© 2024-Center for Economic Integration, Sejong University, All Rights Reserved.

pISSN: 1225-651X eISSN: 1976-5525

Minimum Wage Hike and Multinational Enterprises' Employment: Firm-Level Evidence from South Korea

Hoyong Jung1+ and Sunyoung Park2

¹Seoul National University, Seoul, Republic of Korea ²Dongguk University, Seoul, Republic of Korea

Abstract This study examines the impact of a consecutive double-digit hike in Korea's minimum wage from 2018 to 2019 after the impeachment of President Park Geun-hye as an exogenous shock on the employment of multinational enterprises (MNEs). Notably, this topic has received limited attention in extant literature. Using a firm-level dataset covering the period 2006-2020, we find that MNEs respond to increases in the minimum wage by reducing their total employment size, including both regular and temporary workers. Furthermore, the effects are heterogeneous and depend on the participation of international trade and strategic partnerships. Our findings indicate that the minimum wage policy can even lead to a decrease in high-quality jobs within high-productivity companies, underscoring the need to adjust the pace of such increases to mitigate their side effects on the labor market.

Keywords: minimum wage, employment, multinational enterprises, South Korea

JEL Classifications: F23, J23

Received 29 July 2023, Revised 6 December 2023, Accepted 13 December 2023

I. Introduction

The significant role played by multinational enterprises (MNEs) worldwide is progressing alongside the expansion of international trade (Yeaple, 2013; Antras and Yeaple, 2014). MNEs, which play a crucial part in the global value chain, interact with host countries' respective labor policies, substantially impacting the economy. For instance, MNEs influence a country's employment culture (Siegel, Pyun, and Cheon, 2019; Tang and Zhang, 2021). Conversely, a country's labor policies affect the operations of MNEs (Olney, 2013; Griffith and Macartney, 2014).

The minimum wage, which is a critical labor policy that strongly influences employment, has been the subject of numerous studies conducted from various perspectives (Neumark and

+Corresponding Author: Hoyong Jung

Assistant Professor, Graduate School of Public Administration, Seoul National University, Seoul, Republic of Korea. E-mail: ghdydwjd1@gmail.com

Co-Author: Sunyoung Park

Associate Professor, Department of Economics, Dongguk University, Seoul, Republic of Korea.

E-mail: sanovs@gmail.com

Funding: This work is supported by the Ministry of Education of the Republic of Korea and the National Research Foundation of Korea (NRF-2022S1A5A2A0305221911)

Wascher, 2007). However, there is limited empirical evidence on firm-level responses to minimum wage policies from the perspective of their impact on MNEs (Duanmu et al., 2022). Theoretical predictions regarding how minimum wage affects MNE employment can be contradictory. Since MNEs are typically large companies with a higher proportion of productive and fewer low-wage workers, they may be less susceptible to the impact of minimum wage policies on employment (Dustmann et al., 2022). Conversely, MNEs are highly flexible and resilient in their operations as they can redistribute tasks to foreign affiliates in countries with lower labor costs, potentially exacerbating the negative effects of the minimum wage on domestic employment (Konings and Murphy, 2006).

This study analyzes how the rapid increase in Korea's minimum wage from 2018 to 2019 affects MNE employment. Several distinctive features distinguish this study from existing literature. Firstly, it focuses on a quasi-experimental scenario to identify the effects of minimum wage hikes on employment. The unexpected impeachment of President Park Geun-hye in 2017 caught companies in the market off guard, and the subsequent increase in the minimum wage by the new regime far exceeded the general level, recording a double-digit growth rate over the two years from 2018 and 2019 (Kim and Jung, 2023). Secondly, the empirical strategy expands the scope of analysis. This study utilizes firm-level data from Statistics Korea, covering approximately 13,000 firms annually from 2006 to 2020. Moreover, employment is observed and analyzed based on the type of employees (i.e., regular and temporary workers). The analysis also considers the heterogeneity of firm characteristics, such as industry type, strategic alliances, and international trade. By using Korea as an example, representing a small open economy, this paper contributes additional evidence to the existing literature and offers relevant policy implications regarding minimum wage policies based on empirical results.

