

Spring 4-27-2018

# The Impact of Foreign Direct Investment on the Composition of the Female Labor Force

Liam Missios

Follow this and additional works at: [https://scholar.umw.edu/student\\_research](https://scholar.umw.edu/student_research)



Part of the [Economics Commons](#)

---

## Recommended Citation

Missios, Liam, "The Impact of Foreign Direct Investment on the Composition of the Female Labor Force" (2018). *Student Research Submissions*. 258.

[https://scholar.umw.edu/student\\_research/258](https://scholar.umw.edu/student_research/258)

This Honors Project is brought to you for free and open access by Eagle Scholar. It has been accepted for inclusion in Student Research Submissions by an authorized administrator of Eagle Scholar. For more information, please contact [archives@umw.edu](mailto:archives@umw.edu).

**THE IMPACT OF FOREIGN DIRECT INVESTMENT ON THE COMPOSITION OF  
THE FEMALE LABOR FORCE**

An honors paper submitted to the Department of Economics  
of the University of Mary Washington  
in partial fulfillment of the requirements for Departmental Honors

Liam Missios

April 2018

By signing your name below, you affirm that this work is the complete and final version of your paper submitted in partial fulfillment of a degree from the University of Mary Washington. You affirm the University of Mary Washington honor pledge: "I hereby declare upon my word of honor that I have neither given nor received unauthorized help on this work."

Liam Missios  
(digital signature)

04/22/18

## Abstract

This study examines the impact of foreign direct investment (FDI) on female employment. I use a fixed-effects model with a panel of 69 countries to estimate the impact of FDI on female employment at the sector level. I then disaggregate the data and estimate the effect of FDI on female employment in both developing and developed countries. This is based on the assumption that motivation for FDI differs based on the receiving country's stage of development. I find evidence that FDI inflows cause a slight increase in female employment in the service sector of developing countries. I also find evidence that FDI inflows have a slight negative impact on female employment in the agricultural sector of developed countries.

## **1. Introduction**

The integration of women into the nonagricultural sector is considered an important step in economic development, and it was included as an indicator for the Millennium Development Goals put forth by the United Nations in 2000. In most developing countries, women have disproportionately low representation in the nonagricultural sector, which is associated with higher and more regular wages (United Nations 2012). Greater representation of women in the nonagricultural sector is important for several reasons. It indicates labor market flexibility, which leads to greater economic efficiency (United Nations 2012). Furthermore, the gender disparity in the nonagricultural labor market contributes to a gender pay gap because women either remain unemployed or seek employment in the informal labor market, especially in agriculture. A reduction in the gender pay gap will increase women's autonomy and decision-making power within the household (United Nations 2012). If low-wage, informal employment remains widespread in a developing country, a large part of the population will remain impoverished, and the government will forego potential tax revenue. Thus, for a country to develop its economy, it is vital that it increases the representation of women in the market for nonagricultural wage labor.

This study examines whether foreign direct investment (FDI) has a measurable impact on the composition of the female labor force by estimating the effect of FDI inflows on the share of female workers who are employed in the agricultural, industrial, and service sectors of the economy. My initial motivation to examine this topic was to determine whether FDI inflows could influence the number of women employed in the nonagricultural sector, which includes services and industry, in developing countries. However, I also examine the impact of FDI on female employment in developed countries.

The popular press often depicts FDI as being associated with female employment, especially in certain segments of the manufacturing sector, such as the textile industry. I hypothesized that this link between FDI and female employment is partially due to the gender wage gap. On average, women earn lower wages than men earn, so multinational corporations (MNCs) engaging in vertical FDI will prefer hiring women to minimize labor costs. Firms that engage in vertical FDI locate part of the production process in a country other than the home country because that country has a comparative advantage in some area. Vertical FDI often flows into developing countries because firms seek to exploit relatively low labor costs, and as MNCs tend to invest in industry and services, FDI inflows should increase the representation of women in these sectors. There is evidence of a link between foreign investment and the disparity between the wages of men and women. In a study of the Asian Tigers during the period of their rapid growth, high levels of investment were linked to an increase in the size of the gender pay gap (Seguino 2000).

