The effects of corruption and inflation on women's labor force participation: A quantile regression approach

Gülgün Çiğdem, Atilla Aydın and Meltem Ince Yenilmez*

Abstract: This study aims to investigate the effects of inflation and corruption on women's labor force participation using data from 67 countries in 2022. While conducting this research, GDP and Gross Capital Formation, which is an indicator of investments, were also analysed, but since they were found to be statistically insignificant, the model was constructed by excluding these variables and the analysis continued. Findings reveal a negative impact of inflation and a positive impact of reduced corruption on female labor force participation. Moreover, the test of reverse causality reveals the effect of female labor force participation on corruption. Another important finding of the analysis is that the corruption index parameter is statistically significant, while inflation is insignificant. This shows that in countries with low female labor force participation, inflation is not the reason for the low rate. In addition to this finding, one of the important findings of the analysis is that the severity of the effect of corruption on women's labor force participation rate increases as the quantile decreases. These results underscore the importance of anti-inflation and anti-corruption policies to promote gender equality in the workforce. Understanding the effects of economic variables like inflation and corruption on female labor force participation is crucial for implementing effective policy measures. This study distinguishes itself from the limited existing literature through some of its findings, making a significant contribution to the field.

Keywords: corruption, inflation, women's labor force participation rate, quantile regression

Introduction

Gender-based inequalities are one of the most serious challenges in labor market dynamics; hence, clear disparities in employment rates,

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job mobility, and wage structures persist between men and women. Despite active policy initiatives towards gender-inclusive economic participation, structural barriers still prevail in guaranteeing women access to stable, well-paying employment. Among the major macroeconomic determinants influencing FLFP, the most important are inflation and corruption. These economic distortions have multifaceted and often interdependent effects on labor market competition, employment accessibility, and general economic stability. Given that women are overrepresented in informal, low-wage, and precarious jobs, inflationary pressures and corrupt practices sharpen the already existing labor market inequalities, further deepening systemic disadvantages. One of the major indicators of macroeconomic instability is inflation, which changes the real sector by altering the labor market conditions, household incomes, and employment prospects. Allowing inflation to rise could be associated with increased production costs and wage stagnation, aggravating competition in the labor market and disproportionately hitting female-dominated sectors such as retail, services, and informal employment.

The empirical literature argues that inflationary pressures are more likely to induce household-driven labor supply responses among females, where women are pushed into the labor force as secondary earners to compensate for the loss in household purchasing power (Doğaner 2022; Wang 2019). However, this response is highly context-dependent. In economies with rigid labor markets or high unemployment rates, inflation may instead act as a deterrent to female employment, as firms respond to increased production costs by reducing labor demand or shifting toward more capital-intensive production. Moreover, inflation erodes real wages, and this has a particularly strong effect on low-income and female workers, who are often concentrated in sectors with weak wage bargaining power. In fact, women who work in unstable jobs may feel the brunt of employment instability more because economic downturns spurred by inflation might increase the potential rate of displacement for female employees compared to men. In addition, inflation would also restrain fiscal capacity in the governments, potentially reducing the number of public sector employees, social protection programs, and childcare support services that could facilitate women's participation in the labor force. Thus, the impact of inflation on FLFP is nonlinear and heterogeneous, conditional on institutional labor market structures, social protection mechanisms, and economic resilience factors.

Just as corruption is a structural inefficiency, so does it undermine the integrity of the labor market, creating a scenario that permits nepotism, clientelism, and unequal access to economic opportunities. Often, corruption in highly corrupt labor markets compromises the meritocratic system of hiring and promotion, disproportionately affecting women, young workers, and other marginalised groups (Hagglund & Khan 2023; Afzal & Asif 2021). Corruption also deepens gender gaps by denying access to capital, credit, and entrepreneurial opportunities, making it harder for women to move into formal employment or business ownership. Evidence also demonstrates that corruption distorts labor market competition, thus reinforcing maledominated employment networks, decreasing the likelihood of women finding high-skilled, leadership, and decision-making jobs (Cvetanoska & Kubbe, 2022).

The negative impact of corruption does not stop at labor markets but seeps into the very fabric of institutional frameworks required to implement gender equality policies. Economies with pervasive corruption tend to have a weaker mechanism for enforcing the implementation of gender-responsive policies, such as equal pay legislation, parental leave benefits, and anti-discrimination measures. This also led to the misallocation of resources and diversion of public funds from key social services, such as education, health, and childcare infrastructure, crucial for women's participation in the economy. In so doing, corruption only serves to perpetuate the existing structural gender biases, creating a self-reinforcing cycle of economic exclusion and institutionalised disadvantage.

Empirically, the study will find out to what extent inflation and corruption really affect women's integration into the labor force in considering both direct economic constraints and institutional distortions. To that end, the research will first undertake a major literature review to synthesise existing findings and come up with a theoretical framework through which these relationships can be understood. The paper will then proceed to conduct a quantitative econometric analysis using cross-country panel data on female labor force participation rates, inflation, corruption, GDP, and gross capital formation from the World Bank and Transparency International. Given the heterogeneity in economic environments, quantile regression methods will be employed to capture the differential impacts across varying labor market structures and institutional contexts.

The findings of this study will provide critical insights for policymakers, particularly in developing economies where gender disparities in employment remain stark. The study will also provide evidence-based recommendations for policymakers to mitigate these constraints by estimating the inflationary thresholds beyond which labor market distortions become more pronounced. Moreover, it will assess the marginal impact of corruption on FLFP. Specifically, policy interventions aimed at increasing transparency in the labor market, enhancing the mechanisms for social protection, promoting financial inclusion in a gender-inclusive manner, and implementing structural reforms that will reduce inflationary volatility. Such steps by the government will eventually enable it to develop a labor market in which women are more equitably, resiliently, and inclusively involved in economic development.

The complex interplay among inflation, corruption, and female labor force participation is central to the design of labor market policies that will further not just gender equity but also economic stability. Inflation has both push and pull effects on women's employment depending on the labor market conditions. Corruption systematically disadvantages women, reinforcing institutionalised barriers and economic exclusion. The present article contributes to the existing literature by providing an all-encompassing empirical analysis of such dynamics and by offering policy-driven solutions that build gender-responsive economic environments. Future research should continue to explore these intersectional factors, including education, digitalisation, and labor market flexibility, to understand the complex determinants women's economic empowerment facing ofmacroeconomic and institutional challenges.

Literature

The primary focus of this study revolves around understanding and dissecting the intricate interplay between female labor force participation, corruption, and inflation. To achieve this, we conducted a thorough review of existing literature, aiming to provide an analysis of how these factors impact female labor force participation within the context of current scholarly works. Women's labor force participation stands out as an important issue that not only contributes to economic growth but also has the potential to reduce gender inequality. On the other hand, corruption and inflation serve as reflections of the intricacies within economic systems and policies. Hence, our literature

review sought to amalgamate these three fundamental components, allowing for a deeper comprehension of how female labor force participation interacts with corruption and inflation, while also pinpointing existing gaps in these domains.

