Government support and firm financial performance: New evidence from a transitional economy

Nguyen Trong, Co and Vu Van, Huong and Bartolacci, Francesca

Academy of Finance, Hanoi, Vietnam, University of Macerata, Italy

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[a]Co Nguyen Trong, [a]Huong Vu Van[1] and [b]Francesca Bartolacci

[a]Academy of Finance, Hanoi, Vietnam
[c]Macerata university, Italy

Abstract:

Using a panel dataset of five waves of private manufacturing SMEs surveys in the period 2007-15, this paper contributes to literature by considering for the first time the effects of government support on firms' financial performance in Vietnam. Interestingly, contrary to the many findings of previous studies, we find that government assistance affect firms' financial performance after controlling for heterogeneity, unobservable factors and dynamic endogeneity. This finding supports for the viewpoints of institutional theory. Also, the study shows that technical supports from government such as export promotion, human resource training and technology programmes have insignificant linkages with firm financial performance, but financial supports play an important role, suggesting that supporting measures as tax exemptions, soft loans and investment incentives promote financial efficiency and are vital for the development of Vietnamese private SMEs.

Keywords: Government support, innovation, firm financial performance, SMEs, Vietnam
Jel code: C23, C24, G28, H81, L26, M13

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1. Introduction

Small and Medium Enterprises (SMEs hereafter) play an important role in the success of both developing and developed countries, and Vietnam is not an exception. The Vietnamese economy is numerically dominated by SMEs, with 96% of the total number of enterprises contributing nearly 45% of GDP and 31% of total investment in 2006 (Tuan & Thach, 2016). Furthermore, SMEs play an important role in growth and employment generation: as researchers have revealed, 51% of total employment in Vietnam were created by SMEs, which are the main engine for alleviating poverty, especially in rural areas (Kokko and Sjöholm, 2005;Tuan & Thach, 2016)).

However, according to Harvie and Lee (2008), the development of Vietnamese SMEs has been impeded by some major factors. Lack of land as well as uneven access to rented land by SMEs is one of the major obstacles (Tuan & Thach, 2016). The majority of SMEs faces a lack of funding capital (e.g., Cuong, Rand, Silva, Tam, & Tarp, 2008; Rand, 2007). The shortage of skilled labour and the use of obsolete technology are further obstacles to the development for SMEs. The majority of labour force has a low level of training.

Recognizing that SMEs are a critical engine for the growth of Vietnam, the government has set up specific supporting programs and policies for them. For example, a series of policy measures including financial access, human resource development, technical support and trade and export promotion can be mentioned. Although these policies cover all the various deficiencies of SMEs, difficulties in the implementation of these policies still exist because of unclear or not easily comprehensible requirements for them (Le, 2010). In addition, corruption remains widespread (Nguyen & Van Dijk, 2012; Vu, Tran, Nguyen, & Lim, 2016)). In that context, SMEs are likely to pay informal payments for receiving supports from the government. Hence, it is not clear if the benefits of government support outweigh the costs or vice versa in terms of financial performance. The context motivates us to evaluate whether government assistance is beneficial to the financial efficiency of firms or not and if so, how?

Although this research topic is important, fewer empirical evidences on government support in developing countries, especially for transitional nations, possibly because of less

availability of data sets in these countries. Furthermore, this study considers the effects of government support not only on firm financial performance but also on types of government support. More importantanly, in terms of methodology, the majorty of previous studies (e.g., Zhang, Li, Zhou, & Zhou, 2014) often consider the linkage between government support and firm financial performance using Ordinary least squares (OLS) and the fixed effects (FE). However, such approaches can not overcome several empirical challenges arise such as the endogeneity of explanatory variables. Following Wintoki, Linck and Netter (2012), we overcome these problems by using the two-step system dynamic panel GMM models. This study is expected to contribute to the understanding government support's role on the firm performance and provide useful findings for policy makers in designing policies to improve firm performance.

