# Tourism Development, Financial Inclusion and Governance: A Trio for Women Empowerment in Developing Countries

Sadia Mahwish<sup>1</sup>

Artic	le Informati	ion	Abstract
Received: Revised: Accepted: Keywords Tourism Dev Financial Inc Governance Women Empe Developing C	December December December elopment elusion	08, 2024 17, 2024	Women empowerment refers to the ability to make economic, political, cultural and social choices by women as per their own will. Globally women face difficulties in exercising their right to choose their destiny which is even more challenging in developing economies as there are limited opportunities for women. Realizing the gravity of the issue the United Nations has placed women empowerment and gender equality as its 5th goal of the United Nations Sustainable Developing Goals (UN-SDGs). The study postulates the intriguing relationship of tourism development (TD) and financial inclusion (FI), while governance (GOVI) deployed as moderating variable. The study employed panel data of 39 developing economies for the years 2004-2020. Gender inequality index (GII) serves as a measure of women empowerment. The study employs Driscoll and Kraay (DK) standard error technique, as it addresses the issues of cross-sectional dependency, serial correlation and heteroskedasticity. The findings of study revealed that financial inclusion, governance and tourism development has a robust influence on women empowerment. Solid governance practices that are defined by inclusive policies are recommended in study to reduce gender inequalities and promoting the empowerment of women.

## **1. Introduction**

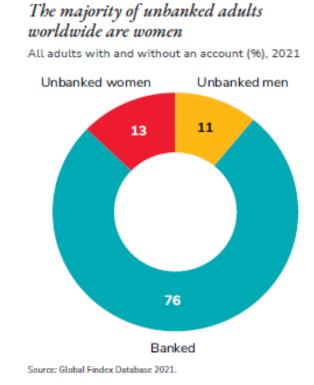
Women have suffered more than any other marginalized group in the world. They have endured a variety of ill-treatment, including assault, poverty, rape, and famine (Hemachandra et al., 2020). Women are subjected to subservience and deprivation on a variety of social, political, cultural, and religious levels across the globe, especially in developing economies (Bayeh, 2016; Dr Tanu Tandon, 2016; Völker & Doneys, 2021). They are treated unfairly and denied participation in the democratic processes of their separate economies. If fifty percent of the public does not engage in the decision-making process, democracy loses all value (Duflo, 2012; Kumar, 2022; Nandedkar, 2019). Acknowledging and addressing women empowerment becomes essential in promoting holistic and sustainable development on a national and international scale. The Beijing Conference (1995) gave rise to a growing movement towards women's empowerment. The Beijing Declaration (1995) highlights women empowerment as a crucial factor in development approach. To achieve equality, growth, and peace, the women must be given equal rights and be able to fully participate in all areas of society (Bushra & Wajiha, 2015; Jade & Ramchurjee, 2014; Khalil, 2018).

<sup>&</sup>lt;sup>1</sup>Lecturer, Department of Economics, The Government Sadiq College Women University, Bahawalpur, Pakistan <u>sadia.mahwish@gscwu.edu.pk</u>

The term women empowerment has been defined by scholars in different ways. Some defined it as the capability to make choices about their welfare on their own terms (Ferguson & Alarcón, 2015; Kabeer & Natali, 2013; Kabeer & Nations, 1999). The ability of women to participate in a creative activity that grants them some degree of financial autonomy is necessary for the economic component of empowerment (Addai, 2017; Kara et al., 2021). Women empowerment means to make it possible to control and obtain access to resources, both financial and informational (Dar, 2020). The 5<sup>th</sup> Sustainable Development Goal is gender equality and to empower all girls and women. This objective is vital human right and it also serves as an indispensable element of a global community (UN, 2022).

In general, and in developing countries particularly, the discussion and debate about women empowerment is becoming increasingly popular. Women are more vulnerable in developing countries for a variety of reasons, some of which include low-wage jobs and limited financial resources (Islam, 2014). Another sad picture that adds to the misery of a woman's life is the loss of her male partner or the separation from their relationship. Because the financial opportunities offered to women are limited, they are compelled to manage with the resources at their disposal (Abrar, 2019; Akhunzada & Khattak, n.d.; Dar, 2020; Parveen & Leonhäuser, 2004).

Moreover, they are unable to secure credit from financial institutions due to their lack of verifiable income to establish their ability to repay. In many developing countries, women experience several challenges including malnutrition, limited access to school, high unemployment rates, and limited access of finances (Biswas, 2018; Jamal et al., 2016; Rashid, 2022).

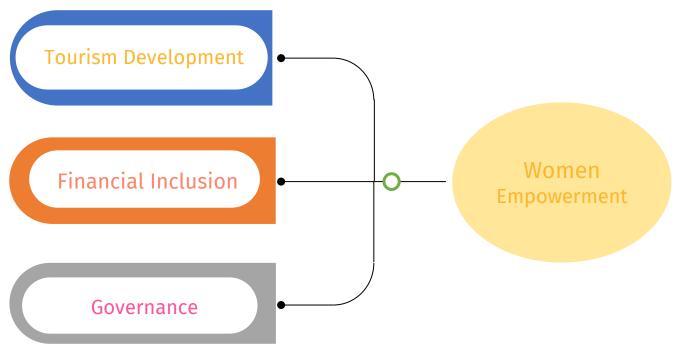


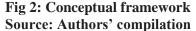
#### Fig 1: majority of unbanked adults are women.

Globally, women shoulder a disproportionate burden of unpaid care work, dedicating two to ten times more hours than men (Abbas et al., 2021). Additionally, among those lacking literacy skills and living in poverty worldwide, women constitute 65% and 70% of the respective populations (UNWTO, 2022) . Shockingly, only 1% of the total assets of world are held by women, highlighting significant economic disparities (UNWTO, 2021). Moreover, statistics show that 70% of the 1.3 billion people existing in conditions of severe poverty are female (UNDP, 2022 (Chaudhary & Kumari, 2022).

The United Nations world tourism organization is dedicated to taking the lead in assisting women in the tourist industry to achieve economic empowerment. Tourism has the potential to increase employment by promoting local art and crafts and promoting women empowerment (Aisario & Stefano, 2015; Alsawafi, 2016; Arroyo et al., 2019b; Evaristus M. Irandu & Parita Shah, 2014; Ferguson & Alarcón, 2015; Mohanty & Chandran, 2018; Nassani et al., 2019; Palikhe, 2018; Radovič-Markovič & Živanovič, 2019). World tourism organization also have its 'Actions plans' to empower women (UNWTO, 2022). Most important advantages of tourism are its capacity to guarantee or enhance environmental sustainability, to enhance gender equality, women empowerment, and to improve livelihoods by reducing poverty(Abou-Shouk et al., 2021; Arroyo et al., 2019a).

