



## Full length article

## Capital investment, internationalization, and firm performance: Evidence from Southeast Asian countries



Chaiporn Vithessonthi

Faculty of Economics, Khon Kaen University, 123 Mithraphap Rd., Muang, Khon Kaen 40002, Thailand

### ARTICLE INFO

#### Article history:

Received 6 March 2016

Received in revised form 28 April 2016

Accepted 29 April 2016

Available online 14 May 2016

#### JEL classification:

F21

F23

G31

G32

#### Keywords:

Corporate investment

Firm performance

Foreign assets

Foreign sales

Internationalization

### ABSTRACT

This study asks whether firms that invest more have higher degrees of internationalization and whether firms with higher degrees of internationalization perform better than those with lower degrees of internationalization. Using a large panel sample that consists of non-financial firms in five countries in the Southeast Asia region during the period 1990–2014, I show that capital investment negatively affects the level of internationalization but has a positive effect on foreign sales growth. The negative effect of capital investment on internationalization levels is weaker for firms with higher degrees of internationalization. The level of internationalization is not associated with firm performance, measured as return on assets; however, there is some evidence for the positive relation between the level of internationalization and firm performance, measured as the stock return.

© 2016 Elsevier B.V. All rights reserved.

## 1. Introduction

In this paper, I present new empirical evidence regarding (1) the relationship between capital investment and the degree of internationalization and (2) the relationship between the degree of internationalization and firm performance. I collect data on publicly listed firms in the Southeast Asian region in order to test whether firms with larger capital investment have higher internationalization levels and whether firms with higher internationalization levels have better performance. I observe that firms with foreign sales account for about 58% of my final sample (1,270 firms out of 2,172 firms). I show that firms with larger capital investment tend to have lower degrees of internationalization and that firms with higher degrees of internationalization do not necessarily have better firm performance than those with lower degrees of internationalization.

The originality of this paper arises from the fact that I use a large panel sample of publicly listed non-financial firms in five Southeast Asian countries over the period 1990–2014 to examine the impact of capital investment on internationalization levels and the impact of internationalization levels on firm performance. Essentially, this study is a multi-country study while most of the prior related studies (see e.g., Bae et al., 2008; Hsu et al., 2013; Paul and Gupta, 2014; Ruigrok et al., 2007; Singla and George, 2013) focus on the analysis of the relationship between internationalization and performance of firms in a single country.<sup>1</sup> Focusing on firms in emerging markets countries allows us to better understand how internationalization

E-mail address: [chaiporn@kku.ac.th](mailto:chaiporn@kku.ac.th)

<sup>1</sup> An example of recent studies using a cross-country sample is de Jong and van Houten (2014).

strategy plays a role in improving firm performance in a period of globalization, especially during the period in which firms from developing countries have expanded their business internationally. The findings complement prior studies that focus on the effect of internationalization on performance of firms in developed countries.

Internationalization is a complex process and has several dimensions, thereby leading to a difficulty of accurately measuring a firm's internationalization level. In this paper, I define the firm's internationalization as the ratio of foreign sales to total sales (FSTS). This measure has been widely used in the literature (see e.g., [Bae et al., 2008](#); [Singla and George, 2013](#)). I also test whether the results are robust to using the ratio of foreign assets to total assets (FATA) as an alternative measure of internationalization. Consistent with the literature, I measure firm performance as returns on assets (ROA) and the stock return (RETURN).

I expect capital investment to have a positive effect on internationalization levels due to the economies-of-scale argument. However, I find that capital investment negatively affects the degree of internationalization. This effect is weaker for firms with higher degrees of internationalization. There is also evidence for a non-linear effect of capital investment on the degree of internationalization. My results show that firms tend to have higher degrees of internationalization when a country's currency depreciates against the US dollar. As expected, GDP growth has a positive effect on the firm's internationalization levels. This set of results is consistent with the literature. For example, using data at the aggregate level, some studies such as that of [Froot and Stein \(1991\)](#) and of [Méon and Sekkat \(2012\)](#) show that macroeconomic factors (e.g., GDP growth, exchange rates, openness to trade) play an important role in determining foreign direct investment.

Consistent with the literature (see e.g., [Oesterle et al., 2013](#)), the results show that firm size is positively associated with the degree of internationalization. My findings indicate that firms with higher market-to-book (MBV) ratios or higher sales growth rates have lower degrees of internationalization. While profitability (ROA) and gross profit margin (GPM) do not affect the level of internationalization, operating risk (RISK) has a positive effect on the level of internationalization. Prior studies such as [Gaur et al. \(2014\)](#) show that firm size, R&D expenditure, export intensity and export experience affect foreign direct investment.

Does a firm's internationalization improve its performance? This question has been empirically investigated over past decades (see e.g., [Bausch and Krist, 2007](#); [de Jong and van Houten, 2014](#); [Hsu and Boggs, 2003](#); [Singla and George, 2013](#)); however, prior empirical studies often show mixed results regarding the relationship between the degree of internationalization and firm performance. While I expect firms with higher degrees of internationalization to have better firm performance, I find that, based on a full sample that includes firm-year observations with and without foreign sales, the degree of internationalization is not associated with firm performance, measured as ROA. However, I find some evidence for the positive effect of internationalization on the stock return (RETURN). Overall, my findings differ from those of prior studies. For instance, [Hsu et al. \(2013\)](#) and [de Jong and van Houten \(2014\)](#) show that the degree of internationalization is positively related to firm performance, while [Singla and George \(2013\)](#) and [Xiao et al. \(2013\)](#) report that the relationship is negative. One plausible explanation for the documented insignificant effect of internationalization on firm performance in this current study is that I include a large set of country-, industry-, and firm-level control variables in my specifications.

I organize the remainder of the article as follows. Section 2 describes and presents data, variables, and methodology. Section 3 analyzes the impact of capital investment on the degree of internationalization. Section 4 presents empirical results of the effect of capital investment on foreign sales growth. Section 5 analyzes the impact of internationalization on firm performance. I conclude the paper in Section 6.

## 2. Related literature

Following decades of the globalization process, almost all firms operating in an open economy are directly and/or indirectly exposed to the influence of globalization. Given these circumstances, it seems natural to ask whether a firm's internationalization improves its performance. Prior empirical studies regarding the relationship between the degree of internationalization and firm performance (see e.g., [Bausch and Krist, 2007](#); [de Jong and van Houten, 2014](#); [Hsu and Boggs, 2003](#); [Ruigrok et al., 2007](#); [Singla and George, 2013](#)) often show mixed results. For example, on the one hand, [Hsu et al. \(2013\)](#) and [de Jong and van Houten \(2014\)](#) indicate that the degree of internationalization, earliness of internationalization, and scope of internationalization have a positive effect on firm performance. On the other hand, [Singla and George \(2013\)](#) and [Xiao et al. \(2013\)](#) show that a firm's internationalization is negatively associated with its performance.

