FROM VISITORS TO RESIDENTS: THE EFFECTS OF TOURISM ON ICELANDIC MUNICIPALITIES

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Dissertation submitted in part fulfilment of the requirements for the degree of Master of Sustainable Rural Development

University of the Highlands & Islands

3.5.2024

ACKNOWLEDGEMENTS

I would like to express my deepest appreciation to a few individuals and institutions whose invaluable support has been instrumental in the completion of this dissertation. Foremost, I am profoundly grateful to the Association of Municipalities in South Iceland (SASS) for accommodating my work-study balance, enabling me to pursue my academic goals while fulfilling my professional responsibilities, and the Icelandic Regional Development Institute for their generous financial support and unwavering commitment to advancing academic research in this field.

I must also extend my heartfelt thanks to my family, whose unending support and encouragement have been a constant source of strength throughout this journey.

ABSTRACT

This dissertation examines the demographic impacts of tourism on Icelandic municipalities, focusing particularly on the influence of tourism on population dynamics, migration patterns, and the sustainability of local communities. Utilizing a mixed-methods approach, this study scrutinizes data across various Icelandic municipalities to elucidate the expansive implications of tourism-induced demographic shifts. The results reveal that tourism profoundly alters demographic structures, which in turn impacts local economies and social fabrics in diverse ways. This research enhances the dialogue on sustainable tourism development by shedding light on the intricate relationship between tourism activities and demographic sustainability. It offers critical insights and strategic recommendations for policymakers and stakeholders, aimed at fostering sustainable community development in tourism-centric regions.

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1. INTRODUCTION

BACKGROUND AND CONTEXT

In Iceland, tourism has recently emerged as the leading industry (Statistic Iceland, 2024), reshaping the economic landscape and societal fabric of its communities. This surge in tourism presents an opportune lens to examine its multifaceted impacts on demographic dynamics within Icelandic municipalities. Acknowledging the diverse effects of tourism across regions, this dissertation aims to delve into the demographic shifts ensuing from the tourism industry's growth, aligning with the broader discourse on sustainable rural and regional development. Studies have highlighted the significant impact of tourism on demographic changes in communities, particularly in rural areas. They show that tourism can lead to a younger population and higher population turnover (Getz, 1986) (Möller and Amcoff, 2018). Consequently, changes in population composition in these areas are heavily influenced by the demographics of incoming immigrants. That stresses the importance of sustainable development practices to manage these changes effectively (Möller and Amcoff, 2018) (Getz, 1986). This leads to examine two key factors: the impact of the growing immigrant population and the consequences of high population turnover. The influx of a substantial number of immigrants presents various challenges for local communities, including adaptation issues aimed at preserving local values, culture, and identity. Moreover, questions around population turnover — determining who is considered part of the population or a transient workforce — are vital. While both issues relate to adaptation, reasons behind population turnover may stem from the nature of employment drawing these workers and the diminished opportunities for adaptation if the prospect of long-term residency is not considered.

RESEARCH PROBLEM AND RATIONALE

Despite the burgeoning importance of tourism, its uniform application across varying landscapes often overlooks the nuanced demographic changes it precipitates. This research seeks to bridge this gap by focusing on the demographic characteristics within tourism-centric municipalities in Iceland. It is prompted by the need to understand the possibly association between tourism growth and demographic developments, including population composition and migration patterns, to inform sustainable development strategies. Although sustainable population development is a concept that has received limited attention or enjoyed a general definition (Scheyvens, 2011). That weakness must be faced because it has been pointed out that such migration patterns are not considered sustainable in the long term (Taylor, Thurmer and Karácsonyi, 2022). Since tourism is the main influencing factor for migration (Getz, 1986) (Möller and Amcoff, 2018) and migration the main influencing factor in population development (Taylor, Thurmer and Karácsonyi, 2022), the research will not exclude migration theories and the issue of communities in policy making for the integration of foreign nationals and community development. By comparing those findings with the development in Iceland and other research that addresses the challenges of specific population trends in communities and in the context of sustainable tourism and sustainable demographic development.

RESEARCH OBJECTIVES AND QUESTIONS

This study is driven by the objective to assess the demographic changes in tourism-centric regions of Iceland, aiming to contribute to the sustainable planning and development of these areas. The central research question, "Does growth in tourism affect population development and the characteristic features of demographic composition in tourism-centric municipalities in Iceland?", seeks to unravel the intricacies of tourism's demographic impacts. By delving into the intersection of tourism growth and demographic development in Iceland, this study endeavors to contribute significantly to the discourse on sustainable rural and regional development. It aims not only to illuminate the demographic shifts associated with tourism but also to propose avenues through which these shifts can be navigated to

foster sustainable, inclusive growth in Icelandic municipalities. This research posits that understanding these demographic shifts is imperative for crafting sustainable development strategies that align with the realities of tourism-centric communities. The outcomes of this research are anticipated to furnish insights into the demographic effects of tourism growth, facilitating better-informed decision-making for municipalities and offering a comparative lens through which similar global phenomena can be examined.

SIGNIFICANCE AND CONTRIBUTIONS

The significance of this research lies in its potential to provide empirical support to theoretical frameworks and offering insights for policy formulation. By dissecting the demographic characteristics influenced by tourism, this dissertation aspires to add a valuable perspective to the literature, advocating for informed and balanced development strategies. As the research is based on geographical boundaries of municipalities, the information provided by the research is informative for each municipality. Municipal policies can therefore consider the information and the results Ideally. The information can also be used as general information and indications about the relationship between tourism and the characteristic population composition. With this information, municipalities can better compare themselves with comparable municipalities, in terms of population characteristics and the proportion of jobs in tourism. This research endeavors to provide a holistic view of tourism's demographic impact in Iceland, offering valuable insights for policymakers, local communities, and stakeholders, as demographic data has significant practical uses (2019). The results could also provide findings for developing forecast models on population development and community development planning, and for further analysis on the subject. This dissertation delves into the nuanced impacts of tourism on Iceland's demographic dynamics, particularly in its rural municipalities. It explores how different levels of tourism employment across these municipalities are associated with demographic characteristics such as population turnover, age distribution, and migration patterns, potentially suggesting interpretations of how tourism may influence these factors. This inquiry is critical, as it addresses the gap

in understanding the broader societal implications of tourism's growth, beyond its economic benefits.

DISSERTATION STRUCTURE

This dissertation unfolds through a systematic structure, beginning with the introduction of the study's backdrop, followed by a literature review that contextualizes the research within existing academic discussions. The methodology chapter outlines the research design and approach, leading to the presentation and analysis of findings. A discussion section interprets these findings, culminating in a conclusion that synthesizes the research insights, with a reflective overview of tourism's impact on demographic dynamics in Iceland and recommendations for future research and policymaking. This introduction sets a comprehensive stage for exploring the intricate relationship between tourism growth and demographic changes in Iceland, aiming to foster a deeper understanding and informed policy decisions for sustainable development.

2. LITERATURE REVIEW

INTRODUCTION TO THE LITERATURE REVIEW

This literature review critically examines the intricate relationship between tourism, migration, and demographic development, with a particular focus on how these elements interact to shape the social and economic landscapes of communities, especially those in sparsely populated areas. The primary objective is to unpack the multifaceted dynamics at play, exploring how tourism-driven migration influences demographic trends and, in turn, the sustainability of local populations.

Central to our inquiry are key themes including the demographic implications of tourism development, the pivotal role of migration in the tourism sector, the challenges and opportunities presented by high population turnover, and the pursuit of sustainable tourism to foster community development. We aim to dissect the nuanced interplay between the influx of foreign labor essential to the tourism industry and the resultant demographic shifts, emphasizing both the positive contributions and the potential strains on local communities.

The review delves into the employment dimension within tourism, highlighted as the main catalyst for migration and a significant driver of population development. Studies by renowned scholars such as Baum (2006), Choi, Woods, and Murrmann (2000), and Williams and Hall (2000) provide a foundation for understanding the employment-migration nexus. Furthermore, we examine policy implications and strategies aimed at managing the socio-economic impacts of tourism and migration, drawing upon insights from Getz (1986), Möller and Amcoff (2018), McCollum, Nicholson, and Duffy (2021), Hara (2022) others who have contributed to the discourse on sustainable demographic development.

By navigating through these complex themes, this literature review aspires to contribute to a deeper understanding of how tourism and migration are interconnected with demographic sustainability. It seeks to identify effective

strategies for integrating migrant workers into local communities, ensuring the economic viability of the tourism sector while preserving the cultural integrity and social cohesion of host communities. Ultimately, the review aims to highlight practical implications for policymakers, stakeholders, and scholars, encouraging a holistic approach to managing the demographic challenges and opportunities presented by tourism and migration.

THEORETICAL FRAMEWORKS

Research concerning the interaction between tourism and demographic development is pivotal in understanding the complex dynamics at play. This chapter aims to dissect the intricate relationship between tourism activities and their impact on population patterns, focusing particularly on sparsely populated areas. We scrutinize a range of studies to shed light on factors that draw individuals closer to or further from sustainable social and demographic community development, considered the equilibrium of this discourse.

Demographic Development and the Tourism Sector

Several studies highlight the association between tourism expansion and shifts in demographic structures, marking significant influences on population composition and age demographics. Notably, Getz (1986) provides an in-depth analysis of tourism's effect on the Scottish Highlands, revealing how tourism acts as both a magnet for in-migration and a catalyst for increased population turnover or more transient population. Getz study covered Badenoch and Strathspey District of the Scottish Highlands, over the period from 1961 through 1981, at the time when tourism became the primary economic force in the area.

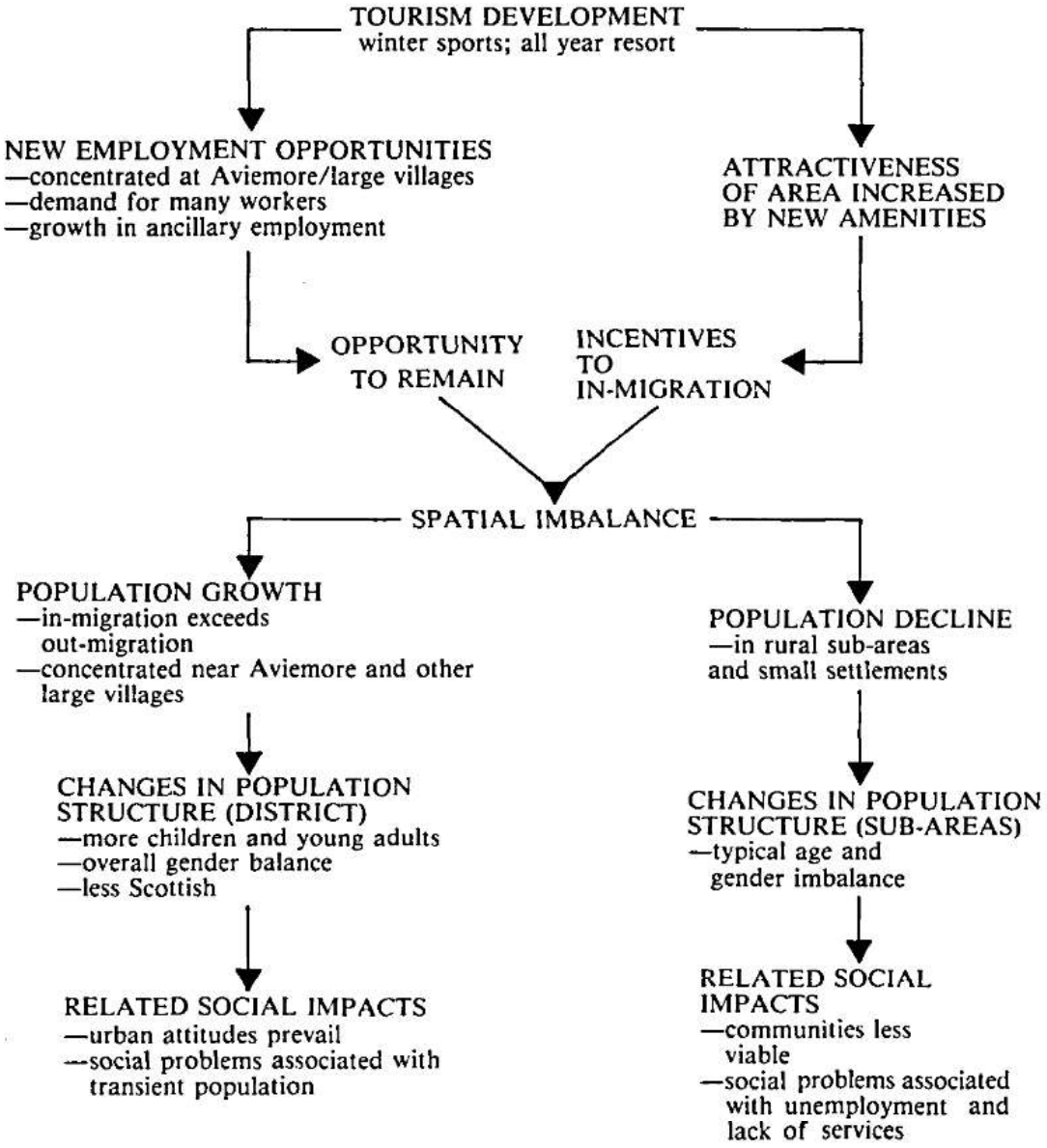


Figure 1 presents an illustration by Getz on "Tourism-Related Population Changes and their Impacts in Badenoch-Strathspey" (Getz, 1986 p. 122).

Emphasis had been placed on winter tourism in the area, which further levelled off the seasonal fluctuations in tourism and particularly supported the increase in year-round employment. According to Getz, positive population development would not have occurred without these year-round jobs.

Similarly, Möller and Amcoff (Möller and Amcoff, 2018) examine how tourism shapes the demographic landscape of rural Sweden, spotlighting the youth demographic. Despite tourism's role in attracting new residents, its contribution to sustained population stability remains debatable, with evidence pointing towards a higher propensity for population turnover within tourist-centric areas. Möller and Amcoff's research methods employ a geographical approach, based on the spatial positioning of residents' settlements and the proportion of tourism-related jobs as the primary occupation. Spatial coordinates are used to analyze the effects based on settlement density and to distinguish these developments from typical urban growth and the impacts of urban development on peripheral areas.

Migration and the Tourism Sector

The nexus between migration and employment in tourism is undeniably strong, with foreign labor playing a crucial role in sustaining the industry. This segment of the workforce often navigates through the labor market with tourism employment as their entry point. The strategic shift towards tapping into global labor markets to address labor shortages, as suggested by Choi, Woods, and Murrmann (2000), underscores the globalization of the economy and its effect on local demographic patterns. Furthermore, the phenomenon of high employee turnover within the tourism sector—accentuated by cultural diversity and transitory employment intentions—underscores the need for more nuanced policies to manage this transient workforce effectively (Möller and Amcoff, 2018) (Billari, 2022) (Getz, 1986) (Niedomysl, 2005).

Sustainable Tourism and Community Development

Tourism is often viewed as a strategy to reverse negative population trends or to support sustainable development in rural areas (Sharpley, 2002) (Choe and Lugosi, 2022)(Scheyvens, 2011). Sustainable tourism emerges as a significant theme, intertwining economic growth with the imperative for social and ecological responsibility. The challenge lies in balancing tourism development with the preservation of community values and identities, especially in regions where tourism is a primary economic driver. The literature calls for a strategic approach to tourism

planning that accommodates the needs of both the industry and local communities, advocating for policies that foster sociocultural sustainability alongside economic advancement (Timothy, 2006) (Choe and Lugosi, 2022) (Scheyvens, 2011).

Emerging Trends and Future Directions

This discourse reveals a critical need for strategies that enable long-term settlement and integration of the tourism workforce into local communities and the importance for societies to be capable of embracing both permanent and transient populations (Choe and Lugosi, 2022). Furthermore, addressing the rapid demographic shifts caused by migration necessitates a comprehensive understanding of population dynamics, urging a departure from "slow demography" to more agile and responsive demographic analysis (Billari, 2022).

In conclusion, the interplay between tourism, migration, and demographic sustainability calls for a multifaceted approach (Scheyvens, 2011). Policies need to account for the transient nature of the tourism workforce, the social implications of high population turnover, and the economic reliance on tourism as a key sector. As we navigate these challenges, the goal remains to achieve a harmonious balance between economic development, social integration, and demographic stability, ensuring the long-term sustainability of communities impacted by tourism and migration.

REVIEW OF KEY STUDIES

Key issues henceforth related to the topic are research studies addressing the interaction between tourism and population development. To comprehensively cover the subject matter and understand the influencing factors and various theories, we delve into related aspects, as necessary. The starting point and foundation are the sustainable social and demographic development of communities, which is considered the balance axis. We aim to explore studies on things that can either bring us closer to or further from that balance. Interlinked with the employment dimension in tourism, which is the main reason for migration (Möller and Amcoff, 2018) (Getz, 1986) and migration as the single most influential factor of population development in rural areas (Baum, 2006) (Choi, Jeong-gil, Woods and Murrmann, 2000) (Williams and Hall, 2000).

Demographic development in Iceland

Iceland has witnessed significant population growth over the past century, especially in and around Reykjavík capital area (Garðarsdóttir, 2022).

