

The Effect of U.S. Protectionist Trade Policy on Foreign Ownership: A Study of Korea's Data Set*

Hyun-Uk Jung

Department of Business Administration, Dong-A University, South Korea

Tae-Hyoung Mun[†]

Department of Business Administration, Mokwon University, South Korea

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Abstract

Purpose – This study analyzed the effect of the Trump Government's protectionist trade policies on foreign ownership. Specifically, this study empirically analyzes the hypothesis that foreign ownership will decrease after the Trump Government rather than before the Trump Government.

Design/methodology – The hypothesis of this study is based on the expectation that US protection trade policy will negatively affect the profitability of Korean companies. The dependent variable in this study is the foreign ownership ratio, and the independent variable is a dummy variable representing before and after the Trump Government. Multiple regression analysis was performed, including the control variables suggested in previous studies related to foreign ownership.

Findings – As a result, foreign ownership increased after the Trump Government rather than before the Trump Government. This study further analyzes whether the main variables affecting foreign investor's decision-making are differences before and after Trump Government. The export ratio, profitability and dividends did not differ before and after Trump Government. However, the level of information asymmetry decreased after the Trump Government than before the Trump Government. This suggests that US protection trade policies do not adversely affect the profitability of Korean companies. However, Korean firms are improving their information environment because US protectionist trade policies can lower profitability and negatively impact capital raising. In this regard, the foreign ownership ratio seems to differ before and after the Trump Government.

Originality/value – This study contributes in that it presents data that US protectionist policies can affect Korean corporate governance. This study has implications from the short-term analysis of US protection trade policy.

Keywords: Foreign Ownership, Trade Protection Policy, Trump Government

JEL Classifications: F13, G32, M49

1. Introduction

This study aims to empirically analyze how US protectionism affects foreign investors' decision making in Korea's security listed companies from 2015 to 2018. Specifically, this study established the hypothesis that the foreign ownership ratio would decrease after the Trump Government more/less than before the Trump Government, and conducted empirical analysis.

As of the end of December 2018, 46,700 foreign investors were registered with the Financial

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[†]Corresponding author: mungini@mokwon.ac.kr

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Supervisory Service (FSS). They have investments worth 480 trillion Won (35.8% of the market cap) of Korea's Composite Stock Price Index (KOSPI market), and 509 trillion Won in the stock and bond markets. In addition, foreign nationals holding stocks in Korea's the KOSPI market have reached 23 countries (excluding other countries).

Foreign investors are known to have a high proportion of institutional investors, and they have a better ability to collect and analyze information and higher return on investment than domestic institutional investors or individual investors (Froot, Connell and Seasholes, 2001; Grinblatt and Keloharju, 2000). In addition, foreign investors are known to be effective managers, and the factors influencing foreign investors' selection of stocks are attracting academic and practical attention.

Factors influencing foreign ownership reported in previous studies include information asymmetry, business performance and financial structure (Dahlquist and Robertsson, 2001; Kang and Stulz, 1997; Lin and Shiu, 2003; Merton, 1987). According to these studies, a high level of information asymmetry is reported to reduce the foreign ownership ratio. However, high profitability and sound financial structure are reported to increase the foreign ownership ratio.

The Trump Government has a trade protectionist policy on major trading partners, such as tariff increase, Free Trade Agreement (FTA) renegotiation and disposal (Fidler 2017; Irwin 2017). For Korea, the United States is the second largest export market after China among the top 10 trading partners. In this regard, US protection trade policy will have a negative impact on Korean companies' profitability. In this case, the US's trade protection policy will affect Korean corporate governance. Based on this logic, this study attempts to empirically analyze the effect of US protection trade policy on foreign ownership in Korean companies by comparing the period before and after the Trump Government.

As a result, the regression coefficients of dummy variables representing the period before and after the Trump Government were found to be positive values. This is contrary to the hypothesis, and it can be interpreted that the foreign ownership ratio increased after the Trump Government rather than before the Trump Government.

In this study, we analyzed whether export rates, profitability, dividends, and information asymmetry levels differ before and after the Trump Government. The analysis shows that export ratios, profitability and dividends did not differ before and after the Trump Government. However, the level of information asymmetry decreased after the Trump Government rather than before the Trump Government.

