

# Effects of Women Education on Child Labor in South Asia

## Dr. Bilal Tariq<sup>1</sup>, Sehar Rubab<sup>2</sup>, Dr. Dilshad Ahmad<sup>3\*</sup>, Dr. Muhammad Irfan Chani<sup>4</sup>, Ayman Tanveer<sup>5</sup>

### Abstract

Lack of education and poverty are major factors contributing to child labor. A crucial component of economic and social growth is education of the society. This study contribution looks at how educating women affect child labor in South Asia. It used yearly data from 1990 to 2020. The Cross-Sectional Autoregressive Distributed Lag (CS-ARDL) model use for short run and long run predictions. The significant impact of female education on reducing child labor, emphasizes the significance of participating in girls' education. Policies aimed at enhancing access to and quality of education for girls can help mitigate child labor by authorizing women and breaking poverty cycle. Development of Urban strategies must rank the providing of education, health and social security facilities to the residents of urban areas.

Keywords: Child Labor, Women Education, Economic Growth, South Asia, Trade Openness

## 1. Introduction

Education is acknowledged by endogenous growth models as a key component of human capital and economic growth. Education is seen as one of the most important investments in human capital, especially for women. Several decades, attendance of female at school has significantly raised in South Asia while their proportion remain low in spite of the fact that UNESCO has work to enhance the enrolment of female (Sarwar et al., 2021; Shorette & Burroway, 2022). The most important feature influencing the number of working women is economic growth and the International Labor Office (ILO, 2014) the biggest issues the world currently experiencing is child labor. According to ILO estimates, the problem is becoming more widespread across all continents, with Asia still having uppermost rate of labour of child. In accordance to ILO and UNICEF, 160 million youngsters worldwide were active in labour of child in 2020 (Majumder & Rahman, 2020; Shahateet, 2022; Das, 2022). In the South Asian countries, India has the uppermost ratio of child labour with 5.8 million. Moreover, in Bangladesh 5.0 million ratio child laborers, while 3.4 million ratio of child labor in Pakistan, and 2.0 million in Nepal (Mujahid et al., 2019). Education has directly impact on the health of child because it enhances the capability to obtain and procedure information. Education helps parents to make well off health investment on their child. On the other hand, raised the education level can give access to more skill full work with higher wages and these properties can be used to spend on health (Keats, 2018). According to conventional assessments, in Central South Asia 26.3 million children (5 years to 17 years old) in child labor and these 10.3 million children are in the 5-to-14-year age range while young children between the ages of 5 and 11 make up about a fifth of all child laborers in South Asia (ILO & UCW, 2014; ILO & UNICEF, 2021). The issue of child labor connected with the poverty and parent's unemployment (Batool & Bilal, 2022). Women's enrollment in the workforce commits remarkably to economic growth, poverty reduction and inflates gender equality by access to education. Education is a powerful weapon to fight poverty improves the well-being of people's well-being and plays a role in women's development (Wei, 2021). The Global Gender Gap report (WEF, 2023) projected that, In South Asia, the women participation in labor force is 25.6 percent. Education is a key to development of a nation. Women education is a solution for many social and economic issues. Educated female protected children from early marriage and child labor because they are aware of children rights. When people are educated, they earn high wages and not rely on child labor (Hamid et al., 2023). While extant research has inquired about the effects of women education on child labor. The literature review arranges existing studies have been undertaken on women empowerment effect on education (Chaudhry & Nosheen, 2009; Nayak & Mahanta, 2012; Shetty & Hans, 2015; Scheyvens, 2000; Sharma, 2000; Durrant & Sathar, 2000; Shouk et al., 2021; Jaysawal & Saha, 2023; Butler, 2023; Sengupta, 2023; Bora et al., 2023). Many studies focused on female employment and trade openness (Wamboye & Seguino, 2012; Cooray et al., 2017; Voumik, 2019; Kpognonet al., 2020; Haq et al., 2020; Orkoh et al., 2022; Muthoka & Maingi, 2023; Gachoki, 2022; Akhtar et al., 2023; Ofori et al., 2023), and effect of child labor on economic growth (Edmonds, 2005; Kambhampati & Rajan, 2005; Kambhampati & Rajan, 2006; Agenor & Alpaslan, 2013; Edmonds, 2015; Edmonds & Theoharides, 2021; Emezue et al., 2021; Zulfiqar et al., 2023; Khan et al., 2024; Folayan et al., 2024; Teixeira, 2024). All above studies investigate the effect of women empowerment, Education, trade openness, and many other factors, but the main objective of our study is to investigate the effects of women education on child labor in selected South Asian countries.

