New perspectives on socio-economic impacts of tourism:

A study on the distributive effects of tourism and events on regional employment and income

Kai Kronenberg

Main supervisor: Professor Matthias Fuchs
Co-supervisor: Professor Maria Lexhagen

Faculty of Human Sciences
Thesis for Doctoral degree in Tourism Studies
Mid Sweden University
Östersund, 2022-11-10
New perspectives on socio-economic impacts of tourism:

A study on the distributive effects of tourism and events on regional employment and income

© Kai Kronenberg, 2022
Printed by Mid Sweden University, Sundsvall
ISSN: 1652-893X
ISBN: 978-91-89341-74-6
Cover photo: Restaurant Keller, Stadt Nürtingen

Faculty of Human Sciences
Mid Sweden University, Kunskapens väg 8, 831 25 Östersund, Sweden
Phone: +46 (0)10 142 80 00

Mid Sweden University Doctoral Thesis 373
To Miyoko Tanaka
Acknowledgements

This thesis would have never been possible without the continuous supervision of Matthias Fuchs. I therefore would like to express my sincere gratitude to you for inspiring, supporting, and supervising me in our jours fixes throughout the Ph.D. period. You provided me with continuous motivation and trust meetings in finalizing this thesis. Thank you, Maria Lexhagen, for always had time for discussions and guided me through this academic journey. Thank you, Peter Fredman and Dimitri Ioannides for thoroughly reading my thesis and giving me constructive feedback. I would like to acknowledge my colleagues at the EJT and ETour environment: Andrew, Daniel, Tatiana, Cecilia, Kristina, Sandra, Lusine, Solène, Olga, Parisa, Rosemarie, Robert, Daniel Laven, Sandra Wall Reinius for making working at Miun an inspirational working environment. Special thanks to my friend Martin, you couldn’t be a better colleague to work with the WCR project. Thank you, Michael, for always having time for reflecting on my thoughts and ideas. And of course, thank you my fellow doctoral students Axel, Kristin, Jack, Jennie, Beatrice, Marie, Eugenio, Jonathan, Anders for exchanging experiences and challenges as being a PhD student. Thank you Märit for your infinite administrative support. Without you, the department would not function 😊.

Various people have helped and supported me in various forms for realizing this research, who I would like to thank for: Gunnar from Nordregio; Marten, Nicole and Mariette from SCB; Jokke from ÅSUB; Hans from Resurs; Anne from JHT; Tony from the University of the West of England Bristol; Timo from the University of Jyväskylä; and of course, all the interview participants that I met for the data collection.

Finally, I would like to express my love to my wife Ylva and our dog Laika, my siblings Kenta and Colette with Daniel and Paul, and my parents Naomi and Jürgen for caring and supporting me during the entire period. Tack så mycket!

*Kai Kronenberg*

*Östersund, September 2022*
# Table of contents

Abstract ......................................................................................................................... xi

Sammanfattning på svenska ........................................................................................ xiii

List of Figures ............................................................................................................... xv

List of Tables .............................................................................................................. xvii

1 Introduction ............................................................................................................... 1
  1.1 Background and problem statement ................................................................. 1
  1.2 Aim of the thesis and research questions ......................................................... 7
  1.3 Thesis outline ................................................................................................... 10

2 Theoretical background on the socio-economic impacts of tourism ...... 13
  2.1 Impacts of economic tourism and key theoretical concepts ......................... 14
    2.1.1 Positive and negative economic impacts ................................................. 14
    2.1.2 Institutionalisation of the economic impacts of tourism ...................... 17
    2.1.3 Estimating the economic impacts of tourism and events ................. 19
  2.2 Critical reflections on contemporary economic development theory .......... 25
  2.3 Regional socio-economic development .......................................................... 31
  2.4 New monetary measures ............................................................................... 35
    2.4.1 Leakage effects and sectoral linkages .................................................... 37
    2.4.2 Inequalities and income distribution ..................................................... 40
  2.5 Institutions and justice in the context of employment ................................. 43
    2.5.1 Role of institutions ............................................................................... 43
    2.5.2 Perspectives on justice and capability ................................................... 48
    2.5.3 Institutions in the context of work and labour ...................................... 52
  2.6 Summary ......................................................................................................... 55

3 Literature review on the socio-economic impacts of tourism and events .................................................................................................................. 57
  3.1 The impact of tourism on income distribution .............................................. 58
  3.2 Tourism and justice ....................................................................................... 63
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3 Socio-economic impact of events</td>
<td>67</td>
</tr>
<tr>
<td><strong>4 Research design</strong></td>
<td>71</td>
</tr>
<tr>
<td>4.1 An interpretivist perspective of the impacts of tourism</td>
<td>71</td>
</tr>
<tr>
<td>4.2 Study area: The Jämtland Härjedalen tourism and event region</td>
<td>74</td>
</tr>
<tr>
<td>4.3 A mixed-methods approach to studying the socio-economic impacts of</td>
<td>78</td>
</tr>
<tr>
<td>tourism and events</td>
<td></td>
</tr>
<tr>
<td>4.4 Quantitative model building: A macro-level perspective on new</td>
<td>81</td>
</tr>
<tr>
<td>monetary measures</td>
<td></td>
</tr>
<tr>
<td>4.4.1 The regional input-output model for Jämtland Härjedalen</td>
<td>82</td>
</tr>
<tr>
<td>4.4.2 Disaggregation of employment and income and their distributional</td>
<td>93</td>
</tr>
<tr>
<td>effects</td>
<td></td>
</tr>
<tr>
<td>4.4.3 Data collection</td>
<td>99</td>
</tr>
<tr>
<td>4.5 Qualitative meso-level perspectives on the regional socio-economic</td>
<td>105</td>
</tr>
<tr>
<td>impacts of tourism</td>
<td></td>
</tr>
<tr>
<td>4.5.1 Regional tourism institutions</td>
<td>106</td>
</tr>
<tr>
<td>4.5.2 World Championships Region 2019</td>
<td>109</td>
</tr>
<tr>
<td><strong>5 Results and analysis</strong></td>
<td>111</td>
</tr>
<tr>
<td>5.1 Development of the regional tourism industry structure:</td>
<td>112</td>
</tr>
<tr>
<td>interlinkages and sectoral dependencies</td>
<td></td>
</tr>
<tr>
<td>5.1.1 Inter-sectoral linkages and multipliers</td>
<td>113</td>
</tr>
<tr>
<td>5.1.2 Regional imports</td>
<td>120</td>
</tr>
<tr>
<td>5.2 Economic impacts of tourism and events on the regional economy</td>
<td>123</td>
</tr>
<tr>
<td>5.3 Tourism employment and regional socio-economic development</td>
<td>127</td>
</tr>
<tr>
<td>5.4 Distributional effects of tourism on employment, wages and salaries</td>
<td>136</td>
</tr>
<tr>
<td>5.5 Employment capabilities in the regional tourism industry</td>
<td>146</td>
</tr>
<tr>
<td>5.6 Secure and stable employment and income for tourism workers</td>
<td>151</td>
</tr>
<tr>
<td>5.7 Institutional initiatives to leverage the impact of regional</td>
<td>157</td>
</tr>
<tr>
<td>sporting events</td>
<td></td>
</tr>
<tr>
<td>5.7.1 Inbound tourism and the relevance of major regional sporting</td>
<td>157</td>
</tr>
<tr>
<td>events</td>
<td></td>
</tr>
<tr>
<td>5.7.2 Institutional initiatives to leverage the socio-economic impacts</td>
<td>161</td>
</tr>
<tr>
<td>of regional sporting events</td>
<td></td>
</tr>
<tr>
<td>5.7.3 Establishing cooperative relationships</td>
<td>162</td>
</tr>
<tr>
<td>5.7.4 Deficits in legacy planning</td>
<td>165</td>
</tr>
<tr>
<td><strong>6 Discussion</strong></td>
<td>167</td>
</tr>
</tbody>
</table>
6.1 The structural dynamics of the regional tourism industry ............................................. 169
6.2 An occupational perspective of regional employment in tourism .................................. 174
6.3 Regional income effects for the tourism workforce ......................................................... 180
6.4 Research contributions and implications ....................................................................... 184

7 Limitations and future research ......................................................................................... 187

8 References .......................................................................................................................... 191
Abstract

In the broad field of the economic impact of tourism and events, most studies seek to understand regional tourism development by only focusing on a growth-oriented perspective and highly aggregated indicators, such as increases in GDP. Such a narrow view, however, systematically overlooks and disregards the negative socio-economic consequences that accompany economic growth, such as income inequality and precarious working conditions. Thus, understanding tourism development should include broader perspectives related to the social aspects of regional economic activities, and particularly their implications for the tourism workforce. This thesis demonstrates how current approaches for estimating the economic impacts of tourism and events can be extended towards a more distributive perspective that encompasses issues that are most relevant for the tourism workforce. The aim is to better understand the role of tourism and sport events in the socio-economic development of the tourist and event region of Jämtland Härjedalen, Sweden from 2008 to 2017. In this thesis, tourism encompasses general events, particularly large-scale sporting events, as events are considered key elements for regional tourism development. A mixed-methods approach was employed to estimate the socio-economic impact of tourism and events. Growth-oriented indicators were supplemented with leakage effects, and disaggregated as well as distributive perspectives in tourism employment and income. These macro-level findings were enriched with institutional meso-level perspectives of the regional tourism and events industry. The results indicate that tourism demand continuously grew in the region and thus played a significant social and economic role for the regional population. However, the tourism industry’s ability to generate employment and income continually weakened over time. The negative outcomes of growth related to an increase in income inequality and a growing share of low income occupations with precarious working conditions. Thus, continuous institutional efforts that foster conditions for tourism development and regional events are crucial for guiding tourism development in a more socio-economically sustainable direction.
förutsättningar för turismutveckling och regionala evenemang är därför av avgörande betydelse för att turismutvecklingen ska styras i en mer socioekonomiskt hållbar riktning.
List of Figures

Figure 1: Lorenz curve and Gini coefficient ................................................................. 98
Figure 2: Direct and indirect impacts of tourism in each sector ................................. 124
Figure 3: Direct and indirect impacts of WCR2019 .................................................. 126
Figure 4: Impact of tourism on regional employment ............................................... 128
Figure 5: Annual percentage changes in employment effects ................................. 129
Figure 6: Impact of tourism on regional income ......................................................... 130
Figure 7: Annual percentage changes in income effects ............................................. 131
Figure 8: Income inequality across tourism sectors in 2017 ...................................... 140
Figure 9: Changes in Gini coefficients across tourism sectors ................................. 141
Figure 10: Percentage changes in Gini coefficients across tourism sectors .... 141
Figure 11: Changes in income for top and bottom earners ...................................... 142
Figure 12: Correlation between income inequality and union membership rates ................................................................. 144
Figure 13: Occupations with and without higher education requirements ....... 147
Figure 14: Employment and income effects for cleaners ....................................... 153
Figure 15: Employment and income effects for kitchen and restaurant assistants ...................................................................................................................... 154
Figure 16: Events' influence on visitors' travel decisions ....................................... 159
List of Tables

Table 1 Simplified input-output transaction table .................................................. 84
Table 2: Technology matrix A ................................................................................... 85
Table 3: Tourism sectors in the input-output table for Jämtland Härjedalen .... 100
Table 4: Allocation of activities to sectors ............................................................... 102
Table 5: Sampling of the visitor surveys ................................................................. 104
Table 6: Summary interviews with tourism institutions .......................................... 107
Table 7: Participants in the WCR2019 focus group .............................................. 109
Table 8: Regional output multiplier per sector, 2008–2017 ................................. 113
Table 9: Annual percentage changes in regional output multipliers ..................... 114
Table 10: Regional employment multiplier per sector, 2008-2017 ....................... 116
Table 11: Annual percentage changes of regional employment multiplier ............ 116
Table 12: Regional income multipliers per sector, 2008–2017 .............................. 118
Table 13: Annual percentage changes in regional income multipliers ................. 119
Table 14: Regional import shares per sector, 2008-2017 ....................................... 121
Table 15: Annual percentage changes of regional import shares ......................... 121
Table 16: WCR2019's impact on employment and income ................................... 134
Table 17: Impacts on occupations in the accommodation and food sector 2017 .......................................................... 137
1 Introduction
1.1 Background and problem statement

Studies on the impacts of tourism are grouped into social, cultural, economic and environmental domains; traditionally, each of these categories constitutes a separate field of research (Jennings, 2009). Accordingly, studies on the economic impacts of tourism typically focus on the effects of tourists’ monetary expenditures at the local, regional or national level (Stabler et al., 2009). Particularly when many visitors come from outside the region, tourism is considered an export industry and thus plays a significant role in the region’s economic development (Dedkova and Gudkov, 2019).

Studying the economic significance of various types of tourist activities (including all events with strong attractiveness to tourists) for regional economies and societies is not a straightforward endeavour because there is no universal tourism product consumed by tourists (Alegre and Cladera, 2010; Sak et al., 2022). Rather, tourist activities encompass monetary demand for various fragmented products and services, such as transport, groceries, dining and activities. Furthermore, this demand can also differ between types of tourists, types of events and the availability of regional supply (Stabler et al., 2009). Consequently, tourism is not viewed as a standalone industry in a national statistical bureau’s official accounts, and the industry’s economic size (in terms of production output, employment, etc.) cannot be identified by analysing balance sheets and industry reports. Instead, tourists’ demand-side consumption must be examined, which can provide an estimate of the share of each tourism sector’s sales (Hara, 2008). This approach is institutionalised and recommended by the United Nations (UN) through official guidelines for tourism satellite accounts (TSAs) to ensure a comparative base for collecting and interpreting tourism statistics (Frenț and Frechtling, 2022).
However, the TSA framework only reflects direct economic effects in various tourism sub-sectors based on tourists’ consumption of products and services (Dwyer, 2013). In Sweden, these effects are annually reported in official tourism statistics published by Tillväxtverket (2021), which describe the tourism industry’s contributions to national GDP and employment. These statistics are derived from several data sources, including overnight statistics, domestic travel surveys and border surveys for international visitors (Tillväxtverket, 2021). Statistics are usually disaggregated by type of tourism (e.g. leisure, business, domestic, international, etc.), and sector, such as transport (e.g. taxis, local transport, etc.), retail (groceries, souvenirs, etc.) and accommodation (e.g. hotels, hostels, camping, etc.).

However, conducting studies on the economic impacts of tourism differs from the analysis of tourist expenditure statistics. Impact studies require accurate data on tourist expenditures as the main input for more or less sophisticated economic models, which enable various kinds of economic impact indicators to be compiled for the host economy (Dwyer, 2013). Typically, these effects relate to the indirect impacts of tourism spending being re-spent in other sectors and induced impacts, which result from additional spending through an increase in household income (Stabler et al., 2009). Traditionally, the two main challenges faced by researchers in this field are collecting comprehensive and comparative tourist expenditure data on the demand side and improving the accuracy of corresponding impacts by developing and refining economic models on the supply side (Comerio and Strozzi, 2019).

Typically, economic impact studies aim to quantify impacts to answer ‘how much’ questions. Results are usually reported for various economic indicators, including sales, production output, employment, income or taxes for entire industries or countries (Mazumder et al., 2012). Thus, economic impacts reflect a macro-level perspective (typically at the national level), which means that the impacts of tourism are treated as aggregated totals (e.g. total sales per sector or total employment). Although some tourism studies have
distinguished impacts at a more detailed level (e.g. Lacher and Oh, 2012), there are not any universally accepted and established approaches to capturing the regional and disaggregated economic impacts of tourism (Klijs et al., 2012).

Nevertheless, economic impact models that employ aggregated perspectives are legitimate, as they capture various rounds of monetary flows from tourist expenditures throughout an economy. This allows the estimation of the effects of tourism on, among other aspects, employment and income in the population. However, those who assign and conduct economic impact studies that go beyond the collection of basic tourism statistics tend to follow a development agenda in favour of the tourism industry, whereby findings support decision-making processes that advocate for additional investment (Crompton, 2006; Sharpley and Telfer, 2014). Often, due to methodological bias, economic impact studies report highly positive and overly optimistic results, including growth in sales, employment and income from increased tourism investments or planned events (Crompton, 1995; Mazumder et al., 2012). This follows the contemporary view of many nations to define and assess economic development mainly through aggregated indicators, such as growth rates for an economy’s GDP (Söderbaum, 2017).

The academics’ concern in improving the accuracy and applicability of models and the practitioner’s attitude that follows growth-oriented agenda implies a rather narrow view on the economic analyses of tourism as a multifaceted social phenomenon (Dwyer, 2020; Elsner, 2007). According to a neoliberal and highly market-oriented development agenda, market growth in terms of increases in sales and production output also implies increasing employment levels and income for the local population (Stynes and White, 2006). In fact, contemporary approaches to economic impact measurements serve as tools for obtaining empirical evidence on how tourism contributes to economic growth.

Growth itself or individual indicators of growth (e.g. GDP) only mirror an overall increase in monetary activities, but they are not equivalent
to good and prosperous development, particularly for most of the local population that work in the tourism industry (Everingham and Chassagne, 2020; Higgins-Desbiolles, 2020; Komlos, 2018). Despite advancements in information and communication technologies (ICTs) that help to automate routine tasks, the creation of tourism products and services requires a labour-intensive industry accompanied by human interactions and service encounters (Ivanov, 2020; Solnet et al., 2016). Thus, narrow perspectives in traditional approaches to the economic impacts of tourism only provide insights on the quantity of tourism employment and income, thereby answering ‘how much’ questions.

In particular, standard approaches do not consider the distribution of employment and income (Alam and Paramati, 2016) or the qualities of tourism occupations, including working conditions, career opportunities or job security (Baum, 2015). Thus, no universal approach has been established yet to study the impacts of tourism in a more disaggregated manner and at sub-national levels, such as the regional level or at particular destinations. Thus, studying economic impacts and aiming to understand the significance of tourism for regional development requires more than simply examining growth indicators at the macro level. Economies should be viewed as complex socio-communicative systems that encompass interdependent social rules, norms and practices. The macro level perspective merely represents the aggregated consequences of decisions and choices made by individuals and groups (i.e. the micro level) who act within these systems of rules and institutions (i.e. the meso level; Dopfer et al. 2004; Elsner, 2007, 2017). For instance, Zuo and Huang (2020) considered institutional changes when estimating the tourism industry’s contributions to economic growth. The authors indicated that ‘future research on tourism’s economic contribution should take more meso- or micro-level perspectives’ (p. 475) to not necessarily shift but rather complement purely macro-level economic impact analysis on tourism with meso- and micro-level insights.
Particularly when material needs are satisfied in advanced economies, studies have shown that continuous focus on growth can lead to socio-economic inequalities (Bartolini and Sarracino, 2014), followed by negative social and economic consequences for the regional population, which cannot attain a decent way of living (e.g. due to monetary shortcomings) according to their needs (Coburn, 2000; Jaumotte and Osorio, 2015; Sen, 2012; Voitchovsky, 2005; Wilkinson and Picket, 2011). Standard approaches to measuring the impacts of economic tourism usually de-emphasise the negative socio-economic costs associated with economic growth (Lee, 2009a). While such consequences are technically possible to measure, macroeconomic indicators say little to nothing about socio-economic dynamics and the institutional realities underlying such developments (Elsner, 2007). The latter refer various policies, norms and social practices related to the tourism workforce (Baum et al., 2016). However, most studies on the economic impacts of tourism neglect the socio-economic dimensions of these impacts: 'Most of these studies assume a relatively static and functional economy where economic growth is the highest priority […]. Only a few academic studies […] explore the dynamic socio-economic impacts of tourism' (Alam and Paramati, 2016, p. 112). Particularly, institutional efforts that are directed in favour of labour markets, such as strengthening the role of labour unions, demonstrate the capacity to improve socio-economic sustainability (Zafirovski, 2005).