The impact of inflation on female labor force participation

Empirical research has extensively explored the relationship between inflation and female labor force participation (FLFP), but the findings regarding the nature and direction of this relationship are mixed. An increasing body of literature identifies inflation as an important macroeconomic determinant of women's labor market engagement (Mehmood et al. 2015). Studies do reveal that inflationary pressures bear on labour supply decisions, notably for women, by altering household income dynamics and employment incentives (Bibi & Afzal, 2012). A long-run relationship between inflation and FLFP was confirmed in all the contexts under study, although the strength of this relationship varies across time.

Some studies have found a positive relationship between inflation and FLFP, especially in emerging economies such as Türkiye (Doğaner 2022; Koyuncu & Okşak 2021; Özkök & Polat 2020; Wang 2019; Mujahid 2013; Niemi & Lloyd 1981). The income effect is the mechanism underlying this relationship: increasing consumer prices imply that the household needs more income, so women must work (Awan & Sadia 2018). Niemi & Lloyd (1981), and Wang (2019) argue that an increased rate in inflation results in higher levels of females seeking entry to the labor force due to eroding purchasing power, whereas this real wage erosion is argued by others to also act as an important driver in explaining female participation for maintaining levels of living by the household members (Eastin and Prakash 2013, and Augustine & Augustine 2013). Empirical evidence suggests that a unit increase in the rate of inflation increases FLFP by 0.06% (Sertçelik 2021), though Özkök & Polat (2020) estimate this effect to be 0.047%, providing support for the hypothesis that inflationary environments lead to increased participation of females in the labor market.

Not all literature agrees with this relationship since some studies found no statistically significant effect of inflation on FLFP. Similarly, the studies by Demirtaş & Yayla (2017) and Korkmaz & Alacahan (2013) indicate no meaningful relation between inflation and female labor force participation, while Özer & Biçerli (2004) report an absence of

direct linkage between these variables. These divergent results point out that the nexus between inflation and FLFP is likely to be context-dependent, depending on structural characteristics of the labor market as well as household income elasticity and broader economic conditions. The impact of inflation on FLFP can also be modified by labor market rigidity, wage-setting mechanisms, and social norms with respect to female employment.

Although inflation can act as a push factor for FLFP in economies where declining real wages require households to generate extra income, the presence of institutional constraints, labor market segmentation, and social barriers may reduce this effect in some contexts. Future research should further investigate the heterogeneous effects of inflation on FLFP, considering sectoral employment shifts, income inequality, and policy responses to inflationary pressures to develop a more nuanced understanding of this macroeconomic relationship.

Table 1. Results of the impact of inflation on female labor force participation

| Researcher | Period, Country | Method | Findings |
|-----------------------------------|---|--|---|
| Niemi and Lloyd, 1981 | 1956-77, USA | OLS | It is evident that the impact of inflation on labor force participa tion rates extends beyond its reduction of the real pay. |
| Özer and Biçerli, 2004 | 1988-2001, Türkiye | Panel Data Regression, Fixed Effects Model, Random Effects Model | Macroeconomic variables such as unemployment rate, inflation rate, wages in manufacturing industry and variables such as crude divorce rate were not found to be significant. |
| Bibi and Afzal, 2012 | 146 married women aging from 20 to 70, Wah Cantt (Pakistan) | Quantitative and qualitative data | The rate of inflation that prevails in a nation's economy has a significant impact on married women 's participa tion in the labor force. |
| Anyanwu and Augustine, 2013 | 1991-2009, Africa | Cross-sectional data | Greater pricing promotes gender parity in the workforce |
| Eastin and Prakash, 2013 | 1980-2005, 146 countries | Linear mixed- effects models (with polynomials) | The impact of economic development on gender equality depends on the level of development. |
| Mujahid, 2013 | 1980-2010, Pakistan | ARDL, ECM approach and Granger Causality Test | Inflation increases women's labor force participation. |
| Korkmaz and Alacahan, 2013 | 2008-2012, Türkiye | Correlation analysis and regression models | A 1-unit increase in female employment leads to a 1,583-unit increase in GDP. |
| Mehmood et al., 2015 | 2003-2013, 41 | Generalised Method of | There is a positive relationship between rising inflation and the female labour force participation rate. Inflation |

| | Muslim countries | Moments (GMM) | creates financial pressure for their families and children to have a better future. |
|-----------------------------|--------------------------------|----------------------------|--|
| Demirtaş and Yayla, 2017 | 1995-2012, 113 countries | Panel data analysis | The inflation rate has no significant effect on women's employment |
| Wang, 2019 | 2000-2018, USA | The Random Forest Model | Religion is an important factor affecting a country's female labour force participation. Housework, gross domestic product, and women's higher education enrollment rate are also influential. |

The impact of corruption on female labor force participation

More recent research has sought to address the convoluted link between corruption and the participation of women in the labor market, bringing attention to the barriers erected by corruption and the way greater inclusion of women in the workforce can reduce corruption. Studies show that women, being less involved in illegitimate activities and more likely to be ethically inclined, may contribute to a decrease in corruption both in political and economic circles (Jha & Sarangi, 2018). In contrast, systemic corruption disproportionately affects women by limiting their access to employment, education, and financial resources, which reinforces the structural barriers to economic participation (Esarey & Schwindt-Bayer 2019). These results underline the two-way nature of the corruption-gender nexus, where corruption, while placing a limit on female economic agency, is also held in check by increased female representation in both the labor market and governance structures.

Moreover, corruption affects labor force participation through institutional inefficiencies that hit women disproportionally. Practices like bribery, nepotism, and clientelism are obstacles to fair job opportunities, and at times, only reward those male-dominant networks while shutting off access for women seeking promotion (Bauhr & Charron 2020). In developing economies, where informal employment constitutes a significant portion of labor markets, women are particularly vulnerable to exploitative work conditions, often exacerbated by corruption that weakens labor protections and regulatory enforcement (Swamy et al. 2001). As a result, corruption functions as an indirect form of labor market discrimination, deterring women's entry into formal employment sectors and limiting their economic empowerment. In addition, corruption impacts female entrepreneurship more because women entrepreneurs must bear larger bureaucratic barriers, insufficient access to credit, and greater exposure

to bribery and extortion (Khan 2022). Because corrupt business environments tend to favour entrenched elites, market competition drops, making it hard for female-owned businesses to get through. With female entrepreneurship being a critical driver for economic growth and poverty alleviation, addressing corruption becomes a sine qua non to fostering an inclusive business environment (Gokcekus & Mukherjee 2021). Policy interventions aimed at increasing women's participation in the labor force, therefore, must include anti-corruption reforms, better financial accessibility, and regulatory frameworks that ensure transparency and equity in labor markets.

