



Investigating the Impact of Economic, Social-cultural, Environmental and Spatial Factors on Return Migration in Rural Areas (Case Study: Bandar Khamir County)

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Abstract

Purpose- Increasing economic pressures, environmental degradation, and public health challenges in urban areas have been identified as key drivers motivating individuals to return to rural regions. This study examines the influence of economic, socio-cultural, environmental, and spatial factors on return migration to rural areas, focusing on Bandar Khamir County in Iran as a case study.

Design/methodology/approach- This study employed a descriptive-analytical approach and a quantitative method. The statistical population included Bandar Khamir residents, and a sample of 300 people was selected using a simple random sampling method. A researcher-developed Return Migration Questionnaire was utilised to examine the research variables. This questionnaire was designed to cover four factors: economic, social-cultural, environmental, and spatial factors. Several professors and experts verified the face validity of this scale, and its reliability was assessed using Cronbach's alpha, which produced a coefficient of 0.90. This is regarded as a highly satisfactory value for the questionnaire. The study utilized LISREL for structural analysis to verify the measurement model's validity, and SPSS for statistical processing. Specifically, the Chi-square test was calculated using SPSS version 23.

Findings- The results showed that economic, socio-cultural, environmental, and spatial factors all have a positive and statistically significant effect on return migration. Economic factors had the strongest impact ($\beta = 0.929$; $R^2 = 0.863$), explaining 86.3% of the variance in return migration. Environmental ($\beta = 0.923$; $R^2 = 0.852$) and socio-cultural factors ($\beta = 0.907$; $R^2 = 0.822$) also demonstrated strong explanatory power, while spatial factors showed a comparatively lower but still significant effect ($\beta = 0.805$; $R^2 = 0.648$). Chi-square test results confirmed all four hypotheses at $p < 0.001$ ($df = 299$). Economic factors had the highest association with return migration ($\chi^2 = 172.534$), followed by spatial ($\chi^2 = 118.421$), environmental ($\chi^2 = 97.842$), and socio-cultural factors ($\chi^2 = 83.327$). Overall, the findings indicate that all four dimensions significantly influence return migration behavior, with economic determinants playing the most prominent role.

Research limitations/implications- The study relied exclusively on a self-report questionnaire as the sole instrument for data collection. Participant selection was limited to migrants, meaning the findings reflect only this specific group's perceptions rather than a multi-stakeholder perspective.

Practical implications- The results of this study have a significant impact on the development of public policies related to return migration. In conclusion, this study demonstrated that return migration to Bandar Khamir is driven by a complex set of issues, influenced by economic, social-cultural, environmental and spatial factors. Return migration represents a viable strategy for rural revitalization and balanced regional development. The findings suggest that addressing urban crises requires investing in rural alternatives.

Keywords- Return Migration, Economic factors, Spatial factors, Bandar Khamir County.

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1. Introduction

The current situation in Iran has made urban life more difficult for city residents due to numerous issues. Many of these residents travel to rural areas to relax or to avoid city traffic and other problems. Urban dwellers often buy gardens in nearby villages and develop leisure and living spaces by building houses or villas with gardens. Since most villages are equipped with basic facilities such as water, electricity, and gas, they are a popular destination for many visitors and residents throughout the year (Afrakhteh et al., 2016). Additionally, many residents have moved permanently to their villages, creating new lives to escape urban sprawl, high rents, and other city-related issues. This has led to the transformation of rural areas, resulting in changes to the layout of houses and rural life (Anabestani et al., 2025), which will ultimately improve living conditions in these villages (Fayyaz et al., 2020).

Migration manifests in various ways within society, including moves from rural to urban areas, from urban to rural regions, and between small towns and large cities. In most developing countries, such as Iran, the dominant migration pattern is a one-way, typically permanent, transfer of rural populations to urban centres. However, over the past decade, a new trend called "return migration" has emerged in rural parts of the country (Sadeghi & Amani, 2023). The most recent population and housing census in Iran (2011) indicated that the number of return migrants (from urban to rural) exceeded those migrating from rural to urban areas. During this period, 755,546 individuals moved from urban to rural zones, compared to 655,251 who moved from rural to urban areas. Unlike earlier periods, return migration outnumbered rural-to-urban migration by more than 100,000 people in this cycle. Since all policymaking and planning in rural regions are directly or indirectly linked to population structure, understanding where returnees go, and analysing patterns of displacement and underlying factors is critically important (Shayan et al., 2021).

Return migration is a key national trend in which people move from urban centres back to their rural origins. This urban-to-rural shift is often a spatial response driven by urban residents seeking leisure and escape from the psychological stresses of urban life (Donaire et al., 2025). Critically, investment in the economic, cultural, and political infrastructure of these rural areas can trigger this "return

migration," reversing historic demographic flows (Yunus et al., 2025; Awasthi & Mehta, 2020).

The renewed international focus on the migration-development link is prompting a critical re-evaluation of return migration. Policymakers are increasingly recognising that urban crises often stem from rural neglect and that the socio-economic significance of rural areas has been consistently underestimated. Consequently, rural development is now viewed as equally important as managing urbanisation (Wilson et al., 2025). Return migration is motivated by the attractiveness of new rural opportunities, such as income from agriculture, pensions, and an improved quality of life, and by the pull of urban centres, which are marked by high costs, pollution, and psychological stress (Yaghoubi & Zobeidi, 2018). The economic recovery and infrastructural development of rural regions are crucial drivers in making it a feasible and desirable option to return home. This process is further supported by improved transport networks, which facilitate easier movement and permanent settlement in one's native communities. Ultimately, return migration is voluntary and reflects migrants' deliberate choice to go back to their place of origin after a period away (Kaiser & Barstow, 2022).

The phenomenon of return migration is becoming more visible in Khamir County, a rural administrative area in the south of Hormozgan Province in Iran. These demographic changes reflect national trends. The region's capital, Bandar Khamir, formerly known as Jamir, has a rich heritage and historical significance due to its strategic maritime and commercial location. Important archaeological sites, such as the Sedar Wall and Khamir Fortress, illustrate this legacy (Bastenegar, 2023). In recent years, the momentum of return migration to the region has increased, mainly driven by strategic development in eco-tourism and marine agri-tourism. These initiatives have made the region more attractive as a destination for both returning local residents and new arrivals. Simultaneously, deliberate efforts by government agencies, such as housing foundations in remote villages and the enhancement of rural social services by local authorities, have created favourable conditions for this demographic shift. These policies aim to promote rural re-population and reduce out-migration to larger urban centres. However, two demographic trends are evident. While rural areas are experiencing population

growth, the city centre of Bandar Khamir continues to attract approximately 1,000 new residents each year from surrounding neighbourhoods (Bastenegar, 2023). The fact that some of these migrants settle in peri-urban areas highlights the complex nature of rural renewal alongside urban sprawl. Ultimately, the rise in return migration in Bandar Khamir can be attributed to a combination of factors, including targeted economic diversification through tourism and robust rural development policies, that have supported the revitalisation of the rural population.

Despite return migration emerging as a significant demographic phenomenon in Iran, with urban-to-rural flows surpassing rural-to-urban migration since 2011, critical knowledge gaps persist. First, existing studies concentrate on western, northern, and northwestern Iran, leaving southern coastal regions empirically unexamined despite their distinctive ecological characteristics and eco-tourism potential. Second, prior research emphasizes singular factor categories, typically economic, without systematically integrating and comparing economic, socio-cultural, environmental, and spatial factors within unified analytical frameworks. Third, while environmental quality increasingly motivates counter-urbanization globally (Hussain et al., 2025), empirical quantification of environmental factors' influence remains absent from Iranian migration scholarship. Fourth, despite government investment in rural development initiatives, evidence linking policy interventions to migration outcomes in coastal regions is lacking. This study addresses these gaps by providing the first empirical examination of return migration determinants in Bandar Khamir County, Iran.

2. Research Theoretical Literature

Migration is the movement of people across residential boundaries to settle in a new location, whether temporarily or permanently (Stockdale, 2016). Following historical rural-to-urban flows, a reverse trend of counter-urbanisation or return migration is now evident. This phenomenon impacts both urban and rural areas, meaning its study cannot be limited to a rural-centric perspective (Scott et al., 2025). The key drivers of return migration fall into four main factors including: Economic, Social and cultural, Environmental and Spatial factors.

