

MIGRATION IN THE LIGHT OF COVID-19: AN ECONOMIC PERSPECTIVE

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Abstract

The COVID-19 pandemic caused major job losses and disrupted migration across India. During the 2020 lockdown, more than 11.4 million internal migrants returned to their home regions as urban jobs and incomes fell sharply. Survey evidence also shows heavy losses among informal and migrant workers, with many unwilling to return to cities soon after the lockdown. Using the Harris–Todaro model, this study explains how the fall in expected urban income made rural areas a safer option for many workers. At the same time, remittances to developing countries remained relatively stable, showing the importance of migrant support networks. The study highlights the need for stronger labour protection, income support, and policies for migrant workers during future crises.

Keywords-COVID-19, Migration, Labour markets, Reverse migration, Harris–Todaro, India, Remittances, Informal workers

Introduction

The COVID-19 pandemic of 2020–21 profoundly disrupted economies and labour mobility. In many countries, lockdowns and travel restrictions left migrant workers stranded, unemployed, and often forced to return home. India's experience was emblematic: an estimated 11.4 million internal migrant workers undertook long journeys back to home regions during the 2020 lockdown. Such rapid reverse migration had no recent parallel and raised urgent questions. From an economics viewpoint, migration is often modeled as driven by expected income differentials (Harris–Todaro, 1970): workers move if expected urban income (factoring unemployment risk) exceeds rural income. COVID-19 upended this logic. Urban wages vanished and unemployment spiked; many migrants found the expected return from staying put or returning home greater than uncertain urban prospects.

This report examines “migration in the light of COVID-19” through an economic lens. We focus on labour migration (especially internal migration) and use India as a case study, while drawing on broader data (ILO, World Bank, UN) where relevant. Our goals are to document migration flows and remittance trends up to 2021, analyze their causes using established theory, and draw lessons. A key theme is that COVID acted as a labour-market shock that reversed traditional migration incentives. We also consider the role of remittances and the differential impact on migrants. The report is structured as follows: we review relevant literature on migration theory and recent evidence; define the core problem; state our objectives; describe data and methods; present

tables and figures; discuss findings; and conclude. Throughout, we maintain a warm but professional tone, aiming for clarity and relevance to policy.

Statement of the Problem

The COVID-19 pandemic abruptly reversed decades-long migration patterns, posing new questions for development. Conventionally, millions of rural labourers migrate to cities or abroad seeking higher incomes. COVID-19 flipped this script: instead of urban centres pulling in workers, we saw a “reverse migration” pushing workers back to rural areas or home countries. This phenomenon suggests a fundamental change in expected income differentials. The core problem is: *how and why did the pandemic alter migration incentives and flows, and what were the economic consequences?*

Key issues include:

- **Reversed Migration Flows:** Quantify the scale of reverse migration (e.g. India's 11.4 million returnees) and compare it to normal migration flows. How did flows vary across states or corridors?
- **Earnings and Employment Impact:** Assess how COVID-19 changed employment opportunities and wages in origin vs. destination regions. Did urban expected income fall below rural wages?
- **Remittances and Financial Flows:** Evaluate changes in remittance flows. Did migrant families rely more on remittances, and how did remittances respond to global economic shocks?
- **Labor Market Outcomes for Migrants:** Identify the immediate outcomes for migrants (job loss, indebtedness, health risk) and their short-run intentions (e.g. willingness to re-migrate). Surveys suggest many were hesitant to return to cities.
- **Policy and Welfare Concerns:** Migration is linked to welfare outcomes (e.g., remittances, household support). The crisis highlights missing social safety nets for migrants. What policy lessons emerge?

Our study frames these issues within the Harris–Todaro migration model. The model posits that migration occurs when expected urban income (urban wage $\times$ employment probability) exceeds rural income. COVID-19 caused urban wages to plummet and unemployment to soar. In this context, expected urban income likely fell below rural income (or the security of subsistence farming/household in origin). Thus, the Harris–Todaro condition predicts out-migration from cities, as indeed observed. The problem is to document this reversal and analyze its fit with theory, using pre-2022 data.

Objectives of the Study

This report has the following objectives:

1. **Quantify Migration Flows** – Collect and present data on migration flows during the pandemic (especially reverse flows) up to 2021. Focus on internal migration in India, and note any relevant international migration trends (e.g. returnees from Gulf countries).
2. **Examine Labour Market Effects** – Analyze changes in employment, wages, and unemployment for migrants and non-migrants. Investigate how income opportunities changed in origin vs destination regions.
3. **Apply Economic Theory** – Interpret the migration reversal using the Harris–Todaro model and related labour-market frameworks. Evaluate if expected-income differentials explain observed flows.
4. **Assess Remittances and Financial Flows** – Study remittance trends pre- and post-COVID to understand the financial aspect of migration. Use World Bank/ILO data on global remittances and regional patterns.
5. **Draw Policy Implications** – Based on findings, discuss what this means for migrant welfare and labour policy. Consider suggestions for social protection and migration governance in crises.

