

Understanding the Evolution of Regional Economic Development and Tourism Efficiency in China

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By

Tsung Pao Wu

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CHAPTER 1

INTRODUCTION

1.1 Background

In the wake of globalization, the dynamics of regional economic development and tourism have become pivotal components in shaping the trajectory of nations on the global stage. China, with its diverse landscapes, rich cultural heritage, and rapidly growing economy, stands as a paradigmatic case study in this intricate relationship. To delve into the nuanced interplay between regional economic development and tourism efficiency across the 31 diverse regions of China are interesting. By unraveling the complex web that connects economic growth and tourism development, we aim to contribute valuable insights that can inform policy decisions, drive sustainable development, and foster a harmonious balance between economic prosperity and cultural preservation.

China's breathtaking economic ascent over the past few decades has been nothing short of extraordinary. As the world's second-largest economy, the nation has transitioned from an agrarian society to an industrial powerhouse, profoundly impacting the regional landscape. The interconnectedness between economic development and tourism has become increasingly apparent, with tourism emerging as a key driver of growth in many regions. However, the efficiency of this symbiotic relationship is not uniform across the vast expanse of the country. Understanding the evolving patterns is imperative for devising targeted strategies that capitalize on each region's unique strengths.

The significance of this study lies in its potential to unravel the intricate threads that bind regional economic development and tourism efficiency. As China embraces a more diversified and sustainable growth model, the role of tourism as both an economic catalyst and cultural ambassador becomes more pronounced. By discerning the underlying factors that influence the efficiency of this relationship, policymakers can fine-tune their approaches to maximize benefits, fostering inclusive growth and cultural preservation simultaneously. Explore the historical evolution of regional economic development in China and its correlation with tourism efficiency. Identify the key

determinants that influence the efficiency of the relationship between economic development and tourism in different regions. Assess the impact of regional policies and initiatives on fostering a synergistic relationship between economic development and tourism. Propose recommendations for policymakers to enhance the efficiency of the symbiotic relationship between regional economic development and tourism.

This study encompasses an extensive analysis of the economic and tourism development trajectories of China's 31 regions. The research employs a combination of quantitative and qualitative methods, including statistical analysis, case studies, and policy reviews. By leveraging a comprehensive dataset, we aim to capture the multifaceted nature of regional dynamics, considering variables such as GDP growth, employment rates, tourism revenue, cultural heritage preservation, and policy interventions. Drawing upon established theories of regional development and tourism, this study integrates concepts such as the tourism area life cycle, economic base theory, and destination competitiveness. By synthesizing these theories, we seek to develop a robust analytical framework that can effectively capture the evolution and efficiency of the relationship between regional economic development and tourism.

The study is organized into distinct sections to facilitate a systematic exploration of the subject matter. Following this introduction, the literature review will provide a comprehensive overview of existing theories and empirical studies related to regional economic development and tourism efficiency. The methodology section will detail the research design and data analysis techniques. Subsequent sections will present the findings, discuss implications, and conclude with policy recommendations. This study aspires to make a substantial contribution to the existing body of knowledge on the intricate interplay between regional economic development and tourism efficiency. By offering a nuanced understanding of the evolving patterns across China's diverse regions, it provides a valuable resource for academics, policymakers, and practitioners seeking to optimize the benefits of tourism as a catalyst for sustainable regional development.

Tourism has emerged as a powerful force in shaping the economic landscape of nations, and China is no exception. The vast and diverse terrain of China, coupled with its rich cultural heritage, provides a unique canvas for the exploration of the efficiency of tourism development across its 31 regions. This study delves into the intricate tapestry of China's tourism landscape, seeking to understand the factors that influence tourism development efficiency and how these dynamics have evolved over time. From the bustling urban centers to the tranquil rural

landscapes, each region contributes distinct elements to the broader narrative of China's tourism prowess.

China's journey in the realm of tourism is a tale of transformation and growth. In the post-reform era, marked by the opening of China to the global economy in the late 20th century, tourism began to play a pivotal role in the nation's economic development. The government's strategic focus on tourism as a key industry led to significant investments in infrastructure, promotion, and cultural preservation. This laid the foundation for the tourism boom that China experiences today.

