

FDI of EU and USA and Employment Effects in Korea*

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Abstracts

After the outbreak of the 1997 Asian financial crisis, the Korean economy has aggressively engaged in attracting Foreign Direct Investment (FDI). Inward FDI amounted to a total of \$116 billion during 1998-2007, which was about six times larger than a decade ago. EU and the USA were the major contributors, accounting for roughly 62% of the total FDI into Korea. In theory, inward FDI can generate positive effects of creating jobs, enhancing productivity, and promoting exports. The present paper aims to look at the employment effects of FDI in the Korean labor market. Specially, we complement previous studies by empirically examining whether firms invested by EU and the USA exhibit different patterns in generating jobs. According to the fixed effect panel analysis, EU-invested firms indeed have low elasticity of employment to sales relative to USA-invested firms. It implies that EU-invested firms in Korea have changed the number of employment more cautiously than USA-invested firms as sales fluctuate.

KRF Classification : B030800

Keywords : FDI, EU, employment

* Acknowledgement: This research was supported with financial assistance from the Yonsei-SERI EU Center.

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I. Introduction

Foreign Direct Investment (FDI) is a set of economic activities carried out in a host country by firms controlled or partly controlled by foreign countries. These activities are, for example, production, employment, sales, the purchase and use of intermediate goods and fixed capital, and the carrying out of research. In the 1980s, the world economy witnessed a virtual explosion of FDI by OECD countries with outward flows increasing by 220 percent and inward flows by 308 percent (Baldwin, 1994). FDI continued to increase with multinational corporations leading the way. Its growth even accelerated since the 1997 Asian financial crisis, as many Asian countries rigorously implemented the economic liberalization where attracting foreign investment was a key component.

For Korea, the size of inward FDI was minimal until the 1997 Asian financial crisis as it is shown in Table 1. This was due mainly to negative sentiments on foreign investment together with strict government regulations. According to Golub (2003), Korea was among those OECD countries that regulated FDI most intensively. The trend changed radically, however, in the wake of the 1997 Asian financial crisis. The Korean government opened domestic market to foreign investment with the urgent need for foreign currencies to stabilize the exchange rate. Many regulations were removed and a number of policy measures were enforced to promote foreign investment (for a detailed survey, see Hong and Gray (2003) and Hong (2008)). Along with these developments, inward FDI began to increase sharply. It rose to \$9 billion in 1998 and reached a peak of \$15 billion in 1999. During 1998-2007, inward FDI amounted to a total of \$116 billion, which was about six times larger than a decade ago.

No doubt, FDI affects the host economy in many important

ways. Most of the existing literatures show that FDI affects the host country economy in positive ways. Lipsey (2002) observes that spillovers from higher wages of foreign firms may bring out positive benefits to the labor market of a host country. FDI also improves productivity, promotes the growth of exports, and introduces new industries for a host country. Caves (1982) suggests that: (1) foreign firms transfer capital, technology and know-how to a host country; (2) FDI improves host country exports and balance-of-payments; (3) FDI induces competition in the host country market. World Trade Organization (WTO) summarizes various effects of FDI on a host country into seven categories. They are: capital accumulation, technology and managerial know-how transfer, export market penetration, entrepreneurship and backward-forward linkage, competition, employment, and stabilization of balance-of payments and the overall economy. Borensztein *et al.* (1998) shows that FDI contributes technology transfer and economic growth of the host country. Li and Lin (2005) also concludes that FDI can promote the economic growth of the host country. For a survey, see DeMello (1997) and Görg and Greenaway (2003).

[Table 1] FDI Inflow Stock / GDP Ratios (%)

	1990	2000	2008
World	9.1	18.1	24.5
Developed	8.1	16.1	24.7
EU	10.7	25.7	36.0
USA	6.8	12.9	16.0
Japan	0.3	1.1	4.1
Developing	13.8	25.1	24.8
China	5.1	16.2	8.7
Hong Kong	262.3	269.3	388.1
Korea	2.0	7.1	9.8
Taiwan	5.9	6.1	11.6
Malaysia	23.4	56.2	33.0

Source: UNCTAD, *World Investment Report* 2009.