By meeting these objectives, the study connects literature, data, and theory in a coherent narrative from Introduction through Conclusion.

Methodology

Given the nature of this analysis, we adopt a mixed-methods approach anchored in secondary data analysis and theoretical interpretation. Specifically:

- **Data Sources:** We use reputable data compiled before 2022:
- **Migration Flows and Stocks:** Government reports (e.g. Rajya Sabha answers on migrant movements, press releases, national surveys) for India's internal migration; ILO and UN DESA data on international migration where available.
- **Remittances:** World Bank's Migration and Development Briefs (2021) and IOM/UN data on remittances and diaspora.
- **Labour Market Indicators:** Publications from ILO, national labour surveys, and crisis-period studies (e.g. ActionAid survey of informal workers) to gauge employment and wage impacts.
- **Qualitative Reports:** Reports and articles (ILO, research journals) to describe migrant conditions during lockdowns.
- **Analytical Framework:** We ground our analysis in the Harris–Todaro model of migration. We conceptualize migration decisions as comparing expected incomes:

$$E[U_r] = w_r \quad \text{vs.} \quad E[U_u] = w_u \times (1 - u)$$

where w_r is rural wage, w_u is urban wage, and u is urban unemployment rate. In Harris–Todaro equilibrium, $E[U_r] = E[U_u]$. We apply this idea to the pre-COVID baseline (when $E[U_u] > w_r$ typically, causing urban in-migration) and the COVID era (when $E[U_u]$ collapsed).

- **Descriptive Analysis:** We compare pre- and post-COVID statistics, creating tables (e.g. of remittance flows, migrant counts) and conceptual figures where helpful. Although full econometric analysis is beyond this scope, we use simple comparisons (percent changes, differences) and cite credible sources.
- **Logical Flow:** Each section of the report builds to the next: the literature review identifies what we know and unknown, the problem statement and objectives clarify what we seek, and the methods explain how we will proceed. Our discussion will tie empirical findings back to theory and objectives.

In sum, our methodology is mainly narrative and comparative, supported by quantitative data. We ensure all data cited are from reports or articles (with references) published by 2021.

Selected migration and labour market indicators (pre- and during COVID-19)

Indicator	2019 (or pre-COVID)	2020/21 (COVID period)	Data Source (Year)
Global international migrants (millions)	272 (2019 est.)	281 (2020 est., ~3.6% of pop.)	UNDESA (2020 est.) [46]
International migrants (% of pop.)	3.5% (2019)	3.6% (2020)	UNDESA [46]
Global remittances (USD, bn)	548 (2019)	540 (2020)	World Bank (2021) [34]
India internal migrants (millions)	139 (per Census 2011)	– (baseline unchanged)	WEF (2017) [40]
India: inter-state returnees (during 1st wave)	–	~11.43 (late 2020)	Govt. reply (Feb 2021) [50]
Shramik trains (May–Aug 2020)	–	6.319 (mil)	Indian Railways [48]
Unemployment (India)	~8% (Feb 2020, pre-lockdown)	~27% (April 2020 peak, CMIE)	ActionAid [53]; CMIE
Informal workers unemployed (Aug-Sep 2020)	–	48%	ActionAid survey [53]
Remittances to South Asia	(base)	+5.2% change	World Bank [34]
Remittances to SSA (excl. Nigeria)	(base)	+2.3% (if Nigeria excluded)	World Bank [34]

Sources: UN/DESA estimates, World Bank Remittance Brief, official Indian government responses, ActionAid (2020), World Economic Forum.

Discussion

Our analysis shows that COVID-19 dramatically altered migration and labour outcomes, consistent with the reversal of expected income incentives. The **migration flow data** are striking. In India, official figures report that *over 11.4 million* inter-state migrant workers returned home during the 2020 lockdown period. For context, in normal times India's annual inter-state migrant flow was about 9 million (2011–16). Thus, a surge in “reverse migration” occurred, with tens of millions (via foot, buses, trains) leaving cities in 2020. The Government operated 4,621 special Shramik trains between May and August 2020, transporting roughly 6.319 million workers home. Table 1 summarizes that 11.43 million is a massive one-time movement, dwarfing routine flows.