The geographical expanse of China encompasses a kaleidoscope of landscapes, from the snow-capped peaks of the Himalayas to the picturesque water towns of the south. This diversity offers a wide array of tourism resources, including natural wonders, historical sites, cultural events, and culinary delights. Each of the 31 regions contributes a unique flavor to this rich tapestry, creating a mosaic of experiences that attracts a diverse range of domestic and international tourists. The economic impacts of tourism development in China are profound and multifaceted. Tourism has become a significant contributor to regional GDP, employment, and foreign exchange earnings. The growth of the tourism sector has spurred the development of related industries such as hospitality, transportation, and entertainment. Moreover, it has acted as a catalyst for urbanization, leading to the modernization of infrastructure in many regions.

Despite the remarkable progress, challenges persist. Uneven development among regions, overreliance on certain iconic destinations, and concerns about environmental sustainability are among the key challenges faced by China's tourism sector. Balancing economic benefits with cultural preservation and environmental conservation poses a delicate task for policymakers. However, these challenges also present opportunities for innovative approaches and sustainable practices that can shape the future trajectory of tourism development. Efforts to assess the efficiency of tourism development require a nuanced understanding of various metrics. Key indicators include the ratio of tourism revenue to investment, the employment generated per tourist, and the sustainability of tourism activities. Additionally, the efficient utilization of cultural and natural resources while minimizing negative impacts on local communities and ecosystems is a critical aspect of evaluating tourism efficiency.

The efficiency of tourism development varies significantly among China's 31 regions. While some regions have successfully leveraged their unique attractions to create sustainable and efficient tourism models, others face challenges related to overdevelopment, inadequate infrastructure, or a lack of effective marketing strategies.

Understanding the factors that contribute to these disparities is essential for formulating targeted policies that address the specific needs of each region. The role of government policies and initiatives cannot be overstated in the context of China's tourism development. The central government has implemented various strategies, including the "Beautiful China" initiative and the development of special tourism zones, to guide and regulate the industry. Examining the effectiveness of these policies in promoting efficient tourism development provides valuable insights into the evolving relationship between the state and the tourism sector.

The advent of technology has revolutionized the tourism industry, shaping how tourists plan, experience, and share their journeys. From online booking platforms to virtual reality-enhanced attractions, technology has become an integral part of the tourism ecosystem. Assessing how regions have embraced and adapted to these technological advancements sheds light on their preparedness for the digital future of tourism.

In conclusion, the efficiency of tourism development across China's 31 regions is a multifaceted and evolving phenomenon. From the early days of opening up to the world to the current era of technological integration, the journey reflects the nation's dynamic approach to harnessing the potential of tourism. This study endeavors to unravel the complexities, challenges, and successes that characterize the tourism development landscape in China. By doing so, it aims to provide a comprehensive understanding that can guide policymakers, stakeholders, and scholars in fostering a sustainable and efficient tourism sector that celebrates the diverse cultural and natural treasures of China's regions.

China's meteoric rise as a global economic powerhouse has been a defining narrative of the 21st century. The diverse economic landscapes across its 31 regions present a fascinating tapestry of development, progress, and challenges. This study embarks on a comprehensive exploration of the economic development efficiency of China's regions, aiming to unravel the intricacies that contribute to the varied trajectories of growth. From the coastal economic hubs to the inland provinces, each region's unique characteristics play a crucial role in shaping the overall economic efficiency of the nation. China's economic journey is marked by significant milestones, notably the initiation of economic reforms in the late 20th century. The shift from a centrally planned economy to a socialist market-oriented system unleashed unprecedented growth potential. Coastal regions, such as Guangdong and Shanghai, were at the forefront of this economic transformation, leveraging their strategic locations and openness to foreign trade.

Despite the overarching narrative of China's economic success, regional disparities are stark. The eastern coastal provinces, benefiting from early economic reforms and foreign investment, have experienced rapid development. In contrast, western and inland regions faced challenges related to geographical remoteness, limited infrastructure, and fewer initial economic opportunities. Bridging these gaps and fostering balanced development remains a priority for China's policymakers.

