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ẢNH HƯỞNG CỦA NGUỒN GỐC FDI ĐẾN TÌNH HÌNH VIỆC LÀM TẠI VIỆT NAM

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Tóm tắt

Trong bài viết này, chúng tôi tập trung vào những câu hỏi sau: Ảnh hưởng của FDI lên ba yếu tố của người lao động bao gồm tiền lương, lượng công việc tạo ra và lợi ích bảo hiểm? Nguồn gốc của FDI có ảnh hưởng đến mối quan hệ trên hay không? Nếu có, ảnh hưởng như thế nào? Dữ liệu điều tra doanh nghiệp tại Việt Nam năm 2017 và 2018 được phân tích sử dụng mô hình tác động cố định. Chúng tôi nhận thấy khi kiểm soát tương tác giữa tỷ lệ yếu tố nước ngoài và biến kiểm soát, ảnh hưởng của FDI lên lao động trở nên đáng kể. FDI có xu hướng làm tăng lương trung bình và giảm số lượng việc làm tạo ra cũng như số lượng lao động được nhận bảo hiểm. Xét thêm yếu tố nguồn gốc nguồn vốn đầu tư, ảnh hưởng của FDI lên lao động là khác nhau khi FDI đến từ các quốc gia khác nhau, tương tự như kết quả các nghiên cứu trước.

Từ khóa: FDI, nguồn gốc FDI, Lao động, Tiền lương, Việc làm, Lợi ích bảo hiểm

THE EFFECT OF FDI ORIGIN ON ASPECTS OF EMPLOYMENT IN VIETNAM

Abstract

In this paper, we focus on these questions: What are FDI effects on three aspects of employment including wage, job creation and insurance benefits? Could country of origin moderate these effects? And if it could, to what extent could it affect? Firm level data in Vietnam are analyzed for 2017 and 2018 using fixed-effects model. We find that when controlling for the interaction between foreign share and control variables, FDI impacts on employment aspects change from insignificant

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into significant. FDI exerts an upward trend on the average wages and a downward trend for jobs created and the number of workers receiving insurance. Regarding to country of origin, these impacts on employment factors vary across FDI source, corroborating previous studies.

Keywords: FDI, FDI origin, Employment, Wage, Job, Insurance benefit.

1. Introduction

Foreign direct investment (FDI) is defined as a form of international capital movement with the purpose of establishing and maintaining permanent equity relations with the foreign company at the same time to exercise a noticeable influence on the management of the company (Golejewska, 2002). Despite being perceived as a source of foreign influence and of competition with local enterprises (Blomstrom *et al.*, 1997), the attraction of foreign investors is still an important goal of policy makers worldwide, especially in less developed countries where lack of capital is one of the key constraints to economic prosperity (Coniglio *et al.*, 2015).

The dramatic increase in FDI flows throughout the globe has led to the attention on its impact on the host countries (Ni *et al.*, 2017). In the field of International Business, a lot of empirical studies have been devoted to understanding the effects of foreign investors on host countries' wage and employment; yet, the results of these studies are mixed and their evidence is still far from conclusive. The divergence in empirical findings can be partly attributed to the methodological issues and the characteristics of the host countries, industries and firms (Fortanier, 2007). However, one factor that contributes to the relationship between FDI and host countries' wage and employment have so far received little attention: the heterogeneity of FDI itself (Chen, 2011).

In the field of Economics, FDI is usually assumed as homogeneous flows of capital, thus, the wage and employment effects are the same for all types of FDI. Rather, FDI differs by various characteristics, such as by the size and entry mode, the role in the global value chain, the aim of investment... but mostly related to firm performances (Chen, 2011). This article examines whether the heterogeneous characteristics of FDI in empirical study enhances our understanding of the impact of FDI: i.e. whether and to what extent the origin of investors affects the wage and non-wage rate and the job creation rate of the host economies.

In this study, we focus on the role of one characteristic of FDI: its country of origin. Early research proves that the FDI country of origin's market conditions, business and institutional systems (Whitley, 1998) have substantial influences on the strategic and organizational characteristics of multinationals including human resource management practices (Bae *et al.*, 1998). Therefore, we form a hypothesis that FDI from different countries should also have different wage, non-wage and employment effects on the host nations.

To test this and contribute further to the literature, we investigate an important emerging economy, Vietnam. Since the late 1990s, Vietnam has experienced a significant surge inward foreign direct investment (FDI) owing to the adoption of a major economic reform known as Doi Moi in 1986 followed by enactment of the Law on Foreign Direct Investment in 1987 and its accession to the World Trade Organization (WTO) in 2006. The rapid growth in inward FDI to Vietnam has a positive impact on the registered foreign capital (GSO, 2017) and net export (Anwar and Nguyen, 2011), thus leading to the increase in economic growth (Hoang *et al.*, 2010; Vu *et al.*, 2008).

We study the effect of FDI and FDI origin on three aspects of employment in Vietnam including wage, job creation and insurance. Although a few studies have examined FDI effects on wage and employment in Vietnam (Nguyen, 2019; Hoi & Pomfret, 2010), this paper provides some of the first findings on the differences in the effects of FDI level on wage, job and insurance of domestic firms under the perspective of investor origin heterogeneity. The findings from this paper are expected to have significant implications for evaluating and selecting the suitable foreign investors to attract based on their impact on domestic firms' employment and the economy at large.

The following empirical analyses employ a firm-level dataset in over 2000 industries in Vietnam during a two-year period from 2017 to 2018. The data were obtained from comprehensive surveys commissioned by the General Statistics Office of Vietnam (GSO), including questionnaires collecting information on enterprises in Vietnam including State enterprises, non-state enterprises, enterprises that have foreign investment, cooperatives/consortium cooperatives.

The rest of the paper is structured as follows. Section 2 reviews the literature on effects of FDI and FDI origin on employment. Section 3 specifies the method of data collection, empirical model and dataset description. Section 4 presents empirical results and relevant analyses. Finally, Section 5 gives concluding remarks.

2. Literature Review

The literature regarding FDI and its effect on host countries' employment has been well documented. In this section, we summarize the effect of foreign ownership and FDI origins on host countries' employment including wage, job and insurance as well as the moderating effect of country of origin that have been so far taken into consideration.

2.1. The wage effects of FDI and its country of origin.

2.1.1. FDI Wage effects

There is a large body of literature on the wage effect of foreign investment in host countries, broadly classified into two main grounds: (1) foreign wage differentials and (2) foreign wage spillover (Brown *et al.*, 2003; Lipsey, 2004). Regarding the former, empirical evidence suggests that foreign firms pay higher wages than their domestic counterparts within host countries, within industries and regions in these countries even after detailed differences in firm characteristics like capital intensity, size, location, industry features and educational level of workers are taken into account (Conyon *et al.*, 2003, Görg *et al.*, 2007; Huang *et al.*, 2017). Studies conducted in developed countries estimate that average wages paid by foreign establishments are approximately 6-22% higher in the United States (Feliciano & Lipsey, 2006; Lipsey, 1994) and 4-26% higher in the United Kingdom (Conyon *et al.*, 2002; Driffield & Girma, 2003; Girma *et al.*, 2001).