From a theoretical standpoint, this makes sense. The Harris–Todaro model predicts migration when

$$w_r < w_u \times (1 - u)$$

where w_r = rural wage, w_u = urban wage, and u = urban unemployment rate. Pre-pandemic, India had a large rural-urban wage gap, and urban expected income exceeded rural, so migration was steady. But COVID changed everything: factories and offices shut down, so w_u fell toward zero and u spiked. The product $w_u \times (1 - u)$ collapsed below even meager rural incomes. In effect, staying home or returning became economically rational. The observed massive outflow of workers aligns with this. In Harris–Todaro terms, the equilibrium flipped: the expected urban income line fell beneath rural wage, causing urban-to-rural migration.

Survey evidence illuminates individual choices. The ActionAid national study of informal workers found that during “unlock” phase (Aug–Sep 2020), 48% of respondents were still unemployed. Even among those employed, wages were low (24% had zero wages in that period). Crucially, **57% of pre-lockdown migrant workers said they did *not* wish to return to urban jobs immediately**, citing fear of COVID, lack of opportunities, and uncertainty. This attitudinal data reinforces the Harris–Todaro story: not only had expected incomes fallen, but perceived risks and uncertainties made migration less attractive. The “**expected income**” here is not just about wages but encompasses the likelihood of finding work and staying safe.

The Indian case is dramatic, but comparable effects occurred globally. The ILO’s “Locked down and in limbo” report finds migrant vulnerability worldwide: millions of workers lost jobs or were excluded from assistance. Many countries saw returning migrants (e.g. Gulf workers, though data beyond our pre-2022 cutoff). However, a notable contrast is in **remittances**. Global data from the World Bank show that remittance inflows to developing countries fell by only 1.6% in 2020, far less than earlier predictions. In fact, remittances to South Asia grew by +5.2%. This resilience suggests several forces: digital remittance channels, strong motive to support families, and targeted stimulus in host countries. Our Figure 1 and Table 1 highlight that some regions (South Asia, Latin America) saw increases, while others like Sub-Saharan Africa fell largely because of Nigeria’s plunge. For India specifically, remittances remained high (India is world’s top remittance recipient), which likely helped cushion rural households.

Labor market impacts also merit discussion. With millions leaving cities, urban labour supply shrank. This likely eased some urban unemployment temporarily (though factories were closed anyway). In rural areas, the influx increased labour supply, potentially depressing rural wages further. Unfortunately, real-time data on rural wages (post-migration) are scarce. One modeling implication is that COVID may have, paradoxically, equalized labour availability between sectors (since both had excess supply). However, the immediate welfare effect was negative: nearly 80% of informal workers had lost livelihoods at some point during 2020 lockdown, and many experienced hunger and debt.

We also consider **policy response**. The literature notes a lack of migrant-specific safeguards (no national registry, no guaranteed transport). Governments did step in with Shramik trains, but the

initial panic migration (millions walking home) reflected a policy vacuum. The crisis underlines Harris–Todaro's policy angle: rural policies (like guaranteed rural work or local development) may reduce forced migration in crises. Indeed, as a result of the shock, policymakers and scholars have called for better data (e.g. a migrant register) and social protection coverage for migrant workers.

Linking back to our objectives:

- **Migration flows:** We documented the magnitude of reverse migration (Objective 1). India's ~11.4m reverse migrants in 2020 is a key fact.
- **Labour market:** We discussed unemployment spikes (e.g. ~48% informal unemployment in Aug–Sep 2020, urban unemployment ~27% in April 2020) and falling incomes.
- **Theory (Harris–Todaro):** We applied it to explain why migrants moved home. The pandemic reversed expected wages, making reverse flows rational.
- **Remittances:** We found that global remittance flows remained robust. For migrant households, remittances may have partially offset income shocks.
- **Policy:** Discussion above suggests integration of migrants into planning. For example, linking migrants to rural development and health services would address vulnerabilities.

In sum, the discussion ties the empirical patterns (return flows, unemployment, remittances) back to economic reasoning. The Harris–Todaro framework effectively captures the direction of migration change: when expected urban income falls, migration is discouraged, as seen in 2020.

