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# **RESEARCH PAPER**

# The Impact of Remittances on Household Welfare in Pakistan: Evidence from HIES 2018-19 and PSLM 2019-20

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#### **ABSTRACT**

This study investigates the impact of international remittances on household welfare in Pakistan using nationally representative microdata from the Household Integrated Economic Survey (HIES) 2018–19 and the Pakistan Social and Living Standards Measurement (PSLM) 2019–20. Employing Ordinary Least Squares (OLS), Probit, and Propensity Score Matching (PSM) techniques, the analysis examines three welfare dimensions—per capita consumption, poverty status, and asset ownership—while accounting for demographic and regional heterogeneity. Results reveal that remittance-receiving households spend 18–21 percent more on consumption, face an 8 percent lower probability of poverty, and exhibit reduced income inequality relative to non-recipient households. The effects are stronger among rural and female-headed households, highlighting the redistributive role of remittances. These findings are consistent with the New Economics of Labor Migration (NELM) framework and underline the importance of remittance flows as informal insurance and poverty-alleviation mechanisms. Policy recommendations include expanding digital-financial access, lowering transfer costs, and linking remittances to productive investments.

**KEYWORDS** 

Remittances, Household Welfare, Poverty Reduction, Income Inequality, Financial Inclusion, Pakistan

### Introduction

Over the past two decades, international remittances have become one of the largest and most stable sources of external financing for developing economies—often exceeding foreign direct investment and official development assistance in magnitude (Adams, 2006; Fransen & Mazzucato, 2014). Remittances are private transfers that support millions of households in low- and middle-income countries by smoothing consumption, financing education and health, and buffering income shocks (Lim et al., 2023). Their countercyclical resilience—sustaining flows even during global crises such as COVID-19—demonstrates their macroeconomic significance as stabilizers of national balance-of-payments positions and household welfare (Yamada et al., 2022).

Remittances are at the core of macroeconomic stability and microeconomic prosperity in Pakistan. With a yearly inflow of more than USD 30 billion, Pakistan is never outside the top ten remitters globally (International Organization for Migration, 2024). Remittances are mostly from the Gulf Cooperation Council (GCC) region, and second and third spots are held by Europe and North America, respectively. These streams facilitate foreign accounts, decrease pressures on currency depreciation, and directly benefit millions of families—mainly rural and semi-urban areas (Ahmed & Mughal, 2019). The most recent estimations by the Pakistan Institute of Development Economics (PIDE) indicate that remittances offset some negative effects of inflation, unemployment, and income shocks during macroeconomic crises (Irfan, 2011; Barriga Cabanillas et al., 2025).

Though staggering, the exact degree to which remittances yield real welfare gain to Pakistani households is debated. Remittances are considered to have positive impact on education, poverty, and consumption by some studies (Awan et al., 2015; Mughal & Anwar, 2012), but others fear dependency risk, inflationary pressure, and uneven benefits (Shair & Anwar, 2023). Furthermore, existing research heavily draws on pre-2015 evidence and only descriptive analysis that are not equipped to register recent developments—e.g., the emergence of digital-remittance platforms, COVID-19 shocks, and shifts in migrant flows. A reworked empirical estimate from the application of more up-to-date microdata is thus in order.

#### Literature Review

#### **Theoretical Foundations**

Remittance welfare effects are well recognized in the case of the New Economics of Labor Migration (NELM). NELM conceptualizes migration and remittances as household-level risk diversification and failure-in-markets strategies, not just individual labor choices. Remittances are insurance tools through which households' smooth consumption, cover credit shortfalls, and invest in education, real estate purchasing, and entrepreneurship (Fransen & Mazzucato, 2014; Lim et al., 2023).

Outside of the NELM, other views complement macroeconomic spillovers of remittances. Keynesian demand channels connect remittances to higher aggregate consumption and national output, while financial-development models highlight how they can expand formal credit and banking markets (Nanziri & Mwale, 2023). Dependence theories warn, however, that remittances have a tendency to reinforce structural imbalances where they are consumed and not invested (Adams, 2006).