Such findings call for a gender-sensitive approach toward anticorruption policies to make sure that governance and economic structures facilitate the full economic participation of women. Future research must go further into examining the intersectionality of gender, corruption, and labor market dynamics, mostly within the framework of regional variations, sectoral differences, and institutional reforms. This can be affected through policy transparency, gender quotas, and inclusive financial mechanisms that will help reduce systemic barriers and build a much more level playing field for women.

| Researcher | Period, Country | Method | Findings |
|-------------------------|--|--|---|
| Samimi et al., 2013 | 2003-2010, selected Isl | Panel data | With the increase in women's participation in the labor market, corruption has been decreasing over time. |
| Afzal and Asif, 2021 | 1995-2018, 167 countries | Panel data | Women working in an economy had a significant impact on reducing the perceived level of corruption from 2007 to 2018. |
| Yerrebati ,2022 | 2013-2018, 79 Developing countries | The two-step system GMM estimation technique. | Women's empowerment and increased labor force participation have been shown to reduce perceived levels of corruption, particularly in developing countries. |

Table 2. Results of the impact of corruption on female labor force participation

Other factors

A review of the literature on women's labor force participation rate reveals that economic growth, national income per capita, unemployment and inflation are the most studied topics. In addition, fertility rate, age, education level, caregiver costs, pensioner rate, unpaid family workers, number of children, social prejudices,

ownership of residence, religion and urbanisation rate are also found to be factors affecting women's labor force participation (Table 3).

Table 3. Results of the impact of the other factors on female labor force participation

| Researcher | Period, Country | Method | Findings |
|------------------|-----------------|-----------------------|-----------------------------|
| Barrow, 1996 | The last 20 | Instrumental variable | Childcare costs have a |
| | years, USA | estimation | significant impact on |
| | , | | women's decision to join |
| | | | the labor market within |
| Özer and | 1988-2001, | Panel data, least | The proportion of unpaid |
| Biçerli, 2003 | Türkiye | squares regression, | family workers in the |
| | | fixed effects and | employed female labor |
| | | random effects models | force and micro variables |
| Doğrul, 2008 | 2003, Türkiye | Logistic regression | Education level, |
| | · | model | economic status, |
| | | | number of children and |
| Ince, 2010 | 1990-2009, | Panel Data Analysis | Wage |
| | Türkiye | | differential |
| | | | s, the |
| Mishra et al., | G-7 countries | Panel Unit root, | Labor force |
| 2010 | | Panel Cointegration | participation rate and |
| | | Panel Granger | total fertility rate is |
| | | causality test | cointegrated. Total |
| | | | fertility %1↑ |
| | | | →female labor force |
| | | | participation rate ↓ |
| Tam, 2010 | 1950-1980, 130 | Dynamic Panel | Long-run U relationship |
| | countries | | with Gross Domestic |
| | | | Product per capita and |
| | | | GDP squared |
| | 2000 7711 | | (TO) 1.1.1 |
| Davaslıgil, 2011 | 2009, Türkiye | Multinominal logit | The age variable was |
| | | model | found to be statistically |
| | | | significant for rural |
| | | | women, but the most |
| | | | important factor affecting |
| | | | female labor force |
| | | | participation was |
| Için, 2012 | 2012, | Survey method | Social prejudices they |
| | Türki | | endure when deciding to |
| | ye, Yalova | | participate in education |
| | | | and business life is at the |
| | | | forefront of the |
| | | | problems women face. |
| | l . | | * |

| Kızılgöl, 2012 | 2002-2008, Türkiye | Logit Model | Education level, household income, dependency ratio, ownership of the dwelling and age of women are found to be important factors on |
|---------------------------|---|---|--|
| | | | women's labor force participation potential. |
| Acar and | 2014, Türkiye | Multiple regression | Religion element, its |
| Fraker, 2016 | | model | impact on women's participation in economic life, similar |
| Korkmaz, 2016 | 2014-2019, Türkiye | Panel regression | Women's full monthly income positive effect on the probability of working full-time. |
| Khanet al., 2017 | 1990-2014, | Augmented-Dickey | A long-run and U-shaped |
| | Pakistan | Fuller (ADF) test, Johansen co-integration test, Error correction model (ECM) | link was found between economic growth and women's labor force participation rate. |
| Zeren and Savrul, 2017 | 1991-2014, Türkiye | Hidden Cointegration | There is an asymmetric long-run relationship with economic growth, unemployment and |
| Appiah, 2018 | 1975-2015, Sub- Saharan Africa | Generalised Method of Moments | Increase in female labor force participation rate, GDP per capita has a |
| Awan and Sadia, 2018 | 2005-2015, Pakistan | Regression Analysis | The decrease in the fertility rate increases in Women's contribution |
| Türlüoğlu, 2018 | 1999-2017, Türkiye | VAR, Granger Causality Analysis | Women's Employment ↔ Growth |
| Düzyol Tıh, 2019 | 2006-2018, Türkiye | VAR, ECM, Granger causality test | Economic growth harms women's labor force participation in the short run and has a positive effect in the long run, |
| Karlılar, 2019 | 1996-2017, 48 advanced, 46 developing country | Static data analysis, dynamic data analysis | Economic growth is found to have an effect on women's employment that first decreases and then |
| Aldan and Öztürk, 2020 | 2004-2016, Türkiye | Logit | Improvement in educational attainment, rising retirement age and declining fertility are other important factors |

| Özkök and Polat, 2020 | 2018, Türkiye | Time series, DOLS, FMOLS | GDP, Inflation Rate, Urbanisation Rate increase the female |
|--------------------------|-----------------------|---|---|
| Sertçelik, 2021 | 1994-2019, Türkiye | Narayan-Popp (2010) unit root test, Maki (2012) cointegration test | A 1% increase in the female population ratio and growth rate increases the labor force participation rate of women by 40.18% and 0.23%, respectively. |

Data and methodology

In this research, information about the participation rate of women in the labor force, corruption perceptions index, and inflation across 67 nations constituted the dataset. Labor force participation rate, female (% of female population ages 15-64) (modelled ILO estimate) from the World Bank for "the participation rate of women in the labor force" is included in the analysis. The Corruption Perceptions Index is taken (transparency.org). Transparency International from consumer prices (annual %), also from the World Bank, is used as inflation data. In addition, GDP growth (annual %) and Gross Capital Formation (GCF), which is an indicator of investments, are also taken from the World Bank and subjected to the test. The women's labor force participation rate was designated as the dependent variable, while the remaining variables were regarded as independent. The dataset comprised horizontal cross-sectional data specific to the year 2022.

All variables underwent logarithmic transformation. The method of the study is quantile regression analysis. Regression analysis is based on determining the effects of independent variable or variables on the dependent variable (Hill et al. 2011, 40). The most used regression model in the literature is linear regression. The linear regression model can be expressed as follows (Gujarati and Porter 2010, 33).

$$y_{-}i=\beta_{-}1+\beta_{-}2 x_{-}2i+\beta_{-}3 x_{-}3i+\cdots+\beta_{-}k x_{-}ki+\varepsilon_{-}i$$
 (1) In the above model, $y_{-}i$ is defined as the independent variable. $x_{-}2i$, $x_{-}3i$, and $x_{-}ki$ are the independent variables of the model. The coefficients β are the parameters of the model. Finally, $\varepsilon_{-}i$ is the normally distributed error term with zero mean and constant variance. In this context, there are k - l independent variables and k parameters in the model (Çil 2018, 119). Parameter estimation in regression analysis is important in measuring the effects of independent variables on the

dependent variable. The method used in parameter estimation is the Least Squares (LS) method. According to the Ordinary Least Squares (OLS) method, the (y_i) values estimated from the sample regression model should be closest to the observed y_i values. This is based on finding the parameter values that minimise the sum of squares of the error terms (Çil 2018, 114). The parameters obtained at the point where the sum of squares of the error term is minimum are linear, biasfree and the best estimators (Wooldridge 2009, 102). These properties of the parameters are referred to in the literature as the Gauss-Markov theorem (Stock and Watson 2012, 755).