The effects of FDI on specific countries such as Korea and China are studied as well. Liu *et al.* (2001) shows that FDI improves labor productivity of electronic industry in China. Cheung (2004) also finds that FDI has positive spillover effect in the patent application of China. Berhelemy (2000) also shows that FDI plays a fundamental role in economic growth of 24 provinces of China. Kim (2010) shows that FDI improves TFP (total factor productivity) of host industries. Also, Park and Lee (2009) shows that FDI contributes employment growth in Korea.

The present paper aims to look at employment effects of FDI on the Korean labor market. In particular, we complement previous studies by examining a hypothesis that FDI firms may exhibit different patterns of employment effect depending on their origin of country. About 120 countries have been investing in Korea. Among them, EU ranks first, accounting for roughly 37% of the total inward FDI for the period of 1998 to 2008, followed by the USA with its share at 25%. We take EU and the USA, and empirically evaluate how these two largest contributors differ in terms of creating jobs in Korea. As well known, firms in the USA allows for more flexible hire/fire practices than those in EU. Firms in EU have strong labor unions with strict employment protections. We pay particular attention to the possibility that this difference between EU and the USA may be spilt over to their FDI firms, generating different features of job creation in Korea. As Park and Lee (2009) points out, those studies based on aggregate or survey data may encounter a possible overestimation of the employment effect. To avoid this problem, the present paper uses panel data, which consists of 24 FDI firms. Out of these 24 firms, 14 firms are invested by EU and the remaining 10 firms are invested by the USA. The sample period covers from 1998 to 2008.

The rest of this paper is organized as follows. Section 2

provides a brief discussion on FDI inflow in Korea and features of the EU and USA firms. Empirical applications and their results are presented in Section 3. Section 4 finalizes the paper.

II. Korea's Inward FDI and Different Employment Effects of the EU and USA Firms

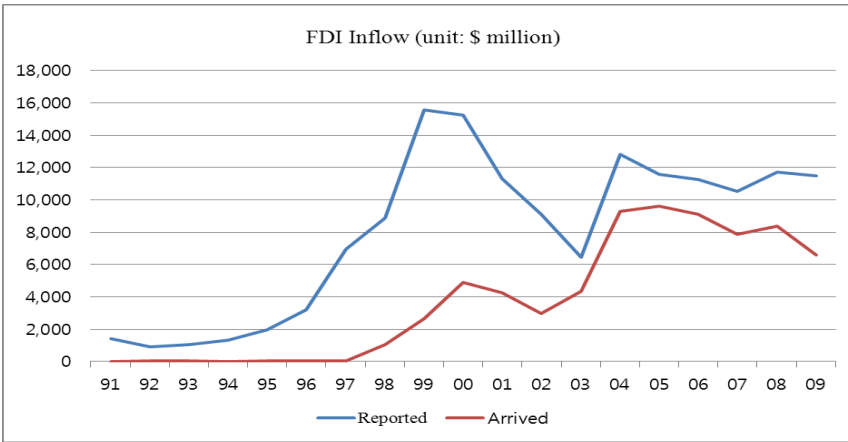
1. General Features of Korea's Inward FDI

After the Asian financial crisis of 1997, Korea has actively embraced FDI inflows from advanced economies. In particular, the annual FDI inflow was more than \$10 billion from 1998 to 2009 on average, which was accounting for roughly 4-12% of the annual investments made in Korea. As it is shown in Figure 1, Korea was relatively inactive in terms of hosting FDI before the 1997 Asian financial crisis. Kim and Hwang (1998) also revealed that FDI had insignificant effect on Korea's productivity improvement before 1997. However, as the financial crisis broke out in the end of 1997, the Korean government tried very hard to attract foreign capital through various channels in order to stabilize the exchange rate. Attracting FDI was one of the most important channels of foreign capital inflow, and it clearly has helped to provide much-needed foreign exchange liquidity to the Korean economy.

