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THE MODERATING EFFECTS OF THE MANAGER'S CHARACTERISTICS AND FINANCIAL OBSTACLES ON INTERNATIONALIZATION AND FIRM PERFORMANCE IN POLAND

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ABSTRACT

This study analyzes the moderating effects of the managers' characteristics and financial access barriers on the relationship between the degree of internationalization and firm performance of 131 manufacturing –and- services firms in Poland. Using the regression estimation method with panel data collected by the World Bank, we find that (1) the relationship between the degree of internationalization and firm performance has an inverted U-shape; (2) the relationship between the degree of internationalization and firm performance is positively improved when managers' gender is Female, in contrast, negatively decreases when firms have difficulty in accessing finance and firm managers who have more years of experience. This research's implication is the basis for policymakers and boards of directors to design appropriate corporate internationalization strategies.

INTRODUCTION

Internationalization is considered one of the important resources for the growth and improvement of enterprises' business performance (Lu & Beamish, 2001); at the same time, helping businesses have the opportunity to gain knowledge and experience from international markets. The increased costs and potential risks in the internationalization process can have adverse effects on firm business performance.

Prior empirical studies over the past time on the relationship between internationalization and business performance have shown disagreement about this relationship's nature. However, the scholars have pointed out 5 common connections, depending on the context and degree of internationalization of the business being studied, including positive, negative, U-shaped linear relationships, an inverted U-shape, and an S-shape.

Although there are many empirical studies on the relationship between internationalization and a firm's business performance, the research on the moderating impact on the relationship between the level of internationalization and firm performance is few and even scarce since 2006 (Hsu et al., 2013). In particular, whether or not and how individual managers' characteristics and financial access barriers affect the relationship between internationalization and business performance is still under-explored. Managers' characteristics are important because they can directly influence to the strategic decision-making process and eventually to firm performance (Cavusgil et al., 2012). Also, accessing financial resources as a strategic asset can help firms achieve the cutting-edge competitive position and market shares and in turn enrich firm performance. While many pure empirical-and-theoretical studies have been well-established and mushroomed in the developed countries and the research subjects are multinational companies, few studies focus on firms operating in the fastest-growing country like Poland.

Therefore, this study investigates the moderating effects of the managers' characteristics and financial access barriers on the degree of internationalization and firm performance. Our research will contribute to the literature review contemporary of internationalization by threefold: (1) provide additional empirical evidence for the theory of internationalization; (2) highlight with a vital role of personal traits of the managers of the firms and financial access barriers; (3) provide a particular research context, i.e., manufacturing and services firms in the fastest-growing economies.

LITERATURE REVIEW

Internationalization is the process by which businesses expand their business to foreign markets. Internationalization is an effective growth strategy for businesses when the domestic market is limited; internationalization helps companies grow their economic scope and scale, and at the same time, helps companies reduce input costs (Dunning, 1988). According to researchers, internationalization is also understood as the process of firms increasing their participation in foreign markets and making strategic decisions to improve international sales (George et al., 2005). When businesses participate in overseas markets, there will be many benefits, such as increasing knowledge

about foreign markets, enhancing competitiveness through gaining practical experience, and exploiting local strategic assets such as financial resources, labor resources (Ghoshal & Bartlett, 1990).

Internationalization is also explained in the direction of considering entering the international market and so-called Uppsala model. The Uppsala model, also known as the "internationalization process" theory, was developed from Uppsala University by Johanson & Vahlne (1977). This model explains that the internationalization of a business can be divided into four stages of development: (1) no regular exports, (2) exports through independent representatives, (3) sales branches in foreign markets, and (4) production in international markets. Over the past four decades (from 1977 to 2017), Johanson & Vahlne have repeatedly developed the Uppsala model. The 2017 Uppsala model is their newest model, and the management ability is considered a significant bottleneck in achieving growth (Vahlne & Johanson, 2017).

The degree of internationalization (DOI) and firm performance (P)

Many empirical studies have provided evidence about the benefits and costs that internationalization brings, but there is still no clear consensus on the relationship between internationalization and performance (Bauweraerts, 2020). Many studies have shown that there is a positive linear relationship between internationalization and firm performance (Bausch & Krist, 2007). Some studies show that expansion of operations overseas operations will incur many costs. For example, Geringe et al. (2000), Gomes and Ramaswamy (1999) point that an increase in internationalization level leads to a decrease in firm performance.

