ECONOMIC AND SOCIAL DIMENSIONS OF GENDER EQUALITY PERCEPTIONS: A CASE STUDY OF PAKISTAN

Samina Akhtar *, Maryam Ishaq

Department of Economics, The University of Lahore, Lahore, Pakistan

ARTICLE INFO	ABSTRACT
	Unequal distribution of responsibilities within households, limited education for females, mobility constraints, and gender-segregated job choices hinder women's employment prospects. We explore the biases towards women's empowerment in Pakistan across five crucial dimensions: Political, Economic Business, Employment, and educational empowerment, spanning two time periods: T1 and T2. Note that T1 (time period 1) refers to long run data of the decade from 2010 to 2022 analysis and T2 (time period 2) for examining recent trends from 2018 to 2022 as short-term trends. The methodology employed is Probit modeling. We uncover transformation in societal behaviors, revealing that female respondents challenge traditional gender stereotypes using two survey data sets. The interesting findings lie in the T2 analysis, where significant shifts in perceptions underscore the urgency of tailored policy interventions emphasizing education, economic empowerment, and equality in the workplace. This study's novelty lies in its in-depth examination of evolving gender dynamics within the unique context of Pakistan, offering valuable insights for policymakers and researchers to contribute significantly to the discourse on women's empowerment.

INTRODUCTION

In the context of Pakistan, the importance of addressing women's empowerment is as important as worrying about the performance of any economic indicators because it is the foundation on which economic development rests (Bushra and Wajiha, 2015; Carli, 2020; Chaudhry et al., 2012; Cheston and Kuhn, 2002). Girls' education faces significant challenges in Pakistan, as many studies have shown that investment in girls' education is low due to the belief that boys will become household heads and primary breadwinners (Jamal, 2014). Cultural norms also play a role, with some people fearing that education might disrupt traditional gender roles for women as daughters, wives, and mothers (Nelson, 2000). Religious leaders in rural areas sometimes misinterpret Islamic teachings to discourage girls' education, contributing to gender disparities in education. Issues such as limited access to educational facilities and concerns about women's safety, particularly in rural regions, further compound the problem. Poverty exacerbates the situation, leading to higher dropout rates among girls, especially in rural areas (Malhotra et al., 2002).

On the global stage, the latest Laureate in Economic Sciences 2023, Claudia Goldin, provides valuable insights into women's earnings and labor market participation across centuries. Goldin's extensive research reveals the causes of gender disparities in the workforce and uncovers the sources of the remaining gender gap. Goldin's work shows that women are significantly underrepresented in the global labor market and when they are employed, they typically earn less than their male counterparts. She meticulously examined over two centuries of data from the United States, unveiling the intricate dynamics of how and why gender differences in earnings and employment rates have evolved over time.

Gender inequality in employment is another pressing issue in Pakistan. Societal norms, gender stereotypes, and cultural practices restrict women's access to economic opportunities. Unequal distribution of responsibilities within households, limited education for females, mobility constraints, and gender-segregated job choices further hinder women's employment prospects (Iversen et al., 2010). Discrimination is prevalent throughout the economy, with men predominantly holding leadership positions, women receiving lower wages compared to men, and facing workplace harassment and unfavourable work environments. Entrepreneurship among women is limited due to barriers such as lack of capital, absence of role models, gender bias in business, and cultural customs (Esping-Andersen, 2002).

Pakistan grapples with deeply ingrained gender-biased social norms and cultural practices that affect various aspects of life. These norms contribute to gender disparities, from unequal access to resources like food, education, and healthcare to early and forced marriages, denial of inheritance rights, and mobility restrictions. Male children are often celebrated, while female children are viewed as burdens (Jayachandran, 2021). Household chores are primarily assigned to females, with no expectation of rewards. Decision-making power is concentrated in male figures within families or communities, perpetuating patriarchal systems under the guise of Islamic teachings. Gender-based violence, including verbal, physical, and sexual abuse, remains a pervasive issue, with limited legal action taken against perpetrators. Harmful practices such as honor killings, bride prices, forced marriages, and marriage with the Quran continue to persist (Chattier, 2013). Additionally, women's participation in politics is

constrained, contributing to gender imbalances in political leadership.

In this complex environment of existing gender inequalities in Pakistan, this study addresses five important dimensions of women's empowerment, which are crucial for Pakistan's progress toward gender equality and economic development. The unique challenges and deeply rooted societal norms (Jayachandran, 2021) necessitate a comprehensive and time-specific approach to empower women across these dimensions, ultimately contributing to the country's social and economic inclusive growth (Aslam, 2020; Aslam and Farooq, 2019; Aslam et al., 2021; Aslam and Shabbir, 2019; Aslam and Zulfiqar, 2016; Bacchetta et al., 2012; Ghouse et al., 2022a, 2022b). Considering this, the following are the precise objectives of this study;

1. To assess the determinants of perceptions regarding women's leadership roles in politics within the context of Pakistan by comparing long run (T_1) and short run (T_2) time periods.
2. To analyze the factors influencing perceptions of women's involvement in the business sector in Pakistan by comparing long run (T_1) and short run (T_2) time periods.
3. To investigate attitudes towards gender-based job allocation and the underlying determinants in the Pakistani context by comparing long run (T_1) and short run (T_2) time periods.
4. To examine determinants of perceptions regarding women's education and its importance in Pakistan by comparing long run (T_1) and short run (T_2) time periods.
5. To explore the factors influencing women's economic empowerment and related perceptions in Pakistan by comparing long run (T_1) and short run (T_2) time periods.
6. To suggest comprehensive policies on women's empowerment in Pakistan.