1. Economic Factors: Economic factors are paramount in driving return migration. This is reflected in variables such as unemployment at the place of origin, income differences, employment opportunities at the place of destination (town), the decline in urban income, and occupational restrictions. Lu Yao (2010) pointed to both behavioural and normative motivations for return migration. Behavioural motivations arise from an individual's value judgments about urban versus rural life, often in the context of a second home. Normative motivations suggest that an individual's behaviour is a function of expectations, intellectual trends, and subjective norms. Lu Yao (2010) states that migration and relocation are purposeful and rational acts, spontaneously undertaken to improve or maintain one's quality of life (Lu, 2010). In other words, applicants for second homes are seeking subjective well-being (non-material, rural) to complement their objective well-being (material, urban). Economists argue that the migrating individual, as the agent of migration, evaluates their actions based on a cost-benefit principle. In this calculation, all conceivable costs are considered, both tangible (e.g., job search, travel) and intangible (e.g., adapting to a new environment). Migration is pursued only if the associated benefits outweigh the costs (Mannan & Kazlov, 2001).

2. Social and Cultural Factors: Socio-cultural factors that influence return migration include the maintenance of public health - a key pillar of social welfare - as well as equitable access to and distribution of health resources within society and educational development that encourages people to adopt healthier lifestyles. Achieving cultural-based self-sufficiency and maintaining social balance are also essential for social well-being. From a socio-cultural point of view, return migration is motivated by a variety of factors, including family formation or reunification, changes in marital status, family obligations, intolerable living conditions and the desire to live in alternative settings.

3. Environmental Factors: The impact of environmental factors on return migration has gained both academic and public interest in recent years. Many people returning to their home of origin due to facing multiple environmental challenges, such as soil degradation or exposure to natural hazards, many of which are aggravated by climate change. These environmental factors may be the driving forces behind the initial migration decision

of returnees, but they are increasingly likely to be the driving forces behind return migration (Hussain et al., 2025). Contemporary urban industrialisation, combined with the spread of noise and air pollution from greenhouse gas emissions and peri-urban industrial activity, has seriously compromised the urban life and mental and physical health of its inhabitants. As a result, a demographic shift is visible, with urban residents moving to pastoral environments to relieve stress and escape urban sprawl. This return migration not only provides the tranquility of rural life, but also, through the increased rural demography, encourages the development of green technologies and helps to preserve the environment (Maleki et al., 2020).

4. Spatial Factors: The characteristics of return population flows and the types of villages they affect show that spatial interactions and functional relationships between metropolises and their peripheral rural areas lead to gradual changes in the demographic, functional, economic, and physical structures of rural communities (Anabestani et al., 2024). The new and growing phenomenon of return migration has recently gained governmental attention, with successful examples observable worldwide (Liu et al., 2023). The development of rural amenities through government planning, including financial incentives such as bank loans and housing subsidies, as well as infrastructures such as gas, access roads and implementation of rural master plans (HADI plans) can be seen as an effective element in the drive of return migration (Ebrahimzadeh et al., 2020). Moreover, the ability to design a house in accordance with individual preferences in rural areas - facilitated by less restrictive building regulations - and the different size of land parcels, combined with low rural density versus high urban density and congestion, also act as a physical push and pull factor in the return migration. In Germany, suitable land on the urban fringe is equipped in 1000-2000 square meter plots and provided to retirees interested in production. In the Netherlands, retired teachers are invited to villages to provide tutoring and simplified instruction. In California, 10-hectare plots with water and cultivation facilities are prepared for applicants (including retirees, the unemployed, and workers) interested in returning to rural life. Consequently, various measures have always been taken globally to reduce rural-to-urban migration. Policies focused on employment and income, job creation, technological changes in production,

various infrastructure projects, and attention to welfare and health indicators have been instrumental in this regard, fostering rural development and, in turn, reverse migration (Selod & Shilpi, 2021).

Over the twentieth century, several theoretical perspectives on migration have evolved. Different theories have been developed to explain the causes and effects of return migration. Despite their conceptual differences, the frameworks do share a common thread: migration is presented as a mechanism for reallocating labour. The first scientific contribution to migration was two articles by the nineteenth-century geographer Ravenstein (1885; 1889), in which he formulated his migration laws. Migratory patterns were further expected to be influenced by factors such as distance and population density (De Haas, 2021; Skeldon, 2014). These theories can be broadly divided into two schools. Macro-level approaches attribute migration to overarching structural constraints, while micro-level views portray migrants as rational actors who carry out cost-benefit analyses to improve their lives. At a macro level, neoclassical economic theory explains migration by geographic differences in labour supply and demand. The resulting wage gap causes workers to move from regions with a high-wage surplus to regions with a low-wage surplus. Migration will make labour less scarce at the place of destination and more scarce at the place of dispatch. At the micro level, neo-classical migration theory views migrants as individuals, rational actors, who make decisions about their migration based on cost-benefit considerations. Assuming freedom of choice and full access to information, they are expected to go where they can be most productive, i.e. where they can earn the highest salaries (De Haas, 2021). While numerous explanatory models exist—ranging from dual-sector and dependency theories to systems approaches—the push-pull model is especially relevant for this type of migration. Lee (1966) revised the 19th-century Ravenstein Laws on Migration and proposed a new analytical framework for migration. In his opinion, the decision to emigrate is determined by the following factors: factors relating to the area of origin; factors relating to the area of destination; factors acting as barriers to emigration (e.g. distance, physical obstacles, immigration legislation, etc); and personal factors (De Haas, 2021). Every location has push factors (negative factors) and pull factors

(positive factors). Migration occurs when the push factors at the origin and the pull factors at the destination prevail. This is reinforced by Ravenstein's law, which states that every migration stream generates a counter-stream; thus, urban-to-rural migration is a natural counterpart to rural-to-urban movement. According to Lee (1966), individuals will choose to migrate if the perceived benefits at the destination, balanced against the negatives of their origin and the obstacles between them, create a net positive outcome. This logic is formalised in human capital theory, which frames migration as a rational investment based on a cost-benefit calculation (Lee, 1966; Stockdale, 2014).

The theoretical discussions of Geyer (1996) and Moseley (1984) regarding the fundamental factors behind population concentration and deconcentration processes provide a valuable framework for selecting relevant variables (Lindgren, 2002). Geyer (1996) argues that human life can be characterised by two important and necessary phases, each corresponding to a separate period. In the "productionism" phase, concerns such as education, job opportunities, and higher income take priority over standards of living. Once individuals have improved their labour market position and achieved their expected income, they turn their attention to their housing situation, which belongs to the "environmentalist" phase. He thus develops the relationship between productionism and environmentalism (Geyer, 1996).

Unlike Geyer's analysis, Moseley (1984) does not focus on different life stages but instead emphasises the importance of jobs, employment opportunities, and their spatial distribution. From his perspective, the explanation for return migration flows is categorised into "people-led" and "job-led" types. Retirees, the unemployed, and those not participating in the labour force are not obliged to remain tied to their work environment. This group can choose their place of residence freely, regardless of the principle of living according to the geography of job opportunities (Moseley, 1984).

The relationship between economic cycles and employment redistribution can explain the population's return to rural areas. A positive correlation exists between the state of the economy and urbanisation trends. When the economy is expanding, the rate of urbanisation increases. Conversely, during an economic downturn, urbanisation may decelerate or even reverse

(Awasthi & Mehta, 2020; Sosanidze et al., 2025). According to the Post-Fordist approach, the trend of counter-urbanisation occurs when the urban industrial sector loses its significance and efficiency. In this context, the demand for labour diminishes. Due to reduced reliance on the industrial sector, many people lose their jobs due to bankruptcy and layoffs. Few employment opportunities are available in cities, and new production centres tend to shift to rural areas. Meanwhile, the service sector experiences substantial growth, resulting in a swift rise in service-related jobs (Roost & Jeckel, 2021).

Olfati et al. (2022), in their study titled "Explaining the Social, Cultural, and Economic Factors of Return Migration from City to Village (Case Study: Sarpol-e Zahab County)," demonstrated a significant relationship between return migration and factors such as social cohesion, educational facilities, urban issues, tourist attractions, and new communication technologies (Olfati et al., 2022). Maleki et al. (2020) conducted a study on the environmental and physical impacts of return migration in the coastal villages of Rasht County, showing that rural migration has increased in recent years, with families returning at a high rate. This trend is more prominent in coastal villages due to their climate, and has resulted in social, economic, physical, and cultural impacts, with the most noticeable effects seen in the physical domain (Maleki et al., 2020).