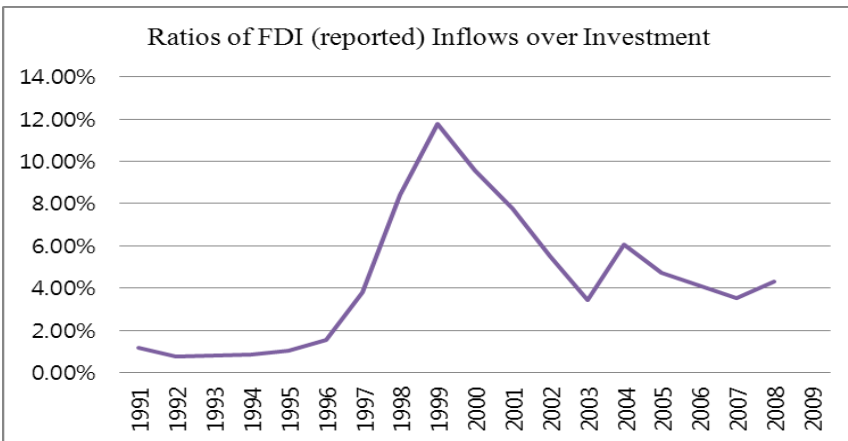
Some critics of FDI argue that there are adverse economic and political effects on the host country (e.g. Aitken and Harrison, 1999; Djankov and Hoekman, 2000; Konings, 2001). Nevertheless, many studies have shown that most of the alleged economic drawbacks of FDI are of little merit and, indeed, the benefits of inward FDI are substantial (Graham and Krugman, 1995; OECD, 2002). To name a few, Blomström *et al.* (1994), Anderson and

Hainaut (1998), Borensztein *et al.* (1995), Haskel *et al.* (2002), Keller and Yeaple (2003), Kokko *et al.* (2001). The experience of Korea was not different in general. Substantial inflow of FDI into Korea was found to help enhance productivity, learn new technology and know-how, and increase exports and investment.

【Figure 1】 FDI Inflow into Korea



Source: Ministry of Knowledge Economy, Korea.



Source: Bank of Korea and Ministry of Knowledge Economy, Korea.

Kim *et al.* (2008) reports that Korea's fixed investment increases by 0.08% for every 1% increase in FDI for the period of 1999 to

2007. Nam and Yoon (2005) finds that FDI contributed significantly to improving the total factor productivity of Korea over 1997 to 2000. FDI firms are also important in boosting international trades, and take up around 10 and 12% of the total export and import in Korea (as of 2001). Lee and Jeon (2005) and Kim and Kim (2007) empirically examine various factors that can induce and determine the inflow of FDI into Korea.

Another important channel through which inward FDI affects is labor market. Many papers that have studied this issue have focused on the relationship between FDI and wage levels paid in the host country. A consensus is that FDI contributes to higher wage payments in host countries (e.g. Aitken *et al.* 1996; Lipsey, 2002; Harrison, 1996). Radosevic *et al.* (2003) and Konings (2004) observe that there is surprisingly little work, however, that studies the employment generation potential of FDI although this could have an important impact on the welfare of host countries. Further, Radosevic *et al.* (2003) finds that the relationship between FDI and employment is far from being well understood. OECD (1995) and World Investment Report (UNCTAD, 1999) conclude that there is no general pattern regarding the employment effects of FDI.

Previous studies for the Korean case appear to be somewhat favorable to positive employment effects of FDI. Cho (2006) calculates that FDI has contributed to about 20% of the total increase in the number of employed during 2000 to 2005. According to Kim *et al.* (2008), the employed increase by 0.007% for every 1% increase in FDI over the period of 1999 to 2007. The report of the Korea Chamber of Commerce and Industry (2004) and Jeong and Park (2007) find that foreign firms are more productive in creating jobs than local domestic firms. This is confirmed by Park and Lee (2009). According to firm-specific data

analysis, the number of employed in foreign firms increases by an annual rate of 3.7%, whereas local domestic firms record an annual increase of 2.5%, for the period of 2000 to 2007. They further find that foreign firms provide a better job security as the rate of involuntary dismissal is smaller than local domestic firms. So, foreign firms appear to have created quality jobs given the fact that they also pay higher wages.