The remaining sections of this study are organized as follows: Section 2 provides the contextual background, including the minimum wage hike in Korea and possible responses to this shock from the perspective of MNEs. Next, Section 3 explains the empirical design, including data sources and the estimation strategy. Section 4 presents the results, and finally, Section 5 concludes.

II. Study Background and Hypothesis Development

The minimum wage is a policy through which the government intervenes in the wage determination process between labor and management. It establishes the minimum level of wages and protects low-wage workers by mandating employers to pay wages above this level. Article 32 (1) of the Constitution of Korea stipulates that the state must implement the minimum wage as prescribed by law. Alongside the constitution, the Minimum Wage Act was enacted and

promulgated on December 31, 1986, and took effect on January 1, 1988.

The minimum wage is determined through the deliberation of a committee within the Minimum Wage Commission, comprising representatives from workers, employers, and public interest groups. The Minister of Employment and Labor requests deliberation by March 31 each year. The determined minimum wage is subsequently announced by the Minister of Employment and Labor by August 5 and takes effect on January 1 of the following year.

Figure 1 illustrates the trend of the minimum wage in recent years, depicting a significant increase in the minimum wage level and growth rate in 2018 and 2019.¹)

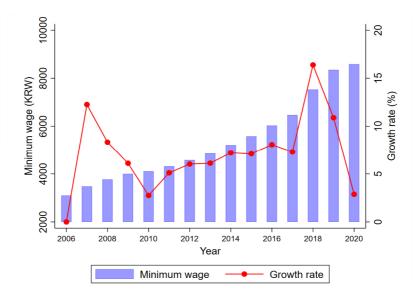


Figure 1. Minimum wage trend in Korea

(Source) Minimum Wage Commission (https://www.minimumwage.go.kr/english/main.do)

This increase is closely related to the regime change. Former President Park Geun-hye was impeached in March 2017 following a series of scandals.²) This impeachment led to the installation of President Moon Jae-in in May 2017 and the implementation of a higher minimum

The minimum wage growth rate experienced a notable increase in 2007. However, this particular year falls outside the scope of our primary focus, given the absence of significant events, such as the 2017 impeachment. Moreover, both the minimum wage level and the absolute increase during this year remained relatively modest. According to a June 29 press release by the Ministry of Labor, it attributed the substantial rise in the minimum wage in 2007 to endeavors to address income inequality and narrow the wage gap between larger and smaller businesses. These factors are discernibly different from the 2017 impeachment of Park Geun-hye, as they lack an element of unpredictability. Therefore, we undertook an additional test, excluding data from 2007, to bolster the robustness of our findings.

²⁾ Several notable scandals occurred during this period, such as the involvement of Mrs. Choi Soon-sil, an unofficial secretary of former President Park Geun-hye, who used her influence for private rent-seeking. Mrs. Park was accused of being implicated in these scandals.

wage during his presidency.

President Moon Jae-in introduced stringent labor market policies, which differed from the previous administration, such as reducing legal weekly working hours and converting non-regular workers in public institutions into regular workers. Notably, the minimum wage increase was one of the most contentious pledges. The Minimum Wage Commission raised the minimum wage by 16.4% in 2018 (from KRW 6470 to KRW 7530) and by an additional 10.9% in 2019 (from KRW 7530 to KRW 8350), resulting in a 29.1% increase over just two years. These consecutive double-digit hikes in the minimum wage following the impeachment of President Park Geun-hye were unexpected by market participants, including MNEs, and served as an exogenous shock. These unforeseen events raised significant concerns about their adverse effects on employment and, consequently, on the economy.

MNEs may respond differently to rapid increases in the minimum wage compared to domestic companies, primarily due to their unique characteristics. They possess competitive advantages, such as technological advancements, strong brand reputations, and superior organizational practices, which help them overcome the challenges of operating in foreign markets (Hymer, 1960; Rugman, 1980). MNEs are also known for their high productivity, substantial investments in research and development, and the production of high-value-added products (Griffith, 1999; Helpman, Melitz, & Yeaple, 2004; Jung, 2022). Additionally, MNEs can leverage their subsidiaries to mitigate and adapt to external market uncertainties, resulting in greater flexibility and improved performance (Fisch & Zschoche, 2012; Reuer & Leiblein, 2000).

