Globalization and Gender: The Impact of FDI Inflows on the Gender Pay Gap

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Abstract

In this essay, Catriona Northcote and Helene Hololei analyse the relationship between FDI inflows and the gender pay gap in three South American countries. Northcote and Hololei find that FDI and the gender wage gap have a positive relationship. Interestingly, Northcote and Hololei find that the effects of FDI on the gender pay gap differ between high and low-skilled jobs. Overall, the paper finds that increased FDI is found to widen the gap between male and female wages in Brazil, Argentina, and Peru. In finding that the gender wage gap increases with more FDI, Northcote and Hololei's thought-provoking analysis finds results at odds with the Becker model.

I. Introduction

This research paper addresses how an increase in foreign direct investment inflows in three South American countries (Brazil, Argentina, and Peru) affects the gender wage gap in each of these countries. This study begins by discussing the FDI-induced transmission channels and spillover effects on the gender wage gap, with a particular focus on the aspect of reduced gender discrimination with increased competition. In light of the UN's 2030 goal of gender equality, it is of interest to assess the neo-classical economic theory which holds that an increase in FDI inflows leads to more equitable gains and the advancement of developing countries (Mahembe and Odhiambo, 2014). Contrary to our original thesis, we find a positive relationship between FDI and the gender wage gap. We observe an increase in female participation and share of women in managerial positions with higher FDI inflows, but this fails to translate to a decreased gender wage gap. The next section discusses the possible implications of this relationship and how the transmission channels fail to narrow the gender wage gap. The paper ends with a discussion of the

the potential limitations of this study. Overall, we suggest that there is a disconnect between the political and economic agenda in developing countries, as the political implications of gender wage inequality are offset by the economic benefits of sustaining a gender pay gap.

II. Background/Literature/Motivation

From an economic perspective, the most common measure of gender inequality is the gender wage gap. The United Nations defines equal pay as "the right to receive equal remuneration for work of equal value". Presently, the global gender wage gap is at 16%. This means that female workers earn 84% of what a male worker earns (UN Women, 2020). Reducing this gap is a top priority for all countries. As many studies are increasingly demonstrating, gender equality and women empowerment influence short-run and long-run macroeconomic outcomes (Seguino, 2000). The UN's inclusion of gender equality in the 2030 Agenda for Sustainable Development reflects this. A detailed longitudinal study by Blau and Klahn found that the gender pay gap could be explained by human-capital factors (although these are diminishing) and gender differences in industry and occupation. The rest of the gender pay gap is unexplained (38%), and this portion has persisted since the 1980s. The authors suggest that this unexplained gap, unaccounted for by measures of gender differences, is due to labour-market discrimination (Blau and Kahn, 2017).

Foreign direct investment is considered to be a central element of development strategy. It increases local competition, bringing about better employment opportunities, changing relative prices, and increasing wages. FDI can lead to technology transfers which may increase the relative demand and wages of women. According to neoclassical theories, increased competition should translate to an increase in female demand for labour and wages by affecting the growth of different industries. It can lead to the expansion of female intensive sectors, such as the service industry. FDI and increased competition could also reduce market imperfections such as gender-based discrimination (Aguayo-Tellez, 2012).

The Becker model holds that increased product market competition will directly reduce all kinds of discrimination as they are inefficient and costly. A decrease in gender-based discrimination should subsequently narrow the gender wage gap, as there is a degree of substitution between female and male labour. As Black and Brainerd show in their study of the gender wage gap across industries in the United States, trade liberalization and increased international competition did contribute to the increase in women's relative wages as they reduced firm's ability to discriminate (Black and Brainerd, 2004). Hazarika and Otero similarly find that trade liberalization is related to a narrowing in the gender wage gap in Mexico. Product market competition induced by foreign trade led to a decrease in gender discrimination, particularly in the export-oriented maquiladora, and also in the non-maquiladora sector in industries where there were reductions in tariffs and trade barriers (Hazarika and Otero, 2004). A study of the Uruguayan economy finds that the gender pay gap is explained

by labour market discrimination, as well as differences in endowments. They stimulate 1994 levels of trade liberalization and find that this has increased female employment and wages and narrowed the gender wage gap. However, they do note that these changes vary by skill (Terra, Bucheli and Estrades, 2009). These studies and others have found that there is a relationship between FDI and the gender pay gap, via labour demand, corporate social responsibility, economic growth, and technological spillovers (Aguayo-Tellez, 2012).

