Can Tho University Journal of Science
website: sj.ctu.edu.vn

DOI: 10.22144/ctu.jen.2018.007

Impact of managerial human resource quality on growth of firms in the Mekong Delta, Vietnam

Nguyen Pham Thanh Nam* and Le Khuong Ninh

College of Economics, Can Tho University, Vietnam

**Correspondence: Nguyen Pham Thanh Nam (email: nptnam@ctu.edu.vn)*

Article info.

Received 09 Jan 2017
Revised 08 Apr 2017
Accepted 30 Mar 2018

Keywords

Firm, growth, human resource, management, MD, quality, social capital

ABSTRACT

This paper is aimed to empirically examine the impact of managerial human resource quality on firm growth, using a primary data set of 450 firms randomly selected in the Mekong Delta, in addition, secondary data retrieved from relevant governmental organizations. Ordinary least squares estimation method was used. The results revealed that the components of managerial human resource quality effect the growth of firms. Firstly, better professional knowledge enables managers to manage firms and make use of good market opportunities. Secondly, participation in short trainings will enrich knowledge for managers so as to create chances for firms to grow. Thirdly, experience is also a valuable source to help managers avoid mistakes and spur faster firm growth. Fourthly, age has impact on firm growth. Both too young and too old managers have intrinsic weaknesses that hold back the possibility to grow of firms. Finally, overseas Chinese managers do better than Vietnamese counterparts in terms of boosting the growth of firms thanks to certain specific attributes. Solutions are then proposed to upgrade managerial human resource quality so as to promote growth of firms in the Mekong Delta.

Cited as: Nam, N.P.T. and Ninh, L.K., 2018. Impact of managerial human resource quality on growth of firms in the Mekong Delta, Vietnam. Can Tho University Journal of Science. 54(2): 46-55.

1 INTRODUCTION

It is widely recognized among economists and practitioners that human resource quality is pivotal to economic growth of nations, since people actively manage all things happening around the world. Meanwhile, researchers have also stressed the key role of managerial human resource quality to firm growth, using the Upper echelon theory developed by Hambrick and Mason (1984), among others. Nevertheless, this topic remains in much need of further studying, especially in transition economies, since it basically depends on specific features of nations, regions and firms as well (Unger *et al.*, 2011).

In Vietnam, the literature on the impact of human resource quality on firm growth gains its unique importance since firms have remarkedly contributed to GDP. In 2014, they created a value of VND 2,301.5 trillion as much, nine times of that in 2001 and about 58.5% GDP, compared to 53.2% in 2001 (General Statistical Office of Vietnam, 2014). The growth of firms has strengthened the country's competitiveness, ensured the success of the industrialization and modernization strategy, restructured the economy and created needed jobs for labours.

In 2014, the Mekong Delta (MD) had around 31 thousand firms, accounting for approximately 8% of total number of firms of the whole country (General

Statistical Office of Vietnam, 2014). Despite their importance, firms in this region have faced with severe constraints, regarding small size and low competitiveness stemming from poor managerial human resource, lack of ability to tackle market uncertainty and limited ability to improve product quality in order to expand market share.

Being concerned with the aforementioned problem, this paper is conducted to empirically examine the impact of managerial human resource quality on firm growth so as to propose solutions to promote their growth, using a primary data set of 450 firms randomly selected from the MD, together with secondary data retrieved from relevant organizations (e.g., the General Statistical Office of Vietnam).

2 LITERATURE REVIEW

Managerial human resource quality is composed of internal factors that belong to personal characteristics of managers such as professional knowledge, working experience and skills (Pfeffer, 1994; Florin *et al*., 2003). Those aspects ineract to form managerial capability that strongly affects firms' growth (Cooper *et al*., 1994; Honig, 2001; Pena, 2004). According to Becker (1993), managerial human resource quality is also built up via on-the-job trainings, in addition to social capital that managers have created during their working life.

Right after the second industrial revolution, a number of firms were set up and greatly contributed to economic growth of countries around the world. Such a phenomenon has allured economists to deeply examine the relationship between managerial human resource quality and firm growth. The milestone of the studies on this topic is the well-known Upper echelon theory developed by Hambrick and Mason (1984), which stresses that managerial experience and personal characteristics of top managers do affect firm growth in a number of ways, since those aspects determine the success of business strategies pursued by managers. Moreover, Coleman (1988), Putnam (2000), Lin (2001) and Svendsen (2006) argue that personal characteristics of managers will constitute the value of social capital (i.e., social relationships established by managers) that can be transformed into financial resources in such a specific manner that physical resources cannot.

Professional knowledge (i.e., in-depth understandings on specific topics or issues) is largely deemed among the most important components of managerial human resource quality, since it enables managers to well perceive and make use of business opportunities. Cooper *et al*. (1994) goes even further to argue that managers with good professional knowledge are better capable of tackling complicated problems, thanks to the education they have acquired. Differently speaking, professional knowledge helps managers answer such crucial questions as what, why, how and whom stemming from business practices.