Taken together, the US's trade protection policy does not appear to adversely affect the profitability of Korean companies. This suggests that US foreign trade policy is not a negative factor to Korean companies' profitability. However, the US's trade protection policy can lower the profitability of Korean companies, which can be a negative factor for capital raising. Therefore, Korean companies are actively improving the information environment after the Trump Government rather than doing so before the Trump Government. In this regard, the foreign ownership ratio seems to differ before and after the Trump Government.

This study contributes in that it presents data that US protectionist policies can affect Korean corporate governance. This study has implications from the short-term analysis of US protection trade policy.

This study is organized as follows. In Chapter II, we reviewed previous studies and suggested research hypotheses. In Section III, the research model and sample selection are described, and in Section IV, empirical analysis results are presented. Finally, Section V presents the results and implications of the study.

2. Preliminary Research and Hypothesis Setting

2.1. Factors Affecting Foreign Ownership

Foreign investors will need to understand the political, economic, and legal requirements of the countries they invest in order to build their international portfolios. However, foreign investors have more difficulty collecting information than domestic investors (Brennan and Cao 1997; Coval and Moskowitz 1999; Lewis 1999; Lin and Shiu 2003). In this regard, previous studies related to foreign ownership focus on the characteristics of individual companies and analyze the factors affecting foreign investors (Dahlquist and Robertsson, 2001; Kang and Stulz, 1997; Lin and Shiu, 2003; Merton, 1987).

Kang and Stulz (1997) empirically analyzed the factors of the firm's characteristics in selecting Japanese stocks from foreign investors from 1975-1991. As a result of the empirical analysis, the foreign ownership ratio increases as the company size is larger and the return on assets (ROA) is higher. The debt ratio and the market to book ratio (MBR) were negatively related to the foreign equity ratio.

Dahlquist and Robertsson (2001) conducted an empirical analysis of corporate characteristics variables affecting foreign ownership in Swedish listed companies from 1993-1997. As a result, the foreign ownership ratio was significantly higher as the size of the company, the high liquidity ratio, and the low dividend yield were high.

Lin and Shiu (2003) conducted an empirical analysis on the firm-specific variables affecting the foreign ownership ratio of companies listed on Taiwan stock market from 1996-2000. As a result, the foreign ownership ratio of firms with high export ratio and large benchmark regulation (BMR) and small BMR was significantly higher.

BMR is commonly included as an independent variable in Kang and Stulz (1997), Dahlquist and Robertsson (2001) and Lin and Shiu (2003), and this variable is related to corporate profitability in Fama and French (1995). It is a company characteristic reported as a proxy for growth potential. Accounting profits of companies with low BMR tend to be consistently high, so they are frequently used as investment indicators.

Merton's (1987) study suggests that investors tend to choose highly recognized companies in their selection. Most of the previous studies on the factors that determine the share of foreigners cited Merton's (1987) study, and companies with high export ratios are expected to be recognized abroad and are likely to be included in the investment targets of foreign investors.

Dividend yields often appear in research papers as a determinant of foreign equity ratios, although capital gains (also translated as 'capital gains' or 'sales profits') are not taxable in most countries, while As income tax is often withheld, foreign investors prefer low-dividend stocks to avoid tax penalties (Lin and Shiu, 2003).

2.2. Background of US Protectionism and Setting of the Hypotheses

Before the 2000s, the United States entered into free trade agreements with two countries, and since 2000, the United States has entered into an FTA with 12 countries including Korea. Table 1 below shows the US trade balance by year since the FTA took effect. Since the United States joined, the trade deficit has increased since 2010, with 2015 and 2016 at -7,370 billion dollars and -7,354 billion dollars, respectively. This is close to the all-time high of - 8,821 billion dollars in 2006.

As the US trade deficit increases, the Trump Government does protective trade with key trade partners, including tariff increases and FTA renegotiation and disposal. This can also

be understood as the Trump Government's preemptive business negotiation strategy to open markets in other countries (Autor, Dorn and Hanson, 2016; Scherrer and Abernathy, 2017).