According to Chiao et al. (2006), the DOI - P relationship is an inverse curve. This means that in the first phase of international expansion, the global strategy's benefits will outweigh the costs, so the P of the business will be remarkably enhanced. These benefits will be significant and essential for firms, especially in the fast-growing economy when they operate in a limited and competitive domestic market and widen openness policy. Specifically, in phase 1, companies often start to expand their operations in countries in the region close to and have many similarities with their home markets. This helps the companies to minimize the costs associated with adapting to the new institutional and cultural environment (Peng, 2002). However, in the second phase, as companies increase their penetration into foreign markets, foreign responsibilities or so-called 'liability of foreignness', or 'liability of outsidership' (costs related to being outside a robust business network of relationships and contacts in a new market) will arise as the geographical and cultural gap between origin countries and host countries causes the rise in costs such as transaction costs, managerial costs as well as inadequate learning and lack of experience (Hsu & Pereira, 2008; Johanson & Vahlne, 2009).

The benefits of internationalization tend to decrease after a certain point of time because internationalization costs increase faster than benefits, leading to a decrease in profits. The two-stage relationship is proven by Ruigrok and

Wagner (2003), Capar & Kotabe (2003), Hitt et al. (1997), Chiao & Yang (2011). In line with this argument, we suggest the hypothesis as follows.

Hypothesis H_1:

There is an inverted U-shaped relationship between the degree of internationalization and firm performance.

Managerial experience.

Management experience is measured by the number of years that the manager is working in the current position. Many studies have shown that leadership experience (Cavusgil et al., 2012), gender (Ho et al., 2015) affect the firm's internationalization strategy and thereby affecting firm growth (Hambrick & Mason, 1984). As the number of years of leadership experience increases, the working process's knowledge also increases; This creates confidence and motivation for business expansion to foreign markets. Leadership experience is also seen as a business resource, which can create a competitive advantage and bring benefits to the business. Hambrick and Mason (1984) show that the leader's experience can positively affect the growth and improvement of firm P. In the process of internationalization, thanks to personal experience, the leader will recognize the risks and uncertainties of international markets, removing barriers of cultural gaps in different markets, and relieving business anxiety in international markets.

A manager with knowledge accumulated increasingly after years of working in a leadership position creates valuable experiences in dealing with international markets' complexities and uncertainties while overcoming the psychic distance associated with doing business in global markets (Johanson & Vahlne, 2009). These experiences values motivate them to develop strategies and expand their business to new international markets (Tihanyi et al., 2000). At the same time, managers' experience also directly affects firms' business results in global markets (Athanassiou & Nigh, 2000). Along with the expertise, knowledge of foreign cultures and the selection of business methods of managers will help businesses eliminate barriers of cultural differences through innovation and innovation product policies, brand promotion to suit the culture of each country.

Hypothesis H_2:

The DOI - P relationship of an enterprise will be strengthened when the manager has many years of experience.

Managers' gender.

The empirical studies have shown that male managers bring more benefits to businesses than women (Fairlie & Robb, 2009). Firms headed by women do not have the majority of the financial resources led by men (Williams, 2013). Since internationalization is a cost-effective strategy to maintain international relations and strengthen its position in the market, a business with a male

manager is more suitable to engage in the process. Next, male managers face fewer discriminatory barriers and barriers to entry into international markets than Female managers (Brush et al., 2004). Simultaneously, ideological stereotypes against women also create doubts from new clients about women's performance and their ability to deliver quality products to international markets on time (Fernando, 2005). All of these make such a significant obstacle to the internationalization process if the manager is a female.

It is a fact that women make up a very low proportion of Poland's senior management team (Strykowska, 1995). This is because women have to be reconciled in two roles: being a mother, wife, and a job. Numerous studies show that Poland's women leaders are more likely to encounter obstacles in doing business in domestic and international markets than male managers. Specifically, women have to balance work and family, so they have less time to improve their professional skills and face social prejudices (Sepashvili, 2019). Female leaders lack management training compared to men in Poland, so they do not have much business theory and practice experience. This impedes international business expansion.

Besides, women-led Polish businesses are often small and have financial constraints, international customers and suppliers compared to firms with a male manager (Lituchy & Reavley, 2004). Therefore, enterprises with male managers will have more advantages in the process of internationalization of the firms.

Hypothesis H_3:

The relationship between DOI - P of the business will be strengthened when the manager is a male

Financial Access.

Jonhanson & Vahln (1977) argue that competitive advantage and resources are the driving force to internationalize enterprises. Resources-Based View (RBV) of Barney (1991) also affirms that corporate resources are essential in creating and maintaining a firm's competitive advantage. This internal resource allows firms to adopt an internationalization strategy (Zahra et al., 2003). Many studies have used RBV to explain firms' internationalization behavior, but they rarely consider financial resources (access to finance). Access to finance can be seen as a vital resource necessary for businesses to establish and expand international business. Access to sufficient financial resources will bring many benefits to businesses, especially small businesses. Conversely, if companies do not have or have little access to finance, it will be challenging to improve business performance and growth.