Considering these characteristics, their response to rapid increases in the minimum wage can vary. On one hand, there may be no significant impact on employment. MNEs tend to have higher productivity, lower marginal costs, employ more skilled workers, and offer higher wages compared to domestic firms (Almeida, 2007; Tatoglu, Glaister, & Demirbag, 2016). These advantages make MNEs less susceptible to the direct effects of rigid labor market policies, enabling them to absorb the cost shock resulting from the minimum wage increase (Riley & Bondibene, 2017).

On the other hand, MNEs' operational flexibilities can magnify the impact of a minimum wage hike on employment. They can reallocate production and resources in response to external changes, reducing their operational exposure (Kogut & Kulatilaka, 1994). This flexibility often leads them to prefer lower-wage locations (Wheeler & Mody, 1992). Furthermore, the minimum wage level can influence their employment as it affects wage distribution throughout the labor market (Grossman, 1983; Neumark, Schweitzer, & Wascher, 2004).

Given the previously mentioned Korean context and the findings from previous studies, we formulate the following hypothesis, noting that it represents an empirical question:

Hypothesis: A sharp increase in the minimum wage significantly impacts the employment of MNEs.

46 Journal of Economic Integration Vol. 39, No. 1

III. Empirical Design

We utilize the Survey of Business Activities from Statistics Korea to investigate the impact of a minimum wage hike on employment in MNEs at the firm level in Korea. This annual firm-level panel dataset has been collected since 2006, covering approximately 13,000 firms. It encompasses firms across all industries and includes those with at least 50 full-time employees and a minimum capital stock value of 300 million KRW.

The dataset provides information on various variables of interest, including employment, foreign acquisition, region, industry, sub-industry, capital stock, export and import transactions, parent companies and subsidiaries, strategic partnerships, and intellectual property rights.³) It also provides geographical information at the level of Korea's 17 metropolitan administrative districts. Industries are identified using the 21 major industrial categories based on the Korean Standard Industrial Classification, while sub-industries are further classified into 99 sub-sectors within the major industrial categories.

Specifically, we focus on employment composition, comprising regular and temporary workers. A regular worker is a wage worker who has signed an employment contract for a minimum of one year or is subject to personnel management regulations upon joining the company per prescribed hiring procedures. Additionally, foreign acquisition is measured by the proportion of foreigners' shares of a firm's total equity.

Table 1 presents the descriptive statistics for the entire sample (Panel A) and a subsample specifically focusing on MNEs, defined as firms with foreigners' share in total equity exceeding 50% (Panel B). Notably, MNEs tend to exhibit larger workforce sizes, higher capital stock values, and engage in more extensive international trade transactions.

Variable	Mean	SD	Min	Max	Observation
Panel A. All observations					
Total workers	330.566	1481.087	1	105679	151934
Regular workers	302.705	1420.758	1	105027	151934
Temporary workers	27.860	243.403	0	37797	151934
Log of total workers	4.939	1.051	0.693	11.568	151934
Log of regular workers	4.870	1.029	0.693	11.562	151934
Log of temporary workers	0.799	1.551	0	10.540	151934
Minimum wage hike	0.251	0.434	0	1	151934

Table 1	Summary	Statistics
---------	---------	------------

³⁾ The parent company refers to an enterprise holding more than 50% of a company's total issued shares. A strategic partnership is established when two companies mutually commit to sharing risks and rewards through mutual agreements, maintaining long-term partnerships to achieve common goals. Intellectual property rights encompass concepts such as patents, design, and trademark rights.

