Globalization and Labor Market: A Systematic Review of the Literature

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Abstract
The current study set out to determine the themes from the relevant empirical literature. After a systematic examination of the literature, the current study discovered that globalization has changed employment and trade in the labor market, impacted the employment rate, and increased gender differences. The study also revealed that FDI has a number of important effects and ramifications for sectorial employment, employment productivity, private sector employment, and employment creation. The study also revealed that different economies experience distinct mix effects of remittances on labor and employment. Similarly, trade openness has been shown to be a conduit for changes in employment. The study also discovered that the gender gap has gotten wider as a result of globalization, which has led to the loss of jobs in industries that compete with imports. The findings also demonstrated an understanding of the complexity of globalization and employment, which must be taken into account for each unique situation. It is anticipated that this study will assist decision-makers in identifying strategies to mitigate the adverse impacts of globalization.

Keywords: Globalization, Labor Market, Employment Shifts, Systematic Literature Review

1. Introduction
Globalization has been used in so many different contexts, and with so many different connotations. The dictionary defines globalization as "the act, process, or policy of making something worldwide in scope or application." From an economist point of view, "globalization is the growing economic interdependence of countries worldwide through the increasing volume of cross-border transactions in goods, services, international capital flows, and through technology." (Zonis 2001,2). On the other hand, labor markets are the arenas in which workers exchange their labor power in return for wages, status, and other job rewards and it includes institutions and practices that govern the purchase, sale, and pricing of labor services (Kalleberg, & Sorensen, 1979). Moreover, the labor market is structured consisting of a multiplicity of sub-markets demarcated by various criteria, but linked by mobility (Kerr, 1954). Its principal divisions are those of geographical area, occupation and industry, which correspond with the three major forms of labor mobility. In addition to this, the labor market may be international, national or local (Goodman,1970). Several studies have been carried out to understand the influence of globalization on economic growth. These studies have emphasized the positive impact of economic globalization on economic growth. On the other hand, economic growth is impacted negatively by social globalization, whereas the effect of political globalization is not significant (Ying, Chang & Lee, 2014). In addition, many researchers have pointed out that globalization is experiencing a renewed surge, thanks to recent political advancements and advancements in information and communication technology. Simultaneously, globalization has been expanding as international value-added chains become more interconnected with the growing influence of Multinational Enterprises (MNE). These developments have had a significant positive effect on global income and productivity. However, it is important to note that there are also considerable risks associated with globalization due to the increasing interdependence of national economies (Rojiček, 2017).

The labor markets around the world have witnessed dramatic changes over the period due to numerous reasons including globalization and technological developments. Globalization and technological change have affected various dimensions of labor market including gender parity, sectorial shifts and employment of skilled and unskilled groups in the labor force. The researchers from various disciplines have produced extensive theoretical, conceptual and empirical literature on the effects of globalization on labor market. The breath and depth of such literature has allured the analysts to conduct traditional literature review, meta-analysis and systematic literature review of the findings of the studies on the effects of globalization on labor market. However, there is dearth of systematic review of empirical literature on the effects of globalization on the labor market. The present study intends to fill this gap by doing systematic review of the empirical literature on the effects of globalization on employment, disaggregate employment (sector-wise) gender-based wage gap and labor force participation gap and sectoral shifts in employment. The key objective of this paper is to shed light on recent empirical literature on the subject to identify the gap in the empirical literature on the subject cited above in case of Pakistan. The paper has also supported in selecting appropriate methodology, and benchmark to compare empirical results of the study. The current study is structured in four sections other than introductory section. The second section describes the methodology, the third section offers the findings of the analysis and the last section concludes the study.

2. Methodology
The purpose of the present study was to review the empirical literature on effects of globalization on labor market and to synthesis their findings to accommodate them into various themes. From the methodological point of view, three strategies were available; traditional narrative literature review, meta-analysis and the systematic literature review. The traditional narrative literature reviews have been widely criticized for the lack of relevance due to the use of a personal, and usually subjective and biased methodology (Fink, 1998; Hart, 1998). A statistical technique called meta-analysis can be used to calculate the mean and variance of underlying population effects from a group of empirical studies that are purportedly answering the same research topic (Field & Gillett, 2010). On the other hand, systematic review has its origins in the medical field (Sheldon and Chalmers, 1994; Booth, 2001) but is now applied in social sciences (Hemsley-Brown and Sharp, 2003, Tranfield et al., 2003, p. 220) to exclude the possibility of personal bias in data selection (Transfield et al, 2003). The main purpose of a systematic review is to identify, describe, and discuss the key scientific contributions to a field or question by excluding or reducing bias (systematic errors) and chance effects which will ultimately enhance the legitimacy and authority of the results (Tranfield, Denyer & Smart 2003). Two steps are particularly important when doing a systematic review:

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(1) the setting of inclusion criteria and, (2) the strategy of locating and selecting the potential studies (Alderson et al., 2004). The difference between a systematic review and a traditional narrative review is that, contrary to the latter, the former uses a rigorous, replicable, scientific and transparent process (Cook et al., 1997). A systematic review is different from a metanalysis in the sense that it does not uses statistical and econometric procedures for synthesizing findings and analyzing data (Transfield et al., 2003).