Obstructions to access to finance can hinder and even prevent a firm's export performance. Therefore, obstacles in accessing finance can reduce the business performance of firms in domestic and international markets. Studies in Europe have shown that financial constraints are negatively correlated with firm exports (Wagner, 2019).

Hypothesis H_4:

The firm's DOI - P relationship will decline when the firm encounters difficulties in accessing finance.

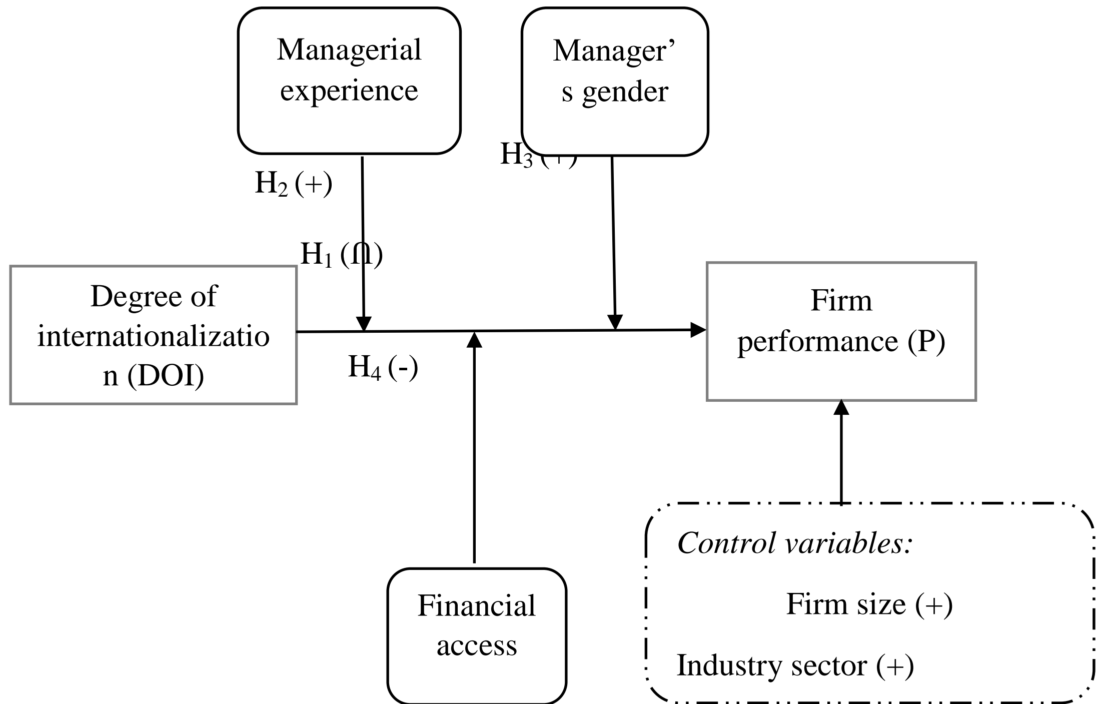

Figure 1. Conceptual framework

METHODOLOGY

The study uses a panel of enterprise data on Poland surveyed by the European Bank for Reconstruction and Development (EBRD), the European Investment Bank, and the World Bank Group investigating business climate and economic performance of 2,590 enterprises. The Enterprise Survey's objective is to understand what firms experience in the private sector and perceive the environment in which they operate. Through 2 stages of both by phone and face-to-face interviews with firms in the manufacturing and services sectors, the survey can evaluate business environment obstacles for firm growth and compare the cross-country business environment in the world.

The whole population is the non-agricultural economy, and the sample for Poland was selected using stratified random sampling. Three levels of stratification were used in this country: industry (23 manufacturing industries, 2 services industries -retail and IT-, and one residual sector), establishment size (small (5 to 19 employees), medium (20 to 99 employees), and large (more than 99 employees)), and region (Central, Southern, Eastern, North-Western, South-Western, and Northern).

This study's table data set are Polish companies operating in the manufacturing and service sectors in three survey periods in 2008/2009, February 2013 to

November 2013, and December 2018 to December 2019. A complete dataset used for analysis has 393 observations, comprising 131 firms.

