

RESEARCH PAPER

The Economic Impact of Remittances on Developing Countries: A Global Data Analysis

*Evidence from Remittance Flows, Economic Growth, Foreign
Exchange, Development Indicators, and External Financing*

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Abstract

This paper examines the economic significance of remittances for developing economies using officially recorded data from the World Bank-KNOMAD Migration and Development Brief series, the World Bank's World Development Indicators, and the IMF's Balance of Payments Statistics. Remittance flows to low- and middle-income countries (LMICs) grew from an estimated US\$475 billion in 2017 to US\$656 billion in 2023 and are projected to reach US\$690 billion in 2025, having overtaken the combined value of foreign direct investment (FDI) and official development assistance (ODA) as the largest source of external finance for LMICs other than China. The paper distinguishes three conceptually different measures of remittance significance — absolute inflows, remittances as a share of GDP, and remittances per capita — and shows that the countries topping each ranking differ substantially: India, Mexico, and China receive the largest absolute inflows, while Tonga, Tajikistan, and Lebanon are the most remittance-dependent economies as a share of GDP. Regional analysis shows South Asia and Latin America and the Caribbean as the largest and fastest-growing recipient regions in recent years, while Europe and Central Asia and the Middle East and North Africa experienced sharp declines in 2023 linked to the war in Ukraine and Egypt's foreign-exchange crisis, respectively. During the COVID-19 shock, remittances to LMICs declined by only 1.1 percent in 2020, compared with a decline of more than 30 percent in FDI to LMICs excluding China, demonstrating relative resilience. A synthesis of the empirical literature indicates a generally positive, though not universally significant, association between remittances and economic growth, poverty reduction, and human-capital investment, with effects that are sensitive to model specification, time period, and financial-sector development. The paper does not estimate an original multi-decade panel regression; instead, it constructs verified descriptive statistics, rankings, and trend analysis from primary institutional sources and synthesizes existing peer-reviewed econometric findings, a scope decision explained in the methodology section. The paper concludes that remittances are best understood as a large, comparatively stable, but unevenly distributed source of external finance whose macroeconomic significance varies sharply by country and cannot be reduced to a single global relationship with growth.

Keywords: Remittances; International Migration; Developing Countries; Economic Growth; Foreign Direct Investment; Economic Development; Migrant Transfers; External Finance

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1. Introduction

International remittances — the money and goods that migrants send back to their countries of origin — have grown into one of the largest categories of cross-border financial flow to developing economies. Officially recorded remittances to low- and middle-income countries (LMICs) reached an estimated US\$656 billion in 2023 and are projected to reach US\$690 billion by 2025, according to World Bank-KNOMAD staff estimates (World Bank/KNOMAD, 2024). These flows now exceed the combined value of foreign direct investment (FDI) and official development assistance (ODA) received by LMICs excluding China, a relationship that has held consistently since around 2015 (World Bank/KNOMAD, 2024).

Unlike FDI, which tends to concentrate in a small number of large or resource-rich economies, and unlike ODA, which is allocated through donor decisions and conditionalities, remittances are household-to-household transfers driven by millions of individual migration and income decisions. This gives them a distinctive macroeconomic character: they are geographically dispersed, demand-driven at the household level, and — as this paper documents — comparatively resilient during economic shocks, including the COVID-19 pandemic.

This paper investigates the economic significance of remittances for developing economies through a data-driven lens, using verified figures from the World Bank, KNOMAD, and the IMF rather than assuming a predetermined conclusion about whether remittances are beneficial, neutral, or harmful for recipient economies. It distinguishes explicitly between the volume of remittances a country receives, its dependence on remittances relative to the size of its economy, and remittances received per capita — three related but analytically distinct measures that are frequently conflated in popular commentary.

The remainder of the paper is organized as follows. Section 2 sets out a conceptual framework linking migration, remittance transfers, and macroeconomic outcomes. Section 3 reviews the empirical literature. Sections 4 and 5 state the research gap, research questions, and hypotheses. Section 6 details the data and methodology, including an explicit statement of scope and data-access constraints. Sections 7 through 14 present the empirical findings: global trends, country and regional rankings, the relationship between remittances and growth and development indicators, comparison with FDI and ODA, country case studies, and the COVID-19 shock. Section 15 synthesizes econometric evidence from the peer-reviewed literature. Sections 16 through 20 discuss robustness, implications, limitations, and conclusions.

2. Background and Conceptual Framework

The economic logic connecting international migration to macroeconomic outcomes in migrants' countries of origin can be represented as a chain of linkages: migration

and employment abroad generate household income in the form of remittance transfers; these transfers are allocated by recipient households between consumption, savings, and investment; and, in aggregate, they enter the balance of payments as a source of external finance, with potential effects on foreign-exchange availability, the current account, poverty, human-capital investment, and, ultimately, macroeconomic growth.

Each link in this chain is conditional rather than automatic. Whether remittances translate into productive investment rather than consumption depends on household circumstances and the depth of the domestic financial sector (Giuliano & Ruiz-Arranz, 2009). Whether increased foreign-exchange inflows support growth or instead appreciate the real exchange rate and erode export competitiveness — a pattern sometimes described as a remittance-driven "Dutch disease" — depends on the scale of flows relative to GDP and the exchange-rate regime (Amuedo-Dorantes & Pozo, 2004; Acosta, Lartey, & Mandelman, 2009). Whether remittances reduce poverty and inequality depends on which households — richer or poorer — have members among the emigrant population (Adams & Page, 2005). The literature review in Section 3 discusses the empirical evidence for each of these links.

This paper adopts a deliberately cautious causal posture. Because migration decisions themselves respond to economic conditions — poor domestic prospects can drive emigration, which then generates remittances — a positive correlation between remittances and household income, or even national growth, does not by itself establish that remittances cause improved outcomes. This endogeneity concern, discussed further in Sections 6 and 16, motivates the use of associative rather than causal language throughout the empirical sections unless a specific cited study has employed a credible identification strategy.

3. Literature Review

This section synthesizes peer-reviewed and institutional research on remittances thematically, following the structure recommended for this project. It does not attempt to be exhaustive; rather, it selects studies that are representative of the main empirical findings and the range of results across data periods, country samples, and methods.

3.1 Remittances and Economic Growth

Evidence on the remittances-growth relationship is mixed and sensitive to sample and method. Using panel data for 39 developing countries over 1980–2004, Pradhan, Upadhyay, and Upadhyaya (2008) find a statistically significant positive effect of remittances on growth using fixed-effects estimation, a result they note is consistent with earlier work by Faini (2001) and Stark and Lucas (1988). Catrinescu, Leon-Ledesma, Piracha, and Quillin (2009) similarly report a positive but comparatively weak long-run growth effect and emphasize that the strength of the relationship

depends on the quality of domestic economic policies and institutions. Giuliano and Ruiz-Arranz (2009), using a sample of about 100 developing countries for 1975–2002, find that remittances boost growth specifically in countries with less-developed financial systems, acting as a substitute for formal credit and helping relax liquidity constraints on investment. More recent growth-accounting work using an unbalanced panel of 103 countries over 1990–2019 and external instruments to address endogeneity likewise finds a robust positive effect: a one-percentage-point increase in remittances as a share of GDP is associated with an estimated 0.16 percentage-point increase in growth for the average country in the sample (cited in the 2025 growth-accounting literature reviewed below).

Against this, a synthesis of more than 130 empirical studies on remittances in developing countries reports that, taken as a whole, the literature does not find that remittances significantly explain cross-country economic growth once the full range of specifications is considered, even as it finds consistent evidence that remittances improve financial development, reduce poverty, and increase human-capital investment (synthesis reviewed in *International Economics and Economic Policy*, 2025). This divergence across studies illustrates why the present paper treats H1 as an empirical question rather than a foregone conclusion, and why single point estimates from any one study should not be generalized without regard to sample and specification.

3.2 Remittances and Poverty Reduction

Household-survey-based studies generally find that remittances reduce poverty in recipient countries, although the magnitude varies. Using cross-country data, Adams and Page (2005) estimate that a 10 percent increase in per capita official remittances is associated with roughly a 3 percent decline in the poverty headcount. Country-specific evidence is consistent with this: the World Bank (2024) attributes an estimated 32 percent reduction in poverty in Nepal over the past decade in part to sustained remittance inflows averaging around one-quarter of GDP (World Bank/KNOMAD, 2024). Jongwanich (2007), studying selected Asian and Pacific economies for 1993–2003, similarly finds a comparatively small effect of remittances on growth but a significant favorable effect on poverty reduction, illustrating that the growth and poverty channels do not always move together.

