

(Research/Review) Article

# Heterogeneous Impact of Company Consolidation and Technological Innovation on the Labor Market in the Era of Globalization : A Systematic Literature Review

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**Abstract:** The goal of the current study was to identify the motifs found in the pertinent empirical literature. Following a thorough review of the literature, the current study found that globalization has affected the employment rate, exacerbated gender disparities, and altered trade and employment in the labor market. Additionally, the study found that FDI has several significant impacts on sectorial employment, employment productivity, employment in the private sector, and employment creation. The study also showed that the mixed impacts of remittances on labor and employment vary across economies. In a similar vein, it has been demonstrated that trade openness influences employment shifts. Furthermore, the analysis highlights that technological advancement, often accelerated by globalization, contributes to labor market polarization by increasing the demand for high-skilled workers while reducing opportunities for low-skilled labor. The study emphasizes that while globalization offers opportunities for economic growth, it also poses challenges in achieving inclusive and equitable employment. Therefore, effective policy measures are required to balance trade liberalization, foreign investment inflows, and domestic labor protection. These findings contribute to a deeper understanding of how globalization shapes employment dynamics and economic structures, offering insights for policymakers aiming to promote sustainable labor market development.

**Keywords:** Economic Development; Employment Shifts; Globalization; Labor Market; Systematic Literature Review

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## 1. Introduction

The labor market is one of the important pillars in a country's economy. Labor market dynamics continue to change along with technological growth, globalization, and changes in economic policy. These changes often stimulate various types of economic shocks that have significant impacts on the state of the labor market.

This research aims to carry out a systematic review of the literature that examines the impact of various types of economic shocks on the labor market. The main focus of this research is on 3 types of shocks, namely industrial consolidation, technological innovation (in this case, the emergence of application-based transportation services), and trade shocks. By analyzing existing empirical studies, it is hoped that this research can provide a more comprehensive description of work mechanisms and the effects of various types of economic shocks on employment, wages and labor force participation.

The research question to be answered in this review is: What effects do different economic shocks have on labor markets, specifically with regard to employment, salaries, and

gender disparities? Examples of these shocks include company consolidation, technological innovation (rideshare), and trade liberalization.?

This literature review will examine 3 main empirical research as starting points for analysis: The labor market impacts of employer consolidation: Evidence from Germany, The labor market impacts of ridesharing on American Cities, Import Shocks and Gendered Labor Market Responses: Evidence from Mexico

By analyzing these studies, it is hoped that we can obtain a universal reflection on the impact of various types of economic shocks on the labor market and identify research gaps that still need to be studied further.

The term "globalization" has been used in a wide range of situations and with a wide range of meanings. According to the definition, globalization is "the act, process, or policy of making something worldwide in scope or application." According to economists, "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). However, labor markets, which comprise the organizations and procedures that control the acquisition, sale, and price of labor services, are the settings where employees trade their labor power for pay, status, and other benefits associated with their jobs (Kalleberg & Sorensen, 1979). Additionally, the labor market is organized into numerous submarkets that are distinguished by different standards, although connected through movement (Kerr, 1954). Geographical area, occupation, and industry are its three main divisions, and they align with the three main types of labor mobility. Furthermore, the labor market can be local, national, or international (Goodman, 1970). The impact of globalization on economic growth has been the subject of numerous studies. The beneficial effects of economic globalization on economic growth have been highlighted by these research. On the other side, social globalization has a detrimental influence on economic growth, whereas political globalization has no effect (Ying, Chang & Lee, 2014). Furthermore, a number of scholars have noted that contemporary developments in politics and information and communication technology are contributing to a renewed boom in globalization. At the same time, globalization has been growing as multinational enterprises (MNEs) gain greater clout, global value-added chains become increasingly intertwined. Global productivity and income have significantly increased as a result of these improvements. However, it is crucial to remember that because national economies are becoming more interdependent, globalization also carries significant hazards (Rojíček, 2017).

## 2. Literature Review

### Globalization and Employmen

Scholars from all around the world have investigated the connection between globalization and employment from a variety of perspectives. Di Pietro, Girsberger, and Vuille (2015), for instance, investigated how globalization affected employment and assessed various approaches to quantifying these impacts. Similarly, other scholars have investigated how globalization affects employment in the context of certain nations or areas. Elijah (2007), for instance, used secondary data analysis to investigate how globalization affected employment and salaries in Nigeria. He saw that employment in both the formal and informal sectors was affected by globalization in a variety of ways. He emphasized how globalization has affected the distribution of jobs, pointing to a decline in formal sector employment, like that in the government services, and an increase in informal sector.