Estimation methods

First, this research conducted a fixed-effects model (FEM) and Random-effects model (REM) to predict the main effects and moderating effects. Hausman test was performed to choose between REM and FEM models. Accordingly, with Prob> chi2 = 0.8023 and greater than P-value = 0.05 (accept null hypothesis), the REM model is more suitable than the FEM model (See Table 4). Besides, the phenomenon of multicollinearity is not a concern in this study (Hair et al., 2006) because the correlation coefficients in the Pearson bivariate correlation matrix of all variables are less than 0.8; and the VIF index is below the "threshold" value 10.0. Then, the Lagrange test is used to check heteroskedasticity of the REM model, with Prob> Chi2 = 0.4612 greater than p-value = 0.05, so the null-hypothesis is accepted (homogeneity). As a result, the model does not exist the phenomenon of heteroskedasticity. However, to reduce the error and increase the reliability and the validity of the research model, this study used the FGLS method to estimate the moderator's effect on the relationship between the independent and dependent variables (See Table 5).

Measurement Dependent variable - Return on sales (ROS):

There are many ways to measure firm performance. In particular, performance measurement based on accounting-related indicators is the most common such as ROA (Geringer et al., 2000), ROE (Thomas & Eden, 2004), ROS (Contractor et al., 2003). The article uses the ROS index because the number is not affected by inflation or accounting principles, reflecting the company's performance more accurately.

Degree of internationalization (DOI):

Many studies use a variety of methods to measure Internationalization. In particular, the FSTS - Overseas revenue over total revenue - is the most commonly used (Geringer et al., 2000). Ruigrok and Wagner (2003) also pointed out that this is a measure of the most core aspect of a company's Internationalization- the financial aspect. The formula for calculating FSTS:

$$FSTS = \frac{Overseas\ revenue}{Total\ revenue}$$

Managerial experience:

this variable is measured by the number of years of management experience (Johanson & Vahlne, 1990).

Manager's gender (GENDER):

is a dummy variable, getting a value equal to 1 if the manager is Female and 0 if Male (Bathula, 2008).

Financial access barriers:

This can be measured by the manager of the business answering the question on the Likert-5 level of "At what level, access to finance is a hindrance to operations of the business?" (0: No obstacles → 4: Extremely obstacles) (Fatoki, 2011).

Firm size:

this variable is meausured by the number of employees can be measured by a dummy variable with 0 is SMEs (>=5 to <= 99 employees), 1 is large (>= 100 employees) (Cerrato & Piva, 2012).

Industry sector:

this variable is coded as a Dummy (1: Manufacturing, 0: service) (Contractor et al., 2007).

Table 1: shows an overview of dependent and independent variables as follows:

Table 1. Variables description

Construct	**Measurement**	**Expectation**
Dependent Variable		
Firm performance (P)	Returns on sales (Xiao et al., 2013)	
Independent variable		
Degree of internationalization	Overseas revenue over total revenue (DOI) *(Xiao et al., 2013)*	(+)
Degree of internationalization squared	Overseas revenue over total revenue squared (DOI^2) *(Xiao et al., 2013)*	(-)
Moderators		
Managerial experience	measured by the number of years of management experience *(Johanson & Vahlne, 1990)*	(+)

Manager's Gender	*Manager gender (GENDER):* is a dummy variable, getting value equal to 1 if the manager is Female and 0 if Male *(Bathula, 2008)*	(+)
Financial access barriers	Measured by the manager of the business answering the question on the Likert-5 level of "At what level, access to finance is a hindrance to operations of the business?" (0: No obstacles → 4: Very severe obstacles) *(Fatoki, 2011)*	(-)
Control		
Firm size	The number of employees can be measured by a dummy variable with 0 is SMEs (>=5 to <= 99 employees), 1 is large (>= 100 employees) *(Cerrato & Piva, 2012)*	(+)
Industry sector	Dummy (1: Manufacturing, 0: service) *(Contractor et al., 2007)*	(+)

RESULT AND DISCUSSIONS

Descriptive statistics and correlation matrix

Table 2 shows the descriptive statistics of the variables in the model. The mean value of net returns on sales (ROS) is 62.602%, maximum value accounting for 100%, and minimum value accounting for -1467.71%. The mean value of the degree of internationalization is 0.105%, with a maximum value of 100% and a minimum value of 0%. While the managerial experience has an average value of around 21 years, most managers are male, with an average value of 0.247. The data also show a low average rate of financial access barriers for firms, only accounting for 1.158.

Table 3 displays the Pearson bivariate correlation matrix. As a result, there are no multicollinearity phenomena because all VIF < 10 and all coefficients are below 0.8.

