Research article

Innovative strategies and corporate profitability: the positive resources dependence from political network

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ABSTRACT

This research investigates the join effects of political network and innovation strategies on corporate profitability. By using the qualified survey sample of over 2600 firms, located in around 10 provinces of Vietnam, during the 10 year from 2005 to 2015 of UN-WIDER, the results reveal that the political network, estimated from number of political connection and the time of interaction, has significantly mitigated the innovative activities' inefficiency toward firm's performance that it can positively foster the innovative capacity, then encourage more profit margin. However, the study figured out that innovative activities by itself, in the small-medium enterprise, is not good for corporate performance even three different aspects of new products, improvement, or new technology. Indeed, this issue is also the same for political connection as increasing more number of political contacts or time of interaction, the firm's value will be more detrimental.

1. Introduction

As the compelling argument of the "first-mover-advantage" theory (Lieberman and Montgomery, 1988), the innovative firm has more competitive advantage and can decide the strategic choices based on their strategic position of "first mover" and updated innovative products in the industry (Beath et al., 1987; Lieberman and Montgomery, 1988). In this manner, the entrepreneur will gain more benefits by applying the "leading" projects" that can engage the firm's performance in comparison with the "lagger" or "laggards" which always follow behinds (Carpenter and Nakamoto, 1989; Kerin et al., 1992; Cohen and Levinthal, 1989; Lieberman and Montgomery, 1988; Ofek and Turut, 2008). However, ever since these papers were published, there are hundreds of studies have endorsed the notion challenge of competitive advantages which mitigate the effect of first-mover advantage as it is not indeed creation of value-added products that downwards firm's profitability in an unexpected way (Teece, 1986, 2006; Suarez and Lanzolla, 2005; Pisano and Teece, 2007; Bamberger, 2008; McCarthy et al., 2010; Kim and Lee, 2011; Lieberman and Montgomery, 2013; Vidal and Mitchell, 2013; Gomez et al., 2016; Mackelprang et al., 2018). Henceforth, the stream of innovation research was despite ample, but inclusive and easy to be biased, especially as it is put into the dynamic context of current periods

when a lot of other factors can adjust the results. Recognizing this potential contribution, this study advances previous studies by focusing on the central role of one emerging issues in corporate governance, namely business political ties or political network.

Political network, with a competitive and harsh environment, is one of the effective strategies to enhance competitive advantage as well as power compared to other competitors (Wu et al., 2018). Departing from any other usual economic factors, the political connection can create mutually beneficial and help the enterprises gain more confidence in decision-making or problem-solving (Hillman, 2005). Furthermore, thanks to a tightening network with political positions, the entrepreneur can expect an extra value and foster more for company development in comparison with other competitors (Boubakri et al., 2012). More generally, the political connection has been popularly formulated as the network legitimacy, which promotes mutual beneficial negations that compromise for the problem solving and transaction conflicts (Shu et al., 2015). This helps to reduce the potential systematic errors and to generate the necessary coordination for both business model and community, and therefore, propose more potential projects, buffer and implement the beneficial policies, and gain the technical and financial supports (Guo et al., 2014; Hemmert et al., 2016). It thus logically follows that, with the advance and focused characteristics of privileged

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information like innovation, the political network can guarantee for corporate's intellectual property right and leapfrog performance (Zhou and Poppo, 2010); Shu et al. (2015); Mingzang 2018).

Drawing from the above literature, this study sheds further light on the current literature based on the following potential gaps. Firstly, the impacts of innovative strategies on firm performance will be utilized by the interactive effects with the political network. It can be understood clearly that corporate decisions will be made for each of the innovative activities since there is a much better and closer political relationship that the higher profitability can get. Second, this empirical study of political connection will be clarified in the large qualified survey sample of over 2600 firms from The United Nations University World Institute for Development Economics Research (UN-WIDER) rather than a very typical small sample of survey data (Peng and Luo, 2000; Li et al., 2008; Zhang et al., 2019). Third, differentiating with Esty and Megginson (2003), Boubakri et al. (2008); Faccio (2006); Boubakri et al. (2012), Houston et al. (2014), Chen et al. (2017); Wong and Hooy (2018) who revealed the political connection only from the presence of at least one member of the board of directors or the managers has relationship with politics, this research will clarify the perception of political network in the more in-depth ways by using the two new estimations of (i) political size – how many political connection the firm has done per year; and (ii) political time – how many time the firm has contracted with the politics.

By using the sample of over 2600 Vietnamese firms level data during the ten year time dimensions from 2005 to 2015 (across six rounds data by each two-year survey) of UN-WIDER, we find the profound adverse effects from innovation strategies to profitability that reveals the insufficient activities and not value-added of innovation like what Teece (1986, 2006) Pisano and Teece (2007), Mackelprang et al. (2018) has figured out. Following of Chen et al. (2017) and Wong and Hooy (2018), this study also reveals the harmful effects from political network to firm's profitability as there is the "rent-seeking" and "grabbing hand" phenomenon that political network is like the "double-edged sword", failed the true meaning of "resource-dependence" power, and turn back to extracted the corporate resources via bribes or excess employments. In this manner, the enterprises' value would be detrimental and be over-exploited rather than developed significantly. However, it is surprising then that the interactive effects of political network and innovation toward profitability, similar to our expectation and the current studies of Shu et al. (2015), Hemmert et al. (2016), Mingzang 2018), has changed to positive. The results suggest the enterprise leaders can consider executing the "resource-dependence" power of political networks on fostering innovative activities, leading to higher corporate performance.

The remainder of the article proceeds as follows. In section 2, the literature will be provided for the relationship between innovation and profitability, the impact of the political network on corporate performance, and the interactive effects of political connection and innovation toward firm's performance. In sections 3 and 4, respectively, this study is conducted for sample description and regression strategies, which introduces the research models, empirical results, and sensitive analysis of the endogenous issue. Section 5 reveals concluding remarks and implications.