This paper is structured as follows: the next section provides literature review for the research. The data sources and analysis framework are discussed in section 3. Empirical results are presented in section 4. The final section offers a summary and conclusions

2. Literature Review

Entrepreneurship has been largely recognized as a means of economic and employment growth. This has given rise to numerous governmental policies aimed to enhancing entrepreneurship and helping the survival and growth of the companies, specially SMEs. Theoretically, the impact of government support on companies' performance is not been explained by a single theory. On the one hand, the effectiveness of government subsidies as a catalyst for external investments, Takalo and Tanayama (2010) show that firms receiving government support can yield a positive signal with market-based financiers. As a result, they can receive higher external investment than their counterparts without such support. Also, government support can provide additional funding sources to help firms have more resources in the context of limited sources. Therefore, firms with government support will advance R&D input and thus improve their performance and survival (Wu, 2016).

By contrast, rent-seeking viewpoints show that government subsidy cannot necessarily be distributed effectively because the granting of subsidies is not based on a firm's promising prospects or social contributions. As a result, subsidies based on social network or political

connections are not beneficial to company performance. Such biases in government support can increase distortions in the efficient allocation of resources among companies, and hence may result in slow growth of profits or the reduction of return on asset (Zhang, Li, Zhou, & Zhou, 2014).

On the basis of the above theoretical background and arguments, there are a series of empirical works following. However, the evidence is mixed. The effects of those initiatives on the companies' performance were analysed by the literature according to an empirical approach (Collett, Pandit, & Saarikko, 2014; Gilbert, Audretsch, & McDougall, 2004). Their analysis reveals that the role of government initiatives could not impact significantly on SMEs profitability, except for financial support that would produce the main positive effects.

By contrast, Doh and Kim (2014) explore the effects of governmental policies on the innovation of SMEs in the regional strategic industries in South Korea using the technological development assistance funds as a proxy. Results from empirical models indicate that a positive relationship exists between the technological support and innovation performance. The study suggests that the governmental financial aids are important for SME innovations.

The objective of another study is to analyse the impact of public support on Spanish SMEs performance considering technological and economic results. Empirical evidence corroborates a direct and positive impact on technological assets of participants. For the economic performance point of view, indicators are positively influenced by the improvement of technological background (Barajas, Huergo, & Moreno, 2016).

In some cases, researches focused on the impact produced by the government support (Maggioni, Sorrentino, & Williams, 1999; Morris & Stevens, 2010)**,** comparing firms that received funding or other form of assistance, with firms that did not, examine whether there are different impacts on financial performance (profitability, sales variations, productivity, etc.). The results from the empirical researches have been diverse. Morris and Stevens (2010) evaluated the impact of a New Zealand government support program on participating firms using a new firm-level panel dataset for the time period 2000-2006. They found that the program had a significant positive impact on sales, although the effect on value-added and productivity was less conclusive. Maggioni et al. (1999) examined how the most important government program to

encourage entrepreneurship in Italy affects several aspects of the early performance of new firms. Results showed that the public program produced mixed effects: government aid allowed firms to have a higher level of technology, but government funding gave rise to entrepreneurial start-ups, which are not always fully efficient.

Another research has linked financial support measures directly to performance variables, such as sales, profitability and productivity for new firms, and the results have been again mixed. Garcia-Tabuenca and Crespo-Espert (2010) adopted a counterfactual approach to evaluate the effects of support measures on Spanish SMEs performance. Three groups of companies that constitute the casuistry of long-term financial supports to companies (guarantees, guarantees and preferential funding, or just preferential funding), as well as another two control groups are studied. The results suggest that public support for SMEs is relevant at financial and business efficiency levels, mainly in the weakest companies although they do not manage to reduce their costs until they reach relative levels similar to those reached by companies not accessing the guarantee system.

Zindiye, Chiliya, and Masocha (2012) investigated the influence of government and other institutions' support on the performance of SMEs in the manufacturing sector. The results indicated that there is a positive relationship despite the prevailing economic conditions. Based on the results it can be concluded that duty drawback system and skills training are the most important initiatives.

Lerner (2000) studied the impact of public subsidization of small firms by examining the Small Business Innovation Research (SBIR), a program of public subsidy by the United States government. He found good results, even if unevenly, the SBIR awardees enjoyed substantially greater employment and sales growth than the matching firms.

