Labor Migration, Human Resource Management, and Economic Development: Evidence from Pakistan

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Abstract

This study examines labor migration as a predictor of economic development through human resource management (HRM) practices. It analyzes labor migration through three variables: talent retention, migrants' return, and diaspora engagement to learn their impact on economic development. Primary data collected through a cross-sectional quantitative survey reveal that retention policies can significantly reduce labor migration, preventing brain drain. While return migration and Diaspora networks are beneficial, they serve as supplementary sources of support. The findings reveal the significance of HRM practices in influencing labor migration practices and their outcomes, contributing to the existing literature on migration by providing a fresh perspective beyond traditional macroeconomic interpretations. Moreover, this research brings novelty to the literature by highlighting the intersection of migration and economic development in developing economies, mediated through HRM policies and practices.

Keywords: Brain drain, Economic Development, Human Resource Management, International Labor Migration, Remittances.

Introduction

Global patterns of labor migration over the past few decades have transformed labor market dimensions in home and host countries (Massey, 2023). The phenomenon has both microeconomic and macroeconomic implications. On the one hand, labor migration results in brain drain (Mishra, 2023), impacting human capital and public investment in home countries although remittances, returnees, knowledge transfer, human capital utilization, and international cooperation partially balance the loss (Afzal & Kalra, 2024). On the other hand, while this influx from the third world facilitates the first world labor markets with a low-cost and compliant workforce (Maqsood et al.,2024), managing the Diaspora becomes a challenge for host countries (Mobarak et al., 2025). In this situation, human resource management (HRM) has a crucial role in mediating these flows to yield maximum developmental benefits.

As an HRM issue, such dynamics raise critical concerns about the role of organizational policy and practices in labor migration (Oishi, 2023). Although literature has examined economic (Egyed & Zsibok, 2023) and demographic (Seyoum & Camargo, 2021) costs of labor migration, the potential mediating role of HRM in leveraging migration and overcoming the negative effects of

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brain drainis rare. Research (Tsen et al., 2021; Dinh, 2024; Isiaka, 2025) reveals that the desire to migrate to a foreign country decreases with flexible working hours, performance bonuses, and career advancement programs. Moreover, reintegration policies for return migrants and diaspora engagement influence brain circulation (Mavroudi, 2022).

However, the relationship between HRM practices and labor migration remains vaguely understood (Martel, 2025), particularly regarding organizational policies (Usanova et al., 2023). Moreover, the strategic impact of HRM interventions on migration outcomes in relation to economic indicators is not explored yet (Roma, 2020), emphasizing the need for a systematic analysis of HRM policies that transform labor migration from talent loss to human capital cultivation and economic development (Adetayo, 2024).

While migration is well documented in economic and demographic studies, far less is known about how everyday HRM practices, such as retention policies or return incentive affects whether workers stay, leave, or come back (Oliinyk et al., 2021). Moreover, existing research has explained macroeconomic and demographic consequences of migration (Natali & Vanhercke, 2015; Roma, 2020), but has given limited attention to HRM as a mediating variable. Moreover, issues such as wages and promotions are studied, giving insufficient attention to how organizational practices, such as talent retention, return incentives, and diaspora engagement, affect migratory dynamics.

Pakistan is a developing country with almost two-thirds of young population. However, lack of decent employment opportunities forces many young individuals to move abroad for livelihood, compromising labor market stability and attainment of sustainable development goals (SDG 8 and 10). This study analyzes the phenomenon to examine how HRM frameworks with strategic tools and practices impact labor mobility in Pakistan. In particular, it asks: How do HRM interventions shape labor migration outcomes in Pakistan, and what are their economic implications? By integrating HRM into migration analysis, this study contributes to theoretical and practical discourse on how to balance the impacts of global labor mobility.