Economic efficiency is closely tied to the diversification of industries within a region. While manufacturing and export-led growth have been central to China's economic ascent, recent efforts focus on transitioning to a more service-oriented and innovation-driven economy. Examining how regions navigate this shift, diversify their economic bases, and foster entrepreneurship provides critical insights into their long-term economic efficiency. Efficient infrastructure serves as the backbone of economic development. Coastal regions, with well-established transportation networks and ports, have reaped the benefits of global trade. The ambitious Belt and Road Initiative (BRI) further underscores China's commitment to enhancing connectivity, linking its less-developed regions to international markets. Assessing the impact of these infrastructure developments on economic efficiency is integral to understanding regional disparities.

Urbanization has been a key driver of economic development in China. Cities such as Beijing, Shanghai, and Shenzhen have emerged as global economic hubs. Understanding the correlation between urbanization rates, population dynamics, and economic efficiency provides insights into the social and demographic dimensions of regional development. The pursuit of economic efficiency has, at times, come at the cost of environmental sustainability. China faces challenges related to pollution, resource depletion, and ecological degradation. Striking a balance between economic growth and environmental conservation is a critical consideration for regions aiming to achieve sustainable economic development.

The role of government policies in shaping regional economic development cannot be overstated. The Chinese government has implemented a range of policies, including regional development plans, tax incentives, and innovation initiatives, to spur economic growth. Assessing the effectiveness of these policies and understanding how they contribute to or mitigate regional disparities is essential for crafting targeted strategies. China's integration into the global economy has been a driving force behind its economic development. Coastal regions, with their proximity to international markets, have been primary recipients of foreign direct investment (FDI). Examining the role of FDI

in economic efficiency and assessing how regions attract and utilize foreign capital contributes to a holistic understanding of regional development.

In conclusion, the economic development efficiency of China's 31 regions is a dynamic and multifaceted phenomenon shaped by historical legacies, geographical factors, and policy interventions. This study endeavors to unravel the complexities inherent in the diverse economic landscapes, shedding light on the challenges and opportunities that define regional development. By doing so, it seeks to offer valuable insights for policymakers, scholars, and stakeholders aiming to foster inclusive, sustainable, and efficient economic development across China's varied regions.

China's economic prowess and vibrant tourism sector are integral components of the nation's global identity. Examining the dynamic relationship between regional economic development and tourism efficiency across the country's 31 diverse regions unveils a complex interplay of factors that shape the trajectory of these intertwined forces. This study endeavors to unravel the nuanced dynamics, exploring how economic development influences tourism efficiency and vice versa, contributing to a holistic understanding of regional growth and sustainability.

The symbiotic relationship between economic development and tourism efficiency is evident in the reciprocal benefits each brings to the other. Robust economic growth in a region creates a conducive environment for tourism by fostering infrastructure development, enhancing living standards, and creating disposable income for leisure activities. Simultaneously, a flourishing tourism sector injects capital into local economies, generates employment opportunities, and stimulates economic diversification.

The economic underpinnings of a region play a pivotal role in determining the efficiency of its tourism sector. Urban centers with strong industrial bases often attract business travelers, while regions endowed with natural beauty may become tourist hotspots. The economic diversity, innovation ecosystems, and investment climate of a region shape its attractiveness to both domestic and international tourists, influencing the efficiency of tourism development.

China's rich cultural heritage and historical landmarks serve as magnets for tourists, creating a distinctive economic niche for regions endowed with such assets. The efficient utilization and preservation of cultural heritage become integral to tourism development. Conversely, tourism activities contribute to the preservation of cultural sites, fostering a cyclical relationship where economic development and cultural heritage conservation mutually

reinforce each other.

The efficiency of tourism development is intricately linked to the accessibility and quality of infrastructure. Regions with well-developed transportation networks, modern accommodations, and tourist-friendly amenities tend to attract more visitors. Economic development contributes to the improvement of infrastructure, while the revenue generated from tourism can be reinvested to enhance accessibility, creating a positive feedback loop. The integration of innovative technologies, such as augmented reality, virtual reality, and artificial intelligence, into the tourism sector transforms the visitor experience. Regions at the forefront of technological innovation often create more efficient and immersive tourism offerings. Concurrently, the adoption of these technologies enhances a region's image as modern and dynamic, contributing to its economic development.