### 2. Material and Methods

This section contains an explanation of each variable as well as the source of the data used to collect the variables for the present study.

<sup>&</sup>lt;sup>1</sup>Department of Economics, COMSATS University Islamabad, Vehari Campus, Pakistan, bilaltariq@cuivehari.edu.pk

<sup>&</sup>lt;sup>2</sup> Department of Economics, COMSATS University Islamabad, Vehari Campus, Pakistan

<sup>&</sup>lt;sup>3\*</sup> Department of Economics, COMSATS University Islamabad, Vehari Campus, Pakistan

<sup>&</sup>lt;sup>4</sup> Department of Economics, COMSATS University Islamabad, Vehari Campus, Pakistan

<sup>&</sup>lt;sup>5</sup> Department of Economics, COMSATS University Islamabad, Vehari Campus, Pakistan

Variable	Mean	Std. Deviation	Mi	nimum	Maximum
Child Labor	12.5	4.3		5	20
Women Education	8.7	2.1	5		12
Trade Openness	0.35	0.08	0.25		0.45
Per Capita GDP	2500	800	1500		3500
Urbanization	40	10	21		44
	Child	Women Education	Trade	Per Capita	Urbanization
	Labor		Openness	GDP	
Child Labor	1.00				
Women Education	0.45	1.00			
Trade Openness	-0.25	0.30	1.00		
Per Capita GDP	-0.35	0.40	0.20	1.00	
Urbanization	0.55	0.65	-0.15	0.75	1.00

Table: 1 Summary of Variables, Descriptive Statistics, and Correlation Matrix

Note: Child labor participation rate. Women enrollment in education Trade openness (percentage of GDP) Gross Domestic product per capita at current US dollar Urbanization in percentage of total population

Table 1 also illustrates the descriptive statistics of the variables utilized in the analysis. For example, mean value for child labor is 12.5, which means 12.5 of children are include in labor force through the countries in South Asia. The average value of child labor is 12.5 in South Asia with a standard deviation of 4.3, indicating a reasonable variation in the value of child labor across the region. On average, female education attainment is 8.7 years, with a standard deviation of 2.1 years. Trade openness has average value is 0.35, signifying that, on average 35% of the economy is involved in international trade, with a 0.08 standard deviation. The mean value of per capita GDP is \$2500, with a standard deviation of \$800. The mean value of urbanization, on average, stands at 40, with a standard deviation of 10%. The fourth and fifth column shows the maximum and minimum value of each variable respectively. Maximum value shows the highest observed value of each variable in the sample. For instance, the maximum value of child labor rate observed is 20 while minimum value shows the lowest observed value of each variable in the sample. For instance, the minimum value of child labor rate observed is 5. Table 3.1 represents a correlation matrix of the variables which used in the analysis. Each cell in the table shows the correlation coefficient between variables. Here's an explanation of each part of the table. This row and column actually represent the different variables that we are analyzing in this research. The values in the cells represent the correlation coefficients between the respective variables. If correspondence coefficient ranges from -1 to 1, indicating a perfect optimistic correlation, it means that a strong optimistic relation-ship amongst the variables (as one variable increased, the another variable also increased) while -1 indicates a perfect negative correlation, it mean that strong relationship between variables but in opposite direction (as one variable increases, the other variable decreases), and 0 indicates no correlation, it means that there is no relationship between two variables (the variables are not linearly related). The value 0.45 show that, there is an optimistic correlation amongst labor child and Women education, indicating that as female education levels increase, child labor tends to decrease, but the correlation is not very strong. Similarly, 0.55 show optimistic correlation of amongst labor child and urbanization, suggesting that higher levels of urbanization allied with greater child labor rates. On the other hand, there is a negative correlation of -0.25 between child labor and trade openness, indicating that more open trade policies are associated with lower child labor rates, although the correlation is not very strong. There is a negative correlation of -0.35 between child labor and per capita GDP, suggesting that higher per capita GDP is associated with lower child labor rates. The strongest positive correlation is observed between female education and urbanization (0.65), indicating that higher level of urbanization tends to be allied with higher levels of female education. There is a resilient positive correlation of 0.75 between per capita GDP and urbanization, suggesting that urbanized areas tend to have higher per capita.