To apply the linear regression model, some assumptions must be met. Firstly, it is assumed that the expected value of the population error term is zero. Secondly, the variance of the error term is constant for each value of the independent variable. Another assumption is that there is no autocorrelation between the error terms. It is also important that the error term and the independent variables are independent of each other. Another assumption is that the values of the independent variables are constant across replicate samples. In addition, the independent variable should take at least two different values. Apart from these, the number of observations should be greater than the number of parameters. Finally, there should be no complete multicollinearity between the independent variables. In case of full multicollinearity, it is not possible to estimate the parameters of the model (Hill et al. 2011, 45).

If the above assumptions are not met, the parameter estimates obtained from the linear regression model may not be valid. On the other hand, the problem of autocorrelation in time series analyses and the problem of changing variance in cross-sectional data are frequently encountered. It is important to use alternative models when the assumptions are not valid. The assumption of constant variance in the horizontal cross-section data used in this study is sometimes not met. In this case, one of the suggested models is quantile regression analysis. In this study, quantile regression analysis is used as a method. In addition, quantile regression analysis is less sensitive to outliers than the ECT method used in linear regression analysis. Although there is no normal distribution assumption in the OLS method, quantile regression can produce more efficient estimators than the OLS method when the error terms do not conform to the normal distribution (Saçaklı 2005, 84). Quantile regression analysis, developed by Koenker and Bassett (1978), is an alternative to the OLS method.

In the quantile regression method, parameter estimates are made based on various quantiles. In this context, separate parameters that minimise the sum of error squares can be estimated for each quantile value. Quantile regression analysis is less sensitive to outliers than the ECM method (Cameron and Trivedi 2005, 85). The reason why the quantile regression method is less sensitive to outliers is that it can divide the distribution of the dependent variable into quartiles. The quantile regression method is more useful, especially when the conditional quantiles vary. One of the assumptions of the ECM method is that the variance of the error terms is constant for each value of the independent variable. The assumption of constant variance is equivalent to the same parameter estimates for all quantiles (Koenker 2005, 75). The case of varying variance causes different parameters to be estimated in different quantiles. If the difference is statistically significant, it indicates that the parameters vary across quantiles (Güler et al. 2018, 224). The quantile regression model is expressed as follows:

$$Y i=x i \beta \theta+e i \tag{2}$$

In the regression equation above, Y_i is the dependent variable and x_i is the vector of independent variables. The vector β_i is the vector of estimated parameters for the θ th quantile regression. Parameter estimation can be achieved by calculating the parameter β that minimises the following equation (Judge et al. 1991, 834).

$$\min_{\boldsymbol{\top}} \beta_{\underline{i}}^{\underline{i}} / / n \left\{ \sum_{i} (i: y_{\underline{i}} \ge x_{\underline{i}} \beta) / \|\theta| y_{\underline{i}} - x_{\underline{i}} \beta| + \sum_{i} (i: y_{\underline{i}} < x_{\underline{i}} \beta) / \|(1 - \theta)| y_{\underline{i}} - x_{\underline{i}} \beta| / \|\|\beta\| / \|$$

$$(3)$$

The following parameter estimator is obtained by minimising equation (3).

$$\beta \hat{\gamma}(\theta) = [argmin](\beta \in R^p) \{ \sum_{i=1}^n [p_\theta (y_i - x_i \beta)] \}$$

$$(4)$$

For $0 < \theta < 1$, the θ th quantile of the dependent variable Y_i is expressed as follows.

$$\varphi_y(\theta) = \inf[rIF(r) \ge \theta]$$
(5)

Within the cumulative distribution function of each unit i, F(i) (y) depends on covariates. Thus, the θ th conditional quantile of Y_i with respect to x_i is shown as follows (Uribe and Guillen 2020, 14).

$$\varphi_{-}(Y_{-}i\backslash X \ i \ (\theta) = \inf\{rIF_{-}i \ (r\backslash X \ i) \ge \theta\})$$
(6)

The process after this stage is like the classical linear regression analysis. In this context, the parameter vector is estimated in a way to minimise the sum of residual squares. In other words, the main objective of quantile regression analysis can be expressed as estimating the parameter vector $(\beta_-\theta)$. The index in the parameter vector indicates that the parameter changes at each quantile level θ .

Results

The dependent variable of the study is the women's labour force participation rate. Corruption index and inflation are independent variables. Firstly, parameter estimates were made by the Ordinary Least Squares Method, and the estimation results are presented in Table 4

Table 4. Results of OLS Method (Dependent variable: women's labour force participation rate)

| Variable | Coefficient | Standard Error | t Statistic | Probability |
|------------------|-------------|----------------|-------------|-------------|
| Inflation | -0,112742 | 0,121062 | -0,931277 | 0,3550 |
| Corruption Index | 0,118902 | 0,058295 | 2,039643 | 0,0452 |
| Constant | 49,46568 | 3,865931 | 12,79528 | 0,0000 |
| F Statistic | | 3,14100 | 7 | |
| Probability (F) | | 0,049482 | 2 | |
| R^2 | | 0,083446 | 6 | |

As seen in Table 4, the parameter related to the corruption index is found to be statistically significant. However, the inflation variable is statistically insignificant, with a low coefficient of significance. The coefficient of significance was also found to be low. According to the F-statistic value indicating the overall significance of the model, the model appears to be significant. However, for the regression analysis to be valid, it is necessary to meet the underlying assumptions. Since the most common issue in cross-sectional data is the problem of heteroskedasticity, the Breusch-Pagan-Godfrey test was applied first, and the test result is presented in Table 5.

Table 5. Breusch-Pagan-Godfrey Test Results

| F Statistics | Probability | | |
|--------------|-------------|--|--|
| 5,955493 | 0,0041 | | |

As seen in Table 5, the probability value is less than 0.05. Consequently, the null hypothesis of homoskedasticity, which posits that the variance of the error term is the same at every point, has been rejected. This indicates the presence of heteroscedasticity in the model. The presence of heteroscedasticity suggests that the parameter estimates obtained by the Ordinary Least Squares Method are not efficient. Therefore, quantile regression analysis was conducted in this context. Quantile regression analysis allows for modelling the heteroskedasticity situation, where the dependent variable responds differently to the independent variables at different points. In this study, quantile regression analysis was applied considering 10 groups. In Table 6, women's labour force participation rate values are evaluated in 10 groups.

| Table 6. Women's labour force participation rate quantile values | | | | | |
|--|-------|--|--|--|--|
| Minimum | 28,26 | | | | |
| %10 | 42,07 | | | | |
| %20 | 48,79 | | | | |
| %30 | 51,02 | | | | |
| %40 | 53,69 | | | | |
| %50 | 55,61 | | | | |
| %60 | 57,75 | | | | |
| %70 | 59,77 | | | | |
| %80 | 61,80 | | | | |
| %90 | 65,98 | | | | |
| Maksimum | 71,84 | | | | |

The values in Table 6 show each 10 per cent group. In other words, it is aimed to make different parameter estimates for each 10 per cent group. In this context, it is aimed to eliminate the effect of heteroskedasticity. The results of the quantile regression analysis are presented in Table 7.