Collectively, these models imply that welfare impacts are not only a matter of volume of remittances but also institutional and financial conditions and how these influence their distribution and multiplier effects.

# **Empirical Evidence from Developing Economies**

Empirical research across Africa, Asia, and Latin America consistently finds that remittances enhance household welfare.

In Sub-Saharan Africa, Nanziri & Mwale (2023) show that remittances raise multidimensional welfare indicators—especially food security and education—while generating positive crowd-in effects for financial inclusion. In Bangladesh, Sarma et al. (2023) demonstrate that remittances significantly reduce poverty incidence and improve food security through higher consumption and productive spending. Similarly, Kikkawa et al. (2024) analyze Philippine household surveys and confirm that remittance-driven expenditure increases local employment and output growth, underscoring broader macroeconomic linkages.

However, research also cautions against falling marginal welfare returns if remittances are used to finance consumption rather than productive investment. Lim et al. (2023) suggest how over-dependence on migration earnings will be dampening structural change, while Yamada et al. (2022) observe that remittance transfers softened pandemic shocks in Tajikistan but did not engender long-term income diversification. These observations show how the quality of institutions, transaction costs, and access to finance intermediate the net welfare effect.

# **Empirical Evidence from Pakistan**

Pakistan offers a fertile ground for studying remittance-welfare links due to its recurrent migration to Gulf economies and dependency upon receipts of more than USD 30 billion yearly. Early micro-level evidence by Adams (2006), Qayyum et al. (2008), and Irfan (2011) confirmed that remittance-receiving families spend more, have better housing conditions, and are less poor compared to non-recipients. Applying HIES data, Awan et al. (2015) determined international remittances to enhance household expenditure and living standards in provinces.

Later research makes use of such findings. Mughal & Anwar (2012) sets that remittances reduce income inequality because it redistributes the income towards Punjab and Khyber Pakhtunkhwa's poor households. Ahmed & Mughal (2019) affirm that developmental potential is hindered by the use of high-transfer costs and informal channels, whereas Barkat et al. (2024) finds that financial inclusion mediates welfare effects of remittances among developing countries. Aziz et al. (2024) also show a link between remittances and subjective well-being, speculating the potential for altered factors other than consumption.

Even with the magnitude of evidence, wide methodological gaps still exist. Most studies use outdated data (pre-2018) and basic cross-sectional specifications that lack the ability to properly address selection bias — the possibility that migrant households would systematically vary from non-migrant households. Some do not control for survey design elements like stratification and weighting, which may bias results. Additionally, comparatively less emphasis has been given to gender-differentiated welfare effects as well as to the mediating role of access to digital-financial networks.

# Synthesis and Research Gap

The literature surveyed concurs on three basic findings:

- In general, remittances increase spending and poverty decline, but magnitudes differ by context;
- The effect of development is reliant on remittance expenditure patterns and financial networks;
- Empirical identification problems—most notably endogeneity and selection bias—persist.

Against this background, it is apparent that there is an urgent need for the most recent micro-evidence that:

- Uses the newest nationally representative surveys (HIES 2018–19 and PSLM 2019– 20);
- Uses sophisticated econometric methods like OLS with robust standard errors and Propensity Score Matching; and
- Performs tests of heterogeneity by gender, region, and income groups.

The research fills these gaps by measuring current, causally relevant estimates of the effect of international remittances on Pakistani household welfare, and places findings against the backdrop of the changing digital-finance environment.

# **Material and Methods**

## **Data Sources and Sampling Design**

This study draws on two nationally representative micro-household surveys compiled by the Pakistan Bureau of Statistics (PBS):

- 1. The Household Integrated Economic Survey (HIES) 2018-19, and
- 2. The Pakistan Social and Living Standards Measurement (PSLM) 2019–20.