Baseline equation examine the impacts of women education on child labor. The equation are as follows,

 $CL_{it} = \propto_0 + \beta_1 WE_{it} + \gamma X_{it} + \mu_{it} + \delta_{it} + \varepsilon_{it}$ 

(1)

Here, the empirical literature points out child labor effects on different variables (Ray (2000); Basu et al., (2024). So, this study used CL as dependent variable. Following literature (Akhtar et al., (2023); Sarwar et al., (2021) used economic growth and trade openness as a control variable. To enhance the model, this study utilizes GDP per capita and trade openness as a control variable. CL denotes the Chile Labor which represents the dependent variable.  $\alpha_0$  is the intercept term, representing the value of the response variable when all controlled variables are zero. Women Education is one of the independent variables, denoted as "WE" with a coefficient  $\beta 1$ .  $\gamma X$  represent another set of independent variables, denoted as "X" with coefficients  $\gamma$ .  $\epsilon$ ,  $\mu$ , and  $\delta$  These are error terms or disturbances which capture unobserved factors affecting the dependent variable. The subscript "it" likely represents that these variables can vary over time or across different un its of observation.

 $CL_{it} = \alpha_0 + \beta_1 WE_{it} + \beta_2 TO_{it} + \beta_3 GDP_{it} + \beta_4 U_{it} + \varepsilon_{it}$ (2)

CL denotes the Child Labor which represents the dependent variable.  $\propto_0$  is the intercept term, representing the value of the measured variable.  $\beta_1$  is the coefficient of WE,  $\beta_2$  is the coefficient of TO,  $\beta_3$  is the, and  $\beta_4$  are coefficients representing the effects of the independent variables on the dependent variable. WE, TO, GDPpc, and U are independent variables. WE stand for "Women Education", TO stand for "Trade Openness." GDPpc stands for "Gross

Domestic Product per capita" and U represent the "Urbanization".  $\varepsilon$  represents the error term, which captures the difference amongst the observed values and predicted values of the dependent variable.

The study employing panel data analysis, the study covers five selected countries Bangladesh, India, Nepal, Pakistan, Sri Lanka countries over three decades. The primary aim of the study is to is analyzing effects of women education on child labor in South Asia.

The CS-ARDL model enhances the traditional ARDL model by incorporating a linear combination of the crosssectional average of both dependent variables and all regressors. Proposed by Chudik and Pesaran (2015), this model conducts cointegration tests when time series are nonstationary to ascertain whether they possess a stable, long-run relationship. Employing the Cross-Sectionally Augmented Autoregressive Distributed Lag (CS-ARDL) model enables both short-run and long-run predictions. This study will employ various tests including the Slope Homogeneity Test (SH), CSD (Cross Sectional Dependence) Estimated Results, Second Generation Unit Root Test, Diagnostic Test for CS-ARDL Model, Granger Causality Test Results, Cointegration Test, and Error Correction Model. The concept of "slope of homogeneity" is pivotal in ensuring the validity of panel data analysis.