In addition to financial inclusion and tourism, governance plays a crucial and essential role in women empowerment and gender equality. Effective governance shapes policies, laws, and associations that can either facilitate or hinder women empowerment. Governance structures are responsible for formulating and implementing policies that directly affect women's rights and opportunities. The current study aims to examine how tourism development, financial inclusion and governance shape women empowerment in developing countries.





The study contributes the literature in many ways. First the study used "International tourism receipts", "international tourism receipts for passenger transport items", and "international tourism receipts for travel items", as the proxies of tourism development and an index is created. The study introduces three financial indicators "access to banks", "access to ATMs", and "access to banking services", rather than the traditionally used microcredit and micro financing tools. Further the study has created index of these indicators to measure their effect on plummeting gender inequalities. Similarly, governance index is created to measure its effect on women empowerment by using governance indicators. In addition, the study uses governance as a moderator and analyses its setting regarding tourism development and financial inclusiveness in developing economies. This novel approach offers pioneering insights into how the governance environment affects the empowerment of women in these countries.

# 2. Literature Review

# 2.1 Women Empowerment and Tourism

The tourism industry is growing all around the world (Elshaer et al., 2021). The economic significance of tourism in developing countries is on the rise, impacting several businesses. Tourism activities drive the construction of infrastructure in underdeveloped countries (Duvendack & Mader, 2020).

Tourism sector helps to create jobs, reduce poverty, boost investment and foreign exchange profits, and improve financial conditions (Abou-Shouk et al., 2021; Aghazamani et al., 2020). Several multinational financial and donor agencies have identified tourism as a powerful instrument for job creation and poverty reduction. Tourism development helps to increase employment by promoting local art and crafts and promoting women empowerment (Aisario & Stefano, 2015; Alsawafi, 2016; Arroyo et al., 2019b; Evaristus M. Irandu & Parita Shah, 2014; Ferguson & Alarcón, 2015; Mohanty & Chandran, 2018; Nassani et al., 2019; Palikhe, 2018; Radovič-Markovič & Živanovič, 2019). World tourism organization also have its 'Actions plans' to empower women (UNWTO, 2022).

The United Nations World Tourism Organization (UNWTO) is dedicated to taking the lead in assisting women in the tourism industry to achieve economic empowerment. It is necessary to consider the Action Plan as a part of the triple commitment goals of the UNWTO in the context of the international code of ethics for tourism: (i) The underprivileged should benefit from tourism, (ii) women empowerment, and (iii) environmental protection, complementing the goals of benefiting underprivileged communities and empowering women, as all three are interconnected pillars of ethical and sustainable tourism. Also noteworthy is the fact that women constitute 60-70 percent of all those employed in tourism or related activities (Chaudhry & Nosheen, 2009; Freund & Hernandez-Maskivker, 2021; Hamzic & Ekbladh, 2017; Harrison, 2015; Hutchings et al., 2020; Kc & Sony, 2012; Khan et al., 2021). Moreover, women can become suppliers in the tourism value chain by learning and refining crop planting and other types of agricultural production techniques (Arroyo et al., 2019b; Figueroa-Domecq et al., 2020; Hutchings et al., 2020).

# 2.2 Women Empowerment and Financial Inclusion

Financial inclusion means availability and access of fundamental financial products and services like credit, savings products, bank accounts, insurance, ATMs and Loans. (Bank World, 2022). The distribution of financial services at affordable costs to disadvantaged and low-income elements of a society is financial inclusion (Bank, 2022).

In the field of economics, the process of ensuring that all households and businesses can successfully access and make use of relevant financial services that they need to improve their standard of living is referred to as financial inclusion (Chaudhary & Kumari, 2022; Lettiah Gumbo et al., 2021; Nguse et al., 2022). Financial inclusion aims to ensure affordable and accessible formal financial services for women, rural communities, people with disabilities, and other marginalized groups. (Chaudhary & Kumari, 2022; Congrave et al., 2020; Duvendack & Mader, 2020; Swamy, 2014). The usage of financial instruments is a critical component of women empowerment. Access to effective and reasonable financial services should be available to everyone, regardless of their capacity to pay (Peruta, 2018; Ivatury & Mas, 2008; Hughes & Lonie, 2007).

80 % of women don't have a bank account, even though there has been significant progress made in financial inclusion (Abdalla et al., 2022; George, 2018; Hendriks, 2019). The gender gap is estimated to be six percentage points on average in developing nations (Demirgüç-Kunt et al., 2022). This is not the case that women are not making progress, in fact there has been an increase in bank accounts of women. Women, in some developing economies, have more bank accounts thank men like Argentina, the Philippines, and Indonesia.

However, over the last three years, the gender disparity in account ownership has grown in developing countries like Pakistan, Bangladesh, and Nigeria. Regardless of the addition of more than 1.3 million female bank customers, the gender disparity in account ownership widened by 28 percentage points in Pakistan (world bank, 2022). Similarly, the gender gap increased to from 9 percentage points to 29 percentage points in Bangladesh, even though more than 6.7 million women have their bank accounts (Demirgüç-Kunt et al., 2022). If more than 7% of women in Pakistan had bank accounts, the country could attain access to over 21% of its total population (Demirgüç-Kunt et al., 2022). Worldwide, 76% of the global population now possesses accounts, with 71% of individuals in developing countries holding account ownership (Demirgüç-Kunt et al., 2022).

Financial inclusion has a significant role in different ways to empower women. It contributes actively to achieve SDGs (George, 2018; Lettiah Gumbo et al., 2021; Nassani et al., 2019). Financial inclusion is shown to be a critical enabler of sustainable development through facilitating financial products and services, empowering women, and encouraging cooperation.(Bermeo, 2019; Habib Sultan & Yahaya, 2020; Swamy, 2014).

## 2.3 Governance a Key for Women Empowerment

Since the beginning of human civilization, the concept of governance has been around, and its definition has broadened significantly over the years. According to Fukuyama (2013), it is the power of the government to impose laws, provide services, and make decisions, whether that government is democratic or not. Two definitions of governance are offered by the World Bank, 2022. The first one is related to the use of political power to handle matters of national concern, whereas the second definition centers on the application of power to the administration of a state's social and economic resources to promote development (Aina & Olayode, 2011; Fasih, 2007; Katsamunska, 2016; Milazzo & Goldstein, 2019; Nandedkar, 2019; Rezazadeh, 2017).