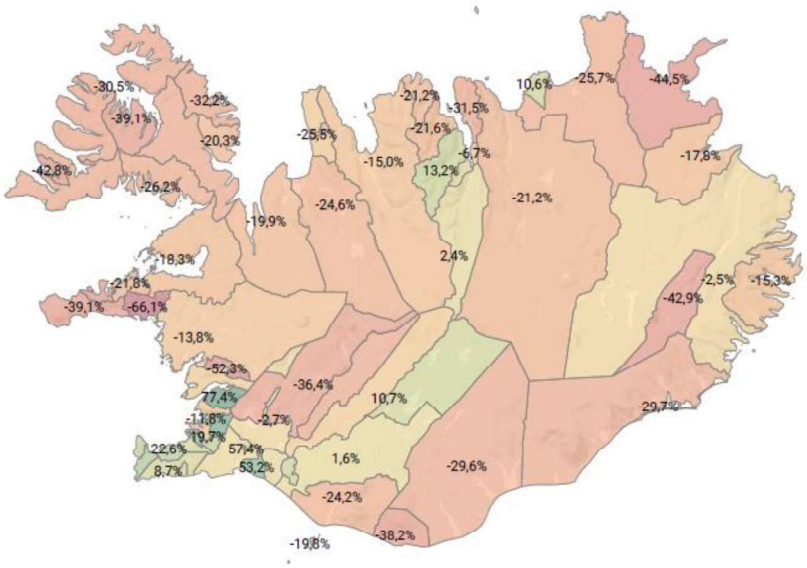


Figure 2 presents domestic migration in Iceland by municipalities, 2003-2023 (Icelandic Regional Development Institute, 2024).

The 1980s marked a decline in migration to coastal villages, leading to population drops and significant out-migration. These changes were largely due to transformations within the fishing industry, such as technological advancements and quota systems, which reduced labor demands and concentrated the industry geographically (Jóhannsdóttir and Garðarsdóttir,2022). While urbanization has occurred, rural areas have remained comparatively smaller. Settlement patterns have varied across the countryside, with notable urban expansion and decline in farming communities. Throughout the 20th century, Iceland transitioned from a rural to an urban society, with growth in the capital driven by high fertility rates and migration patterns. Iceland's societal structure, historically noted for significant domestic migration and limited international movement, started to change in the 20th century. In the 21st century, a decline in fertility rates and an increase in international immigration have helped stabilize or grow populations in communities that previously faced demographic losses (Garðarsdóttir, 2022). Reykjavík has balanced domestic migration, with outflows to its exurban regions offsetting inflows. Conversely, most other Icelandic regions have experienced negative domestic net migration, offset by international immigration and natural population growth (Jóhannsdóttir and Garðarsdóttir,2022).

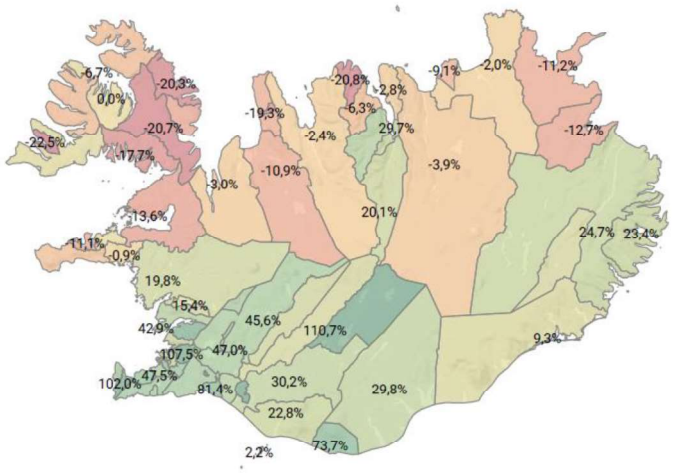


Figure 3 presents Population development by municipalities 2003-2023 (Icelandic Regional Development Institute, 2024).

From a low immigration rate until the 1990s, Iceland has seen a surge in immigration due to economic growth and labor demands, becoming one of the highest immigrant-receiving countries in Europe (Skaftadóttir and Garðarsdóttir,2020 p. 23). The immigrant demographic has shifted from primarily Nordic and Western origins to predominantly Eastern and Central European. Polish immigration, especially, spiked after gaining EU labor market access in 2004, making them the largest immigrant group in Iceland. The economic boom in the mid-2000s sparked a significant increase in job-related migration to Iceland, particularly from new EU member states. Despite the 2008 recession and subsequent emigration of Icelandic and foreign citizens, immigration rates remained higher than in the early 2000s. Tourism's growth later played a key role in Iceland's economic recovery, generating jobs and boosting immigration again (Skaftadóttir and Garðarsdóttir,2020).

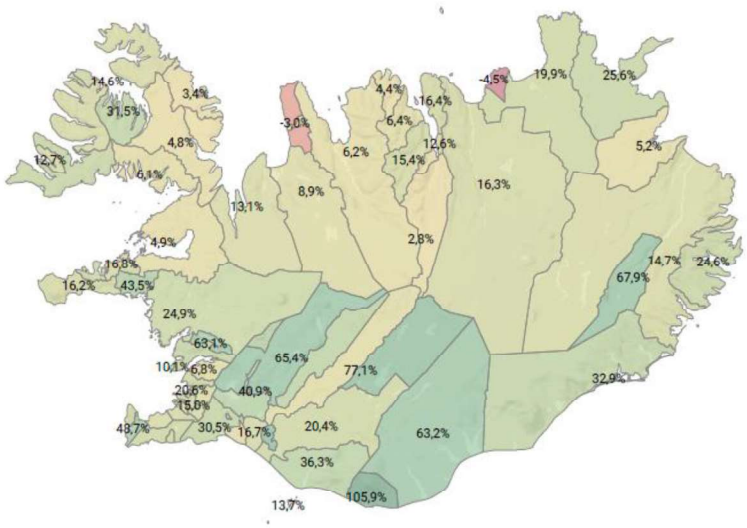


Figure 4 presents international migration by municipalities 2003-2023 (Icelandic Regional Development Institute, 2024).

For migration intentions, rural adolescents historically showed a strong desire to migrate to the Reykjavík capital area. Over time, the inclination of adolescents in the capital to move to other countries increased, while the general interest in moving to

Reykjavík waned. Adults in smaller towns and villages have exhibited a higher propensity for leaving their current residences than those in the capital. Migration intentions are notably higher among the youth and in smaller communities. While living abroad seems more appealing in general except for those planning to move within the next few years, that show a preference for domestic relocation. However, there's little gender disparity in these intentions (Garðarsdóttir and Karlsson,2022). While work opportunities remain the primary draw for immigrants, factors such as family proximity, safety, and nature also matter. Younger immigrants and those with limited Icelandic language skills are more inclined to leave the country. Singles without children show a higher propensity for leaving, in compared to those with families, who express lower intentions of emigration. University-educated immigrants who find their degrees underutilized are significantly more likely to consider leaving within two to three years (Bjarnason, Jóhannesdóttir and Skaptadóttir,2022). In their (2022) study, Bjarnason and Karlsson found that individuals working solely in tourism are more inclined to consider relocating, with 22% contemplating a move, compared to just 4-5% of farmers who expressed similar intentions.

Demographic development in Rural areas

Berry (2012) states that the dramatic demographic shift marked by the rapid growth of the older population, alongside declining fertility rates, is reshaping family dynamics and labor markets globally. Developed countries, experiencing earlier fertility declines, now face labor shortages filled by workers from countries with younger populations. This has led to increased immigration, guest worker programs, and political tensions, especially notable in rural areas where the demographic changes are felt more acutely. Rural aging also changes household structures, with young adults moving to cities and leaving elders behind, affecting labor force availability and family compositions. Future demographic shifts will challenge the youngest and oldest countries differently, as the former may face elder population booms while the latter adapt to labor market changes through immigration or coping strategies for labor shortages.

Green (2012) states that rural areas encounter significant challenges in advancing economic and workforce development. The aging population and the migration of young, educated workers to urban areas exacerbate these difficulties, making rural areas less appealing to employers needing skilled labor. Most policy recommendations center on leveraging the demographic dividend to optimize economic and societal benefits during periods when the workforce constitutes a larger proportion of the population. This window of opportunity, however, is not permanent. Key priorities include enhancing the welfare of the population, alleviating poverty, generating employment opportunities, promoting savings, and shifting towards a model of lifelong education (Bloom, Canning and Sevilla, 2003) (Ross, 2004). Addressing the age structure of populations offers a crucial tool for policymakers to navigate and manage national changes effectively. For developing countries, the demographic transition presents a unique opportunity to hasten economic and social development through policies that promote family planning, reduce fertility rates, and enhance education. However, failing to leverage these demographic changes risks increased unemployment, social instability, and pressure on resources as the population ages. Consequently, understanding and integrating demographic insights into policy formulation is essential for harnessing the positive effects of demographic shifts on economic growth (Bloom, Canning and Sevilla, 2003). Champion (2012) states that the complexity of rural demographic changes in Europe is driven by migration, societal transformations, and policy interventions. Theories on migration offer different views to understand migration, from individual decision-making processes influenced by economic incentives to broader structural factors shaped by global economic dynamics and social networks. Migration is identified as a key factor affecting populations changes, with family size and life expectancy variations diminishing (Billari, 2022) (Champion, 2012).

Demographic development and the Tourism sector

Research exploring the association between population development and tourism has uncovered specific demographic trends (Möller and Amcoff, 2018) (Getz, 1986) (Stojanovic, Kokotovic-Kanazir and Stojanovic, 2017). The literature suggests a link between growth in tourism and population development, in the characteristic features of population composition and development. Getz (1986) analyzes the impact of tourism in the Scottish Highlands, in Badenoch-Strathspey from 1961 to 1981, on population development. Möller and Amcoff (2018) on population development in tourism areas in rural Sweden with an emphasis on young people. In both Getz and, Möller and Amcoff analyzes, tourism has an impact on population development, especially the average age of the population, as the net population increase is higher among young people, but the negative effect is increased population turnover. Getz (1986) argues that tourism has served as an effective instrument for reaching population-related objectives of regional development in the Highlands, yet it has fallen short of being a perfect solution for ensuring population stability. In Stojanovic, Kokotovic-Kanazir and Stojanovic analysis, (Stojanovic, Kokotovic-Kanazir and Stojanovic, 2017) observes the significant role that tourism plays in demographic development across various small towns in Serbia and highlight that while tourism has notably influenced demographic growth in some towns, its impact on population increases or migration appears to be stagnating in others. Studies argue that tourism may attract in-migrants but that it varies among different age groups (Niedomysl, 2005) (Getz, 1986) (Möller and Amcoff, 2018). Möller (2018) states that jobs in tourism do not attract all inhabitants, so a proportion of them choose to move away though jobs in tourism are available.

Studies have highlighted the intertwined nature of migration and employment in the hospitality sector, noting that foreign workers constitute a sizable portion of the workforce, with employment frequently playing a vital role in facilitating migrants' entry into the labor market (Baum, 2006) (Choi, Jeong-gil, Woods and Murrmann, 2000) (Williams and Hall, 2000). Jeong-gil Choi, R. Woods, and S. Murrmann (2000) suggest that the hospitality industry's reliance on global labor markets to address

labor shortages reflects a strategic shift from local recruitment, underscoring the role of international labor migration in the context of a globalizing economy. Park and Min´s (2020) meta-analysis of 144 independent studies involving 391 correlations highlighted that work attitudes, job strains, and role stressors significantly influence turnover intention in the hospitality industry, having a stronger impact compared to other industries. Other studies suggest that the most influential factor, is the turnover culture itself (Iverson and Deery, 1997), as for Park and Min´s (2020) study, that suggest that national culture is one of the factors. Lundmark (2006) contends that individuals in seasonal jobs in tourism rarely migrate permanently, suggesting that their employment motivation is more lifestyle related.

Migration and the Tourism sector

Choe and Lugosi (2022) state that the blurred lines between tourism and migration, emphasizing how tourism-driven mobility and an international workforce are crucial for tourism economies. The literature explores the complex, often contradictory perceptions of tourism and migration in terms of political, social, and economic impacts on social sustainability. While tourism is seen in a positive light, migration faces politicization and is viewed as a challenge to social systems, despite its essential role in the tourism sector. Cheng and Winkler´s (2012) analysis highlights that migration can both contribute to and deplete community capital. As destination countries may benefit from the influx of educated and affluent individuals, potentially enriching the community if these newcomers integrate well. As well as being socially important for other young adults in the communities (Möller, 2012). However, high turnover may undermine these social benefits (Cheng and Winkler,2012) and works against stability in population development (Getz, 1986). Regarding the issues of migration and the hospitality sector, employee turnover is considered high in general (Park and Min, 2020), and characteristics of communities experiencing growth in tourism have shown high population turnover (Möller and Amcoff, 2018) (Getz, 1986).

Cheng and Winkler (2012) state that the impact of migration on community assets depends on integration and retaining young adults. Study by Janta *et. al.*, (2011) on relationships by migrant workers in the tourism sector in the UK, identified three types of relationships: international, conational, and relationships with members of the host community. Where cultural diversity was seen as a positive factor and a source of social support, as for the importance of conational ties. Relationships with conational were important in many ways, such as for social support in the beginning, in adapting to society and settling in. The negative aspect of maintaining conational ties was reduced efforts to integrate or adapt. Relationships with the host community were through interactions with colleagues and customers. A significant discovery of the study is that jobs involving extensive customer contact are crucial for fostering contact with locals, which enhances language skills and cultural understanding, thereby facilitating adjustment. The social, multicultural nature of tourism work and the chance to utilize the host language and interaction skills significantly impact migrants' integration into society. Despite the turnover, studies by Spencer *et. Al.*, (2007) states that migrants in the hospitality sector tended to have more interactions with natives, compared to those working in other sectors, such as studies of Wilczek et al. (2009) on factory workers. The studies of Janta *et. al.,* (2011) might suggest that likelihood of integration lies in the positions in the workplace, or the industry, rather than the tourism industry itself.

Population turnover

Thurmer *et. al.* (2019) highlights the challenge of sustaining population growth in Australia's Northern Territory due to low or negative growth rates since 2010, primarily due to characteristics of migration patterns. It emphasizes the importance of distinguishing between new in-migrants and longer-term residents to understand migration impacts better. The study identifies key factors influencing population turnover, including age, gender, Indigenous status, international origin, wages, and employment sectors. It suggests that current migration trends, attracting short-term residents with high wage demands, are insufficient for long-term growth, indicating a need for policy shifts to encourage more sustainable forms of migration. As for the

study by Möller and Amcoff (2018), that indicates the need for examining more closely the opportunities of further analyzes of adaptation of new inhabitants to settle in for the long run. Billiari (2022) argues that demographic changes can occur rapidly, especially due to migration. That "slow demography" perspective is inadequate for analyzing quick demographic shifts. In his paper he presents new estimates for country-level population turnover rates, revealing a correlation between turnover, population size, and development level. The study uses *population turnover rates* (PTR) and *migration share of turnover* (MST) to analyze these dynamics, showing significant variations. The study documents variations in population change speed and its causes, advocating for a nuanced understanding of demography. Research by Getz (1986), Möller and Amcoff (2018), McCollum, Nicholson and Duffy (2021) and Hara (2022) has enriched the literature by highlighting that high population turnover is indicative of unstable development, contrasting sharply with the principles of sustainable development.

Sustainability and tourism

The World Tourism Organization (2024) describes sustainable tourism as a strategy that accounts for both its current and future effects on economic, social, and environmental dimensions, while meeting the requirements of visitors, the industry, and host communities. The United Nations (2022) emphasizes the importance of sustainable tourism, as tourism is rapidly expanding global industry, generating foreign exchange, creating jobs, and enhancing the socio-economic and environmental health of numerous nations, particularly in developing regions. There has been an increased demand for sustainable tourism, with destinations that can be considered sustainable generating more interest than others. However, the public is not yet willing to pay significantly higher prices, although indications suggest that this trend may be shifting towards greater willingness (Weber, 2019). Scheyvens (2011) critically examines the social and political dimensions of sustainable tourism development in the case of the Maldives. While the Maldives has been internationally recognized for its sustainable tourism model the social realities tell a different story. The model has indeed spurred economic growth; however, political unrest and social

issues, as the challenges demonstrate the stark contrast between the rhetoric of sustainable tourism and the on-the-ground reality. Buckley (2012) highlights that the global tourism sector has not yet achieved sustainability, primarily driven by regulatory rather than market measures. Despite thousands of publications, few comprehensively assess the sector's alignment with global sustainable development standards.

Choe and Lugosi (2022) examine the intertwined dynamics of tourism and migration, particularly their impact on social sustainability. They point out the contrasting perceptions—tourism as beneficial and migration as challenging to social and cultural norms—despite tourism's reliance on migrant labor. They emphasize the necessity of integrating sustainable practices into tourism planning to improve relations between locals and migrants, fostering beneficial coexistence. Haini and Wei Loon (2023) add to the literature how tourism influences population happiness. Their empirical findings indicate that while increased tourist arrivals generally correlate with higher subjective well-being, this relationship becomes negative in economies heavily dependent on tourism. Specifically, they note that in less tourism-dependent economies, increases in tourist arrivals positively impact happiness. However, as an economy's reliance on tourism intensifies, particularly when tourism becomes a major export, this positive association reverses.

Yusoh *et al.* (2021) highlight the critical role of social carrying capacity in sustainable tourism development. They emphasize that managing social carrying capacity involves complex interactions among tourists, locals, and tour operators, and is pivotal in assessing whether a tourist destination remains acceptable to all stakeholders. The challenges stem from diverse perceptions and the difficulties in balancing tourist density with the quality of life for local communities, making it a challenging aspect to implement effectively in some areas.