Another related question, which has not often been asked, is whether a firm with larger capital investment has a higher degree of internationalization. Firms with larger capital investment are arguably more inclined to focus on expanding their businesses in international markets. It has been well documented that international markets are important for multinational firms, especially those located in export-oriented countries (see e.g., [Chetty and Blankenburg Holm, 2000](#); [Jansson and Sandberg, 2008](#)). Importantly, relative to firms in large advanced countries, those in developing and emerging markets countries (or those in small advanced countries) benefit relatively more from foreign markets due to their relatively small domestic markets. In addition, entering into foreign markets might improve the firm's stock of knowledge and capability that helps subsequently expand its business ([Fabling and Sanderson, 2013](#)). When the firm engages in a large investment project, it should attempt to increase its revenue generated from international markets. As a consequence, the impact of capital investment on the degree of internationalization is expected to be positive.

If the short-term effect of investment on performance is negative and substantial, the positive impact of internationalization on performance, if any, might not be observed in the short run. Thus, it is possible that the mixed results reported in

the literature might be due to the fact that the influence of capital investment has not been controlled for when examining the impact of internationalization on firm performance. For example, prior studies, such as [de Jong and van Houten \(2014\)](#), [Singla and George \(2013\)](#), and [Xiao et al. \(2013\)](#), do not control for the influence of capital investment on firm performance.

Generally speaking, this article is closely related to prior studies in the finance literature that examine the determinants and effects of corporate investment (see e.g., [Bolton et al., 2011](#); [D'Mello and Miranda, 2010](#); [Julio and Yook, 2012](#); [Moyen, 2004](#)). For example, [D'Mello and Miranda \(2010\)](#) show the negative effect of long-term debt on overinvestments of firms while [Julio and Yook \(2012\)](#) provide evidence for the relationship between the timing of national elections and variation in corporate investment.

This article is also in line with the international economics literature that focuses on the examination of factors influencing international trade flows and foreign direct investment (see e.g., [Fabling and Sanderson, 2013](#); [Russ, 2007](#); [Tomiura, 2007](#)). For instance, [Fabling and Sanderson \(2013\)](#) investigate input and productivity dynamics of manufacturing firms during periods prior to and following export market entry and show the productivity gap between exporting and non-exporting firms.

In addition, this article complements the international business literature that argues for the importance of internationalization for differences in firm performance (see e.g., [Chang and Rhee, 2011](#); [Ganotakis and Love, 2012](#); [Kotabe et al., 2002](#)). [Kotabe et al. \(2002\)](#) show that a firm's R&D and market capabilities moderate the effect of internationalization on firm performance. [Chang and Rhee \(2011\)](#) argue that firms get into foreign markets quickly to avoid the risk of being a late mover as the level of global competition intensifies and show that rapid foreign direct investment (FDI) expansions have a positive effect on performance of firms in industries whose globalization pressures are high.

Based on the above discussion, I hypothesize that capital investment is positively associated with internationalization levels and that firms with higher internationalization levels have better firm performance.

### 3. Data and descriptive statistics

#### 3.1. Sample

Given that I am interested in examining the links between capital investment, internationalization, and firm performance for firms in emerging markets countries, I collect data on publicly listed firms in the Southeast Asian region. My initial sample consists of all publicly listed non-financial firms<sup>2</sup> in five Southeast Asian countries (i.e., Indonesia, Malaysia, the Philippines, Singapore, and Thailand) over a 25-year period from 1990 to 2014. I obtain all annual financial data from Thompson Reuters Datastream. After excluding observations with missing data on key variables such as total assets (TA), capital expenditure (CAPEX), property, plant, and equipment (PPE), the ratio of market value of equity to book value of equity (MBV), and total debt (TD), I have an unbalanced panel sample consisting of 22,253 firm-year observations. When I exclude observations with missing data on the ratio of foreign sales to total sales (FSTS), the sample is reduced to 14,272 firm-year observations.

#### 3.2. Dependent variables

Consistent with prior studies such as that of [Capar and Kotabe \(2003\)](#) and [Hsu et al. \(2013\)](#), I use the ratio of foreign sales to total sales (FSTS) to measure the level of internationalization of a firm.<sup>3</sup> More specifically, I use MEANFSTS, which is the five-year rolling average ratio of FSTS, to proxy for the internationalization level. In the robustness test section, I use MEANFATA, which is the five-year rolling average ratio of the ratio of foreign assets to total assets (FATA), to measure the firm's internationalization level, given that prior studies such as [Gomes and Ramaswamy \(1999\)](#) use FATA to proxy for the firm's internationalization.

To examine the impact of the degree of internationalization on firm performance, I use return on assets (ROA), measured as the ratio of earnings before interest and taxes (EBIT) to total assets, to proxy for firm performance. As a robustness check, I use the stock return (RETURN), measured as the first difference in the natural logarithm of a firm's year-end stock price, to measure firm performance.

#### 3.3. Independent variable of interest

I use CAPEXTA, which is the ratio of capital expenditure to one-period lagged total assets, to measure the firm's capital investment when I examine the impact of capital investment on the degree of internationalization. This measure has been used by several scholars such as [Custódio and Metzger \(2014\)](#).

<sup>2</sup> Banks, financial firms, and insurance companies are excluded from the sample.

<sup>3</sup> This ratio is also known as export intensity (see e.g., [Gaur et al., 2014](#)).

### 3.4. Control variables

To control for macro-level conditions that might affect the firm's internationalization levels, I use three country-level variables: (1) a country's GDP growth ( $\Delta\text{GDP}$ ), (2) a country's investment rate ( $\text{INVESTMENT}$ ), which is measured as the country's investment as % of GDP, and (3) a country's exchange rate movement ( $\text{FXRETURN}$ ), which is measured as the first difference in the natural logarithm of exchange rates (the domestic currency per one USD). During periods of economic booms, firms are more likely to expand their businesses overseas. Thus, the country's GDP growth rate is expected to have a positive effect on the firm's internationalization levels. If the firm's internationalization strategy is encouraged by the country's investment rate, the effect of  $\text{INVESTMENT}$  on the firm's internationalization levels will be positive. The depreciation of the country's currency is expected to have a positive effect on the firm's internationalization levels, measured as  $\text{FSTS}$ . However, when the country's currency weakens, investing in foreign assets becomes more expensive. Therefore, we expect the depreciation of the currency to have a negative effect on the firm's internationalization, measured as  $\text{FATA}$ .

To control for industry-specific effects on the degree of internationalization, I use an industry's stock return ( $\text{INDRETURN}$ ), which is computed as the first difference in the natural logarithm of the industry price index associated with the firm. In some model specifications, I alternatively use the industry dummy variable ( $\text{IND.DUMMY}$ ) to control for any unobservable time-invariant industry effects.