Indeed, professional knowledge is related to grasping relevant information (what), understanding social and political norms as well as human thinking (why), obtaining skills to conduct works (how) and coordinating relevant people to get things done properly (whom). Professional knowledge helps managers perceive, acquire, evaluate and utilize information obtained from contacts with partners and governmental officials. It also allows managers to wisely approach policies, mechanisms and rules that must be obliged anyway (Storper and Salais, 1997). By those channels, professional knowledge is key for managers to figure out and exploit profitable business opportunities that spurfirm growth. In the MD, this issue may be of concern since a number of firms in the region have developed from family ones and the conditions for firm managers to upgrade professional knowledge have been quite limited.

Participation in short trainings brings about undertandings of pragmatic issues for firm managers. To run business successfully, managers need to figure out and analyze opportunities to make good business strategies, using proper knowledge related to the field of specialization (Mintzberg and Waters, 1982; Chandler and Jansen, 1992; West III and Noel, 2009). In fact, each field of specialization is characterized by unique opportunities and challenges emerging from the environment in which firms operate. Therefore, in-depth understandings of the field allow managers to better grasp good opportunities and avoid bad outcomes resulting from market fluctutations and uncertainty. Such understandings may not be provided by university training programs that are normally designed to provide general knowlege of a certain science (e.g., economics or business). Short trainings on updated topics will bridge the gap, thus being useful for managers to handle daily business activities.

Gimeno *et al*. (1997) points out that understandings of the field of specialization enables managers to well perceive demand and preferences of partners (i.e., customers, suppliers and financiers). As a result, it allows managers to make full-fledged stategies to cope with changes and challenges to ensure triumph and growth for firms. Attending short trainings also means to open chances for

managers to get in touch with a wide range of people, especially governmental officials (Phan Anh Tu and Nguyen Hong Diem, 2016). In other words, skills of managers develop through short trainings, thanks to the information provided as well as business networks created via that. Thus, firm growth is enhanced. As a matter of fact, opportunities for firm managers in the MD to attend well-designed short trainings have been rare, since there are few institutions or organizations specializing in it.

Experience accumulated when working as a manager is also a factor that ensures success and growth of firms. Experience is gained both directly and indirectly via studying, working as well as interacting with people. Experience implies the understanding of production process and business organization, in addition to knowledge on regulation, markets and partners. It is experience that creates conditions for managers to figure out opportunities and enhance the capacity of synthesizing, analyzing and controlling risk (i.e., factor bringing down a number of firms poorly managed by less experienced managers). Researchers have stressed that experience enables managers to tap undiscovered markets as well as make use of chances to materialize strategies and mobilize precious resources for growth of firms (Castanias and Helfat, 2001). In short, accumulated experience enables managers to develop managerial and actual problem-solving capability (Castanias and Helfat, 2001). Thanks to that, highly experienced managers play a crucial role to firm growth and experience of managers is often measured by the number of years of working (Ucbasaran *et al*., 2003).

Risk attitude is another important component of managerial human resource quality as several researchers have pointed out a key role of risk attitude to investment decisions of managers (Le Khuong Ninh *et al*., 2016). It is well known that wise investment decisions will back up sustainable growth of firms, but psychology does influence decisions of managers (Nickell, 1996; Maki *et al*., 2005). As for psychological aspect, managers may belong to either risk-averse or risk-loving groups of people. Risk-averse managers tend to postpone decisions to fetch more information to decide the right time to invest (Berk, 1999). This attitude results in the fact that good opportunities may be missed and growth of firms is adversely affected. In contrast, risk-loving managers tend to opt for risky investment opportunities because of self confidence on own competence and being optimistic about the future due to apopular belief that risk would mean profit. To put it differently, risk-loving managers are more deterministic and hasty in making decisions in spite of output market uncertainty (Akdogu and Mackey, 2008). For cases, such over-optimistic attitude of managers causes failure as the market somehow turns worse. Empirical studies (e.g., Driver and Whelan, 2001; Andrade and Stafford, 2004) reveal that risk-loving managers tend to invest more than risk-averse ones, which strongly influence firm growth. According to Le Khuong Ninh *et al*. (2016), a majority of firm managers in the MD are risk averse due to a high degree of uncertainty with regard to their output markets. This risk attitute may be an impediment to growth of firms in the region.

The relation between manager's age and firm growth is a topic that attracts attention of researchers (Kangasharju and Pekkala, 2002). Bates (1990) and Storey (1994) find out an inverted-U shaped (∩) relation between manager's age and firm growth, confirming the argument that firms managed by young or old managers (often above 55) have a lower growth rate of those managed by others. On the one hand, Storey (1994) believes that firms managed by young managers may have limited growth opportunities since they are new market players, thus being less able to create a good ground for firms to take off. On the other hand, Besnik *et al*. (2008) argues that nearly retired managers often have poor ambition to make firms grow fast due to mental and health constraints. Moreover, they are notable to quickly respond to market changes and challenges.