The novelty of this study lies in its comprehensive analysis of the 5 dimensions of women empowerment within the specific context of Pakistan. By employing a dual approach long run (T_1 comprising of wave 6 and wave 7 from world value survey) and short run (T_2 comprising of recent wave 7 from world value survey) time periods. We offer an in-depth exploration of evolving trends and patterns but also capture recent developments on these five dimensions in this study. This holistic examination of women's empowerment across different domains in Pakistan provides a unique and multifaceted understanding of the factors at play, contributing valuable insights for both policymakers to enhance women empowerment.

THEORETICAL AND CONCEPTUAL FRAMEWORK

The economic and social dimensions of gender equality perceptions are deeply intertwined with various theoretical frameworks. Social Role Theory posits that societal expectations and gender roles significantly shape gender perceptions. It explores how traditional roles influence the belief that men make better political leaders excel in business, or should have more job opportunities, as measured by the dependent variables in this chapter, reflecting gender perceptions regarding political leadership and business executives. Whereas Norms and Culture further highlight the cultural influences on gender equality perceptions, shedding light on how cultural norms impact beliefs about women's roles in leadership, business, job allocation and education. These theories together emphasize the pivotal role of culture and tradition in shaping gender perceptions. At the same time, the Intersectionality Theory acknowledges that gender equality perceptions do not exist in isolation; rather, they intersect with factors like race, ethnicity, and socioeconomic status (Dy et al.,

2017; Fulcher et al., 2023; Samuels and Ross-Sheriff, 2008; Warner et al., 2018). This theory is particularly relevant when examining attitudes toward gender-based job allocation and women's education, highlighting those multiple dimensions of identity influence gender perceptions. Lastly, Institutional Theory underscores how formal and informal institutions influence gender perceptions (Chen et al., 2007; Hacker, 1981; Smith, 2012; Suryahadi et al., 2023). These institutions play a vital role in shaping attitudes toward gender-based job allocation and women's leadership, revealing that legal and organizational practices affect gender perceptions in these domains. In essence, these theories collectively provide a multifaceted understanding of the determinants of gender perceptions in the context of economic and social dimensions, shedding light on how gender perceptions drive gender equality in society.
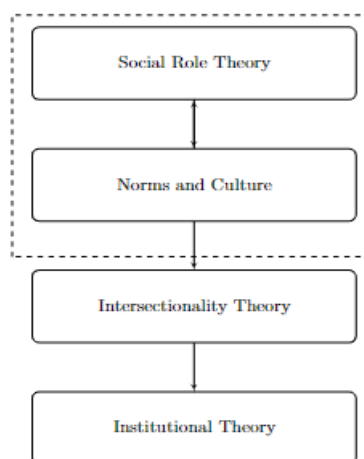

Figure 1. Theoretical linkages.

Figure 1 illustrates a concept map with four central theories concerning gender equality perceptions: Social Role Theory, Norms and Culture, Intersectionality Theory, and Institutional Theory. Social Role Theory, positioned at the top, suggests that societal expectations and gender roles shape gender perceptions, while Norms and Culture, just below, explore how cultural norms influence beliefs about gender roles. These two theories are linked to show their interdependence. Norms and Culture are also connected to Intersectionality Theory, emphasizing the impact of cultural norms on the intersection of gender perceptions with factors like race, ethnicity, and socioeconomic status. Furthermore, Intersectionality Theory connects to Institutional Theory, signifying that multiple identity dimensions play a role in shaping gender perceptions, which are also influenced by formal and informal institutions. We elucidate the intricate relationships between four pivotal theories concerning perceptions of gender equality: Social Role Theory (SRT), Norms and Culture (NC), Intersectionality Theory (IT), and Institutional Theory (InT). Social Role Theory (SRT), situated at the apex, posits that societal expectations and gender roles (SR) are key determinants shaping gender perceptions (GP). This relationship is expressed as follows:

$$GP = f(SR) \tag{1}$$

We also encounter norms and culture (NC). This theory explores how cultural norms (CN) exert influence over beliefs about gender roles (BR). Mathematically, this relationship can be formulated as:

$$BR = g(CN) \tag{2}$$

A significant aspect of these theories is the interdependence between SRT and NC. This interrelation is vital to our understanding of how societal expectations and cultural norms interact. It can be expressed as a dynamic equation:

$\partial SRT/\partial t = -k_1 (SRT - SRT\_eq) + k_2 (CN - CN\_eq)$ (3)

Here, $\partial SRT/\partial t$ represents the rate of change of SRT with respect to time, k_1 and k_2 are rate constants, and SRT_eq and CN_eq are equilibrium values. Norms and Culture (NC) is further intricately linked to Intersectionality Theory (IT). This connection underscores the influence of cultural norms (CN) on the intersection of gender perceptions (GP) with multifaceted factors, such as race €, ethnicity €, and socioeconomic status (SES). We can mathematically represent this as a system of equations:

GP = h (CN, R, E, SES) (4)

Intersectionality Theory (IT) is profoundly connected to Institutional Theory (InT), signifying that various identity dimensions (R, E, SES) play a substantial role in shaping gender perceptions (GP). Additionally, these gender perceptions are influenced by both formal institutions (FI) and informal institutions (II). We can express this relationship as a matrix equation:

GP = M · [R, E, SES, FI, II] (5)

Where M is a matrix representing the complex interactions between identity dimensions and institutional practices. The above conveys the intricate relationships between these theories, highlighting the dynamic nature of the interplay between societal expectations (SR), cultural norms (CN), identity dimensions (R, E, SES), and institutional practices (FI, II). These relationships serve as the foundation for our empirical model, which endeavours to comprehensively explore five dimensions of women's empowerment through advanced mathematical modeling and analysis.

This study focuses on identifying and understanding the biases and behavioral patterns that impede women's empowerment in Pakistan across five critical dimensions. The study examines the *Political Empowerment Dimension*, analyzing perceptions of women's leadership roles in politics while drawing insights from Gender Role Theory and Intersectionality Theory to comprehend the multifaceted factors at play. In the *Business Empowerment Dimension*, it explores attitudes towards women's involvement in business, utilizing the Stereotype Threat Theory to explain potential barriers. The *Employment Empowerment Dimension* investigates gender-based job allocation attitudes and employs the Social Identity Theory and Discrimination Theory to unveil underlying dynamics. In the *Educational Empowerment Dimension*, the study assesses perspectives on women's access to education, guided by the Human Capital Theory and Gender Inequality Theory, while the Economic Empowerment Dimension delves into perceptions about women's earnings and financial independence, drawing from the Economic Empowerment Theory and Income Inequality Theory. A comprehensive analysis of the factors influencing perceptions of women in political leadership roles, considering individual characteristics and societal influences, is shown in the equation below:

P(LeadershipPerception=1) =Φ (β0+β1Gender/ Sex: Female+β2 Gender/Sex: Male+β3Income (Lowincome)+β4 Age+β5 Married+β6Education(upperEducation)+β7 SocialClass (LowerClass)+β8 WorkingMother+εi) (6)

In this equation, *P(Yi=1)* represents the probability that the dependent variable. *Yi* equals 1 (agreeing with the statement that "Men make better political leaders than women do"). Φ (·) denotes the cumulative distribution function of the standard normal distribution. *β*0 through *β*8 are the coefficients to be estimated. The inclusion of gender as an independent variable is pivotal in understanding how societal perceptions of leadership roles are influenced by gender biases. By categorizing respondents as either female or male, we can examine whether there is a correlation between the respondents' gender and their perception of men's and women's suitability as political leaders. Gender Role Theory suggests that traditional societal expectations often shape these perceptions, making it essential to explore how gender influences these beliefs. The income variable, specifically the distinction between low income and high/medium income, provides insights into the economic aspect of leadership perception. Lower-income individuals might have different perspectives on leadership, which could be influenced by economic concerns or experiences. Investigating this variable helps in assessing whether economic factors impact perceptions of leadership suitability.

Age, as an independent variable, allows us to explore how generational differences may affect perceptions of leadership. Younger and older individuals may have varying views on this topic due to differences in exposure to changing societal norms and values over time. By including age, we can assess whether there is a correlation between age groups and perceptions of political leadership. Marital status as an independent variable is relevant because it may reflect varying life experiences and perspectives. This variable, categorized as 'married' or 'otherwise,' enables us to investigate whether individuals' marital status affects their perception of leadership roles. For instance, married individuals might have different views on leadership compared to those who are not married, which can be indicative of societal expectations related to gender roles. Educational level, categorized as 'Upper Education' or 'Middle and Lower Education,' is crucial in understanding how one's level of education correlates with their perception of political leadership. Higher education levels may be associated with more progressive views regarding gender and leadership roles, aligning with the notion that education empowers individuals to challenge traditional norms. The subjective social class variable, recoded into 'Lower Class' or 'High/Medium Class,' allows us to examine how individuals' perceptions of social status related to their views on leadership. It helps us understand whether individuals from different social classes hold distinct perspectives on the suitability of men and women in political leadership roles. The variable 'Working Mother' explores whether respondents' perceptions of political leadership are influenced by their attitudes toward women balancing work and motherhood. By categorizing responses as 'Disagree & Strongly Disagree' or 'Otherwise,' we can evaluate whether those who disagree with women working while raising preschool children have different views on leadership roles, reflecting underlying societal norms and biases. The other dimension's also shows behaviors and biases towards women's empowerment, which can be represented in the equations below:

P(BusinessPerception=1) =Φ (β0+β1Gender/Sex: Female+β2 Gender/Sex: Male+β3Income (Lowincome)+β4Age+β5 Married+β6Education(upperEducation)+β7SocialClass (LowerClass)+β8WorkingMother+εi) (7)