Literature Review

Human resource management (HRM) practices play a pivotal role in addressing the challenges of brain drain while maximizing the developmental benefits of migration. Research highlights that developmental HRM practices (Berger, 2022), such as career advancement opportunities (Siddiqui et al., 2025), workplace flexibility (Abasilim & Obozekhai, 2024), and performance-based rewards (Khan et al., 2024), reduce the intentions to migrate and encourage long-term commitment to home-country organizations. For instance, studies in Lithuania and Greece (Goštautaitė, 2023; Adinugraha & Melad, 2023) demonstrated that such policies lowered self-initiated expatriation and labor migration. Likewise, competitive pay and job embeddedness in Pakistan's telecom industry significantly improved workforce retention (Kanwal et al., 2023). Based on these findings, we hypothesize:

H1: HRM-driven talent retention policies can mitigate brain drain and strengthen domestic human capital.

Return migration has also been shown to contribute to brain circulation and local economic growth. Returnees bring improved skills, international networks, and entrepreneurial capacity, which can support national development when coupled with reintegration and recognition systems (Koczan et al., 2021). Evidence from South Asia (Saidmurodova et al., 2023), the Gulf (Gulf Migration Review, 2024)., and Tajikistan (Rakhmonov, 2022) indicates that remittances and reengagement of returnees enhance household welfare and national GDP, particularly when reintegration programs are operational, highlighting the potential of return migration incentives to transform migration from a one-way loss into a source of knowledge and capital circulation. Based on this evidence, we hypothesize that:

H2: Return migration incentives positively contribute to economic development by facilitating brain circulation.

Moreover, diaspora engagement is increasingly recognized as a driver of transnational cooperation, knowledge transfer, and foreign direct investment (FDI). Research from OECD countries confirms that diaspora networks promote innovation, productivity, and international collaboration (Blit et al., 2023). However, poorly managed or ad hoc approaches limit the scope of such contributions in many developing countries. Therefore, while some literature (Epstein & Heizler, 2016; Tuccio, 2019; Gevorkyan, 2021; Blit et al., 2023) finds Diaspora networks effective, other literature (Brinkerhoff, 2012; Mavroudi, 2022) finds them ineffective. From a Strategic HRM perspective (Wright & McMahan, 2011), Diaspora engagement represents a form of aligning external networks with national development goals. Hence, we hypothesize that

H3: Diaspora networking programs have a positive and significant effect on economic development through knowledge transfer and international collaboration.

The literature establishes that HRM interventions such as workforce retention, return migration, and diaspora engagement can effectively shape the economic impact of international labor migration.

Theoretical Framework

This study employs Human Capital Theory, Strategic Human Resource Management (SHRM), and Resource-Based View (RBV). Human Capital Theory highlights the costs and benefits of migration for both workers and states; Strategic Human Resource Management (SHRM) examines the influence of organizational policies on talent retention and turnover, and Resource-Based View (RBV) complements them by positioning skilled labor as a strategic asset with competitive edge. Together, these theories create a multi-tiered framework to explain why HRM strategies are important in talent retention.

Research Methodology

Research Design

This study employed a quantitative design, using a cross-sectional survey to investigate the relationship between human resource management (HRM) practices and international labor migration. A quantitative methodology was appropriate as it enabled the statistical analysis of proposed correlations between specific HRM interventions, such as employee retention and engagement strategies, and various migration outcomes, including the intention to migrate and return migration. The cross-sectional approach provided an overview of the existing HRM practices and workers' perspectives on migration. The design facilitated insights into the overarching trends and interconnections, adeptly revealing significant patterns and correlations to inform future longitudinal or mixed-methods research.

Population and Sampling

The study population consisted of skilled and semi-skilled workers operating in urban areas in four key sectors: healthcare, information technology (IT), education, and telecommunications, all of which are heavily influenced by labour migration. The study chose the urban population because metropolises have developed formal labour markets, organized human resource management systems, and access to global job prospects, which are missing in rural areas (Maqsood et al., 2024).

To ensure equitable representation of diverse industries and organizations, a stratified random sampling procedure (Nguyen et al., 2021) was used. Each sector was divided into strata, and individuals were chosen at random to capture diversity within each category. This strategy reduced selection bias (Ahmed, 2024) while increasing the probability of learning about sector-specific HRM practices and migration-related viewpoints.