FDI may also introduce new technology that could make female employment more feasible. Many employers assume that men and women have different skill-sets, and that women have lower levels of physical skill, or “brawn.” This limits the number of opportunities for women in jobs which require high amounts of physical skill, including many positions in industry. When FDI introduces new technology to a receiving country, it could create employment opportunities for women in these sectors by reducing the amount of physical skill required to do certain jobs, especially in the industrial sector. Juhn, Ujhelyi, and Villegas-Sanchez (2013) find evidence that NAFTA tariff reductions led to an increase in female representation in Mexican firms. They attribute this to the adoption of new technology

introduced as a result of trade liberalization. Engaging in horizontal FDI serves a similar purpose as exporting, so it could have a comparable impact on employment.

Furthermore, competition with foreign-owned firms could pressure domestic firms to hire more women. This idea is based on Becker's economic model of discrimination, which assumes that some employers will not want to come into contact with women. Because of the lower demand for female employees, firms will offer them lower wages. Firms that continue to discriminate will face reduced profits, and in a competitive environment, they will be driven out of markets (Becker 1957). Empirical studies of the impact of trade liberalization on female employment support this idea. Trade liberalization appears to have led to an increase in the share of female workers employed by Colombian firms due to increased competition with foreign firms (Ederington, Minier, and Troske 2009). In countries that primarily receive horizontal FDI, an increase in FDI inflows will also increase competition. This should result in an increase in female employment in the sectors which receive high amounts of FDI.

There is also evidence of FDI increasing female employment due to cultural differences between the MNC's home country and the host country. Abe, Javorcik, and Kodama (2016) examined horizontal FDI in Japan and found that foreign-owned firms were more likely to employ women and to have female managers, directors, and board members. They attribute this to cultural differences between Japanese and foreign-owned firms. Most FDI inflows in Japan originate in countries that are more gender-equal, as measured by the Global Gender Gap Index. The authors suggest that this may impact the hiring preferences of foreign-owned firms. Furthermore, foreign-owned firms were more likely to offer family-friendly benefits such as flexible working hours and child care subsidies, which likely make employment more appealing for women. Although this phenomenon is unlikely to exist in all countries that receive FDI, it

could mean that the impact of FDI inflows on female employment in the nonagricultural sectors is positive overall.

Previous studies regarding the impact of FDI and female employment have had mixed results. There is evidence that FDI inflows have had a negative impact on female employment in the manufacturing and hotel sectors in rural Indonesia (Siegmann 2006). This may be related to the gap in human capital and childcare responsibilities. Moreover, in Pakistan, FDI seems to have increased the gap between male and female labor participation (Jaffri, Sana, and Asjed 2016). However, in a study of female employment in manufacturing firms across the Middle East and North Africa, Fakhri and Ghazalian (2016) find that foreign ownership has a positive impact on the representation of women in a firm's workforce.

I contribute to this literature by examining the impact of FDI inflows on female employment at the sector level, using cross-country data. I find evidence that FDI inflows cause a slight increase in female employment in the service sector of developing countries. I also find weak evidence that FDI inflows have a negative impact on female employment in the agricultural sector of developed countries.

## **2. Econometric Model**

For my empirical analysis, I use the following regression model:

$$Fem\_Sector\_Employ_{it} = \beta_0 + \beta_1 FDI\_Inflows_{it-k} + \beta_2 Change\_Sector\_Value_{it} + \beta_3 Fem\_Edu_{it} + \beta_4 GII_{it} + \beta_5 PCGDP_{it} + \lambda_i + \delta_t + \varepsilon_{it}$$

The dependent variable indicates the percentage of female workers employed in a given sector. In my analysis, I test for female employment in the agricultural, industrial, and service sectors. The main independent variable is the level of FDI a country receives in a given year. It is measured as a percentage of GDP. I test for the contemporaneous effect of FDI inflows on the

female labor force, and I include three lags to account for any delayed impact. I expect a positive impact on female employment in the industrial and service sectors and a negative sign for female employment in the agricultural sector. MNCs tend to invest in the nonagricultural sectors. For countries that receive vertical FDI, FDI inflows should have a positive impact on female employment in those sectors because these firms are seeking to reduce labor costs. Due to the gender wage gap, they will tend to hire more women than men. For countries that receive horizontal FDI, I also expect FDI inflows to have a positive impact on female employment in the nonagricultural sector. Because discrimination is inefficient, the increased competition should cause discriminating firms to drop out of the market.