Table 1. US Balance of Trade by Year

	(Unit: Billion Dollars)						
Year	2010	2011	2012	2013	2014	2015	2016
US Balance of Trade	-6,906	-7,254	-7,304	-6,899	-7,272	-7,370	-7,354

Source: KITA (2019).

For Korea, the United States is the second largest export market after China among the top 10 trading partners. In Table 2 below, Korea recorded 698 billion dollars and 664 billion dollars in exports for the United States in 2015 and 2016, respectively. This is the largest proportion of Korea's top 10 exporters after China. Considering the US's share of Korea's exporters, US protectionist policies will have a significant impact on Korean companies.

Table 2. Korea's Top 10 Exporters

	(Unit: Billion Dollars (%))			
	2015		2016	
China	1,371	(26%)	1,244	(25.1%)
United States of America	698	(13.3%)	664	(13.4%)
Hong Kong	304	(5.8%)	327	(6.6%)
Vietnam	277	(5.3%)	326	(6.6%)
Japan	255	(4.9%)	243	(4.9%)
Singapore	150	(2.8%)	124	(2.5%)
India (India)	120.3	(2.3%)	115	(2.3%)
Taiwan	120	(2.3%)	122	(2.5%)
Mexico	108.9	(2.1%)	97	(2.0%)
Australia	108.3	(2.1%)		
Marshall Islands			77	(1.6%)
Top 10 Exporting Countries	3,512	(66.9%)	3,339	(67.5%)

Source: KITA (2019).

Previous studies on foreign investors showed that foreign ownership increases as corporate profitability increases (Kang and Stulz 1997; Lin and Shiu 2003). This suggests that foreign investors make up their investment portfolios based on their high information analysis ability (Froot, Connell and Seasholes 2001; Grinblatt and Keloharju 2000). In other words, this suggests that foreign investors are earning dividend gains or capital gains by making investment decisions in profitable companies.

US protectionist policy is likely to have a negative impact on Korean companies' profitability. In this case, foreign ownership is expected to decrease after the Trump Government rather than before the Trump Government. Based on this logic, this study establishes the following hypothesis.

H: Foreign ownership will decrease after the Trump Government rather than before the Trump Government.

3. Research Methodology

3.1. Research Model

In order to verify whether the foreign ownership ratio decreased after the Trump Government rather than before the Trump Government, the model was set up as in the following equation (1).

$$\begin{aligned}
 FOR_{i,t} = & \beta_0 + \beta_1 TrumpGovernment_{i,t} + \beta_2 ROA_{i,t} + \beta_3 BIG_{i,t} \\
 & + \beta_4 VOL_{i,t} + \beta_5 EXP_{i,t} + \beta_6 LEV_{i,t} + \beta_7 SIZE_{i,t} + \beta_8 TURNOVER_{i,t} \\
 & + \beta_9 DIVIDEND_{i,t} + \beta_{10} YD_{i,t} + \beta_{11} ICODE_{i,t} + \varepsilon
 \end{aligned} \quad (1)$$

<i>FOR</i>	:	Shareholding rate of foreign common stock
<i>FOR_end</i>	:	Foreign ownership at fiscal year
<i>FOR_ave</i>	:	Average foreign ownership for one year
<i>Trump Government</i>	:	1 if after Trump Government, 0 otherwise
<i>ROA</i>	:	Total Return on Assets (Net Income / Total Assets)
<i>BIG</i>	:	Auditor size (1 if large accounting firm, 0 otherwise)
<i>VOL</i>	:	Standard Deviation in Annual Stock Return
<i>EXP</i>	:	Export ratio
<i>LEV</i>	:	Debt ratio (total liabilities / total assets)
<i>SIZE</i>	:	ln(total market value)
<i>TURNOVER</i>	:	Total Asset Turnover (Sales / Total Assets)
<i>DIVIDEND</i>	:	Cash dividend (cash dividend / total assets)
<i>YD</i>	:	Year dummy
<i>ICODE</i>	:	Industry dummy

β_1 in Equation (1) is the validation factor for the hypothesis, and β_1 should be given a significant negative value for consistent results with the hypothesis. In other words, if β_1 has a significant negative value, foreign investors who invested in Korean companies may be interpreted as having decreased after the Trump Government rather than before the Trump Government.