Helgadóttir *et al.* (2019) examines the social sustainability of tourism in Iceland, focusing on its effects on residents' quality of life and community resilience. The research, supported by the Icelandic Tourist Board, involves observations and in-

depth interviews that reveal disruptions to daily life due to tourism. While residents recognize tourism's benefits, they express concerns about the industry's management and the sustainability of its growth. The findings suggest the need to integrate considerations of quality of life, resilience, and responsible tourism into community strategies. Helgadóttir *et al.* conclude that a comprehensive view of social sustainability, encompassing both procedural and substantive aspects, is crucial for addressing the challenges in tourism development. In a study by Sharma and Gursoy (2015), the authors provide compelling evidence that perceptions among Sunshine Coast residents have evolved favorably regarding the benefits of tourism, such as enhanced job opportunities and cultural exchanges. Simultaneously, there has been a significant reduction in concerns about the negative impacts of tourism on local living conditions and the availability of recreational areas. This nuanced shift underscores the potential for sustainable tourism development that aligns with community values and needs.

Policy recommendations and further analysis

Champion (2012) highlights the importance of considering rural demographics' fast-changing nature for effective policy planning. He stresses the need for diverse policy approaches tailored to the unique demographic dynamics across Europe's rural areas, emphasizing the integration of rural and urban development strategies. Choe and Lugosi (2022) highlights the importance of examining tourism planning and its effects on community sustainability, the potential for positive or exploitative migrant-local relationships and calls for further research to enhance social sustainability through understanding the interplay between migration and tourism. Scheyvens (2011) argues that sustainable tourism research must acknowledge the crucial role of the state in guiding tourism development and examine how governments navigate the competing interests of various tourism stakeholders.

Timothy (2006) in his book; *Tourism, power and space*, states that since the 1970s, there has been a growing debate about stakeholder participation in development

initiatives, including who should be involved, how they should engage, and the extent of community involvement. As it has led to global calls for decentralizing decision-making power across all development sectors. Scheyvens (2011) asks in his conclusions, what other islands can learn from his study on sustainable tourism development in the Maldives. The Maldives is an archipelago in the Indian Ocean, which might seem to have little similarities with Iceland. However, the population sizes are not so different, and tourism is now the main industry in the Maldives like in Iceland, whereas it used to be fishing as in Iceland. Scheyvens states that governments must lead the sustainable development of the tourism sector, as voluntary industry alone is insufficient for widespread change. Although collaboration between the tourism industry and government is essential for sector growth, it should not prioritize the interests of a few over the broader population's potential benefits from tourism. Getz (1986) proposes strategic planning and further analysis, emphasizing support to family members in the industry. The support, which can aid in population turnover reduction concerning families are e.g., housing, and other aspects, while J. Mattingly and Smith (2012) suggests that future research should explore intra-rural differences and develop tailored policy solutions.

Mcall and Ganning (2012) advocates for flexible, strategic planning and policy development tailored to the unique goals and assets of each county, moving beyond one-size-fits-all approaches to accommodate the diverse needs and opportunities of rural areas. Where needs may differ depending on the priorities and needs of each community. Based on OECD recommendations (2023), Iceland should be addressing the obstacles that stem from language proficiency and the recognition of foreign qualifications for those who intend to stay.

CURRENT DEBATES AND EMERGING TRENDS

As Mason (2019) puts it, future research will delve into challenges such as population aging, low fertility, and the implications of demographic shifts on global economic structures. Addressing these challenges and questions will be crucial for

understanding the complex interplay between demographic changes and economic outcomes. Population turnover tends to be inversely proportional to population size and development level, with migratory movements playing a significant role in determining demographic trends in both small and highly developed countries (Billari, 2022). Morrison et al. (2019) highlight the advancements in small-area demographic data sources and statistical techniques, for research and practical analysis for smaller regions. This information proves invaluable for service management and decision-making by local governments, leveraging innovative technologies like mobile cellular signals, GIS, satellite imagery, and integration with surveys or demographic data. As a growing trend in targeted research for smaller areas, surpassing previous levels. Brown (2019) argues that the concept of social boundaries is evolving, highlighting the need for future research to focus on spatial relationships and interdependencies that define contemporary society's real geographies. However, Morrison et al. (2019), noting that as analysis narrows down to smaller areas and integrates diverse data sets, it inches closer to individual identities, sparking concerns over privacy and confidentiality. Brown (2019) that these issues will become central topics of discussion and debate in the years ahead. As these predictions resonate with the situation in Iceland, particularly considering the dispersed nature of settlements and the trend towards greater administrative consolidation through the merging of municipalities. If continued to be based on administrative boundaries of municipalities, the accuracy for individual areas that now or later will belong to a larger area will decrease, thereby possibly evening out the distinctive characteristics of those communities.

In addressing aging populations and declining birth rates, the concept of "replacement migration" has emerged as a contentious solution. Stimulated by a United Nations Population Division report (2000), this strategy proposes increased immigration to sustain population sizes and adjust age distributions in developed countries. Meyerson (2001) critiques this approach, emphasizing that immigration serves only as a temporary fix and advocates for policy shifts in retirement rather than relying on migration. Bijak, Kupiszewska, and Kupiszewski (2008) extend the

analysis to Europe, indicating that a blend of policies to boost fertility, labor force participation, and moderated immigration levels is essential to meet the socioeconomic challenges of population aging. Hara (2022) suggests that addressing demographic sustainability requires a multifaceted approach, including policies that support reproductive health, manage migration effectively, and adapt to changing population dynamics to ensure economic and social stability. The debate underscores the complexity of relying on immigration to address demographic shifts, pointing to the necessity of comprehensive social and economic reforms alongside ethical and sustainability considerations.

Bongaarts and O´Neill argues that population growth has been excluded from discussions on climate issues (2018). Sullivan (2020) argues that the scarcity of discourse in ecological economics on the impact of population growth, by addressing population dynamics is crucial for advancing ecological economics. Stabilizing population growth is essential for achieving a steady state economy, facilitating reduced resource consumption, and mitigating environmental degradation. The argument posits that a comprehensive examination of population trends could significantly enrich ecological economics research and policy formulation. Two years later, the United Nations report (2022) addressed the relationship between population growth and sustainable development, suggesting that promoting gender equality and increased education in less developed countries could reduce population growth (2022).

Central to this review are key concepts such as "population sustainability" (McCollum, Nicholson and Duffy, 2021) and ”demographic sustainability” (Hara, 2022), which refer to a demographic development that maintains stability over time, achieves a balance between fertility and migration, and ensures that changes are manageable for communities and have positive or at least neutral societal impacts. Like Bergaglio's (2017) perspective on population sustainability, addressing the complex interplay between demographic trends and sustainable development is important to ensure long-term stability and well-being across societies. Although

definitions like these can be read from recent literature, and only recent literature, these definitions will likely develop further.

SYNTHESIS AND RESEARCH GAPS

In synthesizing the existing literature on the interaction between tourism, migration, and demographic development, it becomes evident that while substantial research has addressed various facets of these themes, significant gaps remain. This review has highlighted the critical role of tourism-driven migration in shaping demographic patterns, yet nuanced studies focusing on the long-term sustainability of these impacts are sparse.

Furthermore, while the existing literature robustly discusses the economic drivers and immediate benefits of tourism-related migration, there is a paucity of research on the integration processes for migrants within local communities and the subsequent social sustainability. Studies tend to focus on the economic aspects of migration without sufficiently addressing how these populations are socially and culturally assimilated into their new environments. This oversight suggests a critical research gap in understanding how tourism impacts not only demographic shifts but also the fabric of community life and social sustainability.

Therefore, the research gap identified through this literature review points to the need for comprehensive studies that consider both the economic and social dimensions of tourism-driven demographic changes. Future research should aim to provide a holistic view of how tourism influences community dynamics, focusing on sustainable integration practices and the long-term viability of these demographic shifts. This will involve examining the broader societal impacts, such as changes in social cohesion, cultural identity, and the potential for social stratification or conflict, which have been underexplored in current literature.

CONCLUSION OF THE LITERATURE REVIEW

This literature review has effectively mapped the interplay between tourism, migration, and demographic development, uncovering substantial insights while also highlighting significant gaps, particularly in social integration and sustainability. The economic benefits of tourism-driven migration are well-documented; however, there is a noticeable lack of comprehensive research on the social impacts, such as community integration and cohesion, over the long term.

The review emphasizes the need for more nuanced policy considerations that balance economic incentives with social imperatives, promoting not just economic growth but also social harmony and inclusiveness. It points to the necessity for future research to delve deeper into the sustainable integration of migrants within tourism-driven economies and to explore the longitudinal social effects of these demographic shifts.

Conclusively, this analysis sets a foundational understanding for further investigation, suggesting that future work should focus on creating integrated strategies that ensure both economic and social sustainability in tourism and migration policies. This direction is crucial for crafting policies that not only enhance economic outcomes but also strengthen the social fabric of communities affected by tourism and migration.

3. METHODOLOGY

INTRODUCTION TO THE METHODOLOGY

This dissertation delves into the demographic shifts within Icelandic tourism regions, aiming to unearth patterns and causal influences that parallel those observed in other comparative studies. Drawing on seminal works by Getz (1986), and Möller and Amcoff (2018), this research critically examines whether trends such as changes in average age, population turnover, and immigration, commonly associated with tourism growth, manifest similarly in Iceland.

Research Question

Central to this study is the inquiry into how tourism expansion influences demographic compositions and population dynamics across municipalities centered on tourism. This is encapsulated in the research question:

"Does growth in tourism affect population development and the demographic composition of tourism-centric municipalities in Iceland?"

This question directs the investigation towards understanding the multi-dimensional impact of tourism on local communities, ranging from economic to social transformations.

Hypotheses and Thematic Focus

To provide a structured approach to addressing the research question, several hypotheses are posited, each aiming to explore different facets of demographic changes attributed to tourism:

General Population Growth: There is an observed alignment between tourism growth and an overall increase in municipal populations.

Native Icelandic Population: Contrary to general population trends, there is minimal association between tourism growth and an increase by native residents.

Foreign Nationals and Immigration: A significant relationship is between the burgeoning tourism sector and the rising number of foreign nationals, suggesting tourism as a key driver of immigration.

Demographic Composition Changes: Tourism is hypothesized to influence a younger demographic profile and higher turnover in the population, reflecting changing employment and social conditions.

Age and Population Structure: The growth in tourism is associated with a demographic shift towards a younger population and a reduced proportion of children, indicating potential shifts in family structures and community needs.

Through these hypotheses, the dissertation aim is to comprehensively understand the impact of tourism on local demographic structures and develop strategies to enhance local development.

RESEARCH DESIGN AND APPROACH

The study adopts a mixed-methods approach, combining quantitative data analysis with qualitative insights to provide a comprehensive understanding of the impacts of tourism. This methodology allows for a robust analysis of trends over time and a comparative assessment of demographic changes across different municipalities.

Trend Analysis: By examining longitudinal data, this study aims to identify persistent trends and temporary anomalies in demographic patterns.

Comparative Analysis: Comparing demographic developments across municipalities with varying levels of tourism activity will highlight how tourism intensity correlates with local demographic changes.

SAMPLING METHOD

The research areas are municipalities in Iceland, strategically selected to highlight contrasts in tourism's impact. This selection is based on the proportion of tourism-related employment, ranging from the highest to the lowest within the dataset to

ensure a representative analysis of varied tourism intensity. There are 64 municipalities in Iceland (Samband íslenskra sveitarfélaga, 2024). The base year for this study was 2023, using the average number of jobs throughout the year. The total number of jobs for the year was 216,651, of which 28,506 were in the tourism sector, making the average proportion of tourism jobs 13.2% (Eggertsson, 2024). The study explicitly excludes the capital area, Akureyri and municipalities in the influence zones to prevent urban development factors from skewing the data, thereby focusing on rural areas where tourism's effects might be more pronounced.

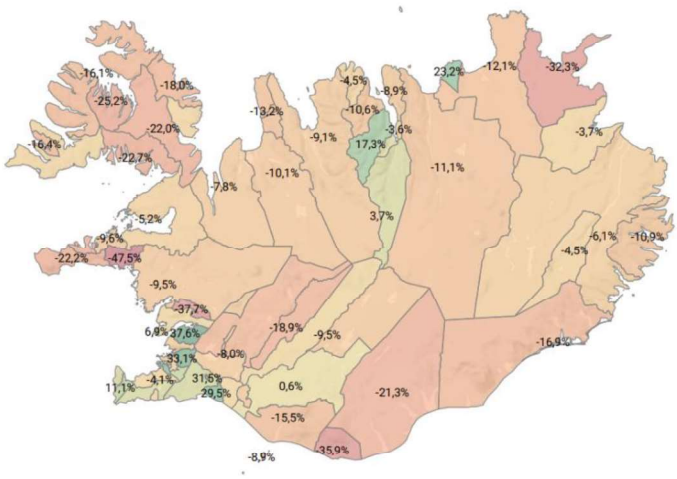


Figure 5 presents Domestic migration by municipalities 2010-2023 (Icelandic Regional Development Institute, 2024).

Municipalities in and around the capital area are excluded from the comparison as for the influence area in 70 km (about 43.5 mi) distance from the capital city Reykjavík, as for the city Akureyri and the surrounding municipalities. From 64 municipalities in Iceland there were 39 municipalities in rural areas included in the research samples.

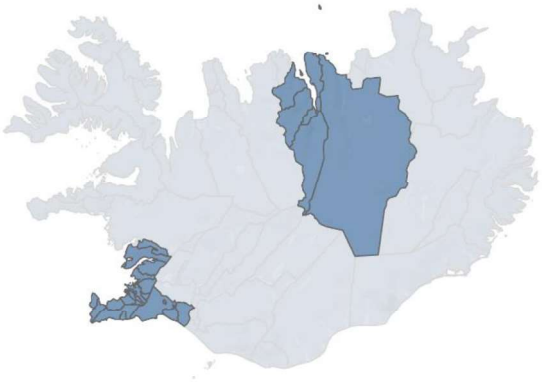


Figure 6 presents Reykjavík and the capital area, Akureyri and influence zone of, and around, both the capital and Akureyri area (Icelandic Regional Development Institute, 2024).

Category A

The first category, that is described as tourism-centric municipalities, are 14 municipalities with a total number of 20,830 residents at the beginning of the year 2024.

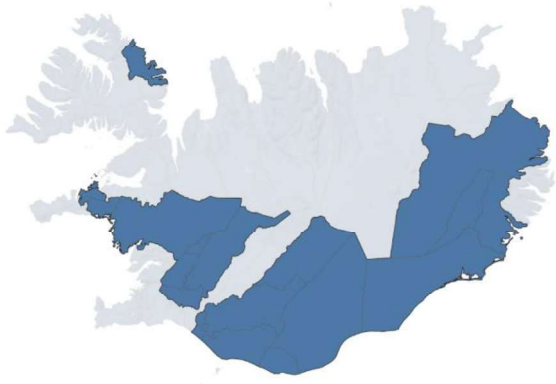


Figure 7 presents the described tourism-centric municipalities, the 14 municipalities of category A (Icelandic Regional Development Institute, 2024).

Category B

The comparison category consists of municipalities, each with a proportion of tourism-related jobs below the national average. This group includes 25 municipalities with a total population of 34,848 at the start of 2024.

Figure 8 presents the category B of the group of 25 municipalities with a proportion of tourism-related jobs below the national average (Icelandic Regional Development Institute, 2024).

Data collection and timeframe

Emphasis is placed on information on the average age, population turnover, and immigration, and the development of these variables, because there is linkage of specific developments in those factors and for comparison with other studies. As stated before, municipalities are selected based on the lowest and highest proportion of jobs in tourism. However, the emphasis is on rural areas and therefore the capital area and surrounding municipalities are separated. This is done to increase the comparability of the sample, both to exclude the effects of urban development and how large those municipalities are in comparison with municipalities in more rural areas in Iceland.

The data was run together, based on the current situation and a comparison of development over time. The dataset starts before the tourism industry began to grow strongly, to compare the development from the time when conditions were as comparable as possible between research areas. In this way, a good overview is obtained of development based on the different effects that tourism has increased. Research period is the years from 2010.

The research has been conducted by two approaches to the research data. On the one hand, based on the combined data and the average of these two research groups. On the other hand, on the correlation of tourism by variables on population development by municipality. In the research work, both options have been worked on for further clarification.

The study is based on data delimited by municipalities. The reason for this is based on access to data on employment and population development in Iceland. There is no concise information on jobs by industries in Iceland other than limited to the boundaries of municipalities, as the information is accessible from Statistics Iceland. As in the Möller and Amcoff (2018) study, the primary work of individuals is considered. The information is based on individuals tax payments and the type of industry based on wage payments without identifiable elements of individuals. The municipalities, or a collection of municipalities, are therefore the research areas. Municipalities are listed according to the proportion of income of individuals in main jobs in tourism. The industries that are characteristic industries of tourism by industries within the ISAT classification and the definition of Statistics Iceland (Statistics Iceland, 2021).

The dataset spans from 2010 to the present, allowing for a longitudinal study of tourism's effects before and after its substantial growth in Iceland. This period enables the comparison of demographic variables under similar conditions across divergent phases of tourism development, providing a clearer picture of causality and influence. Population and demographic data are collected via national censuses, civil registration systems, and sample surveys. Surveys not only

complement traditional data collection techniques but also enable a deeper analysis of societal trends, providing a foundation for predicting future demographic trends (Spoorenberg, 2022).

ANALYSIS

Aligned with the research hypotheses, each thematic category was analyzed across two groups of municipalities:

Population Development: Data on population numbers for municipalities in categories A and B were compiled annually from 2010 to 2024. The population figures, released each year on January 1st, are available up to the year 2024.

Native, Foreign Nationals, and Immigration: To contextualize population trends, it was crucial to examine the local development among Icelandic citizens alongside the increase in foreign nationals. The analysis included the evolution of both Icelandic and foreign citizens from 2010, utilizing mid-year demographic data for comparative and analytical purposes, including the comparison of employment trends across municipalities.

