanyi, & Connelly, 2011). Besides that, Schrand and Zechman (2012) mentioned that executive's characteristics have been associated with overconfidence in the psychology literature and used in more recent studies of the association between overconfidence and corporate financial decisions.

Upper echelon theory explains that manager's education level influences the firm's strategic decision whereby highly educated manager are expected to consider the riskier strategic choice and thus to be more overconfident (Lee & Moon, 2016; and Hambrick & Mason, 1984). This notion is proved by the previous studies Su, Lin, Chen and Lowe (2019) and Rakhmayil and Yuce (2005). However, Wei, Min and Jiaxing (2011) find CEO with

higher education level tend to less overconfident in making decisions. In term of gender difference, most of the literature on psychology, ethics, and business supports the notion that female is more conservative, less confident and more risk-averse than male Skała and Weill (2018), Barno (2017), Albaity and Rahman (2012) and Graham, Harvey & Puri (2013). On that note, this study also expect male CEO is more overconfident than female counterpart. Next, CEO also use their schemata (past experience) as a reference to process the information (which called as heuristic) and conclude the strategic decisions, however, bias might occur during the process. Previous studies such as Lee and Moon (2016) and Rakhmayil and Yuce (2005) find longer tenure CEOs which mean there are stay longer tenure in his position in a firm are more likely to take less strategic risk, meaning that they are less overconfident. Lastly, previous studies of Hambrick and Mason (1984) and Abatecola and Cristofaro (2018) argued that young manager is more likely to work towards risky strategies compared with older manager and this notion is supported by the previous evidence such as Sproten, Diener, Fiebach, & Schwieren (2018) and Wei et al. (2011). Based on the above discussion, this study expects high CEO education level, male CEO, shorter-tenure of CEO and younger CEO are overconfident making the firm's strategic financial decision.

For that reasons, when it comes to the external financing choice, most of the past scholars find that CEO overconfidence tend to use higher debt-level (Seo, Kim, & Sharma, 2017; Huang, Tan, & Faff, 2016; Ben & Ben, 2016; Graham et al, 2013; Marciukaityte & Szewczyk, 2011; Ishikawa & Takahashi, 2010; Dashtbayaz & Mohammadi, 2009; and Barros & da Silveira, 2007; and particularly use more on short-term debt to finance the investment (Zhang & Yang, 2018; Huang et al., 2016; Wei et al., 2011; and Landier & Thesmar, 2009). Short-term debt is more preferable due to lower cost of financing (Huang et al., 2016); and overestimate the business return, hence confident to meet short-term obligation (Landier & Thesmar, 2009). Even using of short-term debt will bring cost reduction to the firm, but it would also expose high risk to the firm of not being able to meet the short-term payment requirement due to uncertainty return and resulting to financial distress and bankruptcy. Furthermore, as SCFs, they need avoid in highly uncertainty event as it would cause gharar fahish (major uncertainty) and would jeopardize the shareholders wealth. Therefore, having an effective internal governance which is female directors are expected to moderate the financing-decision of CEO overconfidence and optimize the financing-decision at optimal risk and tax benefit. Table 1 explain the proxies used for dependent variables and independent variables.

Table 1: Proxies and measurement of variables

Proxies	Measurement	Author
Debt	Book value of debt ratio.	Acaravci (2015), Handoo and Sharma (2014) and Rajan and Zingales (1995).
Short-term debt	Book value of short-term debt ratio.	Alves et al. (2015) and Handoo and Sharma (2014).
Long-term debt	Book value of long-term debt ratio.	Alves et al. (2015), Handoo and Sharma (2014) and Chen (2004).
CEO education level	Higher education level is associate with overconfidence and vice versa. CEO possess master's degrees, or Doctor of Philosophy (PhD) were coded as 1 and coded as 0 if CEO possess undergraduate degrees, or below.	Lee and Moon (2016).