There are few contributions on the impact of government support to the SMEs' performance in developing countries, and these reach different conclusions**.** Fajnzylber and Reyes (2009) consider the role of diverse types of government support on firm performance in Mexico. Research found that the significant within-country differences in firm productivity observed in developing economies are due in part to market and government failures that limit the ability of micro-firms to reach their optimal sizes. Hansen, Rand, and Tarp (2009) analyse whether direct government assistance during start-up and other forms of interaction with the State sector have influenced the long-run performance of manufacturing SMEs in Vietnam.

Results show that government assistance helps firms improve their performance and survival perspectives. In another article, Mingzhi Li, Wei, and Liu (2015) examine the effect of government support in the Chinese context considering a different type of impact: the innovation performance of firms. They divided government support into vertical and horizontal support, and adopted an empirical research approach in this study. In the results, the authors highlighted that vertical support in the form of direct research and development (R&D) subsidies and horizontal support in the form of regional innovation policy have a positive impact on the innovation performance of firms.

In summary, the role of government support in a firm's financial performance seems to be controversial and most investigations have been carried out in developed countries and firms in general instead of SMEs. In addition, there is limited understanding of the effect of types of government support on firms' financial performance. Investigating entire subsidy instead of types of subsidy modes may hinder the real impacts of the government support on firm growth. With regard to methodology, previous studies often use OLS and FE. However, such approaches cannot overcome several empirical challenges arise such as the endogeneity of explanatory variables. Hence, this study would contribute to fill the literature gap by using dynamic GMM approach to consider the role of government support on firms' financial performance in the Vietnamese domestic SME manufacturing context.

3. Data and Econometric Models

3.1 Data

This study utilizes The Small and Medium Enterprise (SME) Survey - Enterprise Development in Vietnam (Copenhagen Centre of Development Research – University of Copenhagen). The surveys are conducted in collaboration between two central Vietnamese partners: the Central Institute for Economic Management (CIEM) and the Institute of Labour Science and Social Affairs (ILSSA).

The surveys focus on manufacturing SMEs in Vietnam and are conducted every two years in years 2005, 2007, 2009, 2011, 2013 and 2015. The surveys cover 10 provinces (Ho Chi Minh City, Ha Noi, Hai Phong, Long An, Ha Tay, Quang Nam, Phu Tho, Nghe An, Khanh Hoa

and Lam Dong) and three regions (South, Central and North). However, this study uses the panel dataset in the period 2007-15 because the information of types of government support is not available in 2005**.**

In order to ensure the analysis of different types of SMEs, the surveys follow a stratified random sampling method according to ownership structures. The surveys provide a wide range of indicators of firm characteristics including ownership, industry, enterprise history, government supports, financial performance and other information. This data set made it possible to analyze the impact of government support on Vietnamese SMEs' financial performance.

A common problem with time variant data is that it is often expressed in current prices. Therefore, our data on current variables are deflated to 1994 prices using the GDP deflators to avoid biases that might arise because of inflation. More specifically statistical description of the main variables in our regression estimations is displayed in Table 1 as below.

Table 2: Summary Statistics for the main variables in the model

Variable	**2007**		**2009**		**2011**		**2013**		**2015**	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
ROA	0.22	1.73	0.266	0.58	0.241	0.65	0.307	1.72	0.35	0.94
Government assistance	0.23	0.42	0.32	0.46	0.143	0.35	0.115	0.31	0.084	0.27
Financial support	0.196	0.39	0.292	0.45	0.101	0.302	0.097	0.29	0.052	0.22
Technical support	0.04	0.198	0.027	0.164	0.028	0.167	0.022	0.14	0.006	0.08
Innovation	0.48	0.49	0.45	0.49	0.44	0.49	0.197	0.39	0.33	0.47
Bribe	0.267	0.44	0.342	0.47	0.38	0.486	0.445	0.49	0.42	0.495
Party member	0.069	0.25	0.071	0.25	0.094	0.29	0.094	0.29	0.073	0.26
Export	0.058	0.23	0.057	0.23	0.06	0.23	0.062	0.24	0.07	0.255
Firm size in log	2.08	1.17	2.06	1.16	1.81	1.15	1.73	1.15	1.78	1.15