Employment in the Tourism Sector: The number of jobs in tourism-related industries was a primary variable examined. Demographic variables were compared against the development of tourism employment, annually and by municipalities A and B. The employment data was based on the average number of primary jobs in the tourism sector as defined by Statistics Iceland.

Demographic Composition Changes: Population turnover was scrutinized in detail, extending beyond traditional analyses of population turnover to include migration turnover. While population turnover includes all resident movements—births, deaths, incoming, and outgoing residents—as a total figure divided by the mid-year population count, typically expressed per thousand residents, migration turnover simplifies this by considering only the numbers of arrivals and departures.

Age and Population Structure: Analysis was conducted on the dependency ratios of municipalities A and B, annually from 2010, to assess temporal developments and

inter-municipal comparisons. The dependency ratio is the proportion of dependents relative to the working-age population (ages 15 to 65). Additional analyses were also conducted on specific age groups, such as the proportions of children and the elderly, to draw further comparisons.

Through these focused analytical approaches, the study aims to uncover nuanced trends in demographic changes influenced by tourism growth, providing a comprehensive view of its impacts on local communities.

Anticipated Outcomes

Through meticulous trends and comparative analyses, this dissertation aims to offer nuanced insights into the demographic implications of tourism growth. By systematically debunking or confirming each hypothesis, the research will contribute to a more profound understanding of how tourism can shape community demographics, thereby informing policy decisions aimed at fostering sustainable regional development.

In doing so, the study seeks not only to respond to its central query but also to model potential demographic trajectories for Icelandic municipalities in the face of continuing tourism growth. This approach will underscore the complex interplay between economic development and demographic stability, guiding future strategies to optimize the benefits of tourism while mitigating its challenges.

ETHICAL CONSIDERATIONS

The data used in this study is official data from Statistics Iceland. Data of population development and tax information of individuals that have been made non-personally identifiable and disseminated by Statistics Iceland (Statistics Iceland, 2021). The information is therefore not bound by special obligations or the risk that its publication violates the law or general morality. Interpretation of the information about individual groups in society has been done with everyone's respect in mind and the information has been disseminated in an impartial manner.

When addressing specific groups, like foreign nationals, it is crucial to avoid generalizations or projecting uniform opinions or motives onto everyone. Given that individuals have diverse attitudes and expectations, it is important to consider the variety of perspectives that influence their decisions to relocate. While studies may provide insights into common reasons for relocating, especially for employment in the tourism industry, it is essential to recognize that everyone's motivation is unique.

When considering the challenges communities face due to migration, it is crucial not to prematurely conclude that these challenges or problems are solely the responsibility of individuals rather than reflecting broader societal, industrial, or governmental issues.

All research methodologies have been designed with strict adherence to ethical standards. Data use has been approved by relevant authorities, ensuring that all demographic information is handled respectfully and responsibly, maintaining the anonymity and privacy of individuals represented in the study.

LIMITATIONS

The population development can be a temporary consequence of the existing employment situation or the existing composition of the population in these areas. The results should, however, be a reliable assessment of the situation, and the development, with comparisons between municipalities. With similarities to the results of other studies, it strengthens the ability to conclude about causality and correlation. However, local influences and external factors may always have an effect.

The definition of tourism-related jobs can differ significantly across countries or even among different studies. While some analyses may narrowly define these roles to include only direct employment, such as hotel service staff, others may adopt a broader view that includes both direct and indirect jobs within the tourism industry.

Therefore, comparisons between studies must consider these variations in definitions.

The use of municipality boundaries as units for data presents challenges for accurately analyzing social and economic phenomena due to their geographic and social limitations (Brown, 2019). Although municipalities offer valuable data. Their relevance may be limited to detailed demographic behaviors and community-level outcomes analysis for more meaningful spatial units. Though, analyzing taxpayer information within municipal boundaries helps delineate the economic sphere of influence, even if individuals find employment beyond their own municipality. However, this approach has limitations, as the jobs may not always be located within the municipality itself. Additionally, seasonal variations in employment might be underrepresented in the data if the individuals in question do not have a registered address within the area during their temporary stay, thereby not being counted as employees within that municipality.

When interpreting the results from attitude surveys, the number, and proportions of responses from the total population of each municipality vary. Proportionally, fewer responses were received from foreign nationals compared to Icelandic citizens relative to the population size. In municipalities with a high percentage of foreign citizens, it can be inferred that the proportion of responses from Icelandic citizens was proportionally higher compared to the total population of those municipalities. Consequently, these results may not accurately reflect the combined attitudes of all residents.

The datasets utilized cover the period of the COVID-19 pandemic, which undeniably had a significant impact on tourism in Iceland, as it did globally. It is essential to consider these external effects when examining the factors affecting tourism development and its potential impact on population trends during this period.

CONCLUSION

This chapter outlined the methodology used to investigate the demographic changes in Icelandic tourism regions. By examining the influence of tourism on local demographics, this study aims to understand how tourism growth correlates with various demographic indicators such as population turnover, the average age, and influx of foreign nationals.

Through a meticulous research design and approach, this dissertation utilized comparative studies to frame the analysis within the context of Iceland's unique tourism landscape. Key theories from influential studies such as those by Getz (1986) and Möller and Amcoff (2018) were integrated to guide the exploration of demographic trends. The methodology chapter also detailed the data collection methods, emphasizing the use of robust datasets to ensure a comprehensive analysis of the impacts of tourism on local communities.

The methodology employed in this dissertation supports a systematic investigation into how tourism affects demographic structures within Iceland, offering a foundational approach for further research on this topic and informing policy decisions aimed at balancing demographic stability with growth.

This methodologically diverse approach provides a solid foundation for exploring the complex dynamics between tourism development and demographic changes in Iceland's municipalities. By integrating multiple analytical techniques and focusing on a range of demographic indicators, the research aims to offer nuanced insights into the socio-economic impacts of tourism, guiding future policy and planning initiatives.

4. FINDINGS

INTRODUCTION TO THE FINDINGS

This final chapter encapsulates the primary insights and findings of the dissertation, providing a cohesive synthesis of the effects of tourism on local demographics and migration patterns. It aims to present a comprehensive overview of the data analysis results in relation to the formulated hypotheses and the central research question.

PRESENTATION OF DATA

The organization and presentation of the data are based on responses to the hypotheses outlined in the research plan, alongside the central research question. Each hypothesis is examined in detail hereafter, with conclusions drawn at the end and contextualized in relation to the main research question. To begin with an overview of main datasets.

Tourism development

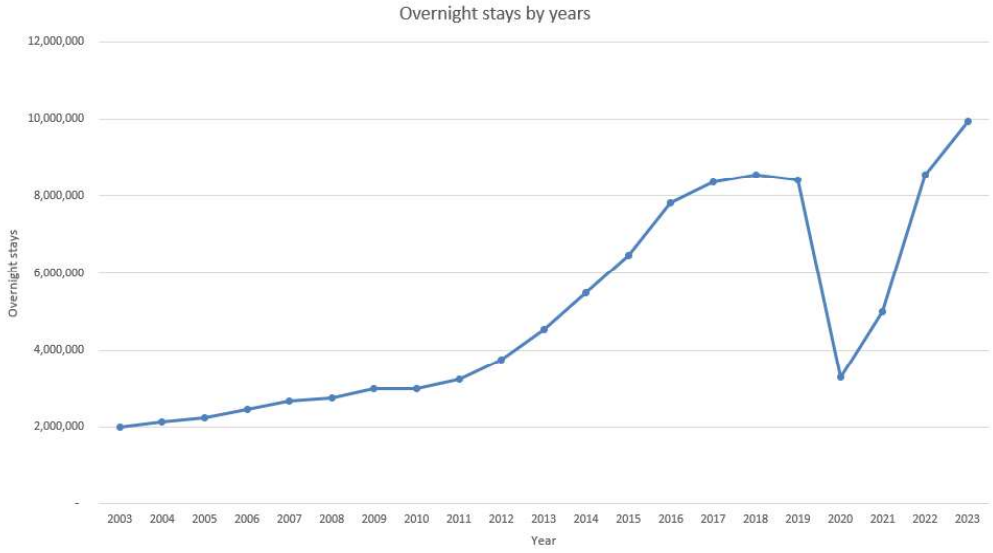
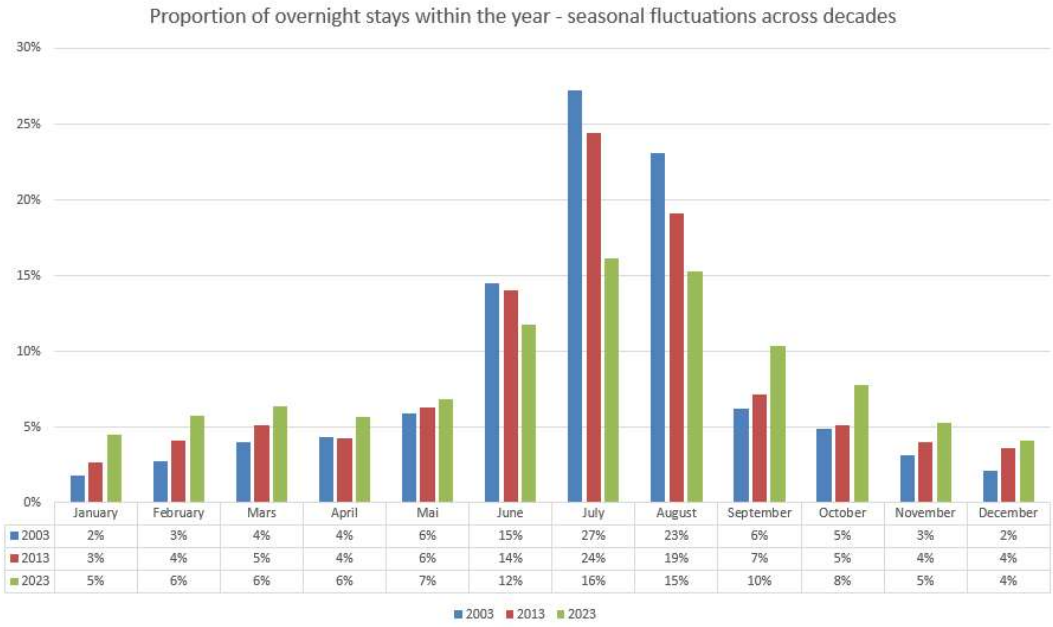


Figure 9 shows the development of overnight stays in Iceland from the year 2003 until 2023, based on data provided by Statistics Iceland (Eggertsson, 2024). (personal communication, April 2024).

The chart above illustrates the growth of tourism in Iceland over the past two decades, specifically tracking the number of overnight stays per year. It highlights two significant turning points. The first, indistinct, occurs around 2010, coinciding with the Eyjafjallajökull volcanic eruption. This event marks the beginning of a period of rapid growth in tourism, which continued until 2016 to 2018, when the growth rate appears to slow. Subsequently, the clear impacts of the COVID-19 pandemic are evident from 2019 to 2021. Tourism then regains its previous strength in 2022 and shows even greater improvement in 2023.



	January	February	Mars	April	Mai	June	July	August	September	October	November	December
2003	2%	3%	4%	4%	6%	15%	27%	23%	6%	5%	3%	2%
2013	3%	4%	5%	4%	6%	14%	24%	19%	7%	5%	4%	4%
2023	5%	6%	6%	6%	7%	12%	16%	15%	10%	8%	5%	4%

Figure 10 shows the development of overnight stays by months in Iceland, the years 2003, 2013 and 2023, based on data provided by Statistics Iceland (Eggertsson, 2024).

Seasonal fluctuations in tourism have been decreasing. In 2003, the peak months (June, July, and August) accounted for about 65% of all overnight stays. By 2013, this percentage had dropped to 57% and further declined to 43% by 2023. This

reduction is accompanied by a relative increase of more than 50% in some winter months compared to two decades earlier.

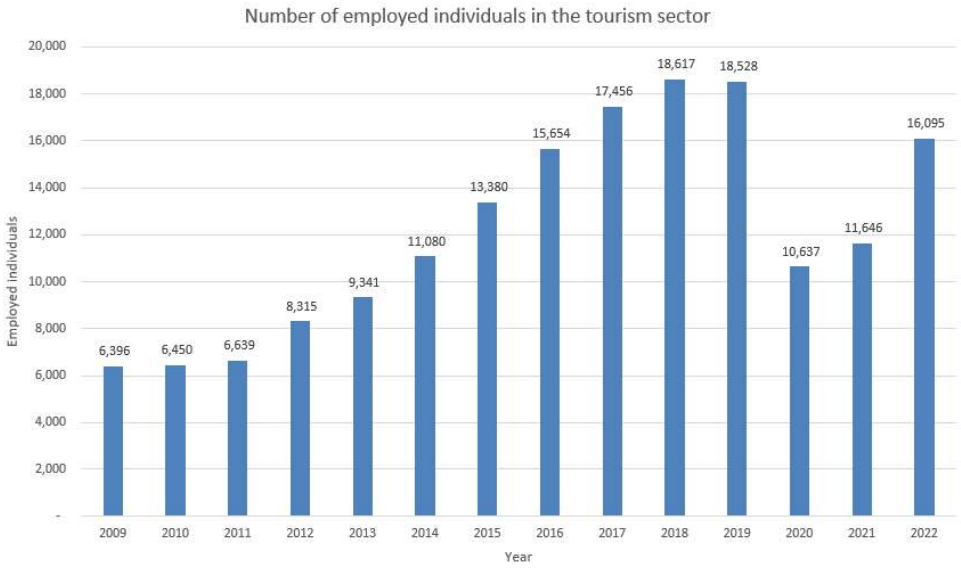


Figure 11 shows the number of employed individuals in the tourism sector, from the year 2009 to 2022, based on data provided by Statistics Iceland (Eggertsson, 2024).

A similar trend can be observed by examining the number of individuals employed in the tourism sector. Here, we see that the workforce tripled from 2011 to 2018, within just an eight-year period. This analysis encapsulates the boom period of tourism and the subsequent transitional period, which is crucial for assessing the impact on various demographic factors of the comparison groups. This period spans from just before peak growth began (around 2010) up to most recent data, considering certain reservations about the COVID-19 period.

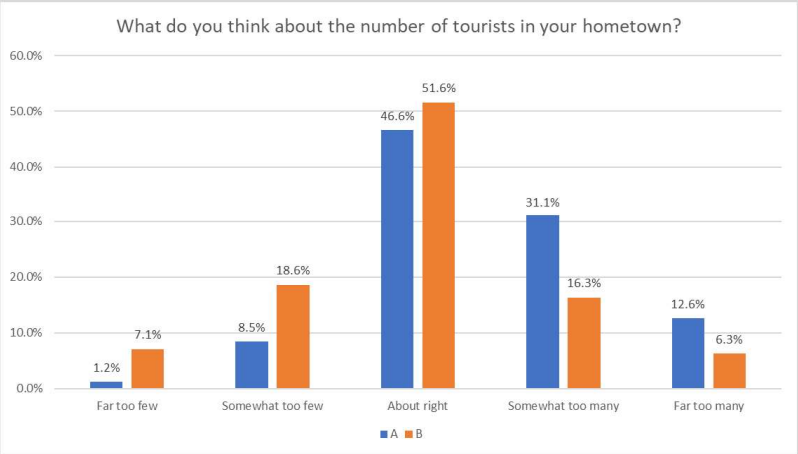


Figure 12 shows results from a survey on the attitudes of residents towards tourism in their area of residency, based on data provided by Karlsson (2024).

In a recent resident survey conducted in Iceland (Karlsson, 2024) it emerged that among those who expressed an opinion, the combined percentage of residents who felt there were too many tourists in municipalities of Group A was about 43.7%, compared to 22.6% in Group B. Residents in Group B municipalities are significantly more inclined to desire an increase in tourist numbers, with approximately 27.7% deeming the current tourist count too low, in contrast to merely 9.7% of residents in Group A, the municipalities focused on tourism.

Population development in comparison municipalities

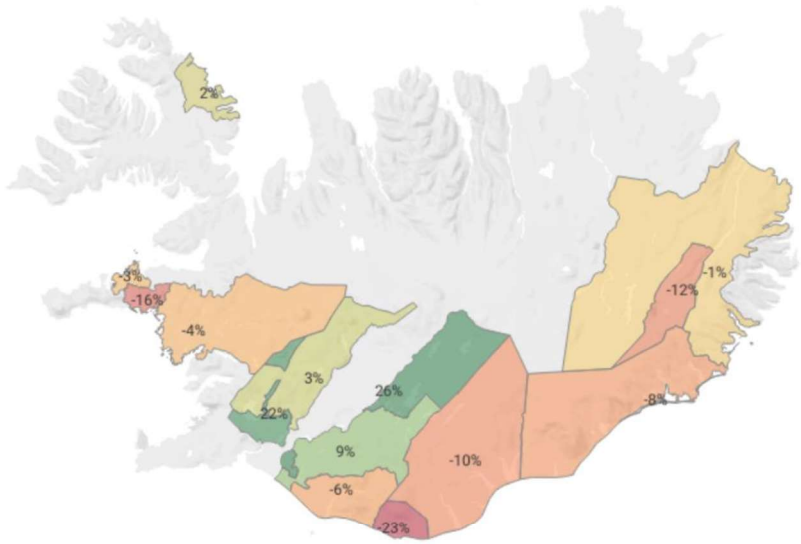


Figure 13 illustrates the development of number of residents with Icelandic nationality, by municipalities, from 2010 to 2024 in category A (Icelandic Regional Development Institute, 2024).