In their research, Manafiazar et al. (2017) found that economic and infrastructural-social factors exerted the most significant influence on return migration to the Baruq district of Miandoab County, while cultural-ethnic factors had the least effect. Quantitative analysis revealed that return migrants had the most significant impact on physical infrastructure indices and the least on the social index. The findings highlight the importance of economic and infrastructural factors in encouraging reverse migration and shaping the physical development of villages (Manafiazar et al., 2017). Afrakhteh et al. (2016) identified economic factors as the most crucial drivers of return migration, with migrants making decisions based on a cost-benefit analysis and perceptions of greater benefits. Social, psychological, and infrastructural factors also influence these decisions. The consequences of return migration include the renovation of rural housing, revitalisation of agricultural lands,

conversion of rain-fed farms into orchards, mechanisation of agriculture, livestock development, and the establishment of production workshops, all of which contribute to the spatial restructuring of villages (Afrakhteh et al., 2016). Alibabaiee and Jomepour (2017) found that urban push factors, such as a lack of housing and failure to attain social status, alongside rural pull factors, such as opportunities to participate in social hierarchies to gain status, are key drivers of migrants' return from the city to rural areas (Alibabaiee & Jom'epour, 2017).

Weldemariam et al. (2023) in their article "Dynamics and factors influencing return migration to Sub-Saharan Africa: A systematic review" showed that the decision to return to the region was influenced by complex scenarios, with a combination of drivers and disincentives for return. Social, personal, economic and political factors were identified as the main drivers of return migration, but it was found that social and personal factors, as opposed to political and economic ones, were the main drivers of the decision to return to the SSA. The observed drivers and obstacles for return migration in the SSA have been categorised and discussed in thematic sections that take structural, individual and political issues into account (Weldemariam et al., 2023).

Albright and Naybor (2010), in their article "Return Migration, the Impact of Returning Home," discussed the gendered migration. They argue that there is a common misconception that most migrant workers are male, but many women migrate abroad or to urban areas within their own country to find work. Migrant work is also divided along gender lines by types of work and wages. They concluded that since the 1960s, nearly half of all migrant

workers have been women. However, since 2000, there has been a significant increase in women migrating independently as income earners, with their migration rates now equal to those of men (Albright & Naybor, 2010).

Liu (2011) found that the return migration of Chinese nationals to China is mainly linked to two key factors. First, China's high economic growth, which continued after the 2008 financial crisis, provided more jobs and economic opportunities domestically while other global economies were in recession. Second, the Chinese government has paid particular attention to talent development through the National Plan for Talent Development (2001-2010), which, as the first comprehensive human resources development plan in China, created a framework for attracting returning migrants. The results showed that these factors played a significant role in encouraging migrant returns and in strengthening China's national economy and social development (Liu, 2011).

2.1. The Conceptual Research Model

This study aimed to investigate the driving factors impacting on the return migration of residents from urban to rural areas in Bandar Khamir County. Following a review of existing theories on return migration, the conceptual model was adopted. In this model, both migrants and interacting institutions are viewed within a holistic framework; consequently, a set of interacting components, along with their characteristics and relationships, are considered within a coherent structure that incorporates economic, social-cultural, environmental and spatial factors. Thus, the conceptual model of the research is illustrated in Figure 2.

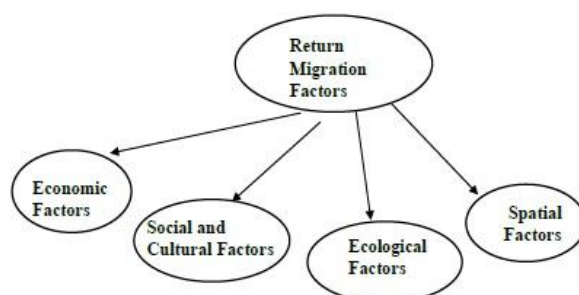


Figure 1. The Conceptual Research Model

3. Research Methodology

3.1. Geographical Scope of the Research

Bandar Khamir is a port city on the shores of the Persian Gulf in the Central District of Khamir County, Hormozgan province, Iran, serving as the

capital of both the county and the district. At the time of the 2006 National Census, the city's population was 11,307 in 2,441 households. The 2011 census recorded 14,617 residents in 3,453 households. The 2016 census counted the city's population at 15,320 people in 4,161 households. This historic port is the largest city near the Khoorkhooran wetland, the largest in the Middle East, and features the widest mangrove forests in Iran (MirzaNiknam, 2014). Bandar Khamir has the longest wetland shoreline in Iran. Thanks to years

of environmental efforts and widespread public participation in preserving and developing this wetland, the city was recognised as Iran's first national wetland city. It became a World Wetland City in 2022. Additionally, the city was designated a UNESCO Learning City in 2021 for its broad educational initiatives targeting various segments of the population. Today, it is recognised both within Iran and internationally as a model of sustainable development driven by community involvement (Bastenegar, 2023).



Figure 2. The geographical location of Bandar Khamir in Hormozgan province, Iran (source: Wikipedia)

3.2. Methodology

This study employed a descriptive-analytical approach and a quantitative method. The study population consists of 1,358 immigrants in Bandar Khamir (Bastenegar, 2023). Utilizing the Cochran formula with a specific margin of error, a sample

size of 300 was determined. Data collection utilized a multi-stage cluster sampling approach. After defining the regional clusters, participants were randomly selected to complete the survey instruments. The following formula illustrates the sample size derivation:

$$n = \frac{NZ^2\alpha/2 \times p(1-p)}{E^2(N-1) + Z^2\alpha/2 \times p(1-p)}$$

$$\frac{1358(1/96)^2 \times 0/5 \times 0/5}{(0/06)^2(1358 - 1) + (1/96)^2 \times 0/5 \times 0/5} = 299.8$$

Figure 3. Cochran's Modified Formula for Finite Populations

3.2.1. The Researcher-developed Return Migration Questionnaire

In the present study, a researcher-developed Return Migration Questionnaire was utilised to examine the research variables. Theoretical data were gathered through a documentary review of reputable Persian and English books and articles. The data collection method was a questionnaire survey. The instrument contains 35 items. Instrument scoring was based on a five-point Likert scale (1 = very low, 2 = low, 3 = moderate, 4 = high, 5 = very high). The questionnaire consists of four

distinct subscales representing economic, socio-cultural, environmental, and spatial factors. Several professors and experts verified the face validity of this scale, and its reliability was assessed using Cronbach's alpha, which produced a coefficient of 0.90. This is regarded as a highly satisfactory value for the questionnaire. The Cronbach's alpha coefficient for all factors (variables), internal consistency (construct validity, convergent/divergent validity), the Average Variance Extracted (AVE), fit indices (CFI, TLI, RMSEA, SRMR), and Confirmatory Factor Analysis (CFA) were reported (Tables, 3,5,8).

4. Research Findings

The collected data were analyzed in two stages. Initially, descriptive statistics were used to profile the participants' demographic characteristics. This was followed by inferential analysis to facilitate the generalization of results to the broader statistical population. Specifically, Chi-square tests, Confirmatory Factor Analysis (CFA), and Structural Equation Modeling (SEM) were performed using SPSS 24 and LISREL software to validate the research hypotheses.

4.1. Demographic Characteristics

According to the data in Table 1, the sample consisted of 180 male respondents (60%) and 120 female respondents (40%), indicating a higher participation of men in the phenomenon of return migration. Based on Table 1, the educational distribution of participants was as follows: 120 individuals (40%) held a Bachelor's degree, 90 (30%) a Master's degree, 45 (15%) a high school diploma or less, and 45 (15%) a doctorate or higher. This distribution suggests a relatively high level of

education within the sample, which could influence social outcomes. The occupational status of participants included employees (30%, n=90), freelance/self-employed workers (25%, n=75), students (20%, n=60), unemployed individuals (10%, n=30), and others in different occupations (15%, n=45). This occupational diversity indicates economic dynamism among the migrants. According to Table 1, 105 individuals (35%) had 5 to 10 years of work experience, 90 (30%) had less than 5 years, 60 (20%) had between 10 and 15 years, and 45 (15%) had more than 15 years. Based on the information in Table 2, participants rated the impact of economic incentives as moderate (30%, n=90), high (25%, n=75), very high (15%, n=45), low (20%, n=60), and very low (10%, n=30). Overall, 40% of respondents considered the impact of these incentives to be high or very high, highlighting the significance of economic factors. Table 1 summarises the demographic characteristics, categories, frequencies, and percentages of the respondents in the study.