Good governance is a concept that tackles concerns of social equality and political legitimacy (Casey et al., 2011; Divakar, 2022; Jamil et al., 2022; Kabir et al., 2018; Milazzo & Goldstein, 2019; Mishra et al., 2020; Post et al., 2019; Seguino, 2000). Participation and civic engagement are essential drivers of governance. Women are typically excluded from crucial decision-making processes. It is necessary for inclusive partnerships in urban administration to consider the barriers that prevent women from participating in public life.

Different scholars have contributed to the literature about the relationship of governance and women empowerment. They were of the view that improvement of gender independence in the areas of governance leads to the elevation of good governance. No government can work efficiently unless it understands the requirements of its entire population irrespective of their gender, class, and religion (Alsawafi, 2016; Kjær, 2014; Post et al., 2019). For example, Baker (2013) gave the vision of the National Gender Equality Institute's work to advance equality by boosting the representation of women in politics and building strong, responsive local networks. Many researchers have observed that creating political institutions guarantees the recognition of women as legitimate players and encourages participation in governance (Abdalla et al., 2022; Al-Khaldi, 2014; Divakar, 2022; Jamil et al., 2022; Katsamunska, 2016; Nandedkar, 2019; Rezazadeh, 2017).

Previous empirical studies on the subject tend to emphasize women empowerment through international tourism (Ayuningaski et al. 2023, Abou shouk et al. 2021, Srivastava et al. 2024, Nassani et al. 2019, Palikhe 2018, Al-sawafi 2016, Kc 2012, Ramchurjee 2011, Scheyvens 2010 etc.) and financial aspects such as microcredit and microfinance (Esmaeilpour & Karami 2023, Yadav et al. 2020, Bhatia & Singh 2019, Handrick 2019, Ipa 2017, Siddik 2017, Ashraf et al. 2010). Similarly they emphasized the need of governance to empower women (Divakar, 2022; Hemachandra et al., 2020; Jamil et al., 2022; Milazzo & Goldstein, 2019). Although these studies are full of insight, the present one is broader in contrast. The study is novel in sense that it has created indices for the measurement of variables. The authors have created a Tourism Development Index, Financial Inclusion Index and a Governance Index

to measure their effects on women empowerment. These innovations make the study a significant and unique contribution to the field.

## 3. Data & Methodology

## 3.1 Model Selection

To conduct the empirical estimation, the study has established the following model.

 $\begin{array}{l} GII_{i,t} = \mu_i + \delta_t + \beta_0 + \beta_1 FI_{i,t} + \beta_2 TD_{i,t} + \beta_3 GOVI_{i,t} + \beta_4 LFF_{i,t} + \beta_5 GCF_{i,t} + \beta_6 GDPPCGR_{i,t} + \beta_7 GOVI_{i,t} * FI_{i,t} + \beta_8 GOVI_{i,t} * TD_{i,t} + \varepsilon_{i,t} \\ \end{array}$ 

Where GII=Gender Inequality Index, FI=financial inclusion, TD=tourism development, GOVI=governance index, LFF=Labor force, female, GDPPCGR=gross domestic product per capita growth. GOVI\*FI= interaction term of governance index and financial inclusion, GOVI\*TD= interaction term of governance index and tourism development.

## **3.2 Justification of Variables**

For empirical estimation, the panel data of 39<sup>1</sup> developing countries selected. Acquiring accurate and trustworthy data for these countries was extremely difficult. Many of the variables for these countries, such as financial inclusion, do not even have full-time series in the most reliable data sources. Therefore, 39 nations have thus been used for the years 2004-2020. The availability of the needed data was the only factor considered while choosing the countries. The detail of variables and data sources is given below:

## **3.2.1. Gender Inequality Index**

Gender inequality index (GII) measures the potential disparity between males and females. GII addresses the three main areas: labor force participation rate, political and educational empowerment, and reproductive health (UNDP, 2022). GII index value is from 0 to 1. If the value is 1, it means greater the gender gap and less women empowerment and vice versa. The scale has changed from 0–1 to 0-100 in this study for analysis (Roy et al., 2020).

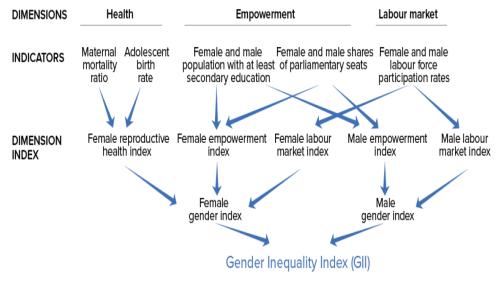


Fig 2: Gender Inequality Index. Source: United Nations Development Program

## **3.2.2 Financial Inclusion**

Access, use of financial products and services and availability to all the segments of society known as financial Inclusion (FI). The study has used following three main measures of financial inclusion:

- a) A sum of commercial banks branched per 0.1 million people (Fukuda, 2017; Kim et al., 2018; Roy et al., 2020).
- b) Total outstanding loans from commercial banks (% of GDP) (Kim et al., 2018; Roy et al., 2020).
- c) Number of automated Teller Machines (ATMs) per 0.1 million people (Kim et al., 2018; Roy et al., 2020).

The study uses Principal Component Analysis to create an index (FI) of these indicators. The current research hypothesized that FI has positive effects on women empowerment in developing countries.

#### 3.2.3 Tourism Development

Another key independent variable is tourism development. The rationale to use the following indicators as an important explanatory variable is the prior research (Lenao and Basupi, 2016; Al Dumbre aveanu et al., 2016; Ferguson, 2011; Saarinen al., 2011, Nassani et al. 2021). Indicators for tourism development used in the study are:

- a) International tourism receipts (ITR) refer to the expenses incurred by international tourists during their visits to a foreign country, encompassing payments made to national airlines for foreign travel activities.
- b) International tourism, receipts for passenger transport items (ITRP) refers to the revenue earned by airlines, cruise lines, railroads, and other passenger transport providers from international tourists.
- c) International tourism, receipts for travel items (ITRT) encompasses all expenditures made by international tourists related to their travel, including passenger transport items, accommodation, activities, food and beverages, costs associated with souvenirs, clothing, local crafts, etc.

The current study developed the index of these variables by using principal component analysis. It is hypothesized that TD significantly affects the women empowerment in developing countries.

#### **3.2.4 Governance Index**

Governance index is applied to check the impact of governance on women empowerment. According to Worldwide Governance Indicators (WGI), Governance has the following six indicators: Control of Corruption, Effectiveness of Government, Political Stability and Absence of violence/Terrorism, Regulatory Quality, Rule of Law, Voice and Accountability.