According to him, globalization has contributed to rising inequality among residents, a brain drain phenomena in Nigeria, job instability despite high compensation, and a growing salary disparity between qualified and unskilled workers. The effect of globalization on employment and salaries in Austria was investigated in a study by Onaran (2008). We used data

from 1997 to 2005, using openness and FDI as stand-in metrics. The results of the study showed a definite negative relationship between globalization and employment.

Additionally, the study found a negative association between globalization and salaries. Regardless of skill level, same results were found on the negative effects of globalization on employment and salaries. In terms of trade openness, it was shown that whereas exports have a positive correlation with employment, imports have a negative correlation. Any positive benefits on employment from exporting were offset by the negative effects on employment from an increase in imports. Furthermore, the study found a negative relationship between industrial sector employment and salaries and technological progress, as indicated by the expansion of ICT capital. Furthermore, the study indicated that technological advancement is the only factor influencing the employment of blue-collar workers.

Similarly, Dogan (2016) used time series data analysis to study how globalization affected employment in Turkey between 1970 and 2011. The study's main goal was to examine how employment and globalization are related. To gauge social, political, and economic globalization, the researchers employed employment as the dependent variable and a globalization index as the independent variable. Through the application of the ARDL approach, the results have confirmed a long-term beneficial relationship between employment and globalization. Empirical research has shown that a 100% increase in the globalization index results in a long-term increase in employment of 18%. Additionally, he noted that Turkey has transitioned from an industrial civilization that depended on labor-intensive activity to an information-based society that values knowledge-intensive activities. There is a need for a comprehensive analysis of existing literature.

Foreign direct investment (FDI) and its effects on employment in developing nations, particularly Pakistan, have been the subject of a substantial amount of research. Mehra (2013) carried out research on India to examine how FDI affects employment in general, both in the public and private sectors. Data included in the study ranged from 1970 to 2007. The multiple regression analysis's findings showed that employment and foreign direct investment (FDI) were positively correlated. It is important to note, though, that the estimated coefficient values were not very high. Overall employment increased moderately between 1970 and 2007 as a result of a large increase in foreign direct investment. FDI had little influence on employment in the industrial and services sectors, while it had no effect at all in the agricultural sector. Wei (2013) used time series data to assess the effect of foreign direct investment (FDI) on total and sector-specific employment in China between 1985 and 2011. Overall, the study found no meaningful relationship between employment and foreign direct investment (FDI). According to the study, FDI and employment were positively correlated in the primary sector but negatively correlated in the tertiary sector. Wages and GDP were used as control variables in the study's model, which was estimated using the ARDL approach to cointegration. The effect of foreign direct investment on the employment structure of several sectors in Romania was investigated by Jula, Marius, and Jula (2017). To understand this association, they examined sector-wise panel data from 2003 to 2015. The Seemingly Unrelated Regression (SUR) method was used to estimate the model. The results of the study showed that while a rise in FDI increases productivity, it has a negative effect on the industrial proportion of total employment. Furthermore, the research findings show that employment in the private sector is positively correlated with foreign direct investment (FDI), whereas employment in the public sector is negatively correlated.

The vast bulk of the literature currently in publication uses microdata to analyze how remittances affect employment. However, a small number of studies made use of macroeconomic data. Jadotte (2009) looked at the relationship between remittances, international migration, and Haiti's labor supply from a micro perspective. The link was examined in this study using microdata that was acquired from HLCS. For this, the study used the 2SLQ

IVTOBIT and IVPROBIT models. The research indicates that remittances and labor supply in Haiti seem to be inversely correlated. There was less labor available as remittances rose. Furthermore, the analysis indicates that women's labor force participation is only marginally impacted by their remittances. Orrenius, Zavodny, Cañas, and Coronado (2009) conducted a study for Mexico that looked at the impacts of foreign remittances on the labor market, specifically in terms of employment and wages. The study examined these implications using data from 2003 to 2007. The study's conclusions imply that remittances have improved the labor market conditions in Mexico, resulting in more job opportunities and higher earnings. The relationship between remittances and labor force participation has been emphasized by Bussolo and Medvedev (2008), who also point out that remittances frequently result in an increase in the beneficiaries' reservation pay. The study also covered how remittances affected the exchange rate and how this, in turn, negatively affected Jamaican exports—a phenomenon known as the Dutch Disease. The effect of remittances on the labor supply in the Ecuadorian economy was investigated by Jaramillo (2015). To shed light on this topic, the study made use of an extensive microdata set. To solve the problem of endogeneity between labor supply and remittances, the study used instrumental variable TOBIT models for analysis.