Table 2. Descriptive statistics

No	Variables	Obs.	Mean	S.D	Min	Max
1	Return on Sales (ROS) (%)	393	62.602	113.004	-1467.71	100
2	Degree of internationalization	393	0,105	0.237	0	1

	(DOI) (%)					
3	Managerial experience	393	20.817	9.816	0	57
4	Manager's gender	393	0.247	0.432	0	1
5	Financial access barriers	393	1.158	1.229	0	4
6	Firm size	393	1.613	0.771	0	3
7	Industry sector	393	0.449	0.500	0	1

Source: Worldbank Enterprise Survey (2020

Table 3 Descriptive statistics and bivariate correlation (n=393)

Variables	**Mean**	**S.D**	**VIF**	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**
1. ROS	62.602	113.004		1				
2.DOI	0.105	0.237	19.13	-0.093^{*}	1			
3.Managerial experience	20.817	9.816	5.19	0.009^{ns}	-0.012^{ns}	1		
4.Manager's gender	0.247	0.432	1.45	0.040^{ns}	-0.032^{ns}	-0.035^{ns}	1	
5.Financial access barriers	1.158	1.229	1.21	-0.094^{*}	0.056^{ns}	-0.070^{ns}	-0.011^{ns}	1
6.Firm size	1.613	0.771	1.15	-0.010^{ns}	0.257^{***}	0.020^{ns}	-0.103^{*}	0.091^{*}
7.Industry sector	0.449	0.500	1.24	-0.051^{ns}	0.3635^{***}	0.050^{ns}	0.010^{ns}	0.029^{n}

Note: (***) p < 0,001; (**) p < 0,01; (*) p < 0,05; (ns) p > 0,10 (non-significant); value in parentheses are standard errors

RESULTS AND DISCUSSION

Table 4 and Table 5 respectively show the FEM and the REM model's regression results as well as the FGLS model. Model 3 in Table 5 includes all variables in the proposed model with the value of Prob > Chi2 = 0,000, showing the goodness-of-fit of the model with actual data at 99% confidence.

According to model 3 Table 5, the relationship between the degree of internationalization and the firm's business performance is a non-linear relationship with an inverted U-shape. The coefficient DOI value is positive (28.771), and DOI^2 is negative (-11.998), so hypothesis H_1 is supported. Internationalization through export activities can help businesses benefit from economic scale and scope, improve competitiveness and sales revenue. However, in the next stages, when expanding into many different markets, businesses will encounter difficulties related to foreign liabilities (liabilities of

foreignness), the liability of outsidership, and challenges when becoming new members in international markets such as seeking human resources, capital, and customers (liabilities of newness). At the same time, businesses face administrative and transaction costs. The costs to adapt to cultures and institutions in different countries increase with regional diversification and geography (Hitt et al., 1997). Next, assuming the elimination of regulatory, control, and interaction variables, leaving only the DOI and DOI^2 variables left, the regression equation between the degree of internationalization (DOI) and business performance (ROS)) of the business will be:

$$ROS = 77.472 + 28.771*DOI – 11.998*DOI^2 \quad (1)$$

To show the effect of DOI on the ROS, a separate derivative of equation (1) will be implemented as follows:

$$\partial ROS/ \partial DOI = 28.771 – 2*11.998DOI = 0 \quad (2)$$

$$DOI = -28.771/-(2*11.998)$$

⇨ $DOI= 1.20$

⇨

Equation (2) indicates the optimal degree for internationalization is 1.20%. This means the DOI-ROS relationship is positive at an early stage when DOI increases. When DOI continuously increases and reaches 1.2%, ROS value will reach maximum. After this maximum point, ROS decreases if DOI increases.

Table 4 REM and FEM models

Variables	DV: ROS	
	REM	**FEM**
Constant	79.313*** (13.874)	68.834*** (15.923)
Control		
Firm size	0.866ns (5.983)	4.638ns (8.369)
Industry sector	-4.403ns (6.213)	-7.490ns (8.898)
Main effects		
DOI	64.081** (24.450)	79.070** (29.874)
DOI^2	-32.843* (19.507)	-33.617ns (25.080)
Managerial experience	5.523ns (6.128)	5.914ns (7.806)
Manager's gender	1.535ns (6.101)	3.237ns (7.569)
Financial access barriers	-2.438ns (6.160)	-0.377ns (7.753)

Moderator		
DOI x Managerial experience	-0.666* (0.278)	-0.716* (0.316)
DOI x Manager's gender	8.868ns (6.739)	3.307ns (7.909)
DOI x Financial access barriers	-26.868** (8.818)	-38.845** (11.201)
Observations	393	393
	Wald chi2 (10) = 26.69	F(10.252) = 2.53
	Prob> chi2 = 0.0029	Prob>F = 0.0065
	R^2 within = 0.0847	R^2 within = 0.0911

Note: (***) p < 0.001, (**) p < 0.01, (*) p < 0.05, (ns) p > 0.1 (non-significant), values in parentheses are standard errors