The dynamic relationship between economic development and tourism efficiency also poses challenges, particularly in the context of environmental sustainability. Unchecked tourism growth can strain natural resources and contribute to environmental degradation. Striking a balance between economic development aspirations, tourism promotion, and environmental conservation becomes imperative for regions seeking long-term sustainability. Government policies play a crucial role in steering the dynamic relationship between economic development and tourism efficiency. Strategic regional planning that aligns economic development goals with sustainable tourism strategies is essential. Effective policies can mitigate negative externalities, foster responsible tourism practices, and ensure that economic benefits are distributed equitably across communities.

The dynamic interplay between economic development and tourism efficiency requires regions to exhibit resilience and adaptability, especially in the face of unforeseen challenges such as global pandemics or economic downturns. Regions that can diversify their economic bases, innovate in tourism offerings, and implement adaptive strategies are better positioned to navigate uncertainties and maintain a balanced relationship between economic development and tourism efficiency.

In conclusion, the dynamic relationship between regional economic development and tourism efficiency in China's 31 regions is a multifaceted interplay of economic, cultural, environmental, and policy factors. Understanding this intricate relationship provides a roadmap for policymakers, local authorities, and stakeholders to foster sustainable development. By recognizing the mutual reinforcement between economic growth and tourism efficiency, regions can capitalize on their unique strengths, address challenges, and cultivate a harmonious

coexistence that propels both economic prosperity and tourism vibrancy.

As we conclude our exploration into the dynamic relationship between regional economic development and tourism efficiency across China's 31 diverse regions, a tapestry of insights emerges, revealing the intricacies and interconnectedness that define the developmental landscape of this global economic giant. This comprehensive study aimed to unravel the complexities inherent in the symbiotic relationship between economic growth and tourism vibrancy, offering a nuanced understanding of the challenges, opportunities, and evolving dynamics that characterize regional development. One of the key takeaways from this exploration is the imperative for regions to adopt a holistic approach to development. The interplay between economic development and tourism efficiency necessitates integrated strategies that transcend sectoral boundaries. Policymakers and regional planners must recognize that fostering economic growth and tourism vibrancy are not mutually exclusive; rather, they are mutually reinforcing aspects of a region's dynamic evolution.

The preservation of cultural heritage emerges as a cornerstone in the sustainable development of regions. As cultural and historical assets contribute significantly to the efficiency of tourism, there is a growing realization that effective preservation strategies are not only a cultural imperative but also an economic one. Regions that strike a delicate balance between showcasing their cultural wealth and ensuring its long-term preservation stand to reap lasting benefits from tourism while safeguarding their unique identities. The infusion of technology into the tourism sector reshapes the visitor experience and underscores the need for regions to embrace innovation. The efficient integration of technologies such as augmented reality, virtual reality, and artificial intelligence amplifies a region's appeal, contributing to both economic development and tourism efficiency. The regions that successfully navigate this technological frontier position themselves as pioneers in the evolving landscape of global tourism.

The dynamic relationship between economic development and tourism efficiency also shines a spotlight on the critical issue of environmental sustainability. As regions strive for economic growth and tourism expansion, the delicate ecosystems that attract visitors must be safeguarded. Sustainable practices, responsible tourism initiatives, and environmental conservation efforts become non-negotiable imperatives for regions aiming to balance economic aspirations with ecological stewardship.

Throughout our exploration, the role of government policies emerged as a pivotal factor shaping the course of regional development. Strategic interventions, inclusive policies, and visionary regional planning are essential for

navigating the intricate relationship between economic development and tourism efficiency. Governments at various levels must align their policies to ensure equitable distribution of benefits, environmental protection, and the cultivation of a resilient and adaptive regional economy. The global landscape is marked by uncertainties, from economic downturns to unforeseen crises such as pandemics. Regions that exhibit resilience and adaptability in the face of challenges stand out. The ability to diversify economic bases, innovate in tourism offerings, and implement adaptive strategies is a testament to a region's preparedness to weather disruptions and maintain a balanced relationship between economic development and tourism efficiency.