While keeping in view the guidelines to carry out systematic literature review, the researchers devised the following four step methodology.

**Step 1: Data Sources and Studies Selection**

To find and choose the articles for systematic review, the researchers used a three-stage approach. Initially, a computerized search was performed using several keywords in three databases: Google Scholar, Science Direct from Elsevier, JStore and Science Direct. The first two databases give users access to over 1,800 journals on how the labor market is affected by globalization, respectively. To find further publications by authors whose names were found in the initial searches, hand searches and online searches were also carried out. In the second phase, the researchers conducted a thorough search of all the publications that appeared in three prestigious journals between January 1993 and December 2003. After completing the first two procedures, the researchers went back and manually searched the reference lists of the publications they had retrieved. In doing so, the researchers found 900 publications that may be included in the systematic review.

**Step 2: Data Collection and Management**

Once the sources of data collection were identified, the researchers proceeded to gather the data pertaining to the research issue of the current study. The researchers established specific criteria for including and excluding literature in order to comprehensively identify all relevant studies in the field, while maintaining a focus on the most relevant studies that would provide the highest quality evidence for the review. Four criteria were employed to choose and evaluate the prospective studies. In order to be considered for our systematic review, a study:

1. need to provide a detailed analysis of the empirical analysis of globalization on the labor market. Studies focused on other forms of effects were excluded. Similarly, theoretical and conceptual investigations were not kept. Nevertheless, the researchers did not impose any limitations on the data analysis approach employed by the authors.
2. must be published in a peer-reviewed journal between the years 1993 and 2003, inclusive. Therefore, other types of publication such as conference proceedings, novels, newspaper articles, and unpublished works were excluded from consideration.
3. was written in English language from various countries including the UK, the USA, Canada, Australia, New Zealand, Asia, and Europe.
4. treats aggregated and disaggregated employment, wage gap, labor force participation gap and sectoral shifts in employment as the dependent variable, meaning they are the variables that need to be explained. Therefore, papers which did not treat these variables as dependent variables were excluded.

The articles that were identified underwent a double screening process. Initially, a preliminary categorization of the titles and summaries of the articles enabled the exclusion of 300 papers that did not fulfill the requirements for inclusion. We were left with a total of 600 items that required comprehensive study. Every single one of these 600 publications was evaluated by a minimum of two out of the three authors and was analyzed based on the established criteria for inclusion. During the second screening, the researchers thoroughly examined the major content of the articles, going beyond only the title and abstract. As a result, the researchers identified and excluded 300 articles that did not fulfill the specified criteria for inclusion. After applying the inclusion criteria, a total of 108 studies remained. The selected articles were organized and tracked using a Microsoft Excel database. This database included information such as the reference for each article, the type of effect being studied (themes or FDI), the sample size, the focus of the study (country or region), the sector(s) being analyzed, and the definitions of the dependent and explanatory variables used in the analysis. The chosen citations were recorded using reference management software and stored in a Word database.

**Step 3: Analysis**

The researchers employed "thematic analysis" to analyze the data which involved combining and interpreting information to summarize existing knowledge and determine the level of agreement across different themes. Every empirical research paper underwent a comprehensive evaluation, utilizing a standardized framework to extract essential information on the study's goal, the definition, the study's design, sampling, methodology, findings, and implications. Furthermore, the authors identified three journal papers that addressed crucial theoretical concerns relevant to the research objectives. Theoretical papers are analyzed independently to identify issues and draw conclusions. These findings are then utilized as supporting evidence for empirical research. In addition to this, the existing body of information on the impact of globalization on the labor market has been classified into three main categories, based on the themes that were identified during the investigation.

**Step 4: Reporting**

The findings of the systematic review were presented and discussed under specific categories in the "findings" section. The systematic review process identifies several sorts of studies, such as qualitative or quantitative, and examines their data gathering methods and sampling techniques, which are then presented and evaluated. The parts presented the findings in a chronological order, starting with the first studies.