Variable	Mean	SD	Min	Max	Observation
Multinational enterprises [1]	0.098	0.297	0	1	151934
Multinational enterprises [2]	0.126	0.331	0	1	151934
Multinational enterprises [3]	0.139	0.345	0	1	151934
Multinational enterprises [4]	0.089	0.285	0	1	151934
Log of capital stock	7.933	1.536	5.704	16.144	151934
Export	0.442	0.497	0	1	151934
Import	0.411	0.492	0	1	151934
Manufacturing industry	0.508	0.500	0	1	151934
Strategic partnership	0.091	0.287	0	1	151934

Table 1. Continued

Panel B. Samples limited to the case of Multinational enterprises [1]

Total workers	381.982	1476.692	1	105679	14876
Regular workers	354.496	1400.991	1	105027	14876
Temporary workers	27.485	298.813	0	10263	14876
Log of total workers	5.020	1.152	0.693	11.568	14876
Log of regular workers	4.981	1.134	0.693	11.562	14876
Log of temporary workers	0.703	1.427	0	9.236	14876
Minimum wage hike	0.242	0.429	0	1	14876
Log of capital stock	8.741	1.618	5.704	15.454	14876
Export	0.624	0.484	0	1	14876
Import	0.674	0.469	0	1	14876
Manufacturing industry	0.429	0.495	0	1	14876
Strategic partnership	0.081	0.272	0	1	14876

Note. Multinational enterprises [1] are defined as entities in which foreigners' share in total equity exceeds 50%, which serves as our primary specification. Alternatively, we employ additional specifications to classify multinational enterprises. Multinational enterprises [2] and [3] are characterized by foreigners' share in total equity exceeding 20% and 10%, respectively. Multinational enterprises [4] refer to those whose parent companies are based in foreign countries.

We employ the following equation as our main regression model:

 $Y_{it} = \beta_1 MNE_i + \beta_2 Hike_t + \beta_3 (MNE_i \times Hike_t) + region_i + industry_i + year_t + \epsilon_{it} ,$

where *i* represents a firm and *t* represents a year. The terms $region_i$, $industry_i$ and $year_t$ capture region-specific, industry-specific, and year-specific fixed effects, respectively. Standard errors are clustered at the industry level.

We use three different types of employees as the dependent variable Y_{ii} : the natural logarithm of the total number of workers, regular workers, and temporary workers. For the independent variable MNE_i , we assign a value of "1" if the ratio of foreign capital to total capital is equal to or greater than 50 percent, considering that substantial foreign ownership can impact major corporate management decisions (Duanmu et al., 2022; Jung, 2022). As for the independent variable $Hike_t$, we assign a value of "1" if the year is after 2018 and "0" otherwise.

We ensure the robustness of our model by also considering alternative definitions of MNEs. Specifically, we assign a value of "1" to MNE_i if the ratio of foreign capital to total capital is equal to or greater than either 10 or 20 percent or if the parent company is foreign. We also limit the period in various ways to account for global events that may have influenced the employment of multinational companies. Additionally, we assign a value of "1" to $Hike_t$ after 2017, and "0" otherwise, considering the possibility of information dissemination before 2018. Lastly, we conduct heterogeneity analysis to examine whether the results differ based on factors such as a firm's record of international transactions, whether it operates in the manufacturing industry, or whether it has a strategic alliance partnership.

IV. Results

Table 2 presents the main findings of the study, showing that the total employment in MNEs declined following the minimum wage hike in 2018 (Column 1). The impact of this reduction is observed in both regular and temporary workers, with a greater magnitude observed in the latter group, which is more directly affected by the minimum wage policy (Columns 2 and 3). These results indicate that increased operating costs for companies due to rigid labor market regulations negatively influence overall employment, and the adverse effects of the minimum wage hike on employment are not exclusive to temporary workers.

	(1)	(2)	(3)
	All workers	Regular workers	Temporary Workers
	0.148	0.157	-0.023
MNEs	(0.114)	(0.111)	(0.076)
11'1	0.004	0.044	-0.418**
Hike	(0.101)	(0.097)	(0.046)
MNEs × Hike	-0.066*	-0.059*	-0.087**
	(0.025)	(0.024)	(0.024)
Year fixed effect	\checkmark	\checkmark	\checkmark
Region fixed effect	\checkmark	\checkmark	\checkmark
Industry fixed effect	\checkmark	\checkmark	\checkmark
R ²	0.122	0.117	0.178
Ν	151934	151934	151934

Table 2. Main Results

Standard errors clustered at the industry level, ** p<0.01, * p<0.05, + p<0.10.