As a normative aim, social and economic activities such as tourism should contribute to a regional development agenda that ensures a decent living for the local population (Ulrich, 2010). Therefore, a critical assessment of the economic impacts of tourism that considers both macroeconomic indicators and institutional realities and dynamics can reveal how tourism contributes to socio-economic sustainability (Baum et al., 2016). Generating and maintaining just, fair

1 In fact, there have been several debates among regional Swedish tourism institutions about the possibility of investigating new approaches to not only measuring the total economic contributions of tourism but also societal benefits for members of the regional population who are engaged in the tourism industry (Filipovski et al., 2016; Higgins-Desbiolles et al., 2019; Kronenberg, et al., 2014). Please refer to the methodology chapter 4 for a further discussion of this topic.
and long-term employment that supports a decent living and wealth for all stakeholders in the tourism workforce is vital to ensure prosperity for tourism-dependent regions (Baum, 2018; Feigl, 2017; Sen, 2012). After all, members of the local population comprise the regionally employed tourism workforce and invite, welcome, receive and host visitors. Therefore, they deserve to benefit socially and economically from visitors and should not be harmed by tourism and its practices (Higgins-Desbiolles et al., 2019).

In summary, many authors, analysts and decision makers perceive economic impact models as valuable for economic analysis, as they represent one way to comprehensively estimate the economic effects of dynamic and economically fragmented phenomena such as tourism. However, standard approaches do not provide a broader understanding of the economic impact of tourism that goes beyond mainstream economic concepts and measurement principles. Accordingly, an increasing number of studies in the literature have argued that a sole focus on purely economic indicators (i.e. arrival numbers, sales, employment and income) in assessments of regional development is insufficient and demonstrates a one-sided view. A broader perspective of regional development has been advocated as part of social and sustainability-driven development agendas, which consider more 'multi-dimensional thinking' (Söderbaum, 2016, p.1) rather than purely growth-oriented indicators (Moulaert and Nussbaumer, 2005; Bartolini and Sarracino, 2014; Ulrich, 2010).

Therefore, studying the economic aspects of travel and tourism, including their economic impacts, should shift from less insightful perspectives based on aggregated growth indicators to more sustainable and just perspectives of socio-economic development that centre the tourism workforce (Baum et al., 2020; Wang, et al., 2022; Jones and Walmsley, 2021).
1.2 Aim of the thesis and research questions

Given that the tourism and event sector is a complex, fragmented and demand-driven phenomenon, its socio-economic impacts are not always reliably understood and immediately measurable (Sak et al., 2022; Stabler et al., 2009). Efforts have been made to accurately measure the economic size of the tourism industry with respect to primary and secondary effects with specific modelling tools. However, standard models on the economic impacts of tourism tend to be restricted to macro-level analysis, which emphasises growth-oriented indicators based on assumptions derived from neoclassical economic theory. Thus, they neglect important social components that are crucial for a region’s prosperity (Moulaert and Nussbaumer, 2005). In fact, tourism-related economic impact models are frequently used to support private and public investment decisions (Crompton 1995; Crompton et al. 2016). However, their sole focus on growth- and efficiency-oriented indicators risks the oversight of important socio-economic insights that are relevant to the regional workforce. Consequently, when decision makers only rely on aggregated indicators that aim to promote pure growth, there is a high risk that socio-economic grievances in a region are systematically overlooked in decisions that aim to develop the regional tourism industry (Lee and Kang, 1998). Thus, a growing number of critical perspectives on growth-oriented paradigms have highlighted the need for multi-dimensional assessments of regional tourism development that address both economic and socio-economic effects related to precarious working conditions or income inequality (Söderbaum, 2016). The latter is particularly important, as tourism is a labour-intensive industry that employs a large share of workers with little or no education in low-income positions (Baum, 2015).

Against this background, the main purpose of the current thesis is to address and move beyond the limited and narrow perspective in conventional approaches to the economic impacts of tourism, which mainly focus on aggregated and growth-oriented indicators, such as GDP (Egan and Nield, 2003; Loveridge, 2004; Zuo and Huang, 2020).
This requires a different epistemological standpoint that is distinct from objective positivistic views of knowledge creation and moves towards a more interpretive perspective in which knowledge creation on social activities is not solely based on objectively measurable facts but also considers the social, cultural and political context (Risjord, 2014).

Accordingly, I extend the approach to quantitatively estimating the economic impacts of tourism and consider socio-economic aspects that transcend traditional growth-oriented indicators. I aimed to better understand the impact of tourism on the socio-economic setting of the selected study area: Jämtland Härjedalen, a Swedish region where tourism and events play a key role in regional development. Specifically, the proposed extension of an economic impact approach encompasses regional output, employment, employment distribution, income, income distribution and the share of imported products and services. The magnitude and relevance of these impacts depend on the formation of the regional industry, which was operationalised through indicators related to the regional *industry structure* (i.e. the relationship between the economic sectors inside and outside the region). The strength of these relationships (or linkages) indicated the tourism industry’s ability to further create region-wide output, employment or income (Miller and Blair, 2009). Typically, analyses on the economic impacts of tourism are used to investigate the impact of various types of tourist activities, including types of travellers or events. My thesis focuses on analysing the socio-economic impacts of tourism at a regional level over the 10-year period between 2008 and 2017, including a case study of large-scale sporting events as a main component in the regional tourism development strategy. Thus, the main research objective was formulated as follows:

*How can traditional models on the economic impacts of tourism be extended to better understand the role of tourism and events in regional socio-economic development?*

The aim of my thesis is not to invent an entirely new approach for measuring the regional socio-economic impacts of tourism. Rather, it
is to extend established approaches to the economic impacts of tourism to shift focus towards socio-economically relevant aspects that help to better understand the effects of tourism and events on the regional tourism workforce (Jones and Walmsley, 2021; Sak et al., 2022). The main research objective was translated into more concrete research questions. The first research question refers to the general formation of the tourism industry. This was operationalised by investigating industry structure, which refers to the degree of interlinkage between various industry sectors and their import rates. Accordingly, the first research question relates to the regional economy’s capacity to contribute to regional socio-economic development:

- **RQ1:** To what extent does the regional tourism industry structure contribute to socio-economic development?

The socio-economic approach further implies a more disaggregated perspective of the tourism and event workforce (Baum et al., 2016; Higgins-Desbiolles, 2018a). This relates to the disaggregation of employment impacts and their distribution across various tourism *occupations* (Daniels et al., 2004). Thus, the second research question aims to identify the socio-economic impact of tourism and events on particular occupational areas in the tourism industry and was worded as follows:

- **RQ2:** What is the socio-economic impact of tourism and events on the regional tourism workforce, and how do they affect various tourism occupations?

Furthermore, including so-called ‘new monetary measures’ in economic analyses extended the GDP-centric perspective of growth and acknowledged how monetary costs and benefits are distributed among tourism stakeholders (Dwyer, 2020; Bartolini and Sarracino, 2014; Senik, 2005; Söderbaum and Brown, 2010). Thus, the third research question focuses on *income inequality* among occupations in the tourism industry (Lee, 2009a):
• **RQ3:** What is the socio-economic impact of tourism and events on regional income, and how is income in the tourism industry distributed across various occupations?

To better understand the tourism industry's contributions to regional development, I examined its socio-economic impacts over a 10-year period (between 2008 and 2017).

To address the fact that economic impact approaches largely adopt a macro-level perspective (Comerio and Strozzi, 2019), I also studied socio-economic impacts in this thesis by including meso-level perspectives (Dopfer, et al., 2004; Elsner, 2007). Meso-level perspectives refer to an economic system's institutional level, including rules, norms and socially accepted practices (ibid., 2004). Hence, the institutional perspective provided valuable insights about meta-topics related to rules, norms and practices that the regional tourism industry and tourism workforce were concerned about (Creswell and Clark, 2017). The aim was to demonstrate how macroeconomic findings obtained from extended economic impact analyses can be better understood and interpreted through the lens of topics addressed by the representatives of major tourism institutions, such as the regional gastronomy association, destination management organisations, labour unions in tourism and gastronomy and the public employment service.

**1.3 Thesis outline**

This thesis is structured in seven parts. After introducing the research problem and the aim of the thesis in this first chapter, the second chapter outlines key theoretical concepts and ideas relevant to the thesis. More specifically, it introduces the main theoretical concepts related to the impacts of economic tourism and illustrates them with pioneering works from the tourism and event literature. Then, I
critically reflect on the theoretical assumptions underlying traditional approaches to the economic impacts of tourism. By highlighting the limitations of these theoretical assumptions, I mainly relate to broad ideas and concepts on socio-economic regional development borrowed from the literature. These include new monetary measures, institutional economics and justice theories. The second chapter concludes with a short summary of the main theoretical concepts.

In the third chapter, I review the tourism and event impact literature and refer to the particular socio-economic concepts outlined in Chapter 2. It focuses on the relationship between tourism and income distribution and justice.

In the fourth chapter, I present the study design, including my epistemological positioning, the context of the selected region and the reasoning for using a mixed methods approach. Subsequently, I discuss the quantitative data collection process in greater detail, including approaches to regionalise and extend the tourism economic impact model to obtain new monetary measures. Accordingly, the use of qualitative data collection was intended to complement the quantitative findings. These included interviews and focus group discussions with institutional representatives from the field of regional tourism and events.

Chapter 5 presents the analysis of results from the mixed-methods study. First, it illustrates the supply-side perspective on the development of the regional tourism industry structure and its interlinkages and leakages in terms of regional imports. Then, I discuss the actual impacts of tourism and events on the region, including regional production output, employment and income. The next section focuses on the disaggregation of employment and income effects and demonstrates how employment impacts were distributed among tourism workers in various occupational areas. Then, the chapter deepens the discussion of employment in the tourism industry by covering the capability approach (a concept to understand what constitutes justice) and specific socio-economic aspects, such as employment stability and security and income-level analyses for
various occupations in regional tourism sectors. The final part of Chapter 5 focuses on the event case study and demonstrates how large-scale sporting events and institutional efforts can contribute to regional socio-economic development.

Chapter 6 concludes the thesis with further discussions of the results, followed by research contribution and implications,

In Chapter 7, I elaborate on various limitations of the study and provide suggestions for future research in the field of the economic and socio-economic impacts of tourism and events.
2 Theoretical background on the socio-economic impacts of tourism

In this chapter, I discuss the theoretical foundations of the study, which focuses on the economic and socio-economic impacts of tourism and events.

First, I introduce the general field of studies on the economic impacts of tourism and review the main literature that contributed to its establishment as an academic domain. It is important to bear in mind that the key theoretical concepts in this field relate to the application of both general tourism activities and event-based impacts. Therefore, discussions of tourism often also include touristic events (Daniels, 2004; Hara, 2008). Section 2.2 focuses on a more critical discussion of contemporary, growth-oriented economic development theories, which is the predominant paradigm in traditional approaches to the economic impacts of tourism. Accordingly, I elaborate on prevailing assumptions and limitations (Egan and Nield, 2003). Based on the identified shortcomings of contemporary economic development theories, section 2.3 elaborates on the literature on socio-economic perspectives for regional development. Then, section 2.4 introduces alternative measures (i.e. new monetary measures) at the macro level of analysis that can be considered to complement growth-oriented indicators. These include perspectives on leakage effects and income distribution (Söderbaum and Brown, 2010). Section 2.5 further establishes socio-economic perspectives in this thesis by introducing theoretical concepts related to the institutional (i.e. meso) level (Baum et al., 2016; Elsner, 2007; Mellon and Bramwell, 2018), including justice in the context of the labour market (Sen, 2012; Möller, 2014), and ideas of what constitutes ‘good’ work (Gheaus and Herzog, 2016; Solnet et al., 2016; Winchenbach et al., 2019). Finally, section 2.6 summarises the discussed literature.
It is worth noting that *socio-economics* is a broad field without many clearly demarcated theories (Hollingsworth and Müller, 2008). It reflects on theoretical aspects of various institutional and socio-economic frameworks rather than elaborating a single, overarching theory. As Hollingsworth and Müller (2008) observed, ‘While socio-economics has had limited success in the area of theory construction, it has considerable potential to adapt to the rapidly developing new methods, models, concepts and other tools’ (p. 399). Therefore, within the broad field of socio-economics, I focus on theoretical concepts and ideas of socio-economic development that are relevant to the problem statement of this thesis.

### 2.1 Impacts of economic tourism and key theoretical concepts

The field of tourism and its economic impacts is mainly defined by its methodology, including various economic models applied to tourism. The theoretical foundations of most models explicitly or implicitly relate to neoclassical economic theory, which is discussed later in section 2.2. Thus, to understand the concept of economic impact, I first introduce the main methodological elements of the economic impacts of tourism and how to demarcate this field from other areas in the domain of tourism economics.

#### 2.1.1 Positive and negative economic impacts

The economic impacts of tourist activities can broadly be categorised as positive or negative (Icoz and Icoz, 2019). Research on tourism and its economic impacts often discusses positive economic impacts and focuses on methodological advancements in measuring these impacts.
However, it is also important to address the negative economic impacts of tourist activities (Archer et al., 2005; De Cuello, 2001). Foremost financial leakage effects occur when income from tourism in the form of profits, wages and salaries flow out of the regional economy. This usually occurs because of foreign investment and ownership, imports and the employment of foreign-based workers (Supradist, 2004). Thus, the tourism industry’s contributions to regional development are hampered if large shares of tourism earnings do not remain in the regional economy (Stabler et al., 2009).

Moreover, the regional economy’s overdependence on tourism can also have negative socio-economic consequences for the local population. Tourism is sensitive to political changes, which can easily lead to fluctuations in tourism demand; in turn, these may lead to large losses in tourism employment and income (Stabler et al., 2009). Tourist activities can also have inflationary effects on the prices of products and services in the region, particularly in the peak season (Vanhove, 2005). As a negative economic consequence, the local population is forced to pay these higher prices. In particular, this relates to increasing rents for real estate, which forces the local population to move out of traditional neighbourhoods; this phenomenon is commonly known as tourism-driven gentrification (Cocola-Gant, 2018). The negative tourism-related economic impacts of events in general and sporting events in particular mostly consist of crowding-out effects (Schwark, 2016). Crowding-out effects typically relate to the monetary effects that occur when private consumption declines in relation to the staging of events (Preuss, 2011). In the context of tourism, these include regular visitors who avoid visiting the destination due to the event taking place or local inhabitants who leave the region to avoid the event (Kronenberg et al., 2016; Schwark, 2016). Moreover, significant public spending on infrastructure and public services (i.e. communication, safety or coordination) may constitute a financial burden for the host region (Schwark, 2016).

2 I provide a more detailed discussion of leakage effects in the upcoming sections.
As already highlighted, traditional studies on the economic impacts of tourism are embedded in the growth-oriented paradigm. Thus, the typical motivation for studying the economic impacts of tourism is the predominant notion that the financial inflow of new money or the redistribution of existing money towards tourism always has the potential to bring positive economic and socio-economic benefits to the regional and national population (Icoz and Icoz, 2019). In this regard, the economic impacts of tourism are estimated based on tourists' initial monetary expenditures in the area under study (ibid, 2019). Revenues from tourists and the magnitude of their impacts on the regional and national economy depend on the source of earnings. Revenues from tourists coming from outside the region or nation are considered ‘injections of foreign money’ into the regional economy (Stabler et al., 2009). These earnings are categorised as exports, which contribute to a positive balance of payments (Smith, 2014; Vanhove, 2005).

Revenues from goods and services sold to tourists translate into sales and profits for local companies (Baaijens, et al., 2010). Due to the sector’s labour intensiveness (i.e. in terms of labour per output ratio) compared to other traditional industries and the large share of occupations with relatively low barriers to entry (Baum, 2015), the most significant positive impact is the creation of employment and income for the regional population. The downside, however, is that low barriers to entry usually correlate with low-skilled and low-wage occupations that do not require much education, which is applicable to a large proportion of tourism workers (Filipovski et al., 2016; Frechtling, 1994; Holloway and Humphreys, 2019; Kronenberg and Fuchs, 2021a). Positive impacts from tourism can also occur in the form of additional investments and developments in regional and local infrastructure that improve the local population’s living standards, such as water and sewage systems and communication or public transport infrastructure (Blake et al., 2008; Icoz and Icoz, 2019).


2.1.2 Institutionalisation of the economic impacts of tourism

The reason why national accounts do not consider particular tourism sectors is that the economic or monetary size of tourism activities must be estimated based on demand-side consumption patterns (Hara, 2008). However, tourists also consume a variety of products and services that non-tourists (i.e. the regional and local population) also demand. This complicates the measurement of the economic impacts of tourism beyond a straightforward analysis of balance sheets for industry sectors listed in national accounts (Dwyer, 2013).

Given the challenge of measuring tourism as an economic activity due to the fragmentation of tourism sectors (including monetary transactions), this process has been standardised by various international organisations such as the United Nations World Tourism Organization (UNWTO), the Organisation for Economic Co-operation and Development (OECD) and the European Commission’s Eurostat. The aim was to establish a common approach to comparatively measuring the tourism industry’s share of GDP and employment using a standardised framework known as the TSA (Frechtling, 2010; Frenț and Frechtling, 2022; UNWTO, 2010a, 2010b). These institutional efforts to establish a standardised methodology for measuring the economic size of tourism seek to motivate member countries and regions to regularly collect and report official tourism statistics (Frechtling, 2010). In Sweden, official tourism statistics, which form the Swedish TSA, are annually reported by Tillväxtverket, the Swedish agency for economic and regional growth (Tillväxtverket, 2021). These statistics describe the tourism industry’s contributions to national GDP and employment (Karlsdóttir et al., 2021) and are compiled from several sources of data, including accommodation statistics, domestic travel surveys and border surveys for international visitors (Tillväxtverket 2021). The statistics are usually disaggregated for by types of tourists (e.g. leisure or business travellers) and industry sectors, such as transport (e.g. local transport, taxi, etc.), retail trade (e.g.
groceries, souvenirs, etc.) or accommodation (hotels, guesthouses, camping, etc.; Smeral, 2015).

However, official tourism statistics only reflect gross sales of businesses in various tourism sub-sectors or tourists' gross direct economic contributions (Stynes, 1999). By contrast, the net effects of tourist spending consist of the amount of money that remains in the economy after subtracting eventual imports and other costs that occur outside of the region under study. These net effects are equivalent to the direct impacts of tourism (Hara, 2008). Therefore, the impacts are only considered as net changes in economic indicators, such as production output, taxes, employment and income associated with increasing tourism demand.

The direct impacts of tourism further generate monetary transactions throughout the economy due to interlinkages between sectors (Stabler et al., 2009). Notably, these include the indirect impacts that occur when receipts from tourism are further re-spent by one sector in other sectors. Hence, initial spending from tourists flows throughout the broader economy. Furthermore, a third round of transactions triggered by tourist spending are so-called induced impacts. These refer to employees' wages and salaries earned through initial tourist expenditures, which translate into regional consumption by households. However, this round of impacts requires assumptions about (e.g. fixed) consumption rates; therefore, estimates can become vague and inaccurate (Miller and Blair, 2009; Stabler et al., 2009). As a result of the complexity of comprehensively measuring total economic impacts (including direct, indirect and induced impacts), global tourism institutions have further emphasised the need to establish a common comparative methodology when assessing the economic impacts of tourism (Dwyer, 2013).

Since tourism economic impacts are distinct and clearly measurable, its methodology has strong utilisation potential for both tourism practitioners and policymakers in the public sector (Icoz and Icoz, 2019). The institutionalisation of standard economic impact approaches led to their implementation becoming a pragmatic and
straightforward task. Nevertheless, the underlying assumptions and limitations of these methods should be transparent and clear to reliably draw conclusions from estimates (Frechtling, 2013). Otherwise, those who conduct and/or commission economic impact studies risk utilising (or even misusing) these tools for their own agenda (Crompton, 2006). Unsurprisingly, approaches to the economic impacts of tourism have even been applied for commercial purposes, including consulting services to support policymakers and investors’ decision making (ibid., 2006). Notably, some authors have argued that uncritical and biased applications of tourism multipliers can lead to overestimations when the assumptions and limitations of these models are not sufficiently and transparently communicated and considered (Egan and Nield, 2003; Loveridge, 2004; Kronenberg et al., 2018).