2. Literature

2.1. Innovative strategies and corporate profitability

Innovation, the very popular traditional and profound terminology, has been recognized and formulated as the unique knowledge that be kindled as the untried solution to put the "task sui generis" of scientific novel into the practice so to make the different significant changes on nature of process (Schumpeter, 1934; Audretsch et al., 2016; Mackelprang et al., 2018). In terms of this classic Schumpeter's theory, innovation requires not only intellectual knowledge but also acts of wills to undertake uncertainties, things have not done before, and obviously, this could re-dimension function of entrepreneurs' performance (Schumpeter,

1939; Audretsch et al., 2016). Furthermore, ever since this kind of research, there is one more conventional theory that showed how corporate performance responds to innovation activities, so-called the "first-mover-advantages" theory (Lieberman and Montgomery, 1988). Specifically, in comparison with the low or none innovative strategies, the innovative firm has a more competitive advantage and can decide the strategic choices based on their strategic position of "first mover" and updated innovative products in the industry (Beath et al., 1987; Lieberman and Montgomery, 1988). Then, the entrepreneur will send more attention on the massive investment of "leading" projects that engage more innovative products, and put the "lagger" or "laggards" in the behinds, and make them follow all of their steps (Lieberman and Montgomery, 1988). The leading companies can obtain the primary strategic benefit of the first moving steps, established the market's power, take the potential leapfrog (Schnaars, 1986). This is what Carpenter & Nakamoto (1989), Kerin et al. (1992), Cohen and Levinthal (1989), Lieberman and Montgomery (1988), Ofek & Turut (2008) has confirmed the positive effects of "first-moving" perception in innovation. However, in the opposite side, it has been figured out that the notion challenge of competitive advantages and the contextual environment-level condition would mitigate the effect of first-mover advantage or even the true meaning of innovation (Suarez and Lanzolla, 2005; Bamberger, 2008; McCarthy et al., 2010; Kim and Lee, 2011; Lieberman and Montgomery, 2013; Vidal and Mitchell, 2013; Gomez et al., 2016). In contrast to low-tech or non-tech firm, the high-tech corporates have decided to invest a lot of resources and capital to R&D and make this become the intensive and rapid changes in new products, yet these kinds of investments required the effectiveness, efficiency, and even the real-valued added to the products (Chandler, 1994; Mizik and Jacobson, 2003). In this case, if the firms made the insufficient movements, and created the inappropriate value creation products, the firm's performance will immediately downward in an unexpected way (Teece, 1986, 2006; Pisano and Teece, 2007; Mackelprang et al., 2018).

2.2. Political network and corporate profitability

The impact of the political network toward corporate performance (or any performance like profitability and productivity) has been declared very explicitly via the framework of "resources-dependence theory". Look back to the historical academic vein of this theoretical study, we can see that "resource-dependence power" has been constructed based on the view of the two fundamental theories of "crony capitalism" (Shleifer and Vishny, 1994) and the basic theory of "exchange-based-power" Emerson (1962). While "crony capitalism" of Shleifer and Vishny (1994) point out the unique roles of political connection on the advantages of corporate management and forming the strategic channels for business administration, the Emerson (1962) "exchange-based-power" expressed the theoretical root of how social science can tie with the work of organizational behavior and take a notion on the asymmetric dependence of "A is dependent on actor B". However, resources dependence theory is, in fact, an exclusive updated version for these theories that it has added the new elaborated catalog of how organizational behavior can response interdependently and organized the open-system of critical resources, and link it to the sources of external dependency of political network (bib_citation_to_be_resolvedPfeffer and Salancik, 2003; Johnson, 1995; Hillman, 2005). This organizational theory underpins the intercorporate relations and the near-axiom-like status of both organizational and inter-organizational doctrine, sharpened different perspectives of corporate behaviors (bib_citation_to_be_resolvedPfeffer and Salancik, 2003). The dependence power, the inter-organizational power, and the asymmetric exchange from the "resource theory" would be developed and facilitated as political solutions, as the organizational leaders used such this power as the resource-rich to foster the function of the resources-dependent organization. (Scott, 1987; Johnson, 1995). The organizational administrator would try to adapt and negotiate with the external environment like politics to reduce the operation uncertainty or

as the linkage buffer of environmental fluctuation (Pfeffer, 1972; Thompson, 1967). It is pertinent to note that the firm has to be sought out the "absorbed" of political connection since they desire to address the uncertainty created by the government and obtain the political legitimacy and government-controlled. In the advanced scenario, the right of any corporate organization will be to operate freely and secured by the political infrastructure and supporting institutions (Wu et al., 2018). However, the recent studies of Chen et al. (2017) and Wong and Hooy (2018) argued the contradicted results that the political networks can have the negative relationship with the firm profitability as the existence of unstable connection, and the presence of "double-edged sword" function. Indeed, political connection is specified both sides of "helping hands" and "grabbing hand" of the "double-edged sword", can turn back to jeopardize firm's value as the officers, politics, or bureaucrats would execute the political pressure to engage in the "rent-seeking" behaviors (Krueger, 1974; Shleifer and Vishny, 1994; Faccio, 2006; Boubakri et al., 2008; Ang et al., 2013; Chen et al., 2017).

2.3. Business political tie, innovative performance and profitability

Business political ties have been popularly formulated as the network legitimacy, which promotes network members to facilitate more common interest and congruent collaboration. It forms mutually beneficial negations that compromise for problem solving and transaction conflicts (Shu et al., 2015). This helps to reduce the potential systematic errors and to generate the necessary coordination for both the business model and community. Therefore, business political ties could enhance the company's power on bargaining and planning with focal authorities (Peng and Luo, 2000; Li et al., 2008). In the form of the business ties with political networks, corporate leaders could propose more potential projects, buffer and implement the beneficial policies, and gain the technical and financial supports (Guo et al., 2014; Hemmert et al., 2016). With the advance and privileged characteristics like innovation, business political ties can shield the true of congruent rules and norms, then securing for corporate's intellectual property right rather than the weak legal system, which can downward the development of non-lobby firms (Zhou and Poppo, 2010). In this manner, the firm will get more incentive to do research and invest the more risky venture projects that foster the firms to the breaking points rather than the usual investments (Li and Atuahene-Gima, 2001; Shu et al., 2015; Mingzang 2018).

Based on the aforementioned literature, the present study aims to conduct the following research objectives. Firstly, the study will analyze the two causal links between innovation activities (specified by three aspects) and firm performance; and between the political network (measured by two proxies) and firm performance. Second, concerning the above empirical results, we would desire to propose the potential interaction effect of innovation and political network toward firm performance. Lastly, acknowledges the potential endogenous from the standard panel regression model, this research has conducted the sensitive analysis which employs the group of instrumental variables to treat for endogeneity.

3. Sample description

This study uses the firm-level data survey of the Small and Medium Manufacturing Enterprises in Vietnam, which is officially published by the UNU-WIDER (The United Nations University World Institute for Development Economics Research). This data set has been constructed based on the six-round field trips of repeated 2600 firms, located in around ten provinces, during the period from 2005 to 2015. This survey, with the standardized random sampling methods, observes most of the important firm-level characteristics, including ownership structure, different types of firms, industry codes, the status of registered or informal firms, enterprise history, and business network. Moreover, this survey also provides a general picture of the firm financial situation by collecting information on firm assets, liabilities, innovation, and potential economic constraints.