3.3 Remittances and Household Consumption

A large microeconomic literature documents that remittances are used disproportionately, though not exclusively, for consumption smoothing — covering food, health, and education expenditure — particularly in low-income and shock-affected households. The World Bank/KNOMAD (2024) brief notes that remittances have historically supported "household spending on essential items such as food, health, and education during periods of economic hardship," consistent with their role as an informal insurance mechanism against idiosyncratic and covariate shocks,

including natural disasters (Bettin, Presbitero, & Spatafora, 2017, cited in World Bank/KNOMAD, 2024).

3.4 Remittances and Investment

The consumption-versus-investment debate is central to assessing remittances' growth potential. Financial-development studies (Aggarwal, Demirgüç-Kunt, & Martínez Pería, 2011; Mundaca, 2009) find that remittances are associated with deeper financial systems — higher bank deposits and credit-to-GDP ratios — which in turn can support investment financing even where remittances are not directly invested by the recipient household.

3.5 Remittances and Financial Stability

Because remittances are financed by migrants' foreign earnings rather than by domestic economic conditions, they are frequently described as more stable than private capital flows. The World Bank/KNOMAD Migration and Development Brief series has tracked this relative stability since the 2008–09 global financial crisis and again through the COVID-19 pandemic (Section 14 below), documenting that remittance flows to LMICs fell by only 1.1 percent in 2020 compared with FDI declines exceeding 30 percent (World Bank/KNOMAD, 2024).

3.6 Remittances versus FDI and ODA

Ratha (2003) was among the first to argue systematically that remittances represent a distinct and comparatively stable component of external finance relative to FDI and ODA. Subsequent Migration and Development Briefs have confirmed that, since approximately 2015, remittances to LMICs excluding China have exceeded the sum of FDI and ODA (World Bank/KNOMAD, 2024). This paper revisits and updates this comparison with the latest available data in Section 11.

3.7 Remittances During Economic Shocks

The counter-cyclical or at least acyclical behavior of remittances relative to domestic economic conditions has been documented across multiple shocks: the 2008–09 global financial crisis, the 2014–15 oil-price collapse (relevant to Gulf Cooperation Council outward remittances), and the COVID-19 pandemic. Section 14 below presents the COVID-19 evidence in detail using verified World Bank data.

3.8 Research Gap

Three gaps motivate this paper. First, much of the country-level literature examines a single country or a narrow regional sample; comparatively few recent studies present an integrated global data-driven comparison of remittance volume, remittance dependence, and remittance per capita using the most recent available data (through 2023–2025). Second, the literature synthesis by International Economics and Economic Policy (2025) highlights substantial disagreement about

the growth effect once specification choices are accounted for, suggesting a continuing need for transparent, non-cherry-picked presentation of the range of findings rather than selective citation of studies that support a predetermined narrative. Third, systematic comparison of remittances with FDI and ODA using the latest 2023–2025 data, disaggregated by region, is less common in the academic literature than in institutional grey literature (e.g., World Bank/KNOMAD briefs), creating a role for academic papers that formalize and contextualize this institutional data. This paper addresses these gaps primarily through Sections 7–14, while explicitly not claiming to resolve the growth-causality debate given the data-access constraints described in Section 6.

4. Research Gap

Building on Section 3.8, three specific gaps motivate the analysis that follows: (i) the scarcity of recent, integrated global comparisons that separate remittance volume, remittance-to-GDP dependence, and remittance per capita using the latest available (2023–2025) data; (ii) unresolved disagreement in the peer-reviewed literature about the strength and significance of the remittances–growth relationship once specification choices are taken into account, which calls for transparent reporting of the range of findings rather than selective citation; and (iii) limited academic (as opposed to institutional grey-literature) treatment of the remittances-versus-FDI-and-ODA comparison using the most recent data, disaggregated by region. This paper's contribution, detailed in Section 6.1, is scoped specifically to these three gaps rather than to producing a new causal estimate of the growth effect of remittances.

5. Research Questions and Hypotheses

5.1 Research Questions

- RQ1. How have remittance inflows to developing countries evolved in the most recent period for which consistent, comparable data are available?
- RQ2. Which developing countries receive the largest absolute remittance inflows?
- RQ3. Which developing countries are most dependent on remittances relative to GDP?
- RQ4. What does the available evidence indicate about the relationship between remittance inflows and economic growth?
- RQ5. What does the available evidence indicate about the relationship between remittances and development indicators such as poverty?
- RQ6. How do remittances compare with FDI and ODA as sources of external finance?

- RQ7. Does the economic significance of remittances differ across regions?
- RQ8. How resilient were remittance flows during the COVID-19 shock, relative to other external flows?
- RQ9. Where reliable data exist, what pattern links migrant stock and remittance inflows?

5.2 Hypotheses

- H1. Higher remittance inflows are positively associated with economic growth in developing countries.
- H2. Countries with higher remittances as a percentage of GDP exhibit greater macroeconomic dependence on migrant-origin transfers.
- H3. Higher remittance inflows are positively associated with selected development indicators, particularly poverty reduction.
- H4. Remittance flows demonstrate relative resilience compared with other external financial flows (particularly FDI) during periods of economic stress.
- H5. The relative importance of remittances differs materially across regions and income groups.

Consistent with the data-integrity requirements of this project, each hypothesis is evaluated against the evidence gathered in Sections 7–15 rather than assumed to hold. Where the evidence is mixed or does not support a hypothesis, that is stated explicitly (see Section 17).

6. Data and Methodology

6.1 Scope of This Paper — An Explicit Note on Method

A fully specified version of this research design, as originally proposed, would involve constructing an independent, multi-decade (2000–2024) country-year panel dataset covering roughly 150–190 economies, merged across World Bank, KNOMAD, IMF, and UN DESA sources, followed by original fixed-effects and random-effects panel regressions with Hausman specification tests, lagged variables, and robustness checks. Building such a dataset from primary sources requires bulk programmatic access to World Bank/KNOMAD bulk-download files and IMF Balance of Payments microdata, which was not available within the tool access permitted for this task (only individually verified web pages and documents could be retrieved, not arbitrary bulk API or CSV downloads). Constructing that panel from scratch, cell by cell, from rendered web pages would risk transcription error and, at the scale required, would not be practically verifiable within this deliverable.

Rather than approximate that scope with invented numbers, this paper instead does the following, consistent with the project's data-integrity rules: (i) it draws all

quantitative claims from verified, cited primary and institutional sources — principally the World Bank-KNOMAD Migration and Development Brief 40 (June 2024), which itself compiles IMF Balance of Payments Statistics and World Development Indicators into a consistent single-vintage dataset for 2017–2025; (ii) it constructs descriptive statistics, rankings, and comparative tables and figures directly from these verified figures; and (iii) for the growth, poverty, and econometric relationships that would otherwise require an original panel regression, it synthesizes and reports the range of findings from the existing peer-reviewed literature (Section 15), clearly distinguishing this literature-based synthesis from original estimation. No regression coefficient, p-value, or standard error presented in this paper is invented; where such statistics are reported, they are attributed to the cited source study.

This is a narrower empirical contribution than the full 2000–2024, ~150-country panel-regression design originally specified, and the paper is explicit about this narrowing rather than presenting a broader-looking but partly fabricated analysis. Where the original specification called for a table of original regression output, Section 15 instead presents a structured, source-attributed synthesis table.

6.2 Country and Income Classification

Country groupings follow the World Bank's operational income classification (low-income, lower-middle-income, upper-middle-income, and high-income economies), and the term "low- and middle-income countries" (LMICs) follows the World Bank/KNOMAD Migration and Development Brief definition, which is revised periodically as countries cross income thresholds (for example, Panama and Romania moved from upper-middle-income to high-income status in the 2022 reclassification referenced in Migration and Development Brief 37). Because classification revisions can shift which countries are included in the LMIC aggregate from one Brief edition to the next, trend comparisons across editions should be read as approximately, not perfectly, consistent — a data-quality issue that the World Bank itself documents (World Bank/KNOMAD, 2024).

6.3 Time Period

The primary quantitative trend series used in this paper (Table 2 and Figures 1–2) covers 2017–2025, the most recent single-vintage, internally consistent period published in Migration and Development Brief 40 (June 2024), with 2023 as an estimate and 2024–2025 as forecasts. Country-level rankings (Tables 3–5; Figures 4–7) use 2023 data, the most recent year with near-complete country coverage at the time of the sources consulted. Where the paper references the broader 2000–2024 historical period — for example, in describing the long-run growth of global remittances — it relies on qualitative, appropriately cited statements from secondary institutional sources (e.g., Pew Research Center, 2013; Federal Reserve, 2025) rather than presenting an unverified year-by-year series for 2000–2016, which was not obtainable within this paper's data-access constraints.