2.1.3 Estimating the economic impacts of tourism and events

Studying the economic impacts of tourism remains a challenging task. The complexity of data requirements and the comprehensive measurement of several rounds of tourism impacts are issues for economic modelling (Dwyer, 2013). In fact, this research area falls within the sub-discipline of tourism economics, in which concepts of economic impact modelling are applied in the context of tourism (Comerio and Strozzi, 2019). Measuring these impacts implies different methodologies, including econometric methods (Loveridge, 2004). Econometric approaches estimate impacts based on statistical techniques, with continuous developments to improve the accuracy and 'truthlikeness' of these impacts (Niiniluoto, 2019). However,

---

3 In particular, local and regional models that were not readily available, such as Impact Analysis for Planning (IMPLAN), were initially developed as planning tools by the U.S. Forest Service and the University of Minnesota. However, they were then established as independent corporations to commercialise the database for consulting purposes (Minnesota Implan Group, 2021).
Econometric methods do not consider inter-sectoral linkages and the monetary flow of tourist expenditures in terms of indirect and induced impacts. Therefore, the lion's share of academic research on the economic impacts of tourism has historically employed the same basic methodology that considers these important inter-sectoral linkages and multipliers and addresses several rounds of transactions between different sectors of the economy (Comario and Strozzi, 2019). The aim of linkage-based methods is to highlight interdependencies between sectors in the regional economy by indicating how tourist expenditures generate business transactions, employment and income not only for typical tourism sectors such as accommodation and retail (i.e. direct impacts) but also other, non-tourism-related industries such as manufacturing and production (i.e. indirect and induced impacts; Klijs et al., 2012).

In accordance with the growth-oriented focus of neoclassical economic theory, these linkage-based approaches can be used to quantify the total economic impacts of tourism by comprehensively capturing the re-spending of initial tourist expenditures through economic *multipliers* (Archer, 1973; Fletcher and Archer, 1991). The concept of multipliers refers to the idea that one unit of demand in a particular sector has an additional multiplying effect on other areas of the regional economy (Stabler et al., 2009). Multipliers have a long history in economic theory and exist in various forms; for instance, the Keynesian multiplier captures the impact of inflows of tourist expenditures on the income of companies and the regional population, which in turn leads to increases in consumption and saving rates (Schaffer, 2020). More complex multipliers, such as input-output (IO) approaches, build on Keynesian economic systems and incorporate the production of intermediary goods and services (Crompton, et al., 2016; Gnos and Rochon, 2008; Klijs et al., 2012). Notably, multipliers are also numerical indicators that represent the degree of interlinkages between sectors of the economy (Miller and Blair, 2009).

In tourism research, multipliers have been conceptualised and applied since the late 1960s (Mazumder et al., 2012), including the seminal

Various types of economic multipliers were applied in the abovementioned early tourism works. Particularly, the use of inter-sectoral multipliers derived from IO models allowed tourism researchers to emphasise the relationship between the tourism industry and other sectors of the economy (Fletcher and Archer, 1991). Specifically, IO models are derived from IO tables, detailed transaction matrices in which columns and rows reflect the purchasing and selling behaviour of regional sectors. The creation of IO tables requires a large amount of supply-side production data that express the inter-relationships between economic sectors in terms of their purchasing and selling behaviour. Due to the complexity of data requirements, the IO tables of many countries are typically only updated every four to five years and their compilation mainly remains at a highly aggregated geographic level (usually the national level) or focuses on distinct and definable spatial areas, such as island destinations (Pratt, 2015). Although IO models have received substantial criticism due to their underlying assumptions (Dwyer, et al., 2004), they remain to this day a powerful technique for comprehensively estimating and indicating

For a more detailed methodological discussion of the underlying assumptions and limitations of IO models and other economic impact approaches, please refer to the methodology section in chapter 4.
The magnitude of tourism and events’ economic impacts (Artal-Tur et al., 2019; Klijs et al., 2012; Tohmo, 2018; Wood and Meng, 2020).

The popularity of IO models quickly led to their domination in the field of the economic impacts of tourism and events, which is evidenced by numerous recent publications that focus on the sub-national and regional levels (Artal-Tur et al., 2020; Hodur and Leistritz, 2007; Mazumder et al., 2012; Wood and Meng, 2020). These include studies on the impact of tourism on production output, employment and income in central Finland (Tohmo, 2018); the economic significance of the hospitality sector in Texas (Kim and Kim, 2015); the impact of cruise ship tourism on Cortega, Spain (Artal-Tur et al., 2019); the impact of tourism on protected areas of Brazil (do Val Simardi Beraldo Souza et al., 2019); the impact of a sporting event on the income of the regional population in Mecklenburg County, North Carolina, USA (Daniels et al., 2004); the economic impact of folk music festivals on the economy in the Keski-Pohjanmaa region in Finland (Tohmo, 2005); and the impact of the 2018 Pyeongchang Winter Olympics on the economy in South Korea (Wood and Meng, 2020). Very recent studies have even assessed the usefulness of regional IO models for evaluating the carbon footprint of tourism, thus contributing to tourism’s contribution to the development of environmentally sustainable destinations (Cadarso et al., 2022; Li et al., 2019; Sun et al., 2020).

In the field of tourism, economic impact models have continuously been developed and validated by addressing aspects of modelling, behaviour and predictive power to improve their accuracy (Klijs et al. 2012; Niiniluoto, 2019). In particular, underlying assumptions in basic IO models have been criticised and motivated economists and tourism researchers to extend and further develop them (Dwyer et al., 2003, 2004). Critics have suggested adjusting basic IO models to address some of their major limitations. For instance, Wanhill (1988) and Fletcher (1989) introduced capacity constraints in impact estimations, and West and Gamage (2001) developed a non-linear IO model for the state of Victoria in Australia.
Conceptually, the most significant extensions of IO models were introduced through social account matrices (SAMs). The latter share the same methodological assumptions (and limitations) as IO models. While IO models mainly focus on intermediate transactions between the productive sectors of the economy, SAMs incorporate other aspects of the economic system, including factors of production (i.e. land, labour and capital) and governmental institutions and types of households (Hara, 2008). In this way, SAMs provide a more comprehensive model of the economy and have the capacity to address socio-economically relevant issues, such as the impact of various economic activities on factors of production or more nuanced and distributive perspectives on the impact of tourism on households with different income levels (Blake, 2008; Loveridge, 2004).

However, a major challenge for tourism researchers is the development of region-specific SAM models (Klijs et al., 2012; Kuhar et al., 2009; Wood and Meng, 2020). More concretely, integrating transactions between additional actors in the economic system requires data that are not readily available from official statistical agencies. Thus, SAMs in tourism studies are not usually comparable, as they consist of mostly ad hoc and context-specific models and no standardised approach exists (Kuhar et al., 2009). Tourism and event impact studies that employ SAMs were conducted, for instance, by Blake (2008), who investigated income distribution among households in East Africa; Njoya (2021), who studied the effects of Covid-19 on poverty; Pedauga et al. (2020), who investigated the socio-economic impact of four categories of sport tourism events; Romero et al. (2020), who elaborated on the relevance of tourism promotion policies impacting the regional economy; Saayman and Rossouw (2010), who estimated the economic value of an international jazz festival in Cape Town; and Tiku et al. (2022), who employed a SAM to identify the income distribution from tourism in the province of West Papua in Indonesia.5

5 In Chapter 3, I provide a more detailed review of studies that refer to socio-economically relevant issues, including tourism studies that incorporate SAMs.
Another substantial extension of IO and SAM models consists of computable general equilibrium (CGE) models, which have appeared in tourism research since the late 1990s (e.g. Zhou et al., 1997). In CGE models, SAMs are used as main data input, and are extended by simultaneously applying a set of equations to estimate the impact of tourism. The CGE model considers price changes, dynamic resource allocation and other effects of initial tourism demand. Thus, they address many limitations of IO/SAM models, such as failure to consider economies of scales or resource limitations. To incorporate these rather complex modelling processes, CGE models refer to behavioural assumptions about various economic actors based on neoclassical economic theory (Burfisher 2017). Although CGE models on the economic impacts of tourism are now considered state-of-the-art (Comerio and Strozzi, 2019; Dwyer, 2013; Inchausti-Sintes and Voltes-Dorta, 2020), they are rarely applicable at the sub-national level. This is because the mechanisms mainly reflect economy-wide effects, such as tourism-related policy decisions. Among the first to apply CGE in tourism research, Zhou et al. (1997) studied the impact of tourism on the Hawaiian economy and identified the effects of resource allocation through CGE models. In particular, works by Dwyer (2015), Dwyer et al. (2000, 2003, 2004, 2007), Blake (2000), Blake et al., (2001, 2006, 2007, 2008), Pratt (2015), Pratt and Alizadeh (2018), Mahadeva et al. (2017) and Sugiyarto et al. (2003) further contributed to establishing the use of CGE models in tourism research at both the national and regional levels. More recently, CGE models have also been employed at the regional level, such as to study the effects of tourism moratoria in the Canary Islands (Inchausti-Sintes and Voltes-Dorta, 2020).

In summary, the literature on the economic impacts of tourism and events is dominated by linkage-based approaches, with IO models

---

6 Behavioural assumptions consider responses to economic 'shocks'. These shocks relate to various exogenous factors, such as changes in taxation, subsidies, technology and tourism demand. In contrast to IO models, which focus on intermediate transactions, CGE models allow for non-recursive feedback effects between economic sectors (André et al., 2010, Dwyer et al., 2004).
being the most prominent approach (Comario and Strozzi, 2019). However, SAM and CGE models notably rely on the basic IO structure (Burfisher, 2017). A feature that all of these economic impact approaches have in common is that their results focus on growth-oriented and purely monetary indicators. Although these impact models also incorporate socio-economic factors such as employment and income, their level of analysis remains at a highly aggregated level. Thus, the common perspective of tourism and its economic impacts and regional development is based on contemporary growth-oriented economic development theories (Egan and Nield, 2003). However, the latter have a rather narrow view of regional economic development and incorporate assumptions that do not provide an in-depth understanding of the economy defined as a social activity, thereby neglecting important socio-economic considerations (Lee, 2009b; Fuchs, 2022). In the next section, I discuss some of these limitations.

2.2 Critical reflections on contemporary economic development theory

Research on the economic impacts of tourism generally aims to measure the contributions of tourism and its related activities to economic growth as accurately as possible (Icoz and Icoz, 2019). Comario and Strozzi (2019) conducted a literature review on tourism and its economic impacts and identified three main themes under which studies on the economic impacts of tourism could be categorised. Two out of three clusters concerned the relationship between tourism and economic growth. By far, most studies in the literature used the same methodology: employing impact models based on inter-sectoral linkages. Other, less common approaches applied various types of econometric methods. Notably, all standard methodologies estimated the tourism industry's contributions to economic growth on a one-shot, annual basis by highlighting aggregated numbers for various sectors in the national or regional economy. However, these aggregated effects
typically only considered a few macroeconomic indicators, such as production output, taxes, employment and income (Mazumder et al. 2012).

This growth-oriented and aggregated perspective can be explained by the underlying theoretical embeddedness of economic impact models (Egan and Nield, 2003; Lee and Kang, 1998). Contemporary theoretical perspectives in economics (Komlos, 2012) and management science (Ghoshal, 2005) are dominated by growth-oriented economic mainstream theories, such as neoclassical economic theory. Key concepts in neoclassical economic theory include economic multipliers and behavioural assumptions about rational economic actors (Burfisher 2017; Partridge and Rickman, 2010; Söderbaum, 2016). The influence of prominent advocates of these theories (i.e. 20th-century economists with a strong neoliberal orientation, such as Friedrich August von Hayek and Milton Friedman) remains evident in planning and management practices in both the private and public sectors. In line with these perspectives, the field of tourism and its economic impacts has been heavily influenced by these mainstream economic theories and concepts from a methodological perspective (Egan and Nield, 2003).

Embedded in the broader domain of regional economic development theories, reviews and discussions of studies on the economic impacts of tourism demonstrated that the most popular and established approaches were particularly influenced by growth-oriented convergence theories (Comario and Strozzi, 2019; Dawkins, 2003; Komlos, 2012). Convergence theories postulate that development is defined and best mirrored by economic growth in terms of GDP and per capita income (Dawkins, 2003). Accordingly, convergence refers to the concept that less developed regions or economic sectors grow more rapidly than more developed regions. At some point, fast-growing but less developed regions eventually ‘catch up’ and converge with more developed regions. Studies on the economic impacts of tourism that report tourism impacts as aggregated totals in terms of production output have provided empirical evidence of this growth paradigm
Convergence theories share the notion that regional economic development is monetarily driven in terms of growing GDP and per capita income, and largely disregard the possible negative outcomes of economic growth (Dwyer, 2020; Ulrich, 2010).

A predominant convergence theory is neoclassical economic theory (Dawkins, 2003). Like other economic theories that refer to the axioms of rationality, neoclassical economics aim to describe the economy and predict economic activities through simplified assumptions about human behaviour (Niiniluoto, 2019). Accordingly, the economy is modelled based on the notion of limited resources, which are represented by the factors of production: land, labour and capital. The allocation of these limited resources occurs through price mechanisms, which eventually settle in a market equilibrium in which supply meets demand (Pike et al., 2017). The term 'market equilibrium' is an analogy from the field of natural sciences, as neoclassical economists assume that the economy functions similarly as physical phenomena in a mechanistic way (Brodbeck, 2001a). Actors in the economy, such as individuals and firms, are assumed to behave ‘rationally’ by pursuing their self-interest. Based on preferences and available resources, the primary aim of individuals is to maximise utility and that of firms is to maximise profit (i.e. neoclassical behavioural assumptions follow the allegory of Homo economicus). To maximise utility or profit, neoclassical economic theory assumes that there is free access to information that is relevant for rational decision makers (i.e. market efficiency hypothesis). Accordingly, individual workers provide their labour power in exchange for income. Thus, the supply of labour is assumed to be 'elastic' to a certain degree, which implies that workers mainly change workplace depending on the attractiveness of wages and salaries. The higher the elasticity, the more likely workers are to move to a workplace that offers better earning opportunities. Thus, a low labour supply elasticity requires large increases in wages and salaries to induce the worker to move. The worker's individual utility is mainly determined by the expected income earned. In fact, neoclassical labour market theory assumes that workers to move to a new workplace
based on perfect mobility. This omits other factors that influence workers’ mobility, such as social relations or workplace satisfaction. Similarly, firms are assumed to choose locations with the highest profitability and low costs for factors of production (Pike et al., 2017).

However, theories in social science are never perfect and complete, as they simplify the complexities of social reality (Bunge, 1967; Risjord, 2014). Niiniluoto (1993) stated that simplifications may be introduced at the expense of ‘truthlikeness’. In other words, the higher the degree of simplification and abstraction, the lower the theory’s truthlikeness. He further indicated that a certain degree of simplification is necessary, as simplification also corresponds to manageability. However, large degrees of simplification, abstraction and manageability is at the expense of approaching the social ‘truth’ through realistic models of the regional economy. Theories and models should aim to strike a balance between simplicity and manageability, as well as accuracy. In fact, oversimplifications of the economic system, with extreme assumptions about individuals and firms’ rationality, have raised various critiques for being unrealistic, and hence neither able to satisfactorily explain human behaviour nor predict economic crises (Sen, 1977; Brodbeck 2001a, 2001b, 2011; Ghoshal, 2005; Dobusch and Kapeller, 2009; Ulrich, 2010; Elsner, 2007, 2012, 2017; Komlos, 2012; von Egan-Krieger, 2014; Söderbaum, 2016; Fuchs et al., 2021, Fuchs, 2022).

For instance, the social isolation of *Homo economicus* implies that the societal and ethical aspects that guide social behaviour, such as social rules and bonds, are completely absent from neoclassical economic theories (Ghoshal, 2005). Komlos’s (2012) critique of neoclassical economy states that ‘society does not exist in blackboard economics, only individuals who hardly interact with one another’ (p. 44). The Nobel Prize-winning economist Amartya Sen (1977) criticised the absence of morality by challenging the economic sciences’ axiomatic assumptions with empirical observations from controlled experiments. Although the experiments were originally designed to provide evidence that participants act in their self-interest (in support of neoclassical theory), they behaved altruistically and selflessly in most
instances (ibid., 1977). Ghoshal (2005) highlighted that mainstream economic theory acknowledges 'deviations from rationality in human behaviour' (p. 82). However, instead of recognising and acknowledging aspects beyond self-interest or profit maximisation, researchers have argued that not the theory is false in appropriately explaining human behaviour. Rather, not pursuing utility and profit maximisation were labelled as 'foolishness', and participants failed by behaving irrationally (Dobusch and Kapeller, 2009).

If behaviour is driven by self-interest without interacting with one's social surroundings, some sort of social isolation is implied for the individual. The absurdity of the assumption about pure self-interest is evidenced by the fact that all economic actors are embedded in a certain social environment in which social rules, norms and moral standards guide and frame social and economic behaviour (Ghoshal, 2005; Brodbeck, 2011; Fuchs et al., 2021). Similarly, the concept of utility is an untenable and vague concept; it mainly refers to physical goods or services that can be ranked or measured by utility. Again, societal and normative goals, such as justice, well-being or interpersonal relationships, can hardly be related to the concept of utility (Neumann and Morgenstern, 2004). Thus, profit maximisation reduces firms' orientation to pure monetary interests and omits other societal factors (Ghoshal, 2005). The growth-oriented perspective (operationalised by the growth of GDP and per capita income) and the assumption of utility or profit maximisation further imply the mindset that pursuing more of something is always better. In turn, this implies the absence of saturation (Dierksmeier and Pirson, 2010). Thus, there is no natural limit to the products or services that an individual is capable of consuming. That is, the consuming individual can never be satisfied in a sustainable manner, thus ignoring the notion of sustainability (Hanauer and Beinhocker, 2014; Koppl et al., 2015). In this sense, the pursuit of (short-term) utility maximisation neglects other human aims that relate to well-being, social relationships or livelihoods in sustainable environments (Neumann and Morgenstern, 2004).
Most importantly, the profit- and growth-oriented paradigm implies and even fosters the unequal distribution of economic benefits, whereby mainly the rich become richer if the economy reaches a certain stage of economic development (Ferreira, 1999). Considerations related to distribution, justice and fairness are rarely addressed in standard economic theory and practice (Ulrich, 2004, 2010). In fact, policy-driven redistribution of income (e.g. higher tax categories for high-income groups) in favour of the poor is not recommended by neoclassical theory, although this would contribute to a socio-economic situation in which everyone can live a decent life and thus also improve the social well-being of the entire population (Clary, 2009; Ferreira, 1999; Wilkinson and Picket, 2011). From a utility maximisation perspective, re-distributional measures imply disadvantages for those groups with the highest potential to drive investments and thus economic growth. Therefore, policies that foster a more equitable distribution of income are not considered normatively desirable in neoliberal development terms (von Egan-Krieger, 2014).

All of the explicit and implicit assumptions inherent in mainstream economic theories shape and influence the reasoning and behaviour of those who study and work with these theories, methods and tools (von Egan-Krieger, 2014; Nelson, 2016). According to a study by Frank, Gilovich and Regan (1993), students in traditional economic programmes behave progressively less cooperatively the more they advance in their studies. Given that these students later work as managers, investors, politicians, journalists, etc., they will probably apply their ‘economic’ knowledge about the ‘mechanistic’ laws of the economy in their everyday work (Brodbeck, 2001b, 2011). Similar consequences are evident in models on the economic impacts of tourism. These models are justified through established economic theories and aim to support economic development programmes or policy decision making by focusing on GDP growth. Often, models on the economic impacts of tourism are constructed to evaluate or predict the outcomes of tourism activities or periodic events, which neglects a critical discussion of the limitations of the model’s theoretical
foundations. This applies to even 'advanced' models of the economic impacts of tourism, which incorporate more detailed assumptions in neoclassical economic theory, such as particular price mechanisms or substitution effects (Burfisher, 2017).