In this study, the following variables were included in the model to control the factors that may influence the foreign ownership ratio. *ROA* is an indicator of corporate profitability, and foreign investors are expected to use *ROA* and included it in their models to control it (Kang and Stulz, 1997).

Foreign investors may be relatively less informed than domestic investors. This incentive allows foreign investors to demand high audit quality for the companies they invest in. Teoh and Wong (1993) report that large auditors offer higher audit quality than small auditors. In this study, *BIG* is included in the model to control the impact of audit quality on foreign investor's decision making. The regression coefficient of the *BIG* is expected to have a positive sign.

The standard deviation of annual stock returns (*VOL*) is included in the model to control the effects of information asymmetry on foreign investor decision making. Dahlquist and Robertsson (2001) and Kang and Stulz (1997) report that foreign investors prefer companies

with low information asymmetry to reduce uncertainty in investment decisions. *VOL* is expected to have a negative association with *FOR*.

Merton (1987) explains that for foreign investors, companies with higher export rates recognize more familiar companies. Since this is closely related to the resolution of information asymmetry, *EXP* is included in the model to control it (Lin and Shiu, 2003; Merton, 1987). Higher debt ratios lead to higher interest costs, resulting in lower net income. Therefore, foreign investors are likely to prefer companies with low debt ratios. In this study, *LEV* is included in the model to control the effect of debt ratio on foreign ownership (Dahlquist and Robertsson, 2001; Kim and Chun, 2013).

Foreign investors tend to prefer large firms, so *SIZE* is included in the model to control them (Kang and Stulz, 1997). *TURNOVER* is included in the model to control the effect of total asset turnover on foreign investor decision making.

DIVIDEND is included in the model to control the impact of dividends on foreign investor decision making. Dahlquist and Robertsson (2001) report that dividend yield is negatively related to foreign ownership. In Korea, dividend gain and capital gain are both subject to taxation. In this case, foreign investors who have made investment decisions in Korean companies are more likely to prefer dividend gain than capital gain. The sign of *DIVIDEND* is expected to represent a positive value. Finally, *YD* and *ICODE* were included in the model to control the year and industrial effects.

3.2. Selection of Samples

The sample of this study was selected as a company satisfying the following conditions from 2015 to 2018. In this case, the final sample was 2,360 (company-year).

- (1) Listed corporations in the securities market from 2015 to 2018 excluding financial services
- (2) Companies whose closing date is December 31st
- (3) Companies with positive capital and companies with unmodified audit opinions
- (4) Companies that can continuously collect financial data, auditing firms, foreign equity ratio and average common foreign equity ratio in Kis-Value of Korea Credit Rating Co., Ltd.

Table 3 below shows the sample selection process. Specifically, 3,444 companies (company-year) satisfy the condition (1). Of the 3,444 companies (company-years), 430 companies (company-year) did not satisfy the condition (2). In addition, 654 companies (company-year) did not satisfy the conditions (3) and (4). The final sample is therefore 2,360 (company-year).

Although not shown in Table 3, 256 of the 2,360 samples are manufactured of chemicals and chemical products (10.8%) and 180 (7.6%) of professional services. The manufacture of basic metal products and the manufacture semitrailers of motor vehicles and trailers are 164 (6.9%) and 140 (5.9%), respectively.

Table 3. Organization of the Sample

	(Units: Company-year)
Companies that satisfy the conditions (1)	3,444(company-year)
- Companies that do not meet the conditions (2)	- 430(company-year)
- Companies that do not satisfy conditions (3) and (4)	-654(company-year)
Final sample	2,360(company-year)

4. Empirical Analysis Results

4.1. Technical Statistics and Correlation Analysis of Major Variables

Table 4 shows the descriptive statistics of each variable used in the regression analysis. Descriptive statistics provide the mean (median), standard deviation, and quartile of each variable.

In Table 4, the mean (median) of *FOR_end* used as a dependent variable in this study is 0.1087 (0.0549), the standard deviation is 0.1319, the mean (median) of *FOR_ave* is 0.1094 (0.0563), and the standard deviation is 0.1316. The mean of *FOR* seems to be somewhat higher than the median.