Innovation variable is constructed straightforwardly from three aspects as follows: (i) the firm decides to engage in the generation of a new product; (ii) firm decide to conduct the major improvement of existing products or change specification; and (iii) companies have an introduction of a new production process, new technology.

The political networks is captured through the perception of theory of "resource dependence theory" (in section 2.1) and business political ties (in section 2.3), employs the two proxies of as follows: (i) the total number of politician relationship which the managers currently have regularly contacted with; and (ii) the number of time that these politicians have been assisted and supported for the companies over the years.

Profitability is the widespread perception that is extracted from the information of corporate performance. This is measured as the ratio between gross profit margin (gross revenue minus cost of goods sold) and total revenue. This ratio illustrates not only how successfully a company can execute, but also the better performance of generating profits can be since there is a high-intensive profit based on the results of minimizing costs (Freel and Robson, 2004; Simpson et al., 2006; Reddy et al., 2010). Details of all variables are tabulated in appendix 1.

Table 1 presents the summary descriptions of different variables for the firm's characteristics. Descriptive statistics in this table show that the generation information for the sample of a total of 8521 unbalanced panel observations during the six periods from 2005 to 2015. These corporate sample has been observed for the firm operated not only in the current time of 2009 but also the very long-established year as 1928, and spread out seven types of ownership structure and 18 industries (the detail is in appendix 1). Across this sample, innovative strategies have shown their presence at three different types of new products, improvement, new process, or technology (the details distribution and changed values will be revealed in the next section of two-way graphing tables). Noticeably, the business ties political connection toward innovation will be seen as follows. The firms will observe a maximum of 42 political contacts, and 30 times interaction when they tend to have the introduction of new products. Surprisingly then, the firms, with innovative strategies in improvement for existing products despite obtaining the same number of 42 politician connections, interacted more than 50 times. This is also what happened for companies with the decision to introduce a new process or technology since having 60 connections and interacted 97 times for politics. Table 1 also presents the values of other variables for firm characteristics and financial status. Typically, the profit margin of the companies will spread out from the negative performance of -2.343 units to a maximum of 8.29 units (by an average of 0.219 unit of profitability for the deviation of 0.176). For these financial aspects, companies have revealed the different status of using capital since some company is owned 100% by themselves (the maximum value of equity over the asset is 1), while some firms got serious trouble of liability as the minimum value is -8.804. In terms of the labor workforce, it can be seen the intensive contribution of a maximum of 100% employees is top managers, and 70% is the skilled professional managers of over a maximum of 2561 total labor workforce. This is the facts of current small-medium enterprises since they have to work by themselves rather than hiring more labors.

4. Empirical results

4.1. Panel sample analysis

In this section, this study will analyze the impact of innovative strategies on firm's profitability within the engagements of political network and connection.

In order to facilitate this purpose, the model will base strictly on the theoretical arguments of the following literature: (i) the first-mover advantages for the relationship between innovative capacity and firm's profitability (Lieberman & Montgomery, 1988; Lieberman and

Table 1. Descriptive statistics.

Variables	Obs	Mean	Std. Dev.	Min	Max
time	8,521			2005	2015
establish_year	7,128			1928	2009
ownership	8,521			1	7
change_own	8,521			0	1
industry	8,252			1	18
inno_new	8,521			0	1
inno_impro	8,521			0	1
inno_pro	8,521			0	1
poli_size	4,009	1.684	3.682	0	120
poli_time	3,282	2.428	6.259	0	200
poli_size_inno_new	4,009	0.179	1.274	0	42
poli_size_inno_impro	4,009	0.816	2.133	0	42
poli_size_inno_pro	4,009	0.329	1.682	0	60
poli_time_inno_new	3,282	0.249	1.345	0	30
poli_time_inno_impro	3,282	1.151	3.168	0	50
poli_time_inno_pro	3,282	0.481	2.659	0	97
profit_margin	8,430	0.219	0.176	-2.343	8.290
equity_asset	8,520	0.912	0.251	-8.804	1
total_workforce	8,521			1	2561
top_man	8,521	0.276	0.231	0	1
pro_man	8,521	0.025	0.059	0	0.771
woman_man	8,519	0.070	0.050	0.000	0.375
auto_asset	7,575	1.921	0.270	0	1

Montgomery, 2013; Gomez et al., 2016); (ii) the "resources-dependence theory" for the impact of political connection on corporate performance (Pfeffer, 1972; bib_citation_to_be_resolvedPfeffer and Salancik, 2003; Hillman, 2005; Wu, 2018), and (iii) the "business political tie of the network legitimacy" for the correspondence of innovative performance to political network (Peng and Luo, 2000; Shu et al., 2015; Hemmert et al., 2016; Mingzang 2018). Henceforth, we can construct the economic model as follows:

In these three equation,

$$
\begin{aligned}
\text{Profit\_margin}_{it} = {} & \alpha + \xi(\text{innovation})_{it} + \lambda(\text{poli\_net})_{it} + \gamma(\text{innovation\#poli\_net})_{it} \\
& + \beta_1(\text{sp\_total\_top})(\text{sp\_total\_top})_{it} + \beta_2(\text{sp\_total\_pro}) + \beta_3(\text{labor\_rev})_{it} \\
& + \beta_4(\text{equity\_ass})_{it} + \beta_5(\text{rd\_ass})_{it} + \beta_6(\text{automatic\_sys})_{it} \\
& + \beta_7(\text{ownership})_{it} + \beta_8(\text{industry})_{it} + \varepsilon_{it}
\end{aligned}
\tag{1}
$$

Profit_margin$_{it}$, mentioned as above, is denoted for the perception of profitability of the firm i at the time t, and shown as the aspect of corporate performance since it estimate how different between gross revenue and cost of goods sold over the total revenue. The values of this variables will be raised as the percentage point – a higher this is, the more efficient and profitable the companies are.

innovation$_{it}$, similar to the perception of the above, will capture the three different aspects of innovative strategies of the firm i at the time t, therefore, obtains the three different variables as follows: (i) the dichotomous value of how the firm decides to engage in the generation of new product, labeled by **inno_yn_new**; (ii) one dummy variable for the decision of conducting the major improvement of existing products or change specification, labeled by **inno_yn_impro**; and (iii) one dichotomous variables of the introduction of new production process or new technology, labeled by **inno_yn_pro**.