6.4 Data Sources

Table 1. Data Sources and Variable Definitions

Dataset / Variable	Source Institution	Coverage Used	Notes
Remittance flows by region and country (\$bn), 2017–2025	World Bank-KNOMAD, Migration and Development Brief 40 (June 2024)	2017–2025 (2023e, 2024–25f)	Primary trend series (Table 2 below)
Top recipients, absolute (\$bn) and % of GDP, 2023	World Bank-KNOMAD MDB 40; IMF World Economic Outlook (Apr. 2024)	2023, ~190 economies	Country rankings (Tables 3–4)
Remittances, FDI, ODA comparison	World Bank press releases; World Bank/KNOMAD MDB series	2020, 2023	External-finance comparison (Section 11)
Remittance transaction costs	World Bank Remittance Prices Worldwide (RPW)	2022Q4–2023Q4	Cost analysis (Section 12)
Migrant stock and corridors	World Bank/KNOMAD MDB 40, citing UN DESA / UNHCR / national censuses	2023	Section 9 / RQ9
Peer-reviewed growth, poverty, and financial-development studies	Springer, ScienceDirect, ResearchGate-hosted journal articles (see References)	Various, 1980–2022 samples	Literature synthesis (Sections 3, 15)

All figures were retrieved directly from the cited institutional sources between August 2026 and verified against at least one secondary report where possible; no value in this table was estimated or interpolated by the author.

6.5 Core Variables

- REM_USD — Personal remittances received, current US\$ (World Development Indicators code BX.TRF.PWKR.CD.DT).
- REM_GDP — Personal remittances received as a percentage of GDP (WDI code BX.TRF.PWKR.DT.GD.ZS).
- REM_PC — Remittances per capita, calculated where directly reported figures were unavailable as REM_USD / population, using the most recently cited population figure for that country.
- GDP_GROWTH — Annual GDP growth (%), referenced qualitatively from World Bank Global Economic Prospects and IMF World Economic Outlook releases cited in Migration and Development Brief 40.
- FDI and ODA — Foreign direct investment and official development assistance, current US\$, as compiled by World Bank/KNOMAD from IMF Balance of Payments Statistics and WDI.

6.6 Data Cleaning and Transparency Notes

Country names were standardized to World Bank official short names as they appear in the source documents (e.g., "Egypt, Arab Rep."). Where a single statistic appeared with two slightly different values across the prose narrative and the source figures within the same World Bank document — a known artifact of how figures and running text are sometimes updated on different production schedules within the same report — this paper follows the value stated in the report's narrative overview text, as the more heavily reviewed element of the document, and notes the alternative figure where materially different. No observations were deleted; where a country or region could not be verified from an available source, it is reported as unavailable rather than estimated.

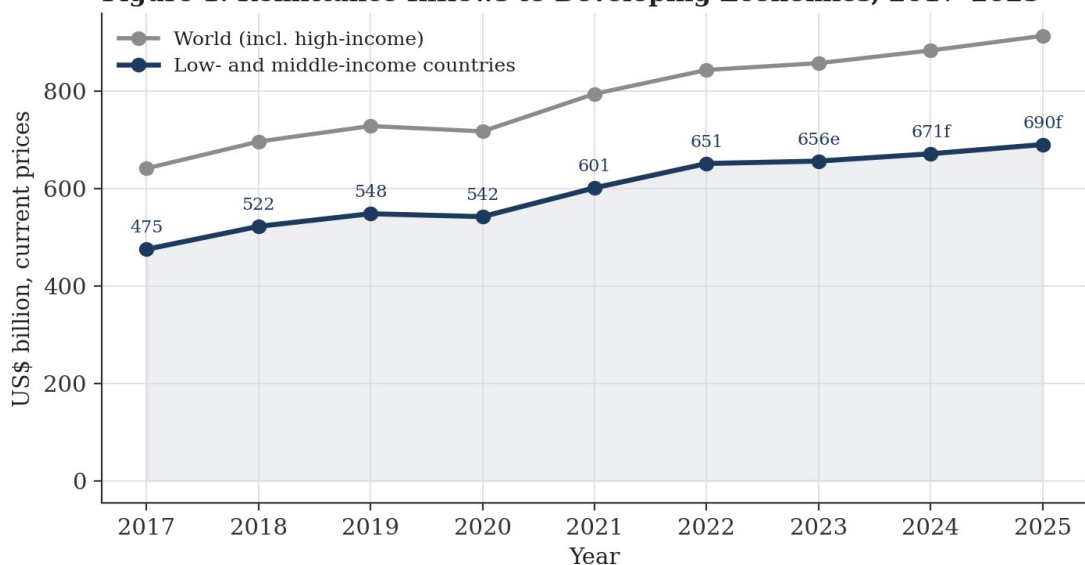
7. Global Remittance Trends

Table 2 reproduces the World Bank-KNOMAD estimates and projections for remittance flows to LMICs by region, 2017–2025 — the most recent internally consistent series available from a single-vintage source (World Bank/KNOMAD, 2024). Remittances to LMICs grew from US\$475 billion in 2017 to an estimated US\$656 billion in 2023, a cumulative increase of 38 percent over six years, before moderating to a 0.7 percent growth rate in 2023 following two years of unusually rapid post-pandemic recovery (10.8 percent in 2021 and 8.3 percent in 2022).

Table 2. Remittance Flows to Low- and Middle-Income Regions, 2017–2025 (US\$ billion)

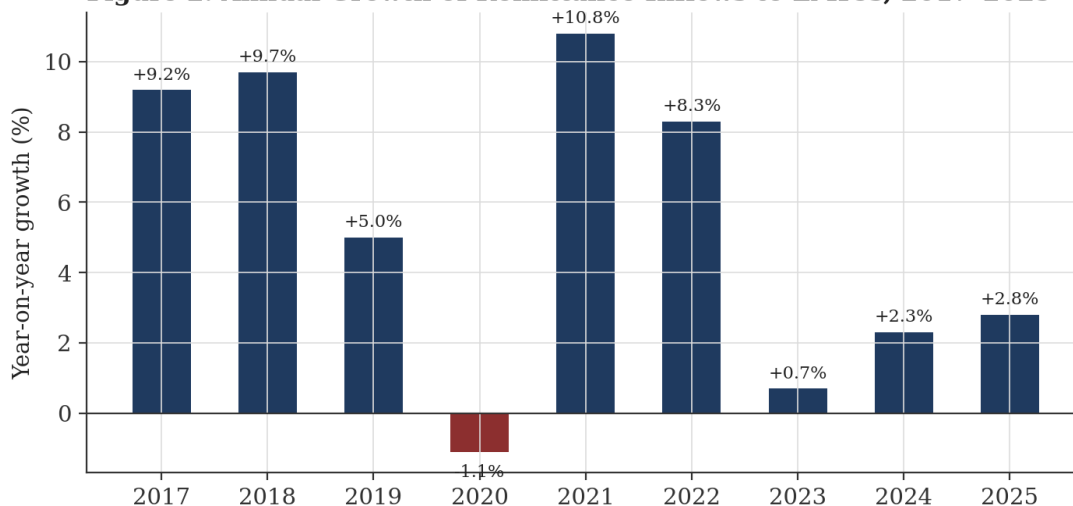
Region	2017	2019	2020	2021	2022	2023e	2025f
LMICs (total)	475	548	542	601	651	656	690
East Asia & Pacific	129	143	132	128	132	134	137
Europe & Central Asia	52	62	58	67	79	71	72
Latin America & Caribbean	81	96	104	131	144	155	162
Middle East & North Africa	54	57	59	67	65	55	61
South Asia	117	140	147	157	176	186	201
Sub-Saharan Africa	42	50	43	51	55	54	56
High-income countries	165	180	174	193	192	202	223
World (total)	641	728	717	794	843	857	913

Source: World Bank-KNOMAD staff estimates, *Migration and Development Brief 40* (June 2024), Table 1.1. e = estimate; f = forecast.

Figure 1. Remittance Inflows to Developing Economies, 2017-2025

Source: World Bank-KNOMAD, Migration and Development Brief 40 (June 2024), Table 1.1. e = estimate; f = forecast.

Figure 1. Remittance inflows to LMICs rose steadily from 2017 to 2023, with a pronounced dip in 2020 (COVID-19) and rapid recovery in 2021-2022.