3. **Findings**

3.1. **Globalization and Employment**

Researchers from around the globe have extensively studied the relationship between globalization and employment from different angles. As an example, Di Pietro, Girsberger and Vuille (2015) explored the impact of globalization on employment and evaluated different methods for measuring these effects. In a similar vein, certain researchers have examined the impact of globalization on employment within the framework of particular regions or countries. As an example, Elijah (2007) examined the impact of globalization on employment and wages in Nigeria through the analysis of secondary data. He observed a wide range of impacts of globalization on employment in both formal and informal sectors. He highlighted the impact of globalization on job distribution, noting a decrease in formal sector employment, such as civil services, and an increase in informal sector
employment. In his perspective, the process of globalization has resulted in job insecurity despite the high pay, a widening wage gap between skilled and unskilled workers, growing inequality among citizens, and a brain drain phenomenon in Nigeria. In a study conducted by Onaran (2008), the impact of globalization on employment and wages in Austria was examined. The data from 1997-2005 was utilized, with FDI and openness serving as proxy indicators. The study’s findings revealed a clear inverse correlation between employment and globalization. The study also discovered a correlation between globalization and wages, indicating a negative impact. Similar findings were discovered regarding the adverse impact of globalization on wages and employment, regardless of skill level. Regarding trade openness, it was discovered that imports have a negative association with employment, whereas exports have a positive relationship with employment. The negative impact on employment resulting from an increase in imports outweighed any positive effects on employment stemming from exports. In addition, the study revealed a negative correlation between technological change (measured by the growth of ICT capital) and employment and wages in the industrial sector. In addition, the study posited that the employment of blue-collar workers is solely impacted by technological change. In a similar vein, Dogan (2016) examined the impact of globalization on employment in Turkey from 1970 to 2011 by analyzing time series data. The study focused on analyzing the relationship between employment and globalization. The researchers used employment as the dependent variable and a globalization index as the independent variable to measure social, political, and economic globalization. By utilizing the ARDL technique, the findings have substantiated a positive correlation between globalization and employment in the long run. Based on empirical findings, it has been observed that a 100% increase in the globalization index leads to an 18% long-term growth in employment. He also mentioned that in Turkey, there has been a shift from an industrial-based society that relied on labor-intensive work to an information-based society that values knowledge-intensive activities. There is a need for a comprehensive analysis of existing literature.

There is a significant body of literature that has examined the impact of foreign direct investment (FDI) on employment in developing countries, including Pakistan. Regarding India, Mehra (2013) conducted a study to analyze the impact of FDI on overall employment, both in the public and private sectors. The study utilized data from 1970 to 2007. The results of the multiple regression analysis revealed a positive correlation between foreign direct investment (FDI) and employment. However, it is worth noting that the estimated coefficients values were relatively low. Due to a significant rise in foreign direct investment, there was a moderate upturn in overall employment from 1970 to 2007. Although there were minimal effects of FDI on employment in the industrial and services sectors, no such impact was observed in the agriculture sector. Wei (2013) conducted a study in China to evaluate the impact of FDI on overall and sector-specific employment from 1985 to 2011, utilizing time series data. At an aggregate level, the study discovered a lack of significant correlation between foreign direct investment (FDI) and employment. The study revealed a positive correlation between FDI and employment in the primary sector, while a negative correlation was observed in the tertiary sector. The study employed GDP and wages as control variables in the model estimated using the ARDL approach of cointegration. In their study, Jula, Marius and Jula (2017) examined the impact of foreign direct investment on the employment structure of different sectors in Romania. They analyzed sector-wise panel data from 2003 to 2015 to gain insights into this relationship. The model was estimated using the Seemingly Unrelated Regression (SUR) technique. The study's findings indicated that an increase in FDI has a negative impact on the industrial share of aggregate employment, while simultaneously enhancing productivity. In addition, the study presented findings that indicate a positive correlation between foreign direct investment (FDI) and private sector employment, while noting a negative correlation in the public sector.