A recurring theme in our exploration is the significance of inclusive growth. As regions pursue economic development and tourism efficiency, it is imperative to ensure that the benefits reach all segments of the population. Inclusivity becomes not only a moral imperative but a strategic one, as it contributes to social stability, cultural vibrancy, and the sustained success of the tourism sector. A crucial aspect that permeates our study is the acknowledgment of the uniqueness of each region. The diverse topography, cultural heritage, economic strengths, and challenges render a one-size-fits-all approach ineffective. Policymakers, scholars, and stakeholders must recognize and celebrate this diversity, tailoring strategies to the specific attributes and needs of each region.

In conclusion, our exploration of the dynamic relationship between regional economic development and tourism efficiency in China's 31 regions unveils a complex, evolving, and interconnected tapestry. As we move forward, the insights garnered from this study serve as a compass, guiding regions toward sustainable development, cultural preservation, and economic prosperity. The delicate dance between economic growth and tourism efficiency requires ongoing attention, adaptive strategies, and a commitment to the long-term well-being of both the regions and the nation as a whole. As China continues to shape its destiny on the global stage, the lessons learned from the experiences of its diverse regions serve as beacons illuminating the path toward a harmonious and vibrant future.

In the chapters that follow, we embark on a journey through the economic and cultural landscapes of China's 31 regions, seeking to unravel the complex evolution of regional economic development and tourism efficiency. Through rigorous analysis and insightful interpretation, this study aims to illuminate the path forward for regions to harness the full potential of their unique attributes while ensuring a sustainable and harmonious coexistence between economic progress and cultural heritage preservation.

CHAPTER 2

AN EXAMINATION OF THE IMPACT OF FOREIGN TOURISM REVENUES ON ECONOMIC GROWTH: DATA FROM CHINA'S 31 PRINCIPAL AREAS

Abstract

This research employs a bootstrap panel Granger causality test to explore the causal connection between international tourism receipts and economic growth across China's 31 principal regions from 1995 to 2015. The analysis takes into consideration the dependencies and variations inherent in these diverse regions. The empirical outcomes of the study align with the growth hypothesis for specific regions, including Anhui, Henan, Jiangxi, Jilin, Fujian, Jiangsu, Shandong, Tianjin, Chongqing, Inner Mongolia, Qinghai, Tibet, and Yunnan.

Supporting evidence for the conservation hypothesis is found in the case of Hubei and Hunan, where a reverse relationship is identified. A reciprocal causal relationship is observed in Hebei and Shaanxi, while 14 of the 31 major regions, namely Heilongjiang, Shanxi, Beijing, Guangdong, Hainan, Liaoning, Shanghai, Zhejiang, Gansu, Guangxi, Guizhou, Ningxia, Sichuan, and Xinjiang, exhibit outcomes in line with the neutrality hypothesis.

These empirical findings carry substantial policy implications for the economic strategies of China's major regions. Understanding the varying causal relationships between international tourism receipts and economic growth provides valuable insights for policymakers seeking to tailor their approaches to the specific dynamics of each region. This nuanced understanding contributes to the formulation of targeted policies that can harness the potential of tourism as a catalyst for economic development while considering the unique characteristics and preferences of each region.

Keywords: international tourism receipts, economic growth, China's major regions, dependency and heterogeneity, bootstrap panel Granger causality test

2.1 Introduction

In the contemporary global landscape, the nexus between tourism and economic growth has become a focal point of scholarly inquiry and policy consideration. As nations strive for sustainable development and economic prosperity, the role of tourism, particularly foreign tourism revenues, has gained prominence as a crucial contributor to national and regional economic dynamics. This study embarks on a comprehensive exploration of the intricate relationship between foreign tourism revenues and economic growth, drawing on data from China's 31 principal areas. With its rich cultural heritage, diverse landscapes, and rapid economic transformation, China provides a compelling backdrop for investigating the nuanced interactions between tourism and economic development.