Table 1. The demographic characteristics of participants

Variable	Group / Level	Frequency	Percentage
Gender	Male	180	60%
	Female	120	40%
	Total	300	100%
Education Level	High School Diploma or less	45	15%
	Bachelor's Degree	120	40%
	Master's Degree	90	30%
	PhD or higher	45	15%
	Total	300	100%
Occupation	Employee	90	30%
	Freelancer/Self-employed	75	25%
	Student	60	20%
	Unemployed	30	10%
	Other	45	15%
	Total	300	100%
Monthly Income (Million Tomans)	Less than 5	60	20%
	5 to 10	105	35%
	10 to 15	75	25%
	Over 15	60	20%
	Total	300	100%
Work Experience (Years)	Less than 5	90	30%
	5 to 10	105	35%
	10 to 15	60	20%
	Over 15	45	15%
	Total	300	100%
Economic Income	Very low	30	10%
	Low	60	20%
	Medium	90	30%
	High	75	25%
	Very high	45	15%*
	Total	300	100%

Table 2. Descriptive statistics of driving factors impacting on return migration

Factors	Mean	Standard Deviation	Minimum Score	Maximum Score
Economic Factors	43.47	10.18	19	65
Social-cultural Factors	30.28	6.51	16	45
Environmental Factors	29.57	7.30	13	45
Spatial Factors	17.02	4.24	5	25
Total Score	117.20	24.91	56	175

The descriptive findings, including the mean, standard deviation, and the maximum and minimum scores for each component and their respective factors, are presented in (Table 2).

Following Hoogland's (1999) framework, a two-stage Partial Least Squares (PLS) modeling procedure was applied to the inferential analysis. Stage one assessed the measurement model's reliability and validity, while stage two evaluated the structural model using fit indices, R^2 , and path analysis. The measurement model validation employed Confirmatory Factor Analysis (CFA) to

verify indicator adequacy and data-structure congruence. The structural model was subsequently tested through path coefficients, goodness-of-fit statistics, and determination coefficients.

Prior to hypothesis testing, the validity of the measurement instrument must be established using Confirmatory Factor Analysis (CFA). The CFA results for the questionnaire items are shown in (Table 3). All standardized factor loadings were statistically significant ($p < 0.05$, 95% CI) and exceeded 0.5, thus all items were retained for structural model estimation.

Table 3. Results of Confirmatory Factor Analysis (CFA)

Item	Factor Loading	t-statistic
1. Economic Factors		
Q01	0.529	7.889
Q02	0.815	36.391
Q03	0.719	25.077
Q04	0.693	21.317
Q05	0.721	24.393
Q06	0.799	33.250
Q07	0.843	35.789
Q08	0.798	30.047
Q09	0.803	37.516
Q10	0.740	19.742
Q11	0.721	21.381
Q12	0.813	36.922
Q13	0.812	31.802
2. Social and Cultural Factors		
Q14	0.724	26.556
Q15	0.733	23.747
Q16	0.819	42.095
Q17	0.816	41.374
Q18	0.812	33.980
Q19	0.784	27.128
Q20	0.747	25.042
Q21	0.802	26.364
Q22	0.739	24.205
3. Environmental Factors		
Q23	0.538	11.650
Q24	0.728	22.815
Q25	0.842	45.067
Q26	0.869	48.508
Q27	0.903	104.534

Item	Factor Loading	t-statistic
Q28	0.859	43.378
Q29	0.782	26.552
Q30	0.635	16.191
4. Spatial Factors		
Q31	0.841	45.548
Q32	0.863	49.003
Q33	0.876	55.093
Q34	0.856	50.704
Q35	0.797	29.353

To obtain convergent validity, values higher than 0.5 indicate the consistency or internal validity of the measurement models. The Average Variance Extracted (AVE) value pertains to the constructs.

Since these numbers in (Table 4) are greater than 0.5, the validity of the measurement instrument is acceptable.

Table 4. Composite reliability, Cronbach's Alpha, Homogenous Reliability and Average Variance Extracted of the model

Variable	Cronbach's Alpha	Homogenous Reliability Coefficient (rho)	Composite reliability	Average Variance Extracted (AVE)
Economic Factors	0.937	0.884	0.876	0.576
Social -cultural Factors	0.917	0.845	0.834	0.603
Environmental Factors	0.902	0.854	0.821	0.608
Spatial Factors	0.892	0.853	0.864	0.719

The composite reliability and convergent validity occurred when the composite reliability was greater than 0.7. In addition, the composite reliability should be greater than the average variance extracted (AVE). In this case, all conditions for conferral of concurrent effect are fulfilled. The coefficient of congeneric reliability (rho) is also used to measure the internal consistency of constructs. According to Chin (1998), the Rho

coefficient is considered more reliable than Cronbach's alpha (Chin, 1998). The value of the Rho coefficient should be greater than 0.7. In addition, the values of Cronbach's alpha should also exceed 0.7 and the average variance extracted should be greater than 0.5 for validation. According to Table (4), all of these coefficients for the research variables are at acceptable levels in relation to the minimum requirements.

Table 5. Discriminant Validity Assessment Matrix

Variables	Economic Factors	Social and Cultural Factors	Ecological Factors	Spatial Factors
Economic Factors	.0758			
Social -Cultural Factors	.0789	.0776		
Environmental Factors	.0776	.0794	.0779	
Spatial Factors	.0640	.0660	.0751	.0847

As shown in (Table 5), which displays the inter-correlations among research construct dimensions, the variance explained by each construct exceeds its shared variance with other constructs. This demonstrates satisfactory discriminant validity and confirms the adequate fit of the measurement models.

A normal distribution exhibits symmetry around the mean, forming a characteristic bell-shaped curve. When distributions violate normality assumptions—evidenced by skewness toward the left or right tail—the choice of statistical tests shifts from parametric to non-parametric methods.

Table 6. Results of the Kolmogorov-Smirnov test to examine the assumption of normality of variable distribution

Variables	K-S Statistic	Significance Level
Economic Factors	0.078	0.001
Social- cultural Factors	0.069	0.008
Environmental Factors	0.065	0.014
Spatial Factors	0.107	0.000
Total Score	0.067	0.010

Results of normality assessment (Table 6) using Kolmogorov-Smirnov test indicated significant deviations from normality ($p < 0.05$), at the 95% confidence level, thus rejecting the null hypothesis of normal distribution. Accordingly, non-parametric test (Chi-Square) was employed for hypotheses testing.

To examine the relationships between predictor variables (economic, socio-cultural, ecological, and spatial factors) and return migration, chi-square tests of independence were performed. The results are summarized in Table (7).

Table 7. Chi-Square Test Results for Research Hypotheses

Hypothesis	Independent Variable	χ^2	df	p-value	Results
H1	Economic factors	172.534	299	<0.001	Confirmed
H2	Socio-cultural factors	83.327	299	<0.001	Confirmed
H3	Environmental factors	97.842	299	<0.001	Confirmed
H4	Spatial factors	118.421	299	<0.001	Confirmed

H1: Economic factors and return migration. The chi-square test yielded a highly significant result ($\chi^2 = 172.534$, $df = 299$, $p < 0.001$), confirming that economic factors are significantly associated with return migration decisions.

H2: Socio-Cultural factors and return migration. A significant relationship was observed between socio-cultural factors and return migration ($\chi^2 = 83.327$, $df = 299$, $p < 0.001$), supporting the second hypothesis.

H3: Environmental factors and return migration. The analysis revealed a statistically significant association between environmental factors and return migration ($\chi^2 = 97.842$, $df = 299$, $p < 0.001$), thereby confirming the third hypothesis.

H4: Spatial factors and return migration. Spatial factors demonstrated a significant relationship with return migration ($\chi^2 = 118.421$, $df = 299$, $p < 0.001$), validating the fourth hypothesis.