The majority of the existing literature focuses on analyzing the effects of remittances on employment by utilizing micro data. Nevertheless, a handful of studies utilized macroeconomic data. From a micro perspective, Jadotte (2009) examined the relationship between international migration, remittances, and labor supply in Haiti. This study utilized micro-data obtained from HCLS to analyze the relationship. The study employed 2SLS IVTOTBIT and IVPROBIT models for this purpose. According to the findings, there appears to be an inverse relationship between remittances and labor supply in Haiti. As remittances increased, the labor supply decreased. In addition, the study suggests that women’s remittances have a limited impact on their labor force participation. A study conducted for Maxico by Orrenius, Zavodny, Cañas and Coronado, (2009) has examined the effects of foreign remittances on the labor market, specifically in terms of employment and wages. The study utilized data from 2003-2007 to analyze these implications. The findings of the study suggest that the labor market conditions in Mexico have been positively impacted by remittances, leading to an increase in employment opportunities and wages. Bussolo and Medvedev (2008) have highlighted the correlation between remittances and labor force participation, noting that remittances often lead to an increase in the reservation wage of the recipients. The study further discussed the impact of remittances on the exchange rate and how this, in turn, had a negative effect on exports in Jamaica, commonly referred to as the Dutch Disease. In a study conducted by Jaramillo (2015), the author examined the impact of remittances on the labor supply in the Ecuadorian economy. The study utilized a comprehensive micro data set to provide insights into this area. The study employed instrumental variable TOBIT models for analysis to address the issue of endogeneity between remittances and labor supply. The findings revealed a clear inverse correlation between remittances and the labor force participation rate (LFPR) of both male and female workers in the formal sector of the economy. In rural areas, a positive association was observed between female labor supply and remittances in the informal sector. A thorough analysis at the macroeconomic level was recently carried out by Chami, Ernst, Fullenkamp, and Oeking, (2018) to investigate the impact of foreign remittances on the labor market. This study incorporated cross-country data from 1991 to 2015. The study found that remittances have a significant impact on labor force participation, unemployment rates, and the nature of the labor market. The study also indicated that remittances have a tendency to enhance employment and wages in industries that are not involved in trade, which in turn can lead to a decrease in productivity when wages are raised in these industries. The study also discovered that remittances have varying effects in states with different levels of stability. There is a clear link between remittances, wages, and employment in non-tradeable low productive industries in fragile states. This association can be attributed to the underdeveloped tradeable sector in these states. Aniceto and Orbeta (2002) conducted a thorough examination of the correlation between trade openness and employment propensity in the Philippines. They utilized both aggregate and manufacturing data from the period of 1980-2000. The study focused on analyzing the relationship between employment and several key economic factors, including real output, real wage rate, real user cost of capital, trade openness, and the ratio of factor prices. The study’s findings revealed a clear correlation between trade openness and labor demand. In addition, the study found that the impact of openness on the employment of
women workers was not significant. However, it did find a significant and positive impact of openness on the employment of low-skilled workers. In a thorough analysis, Lee (2005) examined various studies on the impact of trade liberalization on employment. The findings suggest that the effects of trade on employment are influenced by specific factors unique to each country. The study emphasized the importance of effectively implementing policies related to trade liberalization. Additionally, it emphasized the importance of favorable social and macroeconomic conditions, as well as a well-functioning structure, in order to reap the advantages of trade liberalization. In a study conducted by Kakarlapudi (2010), the author delved into the effects of trade liberalization on employment within the Indian manufacturing sector from 1980 to 2005. The study categorized the manufacturing industries into two groups: those focused on exporting and those focused on competing with imports. The findings indicated a clear correlation between openness and industrial employment, with a notable decrease in employment observed in import competing industries compared to export-oriented industries. In a study conducted by Asghar, Yousuf, and Ali (2014), the focus was on examining the effects of globalization on employment in developing economies. This study has used trade liberalization as a measure for globalization. The study discovered that trade liberalization has varying impacts on sectoral employment in developing countries. In addition, the study found that trade openness has a positive impact on employment in the agriculture sector, but a negative impact on employment in the industrial sector. Asaley, Okodu, Oloni and Ogunjobi (2017) examined the impact of trade openness on employment generation in Nigeria from 1981 to 2014. The study included interest rate, exchange rate, real GDP, CPI, and trade openness as explanatory variables in the model. Through the application of Johansen cointegration, the study discovered a noteworthy long-term relationship among the variables under investigation. The VECM results revealed that employment in Nigeria was influenced by interest rates and trade openness in a negative and significant manner, while the exchange rate had a positive impact on employment. In addition, the study highlighted the negative impact of trade openness on employment generation in Nigeria. It also emphasized the importance of interest rate and exchange rate in enhancing trade competitiveness.

Similarly, Huang and Tang (2015) examined the correlation between fluctuations in economic resources and job creation in the United States. Their findings revealed a direct relationship specifically within the manufacturing sector. The study presented an argument that an increase in employment in the manufacturing sector leads to a corresponding increase in employment in other non-tradeable sectors of the economy. The unique aspect of this study is that it found that depreciation led to an increase in employment in the export-oriented sector, but had no impact on employment generation in the import substitution sector of the US economy. In their study, Galindo, Izquierdo, and Montero (2006) examined the relationship between changes in exchange rates and employment in Latin America. They utilized panel data at the industrial level to conduct their analysis. The findings indicate a clear link between the decline in exchange rates and employment. The study also explored the role of liability dollarization in analyzing the connection between exchange rate and employment. It suggested that as liability dollarization increases, a depreciation in the exchange rate leads to a decrease in employment. In a study conducted by Bhorat, Tian, and Elyne (2014), the authors examined the impact of economic reform on employment in different sectors within South Africa. The study analyzed data from 1975 to 2009 to gain insights into the effects of these reforms. It was discovered that there is a negative relationship between ER appreciation and employment in the tradable sector, while a positive relationship exists in the non-tradable sector. Additionally, it highlighted the significance of skills in determining the relationship between exchange rate and employment elasticity. The findings indicated that workers with higher skill levels are more likely to be impacted by an increase in exchange rates compared to those with lower skill levels. In their study, Chinnman, Bhutto, Butt, Shaikh and Devi (2012) examined the patterns of ER in ASIAN countries using data from 1995–2005. In addition to considering factors such as unemployment rate and exchange rate, the model also took into account net exports, labor productivity, real interest rate, and GDP per capita. The findings indicate that ER plays a crucial role in influencing the unemployment rate in these countries. In the context of Pakistan, several studies have examined the effects of globalization on employment. There is a lack of sufficient empirical evidence in the specific sector related to the mentioned theme. In a recent study, Adeem, Sibt-e-Ali and Akhtar (2019) have conducted a comprehensive analysis of various socio-economic factors influencing employment in Pakistan. A study utilizing the ARDL Bounds test discovered that several factors, including FDI, Trade, secondary school enrolment ratio (a proxy for literacy rate), per capita income, gross capital formation, money supply, political stability, and government expenditures, have a significant impact on employment in Pakistan. Kiren and Awan (2018) conducted a comprehensive study to analyze the effects of globalization on overall employment in Pakistan from 1972 to 2014. The study discovered that the inflow of foreign direct investment (FDI) and workers’ remittances in Pakistan has a positive impact on aggregate employment. This was determined through the application of Johansen’s cointegration approach and error correction mechanism. The study found that economic and political forms of globalization during the data period contributed to employment generation in Pakistan. In a study conducted by Sarwar (2013), the focus was on examining the effects of foreign direct investment (FDI) on employment in Pakistan from 1970 to 2011. The study utilized aggregate employment as the dependent variable, while FDI, per capita GDP, and exchange rate were employed as independent variables. Through the application of the Johansen co-integration method, the study discovered that FDI and GDP per capita have a positive long-term impact. Conversely, the exchange rate was found to have a negative effect on employment in Pakistan. In a similar vein, Malik, Chaudhry, and Javed (2011) employed various indicators to measure globalization, including trade openness, FDI, remittances, and a globalization index encompassing social, economic, and political aspects. They also took into account the literacy rate as a control variable. Through the application of co-integration and ECM techniques, it was discovered that foreign direct investment (FDI) and remittances are linked to job creation in a positive manner, while trade openness has a negative effect on employment. In addition, the impact of globalization on employment in Pakistan is influenced by social and political factors.