Firm age in log	2.35	0.71	2.42	0.73	2.38	0.67	2.55	0.63	2.62	0.63
Leverage	0.11	0.273	0.10	0.23	0.079	0.19	0.07	0.24	0.087	0.235
Observations	2518		2527		2417		2424		2486	

3.2. Methodology

To quantify the role of government support in firm financial performance, we apply a dynamic model approach. Such dynamic model approaches are becoming increasingly important in recent years to solve with the dynamic nature of economic processes (Flannery & Hankins, 2013). This dynamic nature which makes traditional estimation techniques including the Ordinary least squares (OLS) and the fixed-effects (FE) problematic (Flannery & Hankins, 2013; Wintoki, Linck, & Netter, 2012). As shown by many previous studies (e.g., Wintoki et al., (2012), empirical models using firm financial performance as a dependent variable must be examined in a dynamic framework in which lagged dependent variable(s) are considered as explanatory variable(s) (Wintoki et al., 2012).

Technically, the inclusion lagged dependent variable(s) as independent variables of the empirical models allows researchers to control for unobserved historical factors which have potential influences on current firm performance, hence reducing omitted variable bias (Wooldridge, 2009). In addition, when empiricists control for lagged dependent variable(s) allowing for dynamics in the underlying process may be crucial for recovering consistent estimates of other. Hence, as guided by previous studies (e.g., Wintoki, Linck and Netter (2012)), the empirical approach of this study is specified as below:

$$Y_{it} = \alpha_0 + \sum_{s=1}^{k} a_s Y_{it-s} + \delta_m Goverment\ support_{,it} + \beta_k Z_{k,it} + year\ dummies + industry\ dummies + \mu_i + \vartheta_{it} \quad (1)$$

Where: Y_{it} is the financial performance (as measured by ROA) of firm i in year t ; α_1 is the estimated coefficient on one-year lagged dependent variable; Government support is widely defined as a dummy variable to reduce the measurement errors. This is the main interest variable in the model. In this study, we measure government support as a set of variables. First, it is measured as a dummy based on the question if firms have received the assistance. In addition,

the types of government support are measured on the basis of question which assistance firms have received.

Z is a vector of firm-level explanatory variables used in the model as guided by previous studies (e.g., firm size, firm age, innovation and leverage). We also control for potential influences arising from differences across industries through the use of dummy variables for industry classification. .μ_i represents time-invariant unobserved firm characteristics; ω_t denotes time-specific effects which are time-variant and common to all firms. These time-specific effects are captured by year dummy variables; ε_{it} is the classical error term.

The information from the past can be captured sufficiently by two lags of the dependent variable (e.g., Adams & Ferreira, 2009; Dezsö & Ross, 2012; Nguyen, Locke, & Reddy, 2014). However, when we ran a specification in which the current financial performance is a dependent variable regressed on two lags of past performance, and other covariates as in the model (1), an insignificant effect of Y_{it-2} on current firm financial performance was found. This result implies that one-year lagged dependent variable as an explanatory variable in a first-order autoregressive [AR(1)] structure is enough to control for the potential dynamic endogeneity. The specification with AR(1) structure is consistent with the arguments of previous studies (Zhou, Faff, & Alpert, 2014) who show that an AR(1) structure appears to be unavoidable when almost all panel datasets used in corporate finance research are short. Hence, the panel specification model (1) with AR(1) structure can be written as below.

$$Y_{it} = \alpha_0 + \alpha_1 Y_{i,t-1} + \delta_m Goverment\ support_{,it} + \beta_k Z_{k,it} + year\ dummies + industry\ dummies + \mu_i + \vartheta_{it} \quad (2)$$