Over the past few decades, the global tourism industry has undergone a transformative evolution, emerging as a powerful driver of economic growth for many nations. China, with its vast and varied topography, historical treasures, and economic prowess, stands as a paradigmatic case for examining the impact of foreign tourism revenues on economic growth. The sheer scale and diversity of China's 31 principal areas offer a unique opportunity to unravel the multifaceted dimensions of this relationship and derive insights that can inform both scholarly discourse and policy formulation. Tourism, once perceived primarily as a leisure activity, has evolved into a multifaceted industry with profound economic implications. Foreign tourism, in particular, has gained prominence as a source of revenue, employment, and cultural exchange. Nations across the globe, including China, have recognized the potential of tourism to stimulate economic growth, diversify revenue streams, and foster international cooperation.

China's economic ascent over the past few decades has been nothing short of remarkable. The nation has transitioned from a primarily agrarian society to the world's second-largest economy. This transformation has been accompanied by rapid urbanization, technological innovation, and a burgeoning middle class, all of which contribute to the dynamic interplay between foreign tourism and economic growth. Understanding the unique economic contexts of China's 31 principal areas is paramount to unraveling the localized impacts of foreign tourism revenues.

The significance of this study lies in its potential to contribute nuanced insights into the interdependence of foreign tourism revenues and economic growth, specifically tailored to the diverse regions of China. As global and regional stakeholders grapple with the challenges of sustainable development, recognizing the role of tourism in

shaping economic trajectories becomes imperative. By focusing on China's principal areas, this study aims to provide a granular understanding that can inform targeted policies, foster inclusive growth, and leverage the potential of tourism as a strategic component of regional development.

What is the influence of international tourism receipts on economic development? How are international tourism receipts related to the link between economic development? This study performs bootstrap panel Granger causality analysis that account for both dependency and heterogeneity across regional time series of international tourism receipts and economic development. It has long been recognized that tourism has an impact on economic activities (e.g., Dwyer et al. 2004; Jin 2011; Khan et al. 1995; Lee and Kwon 1995; Lean and Tang 2010; Nunkoo 2015; Obadiah et al. 2012; Schubert et al. 2011; Tang and Tan 2013; Wu and Wu 2016). Tourism is perceived as increasing overall economic activities, and the increase in those activities is generally considered desirable; namely, the positive impact of tourism on economic activities is frequently described. Also, tourism is recognized to have a positive effect on long-run economic growth through different channels. First, tourism is a type of foreign exchange earner in terms of inbound tourism attracting foreign tourists who consume the products of local markets and businesses, allowing the country to pay for imported capital goods or basic inputs used in the production process. Second, it motivates governments and firms to invest in the new infrastructure and business environment, fostering the ability of local firms to compete with firms in other tourist countries. Third, it is an important factor in the diffusion of knowledge, stimulating learning and the accumulation of human capital. Also, it has become a common developmental focus in many countries (see Andriotis 2002; Fagance 1999; Lin and Liu 2000; Schubert et al. 2011). Fourth, it contributes to the employment generation and income increase. Finally, it can result in the positive exploitation of economies of scales in national firms. Tourism development has been considered a positive contributor to economic growth. However, there is an unverified question of whether tourism development actually causes economic growth or, alternatively, whether economic expansion substantially contributes to growth in tourism. This study represents our attempt to revisit this issue using the data from China's 31 major regions. As we know, the Asia-Pacific Region has become a rapidly growing tourism destination and has even surpassed the US to become the world's second largest tourist-receiving region since 2001 (Lee and Chien 2008). It should be noted that not all Asian regions and countries which have shared economic growth are equal even though there has generally been an upward trend in international tourism in recent years. Tourism has been promoted in many Asian countries

as part of the solution to their economic problems. Also, it has been seen as an important source of foreign exchange earnings, the employment of domestic labor and a contributor to economic growth (Lee and Chien 2008).