Table7. Quantile regression analysis results

| | Quantile | Coefficient | Std. Error | t-Statistic | Prob. |
|------------|----------|-------------|------------|-------------|--------|
| INFLATION | 0.100 | -0.008530 | 0.120266 | -0.070926 | 0.9437 |
| | 0.200 | -0.085085 | 0.112370 | -0.757187 | 0.4518 |
| | 0.300 | -0.135565 | 0.114822 | -1.180659 | 0.2422 |
| | 0.400 | -0.220374 | 0.121538 | -1.813207 | 0.0746 |
| | 0.500 | -0.282309 | 0.139840 | -2.018799 | 0.0478 |
| | 0.600 | -0.307431 | 0.123653 | -2.486244 | 0.0156 |
| | 0.700 | -0.365970 | 0.117185 | -3.123020 | 0.0027 |
| | 0.800 | -0.357321 | 0.112041 | -3.189189 | 0.0022 |
| | 0.900 | -0.130179 | 0.445914 | -0.291937 | 0.7713 |
| CORRUPTION | 0.100 | 0.313176 | 0.217309 | 1.441160 | 0.1546 |

| | 0.200 | 0.271297 | 0.200456 | 1.353404 | 0.1808 |
|--------|-------|-----------|----------|-----------|--------|
| | 0.300 | 0.170982 | 0.193130 | 0.885320 | 0.3794 |
| | 0.400 | 0.124034 | 0.189012 | 0.656222 | 0.5141 |
| | 0.500 | 0.115067 | 0.126275 | 0.911244 | 0.3657 |
| | 0.600 | 0.231994 | 0.103863 | 2.233646 | 0.0291 |
| | 0.700 | 0.187600 | 0.117035 | 1.602936 | 0.1140 |
| | 0.800 | 0.248209 | 0.185194 | 1.340265 | 0.1851 |
| | 0.900 | 0.098705 | 0.152288 | 0.648147 | 0.5193 |
| GCF | 0.100 | -0.153156 | 0.362346 | -0.422678 | 0.6740 |
| | 0.200 | -0.255022 | 0.298134 | -0.855392 | 0.3956 |
| | 0.300 | -0.152770 | 0.299732 | -0.509689 | 0.6121 |
| | 0.400 | -0.056541 | 0.324223 | -0.174390 | 0.8621 |
| | 0.500 | 0.136620 | 0.361318 | 0.378114 | 0.7066 |
| | 0.600 | 0.232536 | 0.355925 | 0.653330 | 0.5160 |
| | 0.700 | 0.262798 | 0.368812 | 0.712554 | 0.4788 |
| | 0.800 | -0.183202 | 0.323757 | -0.565862 | 0.5735 |
| | 0.900 | -0.115525 | 0.308604 | -0.374346 | 0.7094 |
| LOGGDP | 0.100 | 6.425818 | 8.199981 | 0.783638 | 0.4362 |
| | 0.200 | 1.685770 | 9.650945 | 0.174674 | 0.8619 |
| | 0.300 | 6.235739 | 9.495041 | 0.656736 | 0.5138 |
| | 0.400 | 3.422874 | 9.399161 | 0.364168 | 0.7170 |
| | 0.500 | 1.752917 | 5.420264 | 0.323401 | 0.7475 |
| | 0.600 | -1.402177 | 3.702440 | -0.378717 | 0.7062 |
| | 0.700 | -2.509670 | 4.006718 | -0.626366 | 0.5334 |
| | 0.800 | -12.02966 | 8.659295 | -1.389220 | 0.1697 |
| | 0.900 | -7.785025 | 6.999402 | -1.112241 | 0.2703 |
| С | 0.100 | 3.931345 | 31.30893 | 0.125566 | 0.9005 |
| | 0.200 | 33.63468 | 32.06966 | 1.048801 | 0.2983 |
| | 0.300 | 18.98850 | 31.33850 | 0.605916 | 0.5468 |
| | 0.400 | 34.77435 | 29.39980 | 1.182809 | 0.2414 |
| | 0.500 | 39.54226 | 17.97189 | 2.200228 | 0.0315 |
| | 0.600 | 46.50228 | 13.00350 | 3.576135 | 0.0007 |
| | 0.700 | 55.73566 | 15.92259 | 3.500415 | 0.0009 |
| | 0.800 | 108.3546 | 32.05875 | 3.379876 | 0.0013 |
| | 0.900 | 96.79907 | 28.30141 | 3.420291 | 0.0011 |

The estimated parameter for the inflation variable was found to be statistically significant at the 0.50, 0.60, 0.70, and 0.80 quantile levels. According to the findings:

- In countries at the 0.50 quantile [countries with participation rates ranging from 48.79% to 51.02% (Table 6); Belgium, Bulgaria, Chile, Costa Rica, Poland, Serbia, and South Africa (Table 10)], a 1% increase in inflation reduces the participation rate by 0.28% (Table 7).
- In countries at the 0.60 quantile [countries with participation rates ranging from 51.02% to 53.69% (Table 6); China, Colombia, Czechia, Ecuador, France, Hong Kong SAR, Hungary, and Spain (Table 10)], a 1% increase in inflation decreases the participation rate by 0.31% (Table 7).
- In countries at the 0.50 quantile [countries with participation rates ranging from 53.69% to 55.61% (Table 6); Brazil, Japan, Korea,

Rep., Latvia, Portugal, Rwanda, Slovenia (Table 10)], a 1% increase in inflation lowers the participation rate by 0.37% (Table 7).

In countries at the 0.70 quantile [countries with participation rates ranging from 57.75% to 59.77% (Table 6); The Greek Cypriot Administration of Southern Cyprus, Denmark, Finland, Ireland, Lithuania, Luxembourg, Paraguay, United States (Table 10)], a 1% increase in inflation reduces the participation rate by 0.36% (Table 7).

Corruption was found to be significant at the 0.6 quantile level. The relationship between the corruption index and women's labor force participation rate is positive because a higher corruption index signifies less corruption.