I also included several control variables.<sup>1</sup> I consider the change in size of the sector's output. This is measured as the difference between the sector's share of GDP a given year and the sector's share of GDP in the previous year. I expect a positive coefficient for all sectors. Firms in a sector experiencing growth will have higher demand for labor and will likely hire more female workers. A variable for education, measured as the mean years of schooling for women, is included to account for human capital. Firms will be more likely to hire women if they tend to have a larger skill set, especially in the nonagricultural sector. I expect this variable to have a positive impact on female employment in the industrial and service sectors and a negative impact on female employment in the agricultural sector. I also include the Gender Inequality Index (GII) of the host country as a variable. This index takes into account reproductive health, political empowerment, and labor market participation. GII is often used in analyses of female

---

<sup>1</sup> In an earlier version of the model, I included female labor force participation. I assumed that with more women in the labor force, female employment would increase across all sectors. Surprisingly, this variable had no significant impact on female employment, so I did not include it in my final model. I also tested for the impact of an interaction variable for GII and FDI inflows. I theorized that FDI may have a greater impact on female employment in countries where men and women are relatively equal. This also had no significant effect, so it was not included in the model. Furthermore, I included a variable for the share of the total labor force employed by the sector in question, to account for the effects of FDI that impacted the entire labor force.



employment and has been shown to be negatively linked to women's representation in manufacturing (Fakih and Ghazalian 2016). I also expect that GII is highly correlated with legal and normative barriers against female employment, which are difficult to measure but increase the cost of employing women. A negative coefficient for this variable is expected for the industrial and service sectors and a positive coefficient for the agricultural sector. Finally, I will control for per capita GDP, which is often used as a measure of economic development. Increased female representation in the nonagricultural sector is associated with later stages of economic development, so I expect a positive coefficient for the analysis of the industrial and service sectors and a negative sign for analysis of the agricultural sector. I also include country and year fixed-effects to account for country- and time-specific variation within the model.

### **3. Empirical Analysis**

To examine the relationship between FDI inflows and female employment, I collected data provided by the World Bank and the United Nations Development Programme. It includes data from 2000-2015<sup>2</sup> from 69 developing and developed countries.<sup>3</sup>

---

<sup>2</sup> Although all of the observations are from this time frame, I could not find data from every year for each country that I included in my analysis.

<sup>3</sup> See Appendix 1 for a list of the countries used in my analysis.