P(JobAllocationAttitude=1) =Φ (β0+β1Education (Y022C−Genderequality: education) +β2Gender/Sex: Female+β3 Gender/Sex: Male+β4Income (Lowincome)+β5Age+β6Married+β7 SocialClass (LowerClass)+β8WorkingMother+εi) (8)

P(EducationPerception=1) =Φ (β0+β1Gender/Sex: Female+β2 Gender/Sex: Male+β3Income (Lowincome)+β4Age+β5 Married+β6Education(upperEducation)+β7SocialClass (LowerClass)+β8WorkingMother+εi) (9)

P(EconomicEmpowerment=1) =Φ (β0+β1Gender/Sex: Female+β2Gender/Sex: Male+β3Income (Lowincome)+β4 Age+β5Married+β6Education(upperEducation)+β7SocialClass (LowerClass)+β8WorkingMother+εi) (10)

The five distinct dimensions of women's empowerment are shown in equations 1 to 5, each accompanied by a set of associated questions designed to capture the nuanced perspectives of respondents. The Political Empowerment Dimension, encapsulated in the dependent variable Leadership Perception (see equation 1), seeks to gauge perceptions regarding women's suitability for political leadership roles by posing the question, "Do you agree or disagree with the statement, 'Men make better political leaders than women do'?" Moving to the Business Empowerment Dimension, the dependent variable Business Perception (see equation 2) is assessed by asking respondents, "Do you agree or disagree with the statement, 'Men make better business executives than women do'?" In the Employment Empowerment Dimension, the question surrounding Job Allocation Attitude (see equation 3) inquires, "In a situation where jobs are scarce, do you think men should have more right to a job than women, or do you think both should have an equal right to jobs?" Shifting focus to the Educational Empowerment Dimension, the Education Perception (see equation 4) is evaluated through the question, "Do you agree or disagree with the statement, 'University education is more important for a boy than a girl'?" Lastly, the Economic Empowerment Dimension (see equation 5) delves into attitudes regarding women's economic autonomy by posing the question, "Do you have a problem if women have more income than their husbands?"

We maintain the same set of dependent variables across all five dimensions and their respective equations stem from several logical considerations. Firstly, it allows for consistency and comparability in the assessment of women's empowerment across different domains. By utilizing a common set of dependent variables, we were able to draw meaningful comparisons and identify overarching trends in how perceptions and attitudes toward women's empowerment vary or remain consistent across various facets of society, including politics, business, employment, education, and economic autonomy. Secondly, this approach ensures that the study maintains a clear focus on the core dimensions of women's empowerment. By keeping the dependent variables constant, the study ensures that any variations in the determinants (independent variables) can be directly attributed to the specific dimension under investigation. This clarity in measurement enhances the precision of the study's findings, making it clearer to isolate and analyze the factors that influence women's empowerment within each context. Furthermore, the use of consistent dependent variables aligns with the overarching goal of promoting gender equality and women's empowerment in Pakistan. It allows for a holistic assessment of the challenges and biases that women face across various aspects of their lives, from political participation to economic opportunities. By examining these dimensions using a common set of dependent variables, the study can contribute valuable insights that may inform policies and initiatives aimed at advancing gender equality and promoting women's empowerment in a comprehensive manner.

ECONOMETRIC MODELING
Political Empowerment Dimension: Investigating Determinants of Perceptions of Women in Leadership
The probit model is used in this study. The probit model enables the effective analysis of binary dependent variables, which are prevalent in the context of measuring perceptions and attitudes across various dimensions of women's empowerment (Chib and Greenberg, 1998). Furthermore, these models provide interpretable probabilities, allowing for a nuanced understanding of the likelihood that individuals agree or disagree with statements related to women's empowerment. Probit models also offer robustness against endogeneity concerns and enable assessments of model fit and goodness of fit, ensuring the accuracy and quality of the analyses (Freedman and Sekhon, 2010).
The data underlying the estimations presented in the study are publicly available for download from the World Values Survey webpage: https://www.worldvaluessurvey.org/WVSDocumentationWV7.jsp. Table 1 explains the Measurement details for final model.

Business Empowerment Dimension: Investigating Determinants of Perceptions on women in business
The next section shows the results of a probit regression analysis, specifically examining the determinants of perceptions regarding women in business based on the variables shown in Table 2. The analysis spans two different time frames: a "long run" analysis covering 2010 to 2022 and a "recent" analysis spanning from 2017 to 2022. The dependent variable, "Business Perception," measures the extent to which respondents agree or disagree with the statement "Men make better business executives than women do." Here's an interpretation of the results and an exploration of the differences between the two-time frames.
In the "long run" analysis (2010-2022), several key findings emerge. Female respondents are significantly more likely to disagree with the statement, indicating that they believe women can be equally competent in business. Those in the lower social class don't exhibit a strong inclination one way or the other. Being married significantly decreases the probability of disagreeing with the statement. Low-income respondents are also less likely to disagree, while those with middle education levels show no strong inclination either way. Working mothers are notably more inclined to disagree, indicating a belief in women's potential in business.

Table 1. Measurement details for final model of leadership perception.