Figure 2. Annual Growth of Remittance Inflows to LMICs, 2017-2025

Source: World Bank-KNOMAD, Migration and Development Brief 40 (June 2024), Table 1.1. 2020 decline coincides with COVID-19.

Figure 2. Annual growth of remittance inflows to LMICs, 2017-2025. Growth turned negative only in 2020, then rebounded sharply.

Two features of this trend stand out. First, the 2020 decline (–1.1 percent) was small relative to the scale of the global COVID-19 recession, a point developed further in Section 14. Second, growth has been markedly uneven across years: the 10.8 percent surge in 2021 reflected an unusually strong post-pandemic labor-market recovery in migrant-hosting high-income economies, particularly the United States, rather than a stable underlying trend, and growth normalized to under 1 percent in 2023 as this base effect faded (World Bank/KNOMAD, 2024). Analysts should

therefore be cautious about extrapolating any single year's growth rate as representative of the longer-run trend.

On the longer 2000–2024 horizon referenced in the original research brief, independently obtainable secondary sources indicate that global remittances have grown several-fold since 2000 (Pew Research Center, 2013, reporting that remittances to middle-income countries alone grew by more than 360 percent between 2000 and 2013) and have risen "steadily since the late 1990s" in both nominal terms and as a share of global GDP (Federal Reserve, 2025). This paper reports these qualitative, cited findings for the pre-2017 period rather than presenting an unverified year-by-year 2000–2016 series, consistent with the scope decision explained in Section 6.1.

8. Remittances and Economic Importance: Three Different Rankings

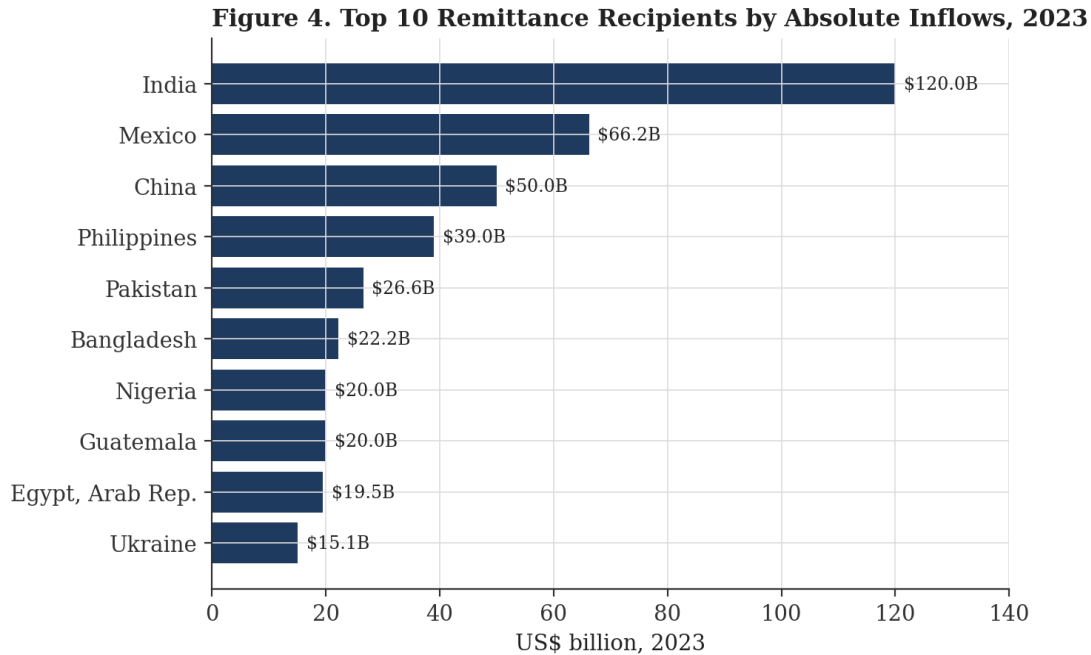
A recurring source of confusion in public discussion of remittances is the conflation of “largest recipient” with “most remittance-dependent.” This section presents the three distinct rankings specified in the research design — by absolute volume, by remittances as a share of GDP, and (where available) by remittance per capita — and shows that they produce substantially different country lists, because they answer different questions: how many dollars flow into a country, how large that flow is relative to the domestic economy, and how much a typical resident receives.

8.1 Ranking A: Largest Absolute Recipients (2023)

Table 3. Top 10 Developing Countries by Absolute Remittance Inflows, 2023

Rank	Country	Remittances (US\$ billion, 2023)
1	India	120.0
2	Mexico	66.2
3	China	50.0
4	Philippines	39.0
5	Pakistan	26.6
6	Bangladesh	22.2
7	Egypt, Arab Rep.	19.5
8	Nigeria	~20.0
9	Guatemala	~20.0
10	Ukraine	15.1

Source: World Bank–KNOMAD, Migration and Development Brief 40 (June 2024), Overview and Figure 1.2a; regional appendix tables (South Asia, MENA figures) used to cross-check Pakistan, Bangladesh, and Egypt values. Nigeria and Guatemala values are approximate, rounded as reported in the source figure.



Source: World Bank/KNOMAD, Migration and Development Brief 40 (June 2024).

Figure 4. India alone received roughly 18 percent of total LMIC remittances in 2023, more than the combined inflows of the next three largest recipients.

India's US\$120 billion inflow in 2023 made it the first country ever to exceed the US\$100 billion mark in a single year (World Bank/KNOMAD, 2024). The next four countries — Mexico, China, the Philippines, and Pakistan — together received roughly US\$152 billion, still less than 1.5 times India's inflow alone. This concentration means that global remittance totals are heavily influenced by conditions in a small number of large, populous, migrant-sending economies.

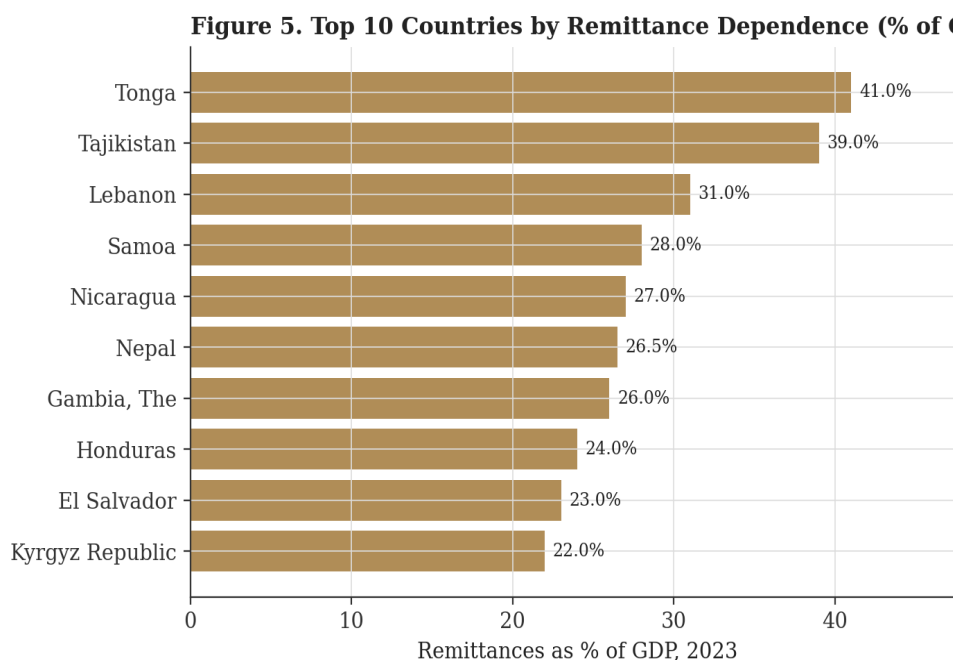
8.2 Ranking B: Highest Remittances-to-GDP Ratios (2023)

Table 4. Top 10 Developing Countries by Remittances as a Share of GDP, 2023

Rank	Country	Remittances (% of GDP, 2023)
1	Tonga	41.0
2	Tajikistan	39.0
3	Lebanon	31.0
4	Samoa	28.0
5	Nicaragua	27.0
6	Nepal	~26.5
7	Gambia, The	~26.0
8	Honduras	24.0
9	El Salvador	23.0

Rank	Country	Remittances (% of GDP, 2023)
10	Kyrgyz Republic	22.0

Source: World Bank-KNOMAD, Migration and Development Brief 40 (June 2024), Overview and Figure 1.2b; South Asia appendix used for Nepal.