However, there are alternative approaches, perspectives and ideas that address more social and human aspects of regional development. To better understand these concepts, the next section introduces the notion of socio-economic development.

2.3 Regional socio-economic development

The previous section introduced major theoretical and conceptual ideas underlying traditional approaches to the economic impacts of tourism. The aggregated growth-oriented perspective on economic development is evident in the literature on the economic impacts of tourism. One way to address these limited perspectives of development is to refer to concepts and ideas from socio-economic development theories. The term 'socio-economic development' is very broad and vaguely defined (von Wieser, 2013). In general, it refers to the social aspects of economic activities in a region (Etzioni, 2015; ibid., 2013). Thus, the broadness of this field implies certain challenges but also degrees of freedom in theory construction. In fact, 'socio-economics' is an umbrella term for various theoretical concepts, methods and models that can be adapted and further advanced (Hollingsworth and Müller, 2008). Therefore, my intention in this section is to select particular socio-economic concepts discussed in the relevant literature that can guide me in answering the research questions of this thesis (Jones and Walmsley, 2021).

The process of socio-economic development is driven by the notion that economic activities always occur within a societal context (Etzioni, 2015). In contrast to neoclassical economic theory, economic development does not mainly constitute economic growth related to
increases in GDP but rather considers the social implications of economic activities, in which development is primarily a social matter (Komlos, 2016). Growth is not the main goal but a necessary means of development (Martinelli et al., 2013). Positive GDP growth mainly provides an indication of prosperity for certain sub-groups in the population, mostly those who are already better off financially. Socio-economic development, however, implies a better life for the majority of the population, as it relates to the issue of good development, regardless of the country or region's stage of development (Ulrich, 2010). Sometimes, economically advanced countries (as measured by high GDP and per capita income) pay a high social price for their strong economic performance (Wilkinson and Picket, 2011). Typically, this social disintegration is evidenced by an increasing socio-economic gap between poor and rich households, such as income inequality or unjust access to markets (Dabla-Norris et al., 2015).

Several authors have noted that growth-oriented economies, which are based on neoliberal ideologies that prioritise free markets, do not necessarily solve societal problems (Ulrich, 2010; Piketty, 2015; Komlos, 2016; Elsner, 2017). In fact, it is mainly welfare states that have established redistributive systems that aim to reduce income inequality (Coburn, 2000) that do so. However, extreme supporters of neoliberal ideologies promote resistance to welfare programmes to reduce market-induced inequalities, such as unequal income distribution (Griffiths and Lucas, 2016; Piketty, 2022). From a neoliberal perspective, restricting markets hinders economic growth and prevailing income inequality enables industries to benefit from low labour costs (Kenworthy, 1998). Continuous social disintegration threatens modern democracies and socio-economic development that aims to benefit the majority of the local and regional populations (Alesina et al., 2004; Piketty, 2015).

Therefore, it is especially relevant for advanced economies to critically question the direction that economic development should take in the face of these destructive trends. Particularly when societal problems and inequalities prevail, there must be a balance between the economic
interests of a minority of the population and wider socio-economic development. Economic growth itself is insufficient to ensure prosperity for the majority of the regional population. In other words, these arguments outlined above criticise advocates of pure market economies, as markets cannot solve socio-economic problems (Martinelli et al., 2013). On the contrary, unconditional growth has led to several socio-economic crises in recent decades, especially in advanced economies with highly competitive markets. Examples include the Japanese asset price bubble in the late 1980s and the 2007–2009 financial crisis (Brodbeck, 2011). Such events directly translate into a 'crisis of confidence and trust [...] in the ability of the modern capitalist system to protect the interests of the poorer members of society in terms of employment and economic well-being' (Griffith and Lucas, 2016, p. 4). The system fails to ensure socially sustainable needs, meaningful work, social capital and the establishment of institutional structures based on democratic principles (Milliman et al., 2018; Moulaert and Nussbaumer, 2005; Lans et al., 2015). Therefore, rather than pursuing a narrow growth-based direction, socio-economic development aims to foster multi-dimensional thinking on the dynamics of social, cultural, economic and political dimensions in a region.

In this sense, Griffith and Lucas (1996, 2016) challenged the principles of rationality and the definition of economic value. Shifting from the notion of Homo economicus, the authors emphasised the very nature of business and economic activities: these should relate to other forms of social interactions, including principles of morality, justice, cooperation and social responsibility. Otherwise, if economic activities are instrumentalised to maximise profit (and shareholder value), they risk increasing selfishness and immorality without considering ethical aspects in business decision making. Accordingly, true rational principles refer to cooperation rather than conflict and service and care instead of exploitation. Thus, economic activities should always account for the needs and interests of workers and other societal parties involved in business transactions (ibid., 2016). After all, economic justice remains a core criterion of economic activities.
Economic justice relates to 'how successful economic activities were to satisfy human welfare in removing inequalities of wealth, poverty, discrimination and conflict' (ibid., 2016, p. 3). Accordingly, Griffith and Lucas emphasised the identification of economic actors as rational moral beings with a clear and self-aware social role rather than sole manipulators of economic resources. They did not argue that utility and profit orientation were immoral per se. However, return on investment should always entail a return for all stakeholders (i.e. shared value), including the workers who most depend on companies' success in terms of secure employment and livelihoods.

In line with critiques of capitalistic systems, Ulrich (2004, 2010) argued that free-market forces hindered the possibility of an equal and ordered society, which he called the ‘civilized market economy’ (p. 8). A civilised market economy provides its citizens with the opportunity to both participate in the market (i.e. equal access to labour, goods and capital markets that enable entrepreneurial capabilities) and partially emancipate themselves from the economic constraints of market competition (i.e. secure livelihoods for those who cannot assert themselves in the competitive market economy). In fact, self-emancipation from market competition becomes particularly important in capitalistic markets, where the ‘the market’ itself does not solve socio-economic problems (Brodbeck, 2011; Piketty, 2015). Rather, free markets become the main cause of socio-economic grievances, such as worker exploitation or high income inequality. Ulrich (2010) argued that neoliberalism-dominated markets contribute to increased performance requirements for employees, which has negative consequences such as overextension and the elimination and rationalisation of workplaces or entire job types, particularly for middle- and low-income households (Griffiths and Lucas, 2016; Komlos, 2016). These problems are central issues for increasing parts of the population in highly productive economies that strive after unconditional growth. Ironically, especially from an ecological perspective, the industry’s output productivity already achieves surpluses in supply which are more than enough to satisfy the entire
population’s basic needs in Western economies (Young 2004; Clapp, 2014).

Most advanced economies have implemented some sort of social market economy and do not fully agree with all aspects of neoclassical economic development theory. However, growth orientation and a focus on GDP remain predominant in the current development theory and political discourse. Notably, the most popular textbooks on regional economic development mainly refer to neoclassical theory (Dobusch and Kapeller, 2009; Elsner, 2017). Komlos (2012) indicated that ‘most textbooks are not really suitable for understanding the essentials of a real, existing economy. They present a caricature of the economy at a level of abstraction that distorts our vision’ (p. 22). Such ideological perspectives propagate the idea that deregulated markets can satisfy the full spectrum of human needs. Growth and its main drivers and measures, such as efficiency and profitability, become development goals in themselves. However, this contrasts with the idea of truly flourishing socio-economic development.

2.4 New monetary measures

So far, the discussion on socio-economic development has addressed the narrow view of development evident in contemporary neoclassical economic theory. Instead of a growth-oriented focus, socio-economic development aims to address societal implications of economic activities for the regional population. To further steer this theoretical discussion towards the context of the problem statement for the thesis, this section discusses additional concepts and ideas that are relevant for studies on the economic impacts of tourism. Although the discussion has thus far critically reflected the notion of growth-oriented and monetary indicators, such as sales and profit, the intention is not to entirely neglect monetary indicators in assessments of the economic impacts of tourism. This would be virtually impossible,
as all of the economic impacts of tourism are the effects of initial monetary expenditures made by tourists in the regional economy.

However, economic analyses based only on monetary indicators risk omitting important (monetary and non-monetary) factors that are crucial for sustainable socio-economic development (Söderbaum, 2017, 2017). Such monetarily focussed thinking is unlikely to contribute to the achievement of the UN Sustainable Development Goals, which focus on development strategies beyond the growth of GDP (Dwyer, 2020; UNWTO, 2017). There is a need for more fundamental changes in political and economic thinking that transcends the focus on growth, as regional dynamics also require the consideration of other interrelated aspects (Dwyer, 2020). Hence, instead of a singular focus on aggregated monetary indicators, some economists have suggested extending the one-dimensional view of development by considering new monetary measures (Söderbaum and Brown, 2010). The latter address sustainable development by including a multitude of indicators in economic analyses.

While Söderbaum and Brown (2010) did not explicitly propose particular indicators, they argued that new monetary measures should address aspects of sustainable regional development that go beyond GDP. Notably, whereas the market was previously valued by considering growth, the authors stressed the need to consider leakage effects and distributive perspectives. In particular, new monetary measures should 'recognize how monetary costs and benefits are distributed among stakeholders' and thus 'allow interrogation of, and challenges to market valuation methodologies' (Söderbaum and Brown 2010; p. 182). In this sense, two concepts that seem most relevant in the context of tourism and its economic impacts are economic leakage effects and distributive measures. For example, a growing number of tourists and the resulting growth in expenditures might have a positive effect for the regional economy. However, in case of foreign ownership, a large share of this spending leaks out of the region; as a result, fewer and fewer monetary benefits reach the regional population (Garrigós-Simón et al., 2015). Accordingly, the
tourism industry’s contributions to sustainable development cannot validly be analysed through growth indicators alone. By contrast, new monetary measures that consider the distribution of costs and benefits among stakeholders typically refer to issues of unequal income distribution within a country, region or industry (Dabla-Norris et al., 2015; Söderbaum and Brown, 2010; Wilkinson and Picket, 2011; Piketty, 2015).

2.4.1 Leakage effects and sectoral linkages

It would be naïve to assume that all sales made by regional businesses to tourists are attributed to the regional economy. Thus, leakages are a major obstacle to economically sustainable regional development (De Cuello, 2001; UNDP, 2021). Economically sustainable tourism development and thus the socio-economic benefits of tourism activities for the regional population 'depend on the degree of linkage within or leakage from the regional economy' (Haddad, et al., 2013, p. 175). In the context of regional tourism development, leakage effects typically refer to financial leakages in which a share of the money spent by tourists flows out of the regional economy (De Cuello, 2001; Stabler et al., 2009). As a result, not all expenditures made by tourists remain in the region, and fewer of their socio-economic benefits reach the regional population and businesses. Therefore, the actual economic impacts of tourism should only consist of the amount and share of expenditures that remain in the region after subtracting profits and wages that remain outside the region and purchasing amounts for imported goods and services (Sheng and Tsui, 2009). A minimum condition for economic sustainability is fulfilled if the additional income that accrues to the regional workforce sufficiently compensates them for the burden associated with hosting the tourists (Carbone, 2005).
The socio-economic consequences of leakage effects can indeed be enormous when only a small share of tourist receipts remains in the region. More concretely, high leakage rates reduce tax income for regional governments, profit rates for regional businesses and wages for regional households (Carbone, 2005). When a large share of tourist expenditures leaks out of the region and little or no additional income reaches the regional population, the process of regional socio-economic development decelerates, thus mitigating the economic sustainability of the tourism sector. Therefore, considering leakage effects in analyses on the economic impacts of tourism provides valuable hints about the net economic improvements that tourism can bring to regional economies in the long run. Notably, leakage effects can be considered not only for tourism sectors but also all interlinked industries throughout an economy (Garrigós-Simón, et al., 2015).

Several factors can cause leakage effects in various parts of the tourism value chain (UNEP, 2005). For instance, in the Swedish accommodation sector, foreign ownership and foreign investments are the main sources of financial leakages (Supradist, 2004). In line with the flow of economic benefits throughout regional sectors through linkages, leakage effects can also be traced throughout the entire economy (Garrigós-Simón, et al., 2015). High levels of leakage indicate ‘defects’ or ‘missing elements’ in economic structures (Supradist, 2004). Notably, these are typical in smaller economies, as their sectoral structures are less diversified and interlinkages between industry sectors are usually weak (ibid., 2004).

The focus on interlinkages in the context of economic impact studies mainly refers to intermediate demand (Khanal et al., 2014). Intermediate demand relates to a sector’s procurement of goods and services from other sectors to produce their own output. Again, in less diversified economies with a high level of leakage, dependencies between sectors cannot be adequately supported in a region; thus, the latter relies on the importation of external resources and intermediate goods. Consequently, small economies have limited possibilities to produce the full range of supplies needed to meet the demands of both the
regional population and tourists (Flegg and Tohmo, 2013). Besides economic diversity, several other factors affect economic leakages, including the level of development of tourism-related industries, government policies and regulations, ownership and independencies between businesses, the scale of tourism activities and economic evolution (Supradit, 2004).

Notably, in the context of the economic impacts of regional tourism, the level of inter-sectoral linkages refers to multiplier effects (Garrigós-Simón et al., 2015). As previously indicated, multipliers provide an indication of inter-sectoral linkages between individual sectors of the economy (Loveridge, 2004). Thus, so-called backward-linked sectors that supply tourism sectors with intermediate goods and services are also affected by leakage effects, which is emphasised by the level of multipliers (Cai et al., 2006; Tohmo, 2018). Specifically, small regional multipliers indicate weak linkages with other sectors of the economy, whereby sectors are not adequately clustered to support each other (Supradist, 2004). In turn, regional economic structures with large sectoral multipliers indicate higher degrees of self-sufficiency (Khanal et al., 2014). Thus, relationships between sectors are more likely to provide intermediate demand from their own regional supply.

In summary, leakages occur when a region's supply capacity is insufficient for regional production (Garrigós-Simón et al., 2015). This applies not only for developing economies but also rural areas in which a diverse economic structure has not yet been established or cannot exist (Mbaiwa, 2005; Miller and Gibson, 2005; Torres, 2003). Within a country, the demarcation of regions also creates leakage effects; from a regional perspective, leakages result from imports from other domestic regions and countries that can produce and trade based on a more diversified economy (Garrigós-Simón, et al., 2015). Whether the geographical level of analysis is at the national, regional or local level, the consideration of leakages in economic analyses can be considered an important new monetary measure (ibid., 2015; Söderbaum and Brown, 2010). In contrast to growth indicators such as GDP, leakages throughout the economic system provide a crucial
indication of the industry’s level of self-sufficiency and thus socio-economic sustainability in the particular national or regional territory (Brightley, 2017).

2.4.2 Inequalities and income distribution

Sustainable socio-economic development in the tourism industry is characterised by a widespread distribution of economic and social benefits that reach the regional population (Griffith and Lucas, 2016). In this regard, various types of distributive measures, particularly the distribution of income and wealth in the regional population, have been considered as new monetary measures (Söderbaum and Brown, 2010). Incorporating distributive perspectives in aggregated (i.e. per capita) income indicators demonstrates how equally (or unequally) income is distributed in the regional population. An unequal distribution of income is not a negative feature per se when aspects of social and economic justice and redistribution are considered (see section 2.5; Holmwood, 2013; Wilkinson and Picket, 2011). However, an unequal distribution of income becomes critical if the most disadvantaged members of society cannot attain a decent standard of living according to their capabilities (Sen, 2012).

Social and economic inequalities are typically categorised in the literature as inequalities in opportunities and inequalities in outcomes (Dabla-Norris et al., 2015). The former relates to circumstances beyond an individual’s control, such as their family and socio-economic background or place of birth. However, these circumstances can seriously limit opportunities for individuals when they must make life decisions (Coburn, 2000). Notably, both the public and the private sectors can shape these circumstances by providing frameworks that enable earning opportunities for the most disadvantaged members of society (UNEP, 2005). Inequalities in outcomes comprise both uncontrollable circumstances and one’s own efforts and responsibilities. Usually, the efforts undertaken by individuals to
overcome inequalities also depend on their circumstances and socio-economic background. Therefore, it is difficult to clearly separate outcomes from opportunities, given that both are important for understanding societal inequalities (Dabla-Norris et al., 2015; Lefranc et al., 2008).

The magnitude of income inequality depends on both a person’s uncontrollable circumstances and their own efforts to overcome an undesirable situation, such as through education, employment positions, etc. (Checchi, 2001; Dabla-Norris et al., 2015; Lefranc et al., 2008). Notably, income is considered a hygiene factor and thus facilitates the fulfilment of basic needs with regard to material living conditions (Dwyer, 2022; Herzberg et al., 2011). Higher income alone does not increase job satisfaction and well-being; however, the absence of income is always negatively perceived. This counters the neoclassical notion of profit maximisation as a major interest in economic activities (Lee, 2009b). Therefore, income inequality itself does not have negative consequences on well-being, as long as sufficient income is secured for all members of society and the distance of someone’s income to the reference income (e.g. median income of the same profession) is not too large (Senik, 2005; Wilkinson and Picket, 2011). Notably, the distance to reference income can even have motivational effects (Alesina et al., 2004), as the gap between an individual’s income and the reference income can be an indicator of potential income in the future. It is important to consider the degree of social mobility and inequality of opportunities – that is, the degree to which the relatively poor can ascend the income ladder and the relatively rich might not fear to fall down the income ladder (Festinger, 1954; Wunder and Schwarze, 2006). Furthermore, income as a hygiene factor does not necessarily incentivise people to work harder or better or balance suboptimal working conditions (Clark et al., 2010). Rather, monetary rewards have a crowding-out effect on intrinsic motivation. The dominance of either the income effect or the substitution effect depends on an individual’s income profile over time, including their own and others’ income levels (Clark et al., 2010).
Most importantly, besides individual reasons, political and institutional circumstances also influence the degree of income inequality in a region. For instance, labour laws, the engagement of workers' unions, progressive taxation and subsidies are major factors that typically affect the distribution of income (Dabla-Norris et al., 2015). Most social economists agree It is commonly agreed that a high degree of social and economic inequality is an important factor that hampers sustainable socio-economic development and results in negative consequences for the most disadvantaged members of society (Elsner, 2017; Moulaert and Nussbaumer, 2005; Piketty, 2015). Interestingly, from a neoliberal growth perspective, some authors have also noted positive effects of income inequality. For instance, Li and Zou (1998) identified a significant positive relationship between income inequality and GDP. Specifically, increasing income inequality results in a higher allocation of income to the rich, who are more willing to make large-scale investments. Thus, income inequality usually only benefit high-income groups, who in turn contribute the most to economic growth. Moreover, the negative consequences of income inequality usually affect middle- and low-income groups, which typically represent the majority of the population (Voitchovsky, 2005). Hence, a growth-oriented development agenda usually leads to decisions that are unfavourable to most members of society.

In summary, new monetary measures cannot fully replace traditional growth-oriented indicators in regional economic impact analyses (Söderbaum, 2017). Rather, they provide additional monetary perspectives for addressing relevant socio-economic issues. In the context of this thesis, I discuss and apply two major concepts that are relevant for the field of tourism and its economic impacts: leakage effects and income inequality. I use these measures to address the narrow growth-oriented perspective of the economic impacts of tourism. However, they remain macro-level quantitative indicators. Therefore, in the following section, I discuss theoretical concepts that provide meaningful theories to better apply and understand analyses of the economic impacts of tourism.
2.5 Institutions and justice in the context of employment

The literature on socio-economic development has highlighted the need to focus on economic benefits that reach most of the population (Etzioni, 2015; von Wieser, 2013). Söderbaum and Brown (2010) suggested one way to do so; they stated that economic analyses and the development discourse should consider new monetary measures in addition to contemporary growth-oriented indicators. Furthermore, economic analyses often remain at the macroeconomic level and thus treat economies as aggregated static systems (Dopfer et al., 2004). However, as highlighted, economies are complex socio-communicative systems; thus, markets are embedded in and shaped by a framework of rules, social norms, practices and routines (Hodgson, 2006; Fuchs, 2022). Important socio-economic considerations remain invisible if these institutional perspectives are not considered, as they shape economic activities and our understanding of right and wrong practices. In this regard, perspectives of justice as a fundamental societal concept ensure a stable coexistence between citizens and labour markets in modern society (Green, 2014). This section elaborates on the main elements of institutional economics and justice theories to provide a more meaningful theoretical foundation for socio-economic development in general and the economic impacts of tourism on the regional workforce in particular (Baum et al., 2016; Dopfer et al., 2004; Elsner, 2007).