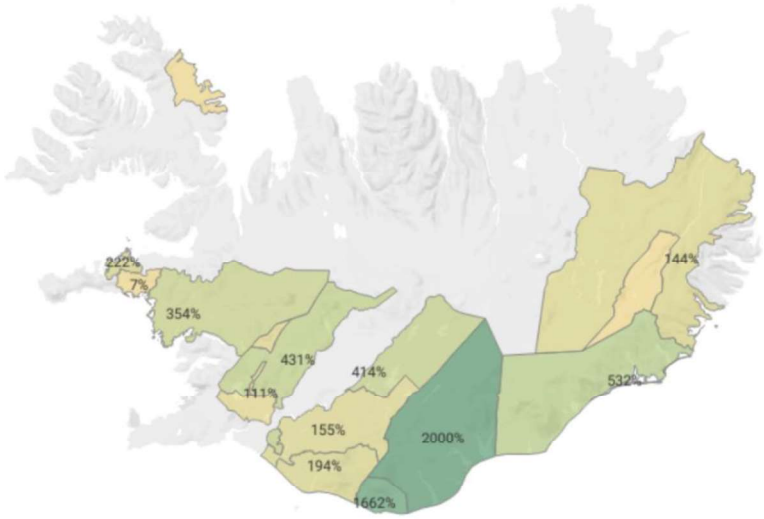


Figure 14 illustrates the development of number of residents with foreign nationality*, by municipalities, from 2010 to 2024 in category A (Icelandic Regional Development Institute, 2024).*

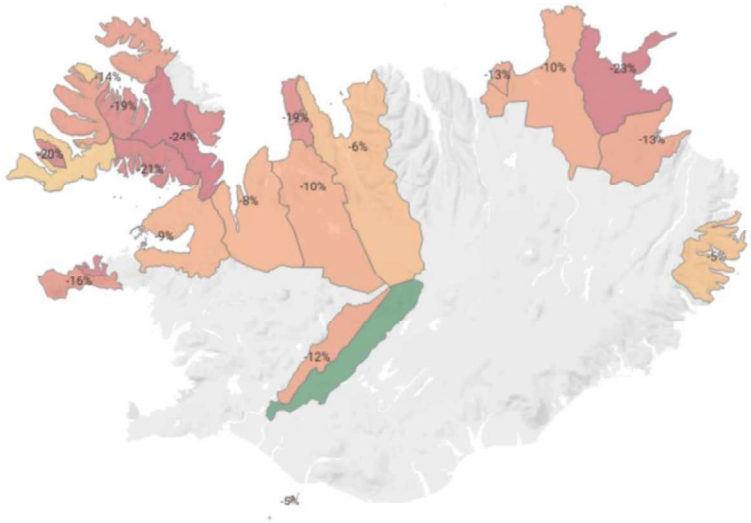


Figure 15 illustrates the development of number of residents with Icelandic nationality, by municipalities, from 2010 to 2024 in category B (Icelandic Regional Development Institute, 2024).

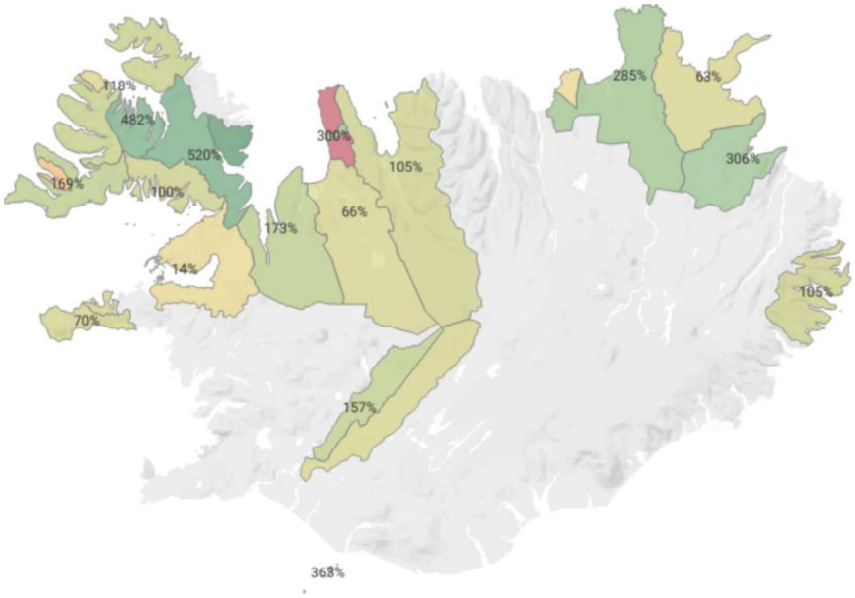


Figure 16 illustrates the development of number of residents with foreign nationality, by municipalities, from 2010 to 2024, in category B (Icelandic Regional Development Institute, 2024).

Growth in tourism and number of inhabitants

The first hypothesis posits that there is a correlation between the expansion of the tourism sector and an increase in the population of municipalities. This hypothesis examines the relationship between the number of people employed in tourism, the proportion of jobs in the tourism industry, and overall population growth within these municipalities.

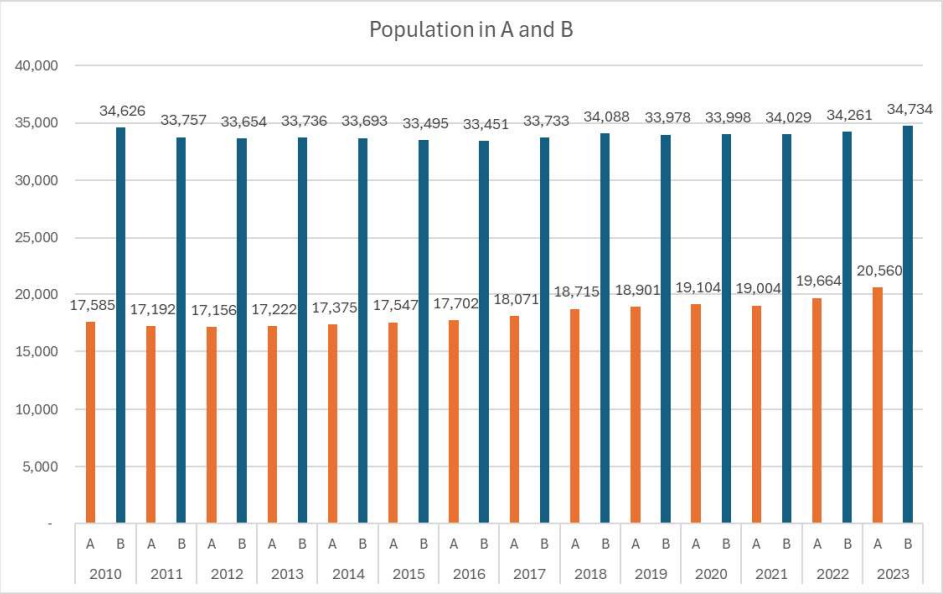


Figure 17 shows the development of number of residents, by municipalities of category A and B, from 2010 to 2023, based on data provided by Statistics Iceland (Eggertsson, 2024).

The tourism-centric municipalities are experiencing growth, while the comparative municipalities remain stagnant. The above figure is based on the population in the middle of the year. While municipalities B is static with a 0.3% increase, there is a 16.9% rise in the population of municipalities A.

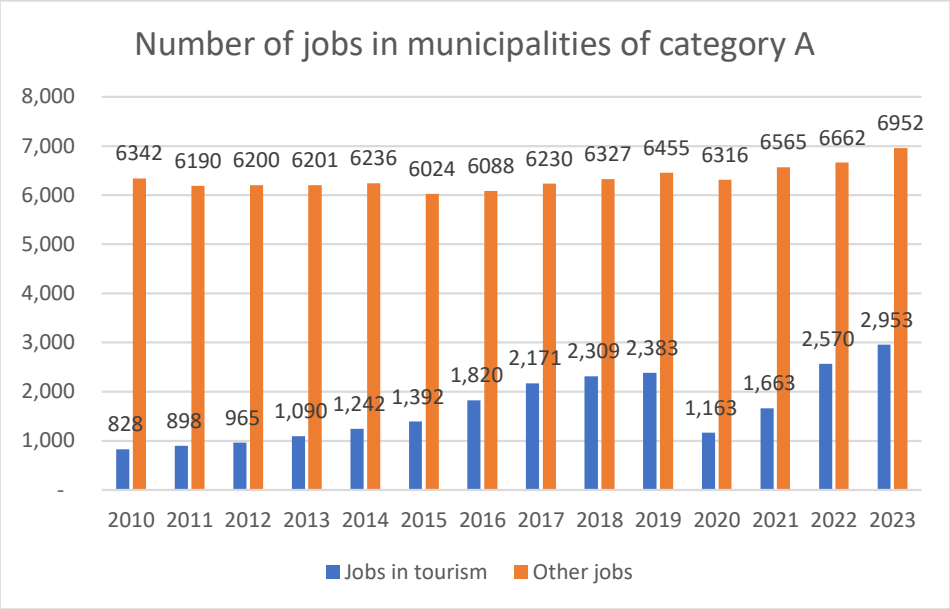


Figure 18 presents the number of jobs in municipalities of category A, by jobs in tourism and other sectors, from 2010 to 2023, based on data provided by Statistics Iceland (Eggertsson, 2024).

Looking at the development of the number of jobs in tourism in municipalities A, there has been an increase of 2,125 jobs over the period, while the population has grown by 2,975. Despite considerable seasonal fluctuations in tourism, there is not much difference between months within the year by number of inhabitants. The correlation between the increase in tourism jobs and population growth is measured at 0.80. In terms of limiting the Covid-19 period's effect, measured correlation is 0.92 from 2011 to 2019.

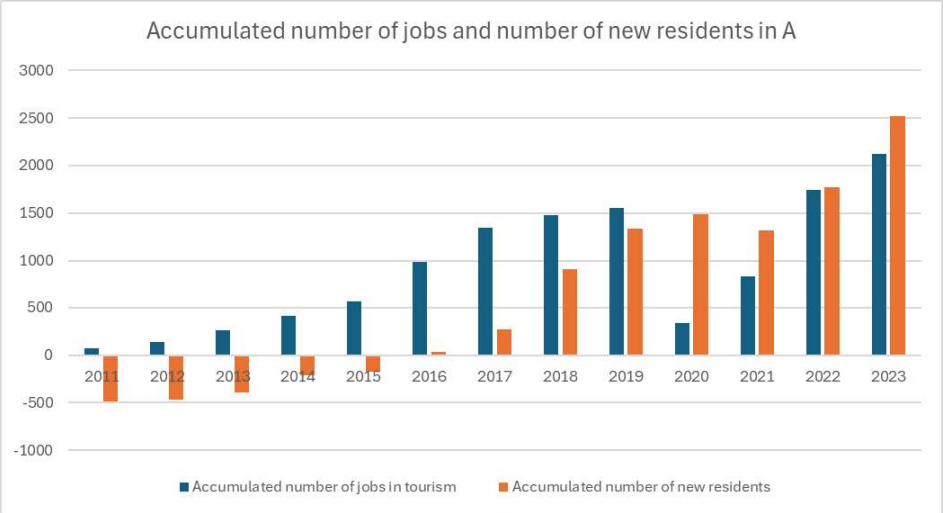


Figure 19 shows accumulated number of jobs and number of new, by municipalities of category A, from 2011 (as accumulated numbers and therefore accumulated from 2010 in the year 2011) to 2023, based on data provided by Statistics Iceland (Eggertsson, 2024).

Since 2011, there has been a decrease in the number of residents from the previous year. The chart above displays the cumulative number of new residents, starting from a negative figure. It is not until 2016 that the municipalities reach the same population level as in 2010, despite a significant increase in job opportunities.

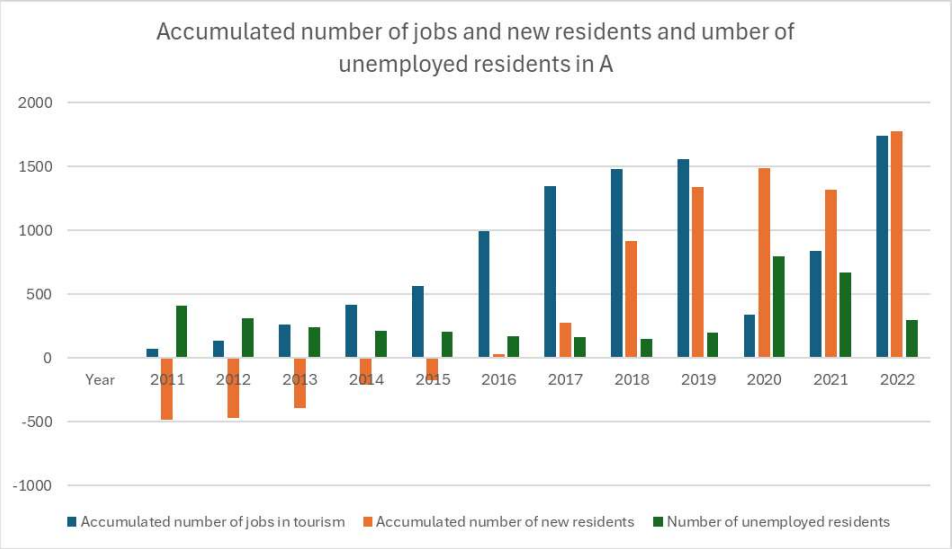


Figure 20 shows accumulated number of jobs and number of new residents, and number of unemployed residents, by municipalities of category A, from 2011 (as accumulated numbers and therefore accumulated from 2010 in the year 2011) to 2023, based on data provided by Statistics Iceland (Eggertsson, 2024).

Unemployment has been a persistent issue in Iceland since the financial crisis in 2008. When analyzing population growth in the context of unemployment, it becomes apparent that equilibrium was not achieved until 2015 and 2016. From that time onwards, there has been an increased influx of foreign nationals into the labor market.

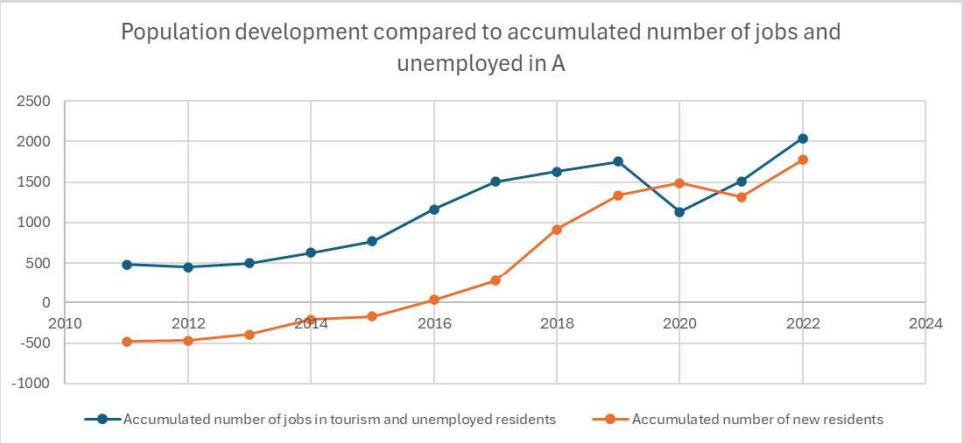


Figure 21 shows the accumulated population development in comparison to the accumulated number of jobs added to the accumulated number of unemployed residents, by municipalities of category A, from 2011 (as accumulated numbers and therefore accumulated from 2010 in the year 2011) to 2023, based on data provided by Statistics Iceland (Eggertsson, 2024).

By aggregating the cumulative increase in tourism jobs and the number of unemployed individuals, external influences on development can be more accurately isolated. This approach reveals a clearer correlation between employment and population growth, which registers a correlation coefficient of 0.87 for the period from 2011 to 2022.

Growth in tourism and Icelandic residents

The second hypothesis posits that "there is little or no correlation between the growth in tourism and the increase in residents of Icelandic origin in municipalities." This hypothesis is introduced partly to question the commonly held beliefs about the benefits of tourism and its effects on community development. Moreover, it is used to draw a comparison with Getz's (1986) findings, which indicate that tourism jobs might not suit everyone, prompting some individuals to move away even when tourism employment opportunities are available locally.

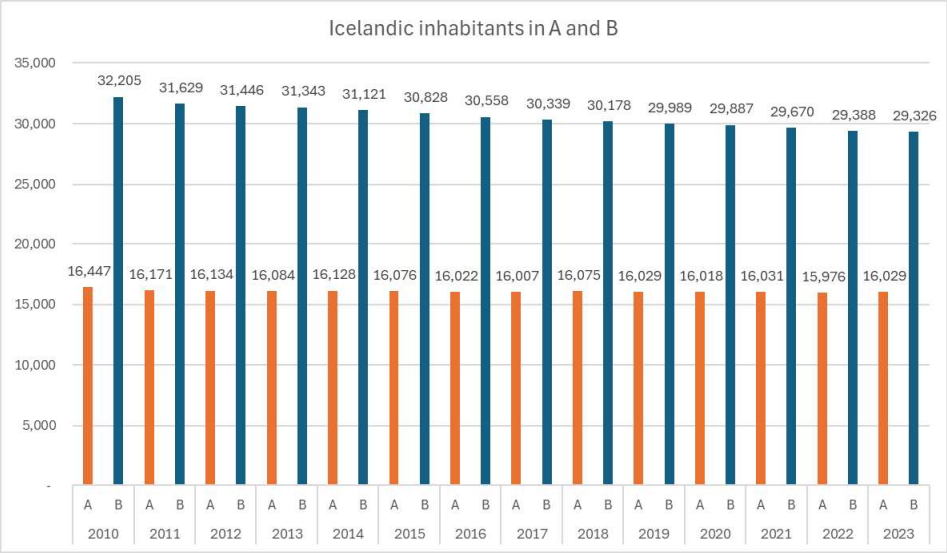


Figure 22 presents the number of inhabitants in municipalities of categories A and B, native residents from the year 2010 to 2023, based on data provided by Statistics Iceland (Eggertsson, 2024).