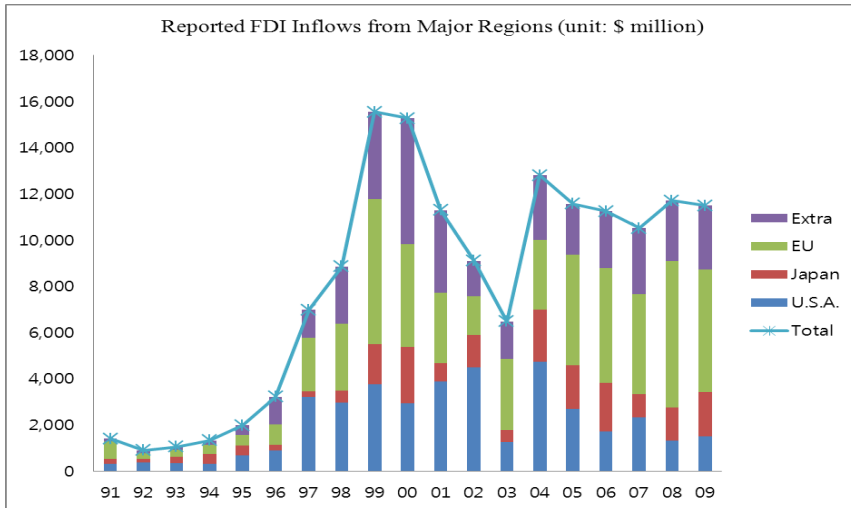
2. Different Effects on Employment between the EU and USA Firms

As Korea has hosted FDI inflows more actively since 1997, most of these FDI came from advanced economies such as USA, Japan, and EU. These three regions are accounting for roughly 3/4 of the total FDI inflows made from 1998 to 2009. In particular, the importance of EU countries has overwhelmed the other regions. As it is shown in Figure 2, EU is accounting for roughly 37% of the total FDI inflows from 1998 to 2009, while the USA and Japan are accounting for 25% and 13% respectively. The importance of EU as the home country of FDI has become even more significant in recent years. For example, according to Figure 2, roughly half of the total FDI inflows are made by EU countries since 2005.

It is a well-known fact that managerial behavior of firms in advanced countries of each continent is different from each other. Particularly, advanced countries show noticeable difference in terms of labor market rigidity. For example, firms in the USA are known to have more flexible hire/fire practices with smaller firing costs than those in Europe or Asia. Firms in Europe are known to have relatively stronger labor union with more strict employment protection compared to those in the USA and Asia. Also, labors in Asian firms are known to have superior work ethic to their

counter-parts in the USA and Europe. The following table shows ranks and indices of labor market rigidities among the USA, Europe, and Asian countries.

【Figure 2】 Reported FDI Inflows from Each Region to Korea



Source: Ministry of Knowledge Economy, Korea.

【Table 2】 Ranks of Labor Market Flexibility (Ranks out of 133 Countries)

	USA	Germany	France	Japan	Korea
Flexibility of wage determination	14	130	87	11	38
Rigidity of employment	1	89	116	20	92
Hiring and firing practices	8	126	119	116	108
Firing costs	1	93	59	6	109

Source: 2009 World Economic Forum, The Global Competitiveness Report 2009-2010.

Note: Small number means flexible labor market, and vice versa.

As it is shown in Table 2, the USA labor market shows the highest degree of flexibility among advanced economies. In particular, it is the most flexible market in terms of rigidity of employment, which implies that it has the least degree of

employment protection. However, European countries show strong degrees of employment protection as well as high rigidities in hiring and firing practices. Generally speaking, Asian economies lie between these two extreme models.

This characteristic of each continent is vividly noticed during the 2008-2009 global financial crisis. Major industrialized countries in each continent suffered heavily from the crisis in terms of losses of GDP growth rates. However, the unemployment rates of the European countries did not increase as much as it did in the U.S. Both the U.S. and the European economies have experienced 4-6 % contraction of their GDPs during the crisis period of 2008-2009. However, the unemployment rate of the U.S. increased by almost 5% when the average unemployment rate of the Euro zone economies increased merely by 2%.

From this observation, we can find that European firms are more cautious in hiring/firing their employees as the business cycle fluctuates. It implies that the change in number of employees is less sensitive to the change in sales volume in Europe than in the USA. It is the purpose of this paper whether Korean firms invested by European countries have behaved similarly in Korea as they have behaved in their home countries. Also, we would like to compare the behaviors of Korean firms invested by European countries to those of firms invested by the USA. By analyzing these, we can find out whether European and the USA investors have behaved in Korea as they would have behaved in their home countries. If European invested firms have behaved differently in terms of their employment policy from the USA invested firms, it will provide significant implication in terms of FDI's impact on the Korean labor market.