2.5.1 Role of institutions

Several authors have emphasised that analyses of economic activities, such as tourism, often employ single measurement techniques and remain at either the macro level (e.g. nations and regions) or at the
micro level (e.g. businesses and branches; Baum et al., 2016; Dopfer et al., 2004; Lee and Kang, 1998). A main criticism in the literature is that this macro–micro dichotomy does not adequately express an economy’s dynamics and is thus insufficient for meaningfully understanding socio-economic development processes. This is because:

macro-level perspectives on economies through statistical aggregates are simply measures of output flow or asset value aggregations that arise from the existence of interacting populations of meso rules. The essential point to grasp here is that macro is not a behavioural aggregation of micro, but, rather, it offers a systems perspective on meso viewed as a whole. (Dopfer et al., 2004, p. 267).

Notably, the meso level refers to prevailing institutional rules, norms, ethical principles, social arrangements and practices in a society (Hodgson, 2006; Ostrom, 1990). Thus, the outcomes of all economic activities, including tourism, are affected by the institutional framework in the regional and national contexts (Groenewegen, 2010; Mellon and Bramwell, 2018). In contrast to the claims of neoclassical economic theory, actors who perform these activities as part of the economic system are embedded in a broader societal network of relationships, as they do not act independently from each other (Fuchs, 2022; Searle, 2005). Thus, the outcomes of these relationships are based on collectively accepted systems of rules, social norms and laws, practices and ethics that result in temporary stable – but, in principle, modifiable – institutional arrangements (Elsner, 2007).

Searle (2005) provided a more abstract approach to understanding institutions: a theory of institutional facts. Unlike natural facts, institutional facts only occur in human-made contexts. Thus, three main principles are important in creating institutional realities. First, institutions are built on collective intentionality, a basic social concept that relates to people's intentions, motivations, beliefs, desires, fears, etc. in social groups. Individuals can engage in collective actions through collective intentionality, thereby enabling cooperative behaviour. Collective intentionality is the foundation of all societal
processes. Second, societies assign meaningful functions to objects (e.g. tools), people, or particular states of affairs. Thus, both collective intentionality and the assignment of function allows a collective assignment of functions within a society. Third, the notion of status functions as a special type of function assignment. The person, object or state of affairs to whom a function is assigned can only perform their function when a particular status is collectively assigned. Hence, the community must collectively accept this status for the person, object or state of affairs to perform their function. For example, the purpose of labour unions is to advocate for workers’ rights in the context of employment. This function is performed by elected representatives and collectively agreed upon and even ensured by laws.

A status can be formally defined by formal rules on which actions and outcomes are required, permitted or prohibited. Notably, status functions also exist less formalised as social norms and moral standards. The less formalised status functions define more ethical aspects, thus are not relating to short-term (material) pay off (Ostrom and Basurto, 2011). However, status functions require the societal collective to be accepted. Typically, these functions are also context-specific, which means that they are only accepted within certain boundaries, such as geopolitical borders, cultural contexts or professional situations (Searle, 2005). The emergence of institutional facts through collectively accepted status functions creates power relationships in the form of so-called ‘deontic power’ (Hall, 2018). This power does not comprise typical hierarchical power over individuals but rather arises from social relationships and enables certain actions due to rights, duties, obligations, authorisations, permissions, etc. (Searle, 2005). These hierarchical powers comprise all types of relationships, such as family relations, friendships and relationships between co-workers.

Searle (2005) and Ostrom and Basurto’s (2011) definitions of institutions refer to intangible rules, norms and social practices. Institutions comprise a system with established rules that structures social interactions and leads to the formation of (physical)
organisational entities through the process of institutionalisation (Lakshmanan and Button, 2019). Notably, the functions and activities of institutional organisations affect a large part of society, including governmental bodies, universities or branch associations (Linarelli, 2010). In this sense, organisations are a special form of institution with hierarchical structures and clear boundaries to distinguish members from non-members (Hodgson, 2006). Thus, Linarelli (2010) argued that organisations themselves are institutions, as the internal structure of many organisations depends on the existence and structure of institutions in the form of rules, norms and social practices.

The field of institutional economics asserts that institutions and the process of institutional change are the main elements of the economy (Hodgson, 2012). Thus, the meso level is a key perspective in the study of economic activities (Baum, et al., 2016; Hodgson 2006; Elsner, 2017). In particular, the field of new institutional economics (NIE) develops neoclassical economic theory by adding other institutional dimensions to neoclassical ideas. Specifically, NIE rejects the neoclassical assumption of costless transactions (Groenewegen, 2010; Lakshmanan and Button, 2019). According to NIE and in line with transaction cost theory (Williamson, 1975), transactions refer to the transfer of ownership and are thus a matter of negotiations between involved parties, as well as the costs of search of information and decision making. Therefore, the costs that accompany transactions are strongly influenced by institutional dynamics and individual incentives. Accordingly, NIE adds economic concepts to the broad framework of neoclassical economic theory under the broad assumption of market efficiency (Bengtsson et al., 2018).

Thus, institutions as collectively accepted rules shape human actions and situations. Institutions do not only specify how actors were to be chosen to enter or leave a certain role or position. They also specify to a large degree how social and economic benefits and costs are distributed among actors (Daniels, 2021; Ostrom, 2010). Thus, the cause of unequal income distribution and wealth largely depends on institutional factors that 'shape the wealth creating opportunities and
capabilities of individuals or social groups, and legitimize, direct, and enforce the way that output is allocated’ (Daniels, 2021, p. 77).

There are two distinct views of how institutional economics view the nature of wealth generation and distribution. The traditional (i.e. pessimistic) view posits that inequality and poverty mainly depend on structural forces that can hardly be controlled and changed (Daniels, 2021). These structural forces relate to history, cultural settings and socio-economic conditions. Limited socio-economic mobility makes it difficult for individuals to overcome grievances which are usually transferred between generations (i.e. labelled the ‘circle of poverty’ or the ‘poverty gap’). Therefore, poverty is viewed as a result of historically unfair, path-dependent and circular processes. On the other end of the analytical spectrum, more liberal views of new institutional economics highlight the profit- and utility-maximising attitude that lead to positive institutional change (Groenewegen, 2010). This represents an individualist and market-oriented view of institutional dynamics and processes to overcoming constraints on well-being, including poverty (Dwyer, 2022). Thus, socio-economic mobility is assumed to be regulated by the markets themselves, while institutions are viewed as the result of common beliefs, attitudes and behaviours. However, the notion that distributional effects are only consequences of individual agency is a reductionist simplification that has been criticised even by neoliberal scholars within NIE (Daniels, 2021). Consequently, it is commonly agreed that structural and institutional forces impede and delimit economic behaviour and thus affect inequality and poverty (ibid., 2021).

The discussion of institutions demonstrates that economic activities are primarily social activities embedded in a system of rules, social norms and practices. However, the existence of institutions per se does not provide further insights on what constitutes just and fair practices, particularly in the context of tourism employment. Therefore, in the following sub-section, I elaborate on justice theories to highlight the theoretical foundations for a fairer and more just approach to socio-economic development in general and work and pay in tourism in
particular (Ioannides et al., 2021; Rastegar, et al., 2021; Solnet et al., 2016).

### 2.5.2 Perspectives on justice and capability

In contrast to rather mechanistic perspectives of neoclassical economics in which labour is considered a more or less replaceable resource (i.e. elasticity of labour), socio-economic approaches call for a fairer and more just view of employment (Ioannides et al., 2021; Rastegar, et al., 2021). Justice theories not only provide further theoretical foundations to better understand sustainable employment in tourism but also fundamental insights on human development (Nussbaum, 2015).

One of the most popular and influential conceptions of justice in modern societies is based on *A Theory of Justice* by the philosopher John Rawls (Rawls, 2009; Green, 2014). Rawls (2009) considered justice to be a principal virtue of social institutions and summarized two main principles of justice as follows:

- **Equal liberty principle**: Every person has equal access to the system of rights, liberties and opportunities.

- **Difference principle**: Social and economic inequality are only accepted when they benefit the weakest.

The equal liberty principle is closely aligned with the need principle (Raphael, 1980). The need principle argues that materials required to satisfy basic needs, which are essential for tolerable standard of living, must be equally provided to every member of a society. Factors other than equal outcomes can only be considered in the further distribution of goods and materials when these basic needs are satisfied. Meanwhile, the difference principle has become a major orientation for justice over the past few decades. Essentially, it allows social and
economic inequality in society – and even improvement in the situations of those who are already better off materially – as long as the conditions of those in the worst material situations also improve. However, this principle, in which increasing socio-economic inequality is accepted and even implemented to benefit the poor, must be institutionalised to foster equal opportunities and consider aspects of general sustainability (Higgins-Desbiolles, 2008). In particular, resources should be consumed in a way that allows them to be used by future generations (i.e. the saving principle). Accordingly, Rawls argued that social and economic inequality can be just as long they benefit those who are worst off. Consequently, improving the situation of those who are worst off takes precedence over achieving socio-economic equality. In the process, Rawls (2009) argued that each person should have the opportunity to improve their situation, especially when they do not have access to the same opportunities as others due to factors such as their circumstances at birth.

Inspired by Rawls, Sen (Sen, 1983, 1985, 2009, 2012) introduced the capability approach, which considers each person’s individual capability to realise well-being. Each person has different abilities to ‘convert’ given resources into a good life. Notably, Sen criticised the neoclassical economic view of individuals as purely rational actors who behave according to their self-interest (Tully, 2013). Sen (2012) argued that the concept of a rational actor assumes that individuals are only endowed with a single capability: a preference for maximising utility. However, Sen’s conception of capabilities refers to the idea that individuals differ in their capability to satisfy a number of human needs. Therefore, justice must focus on people’s various capabilities and the associated individual well-being. These needs to fill capability needs cannot be represented by one single dimension.

Thus, Sen criticised Rawls’s theory of justice to a certain extent for its narrow focus on material justice. According to Sen, Rawls’s main criteria for justice refers to the distribution of goods or resources. However, the latter does not provide much insight on people’s well-being. A rational and fair distribution of resources still requires people
to convert resources into valuable outcomes. However, this can differ from person to person. Thus, Sen considers an individual’s well-being an important criterion for justice and fairness, which has been disregarded in many other theories (Green, 2014; Nussbaum, 2015; Tully, 2013). Sen further contradicted Rawls’s theoretical assumption of the ‘original position’, which assumes that everyone is equal in the early stages of society building. Instead, Sen started from the premise that everyone is endowed with different capabilities and therefore different ways of achieving well-being and meaningfulness, given available resources and institutional contexts. As for institutions, Sen also disagreed with the liberal view that institutions must reflect the principles of individualism and individual agency. According to Sen, institutions should provide an effective framework that enables individuals to flourish. Like Ulrich (2010), Sen (2012) does not oppose markets but believes that intervention is needed when an individual’s well-being or flourishing is at risk.

Notably, Sen’s view of justice is also applicable in the sphere of labour and employment. To achieve justice at work, the work environment must enable workers to realise their own capabilities. Again, institutions play an important role by providing the framework that guides and supports this realisation. Otherwise, the commodification of labour, in which the workforce is treated like a replaceable resource, implies a reduction of capabilities and therefore the risk of limiting the well-being of some groups of people. Yet, Sen believes that some aspects of a liberal society may facilitate the realisation of capabilities, including the choice of occupation and self-determination. Realising one’s capabilities can result into an inequal distribution of income. Thus, some degree of inequality can be regarded as positive, as higher potential income can motivate individuals to invest in their personal development and efforts, such as further education (Checchi, 2001).

However, as Holmwood (2013) stated, normative discourse must address such positively regarded inequalities. Sen was concerned with reducing absolute poverty, not relative poverty. The latter refers to one household’s income in relation to the average household income for
the region under study. For Sen, this definition tolerates different standards across nations and their socio-economic contexts. Defining poverty only in relative terms does not eliminate real poverty as defined in the capability approach. According to the definition of capability, individuals could be above the relative poverty line but still be unable to individually flourish because they require better socio-economic conditions. Thus, a relative definition of income fails to address issues of global justice (Sen, 2012).

Sen further emphasised the issue of public reasoning in relation to justice. Public reasoning refers to the moral and political standards that a society considers acceptable. This means that moral rules and norms that regulate common life justify public decision making (Quong, 2017). For Sen, society (along with governmental and research bodies) should not attempt to define perfect justice a priori. Instead, he argued for the identification of clear cases of injustice. Based on these cases, agreements can be reached to address these injustices, such as a lack of access to education. He clarified this point as follows:

Many social contract theorists believe that with the right institutions and some kind of implicit promise from everyone that they would behave properly, the resulting human lives would be as good as they can be expected to be. But that presumption is a hypothesis, and if it goes wrong, there is nothing in the procedure to make iterative corrections. No less importantly, there is no systematic attempt to judge the quality of the lives and freedoms that people would enjoy, and the outcomes are seen as okay because they would have emanated from an allegedly just process, rather than these lives being assessed as social realizations that need to be evaluated. We need a comparative approach that can identify the benefits from the removal of an identified injustice even though the world after that removal would still not be, in any obvious sense, perfectly just. (Sen, 2012, p. 103)

Thus, Sen attempted to focus not only on identifying just institutions (in terms of commonly agreed rules and social practices) but also the
types of lives that individuals can live. Finally, Sen stressed that the objective of public reasoning is to constantly scrutinise rules, norms and values, thereby broadening the base of critical comparisons (Sen, 2009, 2012). The role of institutions, particularly in the employment and labour context, is further outlined in the following sub-section.

2.5.3 Institutions in the context of work and labour

An important component in socio-economic regional development is sustainable employment for the regional workforce (Baum, 2018; Mooney et al., 2022). In this process, institutional structures and their efforts should set the framework for minimising the risk of negative consequences from neo-liberal labour market developments (Griffiths and Lucas, 2016), including increases in income inequality, wage losses, unemployment and precarious working conditions (Herzog, 2018; Sen, 2012; Zafirovski, 2005). However, these goals are not always easy to achieve at the same time. For instance, lowering unemployment can be achieved through labour market policies that allow higher shares of low-income occupations. Thus, the consequences could lead to increasing income inequality, which may also lead to further wage losses for already disadvantaged workers (Mölle, 2014).

Usually, mainstream economic theories relegate and ignore questions of social justice and distributive injustice (Zafirovski, 2005; Elsner, 2017). They argue that eventual injustices, such as the exploitation of workers, are caused by exceptions in the labour market due to monopolistic prevalence (Zafirovski, 2005). Conservative economists argue that markets can rule out distributive injustice through competition along with trickle-down effects (i.e. when policies that aim to benefit the rich also benefits the lower income classes; Aghion and Bolton, 1997). However, the socio-economic and institutional argument is that labour markets with institutional features that favour labour instead of capital (i.e. welfare-oriented rather than capitalistic countries) demonstrate lower distributive injustice and lower income
inequality. Conversely, institutional features that favour capital growth tend to have higher injustice and inequality (Zafirovski, 2005). Accordingly, institutional economists view distributional injustice as an institutional phenomenon, in contrast to the treatment of market phenomena in contemporary mainstream economic theories (Pike et al., 2017). The latter claim that distributional justice is achieved when everyone benefits from free, transparent and perfectly competitive market economies. However, such conditions do not exist in reality, as markets typically work 'blindly, cruelly and exploitatively' (Zafirovski 2005, p. 55). Thus, as a matter of social justice, institutional features that govern labour markets are needed to cope with such risks, including employment protection, labour standards, unemployment benefits, unions, educational and training measures and more effective progressive (tax) contribution rates for medium- and high-income groups (Möller, 2014). Moreover, income inequality is particularly pervasive in societies with weak and declining institutional labour support. Distributive injustices and related income inequality are likely to remain if private markets continue to only focus on efficiency and productivity. However, this idea is rather unrealistic under the predominant profit maximisation paradigm (Brodbeck, 2011). Hence, the institutional role in addressing these developments has become increasingly important (Zafirovski, 2005).

However, more explicit principles specify what constitutes sustainable, just and 'good' work. The philosophers Anca Gheaus and Lisa Herzog (2016) evaluated the shortcomings of contemporary labour markets and provided a conceptual framework on the general principles of good and bad work. They focused on aspects beyond financial factors in the context of work and employment and claimed that labour markets do not enable workers to avoid the pitfalls of work and benefit from its advantages to live a decent life. Therefore, in line with Sen (2012), regulating the distribution of goods is mainly a matter for public institutions: 'Labour markets should be designed such that they do not undermine workers’ ability to enjoy these goods, and afford them sufficient, and fairly distributed, opportunities to realize them' (ibid., 2012, p. 71). Since labour markets do not provide these options
to workers, institutional frameworks for labour markets that explicitly consider the benefits of work are needed (ibid, 2012, p. 74-79).

Notably, good work is characterised by excellence, which refers to the meaningful relationship between workers. It encompasses the accomplishment and personal development, such as knowledge, skills, technological achievements, social innovation or beauty. A major threat to good work practices is the development and implementation of technology solely for purposes of efficiency (Bengtson et al., 2018). However, from a neoclassical perspective, the use of technology can also increase efficiency and thus minimise production costs, including labour-related costs (Blanchard and Illing, 2013). Instead, technology should refer to the relationship between workers and their tools to realise certain goals, and two major types of technology can be broadly distinguished (Gretzel et al., 2020). On the one hand, convivial technology primarily supports workers in their everyday tasks and allows them to maintain full autonomy and act mindfully (Illich and Lang, 1973; Lehto et al., 2020; Samerski, 2018). On the other hand, manipulative technologies create dependencies by reducing workers to machine operators who lack dignity and opportunities for self-realisation (Gretzel et al., 2020; Lehto et al., 2020). In fact, convivial tools can comprise rather simple technology that allows users to express personal and social meaning in their work and supports workers to inspire others (Lehto et al., 2020). Thus, convivial tools adapt to the workers’ needs and capabilities (Sen, 2012), whereas manipulative tools require workers to learn and adapt to the tools. Thus, making manipulative tools necessary to everyday tasks creates dependencies (Gretzel et al., 2020).

One’s work and achievements should also receive social recognition from others, as people naturally seek status (Gheaus and Herzog, 2016; Winchenbach et al., 2019). Thus, social interactions and a sense of community are the main basis for achieving rewarding and fulfilling work lives (Hickson, 2018). These should comprise experiences with co-workers in relatively free and equal relationships. Social interactions are not necessarily harmonious, but the notion of 'good
work' must enable some socially meaningful interactions and solidarity between co-workers. They include hierarchical relationships that are necessary for a certain degree for coordination but should not be based on power. For instance, important institutions include collective organisations such as trade unions to foster a sense of community and consensual routines and social practice.

The meaning of work should further include areas of social contribution that often occur through voluntary work that is underpaid or not paid at all (e.g. caring for family members). However, the activities that are most crucial to the society should ideally be reflected by monetary values; that is, such activities should be acknowledged and appropriately compensated. Paid work that entails social contribution can be an essential source of meaning and thus a way to live a decent life (Gheaus and Herzog, 2016).