In terms of estimation approach, the pooled OLS (OLS) and the OLS with fixed-effects (FE) methods will provide inconsistent estimations in the presence of the AR(1) structure and endogenous explanatory variables (Flannery & Hankins, 2013; Nickell, 1981; Wintoki et al., 2012). Some studies use traditional IV approach. However, findings of a set of external instrumental variables seem infeasible when almost all independent variables are considered to be not exogenous. As a consequence, we use the system generalised method of moments estimator (System GMM) proposed by (Blundell & Bond, 1998) to correct for this inconsistency and these challenges,. This estimator is superior to OLS or fixed effects in controlling for time-invariant unobserved heterogeneity across firms, simultaneity, and dynamic endogeneity (Blundell & Bond, 1998; Wintoki et al., 2012).

4. Empirical results and discussions

This section provides the results of the empirical analyses. Column 1 of Table 3 shows that government support on firm financial performance when using the OLS approach for pooled data, while column 2 of Table 3 shows estimated results after controlling for unobservable time-invariant factors. Columns from 3 to 5 of Table 3 provide static and dynamic two-step GMM regressions with basic and extended specifications.

Table 3: The impact of government support on firm financial performance

VARIABLES	Pooled	FE	Dynamic GMM	Static GMM	Dynamic GMM
	(1)	(2)	(3)	(4)	(5)
lagROA			0.1541**		0.1477**
			(0.019)		(0.015)
Government	-0.0069	0.0071	0.0393*	0.0274*	0.0390**
support	(0.020)	(0.030)	(0.015)	(0.011)	(0.014)
Firm size in log	-0.0386**	-0.0356	0.0093	-0.0239*	0.0078
	(0.014)	(0.025)	(0.017)	(0.011)	(0.014)
Firm age in log	-0.0575**	-0.0094	-0.0260	-0.0283	-0.0262
	(0.019)	(0.032)	(0.023)	(0.028)	(0.019)
Innovation				-0.0034	-0.0066
				(0.010)	(0.012)
Bribe				-0.0136+	-0.0224*
				(0.008)	(0.010)
Party member				-0.0389	-0.0143
				(0.026)	(0.035)
Export				0.1042**	0.0668**
				(0.031)	(0.024)
Leverage				0.0950**	0.0635*
				(0.030)	(0.026)
Constant	0.5723**	1.7284**	0.0000	0.5730**	0.6157**
	(0.101)	(0.152)	(0.000)	(0.083)	(0.092)
Observations	12,331	12,331	7,783	12,322	7,775
R-squared	0.010	0.023			
Durbin-Wu-Hausman test for endogeneity of covariates (*P* value)			0.000	0.000	0.000
Hansen-J test of over-identification (*P*-value)			0.993	0.095	0.993
Number of panels		4,418	3,120	4,417	3,120

Notes: Robust standard errors in parentheses, the model also control for time dummies, ownership and sector dummies. ** p<0.01, * p<0.05, + p<0.1. Following Schultz, Tan and Walsh (2010) and Wintoki et.al (2012), firm age and year dummies are considered to be exogenous

The above Table 3 presents the results of the impact of government support on firms' financial performance. Regarding the role of government support covariate in determining firms'

financial performance, pooled data estimations reveal that the government assistance have a statistically insignificant influence on ROA. However, the results can be biased because of without controlling for unobservable characteristics in the model. With attempts to control for time-invariant unobserved features and overcome the above challenges, we conduct two-step dynamic GMM systems as guided by Wintoki et.al (2012). It is noted that OLS and fixed effects methods may gain more efficient estimations than the GMM system if explainatory variables are not endogenous. Hence, a Durbin-Wu-Hausman test is implemented for all independent variables as a group if they are actually endogenous. According to Schultz et.al (2010), the test is conducted on the levels equation of firm performance and corruption. One-year lagged differences of explained covariates such as ΔlnY_{it-1}, $\Delta lnsize_{it-1}$, $\Delta govermentsupport_{it-1}$, and $\Delta leverage_{it-1}$, are considered as instrumental variables with year dummies and lnage considered as exogenous variables. The results of test show that the null hypothesis is rejected at traditional level of significance (1%). The endogeneity of regressors is of concern, and hence it is necessary to apply GMM system in this study. We also carry out the validity of the system GMM estimation by a test of Hansen-J test for over identification. The result is displayed in the last row of Table 3. The P-values of Hansen-J test are 0.993, 0.095 and 0.993 respectively, suggesting that instrumental variables in GMM system of this study is valid.