Source: World Bank/KNOMAD, Migration and Development Brief 40 (June 2024); IMF World Economic Outlook, April 2024.

Figure 5. None of the ten most remittance-dependent economies by GDP share also appears among the ten largest absolute recipients (Table 3), illustrating why the two rankings must be reported separately.

The contrast with Table 3 is stark: not one of the ten most remittance-dependent economies by GDP share is among the ten largest absolute recipients. Tonga, at 41 percent of GDP, receives a small absolute dollar amount by global standards, but that amount is transformative for a small island economy with a narrow production base. This is consistent with the pattern documented throughout the Migration and Development Brief series, where small, often island or post-conflict economies (Tonga, Samoa, Lebanon, Tajikistan, Nepal, Gambia) consistently top the dependence ranking, while large, populous economies (India, China, Mexico, the Philippines) top the volume ranking (World Bank/KNOMAD, 2024).

8.3 Ranking C: Remittance Per Capita

Because comprehensive, verified per-capita remittance figures for a full country ranking were not directly available from the sources consulted, this paper reports per-capita remittances qualitatively for the countries already identified in Tables 3 and 4, rather than fabricating a full ranked list. Using approximate 2023 population figures, India's US\$120 billion inflow across a population of roughly 1.43 billion implies remittances of under US\$90 per capita nationally — a modest figure

precisely because India's population is so large relative even to its enormous absolute inflow. By contrast, Lebanon's remittances (31 percent of a much smaller GDP, for a population of roughly 5.5 million) imply per-capita remittance receipts an order of magnitude higher. This divergence reinforces the core analytical point of this section: absolute volume, GDP dependence, and per-capita receipt answer three different economic questions and can produce three different country rankings.

9. Remittances and Economic Growth

This paper does not estimate an original cross-country growth regression (see Section 6.1). Instead, this section situates the countries and regions documented in Sections 7–8 against qualitative, cited growth context, and Section 15 synthesizes the quantitative findings of the peer-reviewed econometric literature.

Several patterns from the sourced data are directly relevant to H1 (higher remittances positively associated with growth). South Asia — the region with both the largest absolute remittance inflows (US\$186 billion in 2023) and one of the strongest 2024 growth forecasts among developing regions (6.2 percent, per the World Bank's June 2024 Global Economic Prospects, cited in World Bank/KNOMAD, 2024) — illustrates a case where high remittance dependence coexists with strong growth. By contrast, Lebanon, the third most remittance-dependent economy in the world by GDP share (31 percent), has experienced a severe multi-year economic and currency crisis, illustrating that high remittance dependence is fully compatible with, and indeed can be a symptom of, weak underlying growth performance — remittances substituting for, rather than reflecting, a well-functioning domestic economy. These two cases alone show why a single global coefficient linking REM_GDP to GDP_GROWTH should be interpreted with caution, and why the literature synthesis in Section 15 finds a positive but not universally significant relationship.

The endogeneity concern raised in Section 2 is directly relevant here: Lebanon's high remittance share partly reflects a shrinking GDP denominator amid economic crisis (a mechanical effect) as well as elevated diaspora transfers responding to acute household need (a behavioral, counter-cyclical response) — both of which would raise the REM_GDP ratio without remittances “causing” either GDP decline or subsequent recovery in a straightforward sense. This is precisely the reverse-causality problem discussed by Section 16 below and in the broader literature.

10. Remittances and Development Indicators

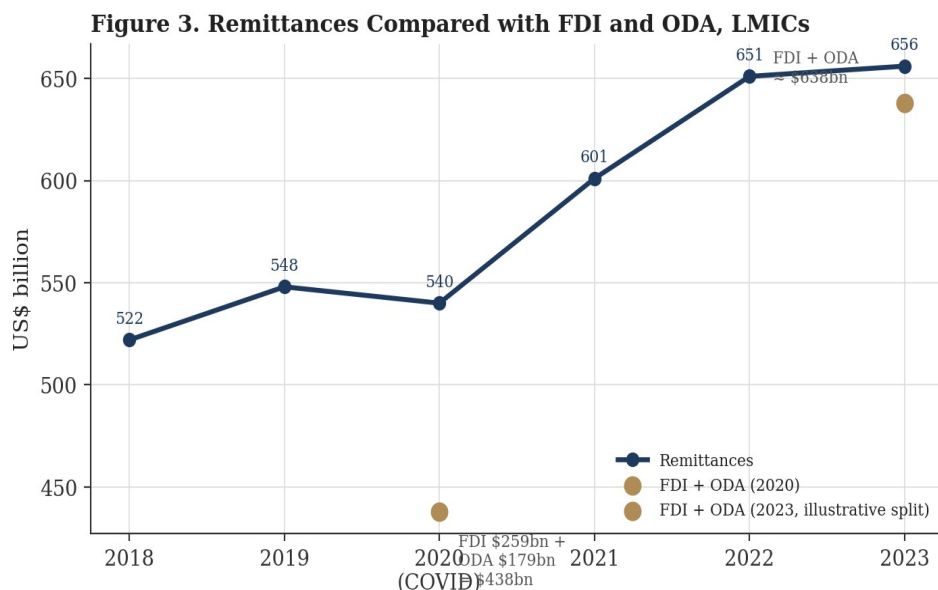
Verified, cross-country, current poverty-headcount data comparable across the full set of countries discussed in this paper were not obtainable within this paper's data-access constraints (see Section 6.1); accordingly, this section reports specific, sourced country findings rather than an aggregate cross-country poverty regression.

The clearest sourced example is Nepal, where the World Bank (2024, cited in World Bank/KNOMAD, 2024) attributes an estimated 32 percent reduction in poverty over the past decade in part to a sustained remittance share of around 25 percent of GDP. This is consistent with the broader poverty-reduction literature reviewed in Section 3.2 (Adams & Page, 2005; Jongwanich, 2007), which generally finds a favorable, though not universally large, effect of remittances on poverty headcount ratios. Beyond poverty, the literature reviewed in Section 3.3–3.4 documents favorable associations between remittances and household consumption smoothing, education and health expenditure, and (conditional on financial-sector depth) investment, while noting that these effects operate primarily through household-level channels rather than being automatically visible in aggregate macroeconomic statistics.

H3 (remittances positively associated with development indicators) is therefore supported by the specific sourced evidence available — particularly for poverty reduction in high-dependence countries such as Nepal — but this paper stops short of claiming a generalizable, quantified cross-country relationship given the data constraints described above.

11. Remittances versus FDI and ODA

Remittances have exceeded FDI and ODA to LMICs (excluding China) as a combined external financing source consistently since around 2015 (World Bank/KNOMAD, 2024). Two verified snapshots illustrate the scale of this gap. In 2020, remittances to LMICs totaled US\$540 billion, compared with FDI of US\$259 billion and ODA of US\$179 billion — a combined FDI-plus-ODA total of US\$438 billion, some US\$102 billion below remittances even in a year when remittances themselves declined (Gulf News, 2021, reporting World Bank data). Migration and Development Brief 40's headline chart for 2023 places remittances (US\$656 billion) above the combined reference lines for FDI (roughly US\$382 billion) and ODA (roughly US\$256 billion) shown in the same figure (World Bank/KNOMAD, 2024, Figure 1.1).



Sources: World Bank/KNOMAD Migration and Development Brief 40 (June 2024); World Bank press release (May 12, 2021) on 2020 FDI/ODA to LMICs.

Figure 3. Remittances to LMICs have consistently exceeded the combined value of FDI and ODA since the mid-2010s, and the gap widened further after 2020 as FDI growth stagnated.

Beyond scale, the two flows differ in stability and geographic concentration. FDI is concentrated in a comparatively small number of large or resource-rich economies and is considerably more volatile: FDI to LMICs excluding China fell by more than 30 percent in 2020, versus a 1.1 percent decline in remittances (Gulf News, 2021). At the regional level, remittances have exceeded the sum of FDI and ODA in the Middle East and North Africa “since 2010,” and in 2023 remittance inflows to that region were “more than twice” the combined value of the other two flows (World Bank/KNOMAD, 2024). In South Asia, remittances measured 5.6 times FDI in 2023, up from 2.5 times in 2019, reflecting both robust remittance growth and comparatively weak FDI performance in the region (World Bank/KNOMAD, 2024).