Table 3 examines the robustness of the main results, with the findings indicating that the results are not highly sensitive to the definition of MNEs used. Specifically, when the definition is relaxed to include companies with a 10% or 20% share of total equity held by foreigners (Panels A and B), the effects become less pronounced. This outcome suggests that the response is stronger when foreigners have a greater influence on internal decision-making, such as employment. The results remain consistent with the main findings when MNEs are defined as corporations with a foreign parent company (Panel C).

Furthermore, the size of a company's capital stock may impact employment and its response to the minimum wage hike. Controlling for the logged value of the capital stock does not qualitatively change the results, and the effects are more significant for temporary workers (Panel D). Additionally, the results remain statistically significant when the analysis excludes the period of the global financial crisis from 2008 to 2009 (Panel E) and 2007, when there was a double-digit growth rate of the minimum wage prior to 2010 (Panel F).

Lastly, as elucidated in the previous section, the determination of the minimum wage level is contingent upon the preceding August. Consequently, even though the effective increase in the minimum wage materialized in 2018, businesses in Korea were likely cognizant of the forthcoming alteration as early as mid-2017. This foreknowledge may have prompted certain firms to react during the year 2017.⁴) By coding the variable that signifies the wage increase as "1" for observations occurring after 2017 and "0" for observations preceding that threshold, we arrive at analogous outcomes (Panel G).

	(1)	(2)	(3)
	All workers	Regular workers	Temporary Workers
Panel A. MNEs is equal to 1 if j	foreigners' share in total eq	uity >10%	
	-0.044+	-0.038	0.027
MNEs \times Hike	(0.022)	(0.022) (0.022)	
R^2	0.130	0.127	0.179
N	151934	151934	151934
Panel B. MNEs is equal to 1 if j	foreigners' share in total eq	uity >20%	
	-0.061**	-0.054*	-0.028
MNEs × Hike	(0.020)	(0.019)	(0.031)

Table 3. Robustness Tests

 \mathbb{R}^2

Ν

4) Furthermore, it is reasonable to anticipate that policies aimed at bolstering labor rights could be instituted under the new regime, given that the Moon Jae-in administration is characterized as a progressive. This awareness is generally acknowledged.

0.122

151934

0.178

151934

0.126

151934

Table 3. Continued

	(1)	(2)	(3)	
	All workers	Regular workers	Temporary Workers	
Panel C. MNEs is equal to 1 if the	he parent company is base	d in a foreign country		
MNEs × Hike	-0.067*	-0.059*	-0.108**	
	(0.026)	(0.025)	(0.024)	
\mathbf{R}^2	0.121	0.117	0.178	
Ν	151934	151934	151934	
Panel D. Including log of capital	stock in the covariates			
MNEs × Hike	-0.051*	-0.043+	-0.080**	
IVIINES ^ TIIKC	(0.023)	(0.022)	(0.023)	
\mathbf{R}^2	0.253	0.257	0.191	
Ν	151934	151934	151934	
Panel E. Excluding years 2008-20				
MNEs × Hike	-0.060*	-0.053*	-0.069*	
	(0.023)	(0.022)	(0.026)	
\mathbf{R}^2	0.125	0.121	0.181	
N	130675	130675	130675	
Panel F. Excluding years 2007 wi	hen the minimum wage gro	wth rate is high before 20.	10	
MNEs × Hike	-0.053*	-0.047+	-0.076**	
WINES ^ THRC	(0.024)	(0.023)	(0.026)	
\mathbf{R}^2	0.125	0.121	0.177	
Ν	141496	141496	141496	
Panel G. Hike is equal to 1 after	2017, taking the dissemina	ation of information into ac	count	
MNEs × Hike	-0.077*	-0.071*	-0.098**	
	(0.030)	(0.028)	(0.030)	
\mathbb{R}^2	0.122	0.117	0.178	
Ν	151934	151934	151934	
Year fixed effect	\checkmark	\checkmark		
Region fixed effect	\checkmark	\checkmark	\checkmark	
Industry fixed effect	\checkmark	\checkmark	\checkmark	

Standard errors clustered at the industry level, ** p<0.01, * p<0.05, + p<0.10.