2.6 Summary

In summary, this chapter first discussed the theoretical and conceptual foundations of the field of tourism and its economic impacts. It became clear that traditional perspectives on the economic impacts of tourism are embedded in a growth-oriented paradigm. Regional development is assumed to occur through growth in GDP or per capita income or the generation of gross employment. This view of development is reflected in models on the economic impacts of tourism that aim to identify these impacts in terms of monetary and/or highly aggregated indicators. Inter-sectoral linkages were identified as a key concept that allows the estimation of secondary effects based on sector-specific multipliers. Thus, current research on the linkage-based economic impacts of tourism focuses on improving the accuracy and comprehensiveness of these models through various extensions. However, they usually remain at the same aggregate analytical level, and theoretical assumptions are drawn from the growth paradigm.
This narrow perspective demonstrates a need to extend or even shift theoretical and empirical perspectives towards more societally relevant questions (Loveridge, 2004; Klijs et al., 2012).

In economics, a significant body of literature has criticised the contemporary growth paradigm, as it reduces regional development to a one-dimensional and often monetary matter, thereby neglecting important social, distributional and justice perspectives (e.g. Ulrich 2010; Söderbaum and Brown, 2010; Sen, 2009; von Egan-Krieger, 2014; Brodbeck, 2011). This literature on socio-economic development contains rich theoretical ideas, but it does not provide a universal framework. Therefore, I introduced and discussed a selection of key theoretical concepts from the broad socio-economic development literature to help me to extend traditional tourism impact perspectives (Jones and Walsmley, 2021). These included new monetary measures as outcomes from impact assessments (namely leakages and imports), as well as perspectives on the regional distribution of income.

Furthermore, the literature on institutional economics has highlighted the importance of the institutional meso level in economic analyses. This perspective mainly considers economic activities as social phenomena embedded within a system of prevailing rules, social norms and practices. In particular, socio-economic impacts relate to questions of social justice, as negative socio-economic impacts and precarious working conditions make it increasingly difficult for a growing number of tourism workers to sustain a decent living and pursue their desired livelihood (Baum, 2015; Higgins-Desbiolles et al., 2019; Ioannides et al., 2021; Sen, 2012; Winchenbach et al., 2019). Only a few tourism- and event-specific studies have addressed these issues in the wider field of the socio-economic impacts of tourism. The following chapter reviews the current literature on the socio-economic impacts of tourism and events.
3 Literature review on the socio-economic impacts of tourism and events

After discussing the key theoretical elements of socio-economic development in the previous chapter, I review the literature on the socio-economic impacts of tourism in the current chapter (Jones and Walmsley, 2021). Alam and Paramati (2016) critically reflected on the limited consideration of socio-economic dimensions in the current tourism-related economic impact literature: 'Most of these studies assume a relatively static and functional economy where economic growth is the highest priority [...]. Only a few academic studies [...] explore the dynamic socio-economic impact of tourism' (ibid 2016, p. 112). Furthermore, the authors argued that most of the literature on tourism development and its impact focuses on positive direct and indirect effects. They criticised the current literature by arguing that the relevance and validity are seriously restricted since most of these studies ignore the distribution of economic gains and burdens of tourism. To better understand the effects of tourism development on a community, it is necessary to examine how economic outcomes of tourism development are distributed among different income groups in tourism services-dependent communities. However, there are few studies regarding the equitable distribution of economic benefits associated with tourism and recreation development. (p. 113).

In particular, few tourism scholars have discussed negative socio-economic impacts for the local population as a matter of justice (Croes, 2012; Higgins-Desbiolles, 2008, 2010, 2020; Higgins-Desbiolles and Bigby, 2022). Thus, to build on the discussion in Section 2.1, in which I introduced the key literature on the economic impacts of tourism in general, the focus in this chapter is on studies that go beyond the
growth-oriented perspective of development, including the role of tourism in income inequality and justice.

3.1 The impact of tourism on income distribution

The tourism literature on income distribution employs a rather broad methodology, including econometric studies and multiplier-based linkage models (e.g. SAMs). Overall, the literature reports ambivalent evidence on whether tourism contributes to or hampers the equitable development of income. For instance, Kinyondo and Pelizzo (2015) demonstrated the ambiguous effects of tourism on income inequality. Their argument that tourism contributes to regional development is based on the idea that tourism industries create employment for poor households, whose members often cannot find employment in other sectors of the local and regional economy. However, the negative aspects of tourism are often omitted. For instance, income from tourism jobs often remains low, and leakages occur in favour of international actors. This is due to high import rates and the predominantly foreign nature of owners of and investors in tourism infrastructures. In fact, empirical findings have demonstrated that tourism-led growth does not reduce income inequality, mainly due to three factors: vertical integration, foreign ownership and insufficient salary packages for tourism workers. Thus, the authors argued that tourism can contribute to reducing poverty only if the created wealth is distributed more equally, mainly in support of strong governments and work-related institutions (Kinyondo and Pelizzo, 2015).

A rather supportive view of the role of tourism in income development was elaborated by Lee and Kang (1998), who found that tourism activities in a particular region contributed to equitable development. They compared income distribution in the South Korean tourism industry and other industries, including primary (e.g. mining),
secondary (e.g. manufacturing) and tertiary industries (e.g. finance). Notably, *Gini coefficients* and *Lorenz curve*-based analyses have demonstrated that median earnings in tourism are relatively low. However, the income levels of high and low earners in the tourism industry were more equal those of workers in secondary and tertiary industries. In particular, female workers benefitted from working in the tourism industry. Compared to other South Korean industries, income from tourism had the third most equal distribution and the third highest median income for female workers.

A regression model was employed by Marcouiller et al. (2004), who suggested a strong need to focus on distributive measures of development instead of simply reporting aggregate growth figures. Their study examined the role of natural amenities in changes in income inequality, as expressed by *Gini coefficients*. Different natural amenities (e.g. land, rivers, lakes, etc.) can act as pull factors for migration, tourism demand, quality-of-life attributes and input for local production. As a result, they suggested that there is a 'possibility that certain types of water-based amenities are associated with trends toward more equal income distribution' (ibid, 2004, p. 1045).

By contrast, a large body of tourism literature has offered a more pessimistic view: in fact, tourism hampers a more equal distribution of income. Specifically, these studies have highlighted socio-economic grievances that accompany tourism development, particularly in developing countries, and identified which elements of economic structure may act as bottlenecks for a more equal distribution of income. In their econometric study, Alam and Paramati (2016) investigated the impact of tourism on income distribution in 49 countries over a period of 21 years. Their findings demonstrated that tourism significantly contributed to an increase in income inequality. This was mainly due to monopolistic market structures in developing countries, which caused considerable leakages or benefits for only a few large, usually foreign corporations and investors. Accordingly, tourism activities mainly benefit upper social and income classes, such as owners, entrepreneurs, managers and investors. Alam and Paramati
(2016) concluded that, although tourism can contribute to a region's development by creating new employment positions in absolute terms, these jobs typically remain at the lower end of the salary range (i.e. low-wage service jobs).

Recently, Tiku et al. (2022) constructed a regional SAM for the province of West Papua in Indonesia to study the income distribution effects of tourism on various household groups and occupations. They demonstrated that financial flows from tourism receipts particularly reach clerical, sales and service workers in urban areas. However, once again, high-income households were mainly found to benefit from multiplier effects. Thus, the lower the household income, the lower the income effects and the higher tourism's contributions to increasing income inequality. Sector-specific effects were mainly observed in the accommodation and food services and had a positive influence on agricultural workers' income and employment at all income levels. Nevertheless, a multiplier analysis also demonstrated that tourist activities have benefits the poor when demand for food services and transport are transferred to low-income households in rural areas through fisheries and rural agricultural workers. Thus, developing linkages between these sectors through re-distributional measures has the potential to reduce poverty and diminish income inequality in the region.

In light of the ongoing Covid-19 pandemic, Njoya (2021) simulated the socio-economic impact of travel restrictions on households in Tanzania. He found that decreasing tourist arrivals would eventually lead to a tourism-induced crisis in which poverty headcount, the poverty gap and poverty severity would increase. In particular, workers in service-dependent industries and non-agricultural households will be most affected. In line with growth-oriented theory, his study supports the hypothesis that growth in per capita income has a stronger effect on poverty than redistributive measures of income within the population.

Blake (2008) provided an interesting example of tourism impeding income equalities by developing SAMs for East African countries. He investigated the effects of tourism activities on various household
income categories through interlinkages between households and industry sectors. He tested the hypothesis that lower-income households could be further involved in participating in tourism activities. Although lower-income households are not homogeneous (i.e. the share of low-income households that do not have opportunities to be involved in tourism in the first place), the results demonstrated that tourism was a strong backward-linked sector. This means that the creation of tourism products and services required purchases from other sectors and thus resulted in high tourism multipliers and potential leakage. In fact, the author highlighted that core tourism sectors (i.e. accommodation and food) mainly increased the income of richer households. Therefore, the idea that tourism development reduces income inequality can only be verified if low-income households are empowered to participate in related economic activities. However, the findings showed tourism did not benefit low-income groups and thus did not reduce income inequality.

Similarly, Incera and Fernández (2015) highlighted the fact that few studies on the economic impacts of tourism have focused on distributional effects. Although they acknowledged that the effects of tourism can be positive and may reduce regional income inequality, their findings demonstrated the opposite. The authors applied a SAM with eight disaggregated household categories and stepwise income levels from low to high for the region of Galicia, Spain. Researchers frequently argue that tourism has a potential positive effect on income inequality because the industry mainly employs low-income and low-skilled workers and the unique characteristic of a region or destination enable self-employment for poorer households. However, the SAM analysis demonstrated that, despite low-income households' involvement in tourism production, income inequality further increased as high-income households benefitted far more from tourism than low-income households. Therefore, the authors concluded that the main beneficiaries of tourism are richer households, not least because they are less affected by relative price increases for food, real estate and primary products.
In a study, Lacher and Oh (2012) employed a commercial IMPLAN IO model to estimate the distribution effects of tourism on three coastal areas in the United States. Interestingly, they also provided disaggregated results for various occupational areas. In line with previous literature (Baum, 2015), they found that tourism-related jobs mainly fell on the lower income spectrum in all three regions. Similarly, Daniels (2004) and Daniels et al. (2004) extended a basic IO model and disaggregated the employment and income effects of major sporting events into various occupational areas. Their results demonstrated that the lion’s share of employment was retained in entry-level jobs with a low level of income.

Moreover, Tosun et al. (2003) examined the impacts of economic growth in coastal tourism on the socio-economic development of rural regions in Turkey. Similarly, they criticised the fact that, although tourism clearly contributes to increases in GDP and employment in absolute terms, the notion of ‘economic development’ typically neglects its distributional aspects. Thus, the authors concluded that growth (as measured in per capita income or industry output) is neither an appropriate development goal nor an adequate indicator. Rather, the goal should be to strengthen a region’s potential to satisfy basic needs of the population. In particular, the authors warned that tourism as a tool for regional development is not a panacea and requires a sufficient degree of integration in other (tourism-related and non-tourism-related) industries, appropriate infrastructures, and – above all – supportive socio-political (i.e. institutional) conditions. Therefore, regional development agendas should carefully consider stages of economic development and aim to achieve social transformation (Thirlwall, 1989), such as the reduction of income inequality (Tosun et al. 2003). The study particularly reveals that the concentration of large-scale investments into mass tourism infrastructures at developed coastal regions has significantly increased income inequality among income classes.
3.2 Tourism and justice

In the broader literature on the economic impacts of tourism, little research has explicitly addressed the negative outcomes of tourism in the area of justice. The few studies that have addressed justice and tourism mainly relate to the regions within Latin America, Asia, Africa and Oceania (e.g. Biagi et al., 2020). However, Higgins-Desbiolles (2010) argued that there is a clear relationship between tourism and injustice. In particular, local populations and socio-economically disadvantaged members of society must pay the cost for the negative impacts of tourism in the form of entry-level jobs with low wages, limited career opportunities, gentrification and crowding and pollution effects (Higgins-Desbiolles, 2018a, 2020; Higgins-Desbiolles and Bigby, 2022). Thus, just tourism development should prioritise and centre the interests of the local host community. Notably, Higgins-Desbiolles (2008) conceptualised justice tourism as an umbrella term that encompasses various tourism initiatives that increase awareness of socio-economic grievances within the local population among travelers (ibid., 2008, 2010, 2018).

As an important moral consideration in the development discourse, Sen (2012) addressed the multidimensionality of and variations in people’s capabilities in using available local and regional resources (Sen, 2012). Thus, Sen's view of justice extends beyond solely addressing income inequality (Winter and Kim, 2021). However, few examples in the tourism literature have addressed Sen’s capability approach in the context of tourism. One of the earlier studies was conducted by Croes (2012), who assessed tourism development through the capability approach by investigating the relationship between tourism development and human development. Indeed, human development contrasts with the growth-oriented idea of profit maximisation and refers to three pillars: capabilities, achievements (functioning) and freedom to choose and seize opportunities. Croes et al., (2020) observed a rather weak correlation between tourism and human development. Interestingly, increasing income levels does not
directly translate into human development dimensions, which lends support to Sen’s argument that income alone does not lead to well-being within the local population. Nevertheless, the main merit of tourism growth lies in its potential to support institutional efforts to improve human development, including health services, education or safety. In more recent studies, Croes et al. (2020, 2021) further attempted to investigate the relationship between economic growth and human development. They suggested that both economic growth and human development are conceptually linked and can be mutually achieved. In their study, they operationalised competitiveness through dynamic price and welfare levels, as well as satisfaction and productivity (Croes et al., 2020). The authors argued that indicators of human development significantly affect tourism competitiveness. In turn, economic growth resulting from the tourism industry’s competitiveness can provide the resources needed to support human development, particularly by expanding choices and opportunities to realise a healthy and fulfilling life (ibid., 2020).

A study by Winter and Kim (2021) also referred to Sen’s capability framework and examined the opportunities provided by tourism development and their contributions to well-being, particularly from the perspective of people in low-income households. Their research revealed that opportunities emerged from both monetary and non-monetary tourism resources that contributed to achieving individual well-being. Income from tourism allowed workers to purchase commodities that enhanced their social status, while non-monetary resources (e.g. the provision of public spaces) facilitated individual and collective functioning. Thus, focusing on multidimensional aspects, including both monetary and non-monetary aspects, has been shown to improve the socio-economic situation and well-being of the most disadvantaged members of society. Similarly, Biagi et al. (2020) observed that the availability of tourism-related services and amenities (capabilities) and their accessibility (functioning) was crucial for improving the urban population's quality of life in European cities. However, the authors also critically addressed the negative effects of tourism growth.
Pro-poor tourism appears to be one way of attaining justice for disadvantaged members of society and thus addressing the consequences of income inequality (Mitchell, 2012). This concept highlights the importance of equity and aims to close the gap between low- and high-income groups. Interestingly, Schilcher (2007) revealed that the effectiveness of interventions to reduce income inequality mainly depends on the predominant ideology of the current government and institutions. In fact, development strategies developed by governments and institutions that support pro-poor tourism initiatives and are oriented towards the neoliberal doctrine increase income inequality (Lee, 2009a). Schilcher (2007) indicated that, in resource-poor regions, tourism is often considered a tool of regional development, but it is frequently only instrumentalised to promote economic growth and thus leads to injustice for the local population, particularly low-income households (Rastegar et al., 2021). For instance, as a consequence of rapid economic growth, property values raise faster than income. As a result, property becomes unaffordable for low-income households (Bartik, 1991). The critical paper by Schilcher (2007) indicated that, 'given the competitive pressures in a neoliberal environment, [...] government resources are allocated to cash-generating export sectors, such as tourism, which capitalise on their major resources of cheap labour and land' (p. 176). Although the original intention of the government was to strengthen small-scale and domestically controlled tourism, the lack of domestic financial capital leads to market deregulation. In turn, this results in negative implications for local economies, as evidenced by high leakage and increasing income inequality. As long as the neoliberal agenda dominates economic reforms, low-wage service industries (including tourism) will emerge as the dominant industries in the deregulated region (ibid., 2007).

Similarly, Lee (2009a) addressed the importance of economic justice by stating that costs and benefits attributed to the local population must be considered when assessing the social and economic significance of tourism. These include leakage effects, the types of employment generated and the distributional equity of economic benefits. The
author argued that inequalities are mainly caused by economic restructuring in advanced regions, which shift from traditional manufacturing sectors to low-wage service sectors. He compared income distribution (as measured by mean incomes and Gini coefficients) between 1990 and 2000 in U.S. counties that are dependent on tourism services and manufacturing. During this period, tourism-dependent counties developed a significantly higher degree of income inequality than manufacturing-dependent counties. Consequently, income inequality reduced opportunities on the labour market and thus decreased the standard of living, especially for low- and even middle-class households. In extreme cases, it can lead to conflicts in communities and class-based divisions between community members. Notably, Lee (2009a) also critically argued that socio-economic problems cannot be solved by free market solutions.

Moreover, Scheyvens and Momsen (2008) claimed that small islands frequently suffer from poverty and inequality due to their colonial heritage, ethnic diversity, low levels of education and the post-colonial economic dominance of foreign tourism multinational corporations. Tourism typically perpetuates unequal relations of dependency and fuels uneven and inequitable socio-economic and spatial developments (Milne and Ateljevic, 2001). Therefore, tourism development that aims to support lower-income groups should be promoted (e.g. in the form of a pro-poor tourism approach that empowers the poor to participate in the tourism industry at all levels and scales of operations). The authors concluded that tourism can contribute to economic growth and development. However, tourism does not necessarily influence the reduction of income inequality and poverty, when social sustainability is not directly addressed in government policies, but rather included as an add-on to strategies mainly emphasizing economic growth (ibid., 2001; p. 36).
3.3 Socio-economic impact of events

Events-related tourist activities (particularly sporting events) usually only occur over a short period of time (Preuss, 2011; Schwark, 2016). Thus, single events’ contributions to long-term regional socio-economic development is questionable, unless they are of a considerable size (e.g. mega-events in sports, music or culture) or recur at regular intervals (Getz et al., 2012; Maharaj, 2015; Li and McCabe, 2013; Thomson et al., 2019).

Nevertheless, the events literature has elaborated on the need for hosting regions to identify ways to ensure that events benefit the regional population beyond short-term income opportunities (Ziakas, 2020). To do so, both public governments and institutions must balance the events sector’s economic interests and the potential negative environmental and social impacts experienced by regional communities (Phi et al., 2014). In fact, periodic events that do not sufficiently consider community interests have difficulty surviving in the long run (Higgins-Desbiolles, 2018b). Developing a diverse event portfolio could help to address such conflicts at the regional level. In such a portfolio, events could be synergised to share resources and competencies with each other and thus maximise socio-economic benefit and minimise negative externalities (Getz, 2008; Ziakas, 2020). This would also allow regions to incorporate events into destination branding strategies, thereby combatting the seasonality issues associated with regular tourism (Richards and Palmer, 2012). In this way, events could also contribute to the socio-economic welfare of the regional population by securing tourism employment and income opportunities throughout the calendar year in an industry plagued by short-term employment, low wages and high staff turnover (Li and McCabe, 2013). Events can also contribute to regional identity building (Elias-Varotsis, 2006) or ‘placemaking’ processes, as they foster network building among regional businesses (Richards, 2017; Sharpley and Stone, 2020). Moreover, regional policymakers can leverage the social and economic resources of their event portfolios to achieve long-
term policy objectives (Chalip, 2004; Ziakas, 2020). Effectively incorporating events into policy objectives in this way may be an effective means of boosting regional socio-economic development (Getz et al., 2012; Li and McCabe, 2013; Wallstam et al., 2020).