Similarly, the foreign wage premia are also proved to exist and even emphasized to be higher in developing countries (Egger & Kreickemeier, 2013). In Indonesia, the average wage in foreign plants is about 50% higher than in private local plants and 60% higher including other types of labour compensation, such as bonuses, gifts, social security, insurances and pensions (Lipsey & Sjöholm, 2004). In Venezuela and Mexico, wages in foreign-owned manufacturing establishments are higher than in domestically owned establishments by 30% (Aitken *et al.*, 1996).

Whilst wage gap estimates between foreign and domestic firms are consistent across existing literature, the explanations for such results are varied. One common reasoning is that foreign

investors pay higher wages in order to reduce worker turnover and thus, to minimize the risk of technology and knowledge diffusion through labour mobility (Fosfuri *et al.*, 2001; Glass & Saggi, 2002, Aitken *et al.*, 1996, Balsvik, 2011; Poole, 2013). Other authors have argued that multinational enterprises offer higher wages to compensate for the possible disadvantages of employment in an MNE, for example, greater pressure and labor demand volatility (Fabbri *et al.*, 2003; Gorg & Strobl, 2003), or higher foreign plant closure rate (Javorcik, 2015). Another motivation for higher wages paid by foreign affiliates can also be explained by rent-sharing across international borders (Budd & Slaughter, 2004) and between employers and employees (Budd *et al.*, 2005).

The second strand of studies on the FDI-linked wage effect focuses on the impact of foreign ownership on the wage rate and wage growth of domestically owned firms. Theoretical studies show that FDI wage spillovers to domestic firms may be generated through several channels. The presence of foreign ownership may lead to positive wage spillovers due to the increasing competition in the labour market. This shifts up the labor demand curve and thus, obliges local firms to increase their wage rates to attract and retain workers, especially high-skilled labour (Aitken *et al.*, 1996). Technological spillovers are also an important channel of FDI wage spillovers. Technological externalities transferred through imitation/demonstration effect, labour mobility or horizontal and vertical linkages (Crespo & Fontoura, 2007; Hoi & Pomfret, 2010) may increase productivity and possibly, wage level of domestic firms (Javorcik, 2004; Görg & Greenaway, 2004).

On the other hand, FIEs may recruit the best workers from domestic firms or acquire high wage local firms, thus lowering the labor quality and the wage rate of local firms (Lipsey & Sjöholm, 2004). Also, foreign participation in product markets may lead to lower scale of production of domestic firms, reduce their market shares and even crowd them out (Aitken & Harrison, 1999; Kosová, 2010).

The empirical evidence from existing literature shows mixed results of FDI wage spillovers. Some authors prove that local workers are better off by FDI wage spillovers in a wide range of countries, such as Indonesia (Lipsey and Sjöholm, 2004), The United Kingdom (Driffield & Girma, 2003), The United States (Aitken *et al.*, 1996), Poland (Bedi and Cieslik, 2002). Some other researchers find negative effects of foreign presence on wage levels of domestic firms (Barry, *et al.*, 2005; Hu & Jefferson, 2002). Finally, some studies find no evidence of wage spillover from FDI to domestic establishments, for example, in the United States (Feliciano & Lipsey, 2006), in Mexico and Venezuela (Aitken *et al.*, 1996), and in the United Kingdom (Girma *et al.*, 2001).

2.1.2. Wage Effects of FDI Country of origin.

A growing body of research has been done to examine the moderating effect of country of origin on FDI linked wage effects, returning mixed results. In brief, these papers show that FDI origin may play an important role in determining wage impact of FDI.

In the UK, Girma & Görg (2007) find evidence for significant positive wage effects resulting from acquisitions from US companies, however, EU counterparts may not bring any impact. In China, Liu *et al.* (2015) argue that while takeovers from North America and Europe put an upward effect on wages, this seems negligible for HMT (Hongkong, Macau, Taiwan) and JKS (Japan, Korea, Singapore) subsamples. This is maybe because North American and European acquirers

possess higher technological intensity thus avoiding labor turnover related technology diffusions by paying premium.

Similarly, the studies on sub-Saharan African firms return findings supporting the moderating impact of parents origin (Coniglio *et al.*, 2015; Blanas *et al.*, 2019). In terms of development level, MNEs from developed countries may be correlated with higher average wages than those from less-developed counterparts (Coniglio *et al.*, 2015). Relating to geographic area, the average wages paid by Chinese investors seems lower than other counterparts as Chinese MNEs may highly demand low-quality workers, thus offering lower wages and/or compared with others, their locations tend to be remote from urban areas taking less labor costs (Coniglio *et al.*, 2015). Meanwhile, Blanas *et al.* (2019) argue that those from outside sub-Saharan Africa may pay higher than local counterparts, regardless of labor type. However, these results for those from sub-Saharan Africa seem true for only managerial and non-production laborers.

In sum, the impact of FDI source on FDI wage effects has increasingly grabbed scholars' attention with diverse findings supporting that a heterogeneity of FDI induced wage effect may come from the difference of FDI origins. However, in Vietnam it still has been negligibly considered and we expect that the wage impact of FDI differs by FDI source.

2.2. Job creation effects of FDI and its country of origin

2.2.1. FDI Job creation effects

Employment creation has been regarded as one of the potential contributions of inward FDI to host countries. However, most analyses on the influence of FDI on employment identify both positive and negative potential effects (Jenkins, 2006; Rama, 2003; UNCTAD, 1994). FDI can increase the local labour demand directly by establishing new greenfield subsidiaries (Rama, 2003) or even expanding existing ones (ILO, 1984). FDI can also lead to increased volume of employment through spurring forward and backward linkages (Golejewska, 2002; Ernst, 2005; Liu *et al.*, 2009). These “crowding in” effects may endure if these foreign firms make long-term commitments to the host countries.

On the other hand, there is evidence that FDI also generates negative effects on host economies' employment (Jenkins, 2006; Rama, 2003; UNCTAD, 1994). FDI may crowd out non-competitive local firms, leading to job losses for the host economies. According to Jenkins (2006), the reduction in volume of employment may also be associated with FDI involving the acquisition of local firms and application of labour-saving technologies. Moreover, as multinationals are footloose and able to relocate production and employment between their affiliates in different countries, jobs created are likely to be highly unstable.

There is a number of empirical literature on the effect of FDI on employment creation in both developed and developing countries. Most of the findings about developed countries point out that firm-level employment remains unchanged or increases after foreign acquisition, for example in the UK (Girma, 2005), Sweden (Bandick & Karpaty, 2007), Norway (Balsvik & Haller, 2010). Studies about developing countries show that foreign firms, on average, grew more rapidly (Lipsey *et al.*, 2010) and have larger numbers of workers than domestically owned firms (Barthel *et al.*, 2011).

2.2.2. Job creation effects of FDI Country of origin.

The study of the relation between country of origin and employment effect of FDI has increasingly flourished in recent years. Overall, the nationality of FDI is likely to play a pivotal role in determining the quantity of jobs created via FDI.