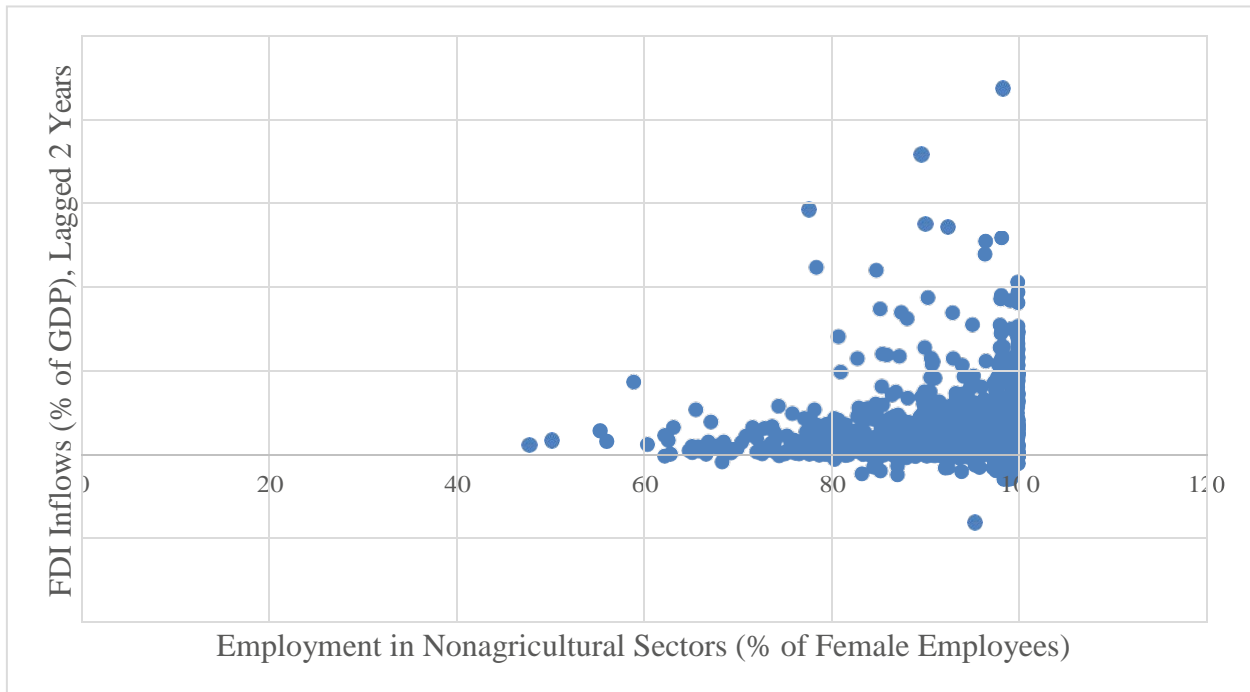
Table 4.1. Descriptive Statistics, 2015.

<b>Variable</b>	<b>Mean</b>	<b>Standard Deviation</b>
<b>FDI Inflow (% of GDP)</b>	5.52	11.62
<b>Per Capita GDP (USD)</b>	23,672.23	23,893.94
<b>Agriculture (% of Female Employment)</b>	9.72	11.2
<b>Industry (% of Female Employment)</b>	12	5.11
<b>Services (% of Female Employment)</b>	77.9	12.47
<b>Change in Agriculture, Value Added (% of GDP)</b>	-0.15	8.34
<b>Change in Industry, Value Added (% of GDP)</b>	1.06	12.73
<b>Change in Services, Value Added (% of GDP)</b>	3.7	22.55
<b>Mean Years of Schooling, Female</b>	10.09	2.36
<b>Gender Inequality Index</b>	0.26	0.16

Sources: See text.

Table 4.1 provides descriptive statistics for the countries used in my analysis. The statistics come from 2015, the most recent year in the data set. For the average country, FDI inflows made up 5.52% of GDP. To put this into perspective, FDI inflows made up 2.81% of the GDP of the U.S. in 2015. The average per capita GDP for the data set is \$23,672, placing the average country in the high-income bracket. This is deceiving as most of the countries in this data set fall into the middle- and low-income categories, but several high-income countries skew the average upward. Furthermore, it should be noted that, on average, the service sector is by far the largest employer of women. It also had the largest average increase in value added to GDP, although the average increase in value added to GDP was also positive for the industrial sector.

Figure 4.1. Correlation Between FDI and Female Employment in Nonagricultural Sectors.



Sources: See text.

Figure 4.1 depicts the correlation between FDI inflows and the share of the female labor force employed in the nonagricultural sectors, industry and services. The graph includes every observation used in my analysis. High levels of FDI inflows appear to be associated with high female representation in the nonagricultural sector. However, the effect of relatively low levels of FDI inflows on female representation in the nonagricultural sector is unclear. The countries which receive relatively high levels of FDI inflows tend to have high female representation in the nonagricultural sector, but female representation in the nonagricultural sector varies in countries which receive low levels of FDI. To estimate the causal relationship between FDI inflows and the share of female employees in a given economic sector, I use a fixed-effects regression model with panel data. Robust standard errors were used to counter the effect of heteroscedasticity.

Table 4.2. Regression Results, Complete Data Set.