The literature on this topic has been heavily debated. Studies in the LAC region have been limited in number and have not been updated recently. The objective of this paper is to contribute to previous studies about the gender dimension of economic globalization by assessing whether an increase in FDI in Brazil, Argentina and Peru will decrease their national gender wage gap. Since the 1980s, these countries have become increasingly liberalized and attracted relatively large FDI inflows (William, 2015). However, they have underdeveloped labour laws and in particular a lack of wage inequality reforms (ILO, 2016). This might be useful in looking at the direct impact of FDI on relative wages. Female workers tend to be relatively unskilled and working in the informal sector, which is undergoing an expansion with liberalization. An observation of particular interest is that the agricultural sectors of these countries consist of mostly men. Therefore, liberalization might negatively affect the agriculture sector and render women relatively better off (Aguayo□Tellez, 2012). Choosing these three countries also allows us to compare differences in country characteristics within a similar region.

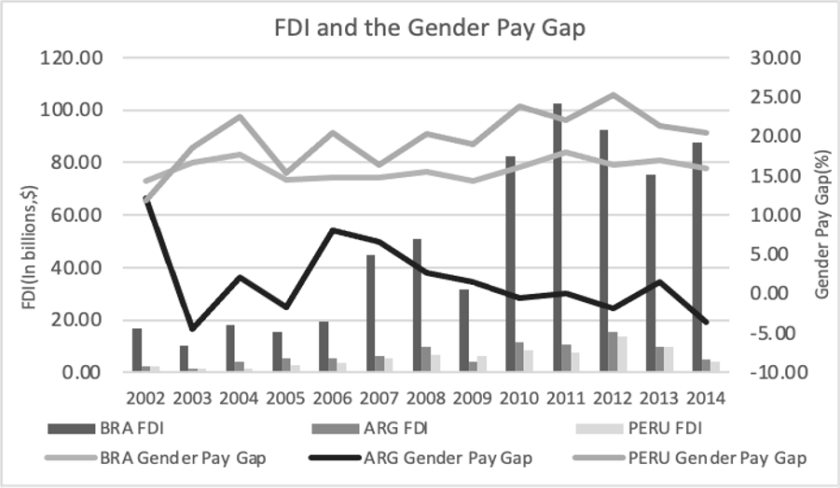
III. Empirical Approach

In order to determine the impact of FDI on the gender wage gap, our empirical approach includes a descriptive analysis of data from the International Labour Organisation and the World Bank. We set up this study using data from Brazil, Argentina, and Peru between 2002 and 2014. We use interpolation to compensate for the missing data points.

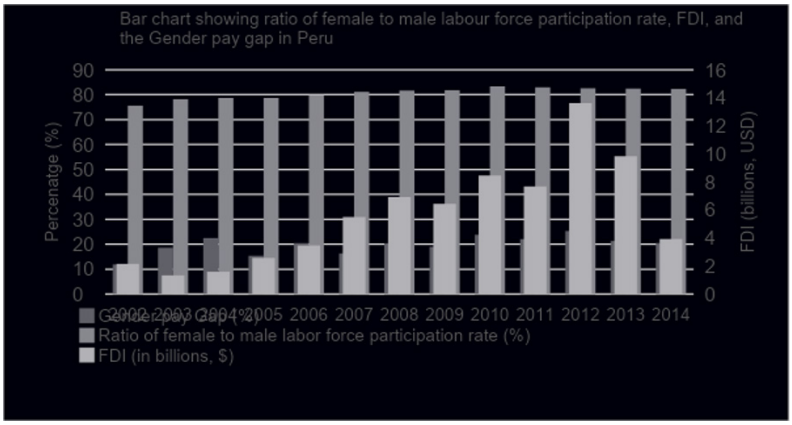
IV. Description of Dataset

Figure 1 shows a clear direct correlation between FDI and the Gender Pay Gap (GPG), where the wage discrimination between genders moves in the same direction as FDI. Brazil sustained both a steady increase in FDI and GPG. Peru encountered a fluctuating FDI and a similar pattern is reflected in the GPG. Argentina, on the other hand, experienced extreme fluctuations in their FDI but it remained consistently lower than in the other two nations. As a result, Argentina's wage differentials have persisted at a much lower level than in BRA and PER. For example, Argentinian FDI decreased from 15.3 in 2012 to 5.1 in 2014. This coincides with GPG drastically dropping from 1.45% in 2013 to -3.62% in 2014. Conversely, the lowest the GPG has been in BRA was in 2002 and 2009 but then increased consistently with FDI inflows. Therefore, these three cases in South America suggests that a higher FDI will not eradicate the the GPG but may actually worsen it, as FDI has a direct direct relationship with GPG.

This research looks at pecuniary FDI spillovers via the labour and competition channels and originally suggested that Becker's Theory of Discrimination (1957) will slowly over time narrow the wage gap between men and women with an equal skillset (Black and Brainerd, 2004). However, this is not what is seen in Figure 1.