Sample size (*N=300*) was determined to meet statistical requirements for regression analysis, ensuring sufficient variance and representation. The sample included early-career employees, mid-level professionals, and senior executives. Employee lists from industry links, professional groups, and accessible human resource departments were used to create the sampling frame that included individuals from varied demographic backgrounds. The respondents volunteered for research participation with informed consent. Moreover, validated protocols were used at every step of sampling (Lopez et al., 2023).

Table 1. Demographic Profile of Respondents

Variable	Category	Frequency	Percentage
Gender	Male	182	60.7
	Female	118	39.3
Age	18–24 years	62	20.7
	25–40 years	156	52.0
	41–55 years	82	27.3
Education	Secondary	78	26.0
	Undergraduate	126	42.0
	Postgraduate	96	32.0
Migration Status	Skilled Migrant	154	51.3
	Unskilled Migrant	146	48.7

Table 1 presents the demographic profile of respondents, including age, gender, educational attainment, and migration status. There wasa male majority (60.7%) because of the patriarchal cultural ideology (Akhtar et al., 2025). Most participants were aged between 25 and 40 (52.0%). This age group in the labor market generally has a strong desire for migration (Czaika & Reinprecht, 2022). While some 42.0% of the participants had bachelor's degrees, 32.0% had completed postgraduate education, indicating a relatively well-educated demographic. Moreover, a little more than half of the participants (51.3%) classified themselves as skilled migrants with previous overseas job experience, highlighting the study's significance regarding labor mobility trends among qualified professionals.

Data Collection

The researchers devised a standardized, self-administered questionnaire on Google Forms to collect the primary data for this study. The instrument was subsequently evaluated in the pilot study after being authenticated by field professionals. It included demographic information, migration intentions and experiences, as well as HRM-related practices, such as perceptions of training, compensation, career development, and retention incentives. A five-point Likert scale was employed to evaluate critical categories, including migration causes, economic contributions, and perceived HRM efficacy. The scale ranged from strongly disagree (1) to strongly agree (5), facilitating the comparison of responses across varied demographic and sectoral groups.

The questionnaire was evaluated with a cohort of 30 individuals from the sample before its full implementation. The pre-test guaranteed the fitness of the structure, clarity of questions, and content validity. In response to pilot study feedback, minor modifications were incorporated to improve reliability and ensure the suitability of the instrument. Moreover, secondary sources such as peer-reviewed journal publications and international reports (World Bank and International Organization for Migration) were combined to contextualize the research within broader global and national migration discourses, identify trends, and triangulate the findings.

Data Analysis

The data were analyzed using SPSS. Descriptive statistics were computed, including means, standard deviations, frequencies, and percentages, to summarize the sample characteristics and related aspects. The summaries included information on demographics, migration experiences, and participants ‘perspectives on HRM practices. Inferential statistical methods were used to examine the relationships between variables, and Pearson correlation analysis was applied to investigate the intensity and direction of the correlation between HRM practices and labor migration outcomes. Moreover, a multiple regression analysis was used to evaluate the predictive efficacy of HRM practices on migration intentions and return migration trends. The instrument was assessed using Cronbach's alpha and found highly consistent and reliable, as all main scales exceeded the standard threshold of 0.70. Together, these statistical procedures allowed a robust examination of the research question and supported the validity of the findings.

Results and Analysis

Economic Contributions of Migrants

Figure 1 and Table 2 show respondents’ perceptions of migration’s contributions to home countries through remittances, job creation, skill transfer, and entrepreneurship in the home country. Mean ratings on a five-point Likert scale were employed to assess these contributions.