Gender is another determinant of firm growth, as confirmed by a number of studies (e.g., Fasci and Valdez, 1998; Masters and Meier, 1998), especially as gender equality is continuously called for to enable females to participate in and contribute to as many social activities as males do. Masters and Meier (1998) contends that females are more conservative than males as they tend to oblige to strict rules rather than something flexible due to a fear of failing and being criticized. Females are often family-oriented, thus devoting less time to managing firms (Longstreth *et al*., 1987). Differently, male managers are more active in creating intimate relations with partners as well as governmental officials to ensure growth of firms. All those arguments would mean that female managers are less able to bring in opportunities for fast growth of firms they manage (Fasci and Valdez, 1998).

Ethnic feature is also considered by studies on firm growth as people move around the globe to make ends meet, specifically the success of Chinese

entrepreneurs in several countries thanks to ethnic communities and culture. Portes and Zhou (1996) reveals the tendency of overseas Chinese entrepreneurs to use labours and seek customers among their own communities, thereby estblish networks so as to mitigate production costs and boosting growth. The success of Chinese entrepreneurs is also related to business ethic culture, since they always pass full knowledge and experience on to descendants to help the latter better capture and respond to market changes and challenges. The mental, managerial and financial values built up this way sustain a strong firm growth (Salvato and Melin, 2008).

Social capital has recently become an attractive topic to studies on firm growth. Bourdieu (1986) argues that social capital is a synthesis of latent capability strengthened through contacts with partners and government officials. For Coleman (1988), social capital is a by-product of human activities and is usually used to create values. This type of capital is very unique, since it is exempted from tax and not depreciated. In addition, it can easily be transformed into physical and financial capitals, thereby boost firm growth in a way distinguished from other types of capital (Bourdieu, 1986; Woodhouse, 2006). Social capital is often proxied by the number and the length of social relationships that managers have establised through out their working time (Fukuyama, 2002).

3 METHODOLOGY

3.1 Data collection method

Primary data were directly collected by interviewing top managers of firms in the MD, using a questionnaire prepared in advance and corrected after several pilot surveys. The information of 450 firms was recorded. The sample comprises of 38 firms in Long An province (accounting for 8.4% of the total number of the surveyed firms), 39 in Tien Giang (8.7%), 21 in Ben Tre (4.7%), 15 in Tra Vinh (3.3%), 33 in Vinh Long (7.3%), 28 in Dong Thap (6.2%), 35 in An Giang (7.8%), 49 in Kien Giang (10.9%), 104 in Can Tho (23.1%), 16 in Hau Giang (3.6%), 32 in Soc Trang (7.1%), 22 in Bac Lieu (4.9%) and 18 in Ca Mau (4.0%).

The data contain information about characterictics of top managers (e.g., education, age, gender, experience, short-training participation, etc.) and firms (i.e., size, output market orientation, field of specialization and sales). This paper used descriptive statistics to describe the managerial human resource quality of the firms in the MD. Afterwards, ordinary least squares (OLS) estimation method was employed to trace out the impact of managerial human resource quality on growth of firms. The OLS estimator is consistent when the regressors are exogenous, like those included in the empirical model.

3.2 Empirical model

Based on the theoretical arguments, an empirical model was specified to examine the impact of managerial human resource quality on growth of the surveyed firms as follows:

$$GROWTH_i = \beta_0 + \beta_1 PROFESS_i + \beta_2 STRAINING_i + \beta_3 EXPER_i + + \beta_4 RISKATT_i + \beta_5 AGE_i + \beta_6 AGE_i^2 + \beta_7 GENDER_i + \beta_8 ETHNIC_i + \beta_9 SCAPITAL_i + \varepsilon_i \quad (1)$$

In Model (1), $GROWTH_i$ is annual growth rate of sales of the firm (%). Meaning of the independent variables of this model is shown by Table 1. Yet, according to other relevant studies (Montgomery, 1985; Jap and Anderson, 2007; Vannoorenberghe *et al*., 2016; Hoxha, 2013; Waweru *et al*., 2004; Chong and Rundus, 2004; Nickell, 1996; Blundell *et al*., 1999; Svensson, 2005), there are additional factors affecting firms' growth that should be included in the empirical model. Then, the augmented model used in this paper reads like this:

$$\begin{aligned} GROWTH_i = {} & \beta_0 + \beta_1 PROFESSION_i + \beta_2 STRAINING_i + \beta_3 EXPER_i + \\ & + \beta_4 RISKATT_i + \beta_5 AGE_i + \beta_6 AGE_i^2 + \beta_7 GENDER_i + \beta_8 ETHNIC_i + \\ & + \beta_9 SCAPITAL_i + \beta_{10} FSIZE_i + \beta_{11} FAGE_i + \beta_{12} EXPORT_i + \\ & + \beta_{13} PRODUCTION_i + \beta_{14} TRADING_i + \beta_{15} DCOMPETE_i + \beta_{16} BRIBERY_i + \\ & + \beta_{17} GOVERN_i + \varepsilon_i \end{aligned} \quad (2)$$