I include a large set of firm-specific characteristics as control variables. Firm size ( $\text{SIZE}$ ) is defined as the natural logarithm of real total assets (in million US dollars). I deflate nominal values of the variables (e.g., net sales, capital expenditure, and total assets) by the US GDP deflation at the constant 2010 price. Leverage ( $\text{LEV}$ ) is measured as the ratio of total debt to total assets. The tangible asset ratio ( $\text{PPETA}$ ) is measured as the ratio of property, plant, and equipment to total assets. The market-to-book ratio ( $\text{MBV}$ ), which is measured as the market value of common equity to the book value of common equity, is a proxy for the firm's investment opportunities. The gross profit margin ( $\text{GPM}$ ), which is measured as the ratio of gross profits to total sales, captures the extent to which the firm is a cost-efficient producer as well as the extent to which the firm competes in high profit product markets. Return on assets ( $\text{ROA}$ ) is measured as the ratio of EBIT to total assets. As the risk of assets-in-place may affect the firm's investing decisions, operating risk ( $\text{RISK}$ ), which is computed as the five-year rolling standard deviation of  $\text{ROA}$ , measures a dispersion of the firm's profitability and thus captures the degree of the firm's prior risk appetite. Sales growth ( $\text{SALESGROWTH}$ ), which is measured as the first difference in the natural logarithm of total sales, is a proxy for the firm's growth associated with assets-in-place (or past investment).

### 3.5. Empirical strategy

#### 3.5.1. The impact of capital investment on internationalization

The central prediction is that firms with large investment outlays should place more emphasis on international expansion. This prediction suggests that there is a positive relationship between capital investment and the degree of internationalization. To test whether the variation in the firm's internationalization can be explained by its capital investment, I estimate the following panel OLS regression:

$$\text{INTER}_{i,j,t} = \alpha + \beta_1 \text{CAPEXTA}_{i,j,t-1} + \delta \mathbf{Z}_{i,j,t-1} + \eta_i + \nu_t + \varepsilon_{i,j,t}, \quad (1)$$

where  $i$ ,  $j$ , and  $t$ , respectively, index firm, country, and time.  $\text{INTER}_{i,j,t}$  is a proxy for a firm's internationalization levels. I use the five-year rolling average of the ratio of foreign sales to total sales to measure the firm's internationalization level.  $\text{CAPEXTA}_{i,j,t}$  is the ratio of capital expenditure to one-period lagged total assets for firm  $i$  in country  $j$  at time  $t$ .  $\mathbf{Z}$  is a vector of firm-, industry-, and country-level control variables;  $\eta_i$  is the firm-fixed effect;  $\nu_t$  is the year-fixed effect; and  $\varepsilon$  is an error term. I include the firm-fixed effects in the regression to control for unobservable firm-specific and time-invariant heterogeneity. I add the year-fixed effects to account for unobserved time-variant common shocks to all firms in the sample. Furthermore, I alternatively add industry-fixed effects and/or country-fixed effects in the regressions.

#### 3.5.2. The impact of capital investment on the foreign sales growth rate

I next examine whether capital investment affects the foreign sales growth rate. The main idea here is to clearly identify whether the firm's foreign sales is a function of capital investment. Therefore, I estimate the following panel OLS regression:

$$\text{FSG}_{i,j,t} = \alpha + \beta_1 \text{CAPEXTA}_{i,j,t-1} + \delta \mathbf{Z}_{i,j,t-1} + \eta_i + \nu_t + \varepsilon_{i,j,t}, \quad (2)$$

where  $i$ ,  $j$ , and  $t$  index firm, country, and time, respectively.  $\text{FSG}_{i,j,t}$  is foreign sales growth, which is computed as the first difference in the natural logarithm of foreign sales. All other variables are defined as before. If firms with larger capital investment are inclined to focus more on their export activities, the coefficient on  $\text{CAPEXTA}$  in regression (2) should be positive, indicating that capital investment is positively associated with foreign sales growth.

#### 3.5.3. The impact of internationalization on firm performance

To test whether firms with higher degrees of internationalization perform better than firms with lower degrees of internationalization, I estimate a series of the following baseline panel OLS regression:

$$\text{PERFORMANCE}_{i,j,t} = \alpha + \beta_1 \text{INTER}_{i,j,t-1} + \delta \mathbf{Z}_{i,j,t-1} + \eta_i + \nu_t + \varepsilon_{i,j,t}, \quad (3)$$

**Table 1**

Summary statistics for the final sample.

	Mean	Median	Min	Max	S.D.	N
FSTS	0.25	0.05	0.00	1.00	0.32	14,272
CAPEXTA	5.09	2.79	0.00	50.97	6.79	14,272
SIZE	5.03	4.86	1.11	9.16	1.59	14,272
LEV	0.25	0.22	0.00	1.13	0.22	14,272
PPETA	0.37	0.35	0.00	0.94	0.23	14,272
MBV	1.49	0.89	−1.56	16.62	2.18	14,272
GPM	0.23	0.20	−0.47	0.83	0.19	14,272
ROA	0.06	0.06	−0.52	0.41	0.11	14,272
RISK	0.06	0.04	0.01	0.30	0.06	14,272
SALESGROWTH	0.04	0.04	−1.34	1.55	0.34	14,272
INDRETURN	0.07	0.09	−1.15	1.06	0.37	14,272

This table reports summary statistics for key variables for the sample of 14,272 firm-year observations over the period 1994–2014. FSTS is the ratio of foreign sales to total sales. CAPEXTA is equal to the ratio of capital expenditure to one-period lagged total assets. SIZE is the natural logarithm of real total assets in million USD. LEV is the ratio of total debt to total assets. PPETA is the ratio of net property, plant and equipment to total assets. MBV is the market-to-book ratio. Gross profit margin (GPM) is the ratio of gross profit to total sales. ROA is the ratio of EBIT to total assets. RISK is the five-year moving standard deviation of ROA. The sales growth rate (SALESGROWTH) is computed as the first difference in the natural logarithm of real total sales. The industry stock return (INDRETURN) is the first difference in the natural logarithm of the industry price index associated with a firm.

where  $PERFORMANCE_{i,j,t}$  is a proxy for firm performance for firm  $i$  in industry  $j$  at time  $t$ . All other variables are defined as before.

### 3.6. Descriptive statistics

Table 1 provides a variety of summary statistics related to firm characteristics for the final sample of 14,272 firm-year observations. I use this sample to test the primary hypothesis that capital investment is associated with the degree of internationalization. To mitigate the impact of extreme values and potential data coding errors, I winsorize all variables at the 1st and 99th percentiles. The mean (median) value of FSTS is 0.25 (0.05), whereas the mean (median) value of CAPEXTA is 0.05 (0.03). The ratio of total debt to total assets, LEV, has a mean (median) of 0.25 (0.22), meaning that the average firm should be able to increase its leverage to finance additional capital investment.