Despite the creation of over two thousand jobs in tourism in municipalities A, the number of Icelandic residents declined over the period. While municipalities B experienced a more significant reduction of Icelandic residents, at -8.9%, municipalities A saw a decrease of -2.5%. Consequently, it is evident that there is no correlation between job growth in tourism and an increase of Icelandic residents within these municipalities.

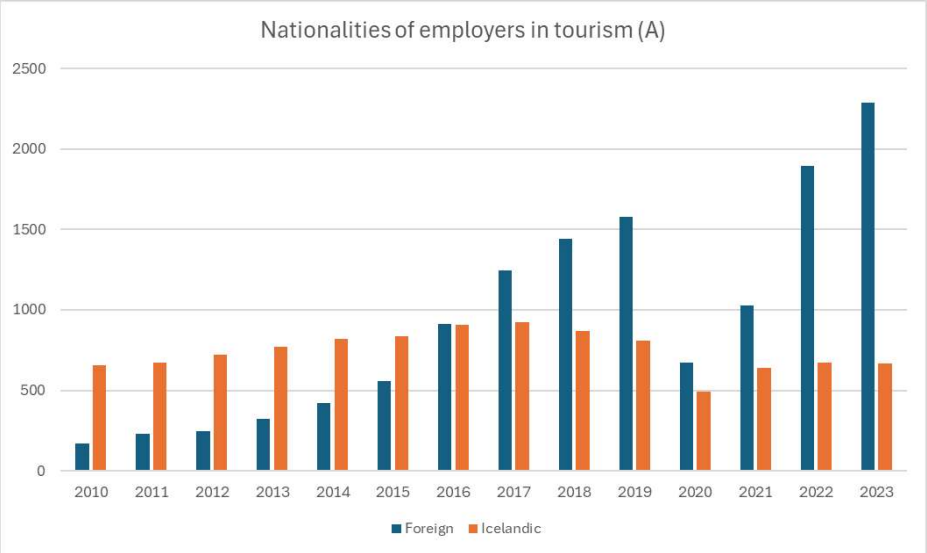


Figure 23 presents the number employers in the tourism sector, in municipalities of category A, by nationalities (Icelandic and foreign nationalities) from the year 2010 to 2023, based on data provided by Statistics Iceland (Eggertsson, 2024).

While it is not the case that no Icelanders work in the tourism sector, the number has remained close to unchanged over the period. However, there was a decline during the COVID-19 pandemic, and the numbers did not recover to the same extent afterwards. Instead, there was a more significant increase in foreign staff after the pandemic period.

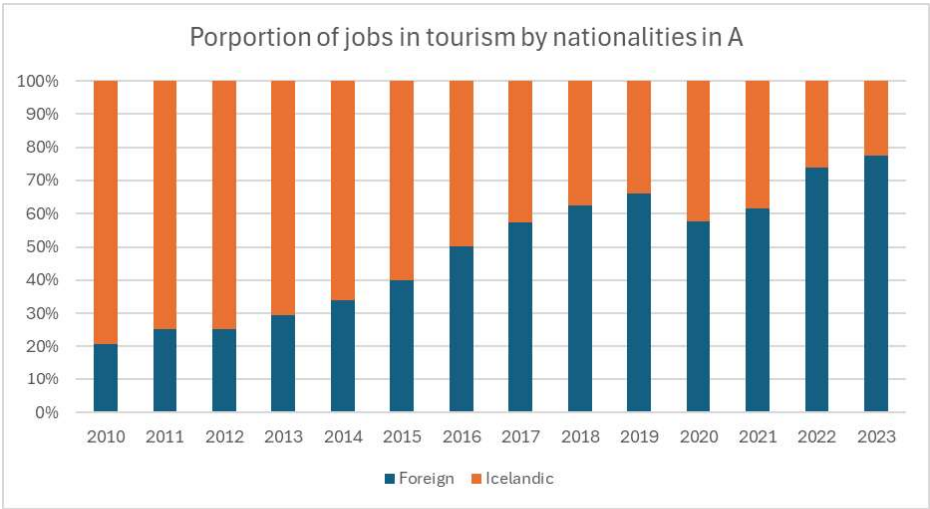


Figure 24 presents the proportion of jobs in the tourism sector, in municipalities of category A, by nationalities (Icelandic and foreign nationalities) from the year 2010 to 2023, based on data provided by Statistics Iceland (Eggertsson, 2024).

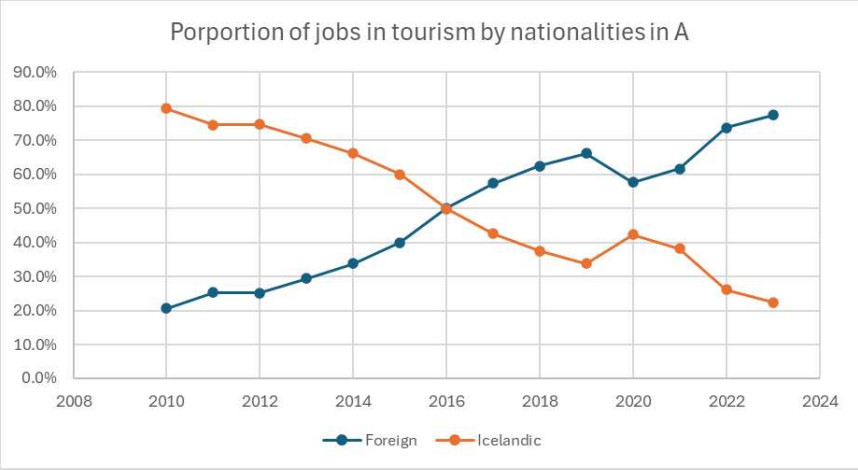


Figure 25 presents the proportion of jobs in the tourism sector, in municipalities of category A, by nationalities (Icelandic and foreign nationalities) from the year 2010 to 2023, based on data provided by Statistics Iceland (Eggertsson, 2024).

The period witnessed a complete reversal in the nationality composition of tourism sector employees. Initially, about 80% of tourism jobs were held by Icelanders; by the end of the period, this figure had inverted, with up to 80% of such jobs being performed by foreign nationals. This shift was primarily due to the creation of new positions in the tourism industry filled by foreigners, and to a lesser extent, Icelanders moving into other types of employment.

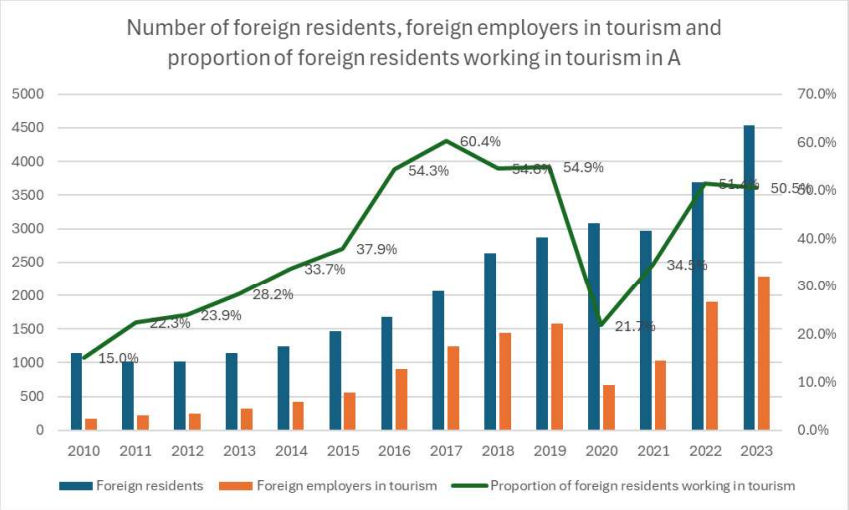


Figure 26 presents the number of foreign residents in municipalities of category A, number of foreign employers in tourism and proportion of foreign residents working in the tourism sector from the year 2010 to 2023, based on data provided by Statistics Iceland (Eggertsson, 2024).

Looking at all the foreign nationals residing in municipalities A, about 50% of them are employed in the tourism sector. This figure includes their entire population, from children to the elderly. In the chart above, the green line correlates with the percentages on the right, and the bars represent counts based on the population thresholds on the left.

Growth in tourism and in-migration

The third hypothesis posits a correlation between the growth in tourism and an increase in the number of foreign nationals (in-migration) in municipalities. As depicted in the graph below, there is a close alignment between jobs in the tourism sector and the number of foreign nationals, with a calculated correlation of 0.82. Looking at recent years and in the context of the previous graph, it is likely that there is a link between the events during the COVID-19 period and subsequent. Although jobs in tourism undoubtedly decreased, foreign nationals did not leave; instead, Icelandic citizens previously employed in tourism moved away or shifted to other jobs, and more foreign nationals took their places.

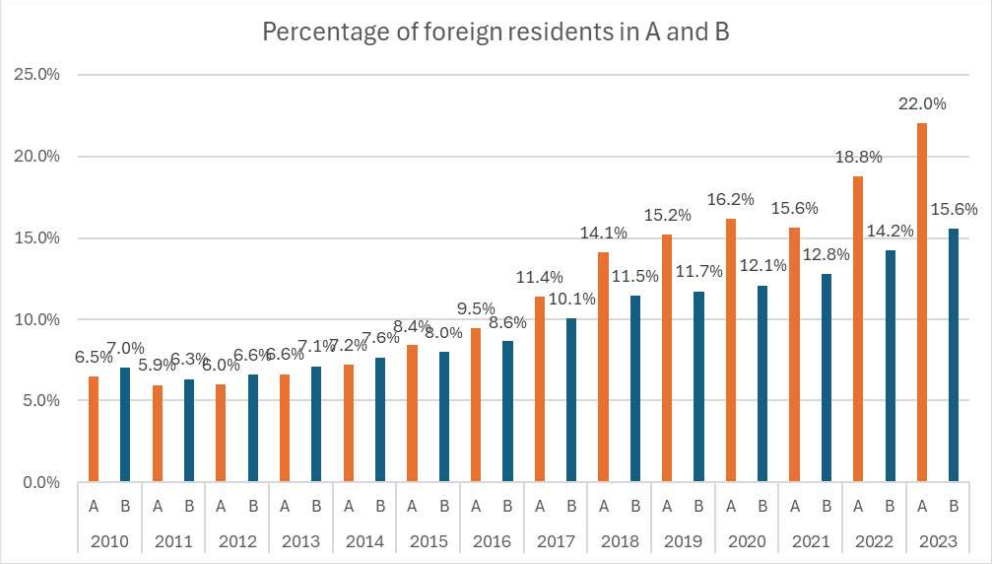


Figure 27 presents the proportion of foreign residents in municipalities of category A and B, from the year 2010 to 2023, based on data provided by Statistics Iceland (Eggertsson, 2024).

The trend in the proportion of foreign citizens in municipalities A and B has evolved in such a way that, while the percentage of foreign citizens was initially higher in municipalities B, since 2015, this percentage has been greater in the tourism-centric municipalities. The growth in these municipalities has been such that by mid-year 2023, the proportion of foreign citizens stands at 22% compared to approximately

15.6% in the municipalities of Group B. That is close to the national average of 15.9%.

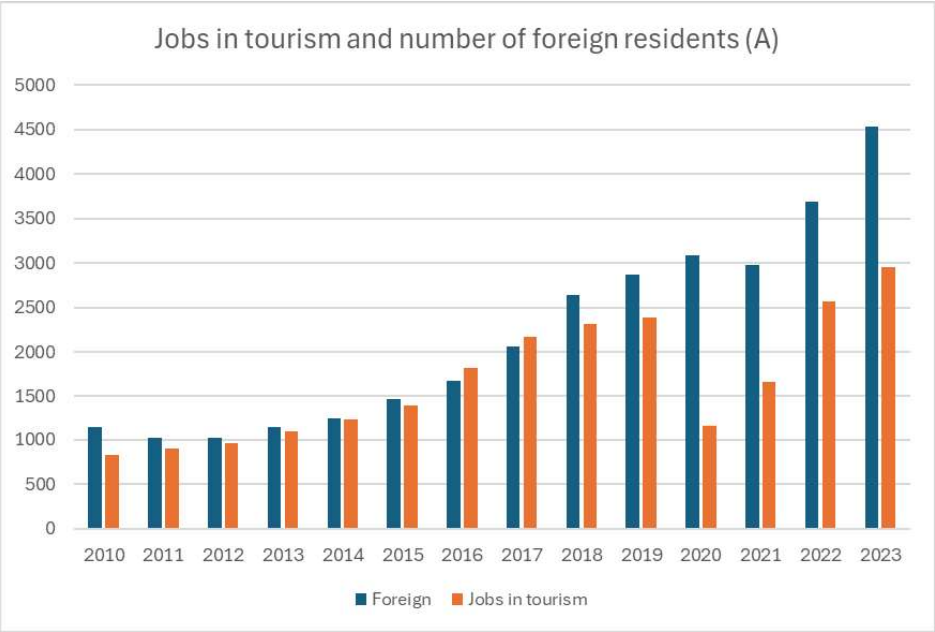


Figure 28 presents the number of jobs in tourism and number of foreign residents in municipalities of category A, from the year 2010 to 2023, based on data provided by Statistics Iceland (Eggertsson, 2024).

Excluding the COVID-19 period and analyzing the correlation between tourism jobs and foreign nationals from 2010 to 2019, the correlation is notably strong, at 0.96.

Growth in tourism and average age and population turnover

The fourth hypothesis suggests an association between the growth in tourism, a decrease in average age, and an increase in population turnover. As Getz (1986) and Amcoff (2018) suggest, it is likely that the expansion of the tourism sector impacts these factors by attracting younger workers who often do not stay long. This influx can lower the average age of residents and increase population turnover.

Average age

At the beginning of the comparison period, the average age of residents in municipalities A and B was the same and began evolving similarly to the national trend, which is to say that the nation is aging along with its inhabitants. By the year 2023, the difference had grown to as much as one year.

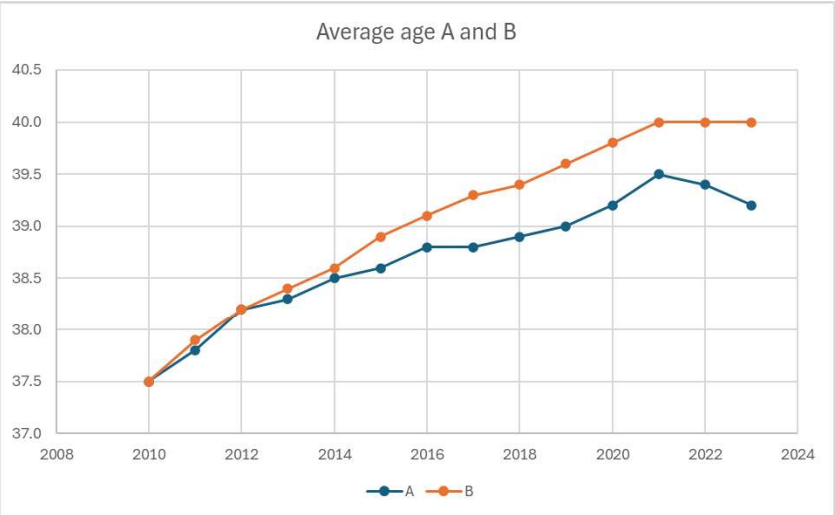


Figure 29 presents average age of residents in municipalities of category A and B, from the year 2010 to 2023, based on data provided by Statistics Iceland (Eggertsson, 2024).

As discussed in previous sections regarding the aging trend in rural areas, municipalities A are experiencing a similar pattern. These are rural areas where the average age is higher than the national average. However, the gap has narrowed over the period.

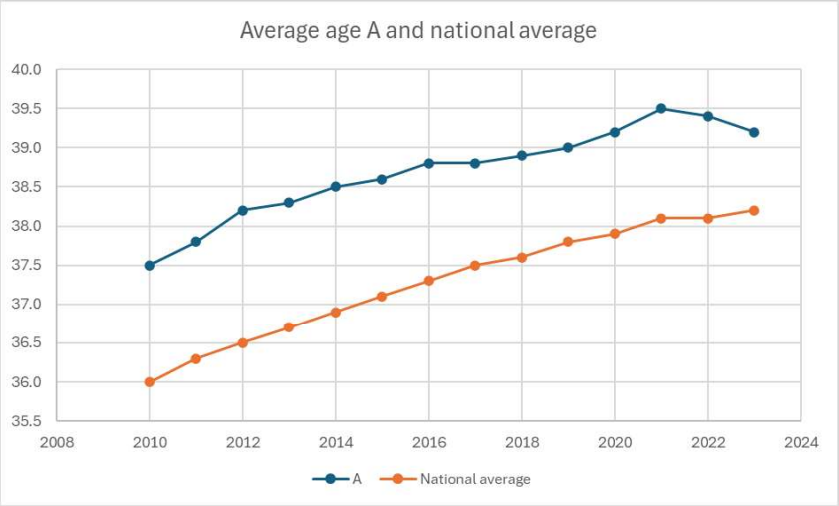


Figure 30 presents average age of residents in municipalities of category A and the national average age, from the year 2010 to 2023, based on data provided by Statistics Iceland (Eggertsson, 2024).

The average age of employees in the tourism sector varies significantly by nationality. Initially, the average age of both Icelandic and foreign nationals is almost identical, but by the end of the period, the difference in average age approaches ten years. This change is primarily due to the annual increase in the average age of Icelandic citizens, while the average age of foreign nationals remains unchanged.