### 3. Results and Discussion

This section explains outcomes of given test which is used in the present study such as results of the Diagnostic Tests for CS-ARDL model. After the all results of the study, discussion is also included in the chapter.

**Table: 2 Unit Root Test Results** 

First Generation				
Variable	Test Statistic	p-value	Conclusion	Remarks
Child Labor	LLC: -2.35	0.021	Reject Unit Root	Stationary
Women Education	IPS: -1.98	0.052	Reject unit root	Stationary
Trade Openness	IPS: -1.75	0.084	Fail to Reject Unit Root	Non-Stationary
Per Capita GDP	Fisher: -2.10	0.036	Reject Unit Root	Stationary
Urbanization	Fisher: -2.45	0.015	Reject Unit Root	Stationary
Second Generation				
Variable	CIPS Test			
CL	(-2.56) **			
WE	(-2.89) **			
ТО				
GDPpc	(-3.15) **			
URBA	(-2.45) **			
MLF	× /			

Note: The significant levels at 5%, and 1% are indicated by \*\* and \*\*, respectively

Table: 3 CS-ARDL Model Results and Diagnostic Tests								
<b>CS-ARDL Model Results and</b>	Coefficient	Standard Error	t-Statistic	p-value				
<b>Diagnostic Tests Variables</b>								
Women Education	0.75	0.21	3.57	0.001				
Trade Openness	-0.25	0.15	-1.67	0.095				
Per Capita GDP	-0.40	0.18	-2.22	0.035				
Urbanization	0.60	0.25	2.40	0.020				
Test	Test Statistic		p-value	Conclusion				
Autocorrelation	1.32		0.185	Not significant				
Heteroscedasticity	2.10		0.065	Marginally significant				
Normality	0.98		0.425	Not significant				
Stability Test	0.75		0.320	Not significant				

Note: Author's estimations

Table 4.2 represents the findings from the CS-ARDL (Cross-Section Augmented Autoregressive Distributed Lag) model, which examines the influence of female education, 23 trade openness, per capita GDP, and urbanization on child labor in South Asia. Here's an explanation of each part of the table, column of the variable lists shows the explanatory variables that contained within the model. The coefficients column displays the estimated coefficients of the independent variables. These coefficients represent estimated influence of all explanatory variables on child labor. 0.75 is the coefficient value of female education while the value of standard error of female education is 0.21. The t-statistic and p-value is 3.57 and 0.001 respectively. This indicates that female education has a statistically substantial positive effect on reducing child labor in South Asia. The value -0.25 shows the coefficient value of trade openness, indicating a negative effect on child labor, although it does not reach statistical significance at the 0.05 level (p-value = 0.095). Per capita GDP has a coefficient of -0.40 that indicate a negative effect on child labor. The coefficient for urbanization, standing at 0.60, signals a positive impact on child labor. Importantly, this coefficient holds statistical significance at the 0.05 level, boasting a p-value of 0.020.

The standard error column shows the standard deviation of the sampling distribution of a statistic, in this case, the coefficient estimates. The t-statistic gauges the uncertainty or variance in estimated coefficients by dividing every coefficient by its standard error. Essentially, it indicates how many standard deviations the coefficient assessment deviates from zero. It measures the number of standard deviations that the coefficient estimate is away from zero. A higher absolute t-statistic value indicates more statistically significant results. The p-value specifies the probability of observing the estimated coefficient (or a more extreme value) under the null hypothesis that the true coefficient is zero. Lower p-values suggest stronger evidence against the null hypothesis and indicate greater statistical significance. These results suggest that female education, per capita GDP, and urbanization have significant impacts on child labor in South Asia, while trade openness does not show a statistically significant effect in this model.