CEO male	Male is more overconfident than female CEO. Code as 1 if firm male CEO and 0 if otherwise.	Ting, Lean, Kweh, and Azizan (2016) and Barno (2017).
CEO age	Younger CEO is more overconfident that older CEO. Current CEOs age in year.	Doukas and Mandal (2018) and Lee and Moon (2016).
CEO experience	Shorter tenure CEO position in firm is more overconfident. Number of years that a CEO continuously holds this position in a company.	Abdeldayem and Sedeek (2018), Baatwah, Salleh and Ahmad (2015); and Rakhmayil and Yuce (2005).
Female directors	Ratio between the number of female directors and total number of directors in the boardroom.	Chen et al. (2019), Terjesen et al. (2016), Alves et al. (2015) and Ntim (2015).
Profitability	EBIT divided by total asset.	Nizam, Amirul, Hairul Nizam, Ismail and Sharifah (2017a), Arosa, Richie and Schuhmann (2015), Thabet and Hanefah (2014), and Akinyomi and Olagunju (2013)
Tangibility	Fixed assets over total assets.	Hassan, Shafi and Mohamed (2012), Azhar and Ahmad (2011); and Chen and Chen (2011).
Size	Natural logarithm of total assets as a proxy for size.	Nizam, Amirul, Hairul Nizam, Ismail and Sharifah (2017b), Khan, Shah, Haq and Shah (2014), and Babu and Chalam (2014).
Growth	Change in total sales between two consecutive years divided by previous year total Sales.	Babu and Chalam (2014).
Risk	Yearly change in the firm EBIT.	Haron (2014), and Deesomsak, Paudyal and Pescetto (2009).
Non-debt tax shield	Annual depreciation expenses to total asset.	Haron and Ibrahim (2012), Awan and Amin (2014) and Rocca, Rocca, Gerace and Smark (2009).
Liquidity	Current assets divided by current liabilities.	Chow et al. (2018), Babu and Chalam (2014) and Thabet and Hanefah (2014).

DATA AND MODEL SPECIFICATION

We estimate the Eq. (1) and (2) using the GMM estimator based on the panel of 67 SC industrial firms listed in Bursa Malaysia for the period of 2009 to 2017, making the total number of observations of 536. The selection of firms was primarily dictated by availability and reliability of data over the sample period. The data are collected from two main sources. Financial data were sourced from Thomson Reuters Data Stream and CEO overconfidence data were manually extracted from annual report of the SCFs, retrieved from www.bursamalaysia.com.my. There are five models being estimated. Model 1 is the baseline model where no interaction of the female directors is incorporated. Models 2, 3, 4 and 5 represent the equation that incorporate female directors' interaction with CEO education, CEO, male, CEO age and CEO experience respectively.

$$Leverage_{i,t} = \alpha Leverage_{i,t-1} + \beta_1 Cedu_{i,t} + \beta_2 Cmale_{i,t} + \beta_3 Cage_{i,t} + \beta_4 Cexp_{i,t} + \beta' X_{i,t} + \eta_i + \varepsilon_{i,t} \quad \text{Eq. (1)}$$

$$Leverage_{i,t} = \alpha Leverage_{i,t-1} + (\beta_1 Female\ director_{i,t}\ x\ Cedu_{i,t}) + \beta_1 Cedu_{i,t} + \beta_2 Cmale_{i,t} + \beta_3 Cage_{i,t} + \beta_4 Cexp_{i,t} + \beta' X_{i,t} + \eta_i + \varepsilon_{i,t} \quad \text{Eq. (2)}$$

$$Leverage_{i,t} = \alpha Leverage_{i,t-1} + (\beta_1 Female\ director_{i,t}\ x\ Cmale_{i,t}) + \beta_1 Cedu_{i,t} + \beta_2 Cmale_{i,t} + \beta_3 Cage_{i,t} + \beta_4 Cexp_{i,t} + \beta' X_{i,t} + \eta_i + \varepsilon_{i,t} \quad \text{Eq. (3)}$$

$$Leverage_{i,t} = \alpha Leverage_{i,t-1} + (\beta_1 Female\ director_{i,t}\ x\ Cage_{i,t}) + \beta_1 Cedu_{i,t} + \beta_2 Cmale_{i,t} + \beta_3 Cage_{i,t} + \beta_4 Cexp_{i,t} + \beta' X_{i,t} + \eta_i + \varepsilon_{i,t} \quad \text{Eq. (4)}$$

$$Leverage_{i,t} = \alpha Leverage_{i,t-1} + (\beta_1 Female\ director_{i,t}\ x\ Cexp_{i,t}) + \beta_1 Cedu_{i,t} + \beta_2 Cmale_{i,t} + \beta_3 Cage_{i,t} + \beta_4 Cexp_{i,t} + \beta' X_{i,t} + \eta_i + \varepsilon_{i,t} \quad \text{Eq. (5)}$$

Where subscripts *i* and *t* denote firm and year, respectively, leverage is financing decision of the firm measure by three different proxies, namely debt ratio (DR), long-term debt ratio (LTDR) and short-term debt ratio (STDR). CEO overconfidence is measure by four proxies. Cedu is CEO education level code as 1 if CEOs possessing master's degrees, a Master of Business Administration (MBA), Doctor of Philosophy (PhD) and 0 if CEOs holding bachelor's degrees or other higher education; Cmale is CEO male code as 1 if male CEOs and 0 if otherwise; Cage is current CEOs age in year; and *X* are control variables that influence the financing decisions. The control variables are profitability, tangibility size, growth, risk, NDTS and liquidity. The firm-specific effect is represented by η and β_1 β_2 β_3 and β_4 will be estimated by the GMM estimator and ε is the error term. The impacts of β_1 and β_2 are expected to be a positive sign, while β_3 and β_4 are expected to be negative sign on financing decision in the baseline model. While, female directors are expected to moderate the relationship between CEO overconfidence and financing decision.