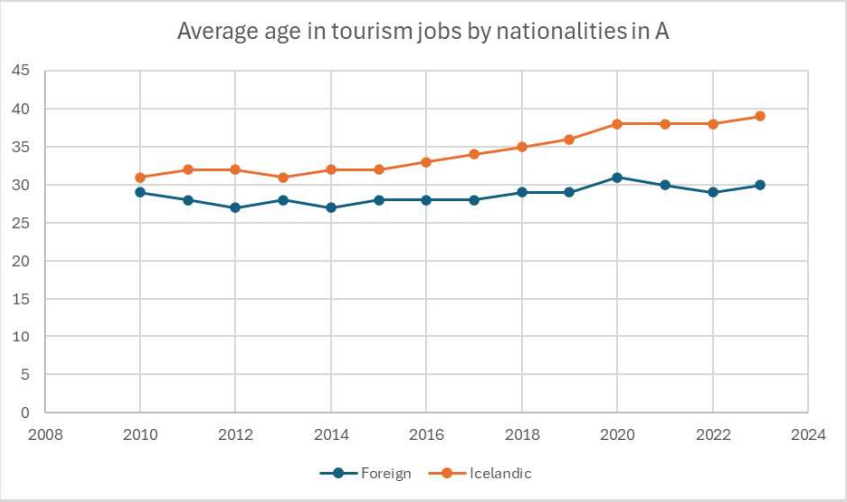


Figure 31 presents average age of residents in municipalities of category A, by nationality (Icelandic and foreign), from the year 2010 to 2023, based on data provided by Statistics Iceland (Eggertsson, 2024).

Population turnover and migration turnover

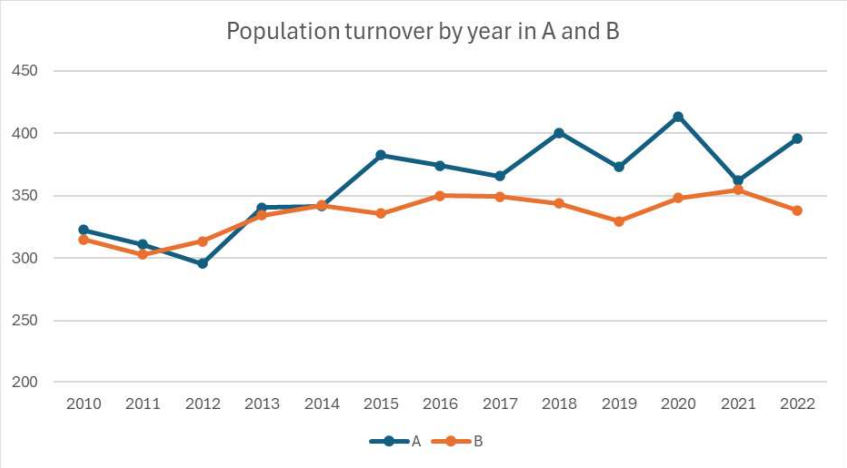


Figure 32 presents population turnover in municipalities of category A and B, from the year 2010 to 2022, based on data provided by Statistics Iceland (Eggertsson, 2024).

Population turnover encompasses all movements of residents and thus serves as a measure of stability or instability. It is also associated with sustainable or stable population development. The trend is upward in both municipalities A and B, with municipality A experiencing higher population turnover in 2022 and generally showing higher rates throughout the period.

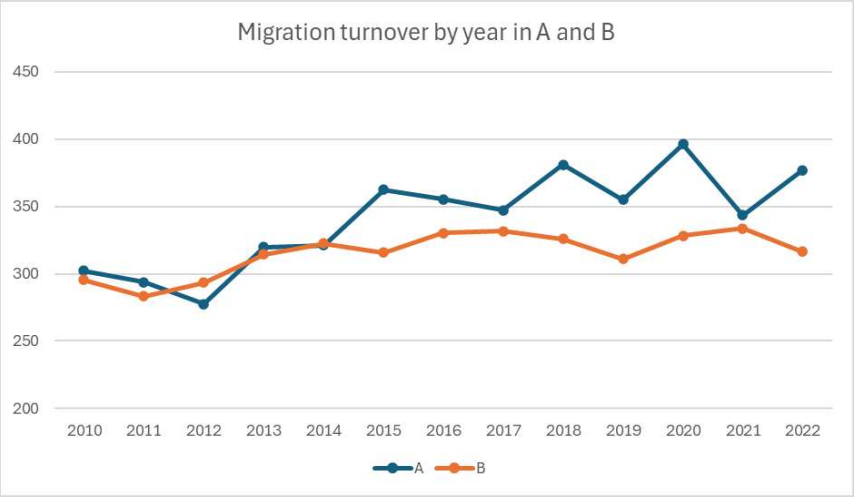


Figure 33 presents migration turnover in municipalities of category A and B, from the year 2010 to 2022, based on data provided by Statistics Iceland (Eggertsson, 2024).

As can be seen from the comparative graphs above, there is little difference between population turnover and migration turnover. This is primarily because movements are mostly explained by the influx or outflow of residents. Birth and death rates play a minor role in this comparison.

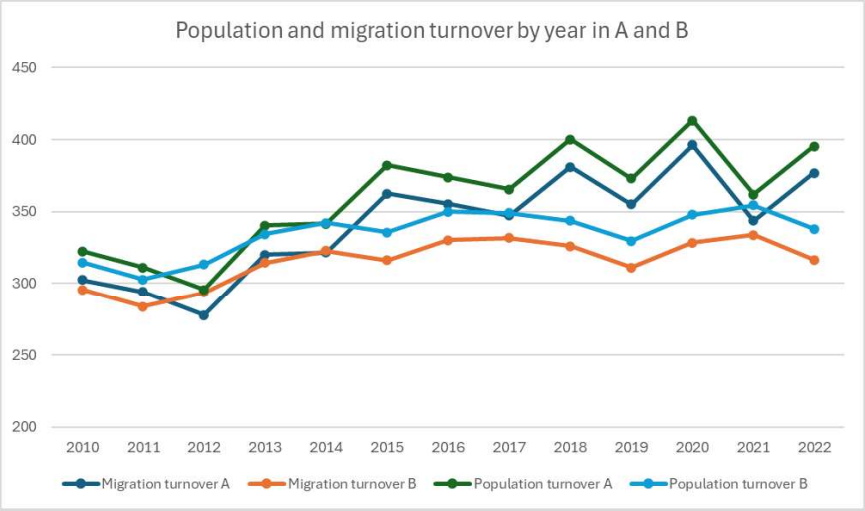


Figure 34 presents population- and migration turnover in municipalities of category A and B, from the year 2010 to 2022, based on data provided by Statistics Iceland (Eggertsson, 2024).

A comparison of municipalities A and B using both metrics presents a consistent picture. The turnover is increasing in all measurements over the period, with both a greater increase and consistently higher rates in municipalities A.

Growth in tourism and dependency ratios

The fifth hypothesis posits an association between the growth in tourism and a lower proportion of children and senior citizens in the total number of inhabitants in municipalities.

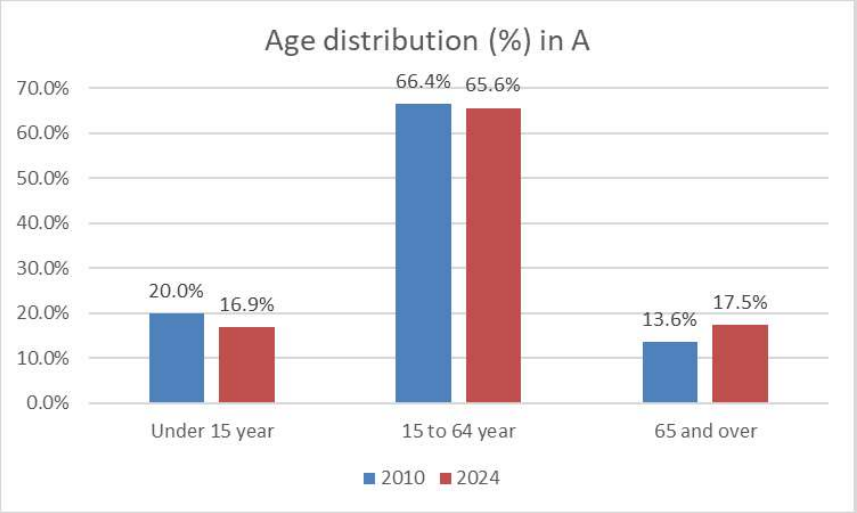


Figure 35 presents age distribution in municipalities of category A, the year 2010 and 2024, based on data provided by Statistics Iceland (Eggertsson, 2024).

In municipality A, there has been a noticeable decrease in the proportion of children. The hypothesis anticipated that the working-age population, based on dependency ratios, would significantly expand at the expense of children and the elderly. However, the middle-age group's size has remained stable, while the proportion of seniors has increased.

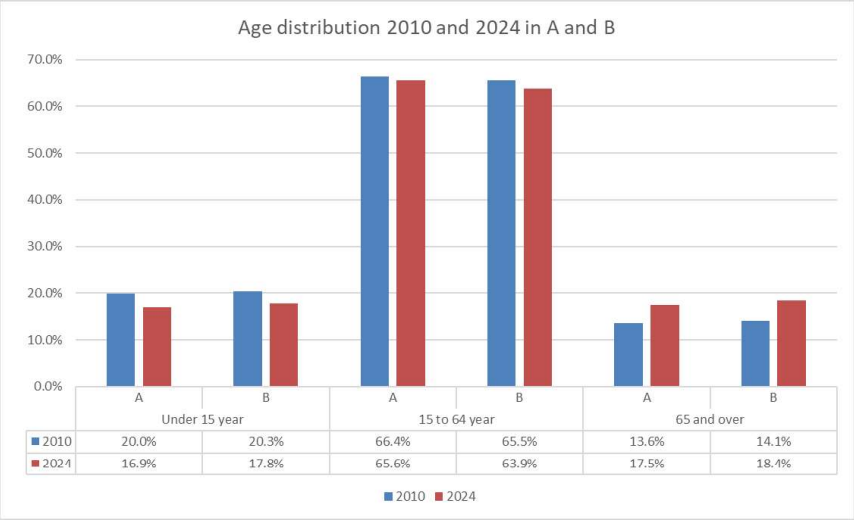


Figure 36 presents age distribution in municipalities of category A and B, the year 2010 and 2024, based on data provided by Statistics Iceland (Eggertsson, 2024).

Comparing the two groups, the trends are similar in municipalities A and B. However, the proportion of children decreases slightly more in municipality A, while the percentage of elderly citizens increases slightly more in municipality B.

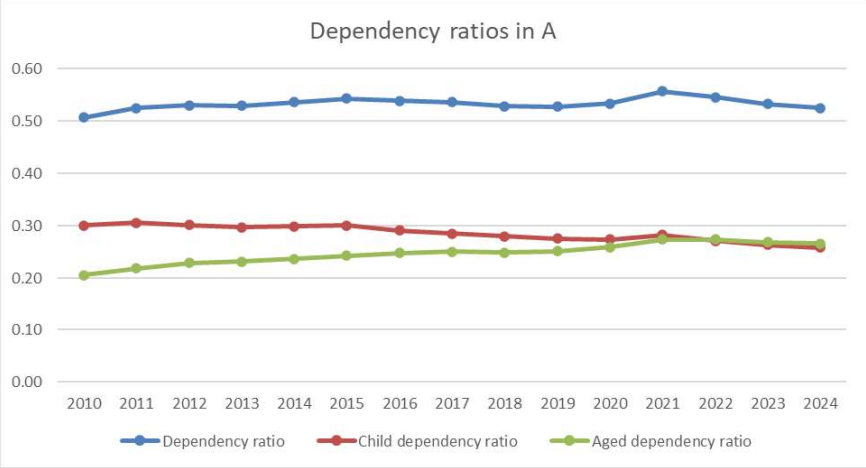


Figure 37 presents dependency ratios (Dependency ratio, child dependency ratio and aged dependency ratio) in municipalities of category A, the years 2010 to 2024, based on data provided by Statistics Iceland (Eggertsson, 2024).

The dependency ratio in municipality A changes only slightly over the period. However, the aged dependency ratio increases, while the child dependency ratio decreases.

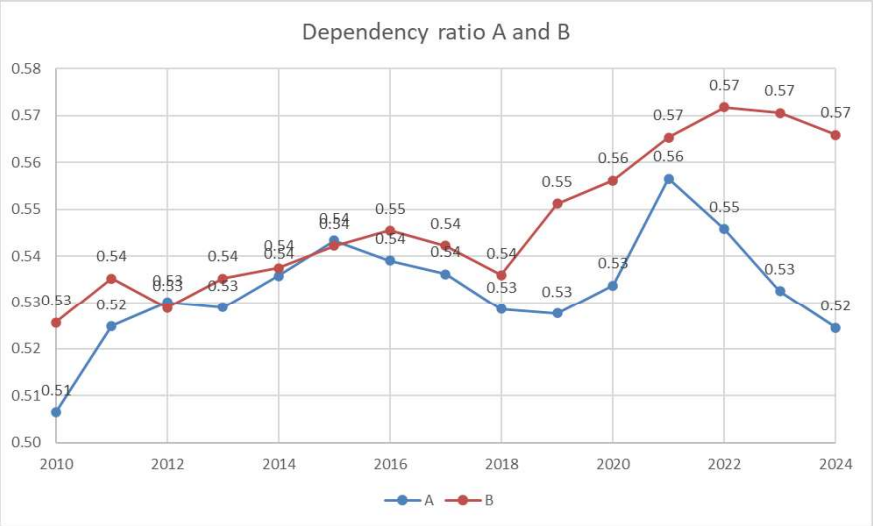


Figure 38 presents Dependency ratio in municipalities of category A and B, the years 2010 to 2024, based on data provided by Statistics Iceland (Eggertsson, 2024).

At the start of the period, the dependency ratio in municipalities A was slightly lower than in municipalities B, but the gap between A and B widened over the period.

ANALYSIS OF FINDINGS

The data analysis substantiates the significant influence of tourism on the demographic and economic fabric of rural Iceland. Notably, it illustrates how tourism-driven economic opportunities can simultaneously foster population growth and alter demographic structures, often resulting in increased migration and changes in community dynamics. Key findings from the data analysis include:

Economic Growth: Tourism has undeniably contributed to economic vitality, especially in targeted municipalities through job creation.

Demographic Changes: The rise in tourism employment has contributed to demographic shifts within municipalities, with increased migration, particularly of foreign nationals, contributing to a diverse community profile.

Community Impact: The influx of migrant workers and the transient nature of tourism employment have posed challenges for social cohesion and long-term community integration and demographic sustainability.

SUMMARY OF KEY FINDINGS

Tourism as an Economic Driver: The association between tourism growth and employment highlights the sector's role as a critical economic driver, significantly impacting labor markets and overall economic conditions.

Population Composition: Tourism has influenced population dynamics, notably through demographic shifts and changes in the age and nationality composition of residents. There is a strong association between the growth of the tourism sector and the increase in foreign nationals in municipalities, suggesting that tourism is a significant factor in migration trends.

Social Implications: The growth in the tourism sector has brought about notable social changes, including challenges related to population turnover. While tourism has bolstered economic prospects for many municipalities, it has also led to social and infrastructure strains, particularly in areas with high tourist-to-resident ratios, which has manifested itself in, among other things, pressure on the housing market and residents' attitudes towards tourists.

In conclusion, the findings reveal a complex interplay between tourism, economic development, and demographic changes. The future sustainability of tourism-led growth will depend heavily on strategic planning and policy-making that consider both the economic benefits and the potential social and demographic ramifications. This dissertation underscores the need for an integrated approach to manage the growth of tourism in a way that supports both economic prosperity and demographic and social sustainability of those communities.

5. DISCUSSION

INTRODUCTION TO THE DISCUSSION

This section of the dissertation sets the stage for implications of the findings presented in the previous chapters. It aims to contextualize the data within the broader theoretical frameworks and debates outlined in the literature review, focusing specifically on how these findings contribute to our understanding of the dynamics between tourism, migration, and demographic changes. The discussion examines the interconnectedness of these elements and their collective impact on local communities, emphasizing the nuances that define and drive sustainable development in tourism-centric regions. This approach not only addresses the hypotheses posited but also aligns with the overarching research question, offering a comprehensive analysis that bridges theory with empirical evidence.

INTERPRETATION OF FINDINGS

The findings from the data presentation are interpreted considering the established theoretical frameworks and current research. Each key result is dissected to reveal its implications for policy, practice, and future research:

1. Economic Impacts of Tourism: The data indicated robust growth in the tourism sector and its significant role in local economic development. This growth, however, comes with challenges such as economic dependency and seasonal variability in employment. The discussion will explore how such economic dynamics influence long-term sustainability and what measures can mitigate associated risks.
2. Demographic Shifts and Migration Patterns: The analysis showed that tourism-driven migration affects local demographics, with an increase in foreign nationals and changes in population composition. The discussion will

delve into how these shifts impact communities, proposing strategies for managing these changes effectively.

3. Social Implications: The findings revealed both positive and negative social impacts of tourism on local communities. This section will discuss how tourism can lead to enhanced multicultural interactions but also strain community resources and cohesion. Recommendations will be made for fostering social sustainability through inclusive policies and community engagement initiatives.
4. Policy and Planning: Based on the empirical evidence and the literature, the effectiveness of policies and planning strategies in managing the effects of tourism and migration will be discussed. To suggest evidence-based strategies for local governments and stakeholders to ensure that tourism contributes positively to sustainable demographic development.

Through these interpretations, the discussion aims to provide a thorough understanding of how the empirical data aligns with and expands upon existing knowledge, offering a grounded perspective on the practical implications of sustaining communities amidst rapid tourism growth and demographic changes.