Table 5 The OLS regression results with the FGLS

Variables	**DV: ROS**		
	Model 1	**Model 2**	**Model 3**
Hằng số	73.538*** (1.128)	78.177*** (1.832)	77.472*** (1.636)
Control			
Firm size	3.862** (1.142)	3.129** (1.172)	1.741ns (1.060)
Industry sector	-4.943*** (1.079)	-3.918*** (1.073)	-5.766*** (0.981)
Main effects			
DOI	0.126ns (1.640)	14. 339*** (3.597)	28.771*** (5.629)
DOI^2			-11.998** (3.578)
Managerial experience	0.090ns (0.988)	2.601* (1.164)	2.593* (1.118)
Manager's gender	1.243ns (0.968)	-0.651ns (1.095)	0.374ns (1.033)
Financial access barriers	-4.090** (1.238)	-0.330ns (1.241)	-1.569ns (1.121)
Moderator			
DOI x		-0.230** (0.088)	-0.281** (0.084)

Managerial experience			
DOI x Manager's gender		4.095* (1.799)	4.211* (1.628)
DOI x Financial access barriers		-8.341* (3.258)	-9.980** (3.100)
Obs	393	393	393
Wald Chi2	43.25***	57.63***	119.03***

Note: (***) $p < 0.001$, (**) $p < 0.01$, (*) $p < 0.05$, (^{ns}) $p > 0.1$ (non-significant), values in parentheses are standard errors

In Table 5 model 3, the estimation results show a negative effect of managerial experience on the relationship between DOI and firm business performance (β = 4.211; p <0.05). This result is statistically significant but contrary to expectation for the sign. This means that an increasing number of years of managerial experience will likely impede internationalization strategy and reduce business performance (See the *downward-sloping* line in Fig.1 as experience = 57 yrs. versus experience=2 yrs.). We argue that while a manager's experience is seen as a contributor to successful business internationalization, perhaps this type of experience may not be precisely suitable for the circumstances. For example, due to international markets' complexity, the difference in national culture, market diversity and market knowledge, organizational complexity and human resource management as scale grows, more experience managers may be reluctant to innovate the traditional production and management process.

Moreover, as managers have more years of experience, their age also increases. More age means risk aversion, reduces incentives to explore new markets, and product diversification and innovation in international markets. There are inherently very strict requirements, so managers with less experience and poor information processing ability (Herrmann & Datta, 2002). Accessing adequate and outdated information on information technology can limit their understanding of foreign cultures and consumer behaviour and undermine internationalization benefits. Besides, the manager's experience at the current company does not fully reflect whether this type of experience indicates a broad understanding of the global market.