Independent Variables	Reference Question number	Reference Question Statement
Gender/Sex: Female	X001	Sex of respondent =1 if Sex=female
Gender/Sex: Male		Sex of respondent =1 if Sex=male
Income (Low income)	X047R_WV	Subjective income level (recoded in 2 groups: high income & medium income=1, low income=1)
Age	X003R	Respondent's Age (18-85 years)
Married	X007	Marital Status (1=yes, 0=otherwise)
Education (upper Education)	X025R	Educational level respondent: recoded (Upper Education=1 Middle and Lower Education=0)
Social Class (Lower Class)	X045	Subjective social (recoded in 3 groups: high income & medium income=0, low income=1)
Working Mother	D061	Pre-school child suffers with working mother (Disagree & strongly disagree=1, 0=otherwise)
Dependent Variable: Leadership Perception	D059	Men make better political leaders than women do. (Disagree & strongly disagree=1, 0=otherwise)

Table 2. Measurement details for final model of business perception.

Independent Variables	Reference Question number	Reference Question Statement
Gender/Sex: Female	X001	Sex of respondent =1 if Sex=female
Gender/Sex: Male		Sex of respondent =1 if Sex=male
Income (Low income)	X047R_WV	Subjective income level (recoded in 2 groups: *high income & medium income=1, low income=1*)
Age	X003R	Respondent's Age (18-85 years)
Married	X007	Marital Status (1=yes, 0=otherwise)
Education (upper Education)	X025R	Educational level respondent: recoded (*Upper Education=1 Middle and Lower Education=0*)
Social Class (Lower Class)	X045	Subjective social (recoded in 3 groups: *high income & medium income=0, low income=1*)
Working Mother	D061	Pre-school child suffers with working mother (Disagree & strongly disagree=1, 0=otherwise)
Dependent Variable: Business Perception	D078	Men make better business executives than women do (Disagree & strongly disagree=1, 0=otherwise)

Educational Empowerment Dimension: Investigating determinants of Perceptions on women's Education
The next section presents the results of a probit regression analysis that explores perceptions regarding the importance of university education for boys and girls. The analysis is divided into two distinct time frames: a "long run" analysis covering the period from 2010 to 2022 and a "recent" analysis spanning from 2017 to 2022. The dependent variable, "Education Perception," measures respondents' agreement or disagreement with the statement "University is more important for a boy than a girl." The details of the variables are shown in Table 3.

Employment Empowerment Dimension: Investigating determinants of attitudes towards Gender-Based Job Allocation
The next section presents the results of a probit regression analysis focusing on the determinants of attitudes regarding job allocation between men and women. The analysis spans two distinct time frames: a "long run" analysis covering the period from 2010 to 2022 and a "recent" analysis covering the years from 2017 to 2022. The dependent variable, "Job Allocation Attitude," measures respondents' agreement or disagreement with the statement "Jobs scarce: Men should have more right to a job than women." The details of the Job Allocation Attitude model variables are shown in Table 4.

Table 3. Measurement details for final model of education perception.

Independent Variables	Reference Question number	Reference Question Statement
Dependent Variable: Education Perception	D060	University is more important for a boy than a girl (Disagree & strongly disagree=1, 0=otherwise)
Gender/Sex: Female	X001	Sex of respondent =1 if Sex=female
Gender/Sex: Male		Sex of respondent =1 if Sex=male
Income (Low income)	X047R_WV	Subjective income level (recoded in 2 groups: *high income & medium income=1, low income=1*)
Age	X003R	Respondent's Age (18-85 years)
Married	X007	Marital Status (1=yes, 0=otherwise)
Education (upper Education)	X025R	Educational level respondent: recoded (*Upper Education=1 Middle and Lower Education=0*)
Social Class (Lower Class)	X045	Subjective social (recoded in 3 groups: *high income & medium income=0, low income=1*)
Working Mother	D061	Pre-school child suffers from working mothers (Disagree & strongly disagree=1, 0=otherwise)

Table 4. Measurement details for final model of job allocation attitude.

Independent Variables	Reference Question number	Reference Question Statement
Dependent Variable: Job Allocation Attitude	C001	Jobs scarce: Men should have more rights to a job than women (1= disagree & neither, 0=agree)
Education	Y022C	Gender equality: education (four categories ranging from 1 to 4; very low, low, high, very high)
Gender/Sex: Female	X001	Sex of respondent =1 if Sex=female
Gender/Sex: Male		Sex of respondent =1 if Sex=male
Income (Low income)	X047R_WV	Subjective income level (recoded in 2 groups: *high income & medium income=1, low income=1*)
Age	X003R	Respondent's Age (18-85 years)
Married	X007	Marital Status (1=yes, 0=otherwise)
Social Class (Lower Class)	X045	Subjective social (recoded in 3 groups: *high income & medium income=0, low income=1*)
Working Mother	D061	Pre-school child suffers with working mother (Disagree & strongly disagree=1, 0=otherwise)

Economic Empowerment Dimension: Investigating Determinants of Women's Economic Empowerment

The next section presents the results of a probit regression analysis aimed at understanding the determinants of women's economic empowerment, specifically their perceptions regarding the potential challenges if women have more income than their husbands. The analysis is divided into two distinct time frames: a "long run" analysis spanning from 2010 to 2022 and a "recent" analysis covering the period from 2017 to 2022. The details of the Economic Empowerment model variables are shown in Table 5.