	Agr.	Agr.	Agr.	Agr.	Ind.	Ind.	Ind.	Ind.	Ser.	Ser.	Ser.	Ser.
<b>FDI</b>	-0.01 (0.03)				0.03 (0.02)				-0.008 (0.03)			
<b>FDI L1</b>		-0.03 (0.03)				0.01 (0.01)				0.02 (0.03)		
<b>FDI L2</b>			-0.05 (0.03)				0.004 (0.01)				0.04 (0.03)	
<b>FDI L3</b>				-0.04 (0.02)				0.01 (0.01)				0.04 (0.03)
<b>Per Capita GDP (\$1,000s)</b>	0.19 (0.18)	0.18 (0.17)	0.18 (0.17)	0.19 (0.17)	0.002 (0.09)	0.02 (0.09)	0.02 (0.09)	0.02 (0.09)	-0.25* (0.15)	-0.26* (0.14)	-0.26* (0.14)	-0.27 (0.14)
<b>Change in Sector Output (% of GDP)</b>	0.06 (0.19)	0.06 (0.19)	0.06 (0.19)	0.07 (0.19)	-0.02 (0.03)	-0.02 (0.02)	-0.02 (0.02)	-0.02 (0.02)	-0.001 (0.02)	-0.001 (0.02)	0.001 (0.02)	-0.001 (0.03)
<b>Mean Years of Schooling</b>	-2.07** (0.88)	-2.03** (0.87)	-2.03** (0.87)	-2.1** (0.86)	-0.44 (0.71)	-0.43 (0.7)	-0.42 (0.71)	-0.41 (0.71)	2.67*** (0.96)	2.63*** (0.95)	2.6*** (0.96)	2.69*** (0.95)
<b>Gender Inequality Index</b>	14.93 (27.16)	14.53 (27.25)	13.71 (27.37)	13.67 (27.59)	0.01 (10.13)	-0.14 (10.14)	-0.26 (10.18)	-0.07 (10.24)	-12.35 (17.77)	-11.89 (17.9)	-10.92 (18.05)	-10.88 (18.09)
<b>N</b>	455	455	454	455	461	461	460	461	460	460	459	460

Sources: See text.

Standard errors in parentheses.

\*Significant at the 10% level.

\*\*Significant at the 5% level.

\*\*\*Significant at the 1% level.

Table 4.2 shows the results of the regression for my complete data set, including both developed and developing countries. The results suggest that FDI inflows have no significant impact on the share of the female labor force employed in the agricultural, industrial, or service sectors. The most important factor in determining the composition of the female labor force appears to be the mean years of schooling for women. Although it does not impact the share of

women employed in the industrial sector, it has the expected effect on the share of women employed in the agricultural and service sectors. The results suggest that a 1-year increase in the mean years of schooling for women leads to around a 2% decrease in the share of the female labor force employed in the agricultural sector and around a 3% increase in the share of women employed in the service sector. This indicates that as the female population becomes more educated, many women employed in the agricultural sector move toward employment in the service sector. Surprisingly, an increase in the per capita GDP appears to lead to a slight decrease in the share of women employed in the service sector. However, this coefficient is only significant at the 10% level.

After running this regression, I separated the data, creating one dataset with the developing countries and one with the developed countries. As described above, horizontal FDI and vertical FDI likely impact female employment in different ways. Because developing countries tend to receive vertical FDI, and developed countries tend to receive horizontal FDI, analyzing the countries separately can indicate which effect is taking place. For example, the increased competition for markets in countries that receive high levels of horizontal FDI may have a different impact on female employment than do the hiring practices of MNCs seeking to reduce labor costs in countries that receive high levels of vertical FDI. I ran fixed-effects regressions with both of these datasets to estimate the relationship between FDI and female employment.

Table 4.3. Regression Results, Developing Countries.