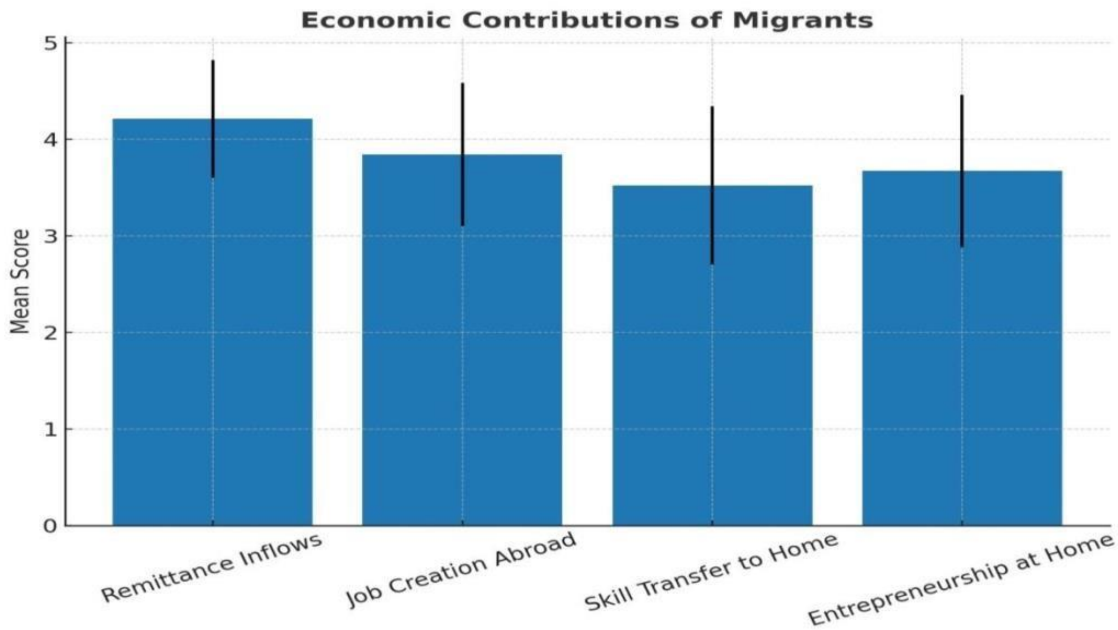

Figure 1. Economic Contributions of Migrants

Table 2. Economic Contributions of Migrants

Contribution Dimension	Mean Score	Std. Deviation
Remittance Inflows	4.21	0.61
Job Creation Abroad	3.84	0.74
Skill Transfer to Home	3.52	0.82
Entrepreneurship at Home	3.67	0.79

Results in Table 2 show remittance inflows with the highest mean score (M = 4.21, SD = 0.61), indicating their positive impact on the home country. Global job creation (M = 3.84, SD = 0.74) is also significant. Home-based entrepreneurship (M = 3.67, SD = 0.79) is significant too, highlighting that returnees' entrepreneurial activities strengthen the local economy. Conversely, skill transfer to home countries (M = 3.52, SD = 0.82) has the lowest mean score.

Brain Gain and Brain Drain Effects

Figure 2 and Table 3 highlight the perceived effects of migration on brain gain and brain drain across home and host countries.