Table 4 presents the analysis of heterogeneities in the results. In terms of international trade criterion, the employment of temporary workers significantly decreases in companies engaged in international trade (Panel A1), while the employment of regular workers decreases in companies that do not have international transactions (Panel A2). Non-trade companies experience a negative impact on total employment. These findings suggest that trade companies manage the adverse effects of the minimum wage hike by shifting the burden of labor costs to temporary workers,

who are more easily hired or discharged in the labor market. On the other hand, the minimum wage shock translates into an overall employment reduction among non-trade companies.

	(1)	(2)	(3)
	All workers	Regular workers	Temporary Workers
Panel A1. Trade companies			
MNEs × Hike	-0.037	-0.023	-0.136**
	(0.029)	(0.027)	(0.022)
R^2	0.086	0.071	0.150
Ν	77993	77993	77993
Panel A2. Non-trade companies			
MNEs × Hike	-0.321**	-0.322**	-0.071
	(0.090)	(0.084)	(0.101)
R^2	0.191	0.190	0.202
N	73941	73941	73941
Panel B1. Manufacturing industry			
	-0.014	-0.009	-0.097+
MNEs × Hike	(0.029)	(0.029)	(0.052)
R ²	0.090	0.090	0.050
Ν	77128	77128	77128
Panel B2. Non-manufacturing industry			
MNEs × Hike	-0.055	-0.048	-0.056
	(0.035)	(0.032)	(0.041)
R^2	0.211	0.206	0.226
N	74806	74806	74806
Panel C1. Strategic partnership			
MNEs × Hike	-0.017	0.005	-0.345**
	(0.105)	(0.103)	(0.066)
\mathbf{R}^2	0.200	0.201	0.205
N	13809	13809	13809
Panel C2. Non-strategic partnership			
MNEs × Hike	-0.064*	-0.058*	-0.063*
	(0.023)	(0.022)	(0.024)
R^2	0.168	0.165	0.198
Ν	138125	138125	138125
Year fixed effect	\checkmark	\checkmark	
Region fixed effect	\checkmark	\checkmark	\checkmark
Industry fixed effect	\checkmark	\checkmark	\checkmark

Table 4. Heterogeneity

Standard errors clustered at the industry level, ** p<0.01, * p<0.05, + p<0.10.

Regarding the manufacturing industry criterion, there is little evidence of divergent effects (Panels B1 and B2), indicating that the impacts of minimum wage hikes are not specific to the manufacturing industry.⁵) For MNEs with strategic alliances, the minimum wage hike leads to a reduction in temporary workers only (Panel C1). In contrast, MNEs without strategic alliances respond to the minimum wage shock by reducing both regular and temporary employees. This finding suggests that companies without strategic alliances may not have alternative ways to mitigate the minimum wage shock and instead respond by reducing employment.

Overall, these findings highlight the heterogeneity in the effects of the minimum wage hike on different types of companies, depending on their involvement in international trade, industry, and strategic alliances.

V. Conclusion

This study employs panel analysis using firm-level data from Korea to examine the impact of minimum wage hikes on the employment of MNEs. The findings reveal that MNEs respond to increases in the minimum wage by reducing their workforce, affecting both regular and temporary workers. These results highlight the importance of cautiously implementing minimum wage policies to mitigate potentially adverse effects on employment, particularly among foreign companies known for offering high-productivity and high-quality jobs.

Acknowledging the limitations of this study, we recognize that the observed effects might not be solely attributable to the minimum wage policy. For instance, Moon Jae-in's administration introduced a range of labor policies beyond mere adjustments to the minimum wage, including the regularization of non-regular workers. Furthermore, external factors such as the impact of the US-China trade conflict in 2018 could also have influenced the observed effects. It is essential to acknowledge that isolating and analyzing the discrete effects in such a context poses a challenge due to the simultaneous implementation of multiple policies within a closely aligned timeframe. Subsequent investigations should address this concern with a heightened level of rigor and thoroughness.

References

Almeida, R. (2007). The labor market effects of foreign-owned firms. *Journal of International Economics*, 72(1), 75-96.

⁵⁾ Here, we include controls for the sub-industry, and the standard errors are clustered at the sub-industry level.