In summary, all four hypotheses were empirically supported, with economic factors exhibiting the strongest association with return migration, followed by spatial, ecological, and socio-cultural factors, respectively.

The structural equation model's adequacy was evaluated using a comprehensive set of goodness-of-fit indices across three categories: absolute, comparative, and parsimonious fit measures (Table

8). All indices met or exceeded their respective acceptable thresholds, providing strong evidence for the model's overall fit to the data.

Absolute fit indices demonstrated excellent model fit. The Goodness-of-Fit Index ($GFI = 0.99$) and Adjusted Goodness-of-Fit Index ($AGFI = 0.93$) substantially exceeded the recommended thresholds of 0.90 and 0.80, respectively. The Standardized Root Mean Square Residual ($SRMR = 0.012$) was well below the acceptable cutoff of 0.05, indicating minimal discrepancy between observed and predicted covariances.

Comparative fit indices further supported model adequacy. The Comparative Fit Index ($CFI = 0.98$), Normed Fit Index ($NFI = 0.95$), and Non-Normed Fit Index ($NNFI = 0.94$) all exceeded the recommended threshold of 0.90, suggesting that the proposed model fits the data substantially better than a null model.

Parsimonious fit indices confirmed that the model achieves good fit without unnecessary complexity. The chi-square to degrees of freedom ratio ($\chi^2/df = 1.88$) fell well within the acceptable range (< 3), the Parsimonious Normed Fit Index ($PNFI = 0.96$) exceeded the 0.60 threshold, and the Root Mean Square Error of Approximation ($RMSEA = 0.026$) was considerably below the 0.08 cutoff, indicating excellent approximate fit.

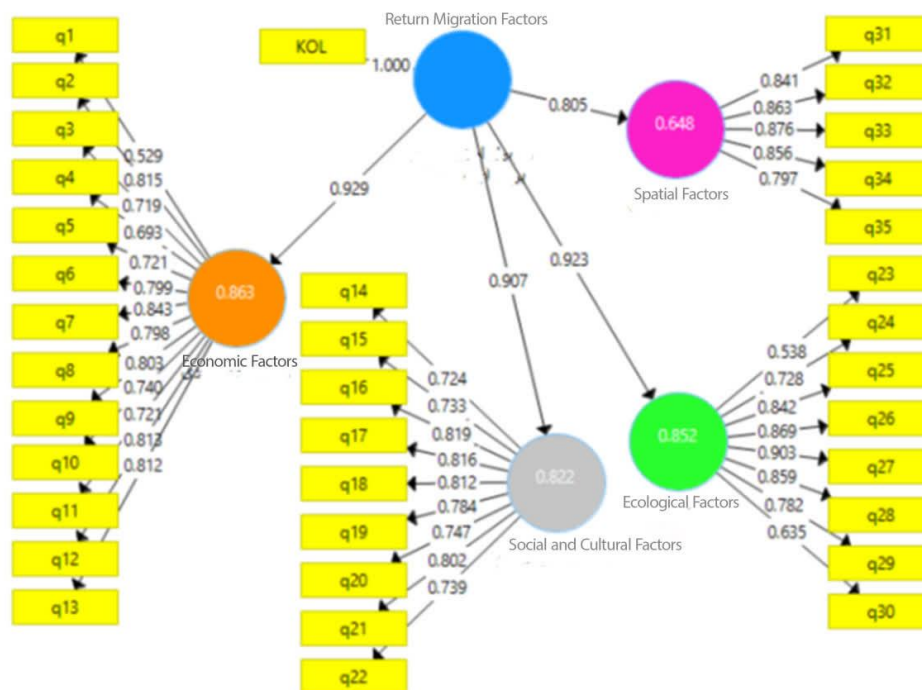
Table 8. Goodness-of-fit indices for the tested research model

Index Category	Index	Model Estimates	Acceptable Threshold	Result
Absolute Fit Indices	GFI	0.99	> 0.90	Confirmed
	AGFI	0.93	> 0.80	Confirmed
	SRMR	0.012	< 0.05	Confirmed
Comparative Fit Indices	CFI	0.98	> 0.90	Confirmed
	NFI	0.95	> 0.90	Confirmed
	NNFI	0.94	> 0.90	Confirmed
Parsimonious/Adjusted Fit Indices*	χ^2/df	1.88	< 3	Confirmed
	PNFI	0.96	> 0.60	Confirmed
	RMSEA	0.026	< 0.08	Confirmed

Structural model fit was evaluated using multiple indices (Table 8). All metrics exceeded recommended thresholds, confirming excellent model-data fit: GFI = 0.99, AGFI = 0.93, SRMR = 0.012, CFI = 0.98, NFI = 0.95, NNFI = 0.94, χ^2/df = 1.88, PNFI = 0.96, and RMSEA = 0.026. The

combination of low residual-based indices (SRMR, RMSEA) and high comparative indices (CFI, NFI) provides robust evidence for model adequacy (Hu & Bentler, 1999).

Note: All indices met or substantially exceeded recommended thresholds.


Figure 4. Path Coefficients of the Research Model

Based on the fitted structural model presented in Figure (4), the path coefficient for the economic factors variable is 0.929, indicating that economic factors have a 92.9% impact on return migration. Furthermore, social-cultural factors account for a 90.7% impact, environmental factors for 92.3%, and spatial factors for 80.5%. The findings demonstrated that all economic, social-cultural,

environmental, and spatial factors have a positive impact on return migration.

Based on the fitted structural model (Figure 4), the coefficient of determination (R^2) for economic factors is 0.863, indicating that 86.3% of the variance in return migration is explained by economic determinants. Social and cultural factors explain 82.2% ($R^2 = 0.822$), environmental factors

85.2% ($R^2 = 0.852$), and spatial factors 64.8% ($R^2 = 0.648$) of the variance. All factors demonstrated statistically significant positive effects on return migration.

Path coefficients, equivalent to standardized regression weights (β), were evaluated for

magnitude, direction, and statistical significance. Positive coefficients indicate direct relationships, while negative coefficients represent inverse associations between endogenous and exogenous latent variables. Figure (5) illustrates the t-statistic values for the research model.

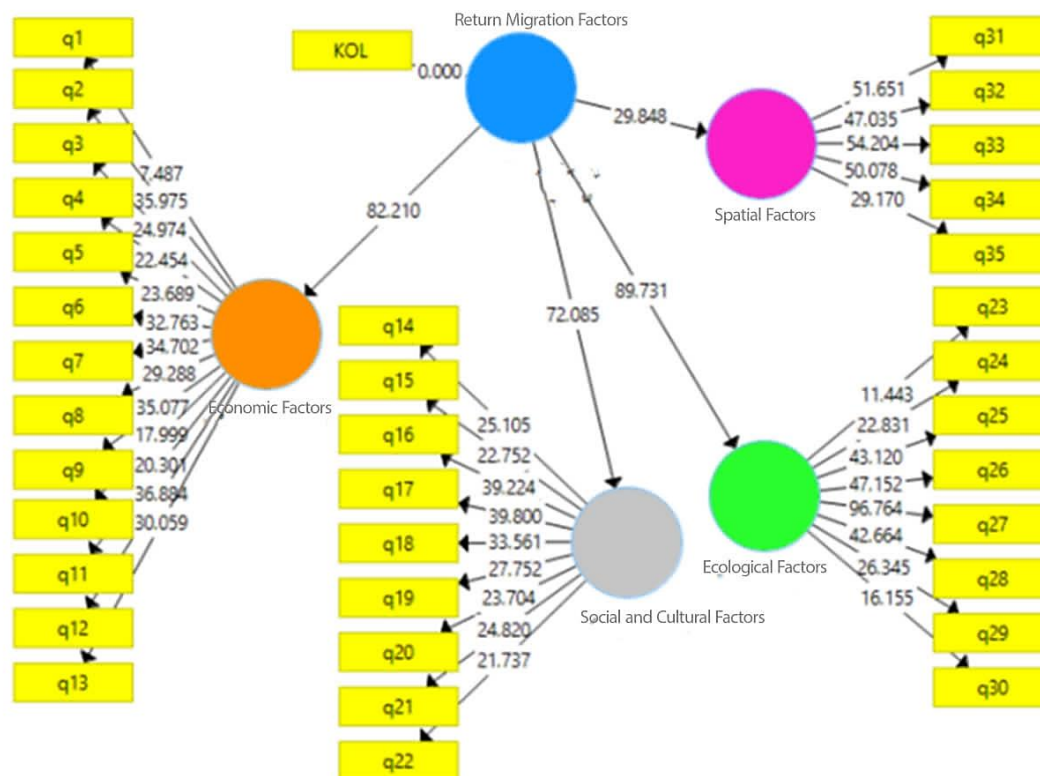


Figure 5. T-test Results of the Research Model

The measurement model demonstrated acceptable fit, with all goodness-of-fit indices falling within recommended thresholds (e.g., CFI > 0.90, RMSEA < 0.08, SRMR < 0.08). Thus, the measurement model is validated and suitable for structural path analysis.