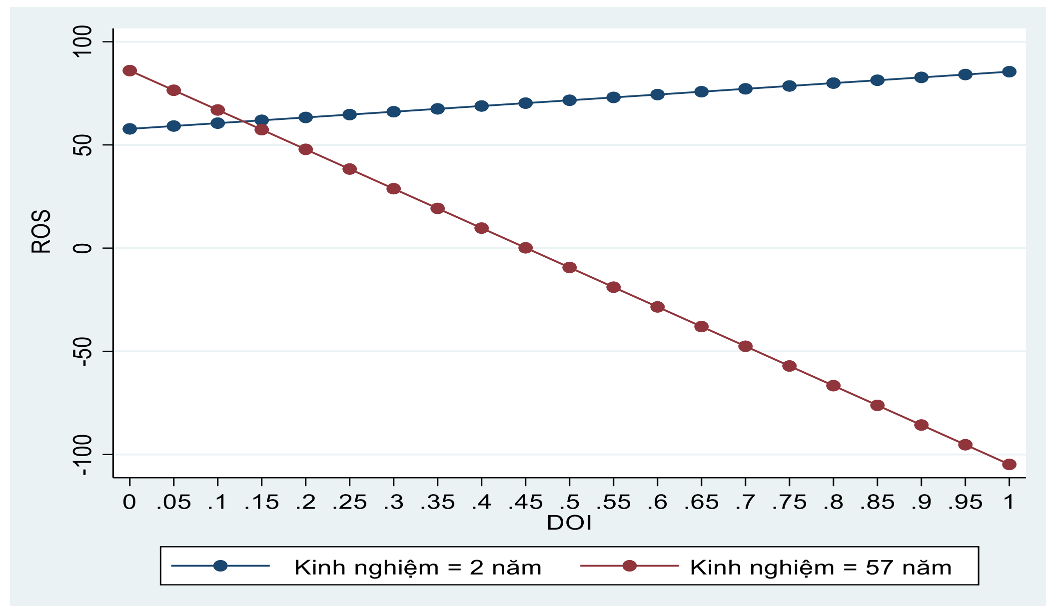

Figure 1. Moderating effects of managerial experience on DOI & P

Note: X axis=DOI; Y axis = ROS; Kinh nghiệm = Experience

Similarly, it is also interesting that the female manager positively affects the relationship between DOI and business performance ($\beta = 0.281$; $p < 0.01$). Hypothesis H3, although not as expected for the sign, is statistically significant. When an enterprise has a female manager, the strategy of internationalization is more effective than a male manager (See the upward-sloping line in Fig.2 given a female manager). We believe that internationalization strategy always comes with unpredictable risks and requires an individual to have high concentration, resilience, and good stamina with complex business environments. Thus, firms with female leaders are probably more successful than firms with male leaders when it comes to internationalization. Women are more likely to focus more on limiting and reducing business risks. Also, female leaders are more risk-averse, have more resilience and tolerance to risks than men (Maden, 2015). This shows that female leaders tend to make more prudent decisions than male leaders when faced with business risks and contribute to improving firms' international business operations efficiency.

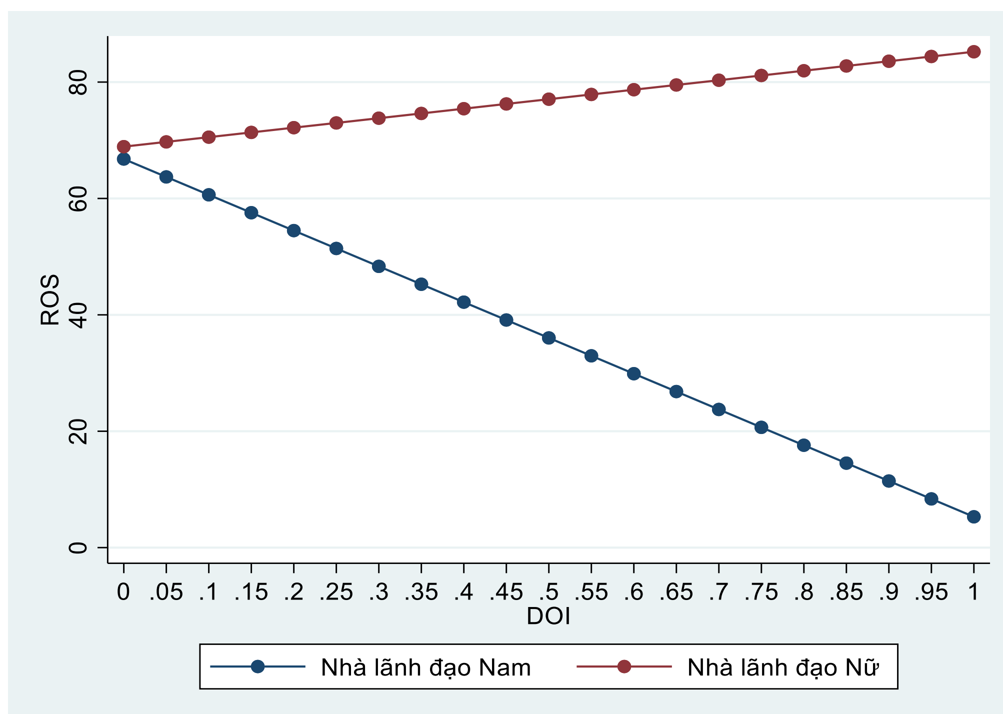

Figure 2. Moderating effects of manager's gender on DOI & ROS

Note: X axis=DOI; Y axis = ROS; Nhà lãnh đạo Nam = male; Nhà lãnh đạo Nữ = Female

Finally, obstacles in accessing finance negatively impact and inhibit the positive relationship between DOI and business performance (β = -9.980; p <0.01). This makes the hypothesis H4 supported, which means that the relationship between DOI and the firm's business performance will decline when enterprises face many obstacles in accessing finance (See the *downward-sloping* line in Fig.3 given *obstacle in accessing finance (Trở ngại tài chính) = 3*). Access to finance facilitates market entry, business growth, and risk reduction (Beck & Asli, 2008) and promotes innovation and improves business performance. When firms encounter obstacles in access to finance, they will lose their competitive advantages, limit investment activities, research new products, hinder scaling up, causing difficulties in paying the costs incurred, and maintain business relationships with customers and suppliers in the business network domestic and international markets.

Also, compared to enterprises operating in the manufacturing sector, firms in the service sector have better business performance (β = -5.766; p <0.001), while firm size has a positive impact on business efficiency but not statistically significant (β = 1.741; p> 0.10).