- Antràs, P., & Yeaple, S. R. (2014). Multinational firms and the structure of international trade. Handbook of International Economics, 4, 55-130.
- Duanmu, J. L., Norbäck, P. J., Lu, J. W., & Clegg, J. (2022). Contraction under minimum wages? Operational and financial advantages of multinational subsidiaries in China. *International Business Review*, 31(2), 101936.
- Dustmann, C., Lindner, A., Schönberg, U., Umkehrer, M., & Vom Berge, P. (2022). Reallocation effects of the minimum wage. *The Quarterly Journal of Economics*, 137(1), 267-328.
- Fisch, J. H., & Zschoche, M. (2012). The effect of operational flexibility on decisions to withdraw from foreign production locations. *International Business Review*, 21(5), 806-816.
- Griffith, R. (1999). Using the ARD establishment level data to look at foreign ownership and productivity in the United Kingdom. *The Economic Journal*, *109*(456), 416-442.
- Griffith, R., & Macartney, G. (2014). Employment protection legislation, multinational firms, and innovation. *Review of Economics and Statistics*, *96*(1), 135-150.
- Grossman, J. B. (1983). The impact of the minimum wage on other wages. *Journal of Human Resources*, 18(3), 359-378.
- Helpman, E., Melitz, M. J., & Yeaple, S. R. (2004). Export versus FDI with heterogeneous firms. *American Economic Review*, 94(1), 300-316.
- Hymer, S. H. (1960). *The international operations of national firms, a study of direct foreign investment* (Doctoral dissertation). Massachusetts Institute of Technology, USA.
- Jung, H. (2021). Foreign acquisition and R&D activities: evidence from a small open economy. *Applied Economics Letters*, 28(20), 1732-1737.
- Kim, Y., & Jung, H. (2023). The impact of changing political positions on charitable donations: A case study of a political scandal in South Korea. *The Review of Socionetwork Strategies*, 17(2), 145-154.
- Kogut, B., & Kulatilaka, N. (1994). Operating flexibility, global manufacturing, and the option value of a multinational network. *Management Science*, 40(1), 123-139.
- Konings, J., & Murphy, A. P. (2006). Do multinational enterprises relocate employment to low-wage regions? Evidence from European multinationals. *Review of World Economics*, 142, 267-286.
- Neumark, D., & Wascher, W. L. (2007). Minimum wages and employment. Foundations and Trends in Microeconomics, 3(1-2), 1-182.
- Neumark, D., Schweitzer, M., & Wascher, W. (2004). Minimum wage effects throughout the wage distribution. *Journal of Human Resources*, 39(2), 425-450.
- Olney, W. W. (2013). A race to the bottom? Employment protection and foreign direct investment. *Journal* of International Economics, 91(2), 191-203.
- Reuer, J. J., & Leiblein, M. J. (2000). Downside risk implications of multinationality and international joint ventures. Academy of Management Journal, 43(2), 203-214.
- Riley, R., & Bondibene, C. R. (2017). Raising the standard: Minimum wages and firm productivity. *Labour Economics*, 44, 27-50.
- Rugman, A. (1980). Internalization as a general theory of foreign direct investment: A re-appraisal of the literature. *Review of World Economics*, 116(2), 365-379.
- Siegel, J., Pyun, L., & Cheon, B. Y. (2019). Multinational firms, labor market discrimination, and the

54 Journal of Economic Integration Vol. 39, No. 1

capture of outsider's advantage by exploiting the social divide. *Administrative Science Quarterly*, 64(2), 370-397.

- Tang, H., & Zhang, Y. (2021). Do multinationals transfer culture? Evidence on female employment in China. Journal of International Economics, 133, 103518.
- Tatoglu, E., Glaister, A. J., & Demirbag, M. (2016). Talent management motives and practices in an emerging market: A comparison between MNEs and local firms. *Journal of World Business*, 51(2), 278-293.
- Wheeler, D., & Mody, A. (1992). International investment location decisions: The case of US firms. *Journal of International Economics*, 33(1-2), 57-76.

Yeaple, S. R. (2013). The multinational firm. Annual Review of Economics, 5(1), 193-217.