5. Discussion and Conclusion

This study aimed to investigate the impact of economic, social-cultural, environmental and spatial factors on return migration in rural areas (Case Study: Bandar Khamir County), Iran. The results showed a significant positive relationship between economic, social-cultural, environmental and spatial factors and return migration. The regression coefficients for the economic, social-cultural, environmental and spatial factors were 0.929, 0.907, 0.923 and 0.805, respectively. The coefficient of determination (R^2) for economic factors is 0.863, indicating that 86.3% of the

variance in return migration is explained by economic determinants. Social and cultural factors explain 82.2% ($R^2 = 0.822$), environmental factors 85.2% ($R^2 = 0.852$), and spatial factors 64.8% ($R^2 = 0.648$) of the variance. The economic factors showed the strongest association with return migration in Bandar Khamir County, Iran. The positive regression coefficients in the model indicated a constructive and direct relationship between return migration and economic, social-cultural, environmental and spatial factors. Therefore, the hypotheses that economic, social-cultural, environmental and spatial factors impacted the return migration in Bandar Khamir County were supported with a confidence level of 95%.

Chi-square tests also confirmed all four research hypotheses at $p < 0.001$. Economic factors showed the strongest association with return migration ($\chi^2 = 172.534$), followed by spatial ($\chi^2 = 118.421$),

environmental ($\chi^2 = 97.842$), and socio-cultural factors ($\chi^2 = 83.327$). All relationships were statistically significant ($df = 299$, $p < 0.001$), indicating that economic, spatial, environmental, and socio-cultural dimensions significantly influence return migration behavior.

The analysis showed a strong positive association between economic factors and return migration intentions, with economic variables accounting for 86.3 per cent of the variation in response to migration. Specifically, respondents who reported a higher perception of economic instability in their city (e.g. unemployment, high cost of living, income stagnation) were more likely to express a desire to return to rural areas. This pattern is in line with the findings of previous Iranian studies, such as that of [Afrakhteh et al. \(2016\)](#) and [Manafiazhar et al. \(2017\)](#), which similarly documented the strong correlation between economic conditions and return migration flows. However, a distinction must be made between the observed statistical relationship and the potential mechanisms. The data show that economic perceptions and migration intentions coexist and definitively demonstrate that economic factors are the driving factors behind migration decisions. The theory of human capital ([Sjaastad, 1962](#)) and the push-pull framework ([Lee, 1966](#)) offer theoretical mechanisms to explain this association: individuals can carry out implicit cost-benefit analyses that combine deteriorating urban economic conditions (a push factor) with perceived rural opportunities in agriculture, eco-tourism, and small businesses (a pull factor) to motivate relocation. In the context of Bandar Khamir, strategic investments in marine agri-tourism and eco-tourism infrastructure ([Bastenegar, 2023](#)) can increase the perceived economic viability of rural life and thus strengthen the association.

Social-cultural factors showed a substantial positive association with return migration ($\beta = 0.907$, $R^2 = 0.822$; $\chi^2 = 83.327$, $p < 0.001$), indicating that participants who valued family ties, community cohesion, and cultural identity were more likely to report their intention to return migration. This finding aligns with international evidence, including [Weldemariam et al. \(2023\)](#) systematic review, which identified social and personal factors as main determinants of return migration in Sub-Saharan Africa, and [Olfati et al. \(2022\)](#) Iranian case study linking social cohesion with return migration. The observed association does not indicate causality but indicates a statistical relationship in which

social and cultural variables and migration intentions are correlated. Theoretical frameworks offer a potential explanation of this pattern. [Moseley \(1984\)](#) suggests that individuals who are not tied to a particular place of employment (e.g. pensioners, remote workers) can prefer social ties to economic geography when choosing a place of residence. According to this view, strong family networks and cultural ties can be a facilitator that enables individuals to overcome the spatial and economic obstacles to rural renewal. Similarly, [Geyer \(1996\)](#) suggests that once individuals have achieved economic security (the production phase), they turn to quality of life considerations, including social relations and cultural affinities.

Environmental factors were strongly positively correlated with return migration ($\beta = 0.923$, $R^2 = 0.852$; and $\chi^2 = 97.842$, $p < 0.001$), with 85.2 percent of the variance in the likelihood of return migration being related to environmental exposure. Participants who reported concerns about urban pollution, noise and environmental degradation were more likely to express their intention to return to the countryside. This model is in line with the global trend towards urbanisation ([Hussain et al., 2025](#)) and with previous Iranian coastal research ([Maleki et al., 2020](#)). This observed association suggests a statistical relationship rather than a causal link. In theory, [Geyer \(1996\)](#) offers a plausible mechanism: as individuals attain economic stability, they can put environmental quality and psychological well-being ahead of material considerations. Urban environmental pressures - including air pollution from industrial emissions, traffic congestion and limited green areas - can act as a pull factor, while rural environmental benefits (quiet, clean air, natural landscapes) can act as a pull factor. In Bandar Khamir, the unique environmental assets of the area - including the designation of the area as Iran's first national wetland city and UNESCO World Wetland City status in 2022 ([Bastenegar, 2023](#)), are likely to increase the perceived attractiveness of the rural environment.

Spatial factors showed a significant positive correlation with return migration ($\beta = 0.805$, $R^2 = 0.648$; $\chi^2 = 118.421$, $p < 0.001$), though less pronounced than economic, environmental, or social-cultural dimensions. These findings indicated that infrastructure elements including transport networks, housing affordability and access to public services, are correlated with return migration

intentions, but account for a smaller share (64.8 percent). The observed association is consistent with previous research linking spatial infrastructure to demographic change. [Anabestani et al. \(2024\)](#) documented the correlation between metropolitan-rural spatial interactions and demographic changes in rural areas. [Ebrahimzadeh et al. \(2020\)](#) identified links between government rural development programmes (e.g. HADI Master Plans, housing subsidies) and return migration patterns. [Lee \(1966\)](#) in his push-pull framework offers a theoretical mechanism that spatial barriers (e.g. distance, poor roads) can act as barriers to return migration, while improvements in spatial infrastructure reduce these barriers and increase accessibility to rural areas.

At the macro level, research findings can be analysed along four basic dimensions: economic, social-cultural, environmental and spatial. From an economic point of view, migration is seen as a function of the labour and employment gap between the place of origin and the place of destination, which suggests that migration will stop only when wage and labour balances are achieved. This view assumes that migrants assess their movements on the basis of a cost-benefit analysis. On the contrary, the new economics of labour migration suggests that migration continues, even in the absence of wage differentiation, driven by the desire for economic stability and diversification of income. The social and cultural perspectives emphasise the factors of push and pull; it takes into account, in addition to economics, social motivations, family reunification, educational opportunities and negative conditions of origin.

Moreover, while the environmental perspective often focuses on international movements, it recognises migration as a multi-dimensional phenomenon, affected by territorial attachments. These findings align with Ravenstein's "Push-Pull" theory, which argues that migrants are rational in seeking better economic conditions ([De Haas, 2021](#); [Skeldon, 2014](#)). While Ravenstein emphasized distance, he also identified social and economic fragility as the main drivers. Ravenstein's framework incorporates variables such as social capital and native ownership (place-based attachment), both of which are confirmed by the findings of the study on migration laws, distance and the predominance of economic motivations.