Table 4. Descriptive Statistics of Variables

	Variables	Mean	Std	Min	25%	Median	75%	Max
<i>FOR</i>	<i>FOR_end</i>	0.1087	0.1319	0.0001	0.0189	0.0549	0.1522	0.7893
	<i>FOR_ave</i>	0.1094	0.1316	0.0002	0.0197	0.0563	0.1538	0.7784
<i>Trump Government</i>		0.5000	0.5001	0.0000	0.0000	0.5000	1.0000	1.0000
	<i>ROA</i>	0.0283	0.1499	-0.8869	0.0047	0.0260	0.0521	5.0132
	<i>BIG</i>	0.6678	0.4711	0.0000	0.0000	1.0000	1.0000	1.0000
	<i>VOL</i>	0.0249	0.0137	0.0069	0.0173	0.0224	0.0295	0.4506
	<i>EXP</i>	0.2166	0.2878	0.0000	0.0000	0.0518	0.3931	1.0000
	<i>LEV</i>	0.3955	0.2144	0.0005	0.2176	0.3971	0.5501	0.9841
	<i>SIZE</i>	26.9417	1.4831	22.6847	25.9393	26.6787	27.6785	32.9205
	<i>TURNOVER</i>	0.8180	0.5268	0.0014	0.5002	0.7597	1.0681	4.1233
	<i>DIVIDEND</i>	0.0093	0.0137	0.0000	0.0000	0.0058	0.0127	0.1849

Note: *FOR_end*: Percentage of common shares held by foreign investors at the end of fiscal year; *FOR_ave*: Average percentage of common shares held by foreign investors for one year; *Trump Government*: *ROA*: Net income / total asset; *BIG*: 1 if the auditor is Big 4, 0 for others; *VOL*: Standard deviation of daily stock returns; *EXP*: The amount of export / sales; *LEV*: Total liability / total capital; *SIZE*: Ln(total market value at the end of December); *TURNOVER*: Sales / total asset; *DIVIDEND*: Cash dividend/ total asset.

The mean and median of the *Trump Government* were both 0.5000. This study selected a sample that could collect data continuously for two years before the *Trump Government* and two years after the *Trump Government*. Therefore, both the mean and median of the *Trump Government* are estimated to be 0.5000.

Descriptive statistics of other control variables showed that the mean (median) of the *ROA* is 0.0283 (0.0260) and the mean (median) of the *BIG* is 0.6678 (1.0000). The mean (median) of *VOL* is 0.0249 (0.0224), and the mean (median) of *EXP* is 0.2166 and 0.0518.

The mean (median) of *LEV*, *SIZE* and *TURNOVER* are 0.3955 (0.3971), 26.9417 (26.6787) and 0.8180 (0.7597), respectively. The mean (median) of *DIVIDEND* is 0.0093 (0.0058).

Table 5 shows the Pearson correlation coefficients among the variables used in the empirical analysis. *FOR* (*FOR_end* and *FOR_ave*) in Table 5 does not show a significant correlation with the *Trump Government*. Since this is not controlling the influence of other variables on foreign ownership, additional tests are necessary.

In the correlation between *FOR* and control variables, *FOR* (*FOR_end* and *FOR_ave*) are shown to have a significant positive correlation with *ROA*, *BIG*, *SIZE*, and *DIVIDEND*. In

addition, *FOR* (*FOR_end* and *FOR_ave*) has a significant negative correlation with *VOL* and *LEV*. It is shown that there is a positive correlation between the proxies (*FOR_end* and *FOR_ave*) of the foreign ownership ratio.

In particular, *FOR* seems to have a positive correlation with *ROA*. This result excludes causality, but suggest that foreign investors who will make investment decisions in Korean companies considered important when making decisions. Although not shown in Table 5, the VIF (Variance Inflation Factor) value was confirmed. As a result, in general, the dispersion expansion coefficient was found to be 1.24 or lower, which is lower than 10, which is considered to be a multicollinearity problem.