III. Empirical Analysis

1. Data

In order to examine the above hypothesis, authors have collected information on Korean firms that have received FDI from EU, the USA, and Japan since 1998. As Korea began to embrace FDI inflows more actively only after 1998, we have focused our analysis on firms that received FDI after 1998. There were approximately 130 such firms in Korea. Out of these 130 firms, only 49 firms are listed in the Korean stock market; 26 from EU, 15 from the USA, and 8 from Japan. As we do not have enough number of firms that received FDI from Japan, authors will focus on firms that received FDI from EU and USA only. For these firms, authors have used management information data such as sales volume, profit, and the number of employees. Authors have selected firms that have employment and sales data for at least four years after they received FDI. For the sake of convenience, $t(0)$ implies the first year each firm received FDI. For USA-invested firms, we could collect data from $t(0)$ to $t(4)$. For EU-invested firms, we could collect data from $t(0)$ to $t(5)$. When this criteria is applied, we could select 10 firms invested by the USA, and 14 firms invested by EU. The list of these 24 firms and the year each firm has received FDI is attached in the appendix.

2. Panel Analysis

In order to test the hypothesis that the change in the number of employees is less sensitive to the change in sales volume in firms that received FDI from EU than in firms that received FDI from the USA, authors use panel analysis. First, a basic equation is written in the following form:

$$\text{Ln } L_{i,t} = a + b \times \text{Ln } S_{i,t} + c \times \text{Ln } P_{i,t} + \varepsilon_{i,t} \quad (1)$$

where L is the number of employees, S is sales volume, P is profit, and ε is the error term.

In the above equation, we are interested in estimating 'b' as it represents the elasticity of employment to sales. If the value of 'b' is large, it implies that the number of employment has changed greatly as sales volume fluctuates. That is to say, firms have increased employment a lot when sales increase, and decreased employment when sales decrease. If the hypothesis is right, then, we would have a smaller 'b' for EU-invested firms than for the USA-invested firms.

Even though we have set up our basic equation as the above form, we have to remove 'Ln P' as it has a multi-colinearity problem with 'Ln S'. Generally speaking, profit increases/decreases as sales increase/decrease. Therefore, we will estimate equation (1) without the term, 'Ln P'. First, let us estimate the equation using pooled OLS method for USA-invested firms and EU-invested firms. The result of this estimation is summarized in Table 3.

[Table 3] Results of Pooled OLS Estimation

Explanatory variable	Dependant Variable	
	Number of employees of U.S.A-invested Firms [Log of L_{USA}]	Number of employees of EU-invested Firms [Log of L_{EU}]
Constant (C)	-7.1218*** (-4.5499)	-2.2596* (-1.5076)
Sales volume (Ln S)	0.6985*** (9.2264)	0.4760*** (6.7920)
R^2	0.6858	0.3687
$Adj-R^2$	0.6777	0.3607
No. of object	41	81

Notes: 1) Numbers in parenthesis are t-values for each coefficient.

2) Coefficients with '*', '**', '***' are statistically significant at 90%, 95%, and 99% respectively.

From the below table, we can find that the coefficient for Ln S, which is the elasticity of employment to sales, is indeed smaller for EU-invested firms than for USA-invested firms. Moreover, this estimation is statistically significant with substantially large t-values.

In order to augment the estimation with random or fixed effect, let us now try Hausman test whether the basic equation has random effect or fixed effect. The results of Hausman test for USA-invested firms and EU-invested firms are stated in Table 4.

[Table 4] Results of Hausman Test

	Hausman Test (Cross-section random)	
	U.S.A-invested Firms	EU-invested Firms
χ^2 -statistic	7.0860	7.7802
p-value	0.0078	0.0053
χ^2 -degree of freedom	1	1

As the p-value for both data set is close to zero, we can reject the existence of random effect. Therefore, let us now estimate the equation with fixed effect. The results of this estimation are summarized in Table 5.