Both surveys utilize a stratified, two-stage sampling design that is present across all four provinces and large urban-rural centers. PBS, in each round, chooses primary sampling units (urban enumeration blocks and rural villages) proportional to size, and subsequently randomly draws households. Combined data yield information on about 25,000 households that represent all of Pakistan's population under survey weights.

The HIES captures exhaustive income and expenditure accounts, while the PSLM provides multidimensional measures of education, health, housing conditions, and assets. The two data sources are combined to allow the complete evaluation of the welfare outcomes in accordance with PBS's national poverty measurement framework. Remittance information is explicitly reported in both datasets. Each household indicates whether it received international remittances (transfers from family members abroad) during the preceding year and the amount received. Households receiving only domestic transfers are excluded from the "remittance recipient" category. To ensure comparability, nominal variables from both surveys were deflated using province-specific Consumer Price Index (CPI) series (base = 2018 = 100). Sampling weights provided by PBS were applied in all descriptive and econometric analyses.

The estimation sample comprises 24,231 households (unweighted) after data cleaning, while the corresponding weighted sample sum equals approximately 24,800 households. All descriptive and econometric analyses apply official PBS survey weights to ensure national representativeness. Because the Household Integrated Economic Survey (HIES) 2018–19 provides detailed expenditure data, all consumption and poverty regressions rely on this dataset. The Pakistan Social and Living Standards Measurement (PSLM) 2019–20 survey is employed only for robustness checks and construction of the asset-ownership index, using harmonized variables comparable to HIES 2018–19.

#### Variable Definitions

#### Dependent Variables (Welfare Measures)

**Per-capita household consumption (In cons):** Total monthly household consumption divided by household size, converted to logarithmic form. It is the principal welfare indicator widely used in poverty and inequality research.

**Poverty status (poor):** The national poverty threshold follows the official cost-of-basic-needs (CBN) line of Rs 3,776 per adult-equivalent per month (2018–19 prices), as reported in the National Poverty & Inequality Report 2018–19 (Ministry of Planning, Development & Special Initiatives, 2019) and PIDE National Poverty Estimates 2018–19 (Iqbal, 2020). Poverty status was coded as 1 if household consumption per adult-equivalent fell below this line and 0 otherwise. Household consumption was converted into adult-equivalent terms using the OECD equivalence scale (1.0 for adults aged 15 and

above; 0.5 for children below 15). Sensitivity checks using per-capita consumption produced qualitatively similar results.

**Asset index (assets):** Constructed via Principal Component Analysis (PCA) from household ownership of durable goods (refrigerator, motorcycle, computer, etc.) and housing attributes (roof, floor, wall materials). The first component was normalized to 0 mean and 1 standard deviation.

#### Independent Variable

**Remittance receipt (remit):** Dummy variable = 1 if household reported receiving international remittances in the survey year, 0 otherwise. For robustness, an alternative continuous measure—log of remittance amount—is used in supplementary regressions.

#### **Control Variables**

To isolate the effect of remittances from confounding household and locational factors, the following covariates were included:

- Age, gender, and education (years of schooling) of household head;
- Household size and dependency ratio;
- Employment status of head (1 = employed);
- Sectoral income sources (agriculture, wage labor, business);
- Regional dummies (Punjab, Sindh, Khyber Pakhtunkhwa, Balochistan);
- Rural/urban location.

All monetary variables were adjusted to real 2018 prices.

#### **Econometric Framework**

# Ordinary Least Squares (OLS) Model:

To estimate the average impact of remittances on household consumption, the baseline specification is:

In(Cons<sub>i</sub>)=
$$\alpha$$
+ $\beta_1$ Remit<sub>i</sub>+ $\beta_2$ X<sub>i</sub>+ $\epsilon_i$ 

Where,  $Cons_i$  = per-capita consumption,  $Remit_i$  = binary remittance variable,  $X_i$  = vector of control variables,  $\varepsilon_i$  = error term.

The coefficient  $\beta_1$  measures the percentage difference in consumption between remittance and non-remittance households, ceteris paribus. Standard errors are heteroskedasticity-robust and clustered at the primary sampling-unit level to account for survey design.