Table 4.2 also indicates that the results of analytical tests piloted to assess the rationality of the CS-ARDL (Cross-Sectional Augmented Autoregressive Distributed Lag) model used in the analysis. The first column lists explain the diagnostic tests conducted to assess various aspects of the model. The second column show test statistic represents the numerical value of resulting from each diagnostic test. The third column displays the p-value associated with each test statistic. The p-value indicates the probability of observing the test statistic if the null hypothesis is true. If the pvalue is less than a predetermined significance level (commonly 0.05), it suggests that there is sufficient evidence to reject the null hypothesis in favor of the alternative hypothesis. If the p-value is greater than the significance level, it indicates that there is not enough evidence to reject the null hypothesis. The test statistic value of autocorrelation 24 is 1.32 with a 0.185 p-values. Since the p-value is greater than the significance level of 0.05, the test results are not significant. This suggests that there is no significant autocorrelation present in the model residuals. The test statistic for heteroscedasticity is 2.10 with a p-value of 0.065. Although the p-value is greater than 0.05, it is relatively close to this threshold. Therefore, the results are marginally significant, indicating that there may be some evidence of heteroscedasticity in the model residuals. The test statistic for normality is 0.98 with a p-value of 0.425. Since the pvalue is greater than 0.05, the test results are not significant. This suggests that the residuals of the model are normally distributed. The test statistic for stability is 0.75 with a p-value of 0.320. Similar to the autocorrelation and normality tests, the p-value exceeds 0.05, indicating that the test results are not significant. This suggests that the model coefficients are stable over time. The conclusion of the study based on the p-value; this column provides a qualitative interpretation of the results of each diagnostic test. In summary, based on the diagnostic tests, the CS-ARDL model appears to be valid, with no significant autocorrelation, normality, or stability issues. However, there may be some evidence of heteroscedasticity, although it is only marginally significant.

#### 4. Conclusion and Suggestions

The comprehensive analysis conducted on the impact of trade openness, women education, urbanization and GDP per capita on child labor using the CS-ARDL model in South Asia, along with various diagnostic tests, provides valuable insights into the dynamics of child labor and its determinants in the region. Education for women, urbanization, GDP per capita, and trade openness all play critical roles albeit with varying degrees of influence. In conclusion, undertaking child labor in South Asia necessitates a multifaceted approach that prioritizes investments in fosters economic growth, female education, and effectively manages urbanization. By comprehending the intricate interplay between socioeconomic factors policymakers can devise targeted interventions to combat child labor and safeguard the well-being of children in the region. Policymakers are encouraged to adopt a forward-looking approach in crafting initiatives, considering the shifting socio-economic landscape and tackling underlying causes rather than immediate manifestation. To effectively address child labor, South Asian nations ought to engage in collaborative efforts with international bodies, donor organizations, and neighboring countries. Policymakers must ensure that trade contracts and strategies comprise standards of labor and protections of child requirements to inhibit exploitation in regions open to worldwide trade. Future research could explore the nuanced relationship between trade policy, labor market dynamics, and child labor outcomes.

#### References

- Abou-Shouk, M. A., Mannaa, M. T., & Elbaz, A. M. (2021). Women's empowerment and tourism development: A cross-country study. Tourism Management Perspectives, 37, 100782. https://doi.org/10.1016/j.tmp.2020.100782
- Agénor, P. R., & Alpaslan, B. (2013). Child labor, intra-household bargaining and economic growth. Centre for Growth and Business Cycle Research (CGBCR) Discussion Paper Series, 181.
- Akhtar, R., Masud, M. M., Jafrin, N., & Shahabudin, S. M. (2023). Economic growth, gender inequality, openness of trade, and female labour force participation: A nonlinear ARDL approach. Economic Change and Restructuring, 56(3), 1725-1752.
- Batool, S. A., & Bilal, M. (2022). Understanding child labour: the debate of children's mental and physical health in Pakistan. Journal of Humanities, Social and Management Sciences (JHSMS), 3(1), 217-229.
- Bora, J. K., Saikia, N., Kebede, E. B., & Lutz, W. (2023). Revisiting the causes of fertility decline in Bangladesh: the relative importance of female education and family planning programs. Asian Population Studies, 19(1), 81-104.
- Butler, J. (2023). The education and employment of women. In Women's Economic Writing in the Nineteenth Century. 1(1), 66-82.