Using Peru as an example, Figure 1 and Figure 2 show that Peruvian GPG has risen alongside FDI. However, Figure 2 shows that the ratio of women to men in the labour force has also increased. This implies that Becker's theory is applicable but limited to narrowing the gender discrimination in employment rather than the pay gap. Therefore, our study does come to the same conclusion as Black and Brainerd's (2014) and Terra, Bucheli, and Estrades' (2008), that female participation rate could be growing alongside FDI. However, in our case this is not sufficient to decrease the GPG.



One of the reasons for this phenomenon is that foreign investment can exploit the GPG in these three countries. At higher levels of education and human capital, men and women are (near) perfect substitutes (Acemoglu, Autor, and Lyle, 2004). Therefore, FDI works through labour mobility, competition, and technology channels to increase female labour force participation, especially in high-skilled employment (Ernesto 2011). However, instead of addressing the GPG, higher female participation in the labour market can create a perverse situation where FDI is reinforcing wage differentials. This is because firms can now improve their investment productivity at a lower unit labour cost than before by exploiting cheap female labour (Seguino, 2000).

Figure 3a shows a gradual and sustained feminization of high-skilled labour in Brazil. The female share of employment in managerial positions has increased by 6.2% between 2002-2014. Even though it has gradually increased over time it does not seem to follow the leap in FDI, nor has it helped lower GPG. Hence, demonstrating that FDI could partly help decrease employment discrimination yet having no knock-on effects on GPG.

Figure 3b demonstrates a similar pattern in Peru, whereas in this case, the ratio of female share of employment in managerial positions fluctuates between 20-38%, hence it is more erratic than in BRA or ARG. However, this is not surprising as their FDI and GPG are also more volatile.

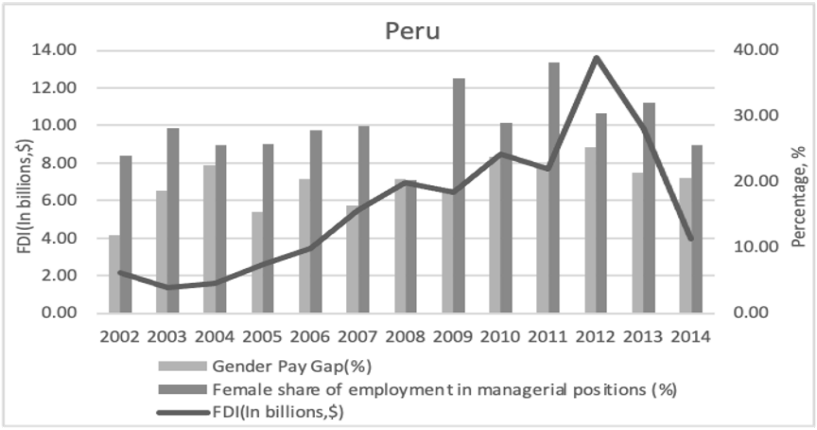
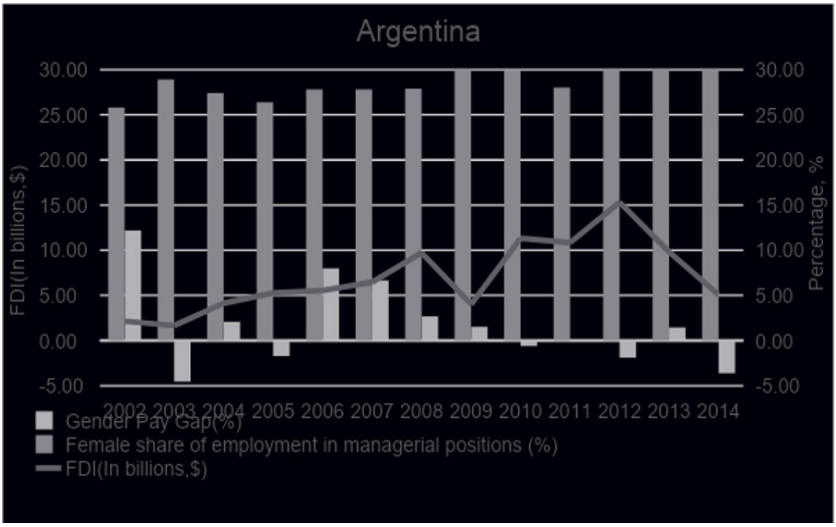


Figure 3c presents a different trend in Argentina than in the other two nations. It has a low but fluctuating FDI, a massive fall in GPG, and not much change (remains low) in the female share of employment in managerial positions.



Therefore, Figures 3a,3b, and 3c show that the percentage of women in high-skilled managerial professions either grew gradually like in BRA and PER yet the GPG remained high or like in ARG where the female share of employment in managerial positions remained constant at around 30% but GPG remained low. Therefore, the feminisation of the labour force has no real impact on lowering GPG. Nevertheless, there seems to be a weak link between FDI and

women in managerial positions. In all three cases (less pronounced in Argentina) a rise in the female share of employment in managerial positions occurred around the same time as a rise in FDI.