IMPLICATIONS FOR THEORY AND PRACTICE

The reliance on a high proportion of foreign labor in tourism-centric municipalities offers several economic benefits, such as satisfying local labor demands, contributing to tax revenues, and occupying positions that native residents may be reluctant to fill. These new residents predominantly belong to the working-age group and often do not have dependents, which theoretically reduces the dependency ratio and minimizes the demand for community services. This dynamic suggests an optimized economic model for municipalities, where income is maximized while the costs associated with dependent care are minimized.

However, the implications extend beyond economic calculations. The community faces challenges from a homogeneous economy characterized by transient

population. Árnason and Kolbrúnardóttir's (2019) and Karlsson´s (2024) highlight a critical threshold of local tolerance towards tourism. Approximately half of the residents in tourism-centric areas perceive the number of tourists and the consequent changes as overwhelming, impacting the community's social fabric and its perception. This suggests a potential tipping point where the adverse effects of unregulated tourism growth might outweigh the economic benefits, leading to diminished local quality of life.

Furthermore, the research suggests that while municipalities benefit financially from tourism, they also bear the responsibility of representing the residents' interests, who are direct stakeholders in how tourism is managed. There is a pressing need for policies that facilitate economic benefits and protect the local population's interests (Scheyvens, 2011) (Choe and Lugosi, 2022) (Mcall and Ganning,2012). This involves considering whether policies should limit further employment growth in the tourism sector, reduce tourism activities in sensitive areas, or implement strategic countermeasures to mitigate negative impacts.

Restrictions are already recognized in Iceland, particularly since 2017, when it was confirmed that further development of hotels in the downtown core of Reykjavik would be limited. This was part of an approved amendment to Reykjavik's master plan for the years 2010-2030 (Skipulagsstofnun). Additionally, the municipality of Ísafjarðarbær has approved a policy on the reception of cruise ships at the ports of Ísafjarðarbær, which specifies a maximum number of visitors (Ísafjarðarbær, 2024). This strategic planning reflects a proactive approach to managing growth and maintaining the balance between development and sustainability in the Icelandic tourism sector.

The accommodation tax in Iceland is imposed on lodging facilities, with the revenues allocated to the national treasury and a development fund for tourist sites. There has been debate over whether all funds should be directed to this fund, the proportionality of allocations based on tourist numbers in municipalities, and initial strong demands from municipalities for direct funding. However, these funds are

specifically linked to environmental factors or the infrastructure development of tourist locations, not to broader community projects within the municipalities (Fjármála- og efnahagsráðherra, 2024).

Given the significant and rapid changes in population composition driven by the tourism industry, a nuanced approach to public policy is necessary. While the literature suggests that general measures such as inclusion programs for foreign citizens could be beneficial, they advocate for tailored actions that address the unique needs and challenges of each community. If a municipality struggles to cope with the impacts of tourism, state intervention to provide support and maintain equilibrium might be justified. This approach underscores the importance of adaptive, community-specific strategies in policymaking to ensure that the benefits of tourism are sustainable and equitably distributed, thus supporting both the economic objectives and the social health of tourism-centric communities.

ENHANCED RECOMMENDATIONS FOR TOURISM-CENTRIC MUNICIPALITIES

Advocacy and financial support Mechanism

In Iceland, various municipalities collaborate through associations tailored to their specific interests, such as those in colder climates (2024), fisheries centric municipalities (2024), and energy production-centric municipalities (2024). Despite these collaborations, there remains a notable absence of a unified group for tourism-centric municipalities, which face unique challenges and opportunities due to their reliance on tourism and given that it is the largest industry in Iceland today (Statistic Iceland, 2024).

Establishing an association specifically for tourism-centric municipalities could significantly strengthen their advocacy for fair shares in accommodation tax revenues and other concerns unique to regions heavily dependent on tourism. Given

that Icelandic municipalities primarily rely on limited sources of revenue—such as property taxes and a portion of the income tax collected from residents—it is imperative to explore additional revenue streams. This exploration is crucial not only to enhance financial stability but also to address the negative perceptions that may arise from residents, particularly if there are no plans to curb the expansion or growth of the tourism industry at the national or local levels.

Municipalities often hesitate to take actions that might impede local job creation. However, by adopting a united approach, they could effectively tackle shared challenges, thereby enhancing their decision-making capabilities and strengthening their advocacy for governmental financial support. This united front could support local action plans that are crucial for addressing the specific needs of tourism-centric communities.

It is essential, as highlighted in the literature, for local authorities to lead the advancement of social sustainability within the tourism sector. They must ensure that the responsibility for sustainable practices does not fall disproportionately on other stakeholders (Scheyvens, 2011). A cooperative model among tourism-centric municipalities could simplify decision-making processes, making it easier to engage with community stakeholders and effectively address common challenges.

The data and analyses compiled in this dissertation, along with the proposed categorization of tourism-centric municipalities, provide a foundational framework for initiating dialogues or cooperation among these municipalities. This collaboration could lead to the formation of dedicated interest groups or associations that specifically address the needs and challenges of regions heavily reliant on tourism. Such groups would enable these municipalities to share best practices, lobby for favorable policies, and secure financial and structural support tailored to enhance the sustainability and profitability of their tourism sectors.

Analysis and Surveys for Enhanced Policy Implementation

To optimize the impact of local planning and tailored actions, a continuous and detailed analysis of community needs and the effect of tourism is imperative. This chapter outlines the necessary analyses and surveys that municipalities and regional development agencies should undertake to effectively inform policy decisions and enhance the sustainability of tourism-centric communities.

Targeted Surveys:

1. Community Sentiment Surveys: Regularly conduct surveys to gauge local sentiment towards tourism and its socioeconomic impacts. These surveys should measure residents' perceptions of tourism-related changes in their quality of life, employment opportunities, housing market, and community cohesion.
2. Tourism Impact Assessments: Implement annual or bi-annual tourism impact assessments to analyze the economic, social, and environmental impacts of tourism. This should include assessments of employment quality, housing affordability, and infrastructure strain during peak and off-peak tourism seasons.
3. Migrant Integration and Intent Surveys: Focus on understanding the integration experiences and intentions of foreign workers within the tourism sector. These surveys should assess whether these workers see their roles as temporary or part of a long-term living strategy, their satisfaction with integration policies, barriers to inclusion, and the overall satisfaction of new residents with municipal services. This will help distinguish between those who are in the community for seasonal work versus those planning to settle permanently.

Analytical Studies:

1. Demographic and Employment Analysis: Analyze demographic trends and employment patterns within the community to identify the relationship

between tourism-driven employment and population stability. This includes studying migration patterns, job tenure, and the correlation between seasonal employment fluctuations and local demographic changes.

2. Economic Impact Studies: Conduct studies to evaluate the broader economic impacts of tourism on local economies, including multiplier effects on local businesses and the distribution of economic benefits across different community segments.
3. Housing Market Analysis: Regularly analyze the housing market to assess the impact of tourism on housing availability and affordability. This includes tracking changes in real estate prices, rental markets, and the construction of new housing in response to tourism growth.

By prioritizing these analyses and surveys, municipalities can gain a deeper understanding of the complex dynamics between tourism development and community welfare. This informed approach will enable more effective policy formulations and adjustments, ensuring that the benefits of tourism are maximally harnessed while mitigating its potential drawbacks for local communities.

Local Planning and Tailored Actions for Sustainable Community Development

Municipalities play a pivotal role in shaping the demographic and economic landscape influenced by tourism. To ensure that local policies reflect the needs and views of current residents, it is crucial for municipalities to actively engage in strategic planning and community-driven decision-making. This approach should focus on minimizing population turnover and enhancing the integration of new residents. Effective strategies might include developing robust reception, inclusion, and cohesion programs that balance the needs of long-term and new residents. Such programs should encourage community participation and offer new residents' opportunities to engage in local governance and decision-making processes.

An essential component of these strategies is the establishment of a comprehensive integration plan. This plan should provide clear pathways for new residents to register their intent to settle permanently, thereby aiding municipalities in better understanding the diverse intentions and needs of their population—ranging from those seeking permanent residency to those attracted temporarily by employment opportunities.

Furthermore, the government, in collaboration with regional development agencies, could introduce support measures aimed at bolstering the tourism sector. One focus area could be the implementation of initiatives to reduce employee turnover within the hospitality industry, a significant concern highlighted by recent studies in Southern Iceland. By stabilizing employment in this sector, we can indirectly curb population turnover in tourism-centric municipalities, thereby enhancing overall community stability.

Efforts to smooth out the seasonal peaks and troughs in tourism can further stabilize employment and population dynamics. By addressing these critical aspects, municipalities can foster a more sustainable and resilient tourism industry, benefiting both residents and visitors alike.

LIMITATIONS OF THE STUDY

The shortcomings of the study are, on the one hand, the fact that the data is summarized regionally based on the geographical boundaries of municipalities, due to the lack of general geographical information in Iceland. However, a considerable number of municipalities in Iceland partially offset this. Reliability in comparing research samples, however, is always limited to the fact that correlation does not necessarily lead to a causal relationship. It will therefore not be possible to establish that growth in tourism has had a direct effect on the relevant demographic variables, but it can be concluded that there are indications of a correlation, especially because the findings have similarities to other studies.

In Iceland, where tourism is widespread, the comparison group to the tourism-centric municipalities is not devoid of tourism. Some municipalities just exceed or fall below the average in the proportion of tourism-related jobs, making it more challenging to isolate or clearly delineate their effects. Additionally, the concentration of residents around the capital area and Akureyri, along with their influence zones, has been so significant that an extremely high percentage of residents are excluded from this study's comparison because of urban development. Given the development data and correlation measurements between variables, it is essential to consider the limited quality due to the COVID-19 period.

RECOMMENDATIONS FOR FUTURE RESEARCH

To further substantiate the impact of tourism on population development, a comprehensive meta-analysis of demographic variables is essential, particularly in areas where the tourism sector constitutes a considerable proportion of the labor market, both regionally and nationally. This analysis would not only confirm the relationship between tourism and population development but also lay the groundwork for subsequent research, enhanced strategic planning, and informed government policy. By gaining a deeper understanding of the unique facets of population development in regions with a prominent tourism sector, it becomes possible to exchange various strategies between regions.

The integration of geographical information systems (GIS) and spatial statistics into social demography provides a methodological leap forward, enabling researchers to achieve more accurate results. These tools facilitate a nuanced examination of the spatial dimensions of demographic data, allowing for a deeper understanding of how population dynamics interact with their geographical contexts. The precision and depth of analysis afforded by GIS and spatial statistics address previous methodological gaps, offering clearer insights into the complex interplay between demographic behaviors and spatial environments (Brown, 2019). Consequently, the application of these advanced spatial analysis tools is instrumental in producing

more refined and accurate findings and would significantly enhance the quality of this research or similar research in the future. It would also be more beneficial for local government and certain areas inside other boundaries, such as municipalities.

A recognized definition of sustainable demographic development or population development must be established for the academic community and community policy formulation. Such standards could, like the Sustainable Development Goals (SDG), serve as benchmarks for countries, regions, and communities. In a constantly changing world, it is natural to expect some limitations. However, we can define benchmarks based on natural population development, for example, compared to other countries or regions in Europe. Other variables, such as immigration and emigration, should ideally have neutral effects on population development. Other factors, like composition or mobility, are additional variables that could be compared and defined as normal benchmarks. Fluctuations may occur annually, but such standards could guide communities through changes over specific periods, looking beyond temporary fluctuations in smaller settlements. Issues discussed here include population turnover, which is not visible in snapshot figures but rather through trends. High population turnover has been indicated as contrary to stability and sustainable development. The level of resident mobility required for population development to be considered unsustainable has not been clearly defined. However, it is agreed that a community where most residents move away each year, replaced by others, and this pattern repeats annually, cannot be considered sustainable demographic development. This contradicts most definitions of communities and societal development. Further definitions and research on communities' tolerance levels for population turnover should be integrated into definitions of sustainable demographic development.

Further research is needed on the intentions of migration workers in the tourism sector. Such studies and standards can impact the academic community and policy formulation and actions by individual communities. A crucial contribution to these discussions is the definition of employee relationships, with research aimed at

clarifying workers' intentions to settle in, work for the long term, or short term. These definitions could support general research and analyses and serve as benchmarks for localized studies that can form the basis for regional strategy development. From a community development perspective, it is essential to consider each situation individually and work from the ground up. It is reasonable to assume that community development initiatives aimed at enhancing the integration of new residents should be tailored according to whether each person plans to stay permanently, for a longer period, or just temporarily. The primary focus should be on examining population development from within each community and fostering support for positive community development.

CONCLUSION

This dissertation has explored the dynamic interplay between tourism development and demographic changes within Iceland's rural municipalities. The findings indicate that there is a nuanced relationship between tourism growth and demographic alterations. Areas with high tourism activity tend to experience more profound demographic changes, characterized by increased population turnover and a younger demographic profile due to the influx of younger foreign nationals attracted by employment opportunities in tourism. However, the study also highlights the challenges posed by these changes, particularly the potential for increased population instability and social strain in tourism-centric communities. The presence of a transient workforce can complicate community cohesion and long-term planning efforts, underscoring the need for policies that promote sustainable community integration.

Moving forward, it is imperative for policymakers and stakeholders to consider these findings in their strategic planning. Efforts should be directed towards creating an inclusive environment that accommodates both the transient and permanent populations. This involves implementing community engagement initiatives that foster integration and stability, ensuring that the benefits of tourism are not

overshadowed by negative demographic impacts. Overall, this research contributes valuable perspectives to the ongoing discussion about sustainable development in tourism-centric areas, providing a foundation for future studies to build upon. It calls for a balanced approach to managing the economic benefits of tourism alongside the demographic and social realities of host communities, aiming for a holistic model of sustainable development.

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APPENDICES

1. TABLE OF MUNICIPALITIES

Municipality	Category	Classification	Proportion of tourism jobs 2023
Árneshreppur	A	Rural areas	14.8%
Ásahreppur	A	Rural areas	17.8%
Bláskógabyggð	A	Rural areas	40.3%
Borgarbyggð	A	Rural areas	16.2%
Eyja- og Miklaholtshreppur	A	Rural areas	20.6%
Fljótsdalshreppur	A	Rural areas	20.0%
Grímsnes- og Grafningshreppur	A	Rural areas	13.9%
Múlaþing	A	Rural areas	14.0%
Mýrdalshreppur	A	Rural areas	60.3%
Rangárþing eystra	A	Rural areas	20.4%
Rangárþing ytra	A	Rural areas	14.4%
Skaftárhreppur	A	Rural areas	49.0%
Sveitarfélagið Hornafjörður	A	Rural areas	36.5%
Sveitarfélagið Stykkishólmur	A	Rural areas	15.2%
Bolungarvíkurkaupstaður	B	Rural areas	4.6%
Dalabyggð	B	Rural areas	6.7%
Fjallabyggð	B	Rural areas	9.8%
Fjarðabyggð	B	Rural areas	3.9%
Grundarfjarðarbær	B	Rural areas	11.3%
Hrunamannahreppur	B	Rural areas	12.5%
Húnabyggð	B	Rural areas	6.4%

Húnaþing vestra	B	Rural areas	11.3%
Ísafjarðarbær	B	Rural areas	7.7%
Kaldrananeshreppur	B	Rural areas	12.9%
Langanesbyggð	B	Rural areas	4.4%
Norðurþing	B	Rural areas	11.5%
Reykhólahreppur	B	Rural areas	4.6%
Skagabyggð	B	Rural areas	0.0%
Skagafjörður	B	Rural areas	7.5%
Skeiða- og Gnúpverjahreppur	B	Rural areas	11.3%
Snæfellsbær	B	Rural areas	11.3%
Strandabyggð	B	Rural areas	6.1%
Súðavíkurhreppur	B	Rural areas	8.0%
Sveitarfélagið Skagaströnd	B	Rural areas	4.2%
Tálknafjarðarhreppur	B	Rural areas	5.2%
Tjörneshreppur	B	Rural areas	7.4%
Vestmannaeyjabær	B	Rural areas	7.8%
Vesturbyggð	B	Rural areas	9.1%
Vopnafjarðarhreppur	B	Rural areas	5.4%
Akraneskaupstaður	C	Influence zone	3.9%
Akureyrarbær	C	Urban area (city)	10.6%
Dalvíkurbyggð	C	Influence zone	7.1%
Eyjafjarðarsveit	C	Influence zone	7.2%
Flóahreppur	C	Influence zone	11.8%
Garðabær	C	Capital area	11.8%
Grindavíkurbær	C	Influence zone	17.6%
Grýtubakkahreppur	C	Influence zone	7.3%

Hafnarfjarðarkaupstaður	C	Capital area	10.8%
Hörgársveit	C	Influence zone	8.1%
Hvalfjarðarsveit	C	Influence zone	6.9%
Hveragerðisbær	C	Influence zone	9.7%
Kjósarhreppur	C	Capital area	7.5%
Kópavogsbær	C	Capital area	10.7%
Mosfellsbær	C	Capital area	8.5%
Reykjanesbær	C	Influence zone	31.1%
Reykjavíkurborg	C	Capital area	12.8%
Seltjarnarnesbær	C	Capital area	12.0%
Skorradalshreppur	C	Influence zone	6.5%
Suðurnesjabær	C	Influence zone	22.2%
Svalbarðsstrandarhreppur	C	Influence zone	10.4%
Sveitarfélagið Árborg	C	Influence zone	10.5%
Sveitarfélagið Ölfus	C	Influence zone	8.7%
Sveitarfélagið Vogar	C	Influence zone	14.4%
Þingeyjarsveit	C	Influence zone	31.1%