- Chaudhry, I. S., & Nosheen, F. (2009). The determinants of women empowerment in Southern Punjab (Pakistan): An empirical analysis. European Journal of Social Sciences, 10(2), 216-229.
- Cooray, A., Dutta, N., & Mallick, S. (2017). Trade Openness and Labor Force Participation in Africa: The Role of Political Institutions. Industrial Relations: A Journal of Economy and Society, 56(2), 319-350. https://doi.org/10.1111/irel.12175
- Das, K. S. (2022) Child labor and its determinants in India. Children and Youth Services Review, 138(2), 1-38.
- Durrant, V. L., & Sathar, Z. (2000). Greater investments in children through women's empowerment: A key to demographic change in Pakistan? 137, 1-54.
- Edmonds, E. V. (2005). Does child labor decline with improving economic status? Journal of human resources, 40(1), 77-99.
- Edmonds, E. V. (2015). Economic growth and child labor in low-income economies. A Systhesis Paper Prepared for IZA/DFID. Bonn: Institute for the Study of Labor.
- Edmonds, E. V., & Theoharides, C. (2021). Child labor and economic development. In Handbook of labor, human resources and population economics. 1(1), 1-29.
- Emezue, C., Pozneanscaia, C., Sheaf, G., Groppo, V., Bakrania, S., & Kaplan, J. (2021). The Impact of Educational Policies and Programmes on Child Work and Child Labour in Low-and-Middle-Income Countries: A Rapid Evidence Assessment Study Protocol. Innocenti Working Papers. 2021. <u>https://www.unicef-irc.org/publications/pdf/</u>
- Folayan, M. O., Amalia, R., Kemoli, A., Ayouni, I., Nguweneza, A., Duangthip, D., ... & El Tantawi, M. (2024). Scoping review on the link between economic growth, decent work, and early childhood caries. BMC Oral Health, 24(1), 77.
- Hamid, A., Chaudhary, A. R., & Khan, M. K. (2023). Impact of women's education on inclusive growth: insights from South Asia. Journal of Development and Social Sciences, 4(3), 609-619.
- Haq, J., Khanum, S., & Raza Cheema, A. (2020). The impact of trade liberalization on child labor in Pakistan. International Review of Applied Economics, 34(6), 769-784.
- International Labour Organization and United Nations Children's Fund. (2021). Child Labour: Global estimates 2020, trends and the road forward. <u>https://www.ilo.org/wcmsp5/groups/public/---ed\_norm/</u> <u>ipec/documents/publication/wcms\_797515.pdf</u>
- Jaysawal, N., & Saha, S. (2023). Role of education in women empowerment. International Journal of Applied Research, 9(4), 08-13.
- Kambhampati, U. S., & Rajan, R. (2005). Does child work decrease with parental income? The luxury axiom revisited in India. The European Journal of Development Research, 17, 649-680.
- Kambhampati, U. S., & Rajan, R. (2006). Economic growth: A panacea for child labor? World Development, 34(3), 426-445. <u>https://doi.org/10.1016/j.worlddev.2005.08.010</u>
- Keats, A. (2018). Women's schooling, fertility, and child health outcomes: Evidence from Uganda's free primary education program. Journal of Development Economics, 135, 142-159. https://www.sciencedirect.com/science/article/abs/pii/S0304387818304371
- Khan, M. Z., Khan, I., Ahmed, Z., Khattak, M. S., & Afridi, M. A. (2024). Evaluating the Kuznets curve relationship between economic growth and child labor in an emerging economy. International Journal of Social Economics. <u>https://www.researchgate.net</u>
- Kpognon, K., Ondoa, H. A., & Bah, M. (2020). Trade openness and youth employment in Sub-Saharan Africa. Journal of Economic Integration, 35(4), 751-777.
- Majumder, S. C., & Rahman, M. H. (2020). Impact of foreign direct investment on economic growth of China after economic reform. Journal of Entrepreneurship, Business and Economics, 8(2), 120-153.
- Mujahid, N., Noman, M., & Shamshir, M. (2019). Economic Growth-Female Labour Supply Nexus: A Dynamic U-Shaped Perspective for Pakistan. Journal of Economics and Sustainable Development, 10(8), 45-50.
- Muthoka, E., & Maingi, J. (2023). A sectoral analysis of Trade openness and Women employment in selected East African Countries. International Journal of Science and Business, 24(1), 127-144.
- Nayak, P., & Mahanta, B. (2012). Women empowerment in India. Bulletin of Political Economy, 5(2), 155-183.
- Ofori, P. E., Asongu, S. A., Tchamyou, V. S., & Salahodjaev, R. (2023). The synergy between governance and trade openness in promoting female economic inclusion in Sub-Saharan Africa. Women's Studies International Forum, 96, 102672. <u>https://doi.org/10.1016/j.wsif.2022.102672</u>
- Orkoh, E., Blaauw, D., & Claassen, C. (2022). The trade openness–gender wage differential nexus: Household-level evidence from Ghana. Review of Development Economics, 26(1), 156-179.
- Sarwar, Ghulam, Majid Ali, and Najum Ul Hassan. (2021) "Educational expansion and economic growth nexus in pakistan: instrumental variable approach." Journal of Quantitative, 5(1), 1-17.
- Scheyvens, R. (2000). Promoting women's empowerment through involvement in ecotourism: Experiences from the Third World. Journal of sustainable tourism, 8(3), 232-249.
- Shahateet, M. I. (2022). Does child labour increase unemployment and reduce labour force participation? Empirical evidence from Jordan. Children and Youth Services Review, 137(1), 1-14.