Oh (2005) indicates that the recognition of a causal relationship between international tourism and economic growth will have important implications for the development of different tourism marketing and policy decisions in Asian countries. For instance, if tourism development is expected to contribute to economic growth, tourism-led economic growth would be practical. If the results indicate that the opposite causal direction, economic development may be necessary for the expansion in the tourism industry. Next, if the causative process is bi-directional, and tourism growth and economic growth have a reciprocal causal relationship, then efforts in both regions would be beneficial. Finally, if there is no causal relationship between tourism growth and economic development, the enthusiastic promotion of tourism may not be as effective as what tourism managers and decision-makers currently believe.

Why is the experience of Chinese tourism industry of interest to us? First, in recent years it has witnessed strong growth of international tourist arrivals in the Asia-Pacific Region, specifically in China. In 2014, China ranked third in inbound tourism arrivals and fourth in inbound tourism expenditure reported by the United Nations World Tourism Organization (UNWTO) (2015). Given the importance of inbound tourism in China, it is necessary to estimate its potential contribution to China's economy. Second, China's regional economies have become widely diversified owing to various socio-economic, economic geographical and political factors. Given the diversified structure of regional economies within which the Chinese tourism industry operates, it serves as an ideal case study to test whether international tourism receipts have the same impact on economic growth in regions that significantly differ in their degrees of tourism dependence. Third, most previous studies have concentrated on one specific region or country. Because of different methods and data periods, it is difficult to compare the results and findings of those studies. As mentioned above, this study adopts panel data of multiple provinces in order to fill in the gap. We employ recently developed panel causality methods to offer compatible findings in China's 31 major regions.

We investigate the causal relationship between international tourism receipts and economic expansion in China's 31 major regions using the regionally specific causality test developed by Kónya (2006) to determine the dynamic and causal relationship between growth in the tourism sector and the overall economic growth. This procedure will undoubtedly allow regionally specific effects to be more readily uncovered. Through a bootstrap

panel Granger causality test, we examine whether there is any causal relationship between growth in the tourism sector and economic growth through a sample of China's 31 major regions over the period from 1995 to 2015. This is the first study to employ a bootstrap panel Granger causality test to study the relationship between international tourism receipts and economic growth in China's 31 major regions. This study is expected to fill the gap in the current literature on growth in the tourism sector and economic growth.

2.2 Literature Review

The intricate relationship between foreign tourism revenues and economic growth has been a subject of extensive scholarly exploration, reflecting the profound transformations occurring in the global economic landscape. As we delve into the specific context of China's 31 principal areas, it is imperative to examine the existing body of literature to understand the theoretical underpinnings, empirical findings, and key debates surrounding this multifaceted relationship.

At the core of the literature on foreign tourism and economic growth lies the Tourism-Led Growth Hypothesis (TLGH). This hypothesis posits that tourism can act as a catalyst for economic development by attracting foreign exchange earnings, generating employment opportunities, and fostering infrastructure development. A seminal study by Balaguer and Cantavella-Jordá (2002) found supporting evidence for the TLGH in a global context, providing a theoretical foundation for exploring this relationship in the specific context of China's 31 principal areas.

China, with its vast geographical diversity and cultural richness, has been a focal point for researchers investigating the impact of tourism on economic growth. Li, Song, and Witt (2005) conducted a comprehensive analysis of the Chinese provinces, emphasizing the role of tourism in contributing to regional economic development. Their study highlighted the varying impacts across provinces, stressing the need for nuanced examinations that account for regional disparities.

The Economic Base Theory provides a lens through which to analyze the regional dynamics of foreign tourism and economic growth. According to this theory, the economic structure of a region influences its vulnerability or resilience to external shocks, such as fluctuations in tourism demand (Fletcher, 2014). In the context of China's 31 principal areas, understanding the economic base and diversification strategies becomes crucial for interpreting the heterogeneous impacts of foreign tourism revenues.

China's rich cultural heritage, spanning millennia, has been a significant driver of tourism. Empirical studies, such as that by Huang and Min (2002), emphasize the role of cultural attractions in stimulating tourism demand and contributing to economic growth. However, questions arise regarding the sustainability of leveraging cultural heritage for tourism and the potential impacts on the preservation of historical assets.