Regarding to development level, acquirers from developing countries may be negatively associated with labor demand of US acquired firms, however, those from foreign industrial countries tend to put an upward effect (Chen, 2011). Conversely, in sub-Saharan Africa, investors from developing countries tend to generate less-skilled labors compared with domestic firms while this impact of those from developed countries seems insignificant (Coniglio *et al.*, 2015).

Relating to geography, in sub-Saharan Africa, South FDI (from other African countries) seems more beneficial for employment growth of targets than North FDI (from the remaining) as the technological or business climate dissimilarity between recipients and African investors seems smaller compared to South counterparts (Gold *et al.*, 2017). In China, HMT and JKS acquirers may enhance job creation of the acquired while the effect of North America and Europe seems insignificant because compared to others, HMT and JKS tend to enlarge workforce to develop their business (Liu *et al.*, 2015). Furthermore, Coniglio *et al.* (2015) reveal that Chinese investors may generate more jobs (mainly less-skilled) than other foreign counterparts.

Generally, a growing quantity of researches have proved that job creating impact of FDI differs depending on investors' nationalities. Hence, taking Vietnam into account, we argue that country of origin may attribute to the dissimilarity of job creation effect of FDI.

2.3. Insurance benefit effects of FDI and its country of origin.

While the effects of FDI on wage compensation have been examined in a growing body of papers, there has been still a lack of studies relating to FDI-linked impacts on non-wage compensation as well as the correlation between FDI source and these effects. To the best of our knowledge, the study done by Eren & Peoples (2013) is presumably the only one researching this issue. Using information from non-manufacturing industries in the US, they argue that FDI activity is generally associated with higher likelihood of laborers acquiring non-wage compensation including pension and health insurance from employers regardless of their education level. However, this result seems significant for male workers and high-educated female counterparts. To sum up, could FDI affect insurance benefits of workers? And if it could, to what extent the country of origin would moderate this relation? The answers have been still unclear, leaving room for more research.

3. Methodology

3.1. Data collection

We obtain data from the 2017 and 2018 surveys of the General Statistic Office of Vietnam. The survey includes questionnaires collecting information on enterprises in Vietnam including State enterprises, non-state enterprises, enterprises that have foreign investment, cooperatives/consortium cooperatives. The survey was randomly distributed to firms all around Vietnam.

3.2. Models and Methodology of analysis

3.2.2. Statistical model

3.2.2.1. Models

This paper aims to answer 2 questions:

What is the effect of FDI on aspects of employment including wage, job, and insurance benefits?

And what is the effect of FDI from a specific country on the aspect of employment?

To address the questions, we estimate panel regression models based on the previous empirical studies (Abor.J., and Harvey.S. K., 2008; Nguyen., 2019; Aitken et al., 1996; Ahmad Seyf., 2000; Robert E. Lipsey et al., 2010). Therefore, the model of specifications of this paper is presented as follows:

$$\ln wage_{it} = \alpha_{it} + \beta_1 FDIpercentage_{it} + \sum \beta_j Controls_{it} + \mu_{it} \quad (1)$$

$$\ln job_{it} = \alpha_{it} + \beta_1 FDIpercentage_{it} + \sum \beta_j Controls_{it} + \mu_{it} \quad (2)$$

$$\ln worker_insurance_{it} = \alpha_{it} + \beta_1 FDIpercentage_{it} + \sum \beta_j Controls_{it} + \mu_{it} \quad (3)$$

(1) *ln wage* measured as the average wages paid to one labor in natural log, (2) *ln worker_insurance* measured as the number of workers that receive insurance measured in natural log, and (3) *ln job* measured as the number of jobs measured in natural log.

3.2.2.2. Variable of interest

To address the first question, our variable of interest is FDI percentage which is defined as total charter capital of FDI divided by total charter capital of the firm multiplied by 100% (Thanapol, 2012)

For the second question, the variable of interest is the dummy variable showing whether firms receive FDI from a specific country or not. In our analysis, we regress on 6 countries that pour the FDI in the most firms in our sample. Those include China (CN), Singapore (SG), Hong Kong (HK), Taiwan (TW), South Korea (KR), Japan (JP)

3.2.2.3. Control variables

Although our data is collected through a randomization process. This can suggest our result will be externally valid which means that the results can be applied for all firms in Vietnam in general. However, for internal validity, the serious problem that may arise in our result is omitted variable bias. Hence, we will have to control for variables that are associated with the change in FDI origin and our 3 dependent variables. These include:

Lnage - Firm age - number of years firm in operation up to 2021 in natural log. The well-established firms are expected to have a positive impact on wages as they gain a more secure foothold in the product and labor markets, indicating their business success and strong paying capacity. (Nguyen, 2019; Bullon et al., 2013),

Lnsize - firm size – previous studies measure size by total sales (Nguyen, 2019) or the number of employees (Feliciano et al., 2006). However, different industries have unique characteristics in sales so when comparing firms across industries, the measure do not correctly reflect the size of the firms. Therefore, we use size which is measured by the total sales of the firm in a year divided by the average sale in that industry in a year in natural log (*Lnsize*) to correctly reflect the size of the firm in a specific industry. The idea is similar to the relative size of firm within its industry. Some firms have sales below the industry sales. The problem of this measure is that the size will

not be correct in a small sample size as we may wrongly measure the average sale in the industry. However, our sample is large enough so we can ignore the problem.

Lncapital_int - The capital intensity of the firm which is measured by fixed assets divided by total employment (Nguyen, 2020). Fixed asset is calculated as the original price minus depreciation. This variable is in natural log.

Year dummy - whether it is in 2017 or 2018.

Region dummy - at which province the firm is located, province code is collected from the General Statistic Office of Vietnam (province dummy),

Industry dummy - which measure the main industry that firm operate in, Industry code is collected according to VSIC 2007 _ 3 - level digit (Industry_3digit Dummy),

Subscript *i* is the firm index, subscript *t* is the year index, and μ is the error term.

3.2.2.4. Econometric strategy

Stata 14 is used for our data analysis.

Due to the characteristic of our data set being 2 years of panel data, we can use the Fixed-effect model (FEM), Random effect model (REM), and Pooled OLS model. Fundamentally, FEM and REM are developed to control the effect of time-invariant variables that are often unobservable or too complex to measure.

In choosing what is the best model for our estimations of panel data. We follow the process of Dougherty (2011).