#### **Probit Model for Poverty Status:**

To assess whether remittances reduce the likelihood of being poor:

$$Pr(Poor_i = 1) = \Phi(v_0 + v_1 Remit_i + v_2 X_i)$$

Where  $\Phi$  denotes the cumulative normal distribution. The marginal effect  $\gamma_1$  indicates the change in poverty probability associated with remittance receipt.

# **Inequality Decomposition:**

Following Cowell (2011), inequality impacts are estimated through comparison of differences between estimated Gini coefficients with and without remittance income on the HIES 2018–19 sample. Provincial Gini differences measure redistributive contributions.

# Addressing Selection Bias: Propensity Score Matching (PSM):

Since migration choices are not random, remittance-receiving households can be systematically different from non-remittance-recipients. In order to reduce selection bias, PSM matches samples according to comparable observable information. Propensity scores—estimated probabilities of remittance receipt—are derived with a Probit model incorporating all control variables enumerated.

Three matching strategies were utilized:

- 1. Nearest Neighbor (1:1) matching,
- 2. Kernel matching with Gaussian weights, and
- 3. Radius matching (caliper = 0.05).

The Average Treatment Effect on the Treated (ATT) was calculated for every welfare outcome. Balance diagnostics (standardized mean differences < 10%) ensure good covariate matching.

# **Robustness and Sensitivity Tests:**

To ensure robustness, the study conducted:

- Alternative specifications using the log of remittance amount;
- Separate regressions for rural/urban and male/female-headed households;
- Exclusion of extreme remittance outliers (top 1%);
- Variance Inflation Factor (VIF) tests for multicollinearity; and
- Breusch-Pagan and White tests for heteroskedasticity.

No severe multicollinearity or heteroskedasticity was detected.

# **Conceptual Framework**

The analysis is based on NELM theory, where it assumes that migration and remittances confirm cooperative household adaptations to risk and credit constraints. On this basis, remittances:

- 1. Maintain consumption constant against income shocks;
- 2. Enforce liquidity constraints removal and permit human-capital investment;
- 3. Possibly create community-level spillovers by increasing local demand.

However, the net welfare impact hinges on remittance consumption patterns, the ability to access finance, and macroeconomic factors. The empirical models discussed above reveal these mechanisms for Pakistan.

#### **Expected Contribution**

This strategy provides three primary contributions to existing literature:

- 1. It uses recent PBS data to revise post-COVID evidence regarding welfare effects;
- 2. It integrates OLS, Probit, and PSM methods to treat selection bias as well as mean effects; and
- 3. It is broken down by gender and region, with richly textured policy implications.

Together, this process delivers robust, replicable evidence on the impact of remittance flows on household welfare in Pakistan today.

#### **Results and Discussion**

# **Descriptive Statistics**

Table 1 displays the weighted descriptive statistics of remittance-receiving households and other households, based on the Household Integrated Economic Survey (HIES) 2018–19. All consumption values are in terms of per-capita monthly expenditure in nominal Pakistani Rupees (PKR).

Table 1
Descriptive Statistics of Remittance and Non-Remittance Households (HIES 2018–19)

Variable	Remittance HH (Mean)	Non-Remittance HH (Mean)	Mean Diff.	p- value
Per-capita consumption (PKR/month)	6,740	5,870	+870	0.001
Poverty headcount (%)	17.8	24.9	<b>-</b> 7.1	0.002
HH size	6.0	6.4	-0.4	0.210
Head's education (years)	9.0	7.4	+1.6	0.000
Rural (%)	63.5	59.0	+4.5	0.160

Source: Author's calculations from HIES 2018–19 (Pakistan Bureau of Statistics).

Notes: All values are weighted using PBS survey weights. Consumption is expressed as monthly per-capita real expenditure in 2018 PKR. Poverty line = Rs 3,776 per adult-equivalent per month (2018–19 prices). Robust standard errors clustered at the PSU level. N (unweighted) = 24,231; weighted = 24,800.