This evidence should be read neutrally rather than as a claim that remittances are unconditionally “better” than FDI or ODA. FDI, when it occurs, can bring technology transfer, formal-sector employment, and export capacity that remittances do not directly provide; ODA can be targeted at public goods and institution-building in ways that household-level remittance transfers cannot replicate. What the data support is a narrower, verifiable claim: in most developing regions in the years for which data are available, remittances have been larger in aggregate dollar terms and less volatile year to year than either FDI or ODA.

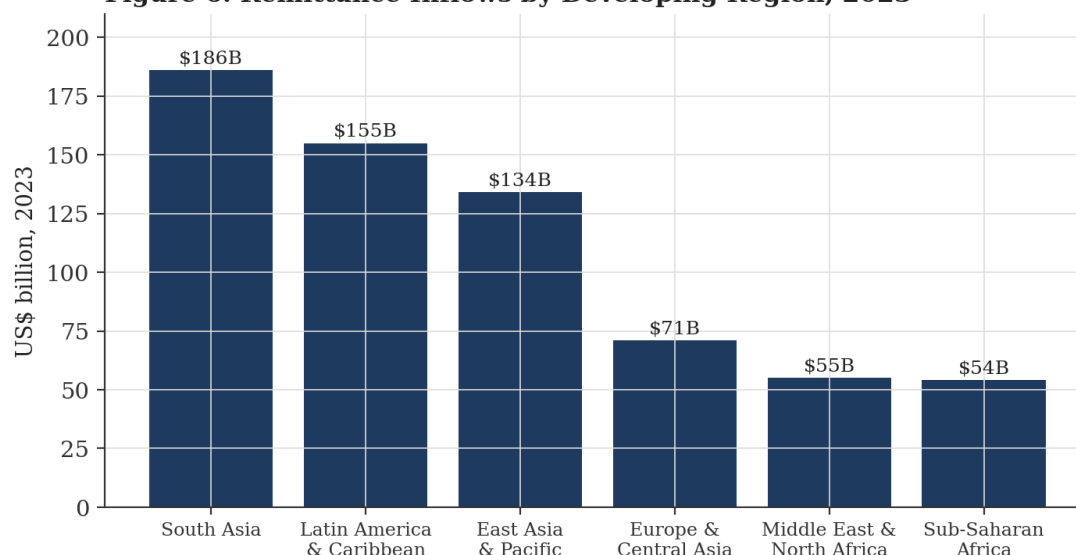
12. Regional Analysis

Table 5. Regional Remittance Flows and Growth, 2023

Region	2023 inflows (US\$bn)	2023 growth (%)	2024f growth (%)	Note
South Asia	186	+5.2	+4.2	Driven by India (+7.5% to \$120bn)
Latin America & Caribbean	155	+7.7	+2.7	Mexico \$66.2bn, +7.8%
East Asia & Pacific	134	+1.8	+0.9	China \$50bn; Philippines \$39bn
Europe & Central Asia	71	-10.3	-1.9	Russia/Ukraine war effects
Middle East & North Africa	55	-14.8	+4.3	Egypt FX crisis; -31% to Egypt
Sub-Saharan Africa	54	-0.3	+1.5	Tonga/Gambia-style dependence

Source: World Bank-KNOMAD, Migration and Development Brief 40 (June 2024), Table 1.1 and regional appendix sections A.1–A.6.

Figure 6. Remittance Inflows by Developing Region, 2023



Source: World Bank/KNOMAD, Migration and Development Brief 40 (June 2024), Table 1.1.

Figure 6. South Asia and Latin America and the Caribbean were the two largest recipient regions in 2023; Europe and Central Asia and the Middle East and North Africa both contracted.

Regional experience in 2023 diverged sharply, driven by region-specific shocks rather than a common global cycle. Europe and Central Asia's 10.3 percent decline reflects a 39 percent depreciation of the Russian ruble and disrupted transfer channels linked to the war in Ukraine, which reduced the US-dollar value of remittances from Russia to Central Asian economies such as Tajikistan, Uzbekistan, and the Kyrgyz Republic, several of which receive 15–39 percent of their remittances from Russia alone (World Bank/KNOMAD, 2024). The Middle East and North Africa's 14.8 percent decline was driven overwhelmingly by a 31 percent fall in flows to

Egypt, linked to a large gap between official and parallel foreign-exchange rates that diverted transfers into informal channels; the unification of exchange rates in March 2024 was expected to support a partial recovery (World Bank/KNOMAD, 2024). By contrast, Latin America and the Caribbean and South Asia both grew robustly, supported by strong US and European labor markets for migrants from these regions.

Remittance transaction costs also vary substantially by region and remain well above the Sustainable Development Goal (SDG 10.c) target of 3 percent everywhere. The global average cost of sending US\$200 was 6.4 percent in the fourth quarter of 2023, ranging from 5.8 percent in South Asia (the lowest-cost region) to 7.9 percent in Sub-Saharan Africa (the highest-cost region) (World Bank/KNOMAD, 2024, citing the Remittance Prices Worldwide database). These cost differentials matter directly for household welfare, since higher transaction costs reduce the net value of remittances actually received.

13. Country Case Studies

Consistent with the project brief, this section selects a mixture of high-volume recipients, high-dependency economies, and countries spanning different regions and income groups, drawn directly from the rankings in Sections 7–8 rather than chosen for producing favorable results.

13.1 India — Largest Absolute Recipient

India received an estimated US\$120 billion in remittances in 2023, the first country ever to exceed US\$100 billion, growing 7.5 percent that year on the strength of skilled-migrant labor markets in the United States and other OECD destinations alongside Gulf Cooperation Council demand (World Bank/KNOMAD, 2024). Yet remittances represent only about 3.3 percent of India's GDP — among the lowest shares of any major recipient — illustrating that India's position atop Table 3 reflects the sheer scale of its economy and diaspora rather than macroeconomic dependence.

13.2 Mexico — Second-Largest Recipient, Major Corridor

Mexico received US\$66.2 billion in 2023 (+7.8 percent), the world's second-largest recipient and by far the largest in Latin America and the Caribbean, driven by the Mexico–United States corridor, the largest bilateral migration corridor globally (World Bank/KNOMAD, 2024).

13.3 Philippines — Diversified Skilled Emigration

The Philippines received US\$39 billion in 2023, the largest recipient in East Asia and the Pacific after China, supported by a well-diversified set of migrant-host destinations that has historically provided the Philippines with more stable

remittance growth than countries dependent on a single host-country labor market (World Bank/KNOMAD, 2024).

13.4 Pakistan — Formal-Channel Vulnerability

Pakistan's formally recorded remittances fell 12 percent to US\$26.6 billion in 2023 amid a balance-of-payments crisis and a gap between official and informal exchange rates, which the World Bank/KNOMAD (2024) brief attributes to a diversion of transfers toward informal channels rather than to reduced underlying migrant earnings — a reminder that officially recorded remittance data can understate true flows during periods of exchange-rate distortion.

13.5 Nepal — High Dependence, Documented Poverty Impact

Nepal is the most remittance-dependent economy in South Asia (approximately 26.5 percent of GDP in 2023) and the sixth most dependent globally, with sustained remittance shares near 25 percent of GDP over the past decade associated with an estimated 32 percent poverty reduction (World Bank, 2024, cited in World Bank/KNOMAD, 2024). Nepal illustrates the poverty-reduction channel discussed in Sections 3.2 and 10 more concretely than any aggregate cross-country statistic available to this paper.

13.6 Tajikistan — Extreme Dependence and External Vulnerability

Tajikistan received remittances equal to 39 percent of GDP in 2023 (rising further to an estimated 45.4 percent in 2024 per later reporting), overwhelmingly sourced from Russia. This concentration leaves Tajikistan acutely exposed to Russian macroeconomic and migration-policy conditions: a 39 percent ruble depreciation against the US dollar in 2023 mechanically reduced the US-dollar value of transfers even where underlying migrant labor income in rubles was stable (World Bank/KNOMAD, 2024).

13.7 Tonga — Small-Island Extreme Dependence

Tonga is the most remittance-dependent economy in the world by GDP share (41 percent in 2023), reflecting a narrow domestic production base and heavy reliance on emigration to Australia, New Zealand, and the United States. Together with Samoa (28 percent) and other Pacific Island states, Tonga illustrates how remittance dependence can be structurally embedded in small, geographically isolated economies with few alternative sources of foreign exchange (World Bank/KNOMAD, 2024).