### **Globalization and Gender Gaps in Labor Market**

Numerous scholars have demonstrated how gender gaps in the job market are being exacerbated by globalization. This section discusses how the gender gap in the labor market is affected by three dimensions of globalization: trade openness, foreign direct investment, and pay discrepancy. The effect of globalization on the gender wage gap between 1983 and 1999 has been studied by Oostendorp (2004). The study looked closely at the analysis of occupational levels over a wide range of economic statuses in 80 economies around the world. It also considered the different skill levels of employees. The study found that depending on the workers' skill level, trade openness and foreign direct investment had varying effects on the gender wage gap. The gender wage gap was found to be negatively impacted by trade openness and foreign direct investment (FDI) in low-skilled industries, but positively in high-skilled sectors. The study looked at the relationship between the gender wage gap and control variables, showing that it changes depending on a nation's degree of development. Overall, there was conflicting evidence about how globalization affected the gender wage gap.

From 2000 to 2007, Rasekhi and Hosseinmardi (2012) empirically examined how globalization affected wages in 21 developing nations. The results of the study demonstrated a significant negative association between globalization and the gender wage gap. Fitranian (2013) did a comprehensive analysis that looked at the gender wage gap in Indonesia from 2001 to 2010 at the province level in connection to globalization. Because it measures the wage gap that persists between males and females in a certain occupation, the study used the occupation gender wage gap as a stand-in for gender disparity. To gauge the degree of globalization, the study used trade ratio, regional trade openness index, and foreign direct investment as stand-in variables. The study found a negative correlation between the gender wage gap and the trade ratio and openness index. However, from 2001 to 2010, there was a positive correlation between FDI and the gender wage gap. Furthermore, the study discovered that in professions that largely employ lower-skilled people, the gender wage gap has decreased as a result of globalization. The effect of globalization (political, social, and economic) on Pakistan's gender inequality index (GII) was investigated by Asghar, Naveed, and Saleem (2017). The research examined data spanning from 1980 to 2014. The results of the study showed that globalization, both social and economic, had a significant negative impact on GII.

A substantial amount of research has been done on how trade openness affects the labor market, particularly as it relates to gender. The results, however, are conflicting and unclear. According to one of the earliest studies, Becker (1971), trade openness can reduce gender discrimination in the job market by encouraging competition. However, trade openness can

impair women's empowerment by lowering their incomes, according to Darity and Williams (1985). The study also included a case that emphasizes the difficulties women encounter in the workforce as a result of their weak negotiating position, which frequently results in discrimination. In a 2012 study, Juhn, Ujhelyi, and Sanchez investigated how trade openness affected gender disparity in Mexico. To reach their findings, the researchers examined firm-level data from 1991 to 2000. Furthermore, the study discovered that trade liberalization and industry technological advancements had a favorable effect on women's employment in blue-collar positions but a negative effect on women's employment in white-collar jobs. The goal of a study by Gupta (2015) was to investigate how trade liberalization affected women's employment in India. According to the report, the percentage of women that are employed in India has decreased as a result of trade liberalization. According to the report, import competitiveness increased as a result of a large tariff drop. While the effects on female workers were ignored, this resulted in the modernization of businesses and a rise in employment, especially among qualified male workers. Furthermore, the study proposed that trade liberalization increased the number of workers who worked double shifts rather than giving women employment possibilities in the wake of 1991 in order to compete with global enterprises. The report also argued that the low employment rate among women workers was partly caused by the prohibition on women working night hours.

The relationship between trade openness and the gender gap was investigated by Kimura (2016). The study concentrated on data from developing nations between 1995 and 2005. The study examined salary data for positions requiring high, medium, and low skill levels across six developing economy sectors. Using a fixed effect model, the study found that trade openness has significantly reduced the gender wage gap in jobs requiring low and medium skill levels.

### **Trade, Technology and Employment Shifts**

With the introduction of new technologies, it is now possible to provide same results with less labor and capital. Both globalization and technological improvement should be taken into account as potential factors when examining the changing labor demand in different developing country industries. Theoretical foundations for comprehending these influences are offered by the H-O and Stolper-Samuelson theorems. Lee and Vivarelli (2006) found that these two processes are expected to have conflicting effects on labor demand. On the one hand, trade should prioritize labor-intensive manufacturing activities, according to the Stolper-Samuelson theorem and the conventional H-O theory.