About 12 percent of the households report receiving remittances from abroad. The remittance-receiving households enjoy much higher per-capita consumption and much lower poverty. These are in line with (Ministry of Planning, Development & Special Initiatives, 2019) and Adams (2006), confirming that remittance inflows ease liquidity constraints and enable household consumption smoothing.

#### **Econometric Estimates**

# **Impact on Household Consumption**

Table 2
OLS Estimates of the Impact of Remittances on Monthly Per-Capita Consumption

Variable	Coefficient (β)	Std. Error	t	Sig.
Remittance (dummy)	0.187	0.039	4.82	***
Head's education (years)	0.044	0.008	5.48	***
Household size	-0.027	0.011	-2.52	**
Employment status (1 = employed)	0.061	0.031	1.96	*
Rural (1 = rural)	-0.050	0.023	-2.13	*
Constant	9.39	0.21	44.7	***

Observations (weighted)	24,231	
$\mathbb{R}^2$	0.318	

<sup>\*\*\*</sup> p < 0.01; \*\* p < 0.05; \* p < 0.10. Robust SEs clustered at sampling-unit level.\*\*

Notes: Weighted OLS/Probit/PSM estimates. Robust standard errors clustered at the primary-sampling-unit (PSU) level are reported in parentheses. Consumption measured as monthly per-capita real PKR (2018 prices). Poverty line = Rs 3,776 per adult-equivalent (2018–19). N (unweighted) = 24,231; weighted = 24,800.

The coefficient on the remittance dummy indicates that, controlling for education, household size, employment, and location, remittance-receiving households spend about 18–19 percent more on monthly per-capita consumption than comparable non-recipient households. This effect is economically meaningful and statistically significant (p < 0.01), consistent with Adams (2006) and Awan et al. (2015).

# **Impact on Poverty Reduction:**

Poverty status is defined following the national consumption-based poverty line of Rs 3,776 per adult-equivalent per month (2018–19 prices).

Table 3
Probit Estimates of the Probability of Being Poor (HIES 2018–19)

110010 200111111000 01 011	110210 2001111000 01 0110 1100010 11100 01 20110 1 001 (11120 2010 13)					
Variable	Marginal Effect	Std. Error	$\mathbf{z}$	Sig.		
Remittance (dummy)	-0.081	0.018	-4.49	***		
Head's education	-0.011	0.004	-2.93	**		
Household size	0.020	0.006	3.39	***		
Employment status	-0.037	0.015	-2.47	**		
Rural	0.029	0.010	2.80	**		
Pseudo R <sup>2</sup>	0.231					

Source: Author's calculations from HIES 2018-19.

Notes: Weighted OLS/Probit/PSM estimates. Robust standard errors clustered at the primary-sampling-unit (PSU) level are reported in parentheses. Consumption measured as monthly per-capita real PKR (2018 prices). Poverty line = Rs 3,776 per adult-equivalent (2018–19). N (unweighted) = 24,231; weighted = 24,800. Receipt of remittances reduces the probability of being poor by approximately 8 percentage points (Table 3). This marginal effect corresponds closely to national poverty levels reported in Ministry of Planning, Development & Special Initiatives (2019) and Iqbal (2020) remains stable across alternative specifications. Education and employment similarly decrease poverty risk, while larger household size and rural residence increase it.

#### **Impact on Income Inequality:**

Table 4
Gini Coefficient With and Without Remittance Income

Without Remittances	With Remittances	Change	Effect
0.323	0.306	-0.017	Equalizing
0.352	0.357	+0.005	Neutral
0.310	0.289	-0.021	Equalizing
0.334	0.336	+0.002	Neutral
0.319	0.300	-0.019	Equalizing
	0.323 0.352 0.310 0.334	0.323     0.306       0.352     0.357       0.310     0.289       0.334     0.336	0.323     0.306     -0.017       0.352     0.357     +0.005       0.310     0.289     -0.021       0.334     0.336     +0.002

Source: Author's computations using HIES 2018-19 (PBS microdata).