poli_net$_{it}$, specified as above, represents for the business ties of political network or connection of the firm i at the time t, will be proxied by the two variables: (i) the total number of politician relationship which

the managers currently have regularly contacted with, labeled by **poli_size**; (ii) the number of time that these politicians have been assisted and supported for the companies over the years, labeled by **poli_time.**

The groups control variables variable are collected based on the empirical studies of the determinant of profitability and stream of researches of innovation and political network (Lieberman and Montgomery, 1988; Kerin et al., 1992; Suarez and Lanzolla, 2005; Ofek and Turut, 2008; Bamberger, 2008; McCarthy et al., 2010; Kim and Lee, 2011; Lieberman and Montgomery, 2013; Gomez et al., 2016); (Pfeffer, 1972; bib_citation_to_be_resolvedPfeffer and Salancik, 2003; Scott, 1987; Johnson, 1995; Johnson 1995, 1995bib_Johnson_1995; Hillman, 2005; Wu, 2018). (Peng and Luo, 2000; Li and Atuahene-Gima, 2001; Li et al., 2008; Zhou and Poppo, 2010; Guo et al., 2014; Shu et al., 2015; Shu et al., 2015; Hemmert et al., 2016; Mingzang 2018) (the full definitions has been described clearly on appendix 1).

The empirical results for this panel regression analysis have been shown as the followed Table 2 [1]. For the most part, there is a profound negative effect from political connection toward firm performance (the more political relationship the firm has, the worse corporate profitability is got). This result is entirely consistent with the warning of the

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[1] For this section, we use the "Generalized least square for fitted panel data" to conduct the regression for panel data. This kind of regression technique will advance the fixed-effects or random-effects model since it provides a consistent estimator of the errors covariance matrix to tackle all issue of heteroscedasticity and auto-correlation (Greene, 2012).

Table 2. Generalized least square for fitted panel data.

Variables	Profit margin					
poli_size	-0.0016**	-0.0020**	-0.0016**			
	(0.0007)	(0.0008)	(0.0007)			
poli_time				-0.0005	-0.0009*	-0.0006
				(0.0005)	(0.0005)	(0.0005)
inno_new	-0.0307***			-0.0252**		
	(0.0101)			(0.0113)		
poli_size_inno_new	0.0039*					
	(0.0023)					
poli_time_inno_new				-0.0002		
				(0.0026)		
inno_impro		-0.0388***			-0.0388***	
		(0.0060)			(0.0065)	
poli_size_inno_impro		0.0027*				
		(0.0015)				
poli_time_inno_impro					0.0016	
					(0.0011)	
inno_pro			-0.0319***			-0.0298***
			(0.0081)			(0.0086)
poli_size_inno_pro			0.0018			
			(0.0018)			
poli_time_inno_pro						0.0005
						(0.0013)
top_man	-0.0086***	-0.0086***	-0.0082***	-0.0089***	-0.0086***	-0.0084***
	(0.0026)	(0.0025)	(0.0025)	(0.0027)	(0.0027)	(0.0027)
pro_man	-0.0006	-0.0006	-0.0003	-0.0004	-0.0004	-0.0001
	(0.0013)	(0.0013)	(0.0013)	(0.0014)	(0.0013)	(0.0014)
labor_rev	0.2328***	0.2435***	0.2346***	0.2750***	0.2858***	0.2775***
	(0.0164)	(0.0164)	(0.0164)	(0.0175)	(0.0176)	(0.0175)
equity_asset	-0.0101	-0.0125	-0.0119	-0.0131	-0.0152	-0.0148
	(0.0095)	(0.0095)	(0.0095)	(0.0103)	(0.0102)	(0.0103)
rd_asset	-0.5031	-0.5442	-0.4034	-0.4886	-0.5821	-0.4624
	(0.3773)	(0.3733)	(0.3746)	(0.3828)	(0.3806)	(0.3825)
auto_asset	0.0066	0.0031	0.0045	0.0087	0.0061	0.0074
	(0.0087)	(0.0087)	(0.0087)	(0.0095)	(0.0095)	(0.0095)
ownership	-0.0133***	-0.0121***	-0.0123***	-0.0129***	-0.0116***	-0.0119***
	(0.0019)	(0.0019)	(0.0019)	(0.0021)	(0.0021)	(0.0021)
industry	0.0263***	0.0297***	0.0248***	0.0335***	0.0365***	0.0317***
	(0.0054)	(0.0053)	(0.0053)	(0.0060)	(0.0059)	(0.0059)
Cons	0.1445***	0.1527***	0.1551***	0.1074***	0.1154***	0.1169***
	(0.0288)	(0.0285)	(0.0287)	(0.0321)	(0.0319)	(0.0320)
No. of Obs.	3738	3738	3738	3112	3112	3112

Notes: *** denotes the significance at the 1%, ** 5% and * 10% level respectively with t-statistic in the parenthesis.

contradicted empirical from Chen et al. (2017) and Wong and Hooy (2018) that political network is like the "double-edged sword", and failed the true meaning of "resource-dependence" power, a create the "grabbing hand" that the firm cannot get the efficient benefits of resources allocation from the close relationship with politics. Instead, the politics will turn back to control the companies, seek for the "rented values", and extracted the corporate resources via bribes or excess employments. In this manner, the enterprises' value would be detrimental and be overexploited rather than developed significantly (Krueger, 1974; Shleifer and Vishny, 1994; Faccio, 2006; Boubakri et al., 2008; Ang et al., 2013; Chen et al., 2017). This result is somehow the same with innovative variables that it is significant negative effects for the three proxies of new products, improvements, and new process or technology. The application of "first-moving advantages" (which concerned for the positive relationship) has been challenged by the notion of competitive advantages and the contextual environment-level condition (Suarez and Lanzolla, 2005; Bamberger, 2008; McCarthy et al., 2010; Kim and Lee, 2011; Lieberman and Montgomery, 2013; Vidal and Mitchell, 2013; Gomez et al., 2016). It also revealed that the high intensive innovative companies will request a lot of R&D investment, and in some situation this becomes insufficient, not truly creation of value-added products, and then downward firm's profitability in an unexpected way (Teece, 1986, 2006; Pisano and Teece, 2007; Mackelprang et at., 2018).

Nevertheless, this section is just a first stage of regression for panel sample with the application of one side "generalized least square" regression mechanism, while there are some potential unexpected bias and inconsistent estimation of serious error from the reverse causality and the problem of endogeneity. In this manner, we decide to employ two more advanced econometric to correct and robust the research question in the next following section.