I divide the sample into two subsamples based on the industry-level capital investment using the cross-sectional median of CAPEXTA at the industry level. HCAPEX is a large capital investment firm dummy variable, which takes a value of one for observations whose CAPEXTA is larger than the cross-sectional median of CAPEXTA, and zero otherwise. The mean (median) value of CAPEXTA for the large capital investment firm sample (i.e., HCAPEX = 1) is 0.09 (0.07), whereas the mean value (median) of CAPEXTA for the small capital investment firm sample (i.e., HCAPEX = 0) is 0.01 (0.01). The difference in CAPEXTA between the two subsamples is statistically significant at the 1% level based on the  $t$ -test. However, the difference in the mean of FSTS between the two groups is statistically insignificant.

Compared to smaller firms, larger firms might have better resources, knowledge, and capabilities and thus are able to expand their businesses overseas. To check whether this assertion is true, I divide the sample into two subsamples based on firm size using the cross-sectional median of total assets at the industry level. HTA is a large firm size dummy variable, which takes a value of one for observations when the book value of total assets is larger than the cross-sectional median of the book value of total assets at the country level, and zero otherwise. The mean value of FSTS for the small firm sample (i.e., HTA = 0) is 0.23, whereas the mean value of FSTS for the large firm sample (i.e., HTA = 1) is 0.26. The difference in the mean of FSTS between the two subsamples is statistically significant, implying that larger firms tend to have higher internationalization levels. The difference in the mean of CAPEXTA between the two subsamples is also statistically significant.

Table 2 reports correlation coefficients of key variables used in the main regressions for the final sample of 14,272 observations over the period 1994–2014. The degree of internationalization (FSTS) is negatively correlated with leverage (LEV), fixed assets (PPETA), the market-to-book ratio (MBV), sales growth rates (SALESGROWTH), the gross profit margin (GPM), and the return on asset (ROA) but is positively correlated with firm size (SIZE) and operating risk (RISK). As the correlation coefficients on explanatory variables are generally below 0.30, the issue of multicollinearity is not of great concern.

## 4. Empirical results: the impact of capital investment on internationalization

### 4.1. Main results

In this section, I examine whether capital investment has a significant effect on internationalization levels. Table 3 presents the panel OLS regression results of the impact of capital investment on internationalization levels. The dependent variable

**Table 2**

Correlations between key variables.

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1. FSTS	1.000										
2. CAPEXTA	0.006	1.000									
3. SIZE	0.112***	0.098***	1.000								
4. LEV	−0.048***	0.026***	0.175***	1.000							
5. PPETA	−0.128***	0.285***	0.129***	0.203***	1.000						
6. MBV	−0.045***	0.119***	0.063***	−0.042***	−0.025***	1.000					
7. GPM	−0.081***	0.049***	0.170***	−0.118***	0.049***	0.075***	1.000				
8. ROA	−0.082***	0.147***	0.184***	−0.229***	−0.042***	0.168***	0.375***	1.000			
9. RISK	0.058***	−0.041***	−0.283***	0.105***	−0.091***	0.079***	−0.143***	−0.292***	1.000		
10. SALESGROWTH	−0.021**	0.138***	0.098***	−0.012	−0.006	0.080***	0.135***	0.249***	−0.053***	1.000	
11. INDRETURN	−0.028***	−0.026***	−0.018**	−0.034***	0.007	0.097***	0.009	0.040***	0.007	−0.026***	1.000

This table reports correlation coefficients between key variables for a sample of 14,272 firm-year observations covering the period 1994–2014. FSTS is the ratio of foreign sales to total sales (in %). CAPEXTA is equal to the ratio of capital expenditure to one-period lagged total assets. SIZE is the natural logarithm of real total assets in million USD. LEV is the ratio of total debt to total assets. PPETA is the ratio of net property, plant and equipment to total assets. MBV is the market-to-book ratio. Gross profit margin (GPM) is the ratio of gross profit to total sales. ROA is the ratio of EBIT to total assets. RISK is the five-year moving standard deviation of ROA. The sales growth rate (SALESGROWTH) is computed as the first difference in the natural logarithm of real total sales. The industry stock return (INDRETURN) is the first difference in the natural logarithm of the industry price index associated with the firm. \*, \*\*, and \*\*\* represent statistical significance at the 10%, 5%, and 1% levels, respectively.

**Table 3**

The effect of capital investment on internationalization.

	(1)	(2)	(3)	(4)	(5)
CAPEXTA <sub>t-1</sub>		−0.051** (0.025)	−0.115** (0.055)	0.056 (0.087)	−0.257*** (0.031)
Squared CAPEXTA <sub>t-1</sub>			0.185 (0.137)		
CAPEXTA <sub>t-1</sub> × SIZE <sub>t-1</sub>				−0.021 (0.017)	
CAPEXTA <sub>t-1</sub> × HFSTS <sub>t-1</sub>					0.503*** (0.042)
ΔGDP <sub>t-1</sub>	0.002*** (0.001)	0.002*** (0.001)	0.002*** (0.001)	0.002*** (0.001)	0.002*** (0.001)
INVESTMENT <sub>t-1</sub>	−0.001 (0.001)	−0.001 (0.001)	0.000 (0.001)	−0.001 (0.001)	0.000 (0.001)
FXRETURN <sub>t-1</sub>	0.043** (0.017)	0.047*** (0.017)	0.047*** (0.017)	0.046*** (0.017)	0.055*** (0.017)
INDRETURN <sub>t-1</sub>	0.003 (0.005)	0.003 (0.005)	0.003 (0.005)	0.003 (0.005)	0.003 (0.004)
SIZE <sub>t-1</sub>	0.023*** (0.005)	0.023*** (0.005)	0.024*** (0.005)	0.024*** (0.005)	0.022*** (0.005)
LEV <sub>t-1</sub>	0.009 (0.014)	0.009 (0.014)	0.008 (0.014)	0.008 (0.014)	0.007 (0.014)
PPETA <sub>t-1</sub>	0.011 (0.017)	0.017 (0.017)	0.019 (0.017)	0.018 (0.017)	0.014 (0.017)
MBV <sub>t-1</sub>	−0.004*** (0.001)	−0.004*** (0.001)	−0.004*** (0.001)	−0.004*** (0.001)	−0.004*** (0.001)
GPM <sub>t-1</sub>	−0.021 (0.015)	−0.020 (0.015)	−0.021 (0.015)	−0.020 (0.015)	−0.018 (0.015)
ROA <sub>t-1</sub>	0.010 (0.017)	0.011 (0.017)	0.013 (0.017)	0.010 (0.017)	0.005 (0.016)
RISK <sub>t-1</sub>	0.097** (0.048)	0.092* (0.048)	0.092* (0.048)	0.091* (0.049)	0.089* (0.048)
SALESGROWTH <sub>t-1</sub>	−0.014*** (0.003)	−0.014*** (0.003)	−0.013*** (0.003)	−0.014*** (0.003)	−0.013*** (0.003)
Constant	0.130*** (0.030)	0.128*** (0.031)	0.127*** (0.031)	0.123*** (0.031)	0.129*** (0.030)
Adjusted R <sup>2</sup>	0.887	0.887	0.887	0.887	0.889
F-statistic	58.927***	58.755***	58.721***	58.723***	60.390***
Firms included	1,270	1,268	1,268	1,268	1,268
Observations	9,631	9,599	9,599	9,599	9,599