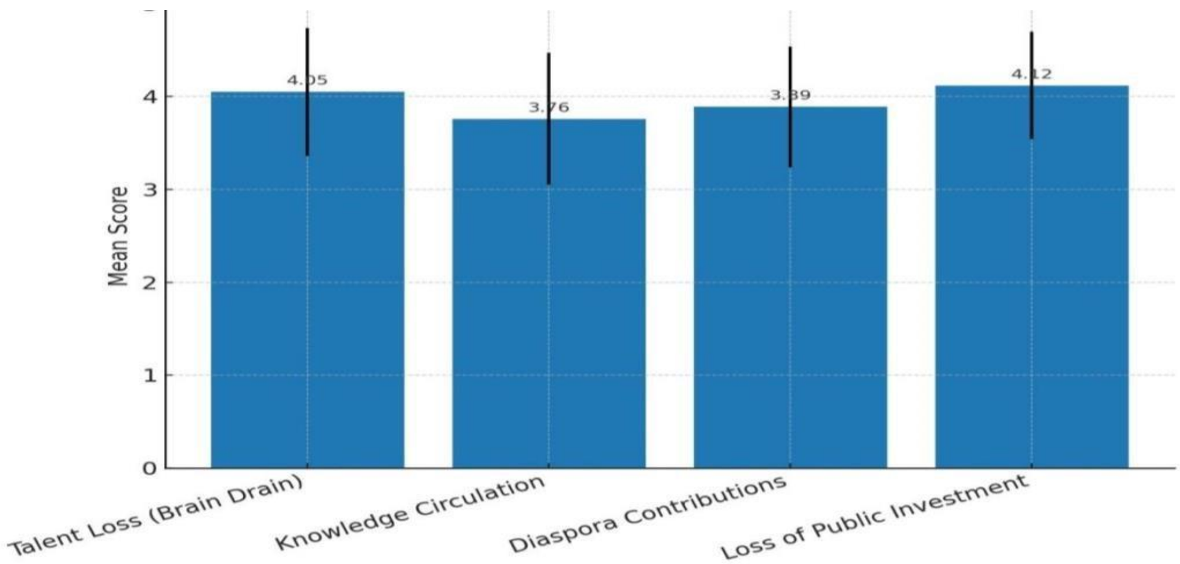

Figure 2. Brain Gain and Brain Drain Effects

Table 3. Brain Gain and Brain Drain Effects

Effect Dimension	Mean Score	Std. Deviation
Talent Loss (Brain Drain)	4.05	0.69
Knowledge Circulation	3.76	0.71
Diaspora Contributions	3.89	0.65
Loss of Public Investment	4.12	0.58

The results in Figure 2 and Table 3showreduced public investment with the highest rating (M = 4.12, SD = 0.58). Brain drain (M = 4.05, SD = 0.69) follows, indicating that migration disadvantages the local market and home economy. Conversely, respondents had little awareness of the advantages associated with Diaspora contributions (M = 3.89, SD = 0.65). The mean score for information circulation is the lowest (M = 3.76, SD = 0.71), suggesting that while migrants promote cross-border knowledge transfer and collaboration, these advantages are less significant than the associated drawbacks.

Correlation between Migration and Economic Development

Figure 3 and Table 4 present the correlation analysis between international labor migration and economic development indicators: GDP, employment, and innovation.