The results of fixed effect panel analysis are not quite different from OLS panel estimation. That is to say, EU-invested firms indeed have low elasticity of employment to sales relative to USA-invested firms. Therefore, we can conclude that EU-invested firms in Korea have changed the number of employment more cautiously than USA-invested firms as sales fluctuate. This behavior coincides with our hypothesis. This finding can have a couple of policy implications in the Korean labor market. First, in terms of stability of employment, it would be better to invite more FDI from EU as they are more likely to maintain the employment level

even when sales fluctuate. However, in terms of job creation, USA-invested firms would create more jobs when sales increase.

[Table 5] Results of Fixed Effect Panel Analysis

Explanatory Variable	Dependant Variable	
	Number of employees of U.S.A-invested Firms [Log of L_{USA}]	Number of employees of EU-invested Firms [Log of L_{EU}]
Constant (C)	-7.2013*** (-4.4104)	-2.7087** (-1.7009)
Sales volume (Ln S)	0.7201*** (8.8933)	0.4971*** (6.6740)
R^2	0.6977	0.3786
$Adj-R^2$	0.6545	0.3282
No. of object	41	81

Notes: 1) Numbers in parenthesis are t-values for each coefficient.

2) Coefficients with '*', '**', '***' are statistically significant at 90%, 95%, and 99% respectively.

IV. Conclusion

As a measure to weather the 1997 Asian financial crisis, the Korean government opened domestic market to foreign investment with many regulations and barriers being lifted. Along with these developments, inward FDI began to increase rapidly. It amounted to more than \$100 billion for the period of 1998 to 2009, which accounted for roughly 4-12% of the annual investments in Korea. Substantial inflows of FDI into Korea were found to help enhance productivity, learn new technology and know-how, and increase exports and investment. FDI firms also created jobs at a faster rate and the involuntary dismissal was less common in comparison to local domestic firms.

The present paper revisits employment effects of inward FDI by

examining a possibility that they differ depending on the origin of country. Specifically, we take EU- and USA-invested firms, and empirically evaluate how these two largest contributors differ in terms of creating jobs in Korea. Empirical evidence suggests that while both EU- and USA-invested firms generate positive employment effects, the former has a smaller elasticity than the latter. EU firms appear to be more cautious about hiring/firing than USA firms. It is well known that firms in EU are less flexible than those in the USA due to strong labor unions and strict employment protections. This difference is likely to be spilt over to their FDI firms, generating different magnitude of job creation in Korea.

Received: October 27, 2010. Revised: January 31, 2011. Accepted: February 8, 2011.

◆ References ◆

- Aitken, B. and A. Harrison (1999), "Do Domestic Firms Benefit from Direct Foreign Investment?: Evidence from Venezuela," *American Economic Review*, 89, pp.605-618.
- Aitken, B., A. Harrison and R. Lipsey (1996), "Wages and Foreign Ownership: A Comparative Study of Mexico, Venezuela, and the United States," *Journal of International Economics*, 40, pp.345-371.
- Andersen, P. and P. Hainaut (1998), "Foreign Investment and Employment in the Industrial Countries," Bank for International Settlements Working Paper 61.
- Baldwin, R. (1994), "The Effects of Trade and Foreign Direct Investment on Employment and Relative Wages," OECD Economic Studies No. 23.
- Béthélemy, J. and S. Démurger (2000), "Foreign Direct Investment and

- Economic Growth: Theory and Application to China,” *Review of Development Economics*, 4(2), pp.140-155
- Blomström, M., R. Lipsey and M. Zejan (1994), “What Explains the Growth of Developing Countries?,” in Baumol, W., Nelson, R., and Wolff, E. (eds), *Convergence of Productivity: Cross-National Studies and Historical Evidence*, Oxford University Press, New York, pp.243-259.
- Borensztein, E., J. Gregorio and J. Lee (1998), “How Does Foreign Direct Investment Affect Economic Growth,” *Journal of International Economics*, 45, pp.115-135.
- Caves, R., (1982), *Multinational Enterprise and Economic Analysis*, Cambridge University Press, New York.
- Cheung, K. and P. Lin (2004), “Spillover Effects of FDI Innovation in China: Evidence From the Provincial Data,” *China Economic Review*, 15, pp.25-44.
- Cho, Y. (2006), “An Analysis on the Employment Effects of Foreign Direct Investment,” *LG Business Insight*, LG Economic Research Institute, Seoul, Korea. (in Korean)
- DeMello, L. (1997), “Foreign Direct Investment in Developing Countries and Growth: A Selective Survey,” *Journal of Development Studies*, 34, pp.1-34.
- Djankov, S. and B. Hoekman (2000), “Foreign Investment and Productivity Growth in Czech Enterprises,” *World Bank Economic Review*, 14, pp.49-64.
- Golub, S. (2003), “Measures of Restrictions on Inward Foreign Direct Investment for OECD Countries,” OECD Economic Studies, No. 36.
- Görg, H. and D. Greenaway (2003), “Much Ado About Nothing?: Do Domestic Firms Really Benefit from Foreign Direct Investment?,” IZA Discussion Paper No. 944, Institute for the Study of Labor, Bonn, Germany.
- Graham, E. and P. Krugman (1995), “*Foreign Direct Investment in the United States*, Institute for International Economics,” Washington