Table 5. Correlation Coefficient

	<i>FOR_end</i>	<i>FOR_ave</i>	Trump Government	<i>ROA</i>	<i>BIG</i>	<i>VOL</i>	<i>EXP</i>	<i>LEV</i>	<i>SIZE</i>	<i>TURNOVER</i>
<i>FOR_ave</i>	0.9837***									
Trump Government	0.0309	0.0295								
<i>ROA</i>	0.1318***	0.1493***	0.0050							
<i>BIG</i>	0.2554***	0.2580***	-0.0198	0.0590***						
<i>VOL</i>	-0.1830***	-0.1865***	-0.0982***	-0.0821***	-0.1628***					
<i>EXP</i>	-0.0304	-0.0314	-0.0188	-0.0658***	-0.0229	0.0519**				
<i>LEV</i>	-0.0995***	-0.0989***	-0.0343*	-0.1477***	0.0049	0.1690***	-0.0127			
<i>SIZE</i>	0.5917***	0.5949***	-0.0121	0.1459***	0.4076***	-0.1565***	-0.0385*	-0.0482**		
<i>TURNOVER</i>	0.0109	0.0050	-0.0155	-0.0111	0.0240	0.0535***	-0.0466**	0.3477***	-0.0596***	
<i>DIVIDEND</i>	0.3185***	0.3216***	-0.0069	0.2166***	0.0969***	-0.1590***	-0.0717***	-0.2741***	0.2533***	0.0473**

Notes: 1. Refer to Table 4 for variable definitions.

2. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.001$.

4.2. Mean Difference Analysis on Foreign Ownership

Table 6 shows the difference between the foreign ownership mean before the Trump Government and the foreign ownership mean after the Trump Government. The results of Table 6 show that the mean of *FOR_end* and *FOR_ave* before the Trump Government is 0.1046 and 0.1055, respectively, and the mean of *FOR_end* and *FOR_ave* after the Trump Government is 0.1127 and 0.1133, respectively. The mean of *FOR_end* and *FOR_ave* increased by 0.0081 and 0.0078 after the Trump Government, respectively, rather than before the Trump Government, but there is no statistical significance.

Table 6. Mean Difference Analysis on Percentage of Foreign Equity Ownership

Variables	Period	Mean	Std	t-value
<i>FOR_end</i>	Periods before the Trump Government(A, n=1,180)	0.1046	0.1298	1.50
	Periods after the Trump Government(B, n=1,180)	0.1127	0.1338	
	Diff = mean(B) - mean(A) = 0.0081			
<i>FOR_ave</i>	Periods before the Trump Government(A, n=1,180)	0.1055	0.1301	1.43
	Periods after the Trump Government(B, n=1,180)	0.1133	0.1329	
	Diff = mean(B) - mean(A) = 0.0078			

Notes: 1. Refer to Table 4 for variable definitions.

2. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.001$.

4.3. Hypothesis Test Results

Table 7 shows the result of regression analysis on the relationship between the Trump Government and foreign ownership. Panel A of Table 7 shows the results of two years before the Trump Government (2015 and 2016) and two years after the Trump Government (2017 and 2018). Panel B analyzes two years before the Trump Government (2015 and 2016) and one year after Trump Government (2018). The reason for excluding 2017 in Panel B is to exclude the effects of previous governments.

Table 7. Regressions for the Effect of the Trump Government on Foreign Equity Ownership

Panel: A (Full Sample (n=2,360): Period before the *Trump Government (2015 year and 2016 year)* and Period after the *Trump Government (2017 and 2018 year)*)

Independent Variables	model 1(FOR end)		model 2(FOR ave)	
	Coefficient	t-statistic	Coefficient	t-statistic
Intercept	-1.1540	-24.92***	-1.1445	-24.88***
Trump Government	0.0145	2.45**	0.0120	2.04**
ROA	0.0050	0.34	0.0217	1.50
BIG	0.0074	1.49	0.0079	1.58
VOL	-0.7043	-4.27***	-0.7700	-4.70***
EXP	-0.0002	-0.04	0.0001	0.01
LEV	-0.0372	-3.19***	-0.0322	-2.78***
SIZE	0.0462	29.44***	0.0459	29.45***
TURNOVER	0.0082	1.75*	0.0058	1.25
DIVIDEND	1.6006	9.24***	1.6041	9.32***
YD		Included		
ICODE		Included		
F-statistic	74.76***		76.27***	
Adj.R ²	0.4075		0.4125	