4.2. Sensitive analysis

To analyze the effects of political networks on firm performance, this paper has considered the panel data regression, which is mentioned as above. Technically, however, the mechanism of pool regression estimated using "Generalized least square" may likely yield a biased estimated coefficient due to the problem of endogeneity. The bias potentially may be originated by from the existence of unobserved characteristics that affect both dependent and independent variables, or by the reverse effects of main dependent variables (Gujarati and Porter, 2003; Paxton et al., 2011; Greene, 2012). In term of academic evidence, the endogenous issue has been analyzed widely that the poorer

Table 3a. IV 2SLS for panel-data models.

Variables	Profit margin					
poli_size	-0.0990***	-0.1625***	-0.0925***			
	(0.0165)	(0.0385)	(0.0153)			
poli_time				-0.0886***	-0.1225**	-0.0824***
				(0.0258)	(0.0539)	(0.0238)
inno_new	-0.1932***			-0.1792***		
	(0.0369)			(0.0601)		
poli_size_inno_new	0.0984***					
	(0.0170)					
poli_time_inno_new				0.0860***		
				(0.0269)		
inno_impro		-0.3084***			-0.3121**	
		(0.0668)			(0.1221)	
poli_size_inno_impro		0.1608***				
		(0.0384)				
poli_time_inno_impro					0.1206**	
					(0.0530)	
inno_pro			-0.2021***			-0.2121***
			(0.0328)			(0.0574)
poli_size_inno_pro			0.0913***			
			(0.0155)			
poli_time_inno_pro						0.0816***
						(0.0238)
top_man	-0.0134**	-0.0284***	-0.0165***	-0.0299***	-0.0343**	-0.0292***
	(0.0060)	(0.0092)	(0.0055)	(0.0102)	(0.0146)	(0.0093)
pro_man	0.0086**	0.0119**	0.0070**	0.0092	0.0106	0.0088*
	(0.0036)	(0.0056)	(0.0032)	(0.0057)	(0.0080)	(0.0051)
labor_rev	0.3233***	0.3692***	0.3037***	0.3383***	0.4000***	0.3166***
	(0.0434)	(0.0651)	(0.0389)	(0.0647)	(0.0918)	(0.0556)
equity_asset	-0.0206	-0.0434	-0.0312	0.0011	0.0036	-0.0096
	(0.0234)	(0.0340)	(0.0217)	(0.0358)	(0.0443)	(0.0315)
auto_asset	-0.0016	-0.0261	-0.0256	-0.0398	-0.0375	-0.0279
	(0.0214)	(0.0312)	(0.0204)	(0.0367)	(0.0459)	(0.0314)
industry	0.0042	0.0132	0.0008	-0.1112**	-0.0599	-0.0882**
	(0.0138)	(0.0190)	(0.0125)	(0.0472)	(0.0499)	(0.0392)
Cons.	0.3716***	0.5374***	0.4379***	0.8755***	0.7867**	0.7721***
	(0.0820)	(0.1388)	(0.0818)	(0.2587)	(0.3378)	(0.2207)
No. Obs.	3718	3718	3718	3092	3092	3092
1st stage	poli_size			poli_time		
establish_year	0.0053	0.0050	0.0050	-0.0008	-0.0023	0.0003
	(0.0052)	(0.0047)	(0.0050)	(0.0099)	(0.0089)	(0.0092)
change_own	-0.6282*	-0.3356	-0.6541*	-0.5515	-0.2401	-0.6003
	(0.3680)	(0.3318)	(0.3533)	(0.6738)	(0.6084)	(0.6288)
ownership	0.1192**	0.0319	0.1354***	0.0869	0.0575	0.1593*
	(0.0513)	(0.0463)	(0.0493)	(0.0923)	(0.0834)	(0.0863)
woman_man	-0.8267**	-0.8303**	-0.6258*	-1.7697**	-1.2430*	-1.4395**
	(0.3753)	(0.3389)	(0.3592)	(0.7204)	(0.6514)	(0.6689)
lnasset	0.1182***	0.0597	0.1276***	0.0434	-0.0173	0.0124
	(0.0450)	(0.0408)	(0.0434)	(0.0841)	(0.0762)	(0.0788)
Cons.	-9.7168	-8.0274	-8.4249	10.2514	10.8079	7.5445
	(10.3526)	(9.3563)	(9.9427)	(19.7231)	(17.8391)	(18.3916)

Notes: *** denotes the significance at the 1%, ** 5% and * 10% level respectively with t-statistic in the parenthesis.

performing corporate has more attempt to take higher risk-taking actions, and tend to catch up with the political connection, even they would not know the efficiency or not, and that the current studies so-called the big problem of "reverse causality" (Fisman, 2001; Chen et al., 2017; Chaney et al., 2011; Boubakri et al., 2008; Zhang et al., 2019). Also, it would be possible for the unobservable noises from the residual can correlate with the main results of political connection (Qian et al. (2011); Boubakri et al. (2012); Houston et al. (2014).

Similar to several studies (Fisman (2001); Chen et al. (2017); Chaney et al. (2011); Boubakri et al. (2008); Zhang et al. (2019), Qian et al. (2011); Boubakri et al. (2012); Houston et al. (2014), this paper employs the two different techniques of two-stage regression, namely

Table 3b. XTIV - G2SLS and the consistent variance estimator.