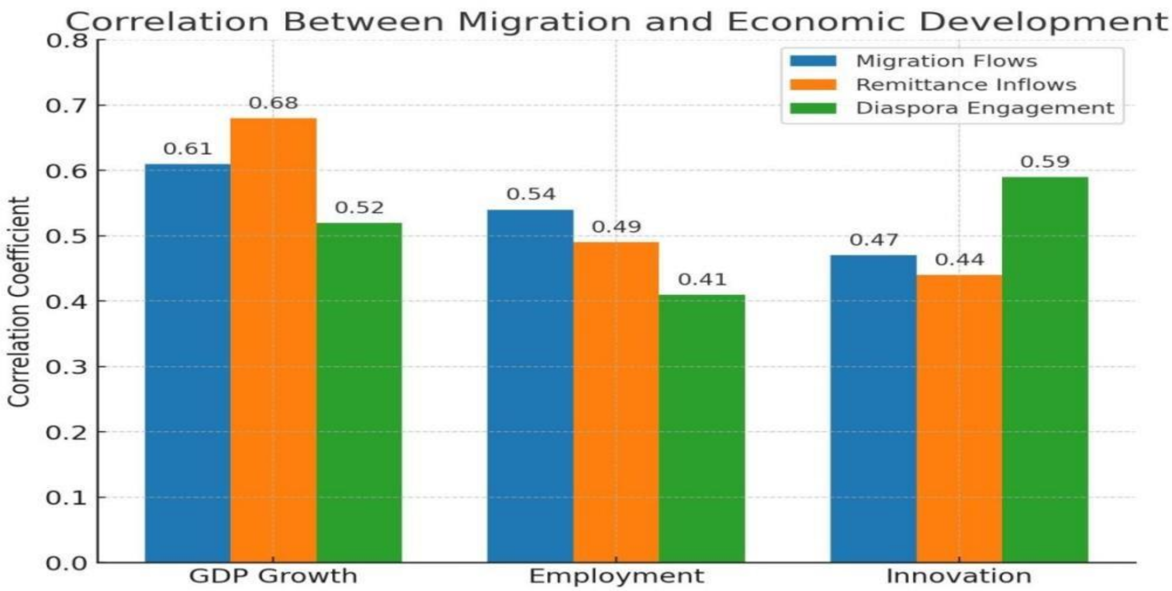

Figure 3. Correlation between Migration and Economic Development

Table 4. Correlation between Migration and Economic Development

Variable	GDP Growth	Employment	Innovation
Migration Flows	0.61	0.54	0.47
Remittance Inflows	0.68	0.49	0.44
Diaspora Engagement	0.52	0.41	0.59

Results presented in Table 4and Figure 3 show the highest score (M = 4.12, SD = 0.58) for public investment, indicating the high financial cost of educational participation and implied loss of public investment on labor migration. Brain drain scores next (M = 4.05, SD = 0.69), indicating that it weakens the local market and national innovation potential. Comparatively, there is a low appreciation of the benefits of migrants in the home country through Diaspora contributions (M = 3.89, SD = 0.65). Knowledge circulation (M = 3.76, SD = 0.71) has the lowest mean score, indicating the imbalance between the outcomes of outflows and inflows.
Standard deviations indicated a medium difference, with the highest in knowledge circulation (SD = 0.71), followed by talent loss (SD = 0.69), with variation in responses. GDP growth, employment, and innovation are all positively connected with migration flows and remittances; whereas, Diaspora engagement is only moderately related to innovation (r = 0.59).

Table 5. Regression Analysis of HRM Interventions

Dependent Variable: Economic Development	**β**	**t-value**	**Sig.**
HRM Talent Retention Policies	0.42	8.21	.000
Return Migration Incentives	0.36	7.34	.000
Diaspora Networking Programs	0.29	6.15	.000

Regression analysis in Table 5 further supports that HRM practices significantly impact economic development ($p < .001$). Talent retention policies (β = 0.42, t = 8.21) are found to be the best predictor, followed by return migration incentives (β = 0.36, t = 7.34) and Diaspora networking activities (β = 0.29, t = 6.15).

Discussion

The analysis highlights a paradox: while labour migration contributes to macroeconomic growth and development through remittances and Diaspora engagement, it simultaneously imposes significant costs via brain drain and loss of public investment. Among the three variables, talent retention is the strongest predictor of the home country's economic situation, emphasizing the role of strategic HRM in enacting policies to handle labor migration. This finding aligns with evidence from Europe and Asia (Goštautaitė, 2023; Kanwal et al., 2023; Lee et al., 2024) that strategic HRM practices, such as career development programs, workplace flexibility, performance-based incentives, and job embeddedness, shape migration dynamics at organizational and national levels. The results also confirm the value of return migration incentives as returnees bring not only remittances but also knowledge and entrepreneurial capacity, augmenting development (Batista & Vicente, 2011; Zhang et al., 2023). However, the relatively low score of knowledge transfer suggests that home countries lack the institutional frameworks that maximize the developmental impact of returnees.

On the other hand, remittances are the most evident advantage of labor migration, which is consistent with studies on South Asia and Sub-Saharan Africa, asserting that financial inflows provide crucial macroeconomic support despite brain drain (Epstein & Heizler, 2016; Seyoum & Camargo, 2021; Saidmurodova et al., 2023).

Moreover, findings highlight that strategy to motivate labor to stay in the home country or return work better than Diaspora networks. This is probably because networks disintegrate without the institutional and policy backing they need to develop connections into productive outcomes. Nevertheless, Diaspora activities have a huge role in promoting innovation and sustaining long-term competitiveness. Blit et al. (2023) support this, emphasizing that these networks facilitate cross-border knowledge transfer, attract FDI, and promote international collaboration. Comparing South Asia with the Gulf reveals that both regions have implemented substantial Diaspora programs, nonetheless with inconsistent outcomes. This indicates that Pakistan's situation symbolizes a broader global issue: transforming transnational networks into tangible developmental advantages, stressing the need for organized Diaspora engagement strategies to link the expatriate professionals with institutions in home countries.