Model Specification

This study estimates the Eq. (1), (2), (3), (4) and (5) using GMM proposed by Arellano and Bond (1991) is due to the potential endogeneity of independent variables, inclusion of the lagged dependent variable and the presence of the firm-specific effects. Blundell and Bond (1998) proved that a system GMM estimator perform much better especially when the series are persistent. We adopt the two-step system GMM in this study because the two-step GMM is more efficient than the one-step GMM in estimating the coefficient with lower bias and standard errors (Windmeijer, 2005). Sargan or Hansen test is applied for the purpose of the consistency of the GMM estimator.

RESULTS

This section presents the empirical findings using two-step system GMM. Diagnostic tests; Sargan or Hansen test, Arellano-Bond (AR (2)) test, difference in Hansen test, and serial correlation test (AR (2)) indicate that GMM estimators are unbiased, consistent and efficient. Moreover, the lagged dependent variable for DR, LTDR and STDR are statistically significant, indicating that the dynamic GMM is the best estimator and the number of instruments is also show less than the number of firms for DR, LTDR and STDR. These revealed that the empirical results are reliable and hence the statistical inference related to the hypothesis of interest can be performed.

Model 1 represents the baseline model that exclude the moderating effect of female directors. Using debt ratio as the dependent variable, in Model 1 with exception to CEO Male, CEO's education, age, and experience are significant factors affecting the financing-mix decision. CEO age has positive relationship with financing decision while CEO education and experience are negatively linked. In term of LTDR, younger CEO prefers to use long-term debt as the relationship appears to be statistically significant at 1% level. However older and short- tenure CEOs tend to employ short-term debt. In overall, results on CEO experience aligned with the previous studies Lee and Moon (2016) and Rakhmayil and Yuce (2005). While, results on CEO age only supported by the previous studies of Sproten et al., (2018) and Wei et al. (2011) when dependent variable is LTDR.

Models 2, 3, 4 and 5 are the estimated GMM regressions with moderating variable (female directors) on CEO education level, CEO male, CEO age and CEO experience respectively. As seen in Table 2, the coefficients of the moderating variable in all models seems to be larger than those in model 1 for all the three dependent variables.

Results in Model 2 demonstrate that the coefficient for the interaction of female directors with CEO education on DR is statistically significantly negative. This implies that, ceteris paribus, a highly educated CEO decision to employ higher leverage could be adversely influence by the female directors' involvement. This concurs with study of Albaity and Rahman (2012) that stated due to risk averse nature of women, they tend to prefer lower debt levels to avoid company being in financial distress. However female directors do not play significant role when it is interacted with CEO male (model 3), CEO age (model 4) and CEO experience (model 5).

When female directors are being put as moderating effect on CEOs male with regards to LTDR (as DV) the results reveal significant positive relationship on LTDR. This shows that the presence of female directors seems to dominate the male CEO's financing decision when making long-term financing decision. Similar results are found to be statistically significant and positive when CEO age and CEO experience are interacted with female directors respectively. Hence, the presence of female directors does influence financing decision of older and long-tenure CEO. These results indicate that female directors moderate the CEOs overconfidence behavior relating financing-mix decision, particularly on long-term debt. These results parallel with the finding of Alves et al., (2015) which revealed that female directors are risk averse and more likely to use long-term debt.

In contrast a negative and statistically significant relationship is found between CEO male, CEO age, CEO experience and STDR when female directors are moderated with the three variables. This implies that female directors do affect the financing decision of older, long-tenure male CEOs when it involves short-term debt. Nevertheless, the interaction between CEO education and female directors has not significant effect on STDR decision. The results are in support of Alves et al. (2015) which find female directors tend to use long-term debt rather than short-term debt financing. In essence, the empirical findings of this study pinpoint that female directors do moderate the CEOs overconfidence behavior when it comes to financing-mix decision, particularly for long-term debt.

As for the control variables (with exception to NDTS), profitability, tangibility, size, growth rate, risk and liquidity are significantly related to STDR. Profitability, risk and liquidity are the only control variables that have no relationship with LTDR while only tangibility has no influence on DR.