Governance index is made using Principal Component Analysis (Fukuda, 2017). The study hypothesized that governance index significantly affects the women empowerment.

## 4. Results and Discussion

## 4.1 Summary Statistics

In Table 4.1 descriptive statistics are reported. The total number of observations are 663. Mean, standard deviation, minimum and maximum values represented in Table 4.1.

Variable	Observations	Mean	Standard	Minimum	Maximum
			Deviation		
GII	663	45.914	12.675	10.2	72.8
TD	663	1.77	1.00	811	6.093
FI	663	1.06	1.00	37	6.247
GOVI	663	9.50	1.00	-1.943	2.763
LFF	663	42.986	14.705	15.135	88.84
GCF	646	23.336	7.313	10.522	58.151
GDPPCGR	663	2.067	3.773	-19.244	15.155

### **Table 4.1 Summary Statistics**

### 4.2 Correlation Analysis

In Table 4.2 results of correlation matrix are discussed. GII has negative relationship with all other independent variables.

Table 4.2 Correlation Analysis							
Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)
GII	1.000						
TD	-0.006	1.000					
FI	-0.132	0.077	1.000				
GOVI	-0.651	0.069	0.150	1.000			
LFF	-0.035	-0.187	0.040	-0.005	1.000		
GCF	-0.042	-0.024	-0.128	-0.093	-0.124	1.000	
GDPPCGR	-0.078	-0.088	-0.089	0.033	0.063	0.310	1.000

<b>Table 4.2 Correlation Analysis</b>	<b>Fable</b>	4.2	Correl	ation	Anal	vsis	
---------------------------------------	--------------	-----	--------	-------	------	------	--

#### 4.3 Diagnostic Tests

#### 4.3.1 Cross section Dependence Test

The current study employs Pesaran (2004) and Breusch and Pagan tests (1980) for cross sectional dependence (CSD). The presence of CSD in a model can be attributed to the correlation between the individual units comprising the panel and the error terms in the equation. Pesaran (2004) has given the following test for cross section dependence:

$$CD = \frac{\sqrt{2T}}{N(N-1)} \sum_{i=1}^{n-1} \sum_{j=i+1}^{n-1} \Theta_{ij} \quad -----Eq. \ 4.1$$

Here N signifies the number of cross sections and T shows the time.  $\theta_{ij}$  represents the cross-correlation errors between i and j. Results are reported as under:

Pesaran's Test	Friedman's Test	Frees's Test
43.521	251.723	12.203
(0.000)	(0.000)	(0.1996)

**Table 4.3 Cross Section Dependence Test Results** 

Note: Prob. values are in parenthesis.

Table 4.3 presents the cross-sectional dependence results. For Pesaran and Friedman tests, a p-value below 5% indicates rejection of the null hypothesis of no cross-sectional dependence. In the Frees test, cross-sectional dependence exists if the F-statistic exceeds the critical values of 0.1, 0.5, or 0.01.

#### 4.3.2 Second Generation Panel Unit Root Test

Given the presence of cross-sectional dependence in the panel data, second-generation unit root tests are required (Pesaran, 2021; Wessssterlund et al., 2016). This study applies the Cross-sectional Augmented Dickey-Fuller (CADF) test (Pesaran, 2003) and the Cross-sectional Im, Pesaran, and Shin (CIPS) test (Pesaran, 2007). The general unit root equation is presented as follows:(Pesaran, 2021; Westerlund et al., 2016)

The standard form of CIPS equation is:

$$CIPS = 1/n \sum_{i=1}^{n} CADF$$
------Eq 4.3

Here CADF represents cross section augmented Dicky Fuller as represented in Eq 4.2. Results reported below:

Variables	CIPS		CADF	
	I (0)	I (1)	I (0)	I (1)
GII	-2.134*		-1.625	-2.053*
FI	-1.802	-2.942***	-1.585	-2.576**
TD	-4.230**		-2.026**	
GOVI	-1.746	-3.282***	-1.516	-2.047*
LFF	-2.645***		-2.618	
GCF	-1.280	-2.328***	-1.432	-2.741*
GDPPCGR	-2.815*		-2.064**	
GOVI*FI	-1.578	-3.818*	-2.221*	
GVOI*TD	-2.718*		-2.184*	

#### Table 4.4 CIPS & CADF

Note: \*\*\*, \*\*, \* indicate 10%, 5%, 1% respectively.

Table 4.4 presents the outcomes of the panel unit root test, providing evidence some variable are stationary at level and some at first difference.

#### **4.3.3 Variance Inflation Factor and Tolerance**

The study used variance inflation factor to assess multicollinearity in the model. High levels of correlation between independent variables in a regression model can cause multicollinearity (Martín, 2019,Thompson et al., 2017). The formula for VIF (Neter, Wasserman & Kutner, 1983) is as follows:

 $VIF = 1 / (1 - R^2) \dots Eq 4.3$ 

Where R<sup>2</sup> represents the coefficient of determination .A VIF of 1 indicates no multicollinearity. VIF values greater than 1 indicate the existence of multicollinearity (Midi & Bagheri, 2010). Tolerance is a similar metric of multicollinearity (Neter et al., 1983). Tolerance of regression coefficient was calculated as the reciprocal of VIF. Results presented as:

Table 4.5 VIF and Tolerance					
Variables	VIF	Tolerance=1/VIF			
FI	2.23	0.44759			
TD	1.16	0.86534			
GOVI	1.48	0.677357			
LFF	1.07	0.934829			
GCF	1.19	0.840818			
GDPPCGR	1.14	0.879883			
GOVIFI	2.23	0.447595			
GOVITD	1.11	0.879883			
Mean VIF	1.451				

Variance inflation factor is calculated as shown in Table 4.5. Value of VIF is less than 10 showing the absence of multicollinearity Moreover, the value of mean VIF is less than 5 which shows the absence of multicollinearity.

### **4.3.4 Different Diagnostic Tests**

Breusch and Pagan LM (1980) test aids in selecting between a simple OLS regression and a random effects regression. The significance of  $\chi^2$  denotes the existence of panel effects (fixed or random).

$$LM = \frac{nt}{2(t-1)} \left[ \frac{T^2 e' e}{e' e} - 1 \right] \sim \chi^2 \dots \text{Eq} (4.4)$$

Results presented in Table 4.6. P-value=0.0000 in both models indicating the presence of panel effects (fixed or random). To determine the fixed or random effect model, the Hausman test is applied (Hahn et al., 2011). Results of Hausman test shows that fixed model is more appropriate for analysis. Results of modified Wald test in the model shows that the null hypothesis is rejected. Results of serial correlation showing the presence of correlation among residuals.