D. C., U. S. A.

- Harrison, A. (1996), "Determinants and Effects of Direct Foreign Investment in Côte d'Ivoire, Morocco, and Venezuela, in Roberts, M. and Tybout, J. (eds)," *Industrial Evolution in Developing Countries*, Oxford University Press for the World Bank, New York, pp.163-186.
- Haskel, J., P. Sonia and M. Slaughter (2002), "Does Inward Foreign Direct Investment Boost the Productivity of Domestic Firms?," NBER Working Paper 8724.
- Hong, J. (2008), "Current Issues on Foreign Direct Investment and Future Challenges: A Firm-level Analysis," Financial Economic Studies, No. 320, Bank of Korea. (in Korean)
- Hong, S. and S. Gray (2003), "Attracting FDI to the Republic of Korea: Foreign Affiliates Satisfaction with Government Policies," *Transnational Corporations*, 12(1), United Nations Conference on Trade and Development, United Nations, pp.107-127.
- Jeong, J. and J. Park (2007), "Trends and Issues in Foreign Direct Investment," January, Bank of Korea. (in Korean)
- Keller, W. and S. Yeaple (2003), "Multinational Enterprises, International Trade, and Productivity Growth: Firm-Level Evidence from the United States," GEP Research Paper 03/03, University of Nottingham.
- Kim, H. (2010), "The Effects of Inward and Outward Direct Investment on Total Factor Productivity by Manufacturing Industry in Korea: Using Panel Data," *the Journal of the Korean Economy*, 28(2), pp.145-170. (in Korean)
- Kim, J. and S. Hwang (1998), "The Role of Foreign Direct Investment in Korea's Economic Development: Productivity Effects and Implications for the Currency Crisis," KIEP Working Paper 98-04, Korea Institute for International Economic Policy, Seoul, Korea.
- Kim, Y. and Y. Kim (2007), "Analysis on the Determining Factors of Foreign Direct Investment," *Monthly Bulletin*, November, Bank

- of Korea, pp.53-83. (in Korean).
- Kim, Y., J. Park and Y. Kim (2008), "Effects of Foreign Direct Investment on Equipment Investment and Employment," *Monthly Bulletin*, April, Bank of Korea, pp.46-78. (in Korean)
- Konings, J. (2001), "The Effects of Foreign Direct Investment on Domestic Firms: Evidence from Firm Level Panel Data in Emerging Economies," *Economics of Transition*, 9, pp.619-633.
- Konings, J. (2004), "The Employment Effects of Foreign Direct Investment," *European Investment Bank Papers*, 9(1), pp.86-108.
- Kokko, A., M. Zejan and R. Tansini (2001), "Trade Regimes and Spillover Effects of FDI: Evidence from Uruguay," *Weltwirtschaftliches Archiv*, 137(1), pp.124-149.
- Korea Chamber of Commerce and Industry (2004), *Survey on the job creation of FDI firms*, Seoul, Korea.
- Lee, C. and S. Jeon (2005), "Industry-specific Foreign Direct Investment Determination by Structural Variables and Policy Implications on Growth Potential," *Financial Economic Studies*, No. 225, Bank of Korea. (in Korean)
- Li, X. and X. Liu (2005), "Foreign Direct Investment and Economic Growth: An Increasingly Endogenous Relationship," *World Development*, Vol. 33, No. 3, pp.393-407.
- Lipsey, R. (2002), "Home and Host Country Effects of FDI," NBER Working Paper #9293. Nahm, G. and Yoon, S., 2005, Policies on Foreign Direct Investment in Korea and Some Recommendations, *Financial Economic Studies* No. 226, Bank of Korea. (in Korean)
- Liu, X., D. Parker, K. Vaidya and Y. Wei (2001), "The Impact of Foreign Direct Investment on Labour Productivity in The Chinese Electronics Industry," *International Business Review*, 10, pp.421-439.
- Organisation for Economic Co-operation and Development (OECD) (1995), *Foreign Direct Investment, Trade and Employment*.
- Organisation for Economic Co-operation and Development (OECD) (2002), *Foreign Direct Investment for Development - Maximising*