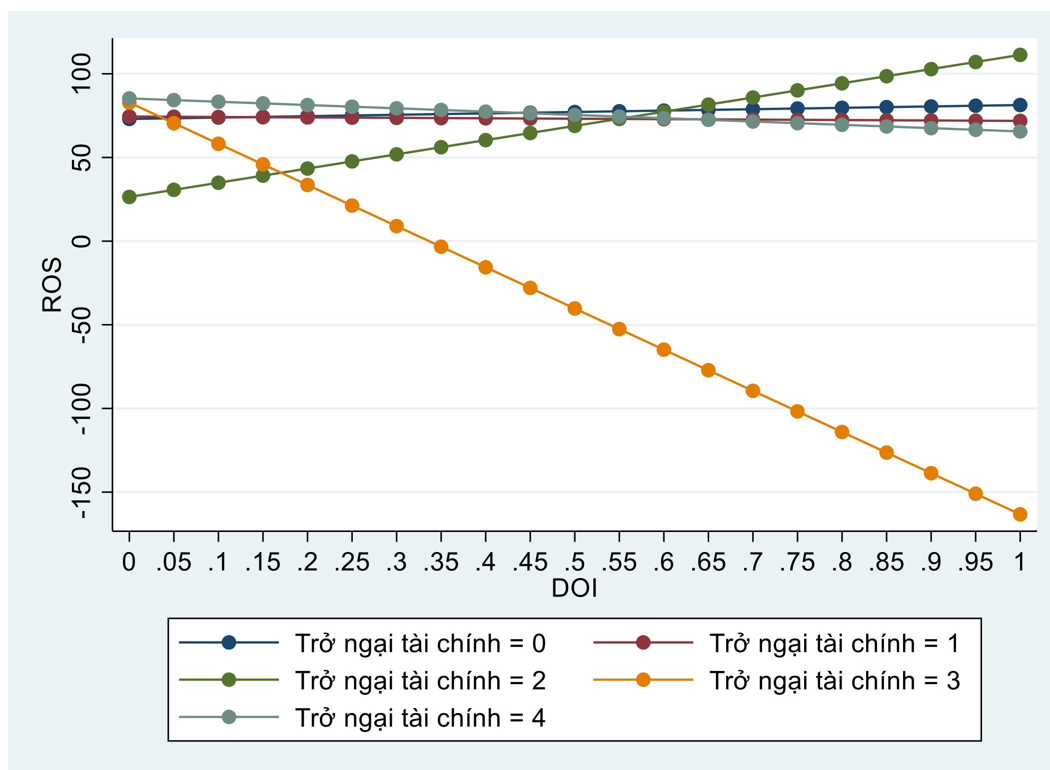

Figure 3. Moderating effects of financial access barriers on DOI & ROS

Note: obstacle in accessing finance (Trở ngại tài chính) = 0= No obstacle, 1: Minor obstacle, 2: Moderate obstacle, 3: Major obstacle, 4: very severe obstacle

CONCLUSION

Using a regression analysis method with the Feasible General Least Squares estimation (FGLS), this study finds empirical evidence that an inverse U-relationship exists between DOI and firm performance operating a business in Poland's rapidly growing and developing economy. Interestingly, contrary to hypothetical expectations, we find evidence that the managerial experience and the male manager had a deterrent effect and diminished DOI's positive effects on performance. Meanwhile, obstacles in access to finance hurt the positive relationship between DOI and business performance.

This study provides several critical governance implications for corporate boards and policymakers in transitional, integrated, and rapidly growing economies such as Poland. First, the business board can recruit female managers and, importantly, recruit staff with international experience and global market knowledge. Besides, business leaders also need to develop strategies to penetrate international markets suitable for each stage of business development. In the early stages, businesses' benefits from internationalization are often higher than their costs. Still, these benefits will tend to decrease gradually due to the increasing complexity of the global market. Furthermore, finding ways to access financial resources with local or international loans effectively will improve business performance in international markets.

There are still some limitations to this study. First, the study only looked at the manager's characteristics instead of the board of directors' characteristics. This is important because a group of people often takes perhaps multinationals' strategic decision. Deciding how to strategize how to internationalize business should then be explored in recent studies. Using an index to measure business performance (ROS) and DOI is likely not to generalize its results. Therefore, future research needs to expand to measure other business performance indicators such as ROE, ROA, or internationalization by the number of branches operating in different countries, thereby increasing the estimated results' generalization. Besides, business diversification in various sectors is also a variable that may need to be considered for inclusion in future research models. Finally, the group of factors has a mediating or moderating role that needs to be studied and expanded in the future, such as culture, geography and institution

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