This table presents panel OLS regressions of internationalization (MEANFSTS), measured as the five-year rolling average ratio of foreign sales to total sales. CAPEXTA is the ratio of capital expenditure to one-period lagged total assets. The high internationalization firm (HFSTS) dummy variable takes a value of one for observations with FSTS larger than the cross-sectional industry-level median value of FSTS, and zero otherwise. ΔGDP is a country's GDP growth. INVESTMENT is the country's investment as % of GDP. FXRETURN is the first difference in the natural logarithm of exchange rates (the domestic currency per one USD). Please see other variable definitions in Table 1. All explanatory variables are one period lagged. Firm- and year-fixed effects are included in all regressions. Robust standard errors, which are clustered at the firm level, are reported in parentheses. \*, \*\*, and \*\*\* represent statistical significance at the 10%, 5%, and 1% levels, respectively.



is MEANFSTS, measured as the five-year rolling average ratio of foreign sales to total sales.<sup>4</sup> To address the endogeneity concerns and establish causation, I lag all explanatory variables one period. Standard errors are clustered at the firm level and are robust to heteroskedasticity and autocorrelation. Overall, the results in Table 3 indicate that in the Southeast Asian region, firms with larger capital investment tend to have lower degrees of internationalization.

The results in Column (1), which is the baseline panel OLS regression where I include country-level, industry-level, and firm-level control variables, show that GDP growth ( $\Delta$ GDP) and the foreign exchange return (FXRETURN) are positively associated with internationalization levels. The industry stock return (INDRETURN) is not associated with internationalization levels. The results show that firm size (SIZE) and operating risk (RISK) are positively related to internationalization levels, while the market-to-book ratio (MBV) and the sales growth rate (SALESGROWTH) are negatively associated with internationalization levels. Leverage (LEV), fixed assets (PPETA), gross profit margin (GPM), and profitability (ROA) are not related to internationalization levels. These results suggest that firms that are larger and have greater operating risk tend and lower growth opportunities tend to have higher levels of internationalization.

To test the direct effect of capital investment on internationalization, I add the main variable of interest, CAPEXTA, as an explanatory variable in Column (2). The coefficient on CAPEXTA is  $-0.051$  and statistically different from zero at the 5% level, suggesting that an increase in the level of capital investment, on average, leads to a decrease in the degree of internationalization.

To test the nonlinear impact of capital investment on internationalization, I add a squared term of CAPEXTA in Column (3). The coefficient on CAPEXTA remains negative and statistically significant, while the coefficient on the squared term of CAPEXTA is positive and statistically insignificant, suggesting that the relationship between capital investment and internationalization levels is not U-shaped. This finding does not support the notion that the impact of capital investment on the degree of internationalization is nonlinear.

In Column (4), I add an interaction term between CAPEXTA and SIZE to test whether firm size moderates the effect of capital investment on internationalization. The coefficient on the interaction term is negative and statistically insignificant, providing no empirical support for the moderating effect of firm size on the relationship between capital investment and the degree of internationalization.

In Column (5), I add an interaction term between CAPEXTA and the high internationalization firm (HFSTS) dummy variable, which takes a value of one for observations for which FSTS is larger than the cross-sectional median of FSTS at the industry level, and zero otherwise. The coefficient on the interaction term is positive and statistically significant, suggesting the negative impact of capital investment on the degree of internationalization is weaker for firms with high degrees of internationalization.

#### 4.2. Robustness tests for the impact of capital investment on internationalization

##### 4.2.1. Addressing the endogeneity concerns by using the IV-2SLS estimation

In this subsection, I further address the endogeneity concerns by using the instrumental variable – two-stage least squares (IV-2SLS) approach. I use an instrumental variable that is correlated with capital investment but is unrelated to the degree of internationalization. More specifically, I instrument CAPEXTA of a specific firm at a given point in time with (1) a one-year lag of CAPEXTA and (2) a one-year lag of the cross-sectional median of capital investment across all firms with zero international levels (i.e., firms with a reported value of zero FSTS). The rationale behind using the second instrumental variable is that it satisfies two criteria: the instrument variable is highly correlated with the instrumented regressor and is unrelated to the error term. That is, while the firm's capital investment may correlate with its peer's capital investment (measured as the cross-sectional median of capital investment of firms in the same industry with zero foreign sales), there is little reason to believe that the industry-level capital investment of firms with zero foreign sales affects the firm's internationalization levels directly (apart from the indirect effect through the firm's capital investment). I estimate the first- and second-stage regressions as follows.

$$CAPEXTA_{i,j,t} = \alpha + \beta_1 CAPEXTA_{i,j,t-1} + \beta_2 MEDCAPEXTA_{i,j,t-1} + \delta Z_{i,j,t-1} + \eta_i + \nu_t + \varepsilon_{i,j,t}, \quad (4)$$

$$INTER_{i,j,t} = \alpha + \beta_1 PCAPEXTA_{i,j,t-1} + \delta Z_{i,j,t-1} + \eta_i + \nu_t + \varepsilon_{i,j,t}. \quad (5)$$

Eq. (4) is the first-stage IV-2SLS regression where the dependent variable is CAPEXTA. The instrumental variables are (1) the one-year lag of CAPEXTA and (2) MEDCAPEXTA, which is the one-year lag of the cross-sectional median of capital investment across all firms with a zero value of FSTS.<sup>5</sup> PCAPEXTA, which is the predicted value of CAPEXTA obtained from Eq. (4), is used in the second-stage regression of Eq. (5). For brevity, I do not tabulate the IV-2SLS estimation results, which are available upon request. The first-stage model's adjusted  $R^2$  is 0.37, which indicates that the model has a reasonable level of explanatory power for CAPEXTA. The coefficient on both instrumented variables is positive and statistically significant.