	Agr.	Agr.	Agr.	Agr.	Ind.	Ind.	Ind.	Ind.	Ser.	Ser.	Ser.	Ser.
<b>FDI</b>	-0.01 (0.06)				0.04 (0.04)				-0.03 (0.06)			
<b>FDI L1</b>		-0.05 (0.05)				0.03 (0.03)				0.03 (0.05)		
<b>FDI L2</b>			-0.1 (0.07)				0.02 (0.03)				0.1* (0.06)	
<b>FDI L3</b>				-0.14 (0.09)				0.03 (0.03)				0.13** (0.06)
<b>Per Capita GDP (\$1,000s)</b>	0.36 (1.02)	0.35 (1.02)	0.37 (1.03)	0.41 (1.04)	-0.24 (0.52)	-0.26 (0.52)	-0.27 (0.52)	-0.28 (0.52)	0.04 (0.83)	0.07 (0.83)	0.06 (0.83)	0.02 (0.84)
<b>Change Sector Output (% of GDP)</b>	0.05 (0.23)	0.05 (0.23)	0.06 (0.23)	-0.08 (0.23)	-0.02 (0.06)	-0.02 (0.06)	-0.01 (0.06)	-0.01 (0.06)	-0.07 (0.25)	-0.04 (0.25)	-0.01 (0.26)	-0.03 (0.25)
<b>Mean Years of Schooling</b>	-4.13** (1.63)	-4.03** (1.67)	-3.98** (1.68)	-4.12** (1.67)	-0.93 (1.51)	-0.97 (1.51)	-0.93 (1.5)	-0.91 (1.51)	4.69*** (1.63)	4.6*** (1.65)	4.54*** (1.65)	4.68*** (1.63)
<b>Gender Inequality Index</b>	15.29 (29.11)	14.5 (29.33)	12.36 (29.89)	10.59 (30.95)	-2.15 (12.75)	-1.78 (12.84)	-1.71 (13.13)	-1.15 (13.54)	-12.85 (19.69)	-12.4 (19.99)	-10.08 (20.35)	-8.56 (21)
<b>N</b>	254	254	254	254	254	254	254	254	253	253	253	253

Sources: See text.

Standard errors in parentheses.

\*Significant at the 10% level.

\*\*Significant at the 5% level.

\*\*\*Significant at the 1% level.

The regression results in Table 4.3 indicate a significant link between FDI inflows and the share of women employed in the service sector when FDI inflows are lagged by two and three years. When FDI inflows are lagged by two years, the coefficient indicates that if FDI's share of GDP increases by 1%, the share of female workers employed in the service sector will increase by 0.1%, and it is significant at the 10% level. When FDI is lagged by three years, the coefficient indicates that if FDI's share of GDP increases by 1%, the share of female workers

employed in the service sector will increase by 0.13%, and it is significant at the 5% level. This partially supports my hypothesis about the impact of FDI on female representation in the nonagricultural sector. FDI has no detectable impact on the share of the female labor force employed in the industrial sector. The positive impact of FDI inflows on female employment in the service sector is probably due firms' preference for female employees, who usually earn lower wages relative to male employees. The difference between FDI's impact on the industrial and service sectors may exist simply because MNCs tend to invest in the service sector in developing countries. However, there may be a preference for hiring men in the industrial sector due a perceived difference in the skill-sets of men and women. FDI inflows appear to have no impact on female employment in the agricultural sector in developing countries. Although a negative coefficient was expected, the impact of FDI inflows into the nonagricultural sector may not be large enough to cause a detectable portion of female workers to leave the agricultural labor market.

Education seems to have a major impact on the share of the female labor force employed in the agricultural and service sectors. The results suggest that a 1-year increase in the mean years of schooling for women decreases the share of women employed in the agricultural sector by about 4% and increases the share of women employed in the service sector by about 5%. An increase in mean years of schooling for women does not appear to affect the share of women employed in the industrial sector. Increasing the level of education for women probably does not impact the industrial sector of developed countries because many of its jobs involve low-skill labor.

Table 4.4. Regression Results, Developed Countries.