benefits, minimising cost.

Park, S. and K. Lee (2009), "A Study on the Employment Effects of Foreign Direct Investment (FDI)," *January, Monthly Labor Review*, Korea Labor Institute, Seoul, Korea, pp.53-72. (in Korean)

Radosevic, S., U. Varblane and T. Mickiewicz (2003), "Foreign Direct Investment and its Effect on Employment in Central Europe," *Transnational Corporations*, 12(1), United Nations Conference on Trade and Development, United Nations, pp.53-90.

United Nations Conference on Trade and Development (UNCTAD) (1999), *World Investment Report 1999: Foreign Direct Investment and the Challenge of Development*, United Nations.

United Nations Conference on Trade and Development (UNCTAD) (2009), *World Investment Report 2009: Transnational Corporations, Agricultural Production and Development*, United Nations.

Appendix: List of companies in the sample

Company Name	Country of Origin	Year of Establishment
ebay Auction Co. Ltd	UK	2003
Samsung Total Petrochemicals Co. Ltd	UK	2003
Otis Elevator Company	UK	1999
Korea Exchange Bank	Belgium/Germany	1998
KT Freetel Co. Ltd	Belgium/USA/Japan	1999
BASF Company Ltd	Germany	2000
Hyundai Motor Company	Germany	2000
Allianz Life Insurance Korea	Germany	1999
LG Display Co. Ltd	Netherlands	1999
Hyundai Oilbank Co. Ltd	Netherlands	1999
Oriental Brewery Co.	Netherlands	2001
LG Phillips Display	Netherlands	2001
Samsung Tesco	Netherlands	2000
Renault Samsung Motors	Netherlands	2000
Citibank Korea	USA	2004
Fairchild Semiconductor Inc.	USA	1998
Costco Wholesale Korea Ltd	USA	1999
Hyundai Capital	USA	2004
Hyundaicard Co. Ltd	USA	2005
GM Daewoo Auto & Technology	USA	2002
SK-Enron	USA	1998
Bowater Korea Ltd	USA	1998
Lafarge Halla Cement	USA	1999
Stats ChipPAC Korea	USA	1999

한국에 대한 EU와 미국의 직접투자와 고용효과

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논문초록

1997년 아시아금융위기 이후 한국경제는 외국인직접투자를 적극적으로 유치하여 왔다. 1998년부터 2007년까지의 기간 동안에 유치한 외국인직접투자의 누계액은 1,160억불에 이르며, 이는 과거 10년에 비하여 여섯배에 이르는 규모이다. 이 중 EU와 미국의 투자액은 전체의 62%에 이르는 큰 비중을 차지하고 있다. 이론에 의하면, 외국인직접투자는 고용창출, 생산성 향상, 그리고 수출증가 등의 긍정적인 효과를 창출할 수 있다. 본 논문은 외국인직접투자가 한국의 노동시장에 주는 고용효과를 분석함을 그 목적으로 하고 있다. 특히, 본 논문은 EU와 미국의 투자를 받은 기업들이 고용창출에 있어서 다른 양상을 보이는가를 실증분석함으로써, 기존의 연구를 보완하려 한다. 고정효과패널분석에 의하면, EU의 투자를 받은 기업들은 미국의 투자를 받은 기업들에 비하여 매출액에 대한 고용탄력도가 낮은 양상을 보이고 있다. 이는 EU의 투자를 받은 기업들이 매출액의 변동에 대하여 보다 신중하게 고용량을 조절하였다는 것을 의미한다.

주제분류 : B030800

핵심 주제어 : 해외직접투자, EU, 고용효과

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