Table 5. Measurement details for final model of economic empowerment.

Independent Variables	Reference Question number	Reference Question Statement
Dependent Variable: Economic Empowerment	D066_B	Problem if women have more income than husband (1=Neither & disagree, 0=otherwise)
Gender/Sex: Female	X001	Sex of respondent =1 if Sex=female
Gender/Sex: Male		Sex of respondent =1 if Sex=male
Income (Low income)	X047R_WV	Subjective income level (recoded in 2 groups: *high income & medium income=1, low income=1*)
Age	X003R	Respondent's Age (18-85 years)
Married	X007	Marital Status (1=yes, 0=otherwise)
Education (upper Education)	X025R	Educational level respondent: recoded (*Upper Education=1 Middle and Lower Education=0*)
Social Class (Lower Class)	X045	Subjective social (recoded in 3 groups: *high income & medium income=0, low income=1*)
Dependent variable: Working Mother	D061	Pre-school child suffers with working mother (Disagree & strongly disagree=1, 0=otherwise)

RESULTS AND DISCUSSIONS

Two separate models are employed for analysis, each serving a distinct time frame. The first model examines the trend over a decade, spanning from 2010 to 2022 as T_1, allowing for an in-depth exploration of longer-term patterns and changes in the variables of interest. The second model, on the other hand, focuses on capturing more recent developments by considering data from the specific period of wave 7, which spans from 2018 to 2022 as T_2. This time-segmented approach enables an in-depth exploration of how perceptions and determinants have evolved both in the long-term and in the more immediate context, offering a comprehensive understanding of the dynamics at play.

Table 6 shows the Women Empowerment model results. In the "long run" analysis (2010-2022), several noteworthy patterns emerge. Female respondents are more likely to agree that men make better political leaders than women, as indicated by the positive coefficient. Respondents identifying as part of the lower social class are less likely to agree with this statement. Married individuals and those with low income are also less likely to express agreement. On the other hand, respondents with upper education levels exhibit a slight inclination toward agreement. The working mother's status positively influences the likelihood of disagreeing with the statement (Horrell and Krishnan, 2007; Koburtay et al., 2023; Thompson, 2002). It is essential to highlight that these results reflect a decade-long trend, and they showcase some enduring perceptions.

In the "recent" analysis (2018-2022), there are some changes in the significance and sign of the coefficients. Female respondents continue to be more likely to agree that men make better leaders, and this effect is even more pronounced in the "short run." However, the effect of social class on this perception is nearly neutral in this time frame. Marital status, while still negatively related to the agreement, sees a slight increase in its magnitude. Interestingly, the influence of low income remains significant and comparable to the long-run analysis. Respondents with upper education exhibit a stronger inclination toward agreement in the recent period compared to the long-term trend. The most striking change is observed in the working mother variable, which becomes significantly more influential in the "short run," indicating that the presence of a working mother has a stronger impact on disagreeing with the statement during this period.

The differences and similarities in the significance and sign of each variable's effect between the long run and recent analysis may be attributed to evolving societal norms, economic conditions, and shifts in gender roles. The increased significance of the working mother variable in the recent analysis suggests that issues related to gender and leadership have gained prominence in public discourse. Furthermore, the strengthening effect of upper education in the recent period could indicate an increasing awareness of gender equality issues among more educated individuals. These findings underscore the dynamic nature of public perceptions and the need to consider both long-term trends and recent developments when studying societal attitudes toward gender and leadership.

In the "recent" analysis (2017-2022), there are notable differences in the significance and direction of the coefficients. While female respondents still significantly disagree with the statement, the magnitude of their disagreement has decreased. In the "recent" period, the influence of lower social class is somewhat negative, indicating a trend toward a weaker belief in women's business capabilities among this group (Ahmad et al., 2023; Aslam et al., 2021; Aslam and Shabbir, 2019). Marriage, which previously decreased the likelihood of disagreement, now shows no significant effect. Low-income respondents are even more likely to disagree with the statement in the "recent" analysis. Those with middle education levels now show a significant inclination toward disagreement. Working mothers continue to strongly disagree with the statement

Table 6. Determinants of women empowerment (dimension one).

Dependent variable:	(1)	(2)
Political Empowerment	long run (T$_1$)	Short run (T$_2$)
Female	0.304***	0.330***
	(0.0547)	(0.0756)
lower_class	-0.0783	0.00115
	(0.0610)	(0.0798)
Married	-0.142**	-0.146
	(0.0654)	(0.0939)
low_income	-0.232***	-0.223***
	(0.0681)	(0.0854)
upper_education	0.0411	0.0651
	(0.0590)	(0.0782)
working_mother	0.327***	0.656***
	(0.0624)	(0.0898)
Constant	-0.821***	-0.999***
	(0.0669)	(0.0993)
Observations	2,730	1,583

Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1.

Table 7. Determinants of women empowerment (dimension two).

VARIABLES	(1) long run (T$_1$)	(2) Short run (T$_2$)
female	0.516***	0.400***
	(0.0552)	(0.0746)
lower_class	0.0114	-0.0573
	(0.0601)	(0.0770)
married	-0.209***	0.0179
	(0.0652)	(0.0954)
low_income	-0.231***	-0.260***
	(0.0679)	(0.0841)
middle_education	0.00767	-0.0675
	(0.0569)	(0.0772)
working_mother	0.400***	0.398***
	(0.0627)	(0.0918)
Constant	-0.916***	-0.993***
	(0.0768)	(0.106)
Observations	2,730	1,583

Note: Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1.