Montgomery (1985) argues that size (often proxied by total assets) is closely related to firm growth since larger firms are better able to utilize the economy of scale to trigger growth. Thus, coefficient β_{10} of $FSIZE_i$ (firm size) is supposed to be positive. According to the life cycle theory, firms go through several stages of growth. In the first stage (the seeding one), firms wish to invest in

speeding up growth to tackle competition pressure but it seems difficult due to constraints on financing sources and market opportunity. After certain years, firms would have a sufficiently steady customer base and market share as well as build up strong relations with business partners that ensure faster growth (Jap and Anderson, 2007). As a result, coefficient β_{11} of $FAGE_i$ (firm age) should be positive.

In the context of global economic integration, firms not only sell products at home but also abroad to tap new markets so as to raise sales and sustain growth. In fact, export-oriented firms benefit substantially from foreign partners and customers (Vannoorenberghe *et al*., 2016). Stringent criteria set on product quality urge firms to try their best to improve them and accrue better knowledge of market prospect and management skills (i.e., important factors that speedup firm growth). Thus, coefficient β_{12} of $EXPORT_i$ (ratio of exports to total sales) is supposed to be positive. Moreover, since Vietnam has embarked on restructuring the economy with a dear attention to developing trading and services firms, those specialization in business fields such as trade or services may have different growth rates of sales. Therefore, the empirical model used in this paper is augmented with two variables of $PRODUCTION_i$ and $TRADING_i$ to clarify this observation. Coefficient β_{13} and β_{14} of these two variables may be either positive or negative.

It cannot be denied that personal characteristics of top managers play a crucial role to firm growth, but the environment in which firms operate may not be less important, especially for countries transiting from centrally planned economy to market oriented one (Hoxha, 2013). Thus, the empirical model considers relevant aspects of the environment, including $DCOMPETE_i$ (degree of competition facing firms), $BRIBERY_i$ (amount of money that firms pay corrupt officials) and $GOVERN_i$ (degree of satisfaction of firm managers to government services).

Table 1: Meaning of independent variables and expected sign of β_j

Variables	Meaning/Measure	Expected sign of β_j
$PROFESS_i$	Being 1 for managers with bachelor degree or above and 0 otherwise	+
$STRAINING_i$	Number of short trainings attended	+
$EXPER_i$	Number of years working as manager	+
$RISKATT_i$	Being 1 for risk-loving managers and 0 otherwise	+
AGE_i	Age of the manager	+
AGE_i^2	Squares of *AGE*	–
$GENDER_i$	Being 1 for male managers and 0 for female ones	+
$ETHNIC_i$	Being 1 for managers of Kinh ethnic and 0 otherwise (overseas Chinese)	–
$SCAPITAL_i$	Number of relevant social relationships of the manager	+
$SIZE_i$	Logarithm of total assets of the firm (VND billion)	+
$FAGE_i$	Number of years in operation of the firm	+
$EXPORT_i$	Percentage of exports sales in total sales (%)	+
$PRODUCTION_i$	Being 1 for production firms and 0 otherwise	?
$TRADING_i$	Being 1 for trading firms and 0 otherwise	?
$DCOMPETE_i$	Degree of competition facing the firm (high = 1, otherwise = 0)	+
$BRIBERY_i$	Ratio of bribes to total assets	–
$GOVERN_i$	Satisfaction degree on local governmental policies (satisfied = 1, otherwise = 0)	+

In transition economies, firms have to cope with increasingly competitive pressure that may squeeze market shares and adversely drive them out of the market if behaving improperly (Waweru *et al*., 2004). To survive from competition, firms have to satisfy demand of customers by improving product

quality, which creates advantages over rivals, thus boosting growth (Chong and Rundus, 2004). In fact, the studies by Nickell (1996) and Blundell *et al.* (1999) point out a positive impact of competition on firm growth. Thus, coefficient β_{15} of $DCOMPETE_i$ in Model (2) is expected to be positive.

According to researchers, bribes would grease bureaucratic officials to get things done faster, thereby allowing firms to make use of promising opportunities to grow rapidly (Svensson, 2005). However, if bribed, corrupt officials may have incentive to delay work to force firms to bribe more later on. If that is the case, bribes impede firm growth, and coefficient β_{16} of $BRIBERY_i$ is negative.

In Vietnam, it takes firms lengthy time to fulfil bureaucratic procedures. Although the Government has recently simplified procedures to improve the business environment, but the result is not promising as expected. Time consuming procedures deprive firms of incentive to make use of good investment opportunities. As a consequence, firms miss promising opportunities to grow. Proper decisions would help firms quickly go with investment projects that bring about good results. To put it differently, chances for firms to grow largely depends on the economic environments in which they operate. Therefore, the empirical model of this paper should take account of this important determinant to firm growth. Since it is hard to directly measure the quality of economic environments, $GOVERN_i$ (a variable taking a value of 1 if the firm is satisfied of government services and 0 otherwise) is used as its proxy. Coefficient β_{17} of $GOVERN_i$ is thus expected to be positive.