- In countries at the 0.60 quantile (countries with participation rates ranging from 28.26% to 42.07% (Table 6); Belarus, Bosnia and Herzegovina, Brazil, Colombia, Ecuador, Hungary, India, Macedonia, Moldova, North, Peru, Serbia, Thailand, Türkiye, Viet Nam (Table 10)), a 1% increase in the corruption index increases the participation rate by 0.23% (Table 7).
- GDP and GCF variables were found to be statistically insignificant at all quantile levels. In this context, the model was reconstructed by excluding these variables and the results of the analysis are presented in Table 8.

| Table 6. Qualitile regression analysis results | | | | | |
|--|----------|-------------|------------|-------------|--------|
| | Quantile | Coefficient | Std. Error | t-Statistic | Prob. |
| Inflation | 0.100 | -0.057818 | 0.095548 | -0.605122 | 0.5472 |
| | 0.200 | -0.113451 | 0.080226 | -1.414143 | 0.1622 |
| | 0.300 | -0.172768 | 0.083981 | -2.057215 | 0.0437 |
| | 0.400 | -0.218488 | 0.095840 | -2.279716 | 0.0260 |
| | 0.500 | -0.250574 | 0.109644 | -2.285331 | 0.0256 |
| | 0.600 | -0.158181 | 0.300480 | -0.526429 | 0.6004 |
| | 0.700 | -0.341724 | 0.103460 | -3.302969 | 0.0016 |
| | 0.800 | -0.126492 | 0.627838 | -0.201473 | 0.8410 |
| | 0.900 | -0.209687 | 0.497483 | -0.421497 | 0.6748 |
| Corruption | 0.100 | 0.371071 | 0.110963 | 3.344084 | 0.0014 |
| | 0.200 | 0.307041 | 0.078549 | 3.908932 | 0.0002 |
| | 0.300 | 0.243397 | 0.070327 | 3.460942 | 0.0010 |
| | 0.400 | 0.206325 | 0.073333 | 2.813533 | 0.0065 |
| | 0.500 | 0.168473 | 0.085466 | 1.971218 | 0.0530 |
| | 0.600 | 0.155788 | 0.088785 | 1.754666 | 0.0841 |
| | 0.700 | 0.104596 | 0.088671 | 1.179599 | 0.2425 |
| | 0.800 | 0.060633 | 0.082322 | 0.736535 | 0.4641 |
| | 0.900 | -0.080597 | 0.074069 | -1.088129 | 0.2806 |
| С | 0.100 | 25.93628 | 8.530507 | 3.040414 | 0.0034 |
| | 0.200 | 32.26419 | 5.818762 | 5.544854 | 0.0000 |
| | 0.300 | 38.84455 | 5.095638 | 7.623098 | 0.0000 |

Table 8. Quantile regression analysis results

| 0.400 | 43.48517 | 5.324207 | 8.167445 | 0.0000 |
|-------|----------|----------|----------|--------|
| 0.500 | 47.16796 | 6.234808 | 7.565263 | 0.0000 |
| 0.600 | 49.16064 | 7.264927 | 6.766845 | 0.0000 |
| 0.700 | 56.05862 | 6.676479 | 8.396435 | 0.0000 |
| 0.800 | 58.59910 | 9.414685 | 6.224223 | 0.0000 |
| 0.900 | 72.12163 | 7.361148 | 9.797605 | 0.0000 |

The estimated parameter for the inflation variable was found to be statistically significant at the 0.30, 0.40, 0.50, and 0.70 quantile levels. According to the findings:

- In countries at the 0.30 quantile [countries with participation rates ranging from 48.79% to 51.02% (Table 6); Belgium, Bulgaria, Chile, Costa Rica, Poland, Serbia, and South Africa (Table 10)], a 1% increase in inflation reduces the participation rate by 0.17% (Table 8).
- In countries at the 0.40 quantile [countries with participation rates ranging from 51.02% to 53.69% (Table 6); China, Colombia, Czechia, Ecuador, France, Hong Kong SAR, Hungary, and Spain (Table 10)], a 1% increase in inflation decreases the participation rate by 0.22% (Table 8).
- In countries at the 0.50 quantile [countries with participation rates ranging from 53.69% to 55.61% (Table 6); Brazil, Japan, Korea, Rep., Latvia, Portugal, Rwanda, Slovenia (Table 10)], a 1% increase in inflation lowers the participation rate by 0.25% (Table 8).
- In countries at the 0.70 quantile [countries with participation rates ranging from 57.75% to 59.77% (Table 6); Cyprus, Denmark, Finland, Ireland, Lithuania, Luxembourg, Paraguay, United States (Table 10)], a 1% increase in inflation reduces the participation rate by 0.34% (Table 8).

Corruption was found to be insignificant at the 0.70, 0.80, and 0.90 quantiles, but significant for other quantiles. The relationship between the corruption index and women's labor force participation rate is positive because a higher corruption index signifies less corruption.

- In countries at the 0.10 quantile (countries with participation rates ranging from 28.26% to 42.07% (Table 6); Belarus, Bosnia and Herzegovina, Brazil, Colombia, Ecuador, Hungary, India, Macedonia, Moldova, North, Peru, Serbia, Thailand, Türkiye, Viet Nam (Table 10)), a 1% increase in the corruption index increases the participation rate by 0.37% (Table 8).
- In countries at the 0.20 quantile (countries with participation rates ranging from 42.0724% to 48.7866% (Table 6); Bulgaria, Romania, and South Africa (Table 10)), a 1% increase in the 578

corruption index increases the participation rate by 0.31% (Table 8).

- In countries at the 0.30 quantile (countries with participation rates ranging from 48.79% to 51.02% (Table 6); Croatia, Malta, Mauritius, Rwanda, Saudi Arabia (Table 10)), a 1% increase in the corruption index increases the participation rate by 0.24% (Table 8).
- In countries at the 0.40 quantile (countries with participation rates ranging from 51.02% to 53.69% (Table 6); Cyprus, Greece, Slovak Republic (Table 10)), a 1% increase in the corruption index increases the participation rate by 0.21% (Table 8).

Tests were conducted considering the possibility of reverse causality. When corruption is the dependent variable, the effect of female labor force participation on corruption becomes significant after 0.5 quantiles (Table 9).

| | Quantile | Coefficient | Std. Error | t-Statistic | Prob. |
|---------------|----------|-------------|------------|-------------|--------|
| Labor Force | | | | | |
| Participation | 0.100 | 0.143442 | 0.236399 | 0.606777 | 0.5461 |
| | 0.200 | 0.035597 | 0.264012 | 0.134831 | 0.8932 |
| | 0.300 | 0.382018 | 0.487413 | 0.783768 | 0.4361 |
| | 0.400 | 0.660764 | 0.415005 | 1.592184 | 0.1163 |
| | 0.500 | 0.817111 | 0.362413 | 2.254637 | 0.0276 |
| | 0.600 | 1.072565 | 0.347079 | 3.090259 | 0.0030 |
| | 0.700 | 1.158332 | 0.324345 | 3.571292 | 0.0007 |
| | 0.800 | 1.140674 | 0.295496 | 3.860204 | 0.0003 |
| | 0.900 | 1.197011 | 0.245059 | 4.884573 | 0.0000 |
| Inflation | 0.100 | 0.070887 | 0.162586 | 0.435995 | 0.6643 |
| | 0.200 | -0.039124 | 0.186777 | -0.209468 | 0.8347 |
| | 0.300 | -0.640001 | 1.304820 | -0.490490 | 0.6255 |
| | 0.400 | -0.549268 | 1.382271 | -0.397366 | 0.6924 |
| | 0.500 | -0.420209 | 0.552393 | -0.760707 | 0.4496 |
| | 0.600 | -0.822284 | 1.353234 | -0.607644 | 0.5456 |
| | 0.700 | -0.275395 | 0.238818 | -1.153157 | 0.2531 |
| | 0.800 | -0.225507 | 0.193525 | -1.165260 | 0.2482 |
| | 0.900 | -0.226037 | 0.161963 | -1.395609 | 0.1677 |
| C | 0.100 | 25.83737 | 12.99342 | 1.988497 | 0.0510 |
| | 0.200 | 37.57910 | 13.79903 | 2.723315 | 0.0083 |
| | 0.300 | 33.49217 | 17.73919 | 1.888033 | 0.0636 |
| | 0.400 | 25.00692 | 21.07663 | 1.186476 | 0.2398 |
| | 0.500 | 19.72386 | 20.59554 | 0.957676 | 0.3418 |
| | 0.600 | 13.58409 | 22.17823 | 0.612497 | 0.5424 |
| | 0.700 | 9.110690 | 18.38658 | 0.495508 | 0.6219 |
| | 0.800 | 12.25280 | 16.71319 | 0.733122 | 0.4662 |