	Agr.	Agr.	Agr.	Agr.	Ind.	Ind.	Ind.	Ind.	Ser.	Ser.	Ser.	Ser.
<b>FDI</b>	-0.01 (0.01)				0.004 (0.02)				0.002 (0.02)			
<b>FDI L1</b>		-0.01 (0.01)				0.003 (0.01)				0.0001 (0.02)		
<b>FDI L2</b>			-0.01* (0.004)				0.002 (0.01)				-0.005 (0.02)	
<b>FDI L3</b>				0.001 (0.01)				0.01 (0.01)				0.001 (0.02)
<b>Per Capita GDP (\$1,000s)</b>	0.1* (0.05)	0.1** (0.05)	0.07 (0.05)	0.09* (0.05)	0.09 (0.07)	0.1 (0.07)	0.1 (0.07)	0.1 (0.07)	-0.22 (0.14)	-0.21 (0.13)	-0.18 (0.14)	-0.21 (0.13)
<b>Change Sector Output (% of GDP)</b>	-0.01 (0.05)	-0.01 (0.05)	-0.01 (0.03)	-0.004 (0.05)	-0.02 (0.03)	-0.02 (0.03)	-0.02 (0.03)	-0.02 (0.03)	-0.004 (0.01)	-0.004 (0.01)	-0.004 (0.01)	-0.004 (0.01)
<b>Mean Years of Schooling</b>	-0.22 (0.28)	-0.22 (0.28)	-0.16 (0.28)	-0.23 (0.29)	0.14 (0.22)	0.15 (0.21)	0.14 (0.21)	0.16 (0.21)	0.9 (.76)	0.91 (0.76)	0.84 (0.74)	0.91 (0.76)
<b>Gender Inequality Index</b>	14.51 (9.74)	14.26 (9.74)	10.81 (10.42)	15.05 (9.92)	18** (7.73)	18.06** (7.8)	18.44** (7.67)	18.17** (7.65)	-11.8 (17.09)	-11.86 (16.87)	-9.2 (18.3)	-11.8 (17.32)
<b>N</b>	201	201	200	201	207	207	206	207	207	207	206	207

Sources: See text.

Standard errors in parentheses.

\*Significant at the 10% level.

\*\*Significant at the 5% level.

\*\*\*Significant at the 1% level.

Table 4.4 shows the regression results for the developed countries used in my analysis.

When lagged by three years, FDI inflows appear to have a slight negative impact on the share of women employed in the agricultural sector. The coefficient indicates that if FDI's share of GDP increases by 1%, the share of female workers employed in the service sector will decrease by 0.01%, and it is significant at the 10% level. This is consistent with my hypothesis. However, if FDI inflows cause the share of women employed in agriculture to decrease, I would expect the share of women employed in industry and services to increase. FDI inflows have no detectable



impact on the share of women employed in these sectors. In developed countries, the agricultural sector tends to make up a small percentage of GDP. It is possible that the women who leave employment in the agricultural sector do find employment in the nonagricultural sector, but that they are so few that there is no detectable impact on the share of women employed in the nonagricultural sectors. Surprisingly, the results also suggest that an increase in per capita GDP causes the share of women employed in the agricultural sector to increase, which is the opposite of what I predicted. Furthermore, an increase in the GII appears to cause an increase in the share of female workers employed in industry. This is not what I expected, and it is especially surprising because it does not have a comparable impact on the share of women employed in the service sector. Because the GII takes many factors into account, it is difficult to identify a specific cause for this effect.

#### **4. Conclusion**

This analysis partially supports my hypothesis. The results suggest that FDI inflows do have a slight positive impact on the share of women employed in the nonagricultural sector. However, the impact appears to be different in developed and developing countries. FDI inflows in developing countries cause a slight increase in female employment in the service sector, probably because firms hire women to reduce costs. In developed countries, FDI inflows appear to cause a slight decrease in employment in the agricultural sector. This may indicate that FDI creates opportunities for women to leave jobs in agriculture for other sectors, but the results are inconclusive. My analysis suggests that attracting FDI can be an effective way of increasing female employment, especially in the service sector of developing countries.