Panel: B (Limited Sample: Period before the *Trump Government (2015 year and 2016 year)* and Period after the *Trump Government (Only 2018 year)*)

Independent Variables	model 1(FOR end)		model 2(FOR ave)	
	Coefficient	t-statistic	Coefficient	t-statistic
Intercept	-1.1327	-21.17***	-1.1298	-21.13***
Trump Government	0.0145	2.46**	0.0119	2.01**
ROA	0.0101	0.37	-0.0015	-0.06
BIG	0.0067	1.16	0.0074	1.28
VOL	-0.7132	-4.06***	-0.7644	-4.35***
EXP	0.0014	0.16	-0.0017	-0.20
LEV	-0.0299	-2.23**	-0.0280	-2.09**
SIZE	0.0454	24.95***	0.0454	24.98***
TURNOVER	0.0066	1.23	0.0046	0.86
DIVIDEND	1.6169	7.98***	1.7134	8.47***
YD		Included		
ICODE		Included		
F-statistic	58.08***		59.05***	
Adj.R ²	0.4039		0.4080	

Notes: 1. Refer to Table 4 for variable definitions.

2. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.001$.

Table 7 Model 1 of Panel A and Panel B is the result of analysis of *FOR_end* as a dependent variable, and Model 2 of Panel A and Panel B is the result of analysis of *FOR_ave* as a dependent variable. The results of Table 7 show that the Trump Government's regression coefficients are positive ($p < 5\%$) in both the Panel A and Panel B models. Contrary to expectations, foreign ownership increased after the Trump government rather than before the Trump government. In other words, this indicates that foreign investors are increasing their investment in Korean companies more after the Trump Government.

The control variable, *VOL*, represents a significant negative value ($p < 1\%$) in both panel A and panel B models. Therefore, the results are consistent with Dahlquist and Robertsson (2001) and Kang and Stulz (1997) that the proportion of foreigners increases as the level of information asymmetry decreases.

LEV represents a significant negative value in both models of Panel A and Panel B ($p < 1\%$). This is consistent with Dahlquist and Robertsson (2001), indicating that foreign investors prefer companies with low debt ratios. *SIZE* represents a significant positive value ($p < 1\%$), suggesting a consistent result with Kang and Stulz (1997) that there is a close relationship between firm size and foreign ownership.

TURNOVER shows a significant positive value ($p < 10\%$) only in Model 1 of Panel A. Total asset turnover is considered to be positively related to the foreign ownership ratio. *DIVIDEND* represents a significant positive value ($p < 1\%$) in both panels A and B models. In Korea, both capital and dividend gain are subject to taxation. In this sense, foreign investors who make investment decisions in Korean firms can be interpreted as preferring dividend gain.

In addition, we used the foreign ownership ratio of the next year ($t + 1$ year) as the dependent variable, but the results are consistent with Table 7. Summarizing the results in Table 7, we can see that the foreign ownership ratio after the Trump Government is higher than before the Trump Government. These results suggest that the Trump Government's protectionist trade policies can change the corporate governance of Korean companies.

4.4. Additional Test

The report in Table 7 suggests that foreign ownership is increasing after the Trump Government rather than before the Trump Government. Prior studies related to foreign equity ratios report that export ratio, profitability, dividend level, and information asymmetry level affect the decision of foreign investors. The Trump Government's trade protection will directly affect the export ratio and profitability of Korean companies. In addition, it is necessary to analyze whether the dividend level and information asymmetry level differ between the period before the Trump Government and the period after the Trump Government. In this context, this study performed mean difference analysis before and after the Trump Government.

The results of Table 8 show that the means of *ROA* and *EXP* before the Trump Government are 0.2220 and 0.0275, respectively, and that of *EXP* and *ROA* after Trump Government is 0.2112 and 0.0291, respectively. However, these variables are found to have no statistical significance. This suggests that the Trump Government's protectionist trade policy does not affect the export ratio and profitability of Korean companies.

The mean of *DIVIDEND* before the Trump Government was 0.0094 and the mean of *DIVIDEND* after Trump Government is 0.0092. The *DIVIDEND* of Korean companies has declined by 0.0002 since beginning of the Trump Government, but there is no statistical significance. Net income is a source of dividends. Net income increases as profitability increases. The fact that there is no difference in dividends before and after the Trump government seems to confirm that there is no difference in profitability before and after the

Trump Government.