3.2. Globalization and Gender Gaps in Labor Market

Numerous researchers have shown how globalization is having an increasing impact on gender disparities in the labor market. The impact of three aspects of globalization i.e. wages disparity, trade openness, and foreign direct investment on the gender gap in the labor market are discussed in this section.

Oostendorp (2004) has examined the impact of globalization on the gender wage gap during the years 1983-99. The study thoroughly examined the analysis of occupational levels in 80 economies worldwide, encompassing a diverse range of economic statuses. Additionally, it took into account the varying skill levels of workers. The study revealed that the gender wage gap was influenced by trade openness and FDI in different ways, depending on the skill level of the workers. In low skilled sectors, trade
openness and FDI were found to have a negative impact on the gender wage gap, while in high skilled sectors, a positive impact was observed. The study examined the relationship between control variables and the gender wage gap, highlighting that this relationship varies with the level of development in a country. Overall, the findings regarding the impact of globalization on the gender wage gap were inconclusive.

Rasekhi and Hosseini Mardi (2012) conducted an empirical analysis on the impact of globalization on wages in 21 developing countries from 2000 to 2007. The study's findings confirmed a notable correlation between globalisation and the gender wage gap, indicating a negative relationship. In a thorough analysis conducted by Fitrania (2013), the relationship between globalization and the gender wage gap in Indonesia from 2001 to 2010 was examined at the provincial level. The study employed occupation gender wage gap as a proxy for gender disparity, as it quantifies the wage discrepancy that continues to exist between males and females within a particular occupation. The study utilised FDI, trade openness index at the regional level, and trade ratio as proxy variables to measure the extent of globalization. According to the study, there is a negative relationship between the trade ratio and openness index and the gender wage gap. On the other hand, FDI has a positive relationship with the gender wage gap during the period 2001–2010. In addition, the study found that globalization has led to a reduction in the gender wage gap in occupations that primarily employ less skilled workers. In a study conducted by Asghar, Naveed, and Saleem (2017), the researchers examined the impact of globalization (Political, Social, and Economic) on gender inequality index (GII) in Pakistan. The study analyzed data from the period of 1980–2014. The research findings revealed a notable adverse effect of globalization (both economic and social) on GII.

There is a vast body of literature on the effects of Trade Openness on the labor market, specifically in relation to gender. However, the findings are varied and inconclusive. One of the initial studies, Becker (1971), presented the perspective that trade openness can decrease gender discrimination in the labor market by fostering competition. On the other hand, Darity and Williams (1985) argued that trade openness can worsen women's empowerment by lowering their wages. In addition, the study presented an argument that highlights the challenges faced by women in the labor market due to their limited bargaining power, which often leads to discrimination. A study conducted by Juhan, Ujheleyi, and Sanchez (2012) examined the impact of trade openness on gender inequality in Mexico. The researchers analyzed firm-level data from 1991 to 2000 to draw their conclusions. In addition, the study found that trade liberalization and technology upgradation in the industries had a positive impact on women's employment in blue-collar jobs, but a negative impact on women's employment in white-collar jobs. In a study conducted by Gupta (2015), the focus was on examining the effects of trade liberalization on women's employment in India. The study revealed that the process of trade liberalization had led to a decrease in the proportion of women participating in India's labor market. The study highlighted that as a result of significant tariff reduction, there was a rise in import competition. This led to the modernization of industries and an increase in employment, particularly among skilled male workers, while the impact on female workers was not addressed. In addition, the study suggested in the aftermath of 1991 that in order to compete with global industries, trade liberalization led to an increase in the number of workers working double shifts instead of providing employment opportunities for women. In addition, the study put forth the argument that the restriction on women working night shifts was a contributing factor to the low employment rate among women workers.

In a study conducted by Kimura (2016), the author examined the correlation between trade openness and the gender gap. The research focused on data from developing countries during the period of 1995-2005. The study analyzed wage data from six sectors of developing economies that encompassed jobs requiring high, medium, and low skills. Through the application of a fixed effect model, the study discovered that trade openness has had a notable impact on decreasing the gender wage gap in low and medium skills jobs.