	Chi <sup>2</sup>	P-value
Breusch Pagan LM test	3208.75	0.000
Hausman test	42.12	0.0000
Wald Heteroskedasticity Test	5160.78	0.0000
Serial Correlation Test	284.951 (F 1,38)	0.000

### 4.4 Estimation Results of Fixed Effect Model with Driscoll Kraay Standard Errors

The study applies the Driscoll and Kraay (DK) standard errors (based on fixed effects estimation) because of the presence of heteroskedasticity, autocorrelation, and cross-sectional dependency in the model. The DK standard errors (Hochle, 1995) are resilient to heteroskedasticity and common kinds of cross-sectional and temporal dependence (He, 2017, Ozokcu, 2017). The DK estimator can handle missing values and is effective with both balanced and unbalanced panels (Danish, 2019, Le 2021, Sarkodie, 2019). Results of DK model presented below in Table 4.7.

Variables	Coefficients	Driscol Kraa Errors	y Standard	t- statistics	<i>P</i> -value	
FI	-3.0612	.2605		-3.61	0.001	
TD	-1.0174	.8473		-3.91	0.000	
GOVI	-1.7576	0.6624		-2.65	0.000	
LFF	4449	.1445		-3.08	0.000	
GCF	1425	.0685		-2.08	0.000	
GDPPCGR	2494	.1111		-2.24	0.000	
GOVIFI	.8466	.4070		2.08	0.064	
GOVITD	.3666	.2751		1.33	0.012	
Constant	68.0409	6.5792		10.34	0.000	
$R^{2}=0.24 \qquad F-\text{statistics}= 252.99$ $Prob (F \text{ statistics}) = 0.0000$						

#### Table 4.7 Driscoll Kraay Standard Error Technique

Table 4.7 shows the estimation results of fixed effect model with Driscoll and Kraay standard error. Gender inequality index (GII), has negative relation with FI, TD, GOVI, LFF, GCF, and GDPPCGR. Negative relation between GII and FI showed that as financial inclusion increases, gender inequality reduces. One percent increase in financial inclusion reduces GII by 3.06%. Increased access to savings and accounts like automated teller machines (ATMs), bank branches and access to loans has a positive impact on saving behavior, investment and household consumption. These findings are in line with Roy et al., (2020), Kim et al. (2017). Furthermore, improved access to bank advances and loans positively influences consumer behavior, as individuals can access credit to finance their purchases and investments. Secondly, it opens more work prospects for women, leading to enhanced employment opportunities.

In addition to this, Tourism Development (TD) has negative and significant relation with GII. If tourism development rises by 1%, GII reduces by 1.01. These findings are in line with Nassani et al. (2019), Dunn (2007), Ferguson (2011), Lenao and Banupi (2016). Tourism development has the potential to enhance women empowerment by providing employment opportunities in different tourism sectors like transportation, food and beverages, infrastructure, local handicrafts.

The governance index (GOVI) also has a negative and significant relation with GII. One percent increase in governance index reduces GII by 1.75 %. The effective government institutions play a crucial role in promoting gender equality. It has also seen that in some countries where government is more stable, there is less gender inequality and women are more empowered (Dumbraveanu et al., 2015; Ferguson & Alarcón, 2015; Kabir et al., 2018; Lenao & Basupi, 2016; Post et al., 2019). In addition to this LFF, GCF and GDPPCGR are taken as control variable. GII is negatively related to these variables. One unit increase in LFF, GCF and GDPPCGR help to reduce gender inequality by 0.44%, .14% and .24% respectively.

Incorporating interaction factors into regression models can extend understanding of the relationships between variables (Williams, 2015). The interaction term of GOVIFI in the model is significant. GII decreases by the size of interaction term (-3.061+.846=-2.215)(Ringle & Sarstedt, n.d.). One unit increase in GOVIFI decreases GII by 2.215 units. The reduction of the Gender Inequality Index (GII) through the interaction term of governance and financial inclusion suggests a multifaceted relationship rooted in socioeconomic dynamics. Effective governance mechanisms ensure that financial inclusion policies prioritize gender equity. Similarly, one unit increase in GOVITD decreases GII by the size of interaction term 0.651 (-1.017+0.366=-0.651). Tourism development may include initiatives aimed at enhancing the skills and capacities of local populations, including women, through employment, education, and training programs. By providing women with access to education and training opportunities related to tourism development, governance structures can empower them economically.

## 5. Conclusion and Policy Recommendations

The aim of the study is to construct a relationship among tourism development, governance and financial inclusion, and its impact on women empowerment in developing countries. Through a comprehensive examination of data from 39 developing countries and the application of the Driscoll-Kraay technique, the study delivers valuable insights into the interconnectedness of these factors and their impact on women empowerment. Outcomes of the study show that financial inclusion and tourism development both foster chances for women to participate in the economy and exercise personal choice. To empower women and lessen gender inequities, strong governance practices characterized by inclusive policies are essential. Some of the key recommendations are presented below:

- Policy makers should pursue a multifaceted approach that integrates tourism development, financial inclusion, and governance. In tourism sector, the focus should be on incorporating gender perspectives into planning, ensuring women's representation in decision-making, providing training and capacity-building for women.
- For financial inclusion, the emphasis should be on establishing women-centered financial services, improving financial literacy, removing barriers to access, and supporting women-owned enterprises.
- Governance strategies shall include enhancing women's political participation, building social networks with organizations working in domain of gender equality. Policymakers should emphasize strengthening women's legal rights, and making public services more gender-responsive.