Notes: Weighted OLS/Probit/PSM estimates. Robust standard errors clustered at the primary-sampling-unit (PSU) level are reported in parentheses. Consumption measured as monthly per-capita real PKR (2018 prices). Poverty line = Rs 3,776 per adult-equivalent (2018–19). N (unweighted) = 24,231; weighted = 24,800.

Incorporating remittance income lowers Pakistan's national Gini coefficient from 0.319 to 0.300, signifying a modest but statistically meaningful equalizing effect. This range closely matches the baseline inequality (Gini  $\approx$  0.31) reported in the National Poverty & Inequality Report 2018–19 (Ministry of Planning, Development & Special Initiatives, 2019). The effect is strongest in Punjab and Khyber Pakhtunkhwa, where migration intensity is highest.

## **Propensity Score Matching (PSM) Results:**

Table 5
Average Treatment Effect of Remittances on Household Welfare (HIES 2018–19)

Outcome Variable	Matching Method	ATT	Std. Error	t	Sig.
Log consumption	Nearest Neighbor	0.184	0.036	5.09	***
Log consumption	Kernel	0.179	0.034	5.26	***
Poverty status (1 = poor)	Nearest Neighbor	-0.076	0.024	-3.19	**
Asset index (wealth proxy)	Kernel	0.141	0.041	3.44	**

Matching covariates: education, HH size, employment, and region. Standardized bias < 10 % after matching.

Notes: Weighted OLS/Probit/PSM estimates. Robust standard errors clustered at the primary-sampling-unit (PSU) level are reported in parentheses. Consumption measured as monthly per-capita real PKR (2018 prices). Poverty line = Rs 3,776 per adult-equivalent (2018–19). N (unweighted) = 24,231; weighted = 24,800. The PSM cross-checks the stability of the regression estimates: remittances boost consumption by about 18–20 percent, lower poverty by 7–8 points, and increase household possession of assets.

# **Heterogeneity Analysis**

## **Rural-Urban Differences**

Remittance impacts are greater in rural areas with limited access to formal financial services. Rural families have a 21–22 percent consumption premium compared to 16 percent for urban families. This is evidence for the NELM hypothesis that remittances act as informal insurance in market-constrained regions (Mughal & Anwar, 2012).

#### Gender of Household Head

The female-headed households represent 7.8 percent of the weighted sample (N  $\approx$  1,900). Hence, their inferred consumption premium of 24 percent should be interpreted with care given smaller sample size.

# **Robustness and Sensitivity Checks:**

**Outlier Exclusion:** Dropping the top 1 % of remittance values leaves coefficients unchanged.

**Alternative Remittance Measure:** Using the log amount instead of a binary indicator yields a coefficient of 0.19, consistent with main results.

**Multicollinearity:** Mean VIF =  $1.82 (< 3) \rightarrow$  no serious collinearity.

**Heteroskedasticity:** Breusch–Pagan  $\chi^2$  = 11.6 (p = 0.31); robust SEs confirmed.

**Provincial Dummies:** Inclusion of provincial dummy variables does not materially alter results.

#### Discussion

The findings support the New Economics of Labor Migration (NELM) theory that remittances are an insurance device, which smoothes consumption and reduces poverty. The  $\approx$  19 percent consumption premium and 8 percentage-point poverty decline are in line with empirical realities of Adams (2006), Awan et al. (2015), and Sarma et al. (2023).

Nonetheless, welfare benefits are still spatially distributed unevenly. More financially inclusive provinces (Punjab, KP) benefit more from developmental benefits, whereas others with restricted access to banking have predominantly consumption-based effects. This supports the welfare impact argument of Barkat et al. (2024) that remittances' welfare impact hinges on the facilitatory financial infrastructure.

On the whole, evidence suggests that foreign remittances are important to household welfare in Pakistan, yet long-term developmental effect will hinge on securing formal channels and utilizing productively.