In a study conducted by Audi and Ali (2016), the focus was on examining the impact of trade liberalization on women empowerment in South Asian Association for Regional Cooperation (SAARC) countries from 2000 to 2014. The study considered regulatory trade barriers and freedom of trade as proxy variables to represent trade liberalization. The study has utilized the female to male participation rate as a metric for assessing the disparity between genders, while the gender development index was employed to gauge the level of empowerment among women. The study revealed that the process of liberalization led to an increase in the Female Labor Force Participation Rate (FLFPR), however, it did not result in a reduction of the gap in Labor Force Participation Rate (LFPR). In a study conducted by Kuete and Voufo (2016), the impact of trade openness on the employment and earning gaps between male and female workers in Cameroon was empirically analyzed. The study utilized survey-based data from four sub-sectors of the informal economy in Cameroon, specifically for the years 2005 and 2010. The study utilized export intensity, trade share, and import penetration as proxy variables to measure the level of trade openness. The study's findings revealed that trade openness did not have a significant direct correlation with women's employment. This is because it did not lead to the expansion of the export sector, which is typically where women find employment opportunities. In a study conducted by Assaf (2018), the focus was on examining the correlation between trade openness and the employment rate of women in the Middle East. The study employed proxies such as the gender parity index and differential in labor force participation rates to assess the impact of trade liberalization on the gender gap. The findings revealed a notable correlation between trade openness and women employment in most of the countries in the Middle East. In addition, the study discovered that trade openness had a significant impact on the gender gap in several countries. Specifically, the gap favored men in Lebanon, Oman, Turkey, and Iran, while in Kuwait, it favored women.

In a study conducted by Braunstein (2006), it was found that foreign direct investment has a positive impact on the employment of female workers in semi-industrialized countries, particularly in the short term. During periods of industry advancement, women often face job losses. In addition, the study suggested that although female workers experience a wage increase in the short term, it is not as significant as that of their male counterparts. As a result, the gender wage gap is unlikely to be completely eliminated. There is a wealth of literature available on the effects of foreign direct investment on the growth of global business and global market. In a comprehensive study conducted by Jönsson (2015), the impact of foreign direct investment (FDI) on gender equality was examined using data from various Latin American countries (LAC) spanning from 1990 to 2013. The study employed FLFPR and ratio of LFPR as dependent variables, while FDI, GDP, fertility rate, education, and openness were utilized as independent variables. The study found no significant correlation between foreign direct investment and gender equality during the specified time frame. In a recent study, Ouedraogo and Marlet (2018) examined the effects of foreign direct investment (FDI) on gender development and inequality in developing countries from 1990 to 2015. The study utilized GDI and
GII as dependent variables. Gender disparities in health, knowledge, and standard of living were measured using GDI, while gender gap in empowerment, reproductive health, and labor force participation rate were measured using GII. In addition to FDI, the study incorporated various control variables such as trade openness, public debt, GDP, government expenditures, and natural resource rents. The findings indicated that foreign direct investment had a positive impact on reducing gender inequality and enhancing the well-being of women. Furthermore, there is a discussion about how the impact of foreign direct investment (FDI) on welfare varies in countries with restrictions on women's participation in business.

In a comprehensive study conducted by Carr (2016), the author examined the relationship between foreign direct investment (FDI) and gender equality. The study utilized data from 91 countries spanning the years 1972 to 2013. The dependent variable in the study was the percentage wage gap, while the key explanatory variables included the ratio of net FDI inflows as a percentage of GDP, population, and GDP. The study utilized the Generalized Least Squares (GLS) regression method and concluded that the impact of FDI on the gender wage gap is insignificant. In a study conducted by Timmerman (2014), the author examined the effects of foreign direct investment (FDI) on female labor force participation (FLFP) and the gap in labor force participation in countries in Sub-Saharan Africa (SSA) from 1990 to 2009. The study utilized OLS regression for estimation. The findings revealed that foreign direct investment had a negligible effect on female labor force participation in Sub-Saharan Africa. This study introduces a unique approach by evaluating the mineral endowment level of the entire SSA region and examining the impact of FDI on FLFP. The findings indicated a clear link between foreign direct investment (FDI) and female labor force participation (FLFP) in nations with abundant mineral resources. In addition, the study found that foreign direct investment has a minimal effect on narrowing the gap in labor force participation between males and females. Likewise, Siegmann (2006) analyzed the impact of foreign direct investment (FDI) on the labor market in Indonesia. The research incorporated both qualitative and quantitative data to gain a comprehensive understanding of the subject. This study examined the impact of foreign direct investment (FDI) on employment and the quality of employment in four sectors of the economy: states, mining, hotel, and manufacturing. The study discovered that foreign direct investment has a positive correlation with the quality of employment in the mining sector, but a negative correlation in the hotel sector. Based on an analysis of quantitative data, the study found that foreign direct investment (FDI) has a positive correlation with women's employment in the state sector, but a negative correlation with women's employment in the manufacturing and hotel sectors. In addition, the study discovered that foreign direct investment has indirectly contributed to the widening of the gender wage gap.