<sup>4</sup> Hausman tests indicate that fixed-effect models are preferred to random-effects models.

<sup>5</sup> Alternatively, I convert observations with missing data on FSTS to zero and alternatively compute MEDCAPEXTA as the cross-sectional median of capital investment across all firms in the full sample. Hence, the sample size for the first-stage of the IV-2SLS estimation is larger.

The second-stage regression results indicate that the relation between capital investment and internationalization levels is negative, non-linear, and is less pronounced for firms with high internationalization levels.

#### 4.2.2. Addressing the endogeneity concerns by using a longer lag of the explanatory variables

It is possible that a lag between the time of capital investment and the time of changes in internationalization levels is longer than one year. Therefore, I alternatively lag all explanatory variables two periods to test the robustness of my findings. I estimate the panel OLS regressions of MEANFSTS when all explanatory variables are two periods lagged. I find that the pattern of the results remains qualitatively unchanged. I further repeat this robustness check by using the IV-2SLS approach. I still find that capital expenditure is negatively associated with the degree of internationalization levels and that this negative relationship is weaker for firms with higher internationalization levels.

#### 4.2.3. An alternative measure of the firm's internationalization

While the degree of internationalization has primarily been measured using FSTS in the literature (see e.g., Ruigrok et al., 2007), other measures such as the share of foreign assets to total assets (see e.g., Singla and George, 2013) and the number of countries where foreign subsidiaries are located (see e.g., Jiménez, 2010) have also been used in recent studies. In this section, I additionally test the robustness of my results to using an alternative measure of internationalization, namely, the share of foreign assets to total assets (FATA). Conceptually, the use of FATA to measure the degree of internationalization reflects the firm's foreign direct investment mode (e.g., in production facilities), rather than on international sales and marketing activities, as the internationalization strategy of the firm.

The results of panel OLS regressions with MEANFATA, which is the five-year rolling mean of FATA, as a proxy for the firm's internationalization are not tabulated to conserve space. I find that capital investment has no effect on MEANFATA in the full sample, suggesting that the relationship between capital investment and internationalization levels is sensitive to how a firm's internationalization is measured.

### 5. Empirical results: the impact of capital investment on foreign sales growth

#### 5.1. Main results

I now empirically address the question of whether capital investment is associated with foreign sales growth. One disadvantage of using MEANFSTS as the dependent variable in the previous section is that the impact of capital investment on the degree of internationalization may not be captured even if there is an increase in foreign sales. Suppose that there is an increase in foreign sales and that the level of FSTS remains unchanged. Looking at the increase in capital investment and the unchanged level of FSTS, one may conclude that capital investment is not associated with (or negatively associated with) a firm's internationalization level. To address this issue, I use foreign sales growth (FSG), measured as the first difference in the natural logarithm of foreign sales, to capture the change in the level of internationalization.

Table 4 reports the panel OLS regression results of the impact of capital investment on foreign sales growth (FSG). As in the previous section, I lag all explanatory variables one period. Standard errors are clustered at the firm level and are robust to heteroskedasticity and autocorrelation. Looking across all columns in Table 4, I find that the coefficient on CAPEXTA is positive and statistically significant in two models (see Columns (4) and (5)). These results provide some empirical evidence for the positive impact of capital investment on foreign sales growth.

I find that there is no evidence for the non-linear impact of capital investment on the degree of internationalization because the coefficient on the squared term of CAPEXTA in Column (3) is statistically insignificant. The negative and significant coefficient on the interaction between CAPEXTA and SIZE in Column (4) indicates that the positive effect of capital investment on the foreign sales growth rate is weaker for larger firms. The results in Column (5) suggest that the positive effect of capital investment on the foreign sales growth rate is weaker for firms with high degrees of internationalization as the coefficient on the interaction term between CAPEXTA and HFSTS is negative and statistically significant. In fact, the net effect of capital investment on the foreign sales growth rate for firms with high internationalization levels is negative since the coefficient on CAPEXTA is 3.544 while the coefficient on the interaction term is  $-3.965$ .

The untabulated results indicate that the coefficient on CAPEXTA is positive and statistically significant for the subsample of small firms ( $HTA = 0$ ) and is negative and statistically insignificant for the subsample of large firms ( $HTA = 1$ ), suggesting that the impact of capital investment on the foreign sales growth rate is asymmetric. That is, the effect of capital investment is positive for small firms and is not evident for large firms.

#### 5.2. Robustness tests

As in Section 4.2.1, I further address the endogeneity concerns by using the instrumental variable – two stage least squares (IV-2SLS) approach. More specifically, I estimate the second-stage regression as follows.

$$FSG_{i,j,t} = \alpha + \beta_1 PCAPEXTA_{i,j,t-1} + \delta Z_{i,j,t-1} + \eta_i + \nu_t + \varepsilon_{i,j,t}. \quad (6)$$

where FSG denotes the growth rate of foreign sales, measured as the first difference in the natural logarithm of foreign sales. PCAPEXTA, which is the predicted value of CAPEXTA obtained from the first-stage regression of Eq. (4), is used as a measure



**Table 4**

The effect of capital investment on foreign sales growth.

	(1)	(2)	(3)	(4)	(5)
CAPEXTA <sub>t-1</sub>		0.121 (0.211)	−0.008 (0.463)	2.691*** (0.767)	3.544*** (0.456)
Squared CAPEXTA <sub>t-1</sub>			0.378 (1.216)		
CAPEXTA <sub>t-1</sub> × SIZE <sub>t-1</sub>				−0.480*** (0.136)	
CAPEXTA <sub>t-1</sub> × HFSTS <sub>t-1</sub>					−3.965*** (0.465)
ΔGDP <sub>t-1</sub>	0.005 (0.006)	0.004 (0.006)	0.004 (0.006)	0.004 (0.006)	0.003 (0.006)
INVESTMENT <sub>t-1</sub>	0.005 (0.004)	0.005 (0.004)	0.005 (0.004)	0.005 (0.004)	0.005 (0.004)
FXRETURN <sub>t-1</sub>	0.297 (0.283)	0.287 (0.284)	0.288 (0.284)	0.286 (0.283)	0.242 (0.281)
INDRETURN <sub>t-1</sub>	0.010 (0.056)	0.011 (0.056)	0.011 (0.056)	0.012 (0.056)	0.008 (0.056)
LNTA <sub>t-1</sub>	−0.078*** (0.024)	−0.079*** (0.024)	−0.079*** (0.024)	−0.057** (0.025)	−0.081*** (0.024)
LEV <sub>t-1</sub>	0.132 (0.093)	0.132 (0.093)	0.131 (0.093)	0.125 (0.093)	0.138 (0.093)
PPETA <sub>t-1</sub>	−0.228** (0.098)	−0.236** (0.099)	−0.233** (0.100)	−0.215** (0.099)	−0.255** (0.099)
MBV <sub>t-1</sub>	0.007 (0.008)	0.007 (0.008)	0.007 (0.008)	0.008 (0.008)	0.004 (0.008)
GPM <sub>t-1</sub>	0.070 (0.107)	0.065 (0.107)	0.065 (0.107)	0.072 (0.107)	0.087 (0.106)
ROA <sub>t-1</sub>	0.178 (0.138)	0.167 (0.138)	0.170 (0.138)	0.140 (0.138)	0.155 (0.137)
RISK <sub>t-1</sub>	0.079 (0.265)	0.088 (0.265)	0.087 (0.265)	0.087 (0.265)	0.078 (0.265)
SALESGROWTH <sub>t-1</sub>	−0.064* (0.036)	−0.063* (0.036)	−0.062* (0.037)	−0.064* (0.036)	−0.065* (0.036)
Constant	0.311* (0.174)	0.319* (0.174)	0.318* (0.174)	0.191 (0.178)	0.350** (0.174)
Adjusted R <sup>2</sup>	0.033	0.034	0.034	0.036	0.048
F-statistic	1.193***	1.200***	1.198***	1.211***	1.286***
Firms included	1,137	1,130	1,130	1,130	1,130
Observations	6,637	6,606	6,606	6,606	6,606