Although I did find a link between FDI and female employment, this research was limited by the broadness of the data, Future research should take into account more specific data to better

understand these effects. For example, to estimate the impact of competition between domestic firms and MNCs, firm-specific data could be utilized to determine if competition has a different impact on a firm's likeliness to leave the market based on the gender composition of its employees. Furthermore, researchers should examine whether foreign ownership has a discernible impact of foreign ownership on the gender composition of its employees, especially in developing countries. Similar research has been done, but it should be replicated with data from a variety of regions to account for regional differences. If firm-specific data cannot be obtained, further research should consider the relative level of FDI among each sector of a country's economy. This could help explain the discrepancy between the impact of FDI on the service sector and the industrial sector in developing countries.

## Bibliography

- Becker, Gary. 1957. *The Economics of Discrimination*. Chicago: University of Chicago Press.
- Ederington, Josh, Jenny Minier, and Kevin R. Troske. 2009. "Where the Girls Are: Trade and Labor Market Segregation in Colombia." *Institute of Labor Economics Discussion Paper Series*, no. 4131 (April): 1-22.
- Fakih, Ali, and Pascal L. Ghazalian. 2015. "Female Employment in MENA's Manufacturing Sector: The Implications of Firm-Related and National Factors." *Economic Change And Restructuring* 48, no. 1 (February): 37-69.
- Kodama, Naomi, Beata Javorcik, and Yukiko Abe. 2016. "Transplanting Corporate Culture across International Borders: FDI and Female Employment in Japan." *Research Institute of Economy, Trade, and Industry Discussion Paper Series*, no. 16-E-015 (February): 1-32.
- Jaffri, Atif Ali, Moniba Sana, and Rooma Asjed. 2015. "Impact of Globalization on Gender Inequality in Labour Market of Pakistan." *Pakistan Economic And Social Review* 53, no. 1 (Summer): 1-16.
- Juhn, Chinhui, Gergely Ujhelyi, and Carolina Villegas-Sanchez. 2014. "Men, Women, and Machines: How Trade Impacts Gender Inequality." *Journal of Development Economics* 106, no. 1 (January): 179-193.
- Seguino, Stephanie. 2000. "Accounting for Gender in Asian Economic Growth." *Feminist Economics* 6, no. 3 (November): 27-58.
- Siegmann, Karin Astrid. 2006. "Globalisation, Gender, and Equity--Effects of Foreign Direct Investment on Labour Markets in Rural Indonesia." *Intervention: Journal Of Economics/Intervention: Zeitschrift Fur Okonomie* 3, no. 1 (January): 113-130.
- United Nations. "Indicators for Monitoring the Millennium Development Goals." 2012. Accessed January 2018. <http://mdgs.un.org/unsd/mi/wiki/3-2-Share-of-women-in-wage-employment-in-the-non-agricultural-sector.ashx>.

## **Appendix 1. List of Countries Used in Analysis.**

### **Appendix 1.1. Developing countries.**

1. Armenia
2. Azerbaijan
3. Bolivia
4. Brazil
5. Bulgaria
6. Chile
7. Colombia
8. Costa Rica
9. Croatia
10. Dominican Republic
11. Ecuador
12. Egypt, Arab Rep.
13. Georgia
14. Honduras
15. Indonesia
16. Iran
17. Jamaica
18. Kazakhstan
19. Kyrgyz Republic
20. Malaysia
21. Mauritius
22. Mexico
23. Moldova
24. Mongolia
25. Montenegro
26. Morocco
27. Pakistan
28. Panama
29. Paraguay
30. Peru
31. Philippines
32. Romania
33. Russia
34. El Salvador
35. Serbia
36. Syria
37. Thailand
38. Turkey
39. Uruguay
40. Venezuela
41. South Africa

## **Appendix 1.2. Developed Countries.**

1. Australia
2. Austria
3. Belgium
4. Canada
5. Czech Republic
6. Denmark
7. Estonia
8. France
9. Germany
10. Greece
11. Hong Kong
12. Hungary
13. Iceland
14. Ireland
15. Italy
16. Japan
17. Luxembourg
18. Netherlands
19. New Zealand
20. Norway
21. Portugal
22. Singapore
23. Slovakia
24. Spain
25. Sweden
26. Switzerland
27. United Kingdom
28. United States