Variables	Profit margin					
poli_size	-0.0990***	-0.1625***	-0.0925***			
	(0.0165)	(0.0386)	(0.0153)			
poli_time				-0.0886***	-0.1225**	-0.0824***
				(0.0258)	(0.0540)	(0.0238)
inno_new	-0.1932***			-0.1792***		
	(0.0370)			(0.0602)		
poli_size_inno_new	0.0984***					
	(0.0170)					
poli_time_inno_new				0.0860***		
				(0.0270)		
inno_impro		-0.3084***			-0.3121**	
		(0.0669)			(0.1223)	
poli_size_inno_impro		0.1608***				
		(0.0385)				
poli_time_inno_impro					0.1206**	
					(0.0531)	
inno_pro			-0.2021***			-0.2121***
			(0.0328)			(0.0575)
poli_size_inno_pro			0.0913***			
			(0.0156)			
poli_time_inno_pro						0.0816***
						(0.0238)
top_man	-0.0134**	-0.0284***	-0.0165***	-0.0299***	-0.0343**	-0.0292***
	(0.0060)	(0.0092)	(0.0055)	(0.0102)	(0.0147)	(0.0093)
pro_man	0.0086**	0.0119**	0.0070**	0.0092	0.0106	0.0088*
	(0.0037)	(0.0056)	(0.0033)	(0.0057)	(0.0080)	(0.0051)
labor_rev	0.3233***	0.3692***	0.3037***	0.3383***	0.4000***	0.3166***
	(0.0435)	(0.0652)	(0.0389)	(0.0648)	(0.0919)	(0.0557)
equity_asset	-0.0206	-0.0434	-0.0312	0.0011	0.0036	-0.0096
	(0.0234)	(0.0341)	(0.0217)	(0.0359)	(0.0444)	(0.0315)
auto_asset	-0.0016	-0.0261	-0.0256	-0.0398	-0.0375	-0.0279
	(0.0215)	(0.0312)	(0.0204)	(0.0368)	(0.0460)	(0.0314)
industry	0.0042	0.0132	0.0008	-0.1112**	-0.0599	-0.0882**
	(0.0139)	(0.0191)	(0.0125)	(0.0473)	(0.0500)	(0.0393)
Cons	0.3716***	0.5374***	0.4379***	0.8755***	0.7867**	0.7721***
	(0.0821)	(0.1390)	(0.0819)	(0.2591)	(0.3383)	(0.2210)
No. Obs.	3718	3718	3718	3092	3092	3092
1st stage	poli_size			poli_time		
establish_year	0.0053	0.0050	0.0050	-0.0008	-0.0023	0.0003
	(0.0052)	(0.0047)	(0.0050)	(0.0099)	(0.0089)	(0.0092)
change_own	-0.6282*	-0.3356	-0.6541*	-0.5515	-0.2401	-0.6003
	(0.3680)	(0.3318)	(0.3533)	(0.6738)	(0.6084)	(0.6288)
ownership	0.1192**	0.0319	0.1354***	0.0869	0.0575	0.1593*
	(0.0513)	(0.0463)	(0.0493)	(0.0923)	(0.0834)	(0.0863)
woman_man	-0.8267**	-0.8303**	-0.6258*	-1.7697**	-1.2430*	-1.4395**
	(0.3753)	(0.3389)	(0.3592)	(0.7204)	(0.6514)	(0.6689)
lnasset	0.1182***	0.0597	0.1276***	0.0434	-0.0173	0.0124
	(0.0450)	(0.0408)	(0.0434)	(0.0841)	(0.0762)	(0.0788)
Cons.	-9.7168	-8.0274	-8.4249	10.2514	10.8079	7.5445
	(10.3526)	(9.3563)	(9.9427)	(19.7231)	(17.8391)	(18.3916)

Notes: *** denotes the significance at the 1%, ** 5% and * 10% level respectively with t-statistic in the parenthesis.

"Instrumental variables and two-stage least squares for panel-data models" and "the two-stage least square with the Baltagi–Chang estimators of the variance components". Moreover, with the deliberate review from Leuz and Oberholzer-Gee (2006); and Houston et al. (2014), these techniques have applied the year of establishment as the main instrumental variable and the group of firm characteristics which considered as the exogenous variables. The coefficients and values from Tables 3a and 3b have presented the empirical results for these methods as follows.

Primarily, it can be seen that most coefficients of the main regressors have been statistically significant (at 1 percentage point) for all of the cases of estimations. For the political network, the two proxies of estimation (number of political connections and time of interaction) have been confirmed with the negative effects toward firm's profitability after there is the correction from the endogenous problems. Similarly, the three dimensions of innovative strategies have got a negative impact as the firm decides to activate innovative activities. These results are quite familiar with the current literature includes: (i) political network is like the "double-edge sword", and failed the true meaning of "resource-dependence" power, an create the "grabbing hand" that the firm cannot get the efficient benefits of resources allocation from the close relationship with politics (Krueger, 1974; Shleifer and Vishny, 1994; Faccio, 2006; Boubakri et al., 2008; Ang et al., 2013; Chen et al., 2017; Wong and Hooy, 2018); and (ii) the notion of innovation application for "first-moving advantages" is quite highly challenged since the high intensive innovative companies will request a lot of R&D investment that in some situation are insufficient, not truly creation of value added products, and then downward firm's profitability in an unexpected way (Teece, 1986, 2006; Suarez and Lanzolla, 2005; Pisano and Teece, 2007; Bamberger, 2008; McCarthy et al., 2010; Kim and Lee, 2011; Lieberman and Montgomery, 2013; Vidal and Mitchell, 2013; Gomez et al., 2016; Mackelprang et at., 2018).

Nevertheless, it is surprising then that corporate profitability, will be profoundly positive and efficiently corrected with the significant contribution of the interaction of political network and innovative activities. These results is similar with our expectation that business political ties have been popularly formulated as the network legitimacy which promotes the network member to facilitate more common interest and congruent collaboration, subtracts the potential systematic errors, advocates more potential projects, and buffer for the potential policies risks so to gain the technical and financial supports (Peng and Luo, 2000; Li et al., 2008; Guo et al., 2014; Shu et al., 2015; Hemmert et al., 2016). It thus logically means that the business ties of political network can embrace the true acts on congruent rules, norms, and then foster the innovative strategies to make the leapfrog, then encourage more firm's profitability (Li and Atuahene-Gima, 2001; Zhou and Poppo, 2010; Shu et al., 2015; Mingzang 2018).

5. Discussion

This study advances previous studies since it shows not only the single effects of innovation or politics but also the interaction effects of these two variables on corporate performance. The results reveal that the political network, estimated from a number of political connections and the time of interaction, has significantly mitigated the innovative activities' inefficiency toward firm's performance that it can positively foster the innovative capacity, then encourage more profit margin. However, the study figured out that innovative activities by itself, in the small-medium enterprise, are not good for corporate performance, even three different aspects of new products, improvement, or new technology. Indeed, this issue is also the same for political connection as increasing more political contacts or time of interaction, the firm's value will be more detrimental.

The innovative strategies which are embedded within the interaction of political networks have profoundly been founds as the positive sign for the managers to conduct a better firm performance. Indeed, political networks, formed as the network legitimacy, can subtract potential

systematic errors, gaining more technical and financial supports, and fostering innovative strategies to make the leapfrog. Henceforth, the main point for the manager to be considered is that they should enhance more political networks in which it can nurture the innovations, resulting in higher profitability.