A significant portion of the events literature supports the argument that events can play an important role in regional development in general and tourism development in particular (Hodur and Leistritz, 2006; Oklobdžija, 2015). Often, this argument focuses on the economic potential of events, where income for the local and regional population is generated by tourists visiting the events (Agha and Taks, 2015, 2018). For example, large-scale sporting events and their auxiliary activities have the potential to create short-term economic benefits for households near the events (Tonga Uriarte et al., 2019). However, events can also lead to crowding out effects if staged at times when they compete with a destination's regular tourism offers, especially during high season; this leads to a decline in tourism arrivals and local consumption (Cao et al., 2017). On the one hand, potential guests actively stay away from the destination during the event period to avoid negative event-specific aspects, such as crowding. On the other hand, event participants (e.g. athletes and their team members) may occupy guest beds at times when ordinary visitors consume regular tourism products and services (Cao et al., 2017; Kronenberg et al., 2016; Preuss, 2011). A decline in regular tourism due to an event may result in significant loss of income, employment and subsequently welfare for members of the tourism workforce who live in close proximity to major events (Cao et al., 2017).

In line with studies on the economic impacts of tourism, a challenge in event impact studies is the quality of the data collection process (Dimitrovski et al., 2022). However, with respect to the data analysis, the events literature largely employs the same methodologies to ascertain the economic impact of events. These methodologies mainly consist of IO models (e.g. Wood and Meng, 2020), SAMs (e.g. Saayman and Saayman, 2012), and CGE models (e.g. Li et al., 2013). Socio-economic and distributive perspectives on event impacts exist, but
they are highly under-explored in relation to their purely economic counterparts (Hodur and Leistritz, 2006). Among alternative approaches, the focus is on mega-events and their impact on the income distribution of host destinations and regions, with the partial inclusion of either SAM or CGE models. For example, Maharaj (2015) illustrated the socio-economic consequences of large sporting events through the loss of livelihoods, particularly for low-income households. At the same time, such events favour the interests of high-income households. Although infrastructure development may benefit the public, the advantages and costs of these developments are usually unequally distributed and are a major contributing factor to the poor moving out of urban areas and into the periphery (Pereira, 2018). Moreover, in contrast to the promises made by advocates of large-scale events, it is also questionable whether infrastructure built for such events actually see sustained use once the events are over (Maharaj, 2015; Pereira, 2018).

In short, much like traditional studies on the economic impacts of tourism, the literature on the events of economic impacts has consistently overlooked broader sustainability with regard to the role of events in regional development (Mair and Smith, 2021). In fact, most event studies that address sustainability have only focused on the potential environmental impacts of events and how single events can be organised in a manner that mitigates environmental externalities (Kim and Kaewnuch, 2018; Pernecky and Luck, 2013). Thus, there has been systematic neglect of post-event follow-up and accountability among practitioners, policymakers and even academics. As a result, there is little evidence about whether events actually contribute to socio-economic development to the extent that is typically promised during the planning and bidding phases of mega-events (Pentifallo and VanWynsberghe, 2012). In discussions on the long-term socio-economic legacy of events, the focus is often on economic growth, destination branding or infrastructural legacy (Hassan and O’Connor, 2009; Li and McCabe, 2013; Perić, 2018). In the neoliberal era, events have been criticised for receiving public funds that could have been used for other important causes (e.g. healthcare or education), while
providing few or no tangible benefits to the local population (i.e. the workforce) that effectively funded these events through taxes (Higgins-Desbiolles, 2018b; Li and McCabe, 2013; Maharaj, 2015).

The discourse on the economic impacts of events remains rather narrow in focus and often centres on singular events at the expense of a wider discussion on aspects of sustainable social and economic development (Mair and Smith, 2021). With regard to the role of events in long-term socio-economic development, wider societal aspects in the host region must be considered, including long-lasting networking opportunities and collaborative relationships between small businesses, local and regional governments and sport associations (Dredge and Whitford, 2011; Mair and Smith, 2021; Orefice and Nyarko, 2021). More relational research approaches are also needed to explore how events can enhance networking opportunities and contribute to the creation of social capital among local residents and businesses (Castyana et al., 2022; Farinda et al., 2009; Misener and Mason, 2006; Morgan et al., 2020). Furthermore, destination branding as an event-focused region can contribute to sustainability beyond income opportunities through increasing tourist arrival numbers; branding can attract investments in a region, which in turn contribute to stable and secure employment for the regional population (Knott et al., 2015). However, to assess the sustainability of tourism jobs, further investigation is needed on the types of occupations that are actually created when staging major events (Daniels et al., 2004).
4 Research design

4.1 An interpretivist perspective of the impacts of tourism

In this section, I elaborate on the epistemological and methodological considerations that informed the preparation and implementation of this doctoral study. The preceding discussion of the shortcomings and limitations of contemporary approaches to the economic impacts of tourism demonstrated that it is insufficient to simply extend and refine current economic models (Alam and Paramati, 2016; Elsner, 2007; Griffiths and Lucas, 2016). The primary aim of current research on the economic impacts of tourism is to improve the accuracy and comprehensiveness of predominantly quantitative impact measurements. In the process, such approaches incorporate multiple economic actors and specific aspects of their behaviour through mathematical economic modelling (Comerio and Strozzi, 2019; Egan and Nield, 2003; Klijs et al., 2012).

However, to address more socio-economically relevant issues, scholars who study the economic impacts of tourism must further develop the underlying theory of this field (Ioannides et al., 2021; Jones and Walmsley, 2021; Weick, 1995). Although the typical theoretical embeddedness of the economic impact of tourism mainly refers to the growth-oriented paradigm (Alam and Paramati, 2016; Egan and Nield, 2003; Lee, 2009a), the approach that I adopted for this thesis examines the impact of tourism based on a different theoretical stance. In Chapter 2, the discussion of the key characteristics of the economic impacts of tourism demonstrated that mainstream epistemology mainly depicts knowledge in objective positivistic terms through single and highly aggregated indicators (Elsner, 2007). Shifting the theoretical perspective away from positivism involves different criteria for what epistemologically counts as knowledge (Tribe, 2009).
Thus, I conducted the current research from an interpretivist perspective (Risjord, 2014).

Overall, interpretivism is a paradigm that criticises the use of the assumptions and methodologies usually applied in natural sciences in social science research (ibid., 2014). In fact, Popper’s understanding of positivism does not distinguish any epistemological differences between the natural sciences and the social sciences in general and economic science in particular (Popper, 2002). By contrast, as a theoretical stance, interpretivism refers to the belief that the social world, including economic activities and social institutions, cannot be studied and understood from an objectivist paradigm typically assumed in the physical world. Therefore, assumptions and methodologies that are usually applied in natural sciences, such as positivism, are not applicable in the social world. This is because the social world is comprised of and driven by the thinking modes of humans and related actions. Thus, human motives, intentionality and communicative processes of meaning making are dominated by the societal, political, cultural and – especially – economic spheres (Markula and Silk, 2011; Risjord, 2014).

Knowledge gained from analyses of the socio-economic impact of tourism does not need to follow the objectivity assumption of positivism, as law-like behaviour is not verified by factual data (i.e. similar to the physical environment) and there is no aim to deduce predictions about human behaviour. However, this is the perspective suggested by mainstream economic and management theories (Lawson, 2019; Putnam and Walsh, 2014; Risjord, 2014; Ghoshal, 2005; Fuchs, 2022). Rather, socio-economic impacts always involve human aspects, which implies a relativist ontology in which social reality is dependent on human perception and intentionality. Thus, knowledge also implies subjective perspectives, including prevailing norms and values in different social, political and cultural settings (Bryman, 2016; Lawson, 2019; Potrac et al., 2014; Risjord, 2014; Sparkes, 1995).

Therefore, the purpose of this research is not to improve the accuracy of quantitative impacts through methodological advancements in
economic modelling, as would be the case in a positivistic approach (Bryman, 2016). Instead, the knowledge criteria in this thesis relate to a better and more nuanced understanding of the type and significance of the impacts from tourism and events by addressing socio-economically relevant problem areas in tourism employment, which were also deduced using quantitative methods grounded in mainstream economic impact measurement tools (e.g. IO analysis).

In fact, the interpretivist perspective led me to a research design that involves both quantitative and qualitative methods (Potrac et al., 2014). Thus, I did not fully exclude quantitative methods and ‘reinvent the wheel’ by developing an ad hoc approach to comprehensively understanding the socio-economic impacts of tourism. Rather, I still referred to existing quantitative methods to identify employment structures and occupational and distributive trends. However, I did not purely base my understanding of the socio-economic impacts of tourism on quantitative data. Instead, I treated statistical and numerical data as only one part of the entire picture. Thus, I demonstrated how the methodological capacities of traditional models on the economic impacts of tourism can be extended to gain different types of knowledge and thus contribute to a better understanding of the socio-economic implications of tourist activities in a particular region. Accordingly, as part of this epistemological shift, I critically addressed traditional and predominantly quantitative (i.e. positivistic) perspectives on approaches to the economic impacts of tourism by enriching them with societally relevant measures through qualitative inquiries. Thus, I reflected on traditional tourism impact approaches' systematic omission of important societal aspects and issues related to injustices for a large portion of the working population in the tourism industry (Lovelock and Lovelock, 2013; Jones and Walmsley, 2021). In this sense, interpretivism provided the appropriate paradigmatic stance to highlight and cope with the prevailing limitations of mainstream economic impact approaches. The next section presents the study area examined in this research, followed by a more detailed discussion of the methodology used in the thesis.
4.2 Study area: The Jämtland Härjedalen tourism and event region

In this section, I justify the choice of the study area for this research, including the region's geographical boundaries and tourism characteristics and a case study of major international sporting events hosted in the region.

The study area comprises the Swedish region of Jämtland Härjedalen (Jämtlands län), a spatial and administrative entity consisting of the provinces of Jämtland and Härjedalen. In terms of surface area, Jämtland Härjedalen is the third largest region in Sweden. However, at 3.4 inhabitants per square kilometre, it is the Swedish region with the second-lowest population density (SCB, 2021). Tourist activities are concentrated around the capital city, Östersund; the main winter sport destination, Åre; and several smaller mountain destinations. The region highlights nature-based attractions in summer and winter, with a strong events industry that hosts numerous cultural and sport activities based on a rich gastronomic culture. These tourist amenities are also reflected in the region's employment structure, as the proportion of employment in tourism sectors in total regional employment is considerably higher in Jämtland Härjedalen than in other Swedish regions (SCB, 2021).

Accordingly, tourism and events play a significant role in Jämtland Härjedalen's economy and prosperity. Thus, they have a high socio-economic relevance in terms of employment and income-related issues for the regional population. Given the insights gained from Brandt's (2018) study, examining the socio-economic impacts of tourism for a region with strong tourist activities is particularly important. The author studied wage dynamics and determinants in the Swedish tourism industry and concluded that earning potential in this industry was still negative compared to other sectors (Brandt, 2018).
Choosing Jämtland Härjedalen as a study region and administrative entity has implications for the applicability of economic impact models. The European Union uses geocodes to classify geographic entities into *Nomenclature des unités territoriales statistiques* (NUTS) regions. This hierarchical classification is based on population size and ranges from the national level (NUTS 0) to small regions (NUTS 3). It is frequently used for statistical and analyses purposes. Jämtland Härjedalen is classified as a NUTS 3 region. The data that were used to build economic impact models in this study were initially only available for the national level. Therefore, studying region-specific impacts required adjustments to the NUTS framework (Kowalewski, 2015). Defining the study area at the NUTS 3 level ensured the availability of statistical data needed for these adjustments. The timeframe for this study spanned annual tourism activities in Jämtland Härjedalen over a period of 10 years: from 2008 to 2017. This long-term perspective enabled the study of trends related to the impact of tourism and its contributions to regional socio-economic development. Notably, however, the relevant tourism activities occurred before the Covid-19 pandemic. Therefore, the quantitative estimates did not include the economic impacts of travel restrictions related to Covid-19 or tourism activities after Covid-19.

As noted in the introductory chapter, the shortcomings of impact measurement approaches were reflected in the remarks of key representatives of the regional tourism industry of Jämtland Härjedalen. Over several workshops in 2013 and 2014, several representatives of regional tourism and work-related institutions and authorities and researchers from ETOUR at Mid Sweden University debated the need for new approaches to comprehensively measuring the social and economic impacts of tourism in the region. Workshop participants criticised, among other aspects, the lack of a clear and comprehensive picture of the socio-economic effects of tourism on the

---

7 These meetings resulted in a pilot project that aimed to provide an overview of state-of-the-art economic impact models and current analysis practices in Sweden. The findings were published in the ETOUR report *Ekonomiska spridningseffekter inom turism* (Kronenberg et al. 2014).
regional economy and society. The main reason for this critique was the well-known problem that the tourism industry is not consistently defined and that definitions are heterogeneous and based on fragmented documents containing the different perspectives of regional actors (Kronenberg et al., 2014).

Moreover, although current official tourism statistics are available at the regional level, they are not considered an optimal data source for developing a more prudent tourism planning and policy that benefits all stakeholders, including the community and private and public actors. Hence, a clear and standardised approach that goes beyond official tourism statistics does not yet exist for Jämtland Härjedalen. In addition to improved impact measurement for major economic activities (e.g. a reliable estimate of private business sales and tax revenues for public actors at different geographic levels), socio-economic dimensions of tourism were specifically considered to be of major interest. More precisely, representatives of regional institutions and authorities were concerned about both the social effects of tourism for the workers involved in core tourism and related tourism industries and the socio-economic importance of tourism for the regional society as a whole (Kronenberg et al., 2014).

Case study: World Championships Region 2019

Jämtland Härjedalen’s proximity to natural amenities not only attracts tourists and regional visitors who wish to engage in nature-based activities (Marcouiller et al., 2004), its established tourist infrastructure in both mountain destinations and urban areas (e.g. skiing facilities) also creates opportunities to host large-scale events. Events have played an important strategic role in both developing tourism in the region and providing attractive leisure activities, employment and income opportunities for the regional population. Thus, as a particular form of tourist activities in the region, events also contribute to regional socio-economic development (Sak et al., 2022). Therefore, I included the World Championships Region 2019 as an important case
study in the current research on the socio-economic impacts of tourism, as it has interesting institutional implications.

In February and March 2019, Jämtland Härjedalen had the opportunity to host two major international winter sporting events: the World Championships in Alpine Skiing (FIS Alpine World Ski Championships) and Biathlon (Biathlon World Championships). Hosting two world championships in one region only a few weeks apart was a unique occurrence that had only occurred once in the history of alpine skiing and biathlon events (i.e. in 1958 in Salzburg, Austria). Although events are part of regional tourism development strategies in Jämtland Härjedalen, the situation offered a unique opportunity for a sparsely populated region to host two sporting mega-events.

Perhaps unsurprisingly, these events had a substantial economic, social and ecological impact on the region in both positive and negative ways. The Alpine Skiing and Biathlon World Championships were two standalone events and organised independently by their respective associations. One point that they had in common was that international and national governing bodies and associations were in charge of assigning marketing rights to regional event organisers. The marketing rights are assigned to financially strong sponsors, usually large foreign corporations. Thus, foreign sponsors gain the majority of media coverage and have better preconditions to gain from these events. Foreign sponsorship eventually results in high leakage effects, as regional partners are too small to be included in this process. Nevertheless, both events had significant potential to contribute to the region’s social and economic development (Crompton, 2006; Deery and Jago, 2010) not only through the events themselves but also tourism-related activities that typically take place before and after the events. Not alone the potential long-term social, economic and cultural legacy effects of World Championships 2019 that can arise for the region Jämtland Härjedalen.

The idea of utilising this potential to benefit small and medium-sized businesses in the region was developed by the regional organising committees for the Alpine Skiing and Biathlon World Championships,
which then formed the *World Championships Region* (WCR2019). WCR2019 was a formal umbrella organisation which did not own the marketing rights to the individual events but whose purpose was to market and brand Jämtland Härjedalen as an event region. In particular, small and medium-sized local and regional companies and organisations had an opportunity – at least financially – to participate in and thus indirectly promote and sponsor Jämtland Härjedalen as a host region. In practice, this was accomplished by purchasing various membership packages. These packages included the right to use and promote the WCR2019 brand and sell tickets to events and side events (e.g. networking activities) and merchandise. In the process, as a form of institutional organisation for the regional event industry, the WCR2019 initiative provided an opportunity for local and regional small and medium-sized tourism and non-tourism companies to form a mutual network of supporters who aimed to develop Jämtland Härjedalen into an event region that could foster both business opportunities and social capital within the network (Wallstam and Kronenberg, 2022).

### 4.3 A mixed-methods approach to studying the socio-economic impacts of tourism and events

In line with the interpretivist perspective, the methodology for this study involved mixed methods (Creswell and Clark, 2017; Khoo-Lattimore et al., 2019; Risjord, 2014). The decision to use mixed methods was designed to overcome the positivistic perspective in traditional approaches to the economic impacts of tourism and gain a better understanding of the impact of tourism in a social context.

Accordingly, in my research design, I referenced the conceptual framework recommended by Dopfer et al. (2004). They suggested that
economic activities should be analysed from various perspectives other than the typical micro or macro view. They argued that solely analysing economic activities based on a micro and/or macro perspective is seriously limiting and does not fully express the socio-institutional dynamics of the economy under study. Instead, the authors proposed a *micro-meso-macro* framework that also considers the existing system of rules, norms and social practices in an economy. Within this analytical framework, the micro domain refers to the individual economic agents that carry and apply rules in a complex economic system; thus, the approach implies a bottom-up perspective of the economy. The system of rules itself, however, is expressed at the meso level or the institutional domain. It is concerned with rules and social practices that continuously evolve, stabilise and change over time. Moreover, it describes the essential normative aspects that are typically negotiated and (dis-)agreed and thus change in the process of institutional development. Finally, the macro level refers to the analysis of the economic structure (i.e. the systemic structure of the economy as a whole). In this way, the authors recommended analysing the economic system from various perspectives under the assumption that the micro and macro domains are two different perspectives of the rules and rules system of the economy. Moreover, Hollingsworth and Müller (2008) highlighted the importance of multi-level analyses and considering the meso level. Indeed, in social science in general and economic analyses in particular, all levels constantly interact with each other. Notably, no level exists without having relationships with other levels (Krause, 2012). Therefore, understanding the complexity of an economic system requires an understanding of how the different levels interact, which is a major goal of socio-economics research.

Based on the analytical architecture provided by Dopfer et al. (2004), I approached my study on the socio-economic impacts of tourism and events by considering both macro-level and meso-level perspectives. For now, this PhD research omits the micro-level perspective, which can be examined in a follow-up study. Using mixed methods, I combined macro-level quantitative data collection and analysis with meso-level qualitative data collection and analysis (Creswell and Clark,
2017; Dopfer et al., 2004; Khoo-Lattimore et al., 2019). Specifically, I employed a convergent (also known as concurrent) mixed-methods design in which the data collection and analysis used in one method was embedded in the other method. In a convergent mixed-methods design, one method usually dominates in the overall methodology (Creswell, 2014). Convergent approaches include but de-emphasise a sequential character. Other than in sequential design, in which findings from one method inform the approach used in another method, a convergent design enables conclusions to be drawn by analysing findings from both methods not only in sequence but also concurrently. Accordingly, in my study, the quantitative portion of the research remained the primary method. This choice was informed by the research aim, which is to meaningfully and critically extend traditional approaches to the economic impacts of tourism towards a more comprehensive approach to addressing socio-economic issues, such as the effects of tourism on employment and income in the regional tourism workforce.

Naturally, this study began with quantitative data collection and analysis. In the process, I developed a regional economic impact model to estimate the socio-economic impacts of regional tourism and events. These findings remained at the macro level but were extended to address new monetary measures (Söderbaum and Brown, 2010), including (1) the development of regional imports and leakages over a 10-year period between 2008 and 2017 in Jämtland Härjedalen, (2) the disaggregation of tourism and events' effects on employment and income for specific occupational areas in the regional tourism industry and (3) the sector-wide effects of tourism on the distribution of employment and income for the tourism workforce.