According to the human capital theory of ([Sjaastad, 1962](#)), an individual will only choose to move if the

perceived benefits outweigh the costs. This decision-making process covers all dimensions of life, especially the socio-economic sphere, and is, in essence, geared to the maximisation of well-being. In other words, migrants are motivated by potential benefits such as higher incomes, a peaceful environment, favourable psycho-social conditions and proximity to family networks. Consequently, findings on the economic capital hypothesis, the reverse migration incentive, domestic attachment, distance and the role of services and amenities serve to empirically confirm this theoretical framework.

Conversely, several studies from other regions showed different patterns among migrants and outcomes. [Boateng et al. \(2019\)](#) examined return migration in rural regions of Ghana, found that social ties, family responsibilities, and community identity were more influential than economic factors in the decision to return. They observed only limited evidence of increased social issues post-return. In their communities, returnees re-integrate into well-established family networks that appear to absorb demographic changes without causing significant tensions. This finding contrasts with Bandar Khamir, where a swift influx of relatively educated and economically active returnees can disrupt the social fabric and heighten competition for land, employment, and political influence, thereby contributing to social decay. Similarly, [Pinilla et al. \(2022\)](#), who investigated lifestyle migration in depopulated Spanish villages, reported that environmental and cultural amenities mainly attracted migrants rather than economic advantages. They noted that such migration tends to promote civic engagement and social cohesion. Their context involves slower, more amenity-driven in-migration to relatively established rural areas, which sharply differs from the politically and economically motivated, faster return movements observed in Bandar Khamir.

[Yaghoubi and Zobeidi \(2023\)](#) found that motives for return migration mainly include welfare improvement, natural attractions, and employment, leading to infrastructural development and increased social participation. These findings are consistent with the current study's focus on economic and social factors. However, [Manafiazar et al. \(2017\)](#) discovered that environmental pollution and social issues were significant drivers in Tehran for leaving the city, whereas economic factors were not. This partially differs from our

results, where economic incentives were prominent; this discrepancy likely stems from differences in the target populations (Tehran metropolis versus Bandar Khamir County) and the types of migration (urban exit versus reverse migration). Studies by [Olfati et al. \(2022\)](#), [Manafi Azar et al. \(2017\)](#), [Afrakhteh et al. \(2016\)](#), [Weldemariam et al. \(2023\)](#), and [Liu \(2011\)](#) also highlight the importance of economic factors, native attachment, and the positive impact of returnees on rural development, all supporting the current findings of this research. Additionally, [Alibabaiee and Jomepour \(2017\)](#) identified urban push factors (high housing costs, pollution) and rural pull factors (cheap land, clean air) as effective drivers, which correspond to the environmental and economic incentives found in this study. [Liu \(2011\)](#) in China demonstrated that economic growth and talent development policies increased return migration, aligning with the economic factors observed in this research.

Several limitations should be considered when interpreting these results. The study relied exclusively on a self-report questionnaire as the sole instrument for data collection. Participant selection was confined exclusively to return migrants, meaning the findings reflect only this specific group's perceptions rather than a comprehensive multi-stakeholder perspective. The study was conducted exclusively in Bandar Khamir County, a coastal region in Hormozgan Province with unique characteristics that may limit the transferability of findings.

Despite these limitations, the findings have important practical and policy implications. This study provides empirical evidence to guide rural development policy in Iran and similar developing contexts. Three key policy recommendations emerge: First, prioritize economic interventions. Economic factors explained 86.3% of return migration variance, confirming that employment opportunities, affordable housing, and rural livelihood diversification are paramount. Policymakers should implement targeted financial incentives—including housing subsidies, low-interest loans, and rural entrepreneurship support—to capitalize on this primary driver. Second, preserve environmental quality. Environmental factors (85.2% variance explained) highlight that urban residents increasingly seek refuge from pollution, congestion, and psychological stress. Policies protecting rural environmental amenities, promoting sustainable development, and marketing

the health benefits of rural living can attract return migrants while ensuring long-term sustainability. Third, invest in integrated infrastructure. While spatial factors showed lower explanatory power (64.8%), continued investment in transportation, utilities, telecommunications, and flexible building regulations creates enabling conditions for return migration. The success of government initiatives in Bandar Khamir—including eco-tourism development and HADI plan implementation—demonstrates the effectiveness of coordinated spatial planning.

Future research can expand in several directions. **Mixed-Methods Designs:** Future studies should integrate qualitative approaches (interviews, focus groups, ethnography) with quantitative surveys to provide deeper contextual understanding. **Longitudinal Studies:** Panel designs tracking migrants over time would enable causal inference and analysis of temporal dynamics. **Multi-Stakeholder Perspectives:** Including non-migrant residents, local authorities, and other stakeholders would provide a more comprehensive understanding of return migration impacts.

In conclusion, this study highlights the complex and multifaceted nature of return migration in Bandar Khamir County, showing strong links across economic, social, cultural, environmental and spatial factors. By carefully differentiating observed statistical relationships from potential causal mechanisms, and acknowledging methodological limitations, the research provides a rigorous foundation for future scholarship and evidence-based policymaking. Return migration is a promising route to rural renewal and balanced regional development in Iran and beyond, but realizing its potential requires continued investment, integrated planning, and continuous empirical research to turn associations into practical interventions.

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Authors' Contributions

This paper is extracted from a PhD. Dissertation. All authors have contributed significantly to research process and the development of the manuscript.

Conflict of interest

The authors report no conflict of interest.

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بررسی تأثیر عوامل اقتصادی، اجتماعی-فرهنگی، محیطی و کالبدی بر مهاجرت معکوس در مناطق روستایی (مطالعه موردی: شهرستان بندر خمیر)

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چکیده مبسوط

۱. مقدمه

مهاجرت به اشکال گوناگونی در جامعه نمود می‌یابد، از جمله جابه‌جایی از مناطق روستایی به شهری، از مناطق شهری به روستایی، و بین شهرهای کوچک و شهرهای بزرگ. در اکثر کشورهای در حال توسعه مانند ایران، الگوی غالب مهاجرت، انتقال یک‌طرفه و معمولاً دائمی جمعیت روستایی به مراکز شهری است. با این حال، طی دهه گذشته، روند جدیدی به نام «مهاجرت معکوس» در بخش‌های روستایی کشور پدیدار شده است. پدیده مهاجرت معکوس در شهرستان خمیر، یک منطقه روستایی در جنوب استان هرمزگان ایران، بیشتر مشهود است. مرکز این منطقه، بندر خمیر (که قبلاً با نام خمیر شناخته می‌شد)، به دلیل موقعیت استراتژیک دریایی و تجاری خود دارای میراثی غنی و اهمیت تاریخی است. سایت‌های باستان‌شناسی مهمی مانند دیوار سدار و قلعه خمیر گویای این میراث هستند. در سال‌های اخیر، شتاب مهاجرت معکوس به این منطقه افزایش یافته است که عمدتاً ناشی از توسعه استراتژیک در بوم‌گردی (اکوتوریسم) و گردشگری کشاورزی دریایی است. این ابتکارات منطقه را به مقصدی جذاب‌تر هم برای ساکنان بومی بازگشته و هم برای تازه‌واردان تبدیل کرده است. هم‌زمان، تلاش‌های عامدانه نهادهای دولتی، مانند بنیاد مسکن در روستاهای دورافتاده و ارتقای خدمات اجتماعی روستایی توسط مقامات محلی، شرایط مساعدی را برای این تغییر جمعیتی فراهم کرده است. هدف این سیاست‌ها ترویج بازاسکان‌دهی روستایی و کاهش مهاجرت به مراکز شهری بزرگ‌تر است. هدف این پژوهش بررسی تأثیر عوامل اقتصادی، اجتماعی-فرهنگی، محیط‌زیستی و فضایی بر مهاجرت معکوس در نواحی روستایی (مطالعه موردی: شهرستان بندر خمیر، ایران) بود.