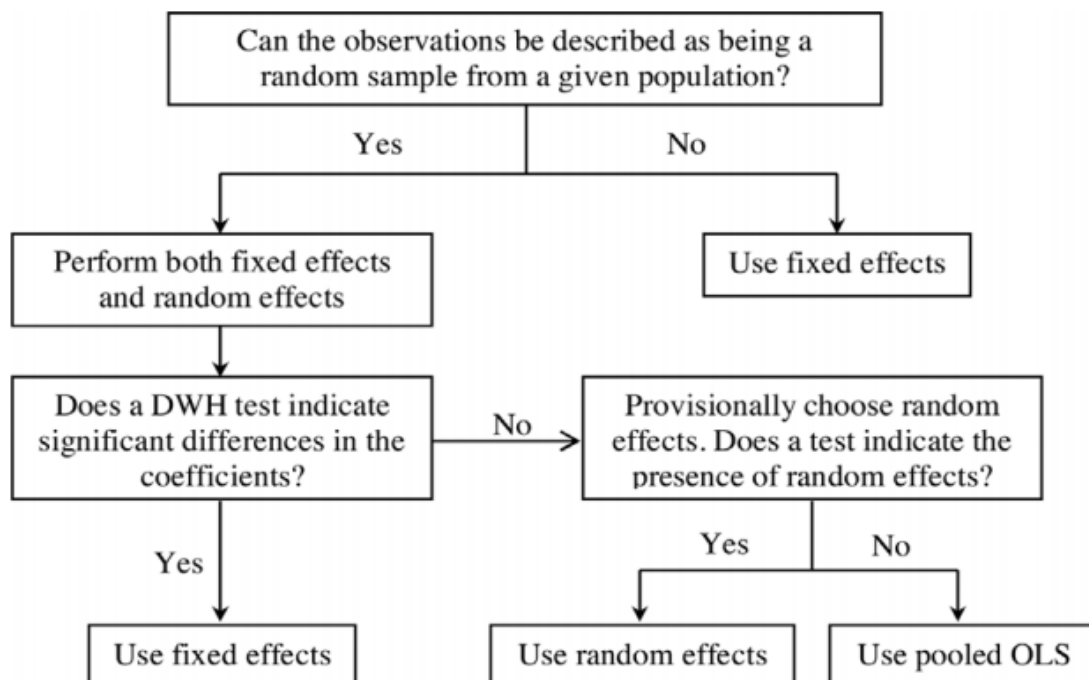


Figure 1. Process of choosing regression model for panel data

Source: Dougherty (2011)

We run 3 different models which are the Fixed-effect model (FEM), Random effect model (REM), and Pooled OLS model. Then, since the observations in our sample are randomly selected,

we use the Hausman test to test whether there is a significant difference between the FEM and REM. If the result rejects the null hypothesis that there is no systematic difference between the 2 approaches, we will use the FEM. If not, we continue to run the Breusch and Pagan Lagrangian Multiplier test to choose between the Pooled OLS model and REM.

Furthermore, Difference and Difference (DiD) is a common approach that some articles have used for analyzing the effect of FDI on aspects of employment, prominently Girma (2005) and Hijzen et. al (2013). However, since our dataset is only in 2 years, it would be difficult to prove the parallel trend assumption of DiD in which firms with FDI and firms without FDI need to show similar trends throughout history. Most importantly, one assumption of DiD is there needs to be no spillover between the 2 groups: firms with FDI and firms without FDI. However, there is likely to have spillover especially in wages among firms.

3.3. Data description

This survey provides information about the firm's characteristics and operation indicators including location, the amount of foreign investment, the country from which investment comes, sales, employment, labor policy, firm size, firm age and assets.

The data consists of 969,227 observations in 2 consecutive years: 2017 and 2018. There are 376,043 observations in 2018 and 593,184 observations in 2017. After cleaning our data set, we have the final sample of 207,847 observations across 2-year period.

Table 1 represents the descriptive statistics. The figures in the table suggest considerable variations within continuous variables, indicating the heterogeneity of firms in the sample. Regarding the level of FDI poured into domestic firms, the average FDIpercentage among all firms in our sample is 10.86%. The maximum amount of FDI percentage is 100 percent, indicating a completely foreign-invested firm, and the minimum level is 0 percent, implying no FDI presence. Since some firms have their sales below the industry average sales, this will make the relative size less than 1 and make the value of firm size in natural log below 0.

Table 1. Summary of key variables

Variables	Obs	Mean	Std. Dev.	Min	Max
lnwage	204, 166	4.0411	0.8997	0	11.8983
lnjob	207, 792	2.7598	1.593	0	11.1604
lnworker_insurance	114, 825	2.8216	1.7312	0	11.1409
FDIpercentage	207,795	10.8666	30.714	0	100
lnsize	206,735	-1.2911	2.2703	-14.2112	8.2763
lnage	207,847	2.2713	0.5299	1.0986	4.8441
lncapital_int	136,723	11.4204	1.8318	0.3087	20.1167

Source: Calculations from software

Table 2 present which country of origin firm often receive FDI the most. The top 6 countries are Singapore, Taiwan, China, South Korea, Hong Kong, and Japan. In raking the total value of FDI country pour into firm in our sample. The order slightly change when Thailand and UK lies in top 6.

Table 2. Top 10 countries with the highest FDI poured into Vietnam.

Country	FDI in VN (millions VND)	Numbers of firms
Korean	48,240,681	2,741
Taiwan	5,501,000	2,352
Japan	901,000	1,857
China	2,739,764	1,013
Singapore	13,241,188	664
Hong Kong	7,529,000	479
USA	274,870	249
Thailand	6,045,000	246
Malaysia	866,467	199
The United Kingdom	4,216,301	167

4. Results

4.1. Correlation matrix

We will begin by checking the multicollinearity problem in our model. If our independent variables are highly correlated with one another, then it would be difficult to measure the actual effect of the FDI percentage on wage, job, and insurance benefits holding constant other variables. We will then imprecisely estimate our coefficients. The Correlation Matrix is presented in table 5 below. We can see that all our regressors are barely correlated with the highest correlation is 21.2% which is lower than 80%. Therefore, we come to conclusion that the multicollinearity problem does not pose a serious threat to our estimations.

Table 3. Correlation Matrix

	FDIpercentage	lnage	lnsize	lncapital_int
FDIpercentage	1			
lnage	-0.0707	1		
lnsize	0.1423	0.212	1	
lncapital_int	0.0446	0.063	0.0045	1

Source: Calculations from software

4.2. Regression results

To understand the effect of FDIpercentage on wage, job, and insurance benefit, the multiple regression model is adopted. Respectively, we run the Pooled OLS model, Fixed Effect Model, and Random Effect Model with the result shown in table 6.

4.2.1. Effects of FDI on wages, job creation and insurance benefits

Considering the effect on wage, the coefficient of the variable of interest *FDIpercentage* is significant in all three models and all have a positive sign. In the FEM, the coefficient is significant at 10% level.

When the dependent variable is job and insurance benefits, the coefficient of *FDIpercentage* is significantly positive in Pooled OLS and REM while it is negative and insignificant in the FEM.

For *Insize* and *Incaptial_int*, the coefficients are consistent in all three models when measuring the effect on wage, job creations and insurance benefits.

However, *lnage* become insignificant and change its direction in FEM when measuring its effect on wage, job creations and insurance benefit.