## References

- Abbas, S., Isaac, N., Zia, M., Zakar, R., & Fischer, F. (2021). Determinants of women's empowerment in Pakistan: evidence from Demographic and Health Surveys, 2012–13 and 2017–18. *BMC Public Health*, *21*(1), 1–14. https://doi.org/10.1186/s12889-021-11376-6
- Abdalla, F. H., Samah, A. A., Hashim, A. H., & Rosnon, M. R. (2022). Relationship between Participation and Women Empowerment in the Tourism Industry; a Structural Equation Modeling

Approach. South Asian Research Journal of Business and Management, 4(1), 11–27. https://doi.org/10.36346/sarjbm.2022.v04i01.002

- Abou-Shouk, M. A., Mannaa, M. T., & Elbaz, A. M. (2021). Women's empowerment and tourism development: A cross-country study. *Tourism Management Perspectives*, 37(November 2020), 100782. https://doi.org/10.1016/j.tmp.2020.100782
- Abrar, M. (2019). *Household empowerment as the key to eradicate poverty incidence*. 2005(June 2018), 4–24. https://doi.org/10.1111/aswp.12152
- Aghazamani, Y., Kerstetter, D., & Allison, P. (2020). Women's perceptions of empowerment in Ramsar, a tourism destination in northern Iran. *Women's Studies International Forum*, 79(May 2019), 102340. https://doi.org/10.1016/j.wsif.2020.102340
- Aina, O. I., & Olayode, K. (2011). Gender Equality, Governance and Women Empowerment Agenda in a Democratizing Society: Issues, Prospects, and Challenges. https://doi.org/10.36108/NJSA/1102/90(0150)Vol.
- Aisario, A., & Stefano, M. (2015). Tourism and women empowerment in Monduli District, Arusha-Tanzania. *African Journal of Hospitality, Tourism and Leisure, 4*(42). www.ajhtl.com
- Akhunzada, Z. U., & Khattak, M. K. (n.d.). Socio-Cultural Barriers to Empowerment: A Study of Working Women in Vocational Training Institutes of District Kohat.
- Al-Khaldi, F. (2014). Good governance and gender equality. *Lincolin Arsyad*, 3(2), 1–46. http://journal.stainkudus.ac.id/index.php/equilibrium/article/view/1268/1127
- Alsawafi, A. M. (2016). Exploring the challenges and perceptions of Al Rustaq College of Applied Sciences students towards Omani women's empowerment in the tourism sector. *Tourism Management Perspectives*, 20, 246–250. https://doi.org/10.1016/j.tmp.2016.10.004
- Arroyo, C. G., Barbieri, C., Sotomayor, S., & Knollenberg, W. (2019a). Cultivating women's empowerment through agritourism: Evidence from Andean communities. *Sustainability* (*Switzerland*), 11(11), 1–14. https://doi.org/10.3390/su11113058
- Arroyo, C. G., Barbieri, C., Sotomayor, S., & Knollenberg, W. (2019b). *Cultivating Women* 's *Empowerment through Agritourism : Evidence from Andean Communities*. 1–14.
- Bandiera, O., Buehren, N., Burgess, R., Goldstein, M., Gulesci, S., Rasul, I., & Sulaiman, M. (2012). Empowering Adolescent Girls: Evidence from a Randomized Control Trial in Uganda. *American Economic Journal: Applied Economics*, 12.
- Bank, T. W. (2022). Spotlight 1.1: Financial inclusion and financial resilience. *World Development Report 2022: Finance for an Equitable Recovery*, 74–77. https://doi.org/10.1596/978-1-4648-1730-4\_spotlight1.1
- Bank World. (2017). Women 's Empowerment in Rural Driven Development Projects. 74.
- Bayeh, E. (2016). The role of empowering women and achieving gender equality to the sustainable development of Ethiopia. *Pacific Science Review B: Humanities and Social Sciences*, 2(1), 37– 42. https://doi.org/10.1016/j.psrb.2016.09.013
- Bermeo, E. (2019). Determinants of financial inclusion: Results of Multilevel Analyses. *University of Bristol*, 1–222.
- Bexell, M. (2012). Global governance, gains and gender: Un-business partnerships for women's empowerment. *International Feminist Journal of Politics*, 14(3), 389–407. https://doi.org/10.1080/14616742.2012.659855
- Biswas, C. S. (2018). Women empowerment in India. *Women's Entrepreneurship and Microfinance*, 3–16. https://doi.org/10.1007/978-981-10-4268-3\_1
- Bushra, A., & Wajiha, N. (2015). Assessing the Socio-economic Determinants of Women Empowerment in Pakistan. *Procedia Social and Behavioral Sciences*, 177(July 2014), 3–8. https://doi.org/10.1016/j.sbspro.2015.02.321
- Casey, C., Skibnes, R., & Pringle, J. K. (2011). Gender equality and corporate governance: Policy strategies in Norway and New Zealand. *Gender, Work and Organization*, 18(6), 613–630. https://doi.org/10.1111/j.1468-0432.2010.00514.x
- Chaudhary, D. A. K., & Kumari, R. (2022). Impact of Financial Inclusion on Women Empowerment: A Case Study of Ranchi District. *International Journal for Research in Applied Science and Engineering Technology*, 10(8), 1388–1398. https://doi.org/10.22214/ijraset.2022.46423
- Chaudhry, I. S., & Nosheen, F. (2009). The determinants of women empowerment in Southern Punjab (Pakistan): An empirical analysis. *European Journal of Social Sciences*, *10*(2), 216–229.