3.3. Trade, Technology and Employment Shifts

The advent of technological advancements has enabled the production of comparable outputs using fewer resources, such as capital and labor. In analyzing the shifting labor demand in various sectors of developing countries, it is important to consider both globalization and technological advancement as potential factors. The H-O and Stolper-Samuelson theorem provide theoretical frameworks for understanding these influences. According to a study by Lee and Vivarelli (2006), these two processes are anticipated to have opposing impacts on labor demand. On one side, the traditional H-O theory, along with the Stolper-Samuelson theorem, suggests that trade should priorities production activities that require a lot of labor. This is because developing countries often have a larger supply of inexpensive, unskilled labor, which can help boost local employment levels. However, the progress of technology necessitates a higher level of expertise, which is in short supply in developing nations. Despite numerous studies highlighting the significance and influence of technological change and trade on overall employment and sectoral shifts in developed countries, there remains a lack of empirical evidence for developing nations. Existing literature has reported a range of outcomes, including both positive and negative effects of technology on employment. It is worth noting that technological advancements often lead to positive employment outcomes through compensation mechanisms (Vivarelli, 2011). According to a report, there are concerns about the impact of rapid technological development on workers' ability to adapt, potentially rendering them obsolete (WEF, 2012).

The progress of technology in developing countries is primarily influenced by trade, foreign direct investment, and the subsequent transfer of global technology. Imports and FDI inflows have the potential to bring about technological advancements that benefit domestic firms. This is achieved through labour mobility across sectors, as highlighted by Coe and Helpman (1995) and Coe et al. (1997). The enhancement of technology adoption can be achieved through exporting to developed countries, which involves replacing existing productive technology in the export sector and establishing new businesses (Gkypali et al., 2015). Various studies in the existing literature have utilized different indicators to measure technological change, which poses a challenge when attempting to directly compare these studies. Piva and Vivarelli (2017) conducted a study on the effects of technological advancements, specifically focusing on research and development (R&D) spending, on employment. Data spanning from 1998 to 2011 has been collected for 11 European countries. A study utilizing GMM and LSDVC econometric techniques has discovered a positive relationship between R&D expenditures and employment in a sample of European countries. The study also noted that there is a clear correlation between technological advancements and job opportunities in the medium- and high-tech sectors, encompassing manufacturing and services. Piva and Vivarelli (2017), firm level data from 2002-2013, analyzed to explore the impact of technology change on employment in the EU. The findings revealed a significant positive relationship between technology change and employment. The study utilized research and development expenditures as a proxy for measuring technology change. In addition to R&D expenditures, the study considered per worker wage, output, and capital formation as explanatory variables. The findings indicate that R&D has a significant impact on employment, particularly in high-tech sectors. However, the effects are not as prominent in technologically backward sectors. This suggests that product innovation and technological change have a more noticeable influence on job creation in the EU, compared to process innovation which may lead to job losses. Similarly, Pellegrino, Piva, and Vivarelli (2017) examined the impact of innovation on employment. The researchers utilized firm level data from the Spanish manufacturing industry spanning from 2002 to 2013. This study brings a fresh perspective by examining two different aspects of innovation. One aspect focuses on the investment in research and development (R&D), which is believed to be beneficial for labor. The other aspect explores the embodied technological change (ETC), which involves the acquisition of machinery and tends to reduce labor requirements. The study incorporated delayed values of R&D and ETC, recognizing that the effects of innovation on employment may not be immediately apparent. Additional control variables included value added, gross wage per employee, and investment in physical capital. All of these variables were logged in the model. The findings of the study for the entire sample indicate that there is no substantial effect of innovation on employment.
whether it is related to research and development or other factors. On the other hand, there is a strong correlation between R&D and employment in technologically advanced companies, with an estimated coefficient value of 1.7%. In contrast, a study discovered a negative relationship between ETC and employment in small and medium firms, with an estimated coefficient value of 0.6%. In their study, Wamboye and Seguino (2012) examined the impact of globalization on employment patterns in 38 African countries from 1991 to 2010, with a particular focus on gender-based implications. The countries of study have been categorized into two groups based on their exportation of minerals and non-minerals. The study included the employment gap between females and males as the dependent variable. It also considered GDP per capita, two indicators of physical infrastructure, trade as a percentage of GDP, and the share of agriculture and manufacturing in GDP as explanatory variables in the model. The findings suggested that the level of global integration, as measured by trade as a percentage of GDP, does not have a significant effect on the employment gap. Global integration was found to have a positive impact on the employment gap in mineral exporting countries, as it led to an increase in female employment. However, in non-mineral exporting countries, global integration was found to have a negative effect on the employment gap, as it resulted in an increase in male employment. In addition, the study discovered a positive correlation between infrastructure and female employment.