Table 7 shows the Women Empowerment (Dimension two) model results. These differences in the "long run" and "recent" analysis could be attributed to evolving societal attitudes and changes in gender roles. The decrease in the magnitude of female respondents' disagreement in the "recent" period may reflect shifting perceptions about women's roles in business. The increase in the significance of middle education levels in the "recent" analysis may suggest a growing awareness of gender equality issues among this group. The stronger disagreement among low-income respondents in the "recent" period may be influenced by changing economic conditions and a broader societal emphasis on diversity and inclusion.

In the "long run" analysis, several interesting findings emerge. Female respondents are significantly more likely to disagree with the statement, indicating a belief in gender equality when it comes to education (Perales Jarillo et al., 2019; Reshi et al., 2022; Tabassum et al., 2010). Respondents from the lower social class show a slightly positive coefficient, suggesting a marginal inclination towards agreement. Being married decreases the probability of disagreement, while low-income respondents are more likely to agree with the statement. Respondents with lower education levels exhibit a strong inclination towards agreement, suggesting that individuals with less education tend to view university education as more important for boys. Additionally, working mothers also exhibit a positive effect on disagreement, indicating a belief in equal educational opportunities.

Table 8 shows the Women Empowerment (Dimension three) model results. In the "recent" analysis, there are notable differences in the significance and direction of the coefficients. The significance of the female variable increases significantly, indicating a stronger belief in gender equality in education. The influence of the lower social class becomes negative, suggesting a shift towards a more gender-neutral view on education within this group. Marriage still has a negative effect on disagreement, but its significance decreases. Low-income respondents are less likely to agree with the statement in the "recent" period. Respondents with lower education levels exhibit an even stronger inclination toward agreement in the "recent" analysis. Working mothers have a significantly stronger effect on disagreement, indicating a growing belief in equal educational opportunities for both genders among this group.

These differences between the "long run" and "recent" analyses could be attributed to changing societal attitudes and increased awareness of gender equality (Aslam et al., 2023). The strengthening effect of the female variable in the "recent" period reflects a broader shift towards gender equality in education. The change in the sign of the lower social class variable may indicate a shift in perceptions among individuals in this class. The stronger effect of working mothers in the "recent" analysis suggests a growing emphasis on equal educational opportunities for both genders (Brooks et al., 2012; Canlas, 2016).

In the "long run" analysis, several insights emerge. Respondents from the upper social class exhibit a positive coefficient, indicating a higher likelihood of disagreeing with the statement. Being married also results in a slightly higher probability of disagreement, while low-income respondents significantly disagree with the statement (Dy et al., 2017). Higher education levels have a strong positive effect on disagreement, indicating that individuals with higher education are more likely to support gender equality in job allocation (Aslam et al., 2017). Furthermore, working mothers have a significant positive effect on disagreement, reflecting a belief in equal job opportunities for women. On the other hand, being female, surprisingly, has a negative coefficient, suggesting that women in the "long run" may be less likely to disagree with the statement.

Table 8. Determinants of women empowerment (dimension three).

VARIABLES	(1) long run (T$_1$)	(2) Short run (T$_2$)
female	0.279***	0.463***
	(0.0490)	(0.0664)
lower_class	0.0248	-0.116*
	(0.0531)	(0.0702)
married	-0.121**	0.0685
	(0.0590)	(0.0848)
low_income	-0.113*	0.0442
	(0.0584)	(0.0727)
low_education	0.262***	0.316***
	(0.0819)	(0.102)
working_mother	0.141**	0.432***
	(0.0581)	(0.0851)
Constant	-0.273***	-0.628***
	(0.0626)	(0.0918)
Observations	2,730	1,583

Note: Standard errors in parentheses *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table 9 shows the Women Empowerment (Dimension four) model results. Women Empowerment (Dimension three) In the "recent" analysis, there are notable differences in the significance and direction of coefficients. The influence of being from the upper social class becomes more pronounced, indicating a strengthening belief in gender equality in job allocation. Marriage has a reduced effect on disagreement, and low-income respondents continue to strongly disagree with the statement. Education has an even stronger positive impact on disagreement in the "recent" period, suggesting a more significant shift towards supporting gender equality. Working mothers still exhibit a positive effect on disagreement, but the magnitude of the effect has increased. Surprisingly, in the "recent" analysis, being female has a more negative effect, indicating that women are even less likely to disagree with the statement in this time frame.

These differences between the "long run" and "recent" analyses could be attributed to changing societal attitudes and a growing emphasis on gender equality in recent years. The increased significance of the upper-class variable and the stronger effect of education in the "recent" analysis may reflect a broader societal trend towards supporting gender equality in job allocation (Ghouse et al., 2021). The shift in the sign of the female variable is somewhat unexpected but could be due to evolving perceptions and attitudes among women themselves.