- Congrave, J., Shaw, A., & Thomas, M. (2020). Women 's Economic Empowerment and Standards and Regulatory Reform measurement tools. February.
- Dar, F. A. (2020). Literature and its Impact on Women Empowerment: An Assessment. SSRN Electronic Journal, 2(I), 92–95. https://doi.org/10.2139/ssrn.3567881
- Demirgüç-Kunt, A., Klapper, L., Singer, D., & Ansar, S. (2022). The Global Findex Database 2021. In *The Global Findex Database 2021*. https://doi.org/10.1596/978-1-4648-1897-4
- Divakar, M. (2022). Inclusive Governance for Women Empowerment : A Case Study of. 6(4), 11587–11597.
- Dr Tanu Tandon. (2016). Women Empowerment: Perspectives and Views. *International Journal of Indian Psychology*, 3(3). https://doi.org/10.25215/0303.134
- Duflo, E. (2012). Women empowerment and economic development. *Journal of Economic Literature*, 50(4), 1051–1079. https://doi.org/10.1257/jel.50.4.1051
- Dumbraveanu, D., Light, D., & Young, C. (2015). Exploring women 's employment in tourism under state socialism : Dumbreaveanu, D., Light, D., Young, C. and Chapman, A. (forthcoming) ' Exploring women 's employment in tourism under state-socialism : Experiences of tourism work in socialist R. July.
- Duvendack, M., & Mader, P. (2020). Impact of Financial Inclusion in Low- and Middle-Income Countries: a Systematic Review of Reviews. *Journal of Economic Surveys*, 34(3), 594–629. https://doi.org/10.1111/joes.12367
- Elshaer, I., Moustafa, M., Sobaih, A. E., Aliedan, M., & Azazz, A. M. S. (2021). The impact of women's empowerment on sustainable tourism development: Mediating role of tourism involvement. *Tourism Management Perspectives*, 38(April), 100815. https://doi.org/10.1016/j.tmp.2021.100815
- Evaristus M. Irandu, & Parita Shah. (2014). The Role of Ecotourism in Promoting Women Empowerment and Community Development: Some Reflections From Kenya. J. of Tourism and Hospitality Management, 2(6). https://doi.org/10.17265/2328-2169/2014.06.002
- Fasih, T. (2007). Analyzing The Impact Of Legislation On Child Labor In Pakistan. November. http://elibrary.worldbank.org/doi/book/10.1596/1813-9450-4399
- Ferguson, L., & Alarcón, D. M. (2015). Gender and sustainable tourism: reflections on theory and practice. *Journal of Sustainable Tourism*, 23(3), 401–416. https://doi.org/10.1080/09669582.2014.957208
- Figueroa-Domecq, C., de Jong, A., & Williams, A. M. (2020). Gender, tourism & entrepreneurship: A critical review. *Annals of Tourism Research*, 84(June). https://doi.org/10.1016/j.annals.2020.102980
- Freund, D., & Hernandez-Maskivker, G. (2021). Women managers in tourism: Associations for building a sustainable world. *Tourism Management Perspectives*, 38(April), 100820. https://doi.org/10.1016/j.tmp.2021.100820
- Fukuda, T. (2017). The Relationship Between Financial Development and Income Inequality in India: Evidence from VARX and ARDL Assessments. Asian Economic and Financial Review, 7(10), 1014–1027. https://doi.org/10.18488/journal.aefr.2017.710.1014.1027
- George, B. (2018). FINANCIAL INCLUSION AND WOMEN EMPOWERMENT A GENDER.pdf. 6(April 2005), 229–237. https://doi.org/10.5281/zenodo.1270189
- Habib Sultan, N. H., & Yahaya, F. (2020). Women Empowerment in Development: An Overview. Icmr 2018, 527–534. https://doi.org/10.5220/0008890005270534
- Hahn, J., Ham, J. C., & Moon, H. R. (2011). The Hausman test and weak instruments. *Journal of Econometrics*, 160(2), 289–299. https://doi.org/10.1016/j.jeconom.2010.09.009
- Hamzic, E., & Ekbladh, M. (2017). Women in Tourism: Exploring the Links between Women' s Skills Development, Empowerment and Employment.
- Harrison, D. (2015). DEVELOPMENT THEORY AND TOURISM IN DEVELOPING COUNTRIES: WHAT HAS THEORY EVER DONE FOR US ? 11, 53–82.
- Hemachandra, K., Amaratunga, D., & Haigh, R. (2020). Factors affecting the women's empowerment in disaster risk governance structure in Sri Lanka. *International Journal of Disaster Risk Reduction*, 51(August), 101779. https://doi.org/10.1016/j.ijdrr.2020.101779
- Hendriks, S. (2019). The role of financial inclusion in driving women's economic empowerment. *Development in Practice*, 29(8), 1029–1038. https://doi.org/10.1080/09614524.2019.1660308

- Hutchings, K., Moyle, C. lee, Chai, A., Garofano, N., & Moore, S. (2020). Segregation of women in tourism employment in the APEC region. *Tourism Management Perspectives*, 34(February), 100655. https://doi.org/10.1016/j.tmp.2020.100655
- Jade, N. A. R., & Ramchurjee, N. A. (2014). "Tourism" a Vehicle for Women's Empowerment: Prospect and Challenges. December 2011.
- Jamal, M. A., Raihana, A. K. A., & Sultana, H. Y. (2016). Empowerment of Muslim Women through Microfinance and Self Help Groups: A Case Study of Chennai City. *Asian Business Review*, 6(2), 117–124. https://doi.org/10.18034/abr.v6i2.36
- Jamil, B., Yaping, S., Ud Din, N., & Nazneen, S. (2022). Do effective public governance and gender (in)equality matter for poverty? *Economic Research-Ekonomska Istrazivanja*, 35(1), 158–174. https://doi.org/10.1080/1331677X.2021.1889391
- Kabeer, N., & Natali, L. (2013). Gender Equality and Economic Growth: Is there a Win-Win? In IDS Working Papers (Vol. 2013, Issue 417). https://doi.org/10.1111/j.2040-0209.2013.00417.x
- Kabeer, N., & Nations, P. (1999). The Conditions and Consequences of Choice : Reflections on the Measurement of Women 's Empowerment f or Social Development. *Context*, 30(108), 435–464. http://doi.wiley.com/10.1111/1467-7660.00125
- Kabir, S. M. S., Aziz, M. A., & Shathi, A. K. M. S. J. (2018). Women Empowerment and Governance in Bangladesh. ANTYAJAA: Indian Journal of Women and Social Change, 3(1), 24–35. https://doi.org/10.1177/2455632718778376
- Katsamunska, P. (2016). The concept of governance and public governance theories. *Economic Alternatives*, 2, 133–141.
- Kc, & Sony. (2012). Roles and Challenges of Women in Tourism Sector of Western Nepal : A Micro-Ethnographic Study. *Nepal Tourism And Development Review*, 32–59.
- Khalil, S. (2018). Women Empowerment in Marginalized Villages via Tourism: A Case of Aswan Governorate, Egypt. *International Journal of Heritage, Tourism and Hospitality*, *12*, 19–31.
- Khan, S. U., Goldsmith, A. H., & Rajaguru, G. (2021). Women's empowerment over recreation and travel expenditures in Pakistan: Prevalence and determinants. *Annals of Tourism Research Empirical Insights*, 2(1), 100009. https://doi.org/10.1016/j.annale.2020.100009
- Kim, D. W., Yu, J. S., & Hassan, M. K. (2018). Financial inclusion and economic growth in OIC countries. *Research in International Business and Finance*, 43, 1–14. https://doi.org/10.1016/j.ribaf.2017.07.178
- Kjær, A. M. (2014). Challenges to Democratic Governance in Developing Countries. Challenges to Democratic Governance in Developing Countries, 19–35. https://doi.org/10.1007/978-3-319-03143-9
- Kumar, S. (2022). Does Financial Inclusion Promote Women Empowerment with Economic Growth: A Bibliometric Approach with databases (Scopus, WOS) Motilal Nehru National Institute of Technology. 1–18.
- Lenao, M., & Basupi, B. (2016). Ecotourism development and female empowerment in Botswana: A review. *Tourism Management Perspectives*, 18, 51–58. https://doi.org/10.1016/j.tmp.2015.12.021
- Lettiah Gumbo, Precious Dube, & Muhammad Ridwan. (2021). Empowering Women through Financial Inclusion in Zimbabwe Is the Gender Gap Not Encroaching This Noble Cause? *Konfrontasi: Jurnal Kultural, Ekonomi Dan Perubahan Sosial*, 8(1), 53–64. https://doi.org/10.33258/konfrontasi2.v8i1.141
- Lohani, M., & Aburaida, L. (2017). Women empowerment: A key to sustainable development. *The Social ION*, *6*(2), 26. https://doi.org/10.5958/2456-7523.2017.00006.4
- Martín, A. M. (2019). Generación De Herramientas De Evaluación Bibliométrica a Partir De Google Scholar Creation of Bibliometric Tools for Evaluation Based on Data From Google Scholar. http://hdl.handle.net/10481/56212
- Midi, H., & Bagheri, A. (2010). Robust multicollinearity diagnostic measure in collinear data set. *International Conference on Applied Mathematics, Simulation, Modelling - Proceedings, January* 2010, 138–142.
- Milazzo, A., & Goldstein, M. (2019). Governance and women's economic and political participation: Power inequalities, formal constraints and norms. World Bank Research Observer, 34(1), 34–64. https://doi.org/10.1093/wbro/lky006
- Mishra, P. K., Mishra, S. K., & Sarangi, M. K. (2020). Do Women's Advancement and Gender Parity