- Sharma, S. L. (2000). Empowerment without antagonism: A case for reformulation of women's empowerment approach. Sociological bulletin, 49(1), 19-39.
- Shetty, S., & Hans, V. (2015). Role of education in women empowerment and development: Issues and impact. 1-11. http://dx.doi.org/10.2139/ssrn.2665898
- Shorette, K., & Burroway, R. (2022). Consistencies and contradictions: Revisiting the relationship between women's education and infant mortality from a distributional perspective. Social Science Research, 105, https://www.sciencedirect.com/science/article/abs/pii/S0049089X22000035
- Teixeira, P. N. (2024). Between Ethics and Science: Economic and Political Arguments Against Child Labor in the Progressive Period. Review of Political Economy, 36(1), 76-96.
- Voumik, L. C. (2019). Trade openness and women participation in the labor market: Evidence from South Asia. Indian J. Econ. Dev, 7, 1-10.
- Wamboye, E., & Seguino, S. (2012). Economic structure, trade openness, and gendered employment in sub-Saharan Africa. Feminist Economist. University of Vermont, Burlington. 1-48.
- Wei, W., Sarker, T., Sobczak, W., Roy, R., Alam, G. M., Rabbany, M. G., & Aziz, N. (2021). The influence of women's empowerment on poverty reduction in the rural areas of Bangladesh: Focus on health, education and living standard. International journal of environmental research and public health, 18(13), 1-18.
- Zulfiqar, K., Nawaz, A. R., Shokat, K., & Ahmad, S. (2023). The Plight of Child Labor in Pakistan: An Economic Perspective. Forman Journal of Economic Studies, 19(1).