Table 4. Estimation results (Pooled OLS Model, Fixed-effect Model, Random effect Model)

Independent variables	Wages			Job			Insurance benefits		
	Pooled OLS	FEM	REM	Pooled OLS	FEM	REM	Pooled OLS	FEM	REM
FDIpercentage	0.0034*** (0.00006)	0.0013* (0.00007)	0.0034*** (0.00007)	0.0023*** (0.00008)	-0.00009 (0.00058)	0.0033*** (0.0001)	0.0041*** (0.0001)	-0.0007 (0.0007)	0.0048*** (0.0001)
lnage	-0.0438*** (0.0039)	0.0286 (0.0236)	-0.0429*** (0.0043)	0.2653*** (0.0049)	0.0215 (0.0182)	0.2789*** (0.0055)	0.3418*** (0.0071)	-0.0358 (0.0252)	0.3426*** (0.0079)
lnsize	0.1543*** (0.00096)	0.169*** (0.0048)	0.1563*** (0.0010)	0.5231*** (0.0012)	0.1961*** (0.0037)	0.4774*** (0.0013)	0.5732*** (0.0019)	0.1566*** (0.0062)	0.5200*** (0.0021)
lncapital_int	0.0438*** (0.0011)	0.1618*** (0.0034)	0.0506*** (0.0012)	-0.1581*** (0.0014)	-0.3346*** (0.0026)	-0.1884 (0.0014)	-0.0630*** (0.0020)	-0.1205*** (0.0039)	-0.067*** (0.0020)
Time (Dummy)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Province (Dummy)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry (Dummy)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	3.4435*** (0.0433)	1.8766*** (0.2378)	3.3771*** (0.0466)	4.5738*** (0.0530)	6.8335*** (0.1834)	4.7472*** (0.0567)	2.6685*** (0.0870)	4.5152*** (0.2589)	2.5197*** (0.0932)
Observation	135,486	135,486	135,486	136,365	136,365	136,365	90,970	90,970	90,970
R-Squared	0.38	0.101	0.38	0.73	0.106	0.73	0.68	0.027	0.68

Source: Authors

In conclusion, when we implement different models, the effect of *FDIpercentage* on aspects of employment changes in terms of statistical significance and direction. Therefore, the coefficient of the variable of interest is not consistent.

We continue to implement some tests as mentioned in the Methodology. First, we ran the Hausman test and witnessed the $p\text{-value} < 0.05$ for all 3 cases with different dependent variables. This means that we will reject the null hypothesis that there is a systematic difference in the estimation of FEM and REM. Therefore, the FEM is an appropriate choice. To be more certain, we continue to run the Breusch-Pagan Lagrange Multiplier test, the random effect model is our choice since the $p\text{-value}$ is lower than 0.05 which means we reject the null hypothesis that the Pooled OLS Model was appropriate. We will then choose to use the random effect model. In conclusion, FEM is the best choice for our estimation and according to table 6, *FDIpercentage* seems to have no effect on aspects of employment in the FEM. In addition, for the FEM, the autocorrelation problem is irrelevant since our dataset include only 2 years, we then witness no endogeneity problem through autocorrelation.

When choosing the fixed-effect model, we witness no clear impact of *FDIpercentage* on each of the 3 aspects of employment. We doubt that when countries pour FDI into firms, the effect of FDI may interact with firm existing characteristics and show no impact on wage, job creation and insurance benefit. Therefore, we try to exclude those effects to see what the actual effect of FDI on aspects of employments is.

After including three interaction terms of *FDIpercentage* with respectively *Incapiatal_int*, *lnsize*, *lnage*, the coefficient of *FDIpercentage* changes from statistically insignificant to significant even with different dependent variables in table 7. The coefficient of the interaction term *FDIpercentage* with *Incapiatal_int* and *lnsize* is significant while the interaction term with *lnage* is insignificant. The actual impact of FDI was clear after we included the interaction terms.

For wage, an increase in *FDIpercentage* by 1% increases wage by 1,09%. When *Incapiatal_int* and *lnsize* increase by 1%, it reduces the effect of *FDIpercentage* on wage by respectively 0.07% and 0.08%. These changes are quite small numerically. The change in age has no clear impact on the effect of *FDIpercentage* on wages.

For jobs, an increase by *FDIpercentage* by 1% reduces the number of jobs by 24,68%. When *Incapiatal_int* increases by 1%, the effect of *FDIpercentage* on jobs will increase by 0.21%. For 1% increase in *lnsize* increase the effect of *FDIpercentage* on job by 0.07%. The effect of the interaction term with *lnsize* is quite small.

For insurance benefits, an increase in *FDIpercentage* by 1% reduces the number of workers receiving insurance by 0.44%. The coefficient of the interaction term with *Incapiatal_int* and *lnsize* is significantly positive by quite small in magnitude.

Table 5. Estimation results adding interaction terms (Fixed-effect)

Independent variables	Fixed - effect					
	Wage		Job		Worker insurance	
	(1)	(2)	(1)	(2)	(1)	(2)
FDIpercentage	0.0013* (-0.00007)	0.0109*** (-0.002)	-0.00009 (-0.00058)	-0.2468*** (-0.0015)	-0.0007 (-0.0007)	-0.0044** (-0.0021)
Lnage	0.0286 (-0.0236)	0.0393*** (-0.0247)	0.0215 (-0.0182)	0.1632*** (-0.01877)	-0.0358 (-0.0252)	-0.0434 (-0.0265)
Lnsize	0.169*** (-0.0048)	0.1842*** (-0.0052)	0.1961*** (-0.0037)	0.1780*** (-0.0039)	0.1566*** (-0.0062)	0.1346*** (-0.007)
lncapital_int	0.1618*** (-0.0034)	0.1743*** (-0.0038)	-0.3346*** (-0.0026)	-0.3726*** (-0.0028)	-0.1205*** (-0.0039)	-0.1260*** (-0.0044)
FDIpercentage*lncapital_int		-0.00067*** (-0.00009)		0.0021*** (-0.00007)		0.0002** (-0.00009)
FDIpercentage*lnsize		-0.00083*** (-0.0001)		0.00072*** (-0.00009)		0.00087*** (-0.0001)
FDpercentage*lnage		-0.00096 (-0.0007)		0.00018 (-0.00054)		0.00062 (-0.00072)
Time (Dummy)	Yes	Yes	Yes	Yes	Yes	Yes
Province (Dummy)	Yes	Yes	Yes	Yes	Yes	Yes
Industry (Dummy)	Yes	Yes	Yes	Yes	Yes	Yes
Constant	1.8766*** (-0.2378)	1.7574*** (-0.2388)	6.8335*** (-0.1834)	7.1738*** (-0.1815)	4.5152*** (-0.2589)	4.5744*** (-0.2609)
Observation	135,486	135,486	136,365	136,365	90,970	90,970
R-Squared	0.101	0.103	0.106	0.1	0.027	0.026

Note: ***p < .01, ** p < .05, * p < 0.1

Source: Authors

4.2.2. Effect of FDI origin on aspects of employments

After analyzing the general effect of FDI on aspects of employments. We want to take a deeper look into how FDI from a certain country affect wage, job, and insurance benefit as they change their level of charter capital in firms

We choose 6 countries that pour FDI in the most firms in the sample. These countries include China (CN), Singapore (SG), Hong Kong (HK), Taiwan (TW), Korea (KR). Japan (JP).

4.2.2.1. Effect of FDI origin on wages

The table 8 represent how wage change with FDI from different origin. We can see that *FDIpercentage* from Hong Kong (HK), Singapore (SG), Japan (JP) have a significantly positive impact on wages in which HK have the biggest impact.

lnage continues to have no clear impact on wages, the results are consistent among countries. *lnsize* and *lncapital_int* have significantly positive coefficients indicating that an increase in these variables will increase wages.