Promote Economic Growth? Evidence from 30 Asian Countries. *Millennial Asia*, 11(1), 5–26. https://doi.org/10.1177/0976399619900603

- Mohanty, P., & Chandran, A. (2018). Poverty Alleviation and Women Empowerment through Tourism Development an Explorative Study of Model Ventures. *Atna Journal of Tourism Studies*, *13*(1), 59–74. https://doi.org/10.12727/ajts.19.5
- Nandedkar, D. N. (2019). Good Governance in Respect of Women Empowerment in India. SSRN Electronic Journal, IX(2), 2–6. https://doi.org/10.2139/ssrn.3309618
- Nassani, A. A., Aldakhil, A. M., Abro, M. M. Q., Islam, T., & Zaman, K. (2019). The impact of tourism and finance on women empowerment. *Journal of Policy Modeling*, 41(2), 234–254. https://doi.org/10.1016/j.jpolmod.2018.12.001
- Nguse, T., Desalegn, D., Oshora, B., Tangl, A., Nathan, R. J., & Fekete-Farkasne, M. (2022). ENHANCING WOMEN ECONOMIC EMPOWERMENT THROUGH FINANCIAL INCLUSION:EVIDENCE FROM SMEs IN ETHIOPIA. *Polish Journal of Management Studies*, 25(1), 270–291. https://doi.org/10.17512/pjms.2022.25.1.17
- Palikhe, A. (2018). Women Empowerment in Tourism: Special Reference to Pokhara Metropolitan City. Journal of Nepalese Business Studies, 11(1), 35–44. https://doi.org/10.3126/jnbs.v11i1.24199
- Parveen, S., & Leonhäuser, I. (2004). Empowerment of Rural Women in Bangladesh : A Household Level Analysis. October, 5–7.
- Pesaran, M. H. (2021). General Diagnostic Tests for Cross Section Dependence in Panels. SSRN Electronic Journal, 1229. https://doi.org/10.2139/ssrn.572504
- Post, P. D. F., R. R. R. A. H., & Malipatil, P. (2019). *Research Article a Study on Role of Government Overnment Policies for*. 1995.
- Radovič-Markovič, M., & Živanovič, B. (2019). Fostering green entrepreneurship and women's empowerment through education and banks' investments in tourism: Evidence from Serbia. *Sustainability (Switzerland)*, *11*(23). https://doi.org/10.3390/su11236826
- Rashid, H. (2022). Sustainable Business and Society in Emerging Economies Women's Empowerment in Punjab: An Analysis of Socio-Cultural Challenges. Sustainable Business and Society in Emerging Economies, 4(1), 13–24. www.publishing.globalcsrc.org/sbsee
- Rezazadeh, R. (2017). Women Empowerment and Good Urban Governance in Iran rezazadeh Asian Social Science. 7(3), 260–268.
- Ringle, C. M., & Sarstedt, M. (n.d.). Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R.
- Roy, C. K., Banik, B., & Xiaoling, H. (2020). Does financial inclusion empower women in emerging countries? A panel data analysis. 1–21.
- Seguino, S. (2000). Accounting for gender in asian economic growth. *Feminist Economics*, 6(3), 27–58. https://doi.org/10.1080/135457000750020128
- Swamy, V. (2014). Financial Inclusion, Gender Dimension, and Economic Impact on Poor Households. *World Development*, 56, 1–15. https://doi.org/10.1016/j.worlddev.2013.10.019
- Thompson, C. G., Kim, R. S., Aloe, A. M., & Becker, B. J. (2017). Extracting the Variance In flation Factor and Other Multicollinearity Diagnostics from Typical Regression Results. *Basic and Applied Social Psychology*, *39*(2), 81–90. https://doi.org/10.1080/01973533.2016.1277529
- Trivelli, C., Villanueva, C., Marincioni, M., Pels, J., Sachetti, F. C., Robino, C., Walbey, H., Martinez, L., & Magnelli, M. (2018). *Financial Inclusion for Women: A Way Forward*. 1–19. https://www.g20-insights.org/wp-content/uploads/2019/10/Financial-Inclusion-for-Women-Final.pdf
- Trommlerova, S. K. (2015). Determinants of Empowerment in a Capability-Based Poverty Approach : Evidence from The Gambia. 66, 1–15. https://doi.org/10.1016/j.worlddev.2014.07.008
- Ulku, H. (2010). Evidence from Household Data in Germany BWPI Working Paper 115. April, 1–22.
- UNODC. (2022). Strategy for Gender Equality and the Empowerment of Women (2022-2026). 38. https://www.unodc.org/documents/Gender\_Gender\_Strategy\_2/22-03522\_Gender\_Strategy\_ebook.pdf
- UNWTO. (2021). Second edition Global Report on Women in Tourism.
- Vildö, L., & Wallentin, F. Y. (2017). THE UNIVERSAL CAUSES AND EFFECTS OF WOMEN 'S EMPOWERMENT FOR DEVELOPING COUNTRIES Submitted by Supervisor.

- Völker, M., & Doneys, P. (2021). Empowerment as one sees it: assessment of empowerment by women participants of development projects. *Development in Practice*, *31*(1), 125–138. https://doi.org/10.1080/09614524.2020.1828284
- Westerlund, J., Hosseinkouchack, M., & Solberger, M. (2016). The Local Power of the CADF and CIPS Panel Unit Root Tests. *Econometric Reviews*, 35(5), 845–870. https://doi.org/10.1080/07474938.2014.977077