4 ESTIMATION RESULTS

4.1 Overview of the sample

According to the survey on 450 firms, 114 managers (approximately 25.3% of total number of the surveyed firms) have not got bachelor degree. This would mean that more than one fourth of the firms have been managed by those of limited professional knowledge. This backwardness impedes the development of firms due to limited growth and efficiency

Table 2: Professional knowledge of firm managers in the MD

Indicators	Below bachelor		Bachelor and higher		Total (people)
	Number of managers	% of total	Number of managers	% of total	
Total	114	25.3	336	74.7	450
Medium and small	108	30.3	249	69.7	357
Large	6	6.5	87	93.5	93

Source: Own survey (2014)

Table 3: Age of firm managers in the MD

Age (years old)	Number of managers	% of total
Younger than 30	19	4.2
31–45	204	45.4
46–55	172	38.2
Older than 55	55	12.2

Source: Own survey (2014)

Firms of different sizes have a relatively large disparity in professional knowledge of managers. According to Table 2, up to 30.3% of managers of medium and small-sized firms have not got bachelor degree, compared to just 6.5% of large firms. Managers with higher degree are better able to accumulate better knowledge useful for managerial works, especially as competition turns tough. Moreover, 50 out of 450 firm managers (11.2%) have not attended any short trainings at all. 308 managers (68.4%) have attended one to 15 short trainings, and 92 managers have attended more than 15 short trainings, accounting for approximately 20.4% of total number of the surveyed managers.

There are few managers below 30 years old since, according to traditional norms, it is too young for those entrepreneurs to start up own business or take up high ranking positions because of lack of experience and trust of business partners. Managers older than 55 years old are also rare due to bad health and/or retirement incentive (Table 3).

The number of years at work of firm managers is quite similar to the distribution of age of firm managers (Table 3). The smallest number of years at work of the managers is of 6 for state-owned firms, much higher than that of the remaining firms (just 1-2 years on average), since state-owned firm managers have to qualify for standards on experience if wished to be appointed to top managerial positions. Less experience seems to be a disadvantage of firms since empirical studies (such as Bruederl *et al.*, 1992; Boden and Nucci, 2000) reveals that it is experience of managers that will

help trigger firm growth. Indeed, experience enables managers to better figure out good business opportunities, tackle challenges and improve ability to analyze and controll market risks, which helps make good business strategies so as to utilize all scarce resources for growth (Watson *et al*., 2003).

The above analysis reveals the disparity in professional knowledge, short-training participation, age as well as experience of firm managers in the MD (i.e., components of managerial human resource quality). This partially explains the growth rate gap among firms of different sizes. Indeed, according to our survey the growth rate of medium and small-sized firms in 2013 was 17.2% per year, much lower than that of 26.5% for large firms (Nguyen Pham Thanh Nam and Le Khuong Ninh, 2017).

4.2 Estimation results

OLS estimation method is utilized to estimate Model 2 to reveal the impact of managerial human resource quality on growth of firms in the MD. The data for hypotheses on multicollinearity and heteroskedasticity are checked carefully. All coefficients between independent variables (r_{ij}) are smaller than 0,8 $(0{,}002 \le |r_{ij}| \le 0{,}564)$ and variance inflation factor is smaller than 10 $(VIF = 1{,}34 < 10)$, implying that there is no multicollinearity effect. In addition, Robust estimation option of Stata is used to correct the problem of heteroskedasticity. The estimation results are shown in Table 4, which reveals that the model is statistically significant and points out determinants of sales growth of the surveyed firms.

Firstly, $PROFESS_i$ has a positive coefficient $(\beta_1 = 4.298)$ at a significance level of 1%, meaning that professional knowledge of top managers do have a positive impact on firm growth. Managers with good professional knowlegde are better capable of perceiving and solving complicated problems of business practices (Cooper *et al*., 1994). Especially, in the transition economy like Vietnam's with many changes in institutions, professional knowledge allows managers to wisely approach policies, mechanisms and rules that must be obliged anyway (Storper and Salais, 1997). Differently stating, professional knowledge is the key for managers to figure out and exploit profitable business opportunities that spur firm growth.

$STRAINING_i$ has a positive coefficient $(\beta_2 = 0.379)$ at a significance level of 5%, confirming the role of short trainings on updated issues in providing managers with skills that enable them to better manage firms. In fact, short trainings helps managers acquire in-depth understandings of the field of specialization. This allows managers to better access and exploit opportunities and formulate business strategies. Moreover, attending short trainings also means to open chances for managers to get in touch with a wide range of people such as customers, suppliers and especially governmental officials (Phan Anh Tu and Nguyen Hong Diem, 2016). In other words, managerial skills develop while attending short trainings, thanks to the information provided as well as business networks created via that, thereby enhancing sales growth of the firms.