For the interaction term, the change in *lncapital_int* and *lnsize* will affect how much *FDIpercentage* impacts wage in some certain countries. SG, HK, KR, JP witness a small reduction in the effect of *FDIpercentage* on wage when increasing *lncapital_int* since the coefficient of the interaction term is statistically significant at 10% level.

Some witness a significant coefficient on interaction term of *FDIpercenatge* with *lnsize*. Those include CN, TW, KR, JP, and increas in *lnsize* reduce the effect of *FDIpercenatge* on wages.

The change in age has no clear impact on the effect of *FDIpercentage* on wage since all coefficients in 6 cases are statistically insignificant.

Table 6. Effect of FDI origin on wages

Independent variables	Wage					
	CN	SG	HK	TW	KR	JP
FDIpercentage of each origin	-0.00078 (-0.0037)	0.0111* (-0.0061)	0.0153** (-0.006)	0.0017 (-0.0035)	0.0025 (-0.0029)	0.0141*** (-0.0036)
lnage	0.0279 (-0.0236)	0.0286 (-0.0237)	0.0293 (-0.0236)	0.0295 (-0.0237)	0.0287 (-0.0238)	0.0282 (-0.0237)
Lnsize	0.1703*** (-0.0048)	0.1691*** (-0.0048)	0.1692*** (-0.0048)	0.1708*** (-0.0049)	0.1710*** (-0.0049)	0.1721*** (-0.0048)
lncapital_int	0.1619*** (-0.0034)	0.1626*** (-0.0035)	0.1622*** (-0.0034)	0.1617*** (-0.0035)	0.1634*** (-0.0035)	0.1666*** (-0.0035)
FDIpercentage*lncapital_int	-0.00008 (-0.0002)	-0.0008** (-0.0003)	-0.00065* (-0.0004)	0.00005 (-0.00019)	-0.00028** (-0.00014)	-0.0010*** (-0.00016)
FDIpercentage*lnsize	-0.0004** (-0.0002)	0.00004 (-0.0004)	-0.0001 (-0.00038)	-0.0005*** (-0.00019)	-0.00036** (-0.00018)	-0.0010*** (0.0026)
FDpercentage*lnage	0.0004 (-0.0011)	0.00005 (-0.0019)	-0.003* (-0.0017)	-0.0008 (-0.0011)	-0.00007 (-0.001)	-0.0002 (-0.00125)
Time (Dummy)	Yes	Yes	Yes	Yes	Yes	Yes
Province (Dummy)	Yes	Yes	Yes	Yes	Yes	Yes
Industry (Dummy)	Yes	Yes	Yes	Yes	Yes	Yes
Constant	1.8842*** (-0.2378)	1.8712*** (-0.2379)	1.8821*** (-0.2379)	1.8962*** (-0.2378)	1.8785*** (-0.2381)	1.8405*** (-0.2377)
Observation	135,486	135,486	135,486	135,486	135,486	135,486
R-Squared	0.09	0.09	0.09	0.09	0.09	0.09

Note: ***p < .01, ** p < .05, * p < 0.1

Source: Authors

4.2.2.2. Effect of FDI origin on job creation

In table 9, when comparing the effect of FDI origin on the number of jobs created in firms. The impact of *FDIpercentage* on jobs is significantly negative. In the case of FDI from CN and HK, the coefficient of *FDIpercentage* is statistically significant at 10% level while other countries have a coefficient significant at 1% level. The effect in *FDIpercentage* from those 2 countries reduces job the lowest compared among 6 countries.

FDI from JP and SG are the 2 that reduce jobs the most as *FDIpercentage* increases. An increase in *FDIpercentage* of 1% reduce job by 2.88% in the case of JP and reduce job by 2.34% in the case of SG.

For all 6 countries in the table, the increase in *lncapital_int* reduces job in the firm and the increase in *lnsize* increase the number of jobs. Firm age still does not affect the number of jobs in firms.

For the interaction term, the increase in *lncapital_int* increases the effect of *FDIpercentage* on jobs in all 6 countries. The increase in *lnsize* also increases the effect of *FDIpercentage* on jobs in most cases. In the case of JP, the increase in *lnsize* has no clear impact on the effect of *FDIpercentage* on jobs. In the case of SG, the interaction between *FDIpercentage* and *lnsize* is significantly negative at 10% proposing that an increase in *lnsize* results in a reduction in the effect of *FDIpercentage* on jobs.

Table 7. Effect of FDI origin on job creation

Independent variables	Job					
	CN	SG	HK	TW	KR	JP
FDIpercentage of each origin	-0.0052* (-0.0028)	-0.0234*** (-0.0047)	-0.0090* (-0.0049)	-0.01*** (-0.0027)	-0.0154*** (-0.0023)	-0.0288*** (-0.0027)
Lnage	0.0217 (-0.0182)	0.0211 (-0.0182)	0.0211 (-0.0182)	0.0223 (-0.0182)	0.0192 (-0.0183)	0.0223 (-0.0182)
Lnsize	0.1946*** (-0.0037)	0.1965*** (-0.0037)	0.1965*** (-0.0037)	0.1939*** (-0.0037)	0.1923*** (-0.0037)	0.1936*** (-0.0037)
lncapital_int	-0.3353*** (-0.0026)	-0.3364*** (-0.0026)	-0.3350*** (-0.0026)	-0.3370*** (-0.0026)	-0.3412*** (-0.0027)	-0.3459*** (-0.0027)
FDIpercentage*lncapital_int	0.0005*** (-0.00017)	0.0019*** (-0.00026)	0.00084*** (-0.0003)	0.0009*** (-0.00015)	0.0013*** (-0.0001)	0.0025*** (-0.0001)
FDIpercentage*lnsize	0.0005*** (-0.00016)	-0.00063* (-0.00035)	0.00088*** (-0.00029)	0.0006*** (-0.00015)	0.00049*** (-0.00014)	0.00017 (-0.0002)
FDpercentage*lnage	-0.0003 (-0.0009)	-0.00008 (-0.0015)	-0.000029 (-0.0013)	-0.00048 (-0.00085)	0.00031 (-0.0008)	0.00003 (-0.00095)
Time (Dummy)	Yes	Yes	Yes	Yes	Yes	Yes
Province (Dummy)	Yes	Yes	Yes	Yes	Yes	Yes
Industry (Dummy)	Yes	Yes	Yes	Yes	Yes	Yes
Constant	6.8436*** (-0.1833)	6.8619*** (-0.1833)	6.8381*** (-0.1834)	6.8428*** (-0.1833)	6.8868*** (-0.1832)	6.9558*** (-0.1823)
Observation	135,365	135,365	135,365	135,365	135,365	135,365
R-Squared	0.105	0.104	0.106	0.105	0.105	0.102

Note: ***p < .01, ** p < .05, * p < 0.1

Source: Authors

4.2.2.3. Effect of FDI origin on insurance benefits

The table shows that in most cases, the effect of *FDIpresence* on insurance benefits is unclear since the coefficient is not statistically significant. Only FDI from JP and TW have a significant coefficient at 5% level in which JP have a negative impact while TW have a positive impact.

lncapital_int keep on having a negative effect on insurance benefit and *lnsize* keep on having a positive effect in all 6 cases. *lnage* appear to have no effect on the number of workers receiving insurance.