This table presents panel OLS regressions of a firm's foreign sales growth rate (FSG). The dependent variable is FSG, measured as the first difference in the natural logarithm of foreign sales (FSALES). CAPEXTA is equal to the ratio of capital expenditure to one-period lagged total assets. Please see other variable definitions in Tables 1 and 3. All explanatory variables are one period lagged. Firm- and year-fixed effects are included in all regressions. Robust standard errors, which are clustered at the firm level, are reported in parentheses. \*, \*\*, and \*\*\* represent statistical significance at the 10%, 5%, and 1% levels, respectively.

of the firm's capital investment in Eq. (6). The results of the IV-2SLS approach are qualitatively similar to those presented in Table 4. Overall, there is some evidence to suggest that the relation between capital investment and the growth of foreign sales is positive; however, this finding is not robust.

## 6. The impact of internationalization on firm performance

### 6.1. Main results

To empirically address the question of whether the degree of internationalization affects firm performance, I first convert firm-year observations with missing data on FSTS to zero and compute MEANFSTS using this sample set. Hence, this empirical analysis can also be seen as an attempt to test whether firms with foreign sales perform better than those without foreign sales. I find that firms with foreign sales roughly account for 58% of the sample (i.e. 1270 firms out of 2172 firms).

Table 5 presents the panel OLS regressions of the impact of internationalization on firm performance, measured as ROA. In Column (1), I include all firm-level, industry-level, and country-level control variables in the model. I find that neither GDP growth nor aggregate-level investment has a significant effect on firm performance. Consistent with theory, firms have better performance when a country's currency depreciates and the industry's conditions are good. Several firm-specific characteristics play an important role in explaining firm performance. For example, the market-to-book ratio (MBV), gross profit margin (GPM), operating risk (RISK), and sales growth (SALESGROWTH) have a positive impact on ROA. In Column (2), the coefficient on MEANFSTS is statistically insignificant, implying that the degree of internationalization is not associated with firm performance. I explore whether the impact of internationalization on firm performance may be conditional on

**Table 5**

The effect of internationalization on firm performance.

	(1)	(2)	(3)	(4)
MEANFSTS <sub>t-1</sub>		0.002 (0.006)	0.013 (0.018)	0.010 (0.017)
MEANFSTS <sub>t-1</sub> × SIZE <sub>t-1</sub>			-0.002 (0.003)	
Squared MEANFSTS <sub>t-1</sub>				-0.011 (0.021)
ΔGDP <sub>t-1</sub>	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
INVESTMENT <sub>t-1</sub>	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
FXRETURN <sub>t-1</sub>	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)
INDRETURN <sub>t-1</sub>	0.013*** (0.003)	0.013*** (0.003)	0.013*** (0.003)	0.013*** (0.003)
SIZE <sub>-1</sub>	-0.022*** (0.002)	-0.022*** (0.002)	-0.022*** (0.002)	-0.022*** (0.002)
LEV <sub>t-1</sub>	-0.019*** (0.006)	-0.019*** (0.006)	-0.019*** (0.006)	-0.019*** (0.006)
PPETA <sub>t-1</sub>	-0.036*** (0.007)	-0.036*** (0.007)	-0.036*** (0.007)	-0.036*** (0.007)
MBV <sub>t-1</sub>	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)
GPM <sub>t-1</sub>	0.128*** (0.006)	0.128*** (0.006)	0.128*** (0.006)	0.128*** (0.006)
RISK <sub>t-1</sub>	0.081*** (0.019)	0.081*** (0.019)	0.081*** (0.019)	0.081*** (0.019)
SALESGROWTH <sub>t-1</sub>	0.028*** (0.002)	0.028*** (0.002)	0.028*** (0.002)	0.028*** (0.002)
CAPEXTA <sub>t-1</sub>	0.011 (0.012)	0.011 (0.012)	0.011 (0.012)	0.011 (0.012)
Constant	0.116*** (0.012)	0.116*** (0.012)	0.114*** (0.012)	0.116*** (0.012)
Adjusted R <sup>2</sup>	0.443	0.443	0.443	0.443
F-statistic	8.319***	8.314***	8.311***	8.310***
Firms included	2,172	2,172	2,172	2,172
Observations	20,256	20,256	20,256	20,256

This table presents panel OLS regressions of firm performance. The dependent variable is ROA, measured as the ratio of EBIT to total assets. The main independent variable of interest is the degree of internationalization (MEANFSTS), measured as the five-year rolling average ratio of foreign sales to total sales. Please see other variable definitions in Tables 1 and 3. All explanatory variables are one period lagged. Firm- and year-fixed effects are included in all regressions. Robust standard errors, which are clustered at the firm level, are reported in parentheses. \*, \*\*, and \*\*\* represent statistical significance at the 10%, 5%, and 1% levels, respectively.

firm characteristics by interacting MEANFSTS with SIZE in Column (3). The coefficient on the interaction between MEANFSTS with SIZE is statistically insignificant, implying that the impact of internationalization on firm performance is not dependent on firm size. The coefficient on the squared term of MEANFSTS in Column (4) is statistically insignificant, suggesting that there is no evidence for the non-linear effect of internationalization on firm performance. The findings in this section suggest that the degree of internationalization is not associated with firm performance. That is, firms with higher degrees of internationalization do not perform better than firms with lower degrees of internationalization.