Table 4: Estimation results

Variables	β		*P value*
C	–20.936		
PROFESS	4.298	***	0.007
STRAINING	0.379	**	0.016
EXPER	0.350	**	0.018
RISKATT	2.764		0.251
AGE	1.220	**	0.061
AGE^2	–0.013	*	0.083
GENDER	0.362		0.826
ETHNIC	–4.876	*	0.079
SCAPITAL	2.181		0.135
SIZE	0.393		0.360
FAGE	0.047		0.627
EXPORT	0.064	*	0.066
PRODUCTION	0.315		0.991
TRADING	–0.020		0.156
DCOMPETE	4.765	**	0.013
BRIBERY	–11.150		0.799
GOVERN	–1.896		0.864
Number of observations (N)	450	F (17, 432)	5,24
Prob > F	0,000	R^2	0,204
Adjusted R^2	0,173	Root MSE	14,499

*Note: ***: significance level of 1%; **: significance level of 5%; *: significance level of 10%*

Source: Calcuted from own surveyed data

The coefficient of $EXPER_i$ is positive $(\beta_3 = 0.350)$ at a significance level of 5% since experience helps managers accrue proper knowledge and skills in managing staff and production, in addition to mobilizing valuable market and financial resources to make firms growing. The coefficient of AGE_i is positive $(\beta_5 = 1.220)$ at a significant level of 10%, and the coefficient of AGE_i^2 is negative $(\beta_6 = 0.013)$

at a significance level of 10%, similar to findings of other studies. This result asserts an inverted U-shaped relation between manager age and firm growth as claimed by Bates (1990) and Storey (1994). This means that firms managed by young managers may have limited growth opportunities since they are new market players, thus being less able to create a good ground for firms to take off (Storey, 1994). On the other hand, Besnik *et al*. (2008) argues that nearly retired managers often have poor ambition to make firms grow fast due to mental and health constraints. Moreover, they are not able to quickly respond to market changes and challenges.

Table 4 also shows the impact of ethnic features on firm growth. Indeed, since $ETHNIC_i$ has a negative coeffient (β_8=–4.876) at a significance level of 10%, implying that firms managed by overseas Chinese entrepreneurs have had a higher growth rate than those by Vietnamese counterparts. This result confirms the success of overseas Chinese entrepreneurs throughout the world (Kee, 1994). Portes and Zhou (1996) reveals the tendency of oversea Chinese entrepreneurs to use labours and seek customers from their own communities, thereby establishing networks so as to mitigate production costs and boosting growth. In the MD, the Hoa ethnic group not only exploits the relationships with the Chinese community in the country but also with those in other ones such as Singapore, Hong Kong and China. They rely on the kinship, cultural and linguistic similarities to build up close business networks (Chau Thi Hai, 2001). The mental, managerial and financial values developed this way sustain a strong growth for firms (Salvato and Melin, 2008).

The coefficient of $EXPORT_i$ is positive (β_{12}=0.064) at a significance level of 10%, divulging that foreign markets are important engines propeling firms to grow. In the era of globalization, Vietnamese firms not only sell products in domestic markets but also approach foreign markets so as to raise sales and sustain growth. Export-oriented firms benefit substantially from foreign partners and customers (Vanoorenberghe *et al*., 2016). Moreover, stringent criteria set on product quality urge firms to try their best to improve it and accrue better knowledge of market prospect and managerial skills. All this propels sales growth of the firms.

Finally, the coefficient of $DCOMPETE_i$ is positive (β_{13}=4.765), implying that firms operating in the higher competition market have had a faster growth rate. The reason is that, because of the competition pressure, firms have to improve product quality to expand market share (Waweru *et al*., 2004). This brings about advantages over rivals, therefore boosting firm growth (Chong and Rundus, 2004).

5 CONCLUSIONS AND RECOMMENDATIONS

The empirical study using a primary data set of 450 firms has provided evidence on the relationship between the managerial human resource quality and firm growth. The estimation results show that internal components of the human resource quality (professional knowledge, short traing participation, experience, age and ethnic) do have effects on the growth of firms, in addition to some external factors such as export tendency and field of specialization.

Better professional knowledge enables managers to better manage firms and make use of good market opportunities, among others. Participation in short trainings will enrich knowledge for managers so as to create chances for firms to grow. Experience is also a precious source to help managers avoid mistakes, which enables firms to grow faster. In addition, age also has impact on firm growth. Being too young and too old have intrinsic weaknesses that hold back the possibility to grow of firms. Finally, overseas Chinese managers do better Vietnamese than counterparts in terms of boosting the growth of firms, thanks to enthic networks that are a specific feature the Chinese. It is also founded that risks facing brings about faster growth for firms.

Based on the analysis is of the status quo of the surveyed fims and the findings of the empirical study, this paper comes up with some recommendations that help promote growth of firms in the MD as follows.