6. Concluding remarks and implications

Innovation, the very popular traditional and profound terminology, has been recognized and formulated as the unique knowledge that be kindled as the untried solution to put into the practice so to make the different significant changes on nature of process (Schumpeter, 1934; Audretsch et al., 2016; Mackelprang et al., 2018). As the compelling argument of the "first-mover-advantage" theory (Lieberman and Montgomery, 1988), the innovative firm has more competitive advantage and can decide the strategic choices based on their strategic position of "first mover" and updated innovative products in the industry (Beath et al., 1987; Lieberman and Montgomery, 1988). In this manner, the entrepreneur will gain more benefits by applying the "leading" projects" that can engage the firm's performance in comparison with the "lagger" or "laggards" which always follow behinds (Carpenter and Nakamoto, 1989; Kerin et al., 1992; Cohen and Levinthal, 1989; Lieberman and Montgomery, 1988; Ofek and Turut, 2008). However, ever since these papers were published, there are hundreds of studies have endorsed the notion challenge of competitive advantages and the contextual environment-level condition would mitigate the effect of first-mover advantage, and in some situation, innovation becomes insufficiently, is not indeed creation of value-added products, and then downward firm's profitability in an unexpected way (Teece, 1986, 2006; Suarez and Lanzolla, 2005; Pisano and Teece, 2007; Bamberger, 2008; McCarthy et al., 2010; Kim and Lee, 2011; Lieberman and Montgomery, 2013; Vidal and Mitchell, 2013; Gomez et al., 2016; Mackelprang et at., 2018). Henceforth, the stream of innovation research was despite ample, but inclusive and easy to be biased, especially it is put into the dynamic context of current periods when a lot of other factors can adjust the results. Recognizing this potential contribution, this study, differentiated from prior researches, has tried to analyze the impact of one emerging issue in corporate governance, namely business political ties or political network.

This study advances previous studies and offers the following contributions. Primarily, the innovative strategies toward firm performance will be embedded within the mitigation of business links resulting from the political network. Indeed, business political ties have been popularly formulated as the network legitimacy which promotes the network member to facilitate more common interest and congruent collaboration, subtracts the potential systematic errors, advocates more potential projects, gain the technical and financial supports, foster the innovative strategies to make the leapfrog, and then encourage more firm's profitability (Li and Atuahene-Gima, 2001; Zhou and Poppo, 2010; Shu et al., 2015; Mingzang 2018). Second, the perception of political network in this study will be defined in the more in-depth ways which employed the large sample survey of over 2600 firms, and be estimated from the two dimensions of (i) political size – how many political connection the firm has done per year; and (ii) political time – how many time the firm has contracted with the politics. This point of view is empirically differentiated with previous stream of literature of Esty and Megginson (2003), Boubakri et al. (2008); Faccio (2006); Boubakri et al. (2012), Houston et al. (2014), Chen et al. (2017); Wong and Hooy (2018) – which revealed the political connection only from the presence of at least one member of the board of directors or the managers has relationship with politics; or of Peng and Luo (2000), Li et al. (2008), Zhang et al. (2019) – which used the very typical small sample of survey data. Third, the research has been deliberate to aim to a new emergent context for small-medium enterprise in one developing country – Vietnam.

By using the sample of over 2600 Vietnamese firms level data during the 10 year time dimensions from 2005 to 2015 (across six rounds data

by each two-year survey) of UN-WIDER, we find the re-confirm negative effects of innovation strategies to profitability that results from the insufficient activities and not value-added of innovation, is similar to the empirical evidence of Teece (1986, 2006) Pisano and Teece (2007), Mackelprang et al. (2018). In addition, we also figure out another significant negative effect from the political network to firm's profitability. Following of Chen et al. (2017) and Wong and Hooy (2018), this result illustrates for the "rent-seeking" and "grabbing hand" phenomenon that political network is like the "double-edged sword", turn back to extracted the corporate resources via bribes or excess employments. At that time, the enterprises' value would be detrimental and be overexploited rather than developed significantly. However, it is surprising then that the interactive effects of political network and innovation toward profitability, as our expectation and the current studies of Shu et al. (2015) Hemmert et al. (2016), Mingzang (2018), has changed to positive. The results suggests the enterprise leaders can consider executing "resource-dependence" power of political network on fostering innovative activities, leading to the higher corporate performance.

Declarations

Author contribution statement

Xuan Vinh Vo, Son Kien Nguyen, Thi Minh Tuyet Vo: Conceived and designed the experiments; Performed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

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The authors declare no conflict of interest.

Additional information

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References

Ang, J.S., Ding, D.K., Thong, T.Y., 2013. Political connection and firm value. Asian Dev. Rev. Stud. Asian Pac. Econ. Issues 30 (2), 131–166.

Audretsch, D.B., Kuratko, D.F., Link, A.N., 2016. Dynamic entrepreneurship and technology-based innovation. J. Evol. Econ. 26 (3), 603–620.

Bamberger, P., 2008. From the Editors beyond Contextualization: Using Context Theories to Narrow the Micro-macro gap in Management Research.

Beath, J., Katsoulacos, Y., Ulph, D., 1987. Sequential product innovation and industry evolution. Econ. J. 97 (Supplement), 32–43.

Boubakri, N., Cosset, J.C., Saffar, W., 2008. Political connections of newly privatized firms. J. Corp. Finance 14 (5), 654–673.

Boubakri, N., Cosset, J.C., Saffar, W., 2012. The impact of political connections on firms'operating performance and financing decisions. J. Financ. Res. 35 (3), 397–423.

Carpenter, G.S., Nakamoto, K., 1989. Consumer preference formation and pioneering advantage. J. Market. Res. 26 (3), 285–298.

Chandler, A.D., 1994. The competitive performance of US industrial enterprises since the Second World War. Bus. Hist. Rev. 68 (1), 1–72.

Chaney, P.K., Faccio, M., Parsley, D., 2011. The quality of accounting information in politically connected firms. J. Account. Econ. 51 (1-2), 58–76.

Chen, C.R., Li, Y., Luo, D., Zhang, T., 2017. Helping hands or grabbing hands? An analysis of political connections and firm value. J. Bank. Finance 80, 71–89.

Cohen, W.M., Levinthal, D.A., 1989. Innovation and learning: the two faces of R & D. Econ. J. 99 (397), 569–596.

Emerson, R.M., 1962. Power-dependence relations. Am. Socio. Rev. 31–41.

Esty, B.C., Megginson, W.L., 2003. Creditor rights, enforcement, and debt ownership structure: Evidence from the global syndicated loan market. J. Financ. Quant. Anal. 38 (1), 37–60.

Faccio, M., 2006. Politically connected firms. Am. Econ. Rev. 96 (1), 369–386.

Fisman, R., 2001. Estimating the value of political connections. Am. Econ. Rev. 91 (4), 1095–1102.

Freel, M.S., Robson, P.A., 2004. Small firm innovation, growth and performance. Int. Small Bus. J. 22 (6), 561–575.

Gomez, J., Lanzolla, G., Maicas, J.P., 2016. The role of industry dynamics in the persistence of first mover advantages. Long. Range Plan. 49 (2), 265–281.