10.31292

13.84515

0.744876

0.900

Table 9. Quantile regression analysis results

0.4591

Ramsey's RESET test was applied to determine whether there is a specification error in the model, and the test results are presented in Table 10.

Table 10. Results of RESET test

| | Value | Probablity |
|---------------------|----------|------------|
| QLR L Statistic | 0,838371 | 0,3599 |
| QLR Lamda Statistic | 0,834233 | 0,3611 |

The following table presents the Quandt Likelihood Ratio (QLR) test statistics: QLR L Statistic and QLR Lambda Statistic, and their associated probability values. The QLR test is often used in detecting structural breaks in regression models by testing whether the relationship between the independent and dependent variables changes at different points in the sample. The QLR L Statistic results in 0.838, and the QLR Lambda Statistic results in 0.834; their respective p-values are 0.3599 and 0.3611, which are much higher than conventional threshold levels of, say, 0.05 or 0.10. These results provide no statistical evidence of a structural break in the model at the tested breakpoints. Said differently, the regression coefficients are stable across the sample under consideration, which implies that the relationships among the variables are relatively invariant to the choice of sub-period or segment.

The absence of a structural break in this sample would, therefore, imply that an estimated model could be stable over time or across different groups included in the dataset. However, these results need to be interpreted together with other diagnostic tests and robustness checks. If, based on prior theoretical expectations or visual inspections—like plots of residuals or rolling regressions—one suspects structural instability, then one might want to consider alternative break tests—for example, Bai-Perron multiple breakpoint test—or interaction terms to further investigate. Taken together, these results provide no evidence for statistically significant structural changes in the model, thereby possibly increasing the reliability of the estimated relationships over the dataset.

Table1presents the coefficient of determination values for the models established for each quantile.

Table 11. Coefficients of determination by Cantiles

| Cantiles | Pseudo R ² |
|----------|-----------------------|
| 0,10 | 0,234769 |
| 0,20 | 0,240265 |

| 0,30 | 0,185207 |
|------|----------|
| 0,40 | 0,146898 |
| 0,50 | 0,119414 |
| 0,60 | 0,094247 |
| 0,70 | 0,045201 |
| 0,80 | 0,023197 |
| 0,90 | 0,029996 |

Table 11 lists the values for Pseudo R² at quantiles to understand the model in terms of explanatory power along different parts of the distribution. The findings point out that for all estimated specifications and, especially so, the lower ones—that is, q = 0.10-0.30—model explanatory power with a pseudo-R² in the 0.18 to 0.24 range gets stronger. This would indicate that the independent variables in the model have relatively greater explanatory power to explain variation in the dependent variable at the lower end of the distribution. As one moves towards the median quantile (0.50) and further towards higher quantiles (0.60–0.90), there is a gradual decline in the values of Pseudo R², reaching the lowest levels at 0.80 (0.023) and 0.90 (0.029). It would then suggest that at higher quantiles, the model has less ability to explain the variation in the dependent variable. It may be a sign that relationships between independent and dependent variables are not uniform along the distribution, with stronger associations in lower quantiles and weaker at higher levels.

This would simply mean the determinants analysed in the study have a stronger influence on the lower end of the distribution of the dependent variable, which might further imply that economic or structural factors have more influence on the lower-performing or underrepresented groups. On the other hand, low values of Pseudo R² for higher quantiles could be indicative of unobserved heterogeneity, meaning inclusion of other explanatory variables, nonlinear effects, or interaction terms could make the model much more robust at capturing variations in higher quantiles.

Table 12. Details of countries

| Country | Women's Labour Force Participation Rate | Quantiles | Corruption | Inflation |
|--------------|--|-----------|------------|-----------|
| India | 28.26 | 1.00 | 40.00 | 6.70 |
| Saudi Arabia | 34.46 | 1.00 | 51.00 | 2.47 |
| Türkiye | 35.11 | 1.00 | 36.00 | 72.31 |
| Italy | 40.69 | 1.00 | 56.00 | 8.20 |
| Bosnia and | 41.11 | 1.00 | 34.00 | 14.02 |

| Herzegovina | | | | |
|-------------------------|-------|------|-------|-------|
| Guatemala | 41.53 | 1.00 | 24.00 | 6.89 |
| Mauritius | 42.21 | 2.00 | 50.00 | 10.77 |
| North Macedonia | 42.22 | 2.00 | 40.00 | 14.20 |
| Romania | 42.29 | 2.00 | 46.00 | 13.80 |
| Greece | 44.67 | 2.00 | 52.00 | 9.65 |
| Mexico | 45.03 | 2.00 | 31.00 | 7.90 |
| El Salvador | 46.38 | 2.00 | 33.00 | 7.20 |
| Croatia | 46.85 | 2.00 | 50.00 | 10.78 |
| Costa Rica | 50.08 | 3.00 | 54.00 | 8.27 |
| Poland | 50.09 | 3.00 | 55.00 | 14.43 |
| Chile | 50.13 | 3.00 | 67.00 | 11.64 |
| Bulgaria | 50.57 | 3.00 | 43.00 | 15.33 |
| Belgium | 50.80 | 3.00 | 73.00 | 9.60 |
| South Africa | 50.82 | 3.00 | 43.00 | 7.04 |
| Serbia | 50.97 | 3.00 | 36.00 | 11.98 |
| Colombia | 51.11 | 4.00 | 39.00 | 10.18 |
| Czechia | 52.16 | 4.00 | 56.00 | 15.10 |
| France | 52.52 | 4.00 | 72.00 | 5.22 |
| Hong Kong SAR, China | 52.91 | 4.00 | 76.00 | 1.88 |
| Spain | 53.19 | 4.00 | 60.00 | 8.39 |
| Ecuador | 53.57 | 4.00 | 36.00 | 3.47 |
| Hungary | 53.68 | 4.00 | 42.00 | 14.61 |
| Brazil | 53.75 | 5.00 | 38.00 | 9.28 |
| Japan | 54.20 | 5.00 | 73.00 | 2.50 |
| Slovenia | 54.25 | 5.00 | 56.00 | 8.83 |
| Portugal | 54.70 | 5.00 | 62.00 | 7.83 |
| Rwanda | 54.76 | 5.00 | 51.00 | 17.69 |
| Korea, Rep. | 55.04 | 5.00 | 63.00 | 5.09 |
| Latvia | 55.61 | 5.00 | 59.00 | 17.31 |
| Uruguay | 55.65 | 6.00 | 74.00 | 9.10 |
| Germany | 56.13 | 6.00 | 79.00 | 6.87 |
| Malta Slovak | 56.13 | 6.00 | 51.00 | 6.15 |
| Republic | 56.18 | 6.00 | 53.00 | 12.77 |
| Austria | 56.55 | 6.00 | 71.00 | 8.55 |
| United States | 56.79 | 6.00 | 69.00 | 8.00 |
| Luxembourg | 57.99 | 7.00 | 77.00 | 6.34 |