Firstly, in-service or distance learning training programs provided by prestigious universities should be targeted at those managers. In addition, short (or part-time) trainings should be designed in a way that is better suited the demand of managers who do not have sufficient time to participate in full-time trainings. Moreover, short trainings should also be aimed at changing the way of thinking of managers. The small- and medium-sized firm association and Vietnam Chamber of Commerce and Industry can also take part in providing managers with knowldge via conferences or documents carefully prepared by highly experienced teachers.

Secondly, experience and age of managers should be considered while recruiting and hiring managers because those factors are key to firms' growth. Moreover, firms in the MD should establish networks to help each others and avoid unfair competition that may bring down all businesses. Networks also enable firms to share professional knowledge

that are crucial in terms of bringing about opportunities for firms to grow fast.

Thirdly, Vietnamese government has tried hard to integrate the country into the international community via a lot of commercial agreements. This creates good chances for firms to tap foreign markets with huge potentials to grow, so firms should pay more attention to this aspect. Participation in international supply chain means that firms must have good strategies and decides with market portion to take part in. The Government may consider improving policies to create a better business environment for firm managers to develop professional skills and to cut off red tapes that have deprived firms of resources, energy and incentive. The Government may also provide firms with information about free trade agreements since it is an important part of knowledge and managerial human resource quality.

Finally, it is urgent to establish of venture capital companies to support start-up activities that have proved successful in many countries, apart from creating a helpful entrepreneurial ecosystem that paves the way for firms to make use of all their potential, especially human sources.

REFERENCES

Akdogu, E. and Mackey, P., 2008. Investment and competition. Journal of Financial and Quantitative Analysis. 43(2): 299-330.

Andrade, G. and Stafford, E., 2004. Investigating the economic role of mergers. Journal of Corporate Finance. 10(1): 1-36.

Bates, T., 1990. Entrepreneur human capital inputs and small business longevity. Review of Economics and Statistics. 72(4): 551-559.

Becker, G.S., 1993. Human capital: A theorical and empirical analysis with special reference to education, Third Edition. University of Chicago Press. University of Chicago, 412 pages.

Berk, J., 1999. A simple approach for deciding when to invest. American Economic Review. 89(5): 1319-1326.

Besnik, A.K., Justina, S.P. and Enver, K., 2008. The determinants of entrepreneurship and small business growth in Kosova: Evidence from new and established firms. International Journal of Entrepreneurship and Innovation Management. 8(3): 320-342.

Blundell, R., Griffith, R. and Van Reenen, J., 1999. Market share, market value and innovation in a panel of British manufacturing firms. Review of Economic Studies. 66(3): 529-554.

Boden, R. and Nucci, A., 2000. On the survival prospects of men's and women's new business ventures. Journal of Business Venturing. 15(4): 347-362.

Bourdieu, P., 1986. The forms of capital. *In*: Richardson, J. (Ed.), Handbook of Theory and Research for the Sociology of Education. Greenwood Press. New York, pp. 241-258.

Bruederl, J., Preisendoerfer, P. and Ziegler, R., 1992. Survival chances of newly founded business organizations. American Sociological Review. 57(2): 227-242.

Castanias R.P. and Helfat, C.E., 2001. The managerial rents model: Theory and empirical Analysis. Journal of Management. 27(6): 661-678

Chandler, G.N. and Jansen, S., 1992. The founder's self-assessed competence and venture performance. Journal of Business Venturing. 7(3): 223-36.

Chau Thi Hai, 2001. Regional links in the context of globalization. Southeast Asian Studies, 4. (in Vietnamese)

Chong, V.K. and Rundus, M.J., 2004. Total quality management, market competition and organizational performance. British Accounting Review. 36: 155-172.

Coleman, J.S., 1988. Social capital in the creation of human capital. American Journal of Sociology. 94: 95-120.

Cooper, A., Gimeno-Gascon, F.J. and Woo, C., 1994. Initial human and financial capital as predictors of new venture performance. Journal of Business Venturing. 9(5): 371-96.

Driver, C. and Whelan, B., 2001. The effect of business risk on manufacturing investment sectoral survey evidence from Ireland. Journal of Economic Behavior & Organization. 44: 403-412.

Fasci, M.A. and Valdez, J., 1998. A performance contrast of male- and female-owned small firms. Accounting Practices. 36(3): 1-7.

Florin, J., Lubatkin, M. and Schulze, W., 2003. A social capital model of high growth ventures. Academy of Management Journal. 46(3): 374-384.

Fukuyama, F., 2002. Social capital and development: The coming agenda. SAIS Review. 22(1): 23-38.

General Statistical Office of Vietnam, 2014. Statistical Yearbook. Statistical Publisher.

Gimeno, J., Folta, T., Cooper, A. and Woo, C., 1997. Survival of the fittest? Entrepreneurial human capital and the persistence of underperforming firms. Administrative Science Quarterly. 42(2): 750-783.