For the interaction terms, the effect of changes in *lnsize*, *lncapital_int* show a mixed result in 6 cases. The interaction terms in the cases of CN, SG, HK present statistical result. Change in *lnsize* will change the effect of FDI on insurance benefit in CN, SG, HK. Change in *lncapital* will change the effect of FDI on insurance benefit of TW and JP. In general, it seems that the effect of interaction term is not consistent among the 6 countries for insurance benefits.

Table 8. Effect of FDI origin on insurance benefit

Independent variabbles	Insurance benefits					
	CN	SG	HK	TW	KR	JP
FDIpercentage of each origin	0.0038 (-0.0037)	-0.0042 (-0.0061)	0.0029 (-0.0062)	0.0073** (-0.0035)	-0.00068 (-0.0029)	-0.0071** (-0.0035)
lnage	-0.035 (-0.0252)	-0.0371 (-0.0252)	-0.0364 (-0.0252)	-0.0354 (-0.0253)	-0.0347 (-0.0254)	-0.0351 (-0.0253)
lnsize	0.1543*** (-0.0063)	0.1567*** (-0.0063)	0.1553*** (-0.0062)	0.1563*** (-0.0063)	0.1546*** (-0.0063)	0.1545*** (-0.0063)
lncapital_int	-0.1201*** (-0.0039)	-0.1207*** (-0.0039)	-0.1204*** (-0.0039)	-0.1187*** (-0.004)	-0.1208*** (-0.004)	-0.1247*** (-0.004)
FDIpercentage*lncapital_int	-0.00027 (-0.00023)	0.000098 (-0.00032)	-0.0002 (-0.00038)	-0.00053*** (-0.00019)	-0.000049 (-0.00015)	0.00065*** (-0.00016)
FDIpercentage*lnsize	0.00069*** (-0.00023)	-0.00025*** (-0.00052)	0.0015*** (-0.0003)	0.000087 (-0.0002)	0.00029 (-0.00018)	0.0004 (-0.00025)
FDpercentage*lnage	-0.000098 (-0.0011)	0.0014 (-0.0019)	0.0001 (-0.0017)	0.0001 (-0.0011)	-0.0005 (-0.001)	0.0002 (-0.0012)
Time (Dummy)	Yes	Yes	Yes	Yes	Yes	Yes
Province (Dummy)	Yes	Yes	Yes	Yes	Yes	Yes
Industry (Dummy)	Yes	Yes	Yes	Yes	Yes	Yes
Constant	4.5008*** (-0.2586)	4.5046*** (-0.2588)	4.5042*** (-0.2856)	4.4773*** (-0.2588)	4.5035*** (-0.2592)	4.5501*** (-0.2589)
Observation	90,970	90,970	90,970	90,970	90,970	90,970
R-Squared	0.03	0.03	0.03	0.03	0.03	0.03

Note: ***p < .01, ** p < .05, * p < 0.1

Source: Authors

5. Conclusion and implication

This paper examines the FDI effect on three dimensions including wages, job creation and insurance benefits, and the correlation between country of origin and these effects. A firm level panel dataset is used, covering 2000 industries in Vietnam for two years 2017 and 2018. According to the literature, econometric models are specified, in which FDI presence is measured based on output share by firm, plus a set of control variables as employment determinants. Fixed-effects is determined to be a more appropriate model for regression compared with OLS and random-effects. Then, the models are estimated separately for six groups of FDI origin: CN, HK, JP, KR, SG, TW.

The results suggest that when controlling for the interaction between foreign share and control variables, impacts of FDI on employment aspects change from insignificant into significant, quite different with previous studies. Overall, foreign presence exerts an upward trend on the average wages and a downward trend for jobs created and the number of workers receiving insurance.

Considering the country of origin, FDI impacts on employment factors vary across FDI source, corroborating previous studies. This may be due to various factors such as institutional difference, cultural gap, technology gap or free trade agreements between countries, etc. Hence, it is important for establishments to quantify the employment effect of FDI as well as FDI source before choosing their investors. Furthermore, the governments should consider these when formulating FDI policies for each country of origin in order to help domestic establishments and workers utilize more benefits from FDI.

This study has contributed to the literature of employment effects of FDI in both theoretical and empirical dimensions. To gain a more nuanced understanding of FDI influences on aspects of employment, future research is needed with respect to the longer period of time or FDI from other home countries such as Europe, America, etc.

References

- Aitken, B., Harrison, A., & Lipsey, R. (1996), "Wages and foreign ownership, a comparative study of Mexico, Venezuela, and the US", *Journal of International Economics*, No. 40, pp. 345 – 371.
- Aitken, Brian J., & Harrison, A.E. (1999), "Do Domestic Firms Benefit from Direct Foreign Investment? Evidence from Venezuela," *American Economic Review*, Vol. 89 No. 3, pp. 605 – 618.
- Anwar, S. & Nguyen, L.P. (2011), "Foreign direct investment and trade: The case of Vietnam", *Research in International Business and Finance*, Vol. 25 No. 1, pp. 39 – 52.
- Balsvik, R. (2011), "Is mobility of labour a channel for spillovers from multinational to local domestic firms?", *Review of Economics and Statistics*, Vol. 93 No. 1, pp. 285 – 297.
- Barry, F., Gorg, H. & Strobl, E. (2005), "Foreign direct investment and wages in domestic firms in Ireland: Productivity spillovers versus labour-market crowding out", *International Journal of the Economics of Business*, Vol. 12 No. 1, p. 67.
- Bedi, S. & Cieslik, A. (2002), "Wages and wage growth in Poland: The role of foreign direct investment", *Economics of Transition*, No. 10, pp. 1 – 27.
- Blomstrom, M., G. Fors, & Lipsey, R.E (1997), "Foreign direct investment and employment: Home country experience in the US and Sweden", *The Economic Journal*, Vol. 107 No. 445, pp. 1787 – 97.
- Brown, D., Deardorff, A. & Stern, R. (2003), "The effects of multinational production on wages and working conditions in developing countries", *NBER working paper*, No. 9669.
- Budd, J. & Slaughter, M. (2004), "Are Profits Shared across Borders? Evidence on International Rent Sharing", *Journal of Labor Economics*, Vol. 22 No. 3, pp. 525 – 552.
- Budd, J.W., Konings, J. & M.J. Slaughter. (2005), "Wages and International Rent Sharing in Multinational Firms", *The Review of Economics and Statistics*, Vol. 87 No. 1, pp. 73 – 84.
- Coniglio, N. D., Protta, F. & Seric, A. (2015), "Foreign Direct Investment, Employment and Wages in Sub-Saharan Africa", *Journal of International Development*, Vol. 27 No. 7, pp. 1243 – 1266.
- Conyon, M. J., Girma, S., Thompson, S. & Wright, P.W. (2003), "The Productivity and Wage Effects of Foreign Acquisition in the United Kingdom", *The Journal of Industrial Economics*, Vol. 50 No. 1, pp. 85 – 102.
- Conyon, M., Girma, S., Thompson, S. & Wright, P. (2002), "The productivity and wage effect of foreign acquisition in the United Kingdom", *Journal of Industrial Economics*, No. 50, pp. 85 – 102.
- Crespo, N. & Fontoura, M. (2007), "Determinant Factors of FDI Spillovers- What do We Really Know?", *World Development*, Vol. 35 No.3, pp. 410 - 425.
- Chen, Z., Ge, Y. & Lai, H. (2011), "Foreign direct investment and wage inequality: Evidence from China", *World Development*, No. 39, pp. 1322 – 1332.