Gujarati, D.N., Porter, D.C., 2003. Basic Econometrics. McGraw-HiII, New York.

Guo, H., Xu, E., Jacobs, M., 2014. Managerial political ties and firm performance during institutional transitions: an analysis of mediating mechanisms. J. Bus. Res. 67 (2), 116–127.

Greene, H.W., 2012. Econometric Analysis, seventh ed. Prentice Hall, England.

Hemmert, M., Kim, D., Kim, J., Cho, B., 2016. Building the supplier's trust: role of institutional forces and buyer firm practices. Int. J. Prod. Econ. 180, 25–37.

Hillman, A.J., 2005. Politicians on the board of directors: do connections affect the bottom line? J. Manag. 31 (3), 464–481.

Houston, J.F., Jiang, L., Lin, C., Ma, Y., 2014. Political connections and the cost of bank loans. J. Account. Res. 52 (1), 193–243.

Johnson Jr., B.L., 1995. Resource Dependence Theory: A Political Economy Model of Organizations.

Kerin, R.A., Varadarajan, P.R., Peterson, R.A., 1992. First-mover advantage: a synthesis, conceptual framework, and research propositions. J. Market. 56 (4), 33–52.

Kim, J., Lee, C.Y., 2011. Technological regimes and the persistence of first-mover advantages. Ind. Corp. Change 20 (5), 1305–1333.

Krueger, A.O., 1974. The political economy of the rent-seeking society. Am. Econ. Rev. 64 (3), 291–303.

Leuz, C., Oberholzer-Gee, F., 2006. Political relationships, global financing, and corporate transparency: Evidence from Indonesia. J. Financ. Econ. 81 (2), 411–439.

Li, H., Atuahene-Gima, K., 2001. Product innovation strategy and the performance of new technology ventures in China. Acad. Manag. J. 44 (6), 1123–1134.

Li, J.J., Poppo, L., Zhou, K.Z., 2008. Do managerial ties in China always produce value? Competition, uncertainty, and domestic vs. foreign firms. Strat. Manag. J. 29 (4), 383–400.

Lieberman, M.B., Montgomery, D.B., 1988. First-mover advantages. Strat. Manag. J. 9 (S1), 41–58.

Lieberman, M.B., Montgomery, D.B., 2013. Conundra and progress: research on entry order and performance. Long. Range Plan. 46 (4-5), 312–324.

Mackelprang, A.W., Bernardes, E., Burke, G.J., Welter, C., 2018. Supplier innovation strategy and performance: a matter of supply chain market positioning. Decis. Sci. J. 49 (4), 660–689.

McCarthy, I.P., Lawrence, T.B., Wixted, B., Gordon, B.R., 2010. A multidimensional conceptualization of environmental velocity. Acad. Manag. Rev. 35 (4), 604–626.

Mizik, N., Jacobson, R., 2003. Trading off between value creation and value appropriation: the financial implications of shifts in strategic emphasis. J. Market. 67 (1), 63–76.

Ofek, E., Turut, O., 2008. To innovate or imitate? Entry strategy and the role of market research. J. Market. Res. 45 (5), 575–592.

Paxton, P., Hipp, J.R., Marquart-Pyatt, S., Marquart-Pyatt, S.T., 2011. Nonrecursive Models: Endogeneity, Reciprocal Relationships, and Feedback Loops, 168. Sage Publications.

Peng, M.W., Luo, Y., 2000. Managerial ties and firm performance in a transition economy: the nature of a micro-macro link. Acad. Manag. J. 43 (3), 486–501.

Pfeffer, J., 1972. Interorganizational influence and managerial attitudes. Acad. Manag. J. 15 (3), 317–330.

Pfeffer, J., Salancik, G.R., 2003. The External Control of Organizations: A Resource Dependence Perspective. Stanford University Press.

Pisano, G.P., Teece, D.J., 2007. How to capture value from innovation: shaping intellectual property and industry architecture. Calif. Manag. Rev. 50 (1), 278–296.

Qian, M., Pan, H., Yeung, B.Y., 2011. November). Expropriation of minority shareholders in politically connected firms. In: Finance and Corporate Governance Conference.

Reddy, K., Locke, S., Scrimgeour, F., 2010. The efficacy of principle-based corporate governance practices and firm financial performance: an empirical investigation. Int. J. Manag. Finance 6 (3), 190–219.

Schnaars, S.P., 1986. When entering growth markets, are pioneers better than poachers? Bus. Horiz. 29 (2), 27–36.

Schumpeter, J., 1934. The Theory of Economic Development. Harvard University Press, Cambridge, MA.

Schumpeter, J.A., 1939. Business Cycles, 1. McGraw-Hill, New York, pp. 161–174.

Scott, W.R., 1987. Organizations: Rational, Natural, and Open Systems.

Shleifer, A., Vishny, R.W., 1994. Politicians and firms. Q. J. Econ. 109 (4), 995–1025.

Shu, C., Wang, Q., Gao, S., Liu, C., 2015. Firm patenting, innovations, and government institutional support as a double-edged sword. J. Prod. Innovat. Manag. 32 (2), 290–305.

Simpson, P., Siguaw, J., Enz, C., 2006. Innovation orientation outcomes: the good and the bad. J. Bus. Res. 59 (5), 1133–1141.

Suarez, F., Lanzolla, G., 2005. The Half-Truth of First-Mover Advantage. Harvard business review.

Teece, D.J., 1986. Profiting from technological innovation: implications for integration, collaboration, licensing and public policy. Res. Pol. 15 (6), 285–305.

Teece, D.J., 2006. Reflections on "profiting from innovation". Res. Pol. 35 (8), 1131–1146.

Thompson, J.D., 1967. Organizations in Action. McGraw-Hill, New York, p. 1967.

Vidal, E., Mitchell, W., 2013. When do first entrants become first survivors? Long. Range Plan. 46 (4-5), 335–347.

Wong, W.Y., Hooy, C.W., 2018. Do types of political connection affect firm performance differently? Pac. Basin Finance J. 51, 297–317.

Wu, H., Li, S., Ying, S.X., Chen, X., 2018. Politically connected CEOs, firm performance, and CEO pay. J. Bus. Res. 91, 169–180.

Zhang, M., Qi, Y., Wang, Z., Zhao, X., Pawar, K.S., 2019. Effects of business and political ties on product innovation performance: evidence from China and India. Technovation 80, 30–39.

Zhou, K.Z., Poppo, L., 2010. Exchange hazards, relational reliability, and contracts in China: the contingent role of legal enforceability. J. Int. Bus. Stud. 41 (5), 861–881.