## 6.2. Robustness tests

I check the robustness of my finding that the degree of internationalization is not associated with firm performance by first using MEANFATA as an alternative measure of internationalization levels. The results of panel OLS regressions where the dependent variable is ROA do not support the notion that variation in firm performance can be explained by the degree of internationalization.

I next estimate the impact of internationalization on the stock return, which is computed as the first difference in the natural logarithm of a firm's year-end stock price. I use MEANFSTS to proxy for the degree of internationalization is measured. The results in Columns (3) and (4) indicate that firms with higher degrees of internationalization tend to have higher stock returns and that this positive effect is weaker for larger firms. In addition, the impact of MEANFSTS on stock returns is non-linear. From a portfolio investor's perspective, these results suggest that a naive investment strategy that takes a short position in stocks with low internationalization levels and a long position might be profitable.

Last but not least, I estimate country-by-country panel OLS regressions of ROA and the stock return, respectively, on the degree of internationalization (i.e., MEANFSTS or MEANFATA). I include both firm-fixed effects and year-fixed effects but

drop macro-level variables from the regressions. Overall, the untabulated results suggest that variation in firm performance cannot be explained by the degree of internationalization.

## 7. Conclusion

In this paper, I use a large panel sample that includes publicly listed non-financial firms in five Southeast Asian countries during the period 1990–2014 to shed light on the relationships between corporate investment, the degree of internationalization, and corporate performance. I find robust, consistent supporting empirical evidence for the negative impact of capital investment on internationalization levels. The negative impact is weaker for firms with higher degrees of internationalization. GDP growth and exchange rate movements play an important role in determining of internationalization levels. Furthermore, based on a full panel sample of firms, the degree of internationalization is not associated with ROA. However, the relationship between the degree of internationalization and firm performance is positive when the stock return is used as a proxy for firm performance.

## References

- Bae, S., Park, C., Xiaohong, J.C., 2008. Multinationality, R&D intensity, and firm performance: evidence from U.S. manufacturing firms. *Multinatl. Bus. Rev.* 16, 53–78.
- Bausch, A., Krist, M., 2007. The effect of context-related moderators on the internationalization–performance relationship: evidence from meta-analysis. *Manag. Int. Rev.* 47, 319–347.
- Bolton, P., Chen, H.U.I., Wang, N., 2011. A unified theory of Tobin's q, corporate investment, financing, and risk management. *J. Finance* 66, 1545–1578.
- Capar, N., Kotabe, M., 2003. The relationship between international diversification and performance in service firms. *J. Int. Bus. Stud.* 34, 345–355.
- Chang, S.-J., Rhee, J.H., 2011. Rapid FDI expansion and firm performance. *J. Int. Bus. Stud.* 42, 979–994.
- Chetty, S., Blankenburg Holm, D., 2000. Internationalisation of small to medium-sized manufacturing firms: a network approach. *Int. Bus. Rev.* 9, 77–93.
- Custódio, C., Metzger, D., 2014. Financial expert CEOs: CEO's work experience and firm's financial policies. *J. Financ. Econ.* 114, 125–154.
- de Jong, G., van Houten, J., 2014. The impact of MNE cultural diversity on the internationalization–performance relationship: theory and evidence from European multinational enterprises. *Int. Bus. Rev.* 23, 313–326.
- D'Mello, R., Miranda, M., 2010. Long-term debt and overinvestment agency problem. *J. Bank. Finance* 34, 324–335.
- Fabling, R., Sanderson, L., 2013. Exporting and firm performance: market entry, investment and expansion. *J. Int. Econ.* 89, 422–431.
- Froot, K.A., Stein, J.C., 1991. Exchange rates and foreign direct investment: an imperfect capital markets approach. *Q. J. Econ.* 106, 1191–1217.
- Ganotakis, P., Love, J.H., 2012. Export propensity, export intensity and firm performance: the role of the entrepreneurial founding team. *J. Int. Bus. Stud.* 43, 693–718.
- Gaur, A.S., Kumar, V., Singh, D., 2014. Institutions, resources, and internationalization of emerging economy firms. *J. World Bus.* 49, 12–20.
- Gomes, L., Ramaswamy, K., 1999. An empirical examination of the form of the relationship between multinationality and performance. *J. Int. Bus. Stud.* 30, 173–187.
- Hsu, C.C., Boggs, D.J., 2003. Internationalization and performance: traditional measures and their decomposition. *Multinatl. Bus. Rev.* 11, 23–50.
- Hsu, W.-T., Chen, H.-L., Cheng, C.-Y., 2013. Internationalization and firm performance of SMEs: the moderating effects of CEO attributes. *J. World Bus.* 48, 1–12.
- Jansson, H., Sandberg, S., 2008. Internationalization of small and medium sized enterprises in the Baltic Sea Region. *J. Int. Manag.* 14, 65–77.
- Jiménez, A., 2010. Does political risk affect the scope of the expansion abroad? Evidence from Spanish MNEs. *Int. Bus. Rev.* 19, 619–633.
- Julio, B., Yook, Y., 2012. Political uncertainty and corporate investment cycles. *J. Finance* 67, 45–84.
- Kotabe, M., Srinivasan, S.S., Aulakh, P.S., 2002. Multinationality and firm performance: the moderating role of R&D and marketing capabilities. *J. Int. Bus. Stud.* 33, 79–97.
- Méon, P.-G., Sekkat, K., 2012. FDI waves, waves of neglect of political risk. *World Dev.* 40, 2194–2205.
- Moyen, N., 2004. Investment–cash flow sensitivities: constrained versus unconstrained firms. *J. Finance* 59, 2061–2092.
- Oesterle, M.-J., Richta, H.N., Fisch, J.H., 2013. The influence of ownership structure on internationalization. *Int. Bus. Rev.* 22, 187–201.
- Paul, J., Gupta, P., 2014. Process and intensity of internationalization of IT firms—evidence from India. *Int. Bus. Rev.* 23, 594–603.
- Ruigrok, W., Amann, W., Wagner, H., 2007. The internationalization–performance relationship at Swiss firms: a test of the S-shape and extreme degrees of internationalization. *Manag. Int. Rev.* 47, 349–368.
- Russ, K.N., 2007. The endogeneity of the exchange rate as a determinant of FDI: a model of entry and multinational firms. *J. Int. Econ.* 71, 344–372.
- Singla, C., George, R., 2013. Internationalization and performance: a contextual analysis of Indian firms. *J. Bus. Res.* 66, 2500–2506.
- Tomiura, E., 2007. Foreign outsourcing, exporting, and FDI: a productivity comparison at the firm level. *J. Int. Econ.* 72, 113–127.
- Xiao, S.S., Jeong, I., Moon, J.J., Chung, C.C., Chung, J., 2013. Internationalization and performance of firms in China: moderating effects of governance structure and the degree of centralized control. *J. Int. Manag.* 19, 118–137.