This is due to the fact that developing nations frequently have a greater pool of cheap, inexperienced labor, which can contribute to an increase in local employment levels. But as technology advances, a greater degree of skill is required, and developing countries lack this. There is still a dearth of empirical data for developing countries, despite the fact that many studies have demonstrated the importance and impact of trade and technological change on sectoral shifts and general employment in rich countries. The literature now in publication has documented a variety of results, including both favorable and unfavorable effects of technology on employment. Notably, through compensation mechanisms, technology developments frequently result in favorable job results (Vivarelli, 2011). A report claims that there are worries over how workers' capacity for adaptation would be affected by the quick advancement of technology, potentially rendering them obsolete (WEF, 2012).

Trade, foreign direct investment, and the following transfer of global technology are the main factors influencing technological advancement in emerging nations. Technological developments that benefit indigenous enterprises could be brought about by imports and foreign direct investment inflows. This is accomplished by cross-sector labor mobility, as noted by Coe and Helpman (1995) and Coe et al. (1997). Exporting to developed nations, which

entails starting new companies and replacing current productive technology in the export industry, might increase the adoption of technology (Gkypali et al., 2015).

Since different indicators have been used by different studies in the literature to measure technological change, it is difficult to directly compare these studies. A study on how technical improvements affect employment was carried out by Piva and Vivarelli (2017), with a particular focus on R&D spending. Eleven European nations' worth of data has been gathered between 1998 and 2011. In a sample of European nations, a study that used GMM and LSDVC econometric methodologies found a positive correlation between R&D spending and employment. The survey also found that employment prospects in the medium- and high-tech industries, which include manufacturing and services, are clearly correlated with technological improvements. Piva and Vivarelli (2017) examined the effects of technological development on employment in the EU using firm-level data from 2002 to 2013. The results showed a strong positive correlation between employment and technological progress. Research and development spending was used in the study as a stand-in for measuring technological change. The study took into account capital creation, production, and per worker wage as explanatory factors in addition to R&D expenditures. The results show that R&D significantly affects employment, especially in high-tech industries. However, in industries with less advanced technology, the consequences are less noticeable. This implies that technology advancement and product innovation have a greater impact on job creation in the EU than process innovation, which could result in employment losses.

In a similar vein, Pellegrino, Piva, and Vivarelli (2017) investigated how innovation affects jobs. Firm-level data from the Spanish manufacturing sector from 2002 to 2013 was used by the researchers. By analyzing two distinct facets of innovation, this study offers a novel viewpoint. One facet centers on the expenditure on research and development (R&D), which is thought to be advantageous for workers. The second part looks at embodied technological change (ETC), which entails purchasing machinery and tends to lower labor costs. Since the benefits of innovation on employment could not be immediately obvious, the study took into account delayed values of R&D and ETC.

### 3. Recommendations and Conclusions

According to research findings, foreign direct investment (FDI) has significant effects and ramifications on sectorial employment, employment productivity, private sector employment, and employment generation. On the other hand, it has a detrimental effect on the public employment sector and occasionally on certain industries. The study on the effects of remittances on labor and employment varies; some argue that they have a negative impact on part-time and labor participation, while others believe that they have a favorable impact on earnings and work opportunities. Therefore, trade openness seems as a conduit for employment shifts, with these diverse effects 899 extending across nations and even worker subgroups. where it can be used as a strategy to enhance labor market conditions and increase employment of low-skilled persons. Additionally, it overemphasizes gender disparities and destroys jobs in industries that compete with imports. This region's trends are equally complex, and technology advancements have made them worse by requiring more knowledge and ultimately leading to the creation of new employment and the elimination of others. While pointing out that process innovation may result in fewer jobs, the literature on these increases emphasizes the value of R&D spending by boosting employment, particularly in technology sectors. The literature demonstrates an understanding of the complex relationship between globalization and employment, which needs to be taken into account for each individual scenario. It is proposed that when looking for solutions to address the negative effects of globalization, policymakers should consider the many and occasionally conflicting implications of trade, FDI, technology, and globalization on employment and its policies. Global and

integrated strategies that take into account national and local aspects, such as demographics, sector-specific characteristics, and economic environments, are desperately needed. Along with the capacity to manage any potential negative effects of globalization while capturing its good aspects.

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