Interestingly, a totally different picture emerges when using two-step GMM regression. As reported in column 3 of Table 3, the impact of government support on firms' financial performance becomes significant after controlling for unobservable characteristics and dynamic endogeneity. This finding reflects the fact that the results from OLS regression are biased. Specifically, the estimated coefficient of government support show that firms with government support gain a nearly 0.04 percentage higher financial efficiency than firms without such supports from the government. The positive and significant impacts of government support on firm financial performance are confirmed further in extended specifications and the results are displayed in column 4 and 5 of Table 3.

Among other firm-level variables, whereas exporters tend to gain higher financial efficiency than non-exporters, in all estimations firm size, innovation does not affect firms' financial performance in the research period. However, the corruption variable has a negative

impact on firms' financial performance and this implies that firms have to pay informal payments in business have a lower efficiency in terms of financial performance compared to firms without such activities throughout this research period. This finding is consistent with Vu et. al (2016) who also shows that corruption have negative impacts on firms' financial performance.

Furthermore, the results of column 4 and 5 of Table 3 also show the positive relationship between financial leverage and financial performance covered by the static and dynamic two-step GMM model when the potential sources of endogeneity and unobservable factors are taken into con-sideration (column 5, 6 of Table 3).This finding is consistent with previous studies (e.g., Vu et.al (2017) and Tuan et. al (2015). This finding also supports the argument of González (2013) who suggests that a firm with higher financial debt may force directors into value-maximising decisions to face higher pressure from debt. Consequently, such actions improve firms'productivity and financial performance.

With regard to the impact of the past firm financial performance, the estimated results in Table 3 shows show a significant and positive impact on current performance when unobservable factors are controlled for by using dynamic two-step general system. This finding agrees with the empirical results of recent studies (e.g., Wintoki et.al (2012). These results show the importance of controlling for unobservable characteristics and also imply that past firm financial performance is a vital variable in considering the dynamic nature of the factors affecting firm financial performance; ignoring this variable in the model can result in researchers fail to capture the real impacts of government supports on firms' financial performance.

Looking more closely, this study explores further the role of types of government support on firms' financial performance. As can be seen from Table 3, different types of government support have various impacts on firm financial performance. Specifically, technical support of government for trade activities, for human training and for technology support has no influence statistically significant on firms' financial performance. However, financial support of government impacts positively on financial performance of SMEs. Obviously, these activities

such as tax exemptions or reductions or/ and loans from Vietnam Development Bank (VDB) or Vietnam Bank for Social Policy with preferential interest rate support for financial efficiency of firms. These results also suggest that the role of government support on firms' financial performance come mainly from supporting activities of finance for firms.

Table 4: The impact of types of government support on firm financial performance

VARIABLES	Pooled	FE	Static GMM	Dynamic GMM
	(1)	(2)	(3)	(4)
lagROA				0.1506**
				(0.015)
Financial support	-0.0042	0.0070	0.0306**	0.0436**
	(0.022)	(0.031)	(0.012)	(0.015)
Technical support	-0.0566+	-0.0114	-0.0345	-0.0164
	(0.032)	(0.043)	(0.024)	(0.034)
Innovation	-0.0346*	-0.0087	-0.0009	-0.0091
	(0.017)	(0.018)	(0.010)	(0.012)
Bribe	-0.0582**	-0.0181	-0.0153+	-0.0228*
	(0.014)	(0.020)	(0.008)	(0.010)
Party member	-0.0695**	-0.0468	-0.0326	-0.0118
	(0.015)	(0.031)	(0.026)	(0.035)
Export	0.1295**	0.0372	0.1019**	0.0665**
	(0.038)	(0.058)	(0.031)	(0.022)
Firm size in log	-0.0465**	-0.0357	-0.0251*	0.0067
	(0.013)	(0.053)	(0.011)	(0.014)
Firm age in log	-0.0563**	-0.0078	-0.0404	-0.0303
	(0.019)	(0.020)	(0.028)	(0.019)
Leverage	0.2924**	0.1394*	0.1023**	0.0631*
	(0.092)	(0.056)	(0.030)	(0.026)
Constant	0.5816**	1.7187	0.6000**	0.0000
	(0.104)	(1.484)	(0.083)	(0.000)
Observations	12,322	12,322	12,322	7,775
R-squared	0.015	0.024		
Durbin-Wu-Hausman test for endogeneity of covariates (*P* value)			0.000	0.003
Hansen-J test of over-identification (*P*-value)			0.131	0.921
Number of panels		4,417	4,417	3,120