In their study, Haile, Srour and Vivarelli (2017) examined the impact of trade, FDI, and technology on employment and skills. They utilised a firm-level panel dataset covering the years 1996-2004 in Ethiopia. The number of employed workers was considered as the dependent variable, while the real wages of workers, real output and investment, share of foreign ownership, and export to output ratio were examined as independent variables. The study employed two labour demand equations that focused on the skill levels of the workers: one for unskilled workers and another for skilled workers. All the variables, with the exception of wage, were discovered to have a positive correlation with employment. In a study conducted by Hisali (2012), the relationship between employment growth and various factors such as exports, GDP growth, gross capital formation, and inflation was examined for the period of 1994-2009. The study discovered that exports and gross fixed capital formation (GFCF) have a positive correlation with employment, whereas inflation was found to have a negative relationship with employment. In addition, the study suggested that the rise in exports can be attributed to a growing demand in that particular sector, which has contributed to the alleviation of poverty in Uganda.

The literature review analyses the external and internal characteristics of how the process of globalization is connected with the topic of employment in different areas. Among the worry that have been occasioned by Globalization include elements such as, insecurity of job, the massive difference in between the remuneration of high skilled workers and the low wage earners, the phenomenon that has been described as brain drain. However, some national level research papers also point out that globalization has inverse relationship with employment and wages, while imports have negative impact on employment; on the other hand, exports have positive and significant impact over employment. All these effects are experienced more with the help of modern technology especially on the workers who are commonly referred to as blue-color workers. The literature also supports the fact that FDI has slightly positive impact on employment in industrial and service sectors slightly in some countries and is blind to affect agricultural sectors. Consequently, FDI has had a favorable impact in the employment of primary sector that has recorded positive change while the tertiary sector has recorded a negative employment factor as influenced by FDI.

Thus, employment has evidentially followed the inverted U-shape path with employment coming down negatively to industrial concentration but going up positively to FDI productivity which shows that the process favored the employment in the private sector but was detrimental to the public sector employment. Another area that raises concern is the type of employment that has been advanced through remittance. This exploratory study indicated that, on the one hand, higher level of remittance confined the human resources in some extent; on the other hand, in some Latin America countries, the remittance created more employment chances and wages. I shall also mention that the benefits and the impact can vary greatly and rather depend on such factors that are related to the labor market but the advantages of remittances can positively depend on some specifics of the region and the sector.

Regarding the effect of trade openness on employment, the literature has shown that there exists a significant influence in employment trend. Such evidence is backed up by examples of the Philippines, Mexico and India on the effect of trade liberalization which shows that there are varying results of the policies and its effectiveness varies depending on the type of sector as well as workers who may be affected individually. For instance, positive impact of trade integration is apparent with regards to effects on employment of low skilled workers in Philippines yet mixed in case of women employment in Mexico an India through several interceding with industry and policies. Existing literature also reveals that the impact of Trade openness and FDI on gender wage differentials depends on its magnitude to different categories of skills depending on country development phase. Consequently, the phenomenon of globalization and technological disruptions have profound implications on the nature of demand for labor and employment revolution. From the combinations above, it is clear that trade leads to the utilization of the production and from the employment point of view it can be seen as beneficial to the qualitative employment in labor intensive production, however technology constrain employment and increase the level of proficiency. Similarly, there is acknowledgement of its unemployment implications in so far as employment generation in new hi-tech Research & Development industries is concerned along with the fact that process innovation gives rise to unemployment in certain circumstances based on experience of European countries. Finally, the literature establishes technological transformation as the macro factor that always impacts employment consequence with variation in the business’s region level.

Hence, it may be safely stated that it is not easy to unequivocally analyses the role of globalization in relation to employment. It is possible to conclude that the conclusions of the work explore the consequences of globalization on labor market in more detail and stress on the importance of the account for national-specific aspects, the legislation and the sectoral peculiarities.

4. Conclusions and Recommendations

Research findings indicate that FDI has some pivotal impacts and implications on employment creation, private sector employment, employment productivity as well as sectorial employment. It has reverse side which impacts negatively in particular on the public employment sector and sometime on some specific industries. Effects of the remittances on labor and employment vary in different aspects of the research, some views suggesting that the remittances decrease part time and labor participation, whereas other views propose that the remittances have positive influence on wages and employment possibilities. Trade openness, therefore, presents itself as a channel through which changes in employment occur, while these varied impacts
spread across countries and even subgroups of workers. Where it can work as a tool that increases employment of low skilled workers and improves labor market conditions. It also overemphasizes gender gaps, and leads to job destruction in import-competing industries. Trends here are equally complex made worse by technological enhancements which require higher expertise and end up creating new jobs and eliminating others. The literature discussed on these increases points to the importance of R&D spending through increasing employment especially in technology sectors while pointing out that process innovation may lead to decrease employment. The literature reveals an appreciation of the multifaceted nature of employment and globalization, which must be presented with consideration for the specific case. It is suggested that policymakers should be concerned with numerous and sometimes contrasting impacts of the globalization, trade, FDI and technology on employment, and its policies when searching for ways to address the negative effects of globalization. There is a dire requirement for formulating global and integrated policies that take into consideration the local and national factors like economic environs and demographic and sector specific characteristics. Together with abilities to capture the positive facets of globalization while managing its possible negative impacts.

References