The weak interaction we see in the graphs may occur as a result of men and women becoming (near) perfect substitutes as human capital increases (Acemoglu, Autor, and Lyle, 2004). Women in managerial positions can earn more in absolute terms but evidently not in relative terms. Figure 3a and 3b represent the feminization of the labour force and a growing pay gap. As of now, firms can exploit lower unit labour costs by employing women, which in turn will further attract investment due to higher potential returns Therefore, an obvious issue arises here where the pay gap offers economic advantages (Seguino, 2000). Standing (1989;1999) pointed out that due to the competitive pressures of globalisation, female workers are benefitting from higher employment at the cost of male workers due to gender wage differentials. Therefore, efficiency-seeking FDI will take advantage of new cheap female labour to lower production costs (Bui, Bui, and Vo, 2018). Under the assumption that females and males are perfect substitutes at higher levels of education, from a purely economic viewpoint, it would be economically inefficient to eradicate the gender wage differentials as exploiting female labour provides the same output as men just at a lower cost to the firm. This effect can potentially explain what we see in the graphs above where GPG is actually increasing even though countries are experiencing more foreign investment and feminization of the labour market. Additionally, as South and Latin American society is characterised by Machismo (a highly patriarchal society), hence GPG becomes even more exploitable for FDI. Women in such societies have limited bargaining power to demand equal pay due to lower socialization. Therefore, women are less able than men to sufficiently protest wage inequality in a way that would signal high political instability to investors hence lowering FDI and slowing economic growth (Seguino, 2000). Essentially, GPG offers cheaper inputs for the same output at lower economic and political costs.

Conclusively, this study represents that there are cross-country similarities in the relationship between FDI and GPG. Our analysis determines that the neo-classical approach of using FDI alone to end gendered wage discrimination locally and globally cannot be achieved. As long as the opportunity cost of GPG is lower than its political implications and it continues to offer low unit labour costs and high investment productivity through high-profit margins and low fixed costs with no political repercussion, then GPG will persist.

V. Limitations

There are three obvious limitations in this research project that need to be addressed for a more robust statistical analysis. Firstly, there are inaccuracies in the gender wage gap data. This stems from the fact that there is a lack of consistent and uniform data on it and our interpolations for the missing years led to further inaccuracies in the final analysis. Secondly, our study is restricted to descriptive analysis. It could be improved using the fixed effects model or the instrumental variable regression model. Thirdly, it would have been beneficial

to look at the FDI in specific sectors within the countries. This would have made the study more generalizable, but there is currently not enough data on the GPG in specific sectors to ensure statistical significance.

VI. Conclusion

The aim of this paper was to assess whether increased foreign direct inflows has narrowed the gender wage gap, as neo-classical and trade theorists have previously argued. Previous research in this field has found evidence that supports Becker's theory of discrimination, hence motivating our own study and contribution to the topic. Analysing Brazil, Argentina, and Peru between the years 2002 and 2014 allowed for a cross-country analysis of a region that has recently adopted liberalization policies and has undergone limited reform with regard to labour market policies. Upon examination of our dataset, we can see that there is a clear direct correlation between FDI and the gender pay gap, where the level of wage discrimination between genders moves in the same direction as FDI. Therefore, we argue that a high FDI will not eradicate the GPG but may actually worsen it.
On the other hand, we also find that in
creased FDI inflows have occurred at the same time as an increase in the ratio of women to men in the labour force and the feminization of high-skilled labour. We argue that this is because firms are now exploiting cheap female labour to improve their investment productivity at a lower unit labour cost. Therefore, although increased FDI may reduce employment discrimination, it will have little impact on reducing wage discrimination and can actually increase the wage gap. There are evident economic gains from gendered wage discrimination that neo-classical economic theory does not address. These gains are associated with increased economic rents and lower production costs, as well as a lack of effective political backlash. As our study suggests, increased FDI inflows seem to contribute to the gender wage gap rather than overcome it. The results of this paper show that although more women are entering the labour force and accessing high-skilled jobs, gendered employment discrimination is still prevalent within wage differentials. As long as the gender pay gap continues to offer low unit labour costs and high investment productivity through high-profit margins and low fixed costs with no political repercussions, the gender pay gap will persist.

Going forward, although this study has its limitations, our results highlight the need for effective labour market reforms and policies alongside trade liberalization in developing countries. FDI inflows alone cannot narrow the gender pay gap or reduce gender inequality. Future research might consider understanding the components of the gender pay gap in greater detail in order to assess the transmission channels. Additionally, it could be beneficial to look at other macroeconomic strategies that could raise women's relative wages to generate an efficiency wage effect, during the process of growth (Seguino, 2000). This paper is only the first of many to contribute to the topic of globalisation and gender.

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