Notes: Robust standard errors in parentheses, the model also control for time dummies, ownership and sector dummies. ** p<0.01, * p<0.05, + p<0.1. Following Schultz, Tan and Walsh (2010) and Wintoki et.al (2012), firm age and year dummies are considered to be exogenous

As a final step, the robustness of results is checked by conducting several scenarios. First, some studies show that our results can be biased by ignoring the role of political connections in investigating the relationship between government support and firms' financial performance (e.g., Zhang et al., 2014). Hence, in further regressions, political connection index is added and

the results are reported in Table 5.[2] As indicated by column 3 of Table 5, a positive impact of government support on firms' financial performance is still observed even when political connection and the interaction between political connection and government support are added in the model. Furthermore, the measure of financial performance of firms (ROA) is replaced by ROE (Return of Equity). However, the positive effects of government support on firms' financial performance are still recorded and the results are available on requests

5. Conclusion and policy implications

In an attempt to contribute to a small but growing amount of empirical evidence concerning the linkage between government support and financial performance, this study contributes to existing literature by providing the first evidence of the role of not only government support but also type of government subsidies on SME financial performance. Based on the empirical results, some main findings may be summarized as follows.

Regarding traditional firm characteristics factors, the empirical results are generally consistent with other international empirical studies. For example, exporters who sell in both markets and are marked by a higher financial performance than non-exporters. In addition, leverage has a positive association with financial performance of firms. Furthermore, it is not surprising that firms firms with corruption behaviour have a lower financial performance than their counterparts without such actions.

With regard to the connection between government support and firm financial performance, estimates of the ordinary least squares (OLS) indicate that there is no linkage between the two. However, dynamic two-step GMM estimates reveal that government support has positive impacts on firm financial performance. Also, GMM approaches show that while financial assistances have a positive association, but technical supports have a negative link with firm financial performance. This suggests that the role of government support on firm financial performance varies at different subsidy modes.

[2] According to Li, Meng, Wang, & Zhou (2008)), Political connection is measured as a dummy variable with 1 if the owner of enterprises is a party member, otherwise it has the value with 0.

Regarding policy implications, changes in the status of firms' government support are accompanied by an improvement in firm financial performance. This implies that private SMEs of Vietnam often are small in size and hence cancellation of subsidies will have a negative impact on both their growth and financial efficiency. Our results further show that financial supports instead of technical assistance impact positively on firms' financial performance. This suggests that it is very important to focus on tax exemptions, interest rate subsidies and investment incentives since they may help private SMEs improve the growth and financial efficiency, especially in the context of discrimination against non-state SMEs still existing.

There are some limitations in the current study. The study used data from manufacturing SMEs, so its findings might not be represented for whole enterprise. Especially, the findings might not be true for large enterprises who own different resources and business behaviors including markets and negotiating powers. This suggests that further research on larger firms and other sectors beyond manufacturing should be done to make a general conclusion about the relationship between government support and firms' financial performance in Vietnam.

Finally, our findings are contrary to many results of previous studies. This can stem from differences in research context. More importantly, this comes mainly from applying the different econometric techniques followed to overcome the bias by the dynamic endogeneity, unobservable factors and other issues. Therefore, future research should be conducted in other economies using the same methodology used in the this study to examine whether a positive association between government support and firm financial performance found consistently beyond Vietnam

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