۲. مبانی نظری تحقیق

مهاجرت به‌عنوان یکی از عوامل کلیدی تحولات جمعیتی، از دیرباز مورد توجه پژوهشگران بوده و به‌ویژه پس از جنگ جهانی دوم به دلیل

تأثیرات گسترده‌اش بر ساختارهای اجتماعی، اقتصادی و فرهنگی جوامع، اهمیت بیشتری یافته است. در کشورهای در حال توسعه مانند ایران، غلبه الگوی توسعه کلاسیک و تمرکز بر شهرنشینی، مانع از توجه کافی به توسعه روستایی شده و روستاها با فقر گسترده مواجه شده‌اند. این مسئله به مهاجرت‌های بی‌رویه روستا-شهری منجر شده که نه تنها مشکلات شهری مانند تراکم جمعیت، افزایش هزینه‌های زندگی، آلودگی و آسیب‌های اجتماعی را تشدید کرده، بلکه روستاها را نیز با کاهش نیروی انسانی و افت فعالیت‌های اقتصادی مواجه ساخته است. مهاجرت‌های داخلی در کشورهای در حال توسعه، به‌ویژه تحت تأثیر صنعتی شدن و توسعه صنعتی، از قرن گذشته میلادی روندی فزاینده داشته است. در ایران، رشد بی‌رویه جمعیت و توزیع نامتوازن آن در سطح ملی، به‌ویژه به دلیل مهاجرت‌های گسترده روستا-شهری، به معضلی جدی تبدیل شده است. اگرچه در گذشته، مهاجرت روستاییان به شهرهای بزرگ به‌عنوان راه‌حلی برای تأمین نیروی کار صنایع شهری و رفع نیروی کار اضافی روستاها مطلوب تلقی می‌شد، امروزه این پدیده به یکی از عوامل اصلی بیکاری و مشکلات اجتماعی-اقتصادی تبدیل شده است. در این میان، بخشی از مهاجران که نتوانسته‌اند به اهداف خود در شهرها دست یابند، ناگزیر به روستاها بازگشته‌اند. با این حال، نسل جدید مهاجران به دلایلی مانند کمبود زمین‌های کشاورزی و بی‌علاقگی به فعالیت‌های سنتی، تمایلی به بازگشت به کشاورزی نشان نمی‌دهند، که این امر پیامدهای نامطلوب اجتماعی-اقتصادی را در مبدأ و مقصد مهاجرت به دنبال داشته است.

۳. روش تحقیق

پژوهش حاضر با رویکردی توصیفی-تحلیلی و با استفاده از روش کمی انجام شده است. جامعه آماری این پژوهش شامل کلیه مهاجران و نخبگان شهرستان بندر خمیر به تعداد تقریبی ۱۳۵۸ نفر بود. بر اساس

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رکود درآمد) گزارش کردند، تمایل بیشتری برای بازگشت به نواحی روستایی ابراز نمودند.

۵. بحث و نتیجه گیری

در جوامع مورد مطالعه آن‌ها، مهاجران بازگشتی مجدداً در شبکه‌های خانوادگی تثبیت شده ادغام می‌شوند که ظاهراً تغییرات جمعیتی را بدون ایجاد تنش‌های قابل توجه جذب می‌کنند. این امر با وضعیت بندر خمیر در تضاد است؛ جایی که هجوم سریع مهاجران بازگشتی نسبتاً تحصیل کرده و فعال اقتصادی می‌تواند بافت اجتماعی را مختل کرده و رقابت برای زمین، شغل و نفوذ سیاسی را تشدید کند و در نتیجه به زوال اجتماعی دامن بزند. چندین عامل نظری و زمینه‌ای به تبیین الگوی یافته‌ها کمک می‌کنند. غلبه مشوق‌های اقتصادی در بندر خمیر با منطق هزینه-فایده در تصمیمات مهاجرت همسو است؛ جایی که افراد در واکنش به فشارهای شهری (نظیر هزینه‌های بالای مسکن، بیکاری، ترافیک و استرس) به مناطق روستایی نقل مکان می‌کنند که اکنون زیرساخت‌های بهبودیافته، اجاره‌های پایین‌تر و فرصت‌های درآمدی جدیدی از طریق اکوتوریسم و گردشگری کشاورزی دریایی ارائه می‌دهند. هم‌زمان، تأثیر معنادار انگیزه‌های اجتماعی، فرهنگی و روان‌شناختی نشان می‌دهد که تصمیم‌گیری صرفاً ناشی از عوامل اقتصادی نیست؛ دلبستگی به روستاهای اجدادی، سنت‌های مذهبی و فرهنگی و تمایل به سبک زندگی کم‌استرس نیز حیاتی هستند. در پایان، این مطالعه نشان داد که مهاجرت معکوس به بندر خمیر توسط مجموعه‌ای پیچیده از مشوق‌ها هدایت می‌شود که تحت تأثیر عوامل اقتصادی و زیرساختی قرار دارند و به عنوان مکانیسم کلیدی عمل می‌کند که از طریق آن چشم‌اندازهای اقتصادی، اجتماعی و فرهنگی روستایی متحول می‌شوند. این مطالعه با ترسیم تجربی این روابط در یک منطقه ساحلی و گردشگری ایران، مدلی حساس به بافت از مهاجرت معکوس و تحول روستایی ارائه می‌دهد که می‌تواند مباحث آکادمیک و ابتکارات سیاستی با هدف دستیابی به توسعه روستایی پایدار از نظر اجتماعی را آگاه سازد.

کلید واژه‌ها: مهاجرت معکوس، عوامل اقتصادی، عامل فضایی، شهرستان بند خمیر.

تشکر و قدردانی

مطالعه حاضر حامی مالی نداشته و حاصل فعالیت علمی نویسنده است.

فرمول کوکران، حجم نمونه مورد نیاز ۳۰۰ نفر تعیین گردید. در این مطالعه از تکنیک نمونه‌گیری چندمرحله‌ای استفاده شد؛ در مرحله نخست، به منظور جلوگیری از پراکندگی گسترده نمونه و جمعیت شرکت‌کنندگان در مناطق مشخص شهری، روستایی و ساحلی، روش نمونه‌گیری خوشه‌ای به کار گرفته شد. سپس در درون این خوشه‌ها، با استفاده از روش نمونه‌گیری تصادفی ساده، نمونه نهایی انتخاب و پرسشنامه‌ها میان آنان توزیع گردید. در مطالعه حاضر، جهت بررسی متغیرهای پژوهش از یک پرسشنامه محقق‌ساخته با عنوان «مهاجرت معکوس» استفاده شد. روایی صوری این مقیاس توسط چندین تن از اساتید و خبرگان تأیید شد و پایایی آن با استفاده از روش آلفای کرونباخ ارزیابی گردید که ضریب ۰/۹ به دست آمد. این مقدار برای پرسشنامه بسیار مطلوب تلقی می‌شود.

۴. یافته‌های تحقیق

هدف این پژوهش بررسی تأثیر عوامل اقتصادی، اجتماعی-فرهنگی، محیط‌زیستی و فضایی بر مهاجرت معکوس در نواحی روستایی (مطالعه موردی: شهرستان بندر خمیر، ایران) بود. نتایج نشان داد که رابطه مثبت و معناداری میان عوامل اقتصادی، اجتماعی-فرهنگی، محیط‌زیستی و فضایی با مهاجرت معکوس وجود دارد. ضرایب رگرسیونی برای عوامل اقتصادی، اجتماعی-فرهنگی، محیط‌زیستی و فضایی به ترتیب ۰/۹۲۹، ۰/۹۰۷، ۰/۹۲۳ و ۰/۸۰۵ بود. ضریب تعیین برای عوامل اقتصادی ۰/۸۶۳ است که نشان می‌دهد ۸۶/۳ درصد از واریانس مهاجرت معکوس توسط تعیین‌کننده‌های اقتصادی تبیین می‌شود. عوامل اجتماعی و فرهنگی ۸۲/۲ درصد عوامل محیط‌زیستی ۸۵/۲ درصد و عوامل فضایی ۶۴/۸ درصد از واریانس را تبیین می‌کنند. عوامل اقتصادی قوی‌ترین ارتباط را با مهاجرت معکوس در شهرستان بندر خمیر نشان دادند. ضرایب رگرسیونی مثبت در مدل بیانگر رابطه سازنده و مستقیم بین مهاجرت معکوس و عوامل اقتصادی، اجتماعی-فرهنگی، محیط‌زیستی و فضایی است. بنابراین، فرضیه‌های مبنی بر تأثیر عوامل اقتصادی، اجتماعی-فرهنگی، محیط‌زیستی و فضایی بر مهاجرت معکوس در شهرستان بندر خمیر با سطح اطمینان ۹۵ درصد تأیید شدند. به طور مشخص، پاسخگویانی که ادراک بالاتری از بی‌ثباتی اقتصادی در شهر خود (مانند بیکاری، هزینه بالای زندگی،

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