Findings

Drawing together the evidence and analysis, the key findings are:

- **Massive Reverse Migration:** COVID-19 caused an unprecedented outflow of workers from cities to rural areas. In India alone, ~11.43 million inter-state migrants returned home during the 2020 lockdowns, far exceeding typical annual flows. Many did so on foot or state-organized transport (nearly 6.32 million via special trains).
- **Expected Income Shocks:** Urban expected income plummeted. Formal lockdowns closed factories and construction, and informal opportunities vanished. This aligned with Harris–Todaro logic: rural workers saw expected urban earnings drop below rural wages, prompting reverse migration.
- **High Unemployment and Income Loss:** The crisis inflicted heavy labour-market damage. Surveys show that in mid-2020, roughly half of informal/migrant workers remained unemployed, and wages were negligible for many (24% earned zero during unlock phase). Overall joblessness surged (CMIE data report ~27% national unemployment in April 2020).

- **Reluctance to Re-migrate:** Many migrants expressed hesitation about returning to urban jobs immediately. 57% of surveyed migrants wanted to stay home, citing health fears and a lack of jobs. This suggests a lasting impact on migration decisions even after lockdowns.
- **Resilient Remittances:** Contrary to fears, remittance flows were largely maintained. Global remittances to LMICs fell only 1.6% (to \$540B in 2020). In South Asia remittances actually rose +5.2%. Thus, migrants abroad continued sending money home, which likely helped rural incomes when urban wages collapsed.
- **Divergent Impacts:** The pandemic exacerbated pre-existing migrant vulnerabilities. Migrants in precarious work bore the brunt of income loss, while some remote or automated sectors held up better. Policy and relief measures were uneven, as documented in the literature.

These findings closely support our objectives. They show that migration during COVID-19 followed the pattern predicted by expected-income theory, highlight the severity of labour-market effects, and underscore the role of remittances. They also illuminate who was most affected (informal migrants) and how the crisis may reshape migration long-term (likely fewer short-term moves until stability returns).

Conclusion

This study investigated the interplay between migration and the COVID-19 crisis through an economic lens. The pandemic's lockdowns essentially reversed the usual dynamics of labour migration. In India and elsewhere, migrants fled cities when their expected urban earnings disappeared. The Harris–Todaro framework helps explain this: when lockdown raised urban unemployment and cut wages, expected urban income fell below rural income, so rural-to-urban migration ceased and reversed.

Empirical data confirm this reversal. Official sources report over 11 million returning migrants in India's 2020 lockdown, and similar (though less quantified) patterns appeared globally. Simultaneously, remittances—a key financial tether between migrants and home communities—proved resilient, highlighting migrants' commitment to family support even in crisis. However, surveys reveal migrants' hardship: high unemployment, lost livelihoods, and uncertainty. These suggest that the social safety net for migrants was sorely insufficient.

Our analysis reinforces that migration decisions are fundamentally economic. The pandemic provided a stark “natural experiment” in which expected incomes flipped. This has implications: policymakers should build mechanisms (insurance, savings, labour protection) acknowledging that migrants are rational actors facing volatile incomes. In the short term, support for returnee migrants in villages is vital, as many cannot quickly re-enter jobs. In the longer term, improving rural opportunities might reduce the shock of such crises.

In conclusion, COVID-19 has taught us that migration flows depend on underlying economic incentives – and that those incentives can change rapidly when labor markets are disrupted. Future research should continue monitoring how migration and remittances recover post-2021, and update theory to incorporate factors like pandemic risk. But even now, it is clear that an economic professor's perspective – focusing on wages, probabilities, and equilibria – sheds light on why migration went into reverse and how societies can adapt.

References

- Bhagat, R. B., Reshmi, R. S., Sahoo, H., Roy, A. K., & Govil, D. (2020). *The COVID-19, Migration and Livelihood in India: Challenges and Policy Issues*. *Migration Letters*, 17(5), 705–718.
- Jones, K., Mudaliar, S., & Piper, N. (2021). *Locked down and in limbo: The global impact of COVID-19 on migrant worker rights and recruitment*. *ILO Research* (1st ed.).
- World Bank (2021). *Migration and Development Brief 34: COVID-19 Crisis Through a Migration Lens*. World Bank Press Release (May 12, 2021).
- World Economic Forum (2017). *India has 139 million internal migrants...* (analysis by Krishnavatar Sharma, citing Census 2011).
- Government of India – Ministry of Labour & Employment (2021). *Answer to Rajya Sabha unstarred question on migrant labourers* (Feb 10, 2021).
- Government of India – Ministry of Railways (2020). *Statement on Shramik Special trains* (May–Aug 2020).
- ActionAid India (2020). *Workers in the Time of COVID-19: Round 2* (survey report, Nov 30, 2020).
- Harris, J.R., & Todaro, M.P. (1970). *Migration, Unemployment and Development: A Two-Sector Analysis*. *American Economic Review*, 60(1), 126–142.