| Finland | 58.17 | 7.00 | 87.00 | 7.12 |
|--|-------|-------|-------|-------|
| Lithuania | 58.84 | 7.00 | 62.00 | 19.71 |
| Paraguay | 59.06 | 7.00 | 28.00 | 9.77 |
| Ireland | 59.40 | 7.00 | 77.00 | 7.81 |
| Denmark The Greek Cypriot Administration of Southern | 59.42 | 7.00 | 90.00 | 7.70 |
| Cyprus | 59.63 | 7.00 | 52.00 | 8.40 |
| Thailand | 59.86 | 8.00 | 36.00 | 6.08 |
| Botswana | 60.06 | 8.00 | 60.00 | 11.67 |
| Estonia | 60.63 | 8.00 | 74.00 | 19.40 |
| Israel | 61.15 | 8.00 | 63.00 | 4.39 |
| Canada | 61.48 | 8.00 | 74.00 | 6.80 |
| Switzerland | 61.49 | 8.00 | 82.00 | 2.84 |
| Qatar | 61.73 | 8.00 | 58.00 | 5.00 |
| Azerbaijan | 61.90 | 9.00 | 23.00 | 13.85 |
| Australia | 62.31 | 9.00 | 75.00 | 6.59 |
| Norway | 62.53 | 9.00 | 84.00 | 5.76 |
| Singapore | 63.37 | 9.00 | 83.00 | 6.12 |
| Netherlands | 63.58 | 9.00 | 80.00 | 10.00 |
| Sweden | 63.68 | 9.00 | 83.00 | 8.37 |
| Belarus | 65.79 | 9.00 | 39.00 | 15.21 |
| Peru | 66.73 | 10.00 | 36.00 | 8.33 |
| New Zealand | 66.90 | 10.00 | 87.00 | 7.17 |
| Viet Nam | 68.54 | 10.00 | 42.00 | 3.16 |
| Iceland | 70.70 | 10.00 | 74.00 | 8.31 |
| Moldova | 71.50 | 10.00 | 39.00 | 28.74 |
| Bolivia | 71.84 | 10.00 | 31.00 | 1.75 |

Among the 67 countries nations in the investigation, the beat 10 nations in corruption are Azerbaijan (23%), Guatemala (24%), Paraguay (28%), Mexico (31%), Bolivia (31%), El Salvador (33%), Bosnia and Herzegovina (34%), Türkiye (36%), Thailand (36%) and Serbia (36%). The top 10 countries in inflation are Türkiye (72.31%), Moldova (28.74%), Lithuania (19.71%), Estonia (19.40%), Rwanda (17.69%), Latvia (17.31%), Bulgaria (15.33%), Belarus (15.21%), Czechia (15.10%) and Hungary (14.61%).

Conclusion

This paper empirically investigates the impact of inflation and corruption on women's labor force participation, hence serving critical insights into the macroeconomic determinants of gender dynamics in labor markets. Understanding how these economic variables interplay with FLFP will provide the necessary insights to design effective policy interventions toward gender equality and inclusive economic growth. By identifying the impacts of inflation and corruption, this study tries to provide a basis for evidence-based policymaking where economic structures create more opportunities for greater female participation in the labor market. In doing so, the present study started with Gross Domestic Product (GDP) and Gross Capital Formation (GCF) as one major indicator of investment activity. However, since these variables were found to be statistically insignificant at all quantile levels, the final model was respecified, focusing on inflation and corruption only. This dataset contains data for 67 countries in relation to FLFP, CPI, inflation, GDP, and GCF obtained from the World Bank and Transparency International. Specifically, to account for these heterogeneous effects, the analysis will follow the Quantile Regression approach and hence provide a detailed insight compared to traditional mean-based regression techniques. Results showed a negative impact of inflation on FLFP, meaning increased participation of women in the workforce drops with the rise in inflationary pressures. This finding deviates from previous empirical studies (Niemi & Lloyd 1981; Mujahid 2013; Wang 2019; Özkök & Polat 2020; Koyuncu & Oksak 2021; Sertçelik 2021; Doğaner 2022; İnce Yenilmez 2024), which presented the result that inflationary pressures might push women into the labor force as real wages decrease. The difference observed in this study is likely to be due to increased economic uncertainty under inflation. Inflation postpones investment and production and consequently diminishes the demand for labor. This insight adds a new perspective to the existing literature by underlining the adverse labor market effects of inflation on female employment, particularly in developing economies.

The research also ascertains that lower corruption is associated positively with FLFP, suggesting that reduced levels of corruption lead to more females engaging in economic activities. This is explained by the creation of a more transparent, fairer, and inclusive working environment that eases the entry of women into the formal labor force. While there are some studies by Samimi et al. (2013), Jin (2016), and

Afzal & Asif (2021) that investigated the general impacts of corruption on the economy, the number of studies directly investigating its impacts on FLFP is relatively small.

This paper closes this gap by empirically establishing that the reduction in corruption is a major determinant of gender-inclusive labor markets. The test for reverse causality indicated that FLFP influences corruption after the 0.5 quantile, meaning that greater participation by women in the work force would, in the long term, be associated with lower levels of corruption. Especially for countries with a low FLFP rate, this translates into corruption—a stronger predictor of women's participation in the labor force, compared to inflation. Especially for the lowestquantile—10%—a 1% reduction in corruption is associated with a higher increase in FLFP by approximately 0.37%, strongly indicating that there is a highly increased importance in institutional quality related to settings characterised by persistently depressed labor market participation rates among women.

These are findings with deep policy implications. The best policies for increasing FLFP will be those encouraging structural reforms, increasing transparency, fighting corruption, and promoting economic stability. Another important aspect is social support, educational initiatives, and focused employment policies that will help often the impact of economic instability on the participation of women in the workforce. There is, therefore, an urgent need to incorporate gendersensitive economic reforms into national development agendas by policymakers, based on the empirical evidence provided in Cigdem et al. (2022) concerning the positive relationship between FLFP and economic growth.

Future research should further explore the causal mechanisms that link corruption to inflation and to FLFP in different economic contexts. Since the issues of gender equality, labor market dynamics, and macroeconomic stability are tightly linked, consistent empirical investigation of these relationships will be important in fostering social progress, economic resilience, and inclusive development.

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