CONCLUSION

This study attempts to study the moderating effects of female directors on the relationship between CEO overconfidence and financing-mix decision of SC industrial sector listed in

Bursa Malaysia. Using the 2-step system GMM estimation, the study confirms that overconfident CEOs with the presence of female directors are less likely to finance the investment using high risk of debt instruments namely short-term debt. This signifies the role of female directors in moderating financing decision of the overconfident CEOs. We find that female directors matter in SC industrial firm and specifically for all proxies of CEO overconfidence. Besides that, the evidences reveal that female director is an effective mechanism to monitor the CEO behaviour particularly on overconfident CEO that could make financing decision that is detrimental to the company. The high percentage of female directors could act as internal corporate governance mechanism since they are found to be less aggressive in investment (Chen, et al., 2019) and is highly risk-averse (Huang & Kisgen, 2013) in SC industrial firms.

Empirical findings of this study provide critical insight of gender difference in the boardroom, especially in relation to monitoring effectiveness of CEO overconfidence on financing-mix decision. Additionally, findings of this study contribute to the current body of knowledge on financing decision made by CEO overconfidence and corporate governance literature by providing further evidence on female directors' monitoring function. These findings may be useful to the policy maker to strengthen the corporate governance policies in promoting female participation in boardroom. Although this study demonstrates the significant impact of female directors in the boardroom, it has certain limitations in terms of to find the optimal structure of gender difference in the boardroom. Therefore, future research can further examine using marginal effect method to gather the result on the optimal structure of gender difference in the boardroom of SC industrial firms.

Table 2: Moderating effect female directors on the relationship between CEO overconfidence and financing-mix decision

DV = Debt ratio (DR)				DV: Long -term debt ratio (LTDR)					DV: Short-term deb		
Model 2	Model 3	Model 4	Model 5	Model 1	Model 2	Model 3	Model 4	Model 5	Model 1	Model 2	Model
0.0229	-0.0405***	-0.0381***	-0.0512***	-0.0135	-0.0086	-0.0183	-0.0138	-0.0112	-0.0038	-0.1282	-0.007
-0.033	0.0122	0.0129	0.0088	0.0527*	0.0332	0.0147	0.0431	0.0411	-0.1282	-0.102	-0.101
0.0033***	0.0040***	0.0039***	0.0043***	-0.0006**	-0.0002	-0.0001	-0.0002	-0.0003	0.0021***	0.0021***	0.0019*
-0.0028**	-0.0053***	-0.0052***	-0.0058***	0.0004	0.0002	-0.0006	-0.0004	-0.0007*	-0.0031**	-0.0023*	-0.001
-0.8414* **	-	-	-	-	0.0924	-	-	-	-	-0.0056	-
-	0.0046	-	-	-	-	**0.1015*** **	-	-	-	-	**-0.1056***
-	-	-0.0001	-	-	-	-	**0.0015*** **	-	-	-	-
-	-		0.0011	-	-	-	-	**0.0048*** **	-	-	-
-0.1255***	-0.1270***	-0.1279***	-0.1270***	0.0014	-0.0054	0.0141	0.0149	0.0139	-0.1366***	-0.1383***	-0.1427*
0.0064	-0.0222	-0.0198	-0.0282	0.0581***	0.0537***	0.0675***	0.0646***	0.0619***	-0.0703***	-0.0770***	-0.0744*
0.0376***	0.0307***	0.0307***	0.0323***	0.0074***	0.0060**	0.0106***	0.0089***	0.0096***	0.0262***	0.0255***	0.0207*
-0.0031***	-0.0026***	-0.0025***	-0.0029***	-0.0006	-0.0006	-0.0016***	-0.0016***	-0.0012**	-0.0023***	-0.0021***	-0.0015
-0.0031***	-0.0026***	-0.0025***	-0.0029***	-0.0001	-0.0001	0.0001	0	0	0.0008***	0.0006**	0.0007*
-0.0031***	-0.0026***	-0.0025***	-0.0029***	-0.2318***	-0.2422***	-0.3471***	-0.3610***	-0.3965***	0.424	0.4096	0.439
-0.0078***	-0.0062***	-0.0061***	-0.0071***	0.0002	0.0001	0.0003	0.0002	0.0003	-0.0072***	-0.0079***	-0.0084*
0.880	0.895	0.888	0.946	0.118	0.107	0.092	0.089	0.095	0.739	0.770	0.806
0.445	0.429	0.866	0.557	0.333	0.370	0.307	0.288	0.321	0.583	0.631	0.510
0.360	0.285	0.283	0.344	0.530	0.520	0.272	0.244	0.269	0.231	0.343	0.331
49	49	49	49	49	49	49	49	49	49	49	49
67	67	67	67	67	67	67	67	67	67	67	67

Notes: The estimation of GMM use xtabond2 in STATA 12; ***, ** and * denotes significant level at 1%, 5% and 10%, respectiv

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