Employment generation is a key aspect of the tourism-economic growth nexus. Zhang and Xu (2007) investigated the employment effects of tourism in China, finding that tourism has a positive impact on job creation, particularly in service-related industries. This dimension is of particular relevance when examining the social implications of foreign tourism revenues in China's 31 principal areas, where employment patterns may vary significantly.

The surge in tourism, while a boon for economic growth, has raised concerns about its environmental sustainability. China's principal areas, with their diverse ecosystems and natural wonders, face the challenge of balancing tourism-induced economic benefits with the need for ecological preservation. Liu and Lu (2012) delved into the environmental impacts of tourism in China, urging for sustainable tourism practices to ensure long-term harmony between economic growth and environmental conservation.

Government policies play a pivotal role in shaping the impacts of foreign tourism on economic growth. Studies by Li and Blake (2019) highlight the significance of effective policy frameworks in maximizing the positive outcomes of tourism while mitigating negative externalities. Examining the policy landscape in China's 31 principal areas is crucial for understanding how regional authorities navigate the complexities of tourism development.

The advent of technology has revolutionized the tourism industry, influencing traveler behavior, destination marketing, and the overall tourism experience. Information and communication technologies (ICTs), including social media and online platforms, have transformed how tourists plan and share their journeys. The implications of these technological advancements on the relationship between foreign tourism revenues and economic growth warrant exploration in the context of China's dynamic principal areas.

Over the past decades, a vast amount of literature has investigated the relationship between tourism and economic growth (Arslanturk et al. 2011; Khan et al. 1995; Kim et al. 2006; Lee and Kwon 1995; Wu et al. 2017). The policy-makers desiring to create the wealth in a country are concerned not only the overall industrial development but also the appropriate resource. Base on the past literature, tourism-led growth means that tourism

plays an active role in an economy. By attracting more tourists to consume in a region, tourism causes catalytic reactions and spillover effects in economic growth. Because of tourism development, more jobs have been created and many people engaging in tourism activities have more income to consume. Furthermore, tourism income tax increases government income which affords government expenditure. Both of consumer consumption and government expenditure create the multiplier effect in economic growth. In sum, the tourism industry has a positive effect on economic growth (Khan et al. 1995; Lee and Kwon 1995; Oh 2005; Wu and Wu 2016; Wu et al. 2017). Balaguer and Cantavella-Jorda (2002) examine the relationship between tourism and long-term economic growth in Spain. The results indicate that tourism influences the economic growth. Gunduz and Hatemi (2005) find one-way causality from the tourism industry to economic growth. Dritsakis (2004), Durbarry (2004) and Oh (2005) support the aforementioned results.

On the contrary, economic development positively drives tourism growth in a country. According to Engle's Law, as income rises, the proportion of income focuses on food falls, even if actual expenditure on food rises. More income urges people to increase the percentage of consumption in entertainment, cultural and education. Oh (2005) finds that because of strong economic growth in South Korea, many foreign businessmen travel and work in South Korea. Based on the inductive logic, Oh (2005) argues that this result supports the economic growth which influences the tourism industry. The research finding of Lanza et al. (2003) also support this perspective. Oh (2005) indicates that when the ratio of GDP in tourism is low, more probability will exist within the economic-driven tourism growth.

Past studies also have found that the reciprocal relationship exists between tourism and economic growth. Dritsakis (2004) and Durbarry (2004) find a reciprocal relationship in Greece and Mauritius. Kim et al. (2006) show that there is a long-run equilibrium between the tourism and economic growth in Taiwan. Tourism and economic growth reciprocally affect each other. Chen and Chiou-Wei (2009) apply the Taiwan and South Korea data, finding that Taiwan is tourism-led economic growth while South Korea is a reciprocal relationship between tourism and economic growth. Furthermore, Arslanturk et al. (2011) assert that there is no relationship between tourism and economic growth. In addition, they employed the Granger causality test from 1963 to 2006, indicating that the relationship between tourism and economic growth did not exist. Riddestaat et al. (2014) investigate the relationship between tourism and economic growth in Aruba by using time series data from the period of 1972 to 2011. The