In the "long run" analysis, we can discern several key findings. Female respondents are significantly more likely to disagree with the statement, indicating that they are less concerned about women having higher incomes than their husbands. Those from the lower social class exhibit a negative coefficient, showing a tendency to be more concerned about this situation, albeit modestly. Marital status, represented by "married," has a negligible effect. Low-income respondents are more concerned about women out-earning their husbands, as indicated by the negative coefficient. Respondents with lower education levels are also more inclined to express concerns (Aziz et al., 2021).

Table 9. Determinants of women empowerment (dimension four).

VARIABLES	(1) long run (T$_1$)	(2) Short run (T$_2$)
upper_class	0.114	0.479*
	(0.224)	(0.261)
married	0.105	0.0705
	(0.0980)	(0.136)
low_income	-0.507***	-0.535***
	(0.111)	(0.134)
education	0.510***	0.524***
	(0.111)	(0.139)
working_mother	0.272***	0.314**
	(0.0868)	(0.123)
female	-0.0466	-0.117
	(0.0804)	(0.109)
Constant	-1.840***	-1.753***
	(0.112)	(0.147)
Observations	2,689	1,565

Note: Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1.

Table 10. Determinants of women empowerment (dimension five).

VARIABLES	(1) long run (T$_1$)	(2) Short run (T$_2$)
female	0.340***	0.337***
	(0.0489)	(0.0658)
lower_class	-0.103*	0.0313
	(0.0529)	(0.0693)
married	-0.0267	0.0896
	(0.0591)	(0.0844)
low_income	-0.216***	-0.284***
	(0.0583)	(0.0728)
low_education	-0.155*	-0.0311
	(0.0827)	(0.103)
working_mother	0.233***	0.146*
	(0.0583)	(0.0852)
Constant	-0.188***	-0.458***
	(0.0625)	(0.0905)
Observations	2,730	1,583

Note: Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1.

Table 10 shows the Women Empowerment (Dimension five) model results. Working mothers, on the other hand, have a strong positive effect on disagreeing with the statement, suggesting a belief in women's economic empowerment (Aziz et al., 2021). The constant term is negative, indicating that in the absence of other factors, respondents are generally more inclined to disagree with the statement.

In the "recent" analysis, some variations in the significance and direction of coefficients can be observed. While female respondents still significantly disagree with the statement, there is no substantial change in their perception. The significance of the lower social class variable has increased, implying a growing concern among this group about women having more income. "Married" respondents are now more likely to disagree, suggesting a shift in the perception of marital dynamics. Low-income respondents still express concerns, and the significance of this variable has grown. Notably, the significance of the "low education" variable has decreased, indicating a shift towards lesser concern among those with lower education levels (Aslam and Farooq, 2019; Zulfiqar et al., 2016).

Working mothers remain supportive of women's economic empowerment, but the magnitude of their influence has decreased in the "recent" analysis. The constant term remains negative, indicating the baseline tendency to disagree with the statement in the absence of other variables.

These differences between the "long run" and "recent" analyses may be attributed to changing social norms and evolving perceptions regarding gender and income. The increased significance of the lower social class variable suggests that concerns about women's economic empowerment are growing in this group. The shift in the sign of the "married" variable could reflect changing dynamics within marriages and increased support for women's financial independence.

CONCLUSIONS

This research provides valuable insights into the changing dynamics of gender empowerment and evolving perceptions regarding women across multiple dimensions. In terms of Political Empowerment, the data reveals a growing gender gap, with female respondents increasingly believing that men make better political leaders than women, especially in the recent analysis from 2018 to 2022. Socioeconomic factors like social class, marital status, and income exhibit varying effects over time, reflecting shifting societal norms and gender perceptions. Shifting to Business Empowerment, findings over the past decade (2010-2022) indicate that female respondents are increasingly disagreeing with the idea that men are better business executives than women, with a slight disagreement reduction in the recent analysis from 2017 to 2022. Similar fluctuations are observed in the impact of factors like social class, marital status, and income, highlighting changing dynamics in gender roles within the business context. In the Educational Empowerment Dimension, female respondents reject the notion that university education is more important for boys, particularly in the recent analysis (2017-2022), suggesting a shift toward endorsing gender-neutral education. Socioeconomic variables also display changing effects, emphasizing the importance of promoting gender equality in education. In the Employment Empowerment Dimension, data shows that various factors like social class, marital status, income, and education influence attitudes toward gender-based job allocation over the decade (2010-2022). In the recent analysis (2017-2022), these factors exhibit shifts, possibly reflecting evolving societal attitudes and changing dynamics in gender roles. Finally, the Economic Empowerment Dimension reveals shifting perceptions regarding women's economic empowerment. In the long-term analysis (2010-2022), female respondents are less concerned about women earning more than their husbands. However, in the recent analysis (2017-2022), these variables evolve, suggesting changing societal norms and dynamics concerning gender and income. These findings emphasize the dynamic nature of gender perceptions and attitudes. To promote gender equality, policymakers should recognize these evolving attitudes and adapt strategies accordingly, considering specific demographic groups with distinct perceptions, such as those from lower social classes or with lower education. Continuous educational programs emphasizing gender-neutral education and economic empowerment for women are essential, and the increased significance of the working mother variable in recent analyses underscores the importance of supporting women in the workforce.

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