Furthermore, the results demonstrate that migration is generally perceived as a source of social and economic loss, even though it somehow brings corresponding positive outcomes. Such paradoxical dynamics highlight that demographic or macroeconomic factors alone cannot explain the economic outcomes of migration. HRM strategies are crucial in determining whether migration results in resource depletion or contributes to sustainable economic development. By simultaneously addressing talent retention, reintegration, and Diaspora engagement, policymakers can bring equilibrium to the phenomenon.

A comparison of South Asia and the Gulf emphasizes the global relevance of these findings. South Asian countries, such as India and Bangladesh, have established comprehensive Diaspora institutions. However, they face difficulties in organized coordination and efficient integration into national innovation systems. Conversely, Gulf countries prioritize retaining individuals within their home countries through restrictive sponsorship (kafala) schemes that prevent migration yet facilitate long-term development. On the other hand, Pakistan's circumstances oscillate between two extremes: it invests in incentives to retain and repatriate individuals, yet it lacks institutional structures for Diaspora networks.

Pakistan has a large population under the age of 30, which could boost its economy. When skilled young people leave the country, they send money home. However, massive labor migration creates issues of labor supply, innovation, and industrial growth. In this situation, HRM-based retention policies can assist in contributing to national economic growth and development. Absence of strategic HRM policies is a core practical and policy dilemma that poses a significant challenge to weak economies, such as Bangladesh, India, Pakistan, and the Philippines, which have a large percentage of migrants.

Summing up the results, among the three variables, talent retention is the most relevant factor in the economic outcomes of migration. HRM policies directly address workers' immediate need for decent employment (SDG-8) with job stability, career growth opportunities, and fair wages, making them more valuable to the home country than return or international networking, which takes longer to produce returns. Besides, retention strategies are integrated into organizational structure, making them more visible and successful than diaspora networks, which are disorganized and dispersed.

Conclusion

The research indicates that brain drain is detrimental to the home economy. Therefore, HRM policies serve as both migration management mechanisms and catalysts for economic development. Pakistan can protect its human capital foundation, rely less on remittances, and turn its demographic dividend into long-term growth by retaining young talent in the country. In this regard, retention policies can significantly influence migration decisions. On the other hand, although remittances, returnees, and Diaspora networks have substantial socioeconomic benefits, they lack sustainability.

The theoretical integration of Human Resource Management with migration studies illustrates how organizational practices influence labor migration. From a policy perspective, the study recommends prioritizing domestic retention through competitive labor markets, supplemented by organized return pathways and established diaspora engagement. Using synthesized perspectives, this study provides a theoretical foundation to explain how HRM interventions can productively mediate the economic outcomes of migration.

Future Directions

First, future research may focus on a rural-urban sample or a rural sample. Second, researching skill-short industries such as healthcare, education, and technology needs more devoted research. Third, HRM interventions' long-term implications on migration and development using longitudinal methodologies should be assessed. Fourth, comparing countries with high migration and immigration rates would show how policy and HR management affect labour migration. Fifth, future research may evaluate how digital platforms, online labour mobility, and remote employment affect migration and HR management post-pandemic. Sixth, HR specialists and migrants' qualitative insights into migratory patterns, lived experiences, motives, and institutional barriers may improve quantitative outcomes.

Implications

The study has implications for human resources professionals and policymakers. Employee-centered policies may reduce skilled labor migration, highlighting the need to strengthen talent retention frameworks. Moreover, based on the findings, reintegration strategies for returnees, such as skill recognition frameworks and focused incentives, can be strengthened. Furthermore, to make migration innovative and capture capital inflows, Diaspora engagement is mandatory through organized platforms for knowledge sharing, cooperative research, and investment initiatives. In addition, to address skill shortages, public-private partnerships can be encouraged through investments in technological adaptation, up skilling programs, and vocational training.

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