While Propensity Score Matching accounts for selection based on observables, unobservable household traits—e.g., migrant motivation, skills, or risk aversion—could still affect both receipt of remittances and welfare levels. The estimated effects must thus be interpreted as associations reflecting correlated welfare increases, not precise causal effects.

#### Conclusion

This research analyzed the impact of foreign remittances on household welfare in Pakistan using nationally representative datasets Household Integrated Economic Survey (HIES) 2018–19 and Pakistan Social and Living Standards Measurement (PSLM) 2019–20. Employing OLS, Probit, and Propensity Score Matching methods, the research provides robust evidence to support that remittance receipts raise some welfare indicators—consumption, poverty alleviation, and savings.

Recipient households spend approximately 19–21 percent more and have an 8 percent lower likelihood of becoming poor compared to similar non-recipient households. Remittances also lower the rate of income inequality, decreasing the nation's Gini coefficient from 0.319 to 0.300. It has the greatest effect on rural and female-headed households, emphasizing remittances' redistributive and pro-gender function.

The results confirm the New Economics of Labor Migration (NELM) hypothesis that remittances are informal credit and insurance mechanisms. Meanwhile, their development impact hinges on the financial environment—where formal finance is not available, remittances are largely consumed; where information and institutional infrastructure are more developed, more are invested and saved.

# **Policy Recommendations**

**Expand Financial Inclusion and Digital Access:** The State Bank of Pakistan and the commercial banks can provide branchless banking and fintech platforms (e.g., EasyPaisa, JazzCash) to rural areas. Easy account opening, biometric identification, and interoperable wallets can promote savings and decrease the use of informal hawala networks.

**Promote Productive Use of Remittances:** Coordination among the Pakistan Remittance Initiative (PRI), micro-finance institutions, and provincial development banks can construct remittance-linked investment tools such as diaspora bonds or remittance-backed micro-enterprise loans for mobilizing private flows as community development capital.

**Reduce Transaction Costs:** Corridor-variant fee caps negotiated and encouraging competition among money-transfer operators have the potential to raise the net disposable income of the recipient households.

Enhance Financial Literacy: National training programs can assist the remittance recipients in small-business enterprise, asset building, and budgeting. Financial education has been found to enhance welfare impacts of remittances (Barkat et al., 2024).

**Leverage Remittances for Local Development:** Local governments in migrant-saturated locales can set up matching-grant community funds that help co-finance local infrastructure with remittance flows, thereby linking private transfers with the provision of public goods.

Strengthen Data and Monitoring Systems: Periodic integration of HIES and PSLM migration modules, with public microdata access, would encourage reproducibility of research and evidence-based policy.

#### **Limitations and Directions for Future Research**

In spite of methodological rigor, this research has several limitations. There are no panel data on households available in the HIES and PSLM waves, constraining causal inference over welfare changes over time. Observable selection bias is addressed by applying PSM, but unobserved heterogeneity (that is, ability, motivation of migrant migrants) is still an issue for the findings. Remittances are possibly under-reported given the utilization of informal transfer channels. Micro-level welfare is addressed by analysis; spillover on inflation or local labor markets was not estimated.

Subsequent research can exploit panel data or instrumental-variable methods (e.g., historical migration networks) to strengthen causal inference. Incorporating indicators of financial inclusion and digital-remittance use would also illuminate mechanisms by which remittances promote long-term development.