The mean of *VOL* before the Trump Government was 0.0262, and the mean of *VOL* after the Trump Government is 0.0236. This is a decrease of 0.0026 in the means of Korean companies after the Trump Government. The *VOL* mean difference is statistically significant. This suggests that the information asymmetry level after the Trump Government is lower than before the Trump Government.

Table 8. Mean Difference Analysis on Percentage of EXP, ROA, DIVIDEND and VOL

Variables	Period	Mean	Std	t-value
<i>EXP</i>	Periods before the <i>Trump Government</i> (A, n=1,180)	0.2220	0.2861	-0.91
	Periods after the <i>Trump Government</i> (B, n=1,180)	0.2112	0.2895	
	Diff = mean(B) - mean(A) = -0.0108			
<i>ROA</i>	Periods before the <i>Trump Government</i> (A, n=1,180)	0.0275	0.0937	0.24
	Periods after the <i>Trump Government</i> (B, n=1,180)	0.0291	0.1901	
	Diff = mean(B) - mean(A) = 0.0016			
<i>DIVIDEND</i>	Periods before the <i>Trump Government</i> (A, n=1,180)	0.0094	0.0144	-0.33
	Periods after the <i>Trump Government</i> (B, n=1,180)	0.0092	0.0129	
	Diff = mean(B) - mean(A) = -0.0002			
<i>VOL</i>	Periods before the <i>Trump Government</i> (A, n=1,180)	0.0262	0.0160	-4.79***
	Periods after the <i>Trump Government</i> (B, n=1,180)	0.0236	0.0106	
	Diff = mean(B) - mean(A) = -0.0026			

Notes: 1. Refer to Table 4 for variable definitions.

2. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.001$.

Taken together, the results of Table 7 and Table 8 show that US protection trade policies do not adversely affect the profitability of Korean companies. However, Korean firms are improving their information environment because US protectionist trade policies can lower profitability, which can be a negative factor for smooth capital raising. In this regard, the foreign ownership ratio seems to differ before and after the Trump Government.

5. Conclusion

This study analyzed the effect of the Trump Government's protectionist trade policy on foreign ownership. This study empirically analyzes whether there is a difference between foreign ownership before and after the Trump Government.

Foreign investors are known to have a high proportion of institutional investors, and they have a better ability to collect and analyze information and higher return on investment than domestic institutional investors or individual investors. In addition, foreign investors are known to be effective managers, and the factors influencing foreign investor's stock selection are attracting academic and practical attention.

For Korea, the United States is the second largest export market, after China among the top 10 trading partners. The US's trade protection policy could have a negative impact on Korean firms' profitability. Negative factors on profitability will also affect corporate governance. However, in the previous studies related to the foreign shareholding, the study is focused on the effect of individual company characteristic variables on the foreign ownership. This study empirically analyzes the effect of US protection trade policy on foreign ownership of Korean companies by comparing the period before and after the Trump Government.

As a result, foreign ownership increased after the Trump Government rather than before

the Trump Government. In order to interpret these results, this study analyzed whether export rates, profitability, dividends, and information asymmetry levels affected the foreign investors' decision making before and after the Trump Government. The analysis showed that export ratios, profitability and dividends did not differ before and after the Trump Government. However, the level of information asymmetry decreased after the Trump Government rather than before the Trump Government.

Taken together, the US's trade protection policy does not appear to adversely affect the profitability of Korean companies. In particular, Korean companies are expected to continue to improve their information environment to make up for the negative impact of US protection trade policy on profitability. In this regard, the foreign ownership ratio seems to differ before and after the Trump Government.

This study contributes in that it presents data that US protectionist policies can affect Korean corporate governance. This study has implications from the short-term analysis of US protection trade policy. This study has limitations that foreign investors could not analyze by country due to the limitation of data collection.

This study is limited in data collection related to foreign ownership, and has a limitation in not being able to extend the analysis period. In addition, this study has a limitation in reducing the number of samples by analyzing only matching companies before and after the Trump government.

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