Dao, N.T.H. (2019), “Inward foreign direct investment and local wages: The case of Vietnam’s wholesale and retail industry”, *Journal of Asian Economics*, pp. 101 - 134.

Dao, N.T.H. (2020), “Are local workers better-off from foreign presence? A firm-level panel data analysis of a service industry”, *Bulletin of Economic Research*, pp. 1 - 19.

Dao, N.T.H., Sun, S. & Beg, A.B.M.A. (2019), “How does FDI affect domestic firms’ wages? theory and evidence from Vietnam”, *Applied Economics*, pp. 5311 - 5327.

Driffield, N. & Girma, S. (2003), “Regional foreign direct investment and wage spillovers: Plant level evidence from the UK electronics industry”, *Oxford Bulletin of Economics and Statistics*, No. 65, pp. 453 – 474.

Egger, H. & Kreickemeier, U. (2013), “Why foreign ownership may be good for you”. *International Economic*, No. 54, pp. 693 – 716.

Fabbri, F., Haskel, J. & Slaughter, J. (2003), “Does nationality of ownership matter for labor demands?”, *Journal of the European Economic Association*, Vol. 1 No. 2, pp. 698 – 707.

Feliciano, Z. & Lipsey, R. (2006), “Foreign ownership, wages, and wage changes in U.S. industries”, *Contemporary Economic Policy*, No. 24, pp. 74 – 91.

Fosfuri, A., Motta, M. & Ronde, T. (2001), “Foreign direct investment and spillovers through workers’ mobility”. *Journal of International Economics*, Vol. 53 No. 1, pp. 205 – 222.

Glass, A. & Saggi, K. (2002), “Multinational firms and technology transfer”. *Scandinavian Journal of Economics*, Vol. 104 No. 4, pp. 495 – 513.

Golejewska, A. (2002), “Foreign direct investment and its employment effects in Polish manufacturing during transition”, *Analizy I Opracowania KEIE UG Nr 4/2002*.

Gorg, H. & Strobl, E. (2003), “Footloose multinationals”, *The Manchester School*, Vol. 71 No. 1, pp. 1 – 19.

Görg, H. & Greenaway, D. (2004), “Much ado about nothing? Do domestic firms really benefit from foreign direct investment?”, *The World Bank Research Observer*, Vol. 19 No. 2, pp. 171 – 197.

Görg, H., Strobl, E. & Walsh, F. (2007), “Why Do Foreign-Owned Firms Pay More? the Role of On-The-Job Training”, *Review of World Economics*, No. 143, pp. 464 - 482.

Girma, S., Greenaway, D. & Wakelin, K. (2001), “Who benefits from foreign direct investment in the UK?”, *Scottish Journal of Political Economy*, No. 48, pp. 119 – 133.

Hakkala, K.N., Heyman, F. & Sjöholm, F. (2014), “Multinational firms, acquisitions and job tasks”, *European Economic Review*, pp. 248 - 265.

Hale, G. & Long, C. (2011), “Did Foreign Direct Investment Put an Upward Pressure on Wages in China?”, *IMF Econ Rev*, No. 59, pp. 404 – 430.

Hoi, L.Q. & Pomfret, R. (2010), “Foreign Direct Investment and Wage Spillovers in Vietnam: Evidence from Firm Level Data”, *ASEAN Economic Bulletin*, Vol. 27 No. 2, pp. 159 - 172.

Hu, A. & Jefferson, G. (2002), “FDI impact and spillover: Evidence from China’s electronic and textile industries”, *The World Economy*, No. 25, pp. 1063 – 1076.

Huang, Y. & Zhang, Y. (2017), “Wage, Foreign-Owned Firms, and Productivity Spillovers via Labour Turnover: A Non-Linear Analysis Based on Chinese Firm-Level Data”, *Applied Economics*, Vol. 49 No. 20, pp. 1994 – 2010.

Javorcik, B.S. (2004), “Does foreign direct investment increase the productivity of domestic firms? In search of spillovers through backward linkages”, *The American Economic Review*, Vol. 94 No. 3, pp. 605 – 627.

Javorcik, B.S. (2015), “Does FDI Bring Good Jobs to Host Countries? World Bank Research Observer”, Vol. 30 No. 1, pp. 74 – 94.

Lipsey, R. (1994), “Foreign-owned firms and U.S. wages”, *NBER working paper*, No. 4691.

Lipsey, R. & Sjöholm, F. (2004), “Foreign direct investment, education and wages in Indonesian manufacturing”, *Journal of Development Economics*, No. 73, pp. 415 – 422.

Muñoz-Bullón, F. & Sánchez-Bueno, M.J. (2013), “Multinational enterprises and domestic wages: The contingent effect of skill composition”, *International Business Review*, pp. 918 - 931.

Muñoz-Bullón, F. & Sánchez-Bueno, M.J. (2013), “Multinational enterprises and domestic wages: The contingent effect of skill composition”, *International Business Review*, Vol. 22 No. 6, pp. 918 – 931.

Ni, B., Spatareanu, M., Manole, V., Otsuki, T. & Yamada, H. (2017), “The origin of FDI and domestic firms’ productivity—Evidence from Vietnam”, *Journal of Asian Economics*, No. 52, pp. 56 – 76.

Poole, J. (2013), “Knowledge Transfers from Multinational to Domestic Firms: Evidence from Worker Mobility”, *The Review of Economics and Statistics*, Vol. 95 No. 2, pp. 393 – 406.

Kosová, R. (2010), “Do Foreign Firms Crowd Out Domestic Firms? Evidence from the Czech Republic”, *The Review of Economics and Statistics*, Vol. 92 No. 4, pp. 861 – 881.

Seyf, A. (2000), “Can more FDI solve the problem of unemployment in the EU? A short note”, *Applied Economics Letters*, Vol. 7 No. 2, pp. 125 – 128.

Srithanpong, T. (2014), “Productivity and wage spillovers from FDI in Thailand: Evidence from plant level analysis”, *Thailand Development Research Institute*, Vol. 29 No 2.

Thu T.H., Paitoon, W. & Bangorn, T. (2010), “Does Foreign Direct Investment Promote Economic Growth in Vietnam?”, *ASEAN Economic Bulletin*, Vol. 27 No. 3, pp. 295 - 311.

Vu, T.B., Gangnes, B. & Noy, I. (2008), “Is foreign direct investment good for growth? Evidence from sectoral analysis of China and Vietnam”, *Journal of the Asia Pacific Economy*, Vol. 13 No. 4, pp. 542 – 562.