#### References

- Adams, R. H. (2006). International Remittances and the Household: Analysis and Review of Global Evidence. *Journal of African Economies*, 15(2), 396–425. https://doi.org/10.1093/jafeco/ejl028
- Ahmed, J., & Mughal, M. (2019). Cost of Remitting to Pakistan Across Major Corridors. Pakistan Institute of Development Economics, Islamabad Research Brief 04
- Awan, M. S., Javed, M., & Waqas, M. (2015). Migration, Remittances, and Household Welfare: Evidence from Pakistan. *The Lahore Journal of Economics*, 20(1), 47–69.
- Aziz, N., Raza, A., Yang, S., & Zhou, J. (2024). Assessing the impact of migration on the happiness of household women left behind: Evidence from Punjab, Pakistan. *Comparative Migration Studies*, 12, Article 48. https://doi.org/10.1186/s40878-024-00409-9
- Barkat, K., Mimouni, K., Alsamara, M., & Zouhair Mrabet. (2024). Achieving the sustainable development goals in developing countries: The role of remittances and the mediating effect of financial inclusion. *International Review of Economics & Finance*, 95, 103460. https://doi.org/10.1016/j.iref.2024.103460
- Barriga Cabanillas, O., Kishwar, S., Meyer, M., Nasir, M., & Qazi, M. (2025). Poverty Projections for Pakistan: Nowcasting and Forecasting. Policy Research Working Paper; 11010. World Bank7
- Cowell, F. (2011). *Measuring Inequality, 3rd edn, London School of Economics Perspectives in Economic Analysis*. Oxford University Press. https://doi.org/10.1093/acprof:osobl/9780199594030.001.0001
- Fransen, S., & Mazzucato, V. (2014). Remittances and Household Wealth after Conflict: A Case Study on Urban Burundi. *World Development*, 60, 57-68. https://doi.org/10.1016/j.worlddev.2014.03.018
- International Organization for Migration. (2024). *Remittance inflows to Pakistan: Data and trends* (2020–2024). IOM Migration Data Portal.
- Iqbal, N. (2020). *National poverty estimates 2018-19 (Knowledge Brief May, 2020). Pakistan Institute of Development Economics,* Islamabad. https://www.pide.org.pk/research/national-poverty-estimates-2018-19/
- Irfan, M. (2011). Remittances and Poverty Linkages in Pakistan: Evidence and Some Suggestions for Further Analysis (PIDE Working Paper No. 2011:78). Pakistan Institute of Development Economics, Islamabad.
- Kikkawa, A., Gaspar, R., Kim, K., Mariasingham, M. J., & Zamora, C. M. (2024). Measuring the contribution of international remittances to household expenditures and economic output: A micro-macro analysis for the Philippines (ADB Economics Working Paper Series No. 714). *Asian Development Bank (ADB)*, Manila. https://doi.org/10.22617/WPS240025-2

- Lim, S., Morshed, A. M., & Turnovsky, S. J. (2023). Endogenous labor migration and remittances: Macroeconomic and welfare consequences. *Journal of Development Economics*, 163. https://doi.org/10.1016/j.jdeveco.2023.103110.
- Ministry of Planning, Development & Special Initiatives. (2019). *National poverty & inequality report 2018-19*. Government of Pakistan.
- Mughal, M. Y., & Anwar, A. I. (2012). *Remittances, inequality and poverty in Pakistan: Macro and microeconomic evidence (CATT Working Paper No. 2).* Centre d'Analyse Théorique et de Traitement des Données Économiques (CATT).
- Nanziri, L. E., & Mwale, M. L. (2023). Remittances, crowd-in effect, and household welfare. *Scientific African*, 19, e01521
- Qayyum, A., Javid, M., & Arif, U. (2008). *Impact of remittances on economic growth and poverty: Evidence from Pakistan*. MPRA Paper No. 22941. University of Munich. Retrieved from https://mpra.ub.uni-muenchen.de/22941/
- Sarma, P., Alam, M., & Begum, I. (2023). International remittances' impact on household welfare and food security in Bangladesh: evidence from cross-sectional data. *SN Business & Economics*, 3(11). https://doi.org/10.1007/s43546-022-00388-y
- Shair, W., & Anwar, M. (2023). Effect of internal and external remittances on expenditure inequality in Pakistan. *Cogent Economics & Finance*, 11(1), Article 2178121. https://doi.org/10.1080/23322039.2023.21781
- Yamada, E., Shimizutani, S., & Murakami, E. (2022). Remittances, household welfare, and the COVID-19 pandemic in Tajikistan. *Asian Development Review*, 39(2), 147-174. https://doi.org/10.1142/S0116110522500159