Hambrick, D.C. and Mason, P.A., 1984. Upper Echelons: The organization as a reflection of its top managers. Academy of Management Review. 9(2): 193-206.

Honig, B., 2001. Human capital and structural upheaval: A study of manufacturing firms in the West Bank. Journal of Business Venturing. 16: 575-594.

Hoxha, D., 2013. Understanding small business growth and development in the context of an extreme, transitional and marginalized environment. Doctoral thesis, Universitat Autonoma de Barcelona.

Jap, S.D. and Anderson, E., 2007. Testing a life-cycle theory of cooperative interorganizational relationship: Movement across stages and performance. Management Science. 53(2): 260-275.

Kangasharju, A. and Pekkala, S., 2002. The role of education and self-employment success in Finland. Growth and Change. 33(2): 216-237.

Kee, P., 1994. Unravelling the global Chinese business networks. BIPR Bulletin, 11: 9-12.

Le Khuong Ninh, Le Tan Nghiem and Huynh Huu Tho, 2016. Risk attitude and corporate investment under output market uncertainty: Evidence from the Mekong River Delta, Vietnam. Journal of Economics and Development. 18(2): 59-70.

Lin, N., 2001. Social capital: A theory of social structure and action. Cambridge: Cambridge University Press.

Longstreth, M., Stafford, K. and Mauldin, T., 1987. Self-employed women and their families: Time use and socioeconomic characteristics. Journal of Small Business Management. 25(3): 30-37.

Maki, T., Yotsuya, K. and Yagi, T., 2005. Economic growth and the riskiness of investment in firm-specific skills. European Economic Review. 49(4): 1033-1049.

Masters, R. and Meier, R., 1988. Sex differences and risk-taking propensity of entrepreneurs. Journal of Small Business Management. 26(1): 31-35.

Mintzberg, H. and Waters, W.J., 1982. Tracking strategy in an entrepreneurial firm. Academy of Management Journal. 25(3): 465-499.

Montgomery, C.A., 1985. Product-market diversification and market power. Academy of Management Journal. 28(4): 789-798.

Nickell, S.J., 1996. Competition and coporate performance. Journal of Political Economy. 104(4): 724-746.

Nguyen Pham Thanh Nam and Le Khuong Ninh, 2017. Managerial human resource quality of firms in the Mekong Delta, Vietnam. Can Tho University Journal of Science. 07: 38-48.

Pena, I., 2004. Business incubation centers and new firm growth in the Basque Country. Small Business Economics. 22(3/4): 223-36.

Pfeffer, J., 1994. Competitive advantage through people. Harvard Business School Press, Boston.

Putnam, R.D., 2000. Bowling alone: The collapse and revival of American community. Simon & Schuster, New York, 544 pages.

Phan Anh Tu and Nguyen Hong Diem, 2016. Entrepreneurial characteristics and private firm performance in the Mekong River Delta. Can Tho University Journal of Science. 03: 160-169.

Portes, A. and Zhou, M., 1996. Self-employment and the earnings of immigrants. American Sociological Review. 61(2): 219-230.

Salvato, G. and Melin, L., 2008. Creating value across generations in family controlled businesses: The role of family social capital. Family Business Review. 21(3): 259-276.

Storey, D.J., 1994. Understanding the small business sector, London: Thomson Learning, 355 pages.

Storper, M. and Salais, R., 1997. Worlds of production, The action frameworks of economy. Havard University Express, Cambridge, MA., 370 pages.

Svendsen, G.L.H., 2006. Studying social capital in Situ: A qualitative approach. Theory and Society. 35(1): 39-70.

Svensson, J., 2005. Eight questions about corruption. Journal of Economic Perspectives 19(3), 19-42.

Ucbasaran, D., Westhead, P. and Wright, M., 2003. Human capital based determinants of opportunity identification. Frontiers of Entrepreneurship Research. Babson College, Wellesley, MA. 430-444.

Unger, JM., Rauch, A., Frese, M. and Rosenbusch, N., 2011. Human capital and entrepreneurial success: A meta-analytical review. Journal of Business Venturing. 26(3): 341-358.

Vanoorenberghe, G., Wang, Z. and Yu, Z., 2016. Volatility and diversification of exports: Firm-level theory and evidence. European Economic Review. 89(C): 216-247.

Watson, W., Stewart, W. and BarNir, A., 2003. The effects of human capital, organizational demography and perceptions of firm success on evaluation of partner performance. Journal of Business Venturing. 18: 145-164.

Waweru N.M., Hoque Z. and Uliana, E., 2004. Management accounting change in South Africa: Case studies from retail services. Accounting, Auditing and Accountability Journal. 17(5): 675-704.

West III, G.P., Noel, T.W., 2009. The impact of knowledge resources on new venture performance. Journal of Small Business Management. 47(1): 1-22.

Woodhouse, A., 2006. Social capital and economic development in regional Australia: A case study. Journal of Rural Studies. 22(1): 83.