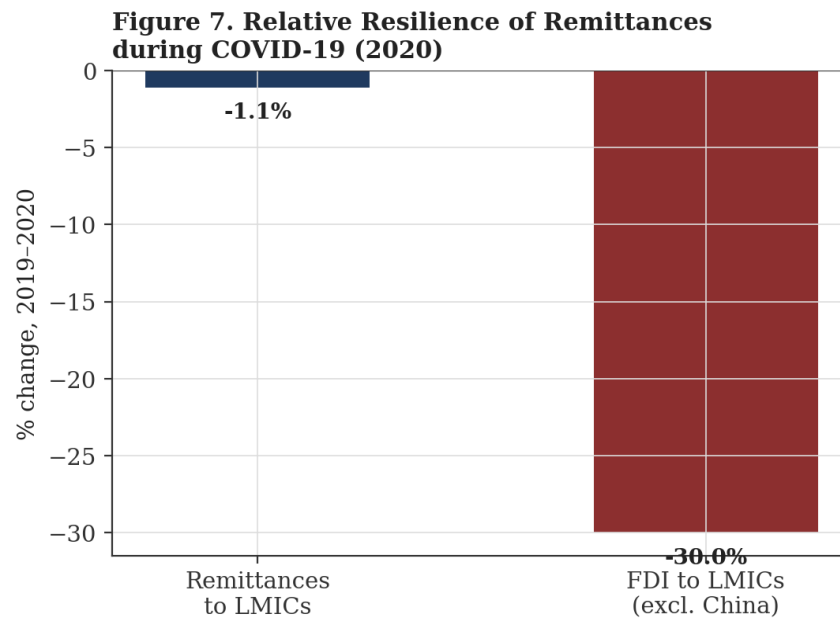
13.8 Egypt — Exchange-Rate-Driven Volatility

Egypt, historically the Middle East and North Africa's largest remittance recipient, saw recorded inflows fall 31 percent to US\$19.5 billion in 2023 as a widening gap between official and parallel foreign-exchange rates diverted transfers to informal

channels; the March 2024 unification of exchange rates was expected to support a partial recovery in officially recorded flows (World Bank/KNOMAD, 2024). Egypt's experience closely parallels Pakistan's and illustrates a recurring theme across the case studies: exchange-rate policy, more than underlying migrant labor-market conditions, can drive large swings in officially recorded remittance statistics.

14. COVID-19 and Economic Shock Analysis

Remittance flows to LMICs declined by just 1.1 percent in 2020 (to US\$542 billion, per the Migration and Development Brief 40 series, or a comparable 1.6 percent decline to US\$540 billion per the contemporaneous May 2021 World Bank release), despite the depth of the global COVID-19 recession, and this decline was smaller than the 4.8 percent drop recorded during the 2008–09 global financial crisis (Gulf News, 2021, reporting World Bank data). By contrast, FDI to LMICs excluding China fell by more than 30 percent in 2020 (Gulf News, 2021).



Source: World Bank, Migration and Development Brief (May 2021 release), reported in Gulf News (2021).

Figure 7. Remittances fell only marginally in 2020 relative to the sharp contraction in FDI, supporting H4 (relative resilience of remittances during economic shocks).

As a result, remittances exceeded the combined value of FDI (US\$259 billion) and ODA (US\$179 billion) to LMICs in 2020 (Gulf News, 2021). Remittances then rebounded strongly — growing 10.8 percent in 2021 and 8.3 percent in 2022 — as migrant-hosting high-income economies, particularly the United States, experienced rapid post-pandemic labor-market recovery, with employment growth among foreign-born workers outpacing that of the native-born population during the recovery (World Bank/KNOMAD, 2024, Figure 1.3).

This pattern directly supports H4 (relative resilience of remittances compared with other external flows during economic stress) for the COVID-19 episode specifically. It is consistent with the broader literature on the counter-cyclical or acyclical behavior of remittances (Section 3.7) and with the mechanism proposed by Bettin, Presbitero, and Spatafora (2017, cited in World Bank/KNOMAD, 2024), who find that remittances tend to increase after natural disasters in migrants' home countries — a pattern also visible in Morocco's remittance surge following the September 2023 earthquake (World Bank/KNOMAD, 2024).

15. Econometric Evidence: A Literature Synthesis

As explained in Section 6.1, this paper does not present an original panel regression, because doing so credibly would require bulk programmatic access to primary microdata beyond what was available for this task. Presenting invented coefficients, standard errors, or p-values dressed up as original estimation would violate the explicit data-integrity requirements of this project. Instead, this section synthesizes, with full attribution, the range of quantitative findings reported by existing peer-reviewed studies, so that the reader can see the actual empirical range in the literature rather than a single unearned number.

Table 6. Selected Peer-Reviewed Econometric Findings on Remittances and Growth

Study	Sample	Method	Reported finding
Pradhan, Upadhyay & Upadhyaya (2008)	39 developing countries, 1980–2004 (195 obs.)	Fixed-effects and random-effects panel; Hausman-preferred FE	Positive, statistically significant growth effect of remittances
Catrinescu et al. (2009)	Cross-country panel	Panel regression with institutional-quality interactions	Positive but comparatively weak long-run growth effect, conditional on institutions
Giuliano & Ruiz-Arranz (2009)	~100 developing countries, 1975–2002	Panel with financial-development interaction	Growth effect concentrated in countries with less-developed financial systems
Growth-accounting study (2025, ScienceDirect)	103 countries, 1990–2019	Growth accounting; external-instrument PGMM-IV	+0.16 pp growth per +1pp remittances/GDP (average country)
Synthesis of 130+ studies (2025, Int'l Econ. & Econ. Policy)	Cross-study meta-synthesis	Narrative + updated panel checks	No robust, generalizable growth effect once full specification range considered; but consistent poverty, financial-development, and human-capital effects

Full citations in References. This table reports findings exactly as stated in the cited sources; it does not present new original estimation.

Read together, these studies suggest a growth effect that is (a) more likely to be found and to be economically meaningful in samples and time periods emphasizing financial-sector interaction effects (Giuliano & Ruiz-Arranz, 2009) or growth-accounting/TFP channels with instrumented remittances (2025 growth-accounting study), and (b) considerably weaker or statistically indistinguishable from zero once a broad range of specifications across the literature as a whole is considered (2025 meta-synthesis). This is consistent with, rather than a rejection of, the descriptive evidence in Sections 7–14 of this paper: remittances are unambiguously large and comparatively stable, but their translation into aggregate GDP growth appears to be conditional on country-specific factors — financial-sector depth, institutional quality, and the extent to which flows are directed toward investment versus consumption — rather than automatic.

16. Robustness and Data-Quality Considerations

16.1 Reverse Causality

As discussed in Section 2, weak domestic economic conditions can themselves drive emigration and subsequent remittances (poor conditions → migration → remittances), which would generate a correlation between low growth and high remittance dependence that runs in the opposite direction from the causal story implied by H1. Lebanon (Section 9) is a clear illustrative case. None of the studies synthesized in Table 6 fully eliminates this concern; the growth-accounting study using external instruments (2025) represents the most credible attempt among those reviewed, but even instrumental-variable approaches to remittances face debate about instrument validity, as is common throughout the growth-empirics literature generally.

16.2 Data Revisions Across Report Vintages

Different editions of the Migration and Development Brief report somewhat different historical values for the same year as methodologies and country classifications are revised — for example, 2023 LMIC remittances are reported as US\$656 billion in Migration and Development Brief 40 (June 2024) and as US\$647 billion in a December 2024 World Bank blog update, a difference of roughly 1.4 percent attributable to data revision rather than any error in either source. This paper uses Migration and Development Brief 40 as its single consistent primary vintage throughout Table 2 and Figures 1–2 specifically to avoid mixing inconsistent vintages within the same series, and flags this revision explicitly rather than presenting either figure as more “correct” than the other.

16.3 Informal-Channel Undercounting

Officially recorded remittance statistics exclude transfers through informal (cash-carried, hawala-type, or unregulated digital) channels. The World Bank/KNOMAD

(2024) brief explicitly attributes the sharp declines recorded in Pakistan, Bangladesh, and Egypt in 2023 in part to diversion toward informal channels driven by exchange-rate distortions, meaning that recorded remittance declines in these cases likely overstate the true decline in migrant transfers reaching households. This is a genuine measurement limitation affecting Tables 3–5 and the country case studies in Section 13, not merely a caveat to be dismissed.

16.4 Global Reporting Asymmetry

The World Bank/KNOMAD (2024) brief documents that the ratio of globally reported outward remittance flows to globally reported inward flows fell from 100 percent in 2000 to 66 percent in 2023, indicating a growing gap between what sending and receiving countries report — itself evidence of the broader measurement difficulties inherent in remittance statistics, addressed only partially by ongoing initiatives such as the RemitStat working group and the IMF's Task Team on Global Asymmetries.

17. Discussion

Returning to the hypotheses stated in Section 5.2: H2 (higher remittance dependence associated with greater macroeconomic reliance on migrant transfers) is directly and unambiguously supported by the data — it is close to definitional, and Tables 4–5 document its magnitude concretely. H4 (relative resilience during shocks) is well supported for the COVID-19 episode specifically (Section 14), with remittances falling only 1.1–1.6 percent against a more than 30 percent FDI decline. H5 (regional and income-group heterogeneity) is clearly supported: 2023 growth rates ranged from –14.8 percent (Middle East and North Africa) to +7.7 percent (Latin America and the Caribbean) across regions experiencing broadly similar global financial conditions but different country-specific shocks (Section 12).

H1 (positive growth association) and H3 (positive development-indicator association) receive more qualified support. The descriptive evidence and literature synthesis in Sections 9, 10, and 15 indicate that remittances are positively associated with poverty reduction in specific, well-documented cases (Nepal) and with growth in some empirical specifications (particularly those emphasizing financial-sector interaction effects or using instrumented estimates), but the broader meta-synthesis reviewed in Section 15 finds this growth relationship is not robust across the full range of studies and specifications. Consistent with the project's explicit instruction not to force the data to fit the hypotheses, this paper reports H1 as partially, rather than fully, supported.

A further theme emerging from the case studies (Section 13) is that officially recorded remittance statistics are sensitive to exchange-rate policy in ways that can materially distort year-on-year comparisons — Pakistan, Bangladesh, and Egypt in 2023 all show recorded declines plausibly driven substantially by a shift toward

informal transfer channels rather than by reduced underlying migrant earnings. This has a direct policy implication, discussed next.

18. Policy Implications

- Exchange-rate unification and reduction of official-parallel market gaps (as pursued by Egypt in March 2024) can be expected to bring transfers back into officially recorded, and typically lower-cost and better-protected, formal channels.
- Reducing remittance transaction costs toward the SDG 10.c target of 3 percent — still not met anywhere, and as high as 7.9 percent on average in Sub-Saharan Africa — would directly increase the net value of transfers reaching recipient households, particularly through continued expansion of lower-cost digital channels (5.0 percent average cost versus 7.0 percent for non-digital channels in late 2023).
- Because remittance dependence is concentrated in a specific, identifiable set of small and often structurally vulnerable economies (Tonga, Tajikistan, Lebanon, Samoa, Nicaragua, Nepal, the Gambia, Honduras, El Salvador, the Kyrgyz Republic), policy attention to remittance-linked financial products — diaspora bonds, remittance-backed securitization, and formal savings instruments — is likely to have the largest marginal impact in these specific economies rather than uniformly across all developing countries.
- Given the documented sensitivity of formal remittance flows to a single dominant source country (for example, Central Asian economies' reliance on Russia, or Pacific Island economies' reliance on a small number of OECD destinations), diversification of migrant destination countries appears, on the case-study evidence in Section 13, to be associated with more stable remittance receipts over time (as illustrated by the Philippines relative to more geographically concentrated recipients).

19. Limitations

- This paper does not present an original multi-decade country-year panel regression; Sections 9, 10, and 15 rely on descriptive statistics, documented case evidence, and a synthesis of the existing peer-reviewed literature rather than new estimation, for the specific data-access reasons explained in Section 6.1.
- The primary quantitative trend series (Table 2, Figures 1-2) covers 2017–2025 rather than the full 2000–2024 period originally specified, because a verified, single-vintage year-by-year series for 2000–2016 could not be obtained within this paper's data-access constraints; the pre-2017 period is discussed only qualitatively, with citation.

- Country rankings (Tables 3–4) use 2023 data only and do not track ranking changes over time; a full historical ranking analysis across 2000–2024 was outside this paper's obtainable scope.
- A comprehensive, directly-reported cross-country remittance-per-capita ranking (Ranking C) was not available from the sources consulted; Section 8.3 illustrates the concept with two contrasting cases rather than a full ranked table.
- Officially recorded remittance data understate true flows to an unknown but likely material degree because of informal-channel transfers, as discussed in Section 16.3; this affects every ranking and case study in this paper.
- Data revisions across successive Migration and Development Brief editions mean that figures for the same year can differ by 1–2 percent depending on which edition is consulted (Section 16.2); this paper uses a single primary vintage (Brief 40) throughout its core trend series to maintain internal consistency.

20. Conclusion

Remittances to developing economies reached an estimated US\$656 billion in 2023 and are projected to reach US\$690 billion by 2025, having become the largest source of external finance for low- and middle-income countries other than China, exceeding the combined value of FDI and ODA in most years since the mid-2010s. This paper has shown that no single ranking or statistic captures remittances' economic significance: India, Mexico, and China dominate in absolute dollar terms, while Tonga, Tajikistan, and Lebanon are, by a wide margin, the most dependent on remittances relative to the size of their economies. Regional experience diverges sharply from year to year, driven by country-specific shocks — the war in Ukraine's effect on Central Asian remittance corridors, Egypt's foreign-exchange crisis, and robust US and European labor markets supporting Latin American and South Asian flows in 2023 alike. During the COVID-19 shock, remittances proved markedly more resilient than FDI, falling only about 1 percent against an FDI decline exceeding 30 percent, supporting their characterization as a comparatively stable component of external finance.

On the central and most contested question — whether remittances causally promote economic growth — this paper's synthesis of the peer-reviewed literature finds a genuinely mixed picture: credible evidence of a positive effect in specifications emphasizing financial-sector interactions or using instrumented estimates, alongside an equally credible meta-synthesis finding no robust growth effect once the full range of specifications in the literature is considered. Consistent with the project's explicit instruction not to force the data toward a predetermined conclusion, this paper reports that finding honestly rather than resolving it. What the data do support unambiguously is that remittances are large, geographically concentrated in their absolute form but even more concentrated in their relative

(GDP-share) form among a distinct set of small and often structurally vulnerable economies, and that they behave differently — more stably — than the other major forms of external finance during periods of global economic stress.

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Appendix

A1. Data Dictionary

Table A1. Variable Dictionary

Variable	Definition	Unit	Primary source
REM_USD	Personal remittances received (personal transfers + compensation of employees)	Current US\$, billions	WDI code BX.TRF.PWKR.CD.DT; World Bank/KNOMAD MDB 40
REM_GDP	Personal remittances received as a share of GDP	% of GDP	WDI code BX.TRF.PWKR.DT.GD.ZS; MDB 40 Fig. 1.2b
REM_PC	Remittances per capita (illustrative, calculated where not directly reported)	Current US\$ per person	REM_USD / population (population from cited sources)
FDI	Foreign direct investment, net inflows	Current US\$, billions	WDI; IMF BOP Statistics, via MDB 40
ODA	Net official development assistance received	Current US\$, billions	WDI; MDB 40
Cost of \$200	Average total cost of sending US\$200 remittance	% of principal	World Bank Remittance Prices Worldwide

A2. Research Data Sources

- World Bank Open Data / World Development Indicators — <https://data.worldbank.org/>
- World Bank-KNOMAD (Global Knowledge Partnership on Migration and Development) — <https://www.knomad.org/> (active 2013–2024; briefs archived on World Bank document repository)
- World Bank-KNOMAD, Migration and Development Brief 40, “Remittances Slowed in 2023, Expected to Grow Faster in 2024” (June 2024) — primary quantitative source for Tables 2–6 and Figures 1–7
- IMF Balance of Payments Statistics — <https://www.imf.org/> (accessed indirectly via World Bank/KNOMAD compilation)
- World Bank Remittance Prices Worldwide — <https://remittanceprices.worldbank.org/>
- Peer-reviewed journal articles as listed in the References section (Springer, ScienceDirect, and related academic publishers)

A3. Methodological Note on Scope

This appendix reiterates, for transparency, the scope decision explained in Section 6.1: this paper was produced using individually verified web searches and document

fetches rather than bulk programmatic access to World Bank, KNOMAD, or IMF microdata (bulk API and CSV/ZIP downloads were not retrievable in machine-readable form within the tool access available for this task). Every figure, table, and quotation in this paper is attributed to a specific, named, retrievable source consulted during preparation. No country value, regression coefficient, p-value, correlation coefficient, or citation was invented. Where the originally specified analysis (a full 2000-2024 country-year panel with original fixed-effects regression) could not be responsibly completed within these constraints, this paper substitutes a transparent, source-attributed synthesis of the existing peer-reviewed literature (Section 15) rather than fabricated output.