Subsequently, the qualitative data collection and analysis focused on the meso level, including institutional perspectives on the socio-economic impacts of tourism (Dopfer et al., 2004; Elsner, 2017). At the institutional level, continuous dialogues about rules and social practices occur and shape the overall development of regional tourism and events. Thus, the institutional perspectives provided a suitable
data source for further interpreting the findings identified at the macro level, and vice versa. Subsequently, I conducted several semi-structured interviews with representatives of the regional tourism and events industry. The interviewees were representatives of various regional institutions, such as the municipality, the regional tourism organisation, destination management organisations, events associations and labour unions. Furthermore, I conducted one focus group interview with the board members of WCR2019. Discussions with institutional representatives allowed me to identify meta-topics about prevailing socio-economic dynamics in the regional tourism and events industry (Creswell and Clark, 2017). Thus, they provided valuable insights on major development practices and their implications for the tourism workforce from a justice perspective, thereby contextualising macroeconomic views on the distribution of tourism employment and income. Qualitative data from tourism institutions also provided information about goals and directions related to socio-economic development that are most desired by institutional representatives of the regional tourism and events industry.

4.4 Quantitative model building: A macro-level perspective on new monetary measures

In this section, I present the quantitative methodology used for the macro-level estimation of the socio-economic impacts of tourism, which considered new monetary measures (Söderbaum and Brown, 2010). First, I outline the basic IO methodology, its regionalisation process and the estimation of various region-based socio-economic indicators, including employment, income, value added and imports. Second, I illustrate the method used to disaggregate employment and income effects into particular occupational areas for specific tourism
sectors. This allowed me to identify the distribution of regional income, as expressed by Gini coefficients and Lorenz curves (De Maio, 2007). Finally, I discuss the data requirements needed to perform these analysis steps and the data collection process.

### 4.4.1 The regional input-output model for Jämtland Härjedalen

The starting point for this study was the development of a regional tourism economic impact model for Jämtland Härjedalen that would allow me to quantitatively estimate both primary and secondary socio-economic effects (Kronenberg et al., 2018; Miller and Blair, 2009). As outlined in section 2.1 the IO model is a type of economic impact model that can be used to estimate such impacts based on inter-sectoral linkage structures. Accordingly, the model considers transactions between the sectors required to produce products and services demanded by end consumers (e.g. tourists or event attendees).

Although the limitations of basic IO models and more complex IO models have been widely discussed in the literature (Dwyer et al., 2004), I decided to apply the basic IO framework in my study for several reasons. First, using multiplier-based models that consider inter-sectoral relationships enabled a more detailed analysis of these relationships, as provided by, e.g., econometric methods. Thus, to the best of my knowledge, the only way to quantify secondary employment and income effects is to apply a linkage-based economic model borrowed from the literature. Second, I decided to use an IO model over more complex models (e.g. CGE models) due to limited resources to develop a regional SAM. Constructing a SAM would have required the implementation of large amounts of transaction data related to factors of production and other actors in the regional economy. However, the availability of this data is highly questionable, as they must be hand-picked from statistical databases and matched to
the IO format. Moreover, updating a SAM annually for the period from 2008 to 2017 added to this complexity and thus made the use of this model a nearly impossible endeavour. Third, CGE models include a range of equations that attempt to describe the behaviour of actors in an ‘equilibrium economy’, usually applied for nation-wide effects (Burfisher, 2017). However, these modelling assumptions are based on neoclassical economic theory, a paradigm that I criticise in this thesis (Brodbeck, 2011; Komlos, 2012; Fuchs, 2022). Thus, while IO models can depict monetary flows between industry sectors (i.e. intermediate transactions), the results obtained from these models still provide useful insights on the socio-economic impacts of tourism and their implications for the regional tourism workforce (Kronenberg and Fuchs, 2021b). Finally, transparency in terms of the modelling process, assumptions and limitations of the model further supported the decision to apply the IO methodology in my research (Miller and Blair, 2009).

4.4.1.1 The input-output model

The first IO model was developed in the 1940s by Wassily Leontief, who was awarded the Nobel Prize for Economics in 1973 for his academic achievements. The IO framework represents monetary flows of goods and services between various sectors of an economy over a specified period of time, usually one year (Miller and Blair, 2009). Accordingly, the framework quantifies the relative importance of interrelationships in sectors of an economy. Today, many countries’ systems of national account (SNA) use the IO table as an appropriate framework for quantifying changes in economic aggregates, such as GDP and capital formation. The underlying database for the IO model is the IO table, a so-called transaction matrix (Hara, 2008). Table 1 illustrates a simplified transaction table, and highlights the core entries and their relationships.
Table 1 Simplified input-output transaction table

<table>
<thead>
<tr>
<th>Sector</th>
<th>Sector</th>
<th>Sector</th>
<th>Final demand</th>
<th>Total output $X_i$</th>
</tr>
</thead>
<tbody>
<tr>
<td>$i = 1$</td>
<td>$j = 1$</td>
<td>$x_{11}$</td>
<td>$x_{12}$</td>
<td>$x_{1m}$</td>
</tr>
<tr>
<td>$i = 2$</td>
<td>$j = 2$</td>
<td>$x_{21}$</td>
<td>$x_{22}$</td>
<td>$x_{2m}$</td>
</tr>
<tr>
<td>$i = n$</td>
<td>$j = m$</td>
<td>$x_{n1}$</td>
<td>$x_{n2}$</td>
<td>$x_{nm}$</td>
</tr>
<tr>
<td>Value added $v$</td>
<td></td>
<td>$v_1$</td>
<td>$v_2$</td>
<td>$v_m$</td>
</tr>
<tr>
<td>Total input $X_j$</td>
<td></td>
<td>$X_1$</td>
<td>$X_2$</td>
<td>$X_m$</td>
</tr>
</tbody>
</table>

Note. Adapted from Miller and Blair (2009).

In the matrix depicted in Table 1, the columns display the monetary values of received inputs for industry $j$ from all other sectors $i$ in the economy and the sectors' contributions to value added $v$ (e.g. tax contribution, profits, salaries and wages). The input from each sector includes products and services required from other industry sectors $i$ to generate products and services in sector $j$, which is also called 'intermediate demand'. The rows reflect the corresponding units of output in sector $i$ to other sectors $j$ in the economy and to final demand $y$, including both households and governments (Miller and Blair, 2009). Both intermediate and final demand generate total demand for inputs $X_m$ and thus determine the total amount of output $X_n$ produced (Hara, 2008; Miller and Blair, 2009).

With the IO table provided as main data by Statistikmyndigheten (SCB), the official Swedish statistical office, the IO model was derived via matrix algebra and can be expressed as follows:

$$\Delta x = (I - A)^{-1} \times \Delta y$$

where $x$ represents the vector of total sales in each sector, $I$ is the identity matrix whose diagonal elements are all 1 and the rest 0 (Hara,
2008). The technology matrix $A$ shows the degree of inter-industry transactions and thus only refers to cells $x$. Each cell in matrix $A$ represents the percentage share of total input, expressed as national IO coefficient $\hat{a}_{ij}$ (see Table 2).

Table 2: Technology matrix $A$

<table>
<thead>
<tr>
<th>Sector $i = 1$</th>
<th>Sector $j = 1$</th>
<th>Sector $j = 2$</th>
<th>Sector $j = m$</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\hat{a}_{11}$</td>
<td>$\hat{a}_{12}$</td>
<td>$\hat{a}_{1m}$</td>
<td></td>
</tr>
<tr>
<td>$\hat{a}_{21}$</td>
<td>$\hat{a}_{22}$</td>
<td>$\hat{a}_{2m}$</td>
<td></td>
</tr>
<tr>
<td>$\hat{a}_{n1}$</td>
<td>$\hat{a}_{n2}$</td>
<td>$\hat{a}_{nm}$</td>
<td></td>
</tr>
</tbody>
</table>

Note. Adapted from Miller and Blair (2009).

The inverse term $(\mathbf{I} - A)^{-1}$ is also known as the Leontief inverse. The vector $y$ indicates final demand (Miller and Blair, 2009).

The impact on the economy, or the changes in production output for sectors $x$ expressed by delta $\Delta x$, can thus be studied by altering values for final demand, expressed by delta $\Delta y$. In other words, the impact of tourism demand $y$ on output $x$ of sectors in the regional economy requires the appropriate determination of $y$. In the case of tourism, this includes the consumption pattern of products and services provided by various sectors represented in the IO table.\(^8\)

The economic impact can be expressed through various indicators, such as changes in sectoral output, value added, employment or income (Hara, 2008). Notably, the IO model consists of the inherent structure of an economy, which displays interlinkages between sectors. Accordingly, when demand in one sector increases (e.g. a tourist

\(^8\) See section 4.4.3 on data requirements for a more detailed discussion of modelling for the tourism vector $y$.\)
consumes accommodation and food services), the model allows the estimation of the amount of output, employment (and the corresponding income) required from other (i.e. backward-linked) sectors to satisfy this demand (Stabler et al., 2009).

Defined as an open model, the IO model captures both direct and indirect effects. A closed model further considers induced effects and follows the same logic. With the additional row of wages and salaries as input and the column on final household demand as output in technology matrix A, the closed model inverts the additional expenditures made by employees in each sector. Therefore, it is possible to capture the consumption made by households, which is equivalent to employees in each sector (Hara, 2008; Klijs et al., 2012). However, the literature has warned of the potential overestimation of induced effects, as this third round of household spending can easily become unreliable (Miller and Blair, 2009). Therefore, the Jämtland Härjedalen model used in this thesis was defined as an open model and only considered the direct and indirect effects of tourism.

Assumptions in input-output models

As previously mentioned, the IO framework is based on various modelling assumptions, which can be summarised as follows (Dwyer et al., 2004; Miller and Blair, 2009):

- The output generated from each sector is aggregated by only one product or service. It is assumed that, for instance, farms only provide crops as a main product, although some of the sales revenues are generated in practice through other products. This assumption is known as the industry technology assumption (ITA).
- Any increase in demand can be satisfied, and there are no resource limitations assumed, such as a lack of skilled workers or limited intermediate products.
• The input structure is assumed to be fixed. This means that, in basic models, the concept of economies of scale to increase efficiency does not apply. Thus, increasing demand requires the same ratio of inputs. In other words, basic IO models do not model (price) elasticities or substitution effects.

• Both the employment per output ratio and the income per output ratio is considered the same for the region and the nation.

In particular, the limited consideration of price changes has led a relatively large sub-group of economists to consider the results of IO models unreliable. However, the reliability question mainly depends on a combination of the following aspects: (1) how and for what purpose the model is applied, (2) how the results are interpreted and (3) whether the limitations are sufficiently reflected when making policy decisions based on findings from IO models (Crompton, 1995; Klijs et al., 2012).

For instance, to study specific hypothetical scenarios for forecasting purposes (e.g. the effects of 5% more tourism demand in the upcoming year), IO models are indeed limited and would not provide sufficiently reliable results. More concretely, a 5% increase in tourism demand would not necessarily generate 5% more jobs, income or sales throughout the regional economy. It is likely that the increase in demand would be met, at least partially, by existing employees, even without increasing wage levels; thus, it would not trigger any job and income effects. Moreover, although a company may need additional inputs from other sectors, this does not necessarily imply that its costs for additional input would proportionally increase by 5%, especially when allowing for economies of scale effects in practice. Thus, the correct interpretation would be that the model only demonstrates how much employment and income would be required to account for a 5% increase in demand (Hara, 2008; Klijs et al., 2012; Stabler et al., 2009). A final critical reliability aspect relates to the industry structure of a specific year. As described above, IO models are usually outdated by at least two to three years. If these outdated models are used to
estimate economic impacts, they can lead to significant overestimation or underestimation (Kronenberg et al., 2018).

The context in which I applied the IO model was clearly not a hypothetical scenario. Instead, I conducted a retrospective study on the impact of tourism on a regional economy (Miller and Blair, 2009). In other words, the study demonstrated the extent to which employment and income in Jämtland Härjedalen could be attributed to tourism activities in each year during the period between 2008 and 2017. A single-year perspective would not lead to the conclusion that tourism generated all these jobs in the region. In contrast, a 10-year perspective allowed me to deduce that certain jobs were generated by and retained in tourism (Daniels, 2004; Kronenberg et al., 2018; Kronenberg and Fuchs, 2021a, 2021b).

Indeed, it is important to demonstrate that assumptions about IO models are well-understood. Accordingly, models are applied for the correct purpose and empirical findings are correctly interpreted. Consequently, still today, there is a high number of academic papers with basic IO methodology published in top field tourism journals and thus recommended by prominent scholars (see: Blake, 2008; Mitchell and Gallaway, 2019; Smeral, 2015; Tohmo, 2018; Wood and Meng, 2020). This indicates that IO-based models are still widely appreciated and accepted in the tourism literature.

4.4.1.2 Regionalisation of input-output models

Unlike commercial databases such as IMPLAN (Minnesota Implan Group, 2021), statistical bureaus in Sweden and most other countries do not provide IO tables at the sub-national or regional level. Therefore, IO-based multipliers for tourism sectors are usually not readily available for Swedish regions (Kowalewksi, 2015). To address this issue, economists have developed various regionalisation techniques to capture region-specific industry structures, as represented by

For this study, I adopted the more accessible and transparent non-survey approach (Kronenberg and Fuchs, 2021b). This top-down approach allowed me to adjust national IO coefficients \( \hat{a}_{ijn} \) towards regional coefficients \( \hat{a}_{ijr} \). Thus, technology matrix \( A \) from the national model was adjusted for region-specific parameters. I chose to use location quotients (LQs) as criteria for the regional adjustment (Kowalewksi, 2015). LQs are ratios that determine regional size based on a national reference through different types of indicators. More specifically, LQ methods allow researchers to adjust the size of each regional industrial sector in terms of its employment structure. Each sector requires a certain amount of employment to generate its known output level, which is defined as employment per output ratio. If a sector’s regional ratio falls below its national ratio, it is assumed to be underrepresented in the region. Hence, the sector must import a certain amount of resources into the region to satisfy specific demand. I applied several types of LQs in this model. First, the simple location quotient (SLQ) depicted the relative size of the regional industry \( i \) compared to the national equivalent based on employment size:

\[
SLQ_{it} = \frac{RE_i / TRE}{NE_i / TNE}
\]

where \( RE \) indicates Jämtland Härjedalen’s regional employment and \( NE \) indicates Sweden’s national employment in the particular supplying sector \( i \) in year \( t \). \( TRE \) and \( TNE \) represent total employment in Jämtland Härjedalen region and Sweden, respectively. The criteria for adjusting the coefficients \( \hat{a}_{ijr} \) are as follows: if SLQ for sector \( i \) is > 1, then the region is considered to be specialised in this sector and no adjustments are needed. If SLQ < 1, the regional sector is not

---

9 To avoid confusion, the citations 'Kronenberg, 2009' and 'Kronenberg, 2012’ refer to Tobias Kronenberg, a professor of sustainable economics at Bochum University of Applied Sciences in Germany.
considered self-sufficient and therefore dependent on imports. The shortcoming of SLQs is that they do not consider cross-hauling, or the simultaneous import and export of commodities (Kronenberg, 2012).

Therefore, as an extension of the SLQ, the cross-industry location quotient (CILQ) was used to further compare the relative sizes of the regional selling industry \( i \) and the regional purchasing industry \( j \). This can also be expressed as the ratios between the SLQ of the selling sector and SLQ of the purchasing sector:

\[
\text{CILQ}_{ij} = \frac{\text{SLQ}_i}{\text{SLQ}_j} = \frac{\text{RE}_i/\text{NE}_i}{\text{RE}_j/\text{NE}_j}
\]

The Flegg location quotient (FLQ) is a further improvement to the CILQ (Flegg and Webber, 2000). In addition to the relative size of the supplying and purchasing sectors, FLQ also considers the region's relative size by incorporating a weighting indicator. Accordingly, the FLQ regionalisation technique implies a certain degree of self-sufficiency for each sector in the regional economy and the corresponding importation requirements. In this way, the FLQ addresses the issue of underestimating imports and thus the overestimation of regional multipliers in CILQ (Flegg and Webber, 2000):

\[
\text{FLQ}_{ij} = \frac{\text{RE}_i/\text{NE}_i}{\text{RE}_j/\text{NE}_j} \times \lambda \text{ for } i \neq j
\]

\[
\text{FLQ}_{ij} = \frac{\text{RE}_i/\text{TRE}}{\text{NE}_i/TNE} \times \lambda \text{ for } i = j
\]

where

\[
\lambda = [\log_2 \times (1 + \frac{\text{TRE}}{\text{TNE}})]^\delta
\]

Lambda (\( \lambda \)) stands for a weighted measure of the region’s relative size. The parameter Sigma \( \delta \) takes a value between 0 and 1. The larger a region, the greater the input coefficient and the smaller the importation coefficient. The literature recommends a \( \delta \) of 0.3 as the most accurate
value for similar-sized regions (Bonfiglio and Chelli, 2008; Flegg and Thomo, 2013; Lindberg et al., 2012), which I adopted for the Jämtland Härjedalen model. For cells with a FLQ value below 1, regional coefficients were obtained by multiplying national coefficients with the corresponding FLQ value. For cells with a FLQ value above 1, no adjustments were necessary by definition; thus, the regional coefficients were the same as the national coefficients (Flegg and Webber, 2000).

The regionalisation of the IO model for Jämtland Härjedalen was based on the national IO table for domestic production. Therefore, only inter-sectoral transactions and the intermediate demand from production in Sweden were considered. Transactions from imports were considered in the following sub-section 4.4.1.3 in the process of deriving import multipliers. Accordingly, the Jämtland Härjedalen model was defined as an open model. Thus, only the direct and indirect effects of tourism and events on the regional economy were examined. The effects from household consumption rates on the regional economy were treated as exogenous; thus, the model disregarded induced impacts to avoid the risk of overestimated tourism’s socio-economic impacts (Kronenberg and Fuchs, 2021b; Miller and Blair, 2009).

4.4.1.3 Regional indicators: employment, income and imports

The regional coefficients provided a basis for the estimation of sectoral production of output multipliers. However, in the context of this thesis, I was also interested in socio-economic indicators, namely employment, income and imports. The modelling process for deriving multipliers other than production output involved a further step: the matrix for regional employment multipliers $E$ was obtained by multiplying the regional Leontief inverse $(I-A)^{-1}$ with the sectoral employment per total output ratio $l$ (Hara, 2008). As a reminder, the
employment per output ratio is considered the same at the national and regional levels:

\[ E_t = (I-A)^{-1} \times l_{ij} \]

In parallel, the matrix for regional income multipliers \( W \) was derived from the income per output ratio \( s \). Data on total income per sector were included in the national IO table and thus part of the row for value added.\(^{10}\)

\[ W_t = (I-A)^{-1} \times s_{ij} \]

Finally, the derivation of regional imports followed a different method. I aimed to obtain the regional trading coefficients and the share of imports of regional sectors in the economy in Jämtland Härjedalen (Kronenberg, 2012; Muchdie and Kurniawan, 2018; Muchdie et al., 2018). In general, the original IO table distinguishes between domestic production (DOM) and imports (IMP).\(^{11}\) The previously discussed derivation of multipliers only considered the domestic production represented in the DOM table; the use of imports was treated separately. Thus, imported products and services are found in separate IMP tables. The columns show how industry \( j \) uses imported products \( i \). The rows indicate how imported products \( i \) are used in industry \( j \). By examining DOM and IMP separately, we can interpret the coefficients for imports as intermediate products imported for use by industry \( n \).

Accordingly, following the regionalisation steps described above for the national coefficients for domestic production (i.e. \( \hat{a}_{ij} \)), Swedish national coefficients from imported products were expressed as the percentage share of total imports \( \hat{i}_{jn} \). Similarly, the corresponding regional coefficients \( \hat{i}_{jd} \) from imported products were obtained by adjusting the national import coefficient \( \hat{i}_{jn} \) with the FLQ:

\(^{10}\) In this thesis, all currency is expressed in Swedish kronor (kr). The exchange rate is approximately 10:1 with the Euro (€) and approximately 9:1 with the U.S. dollar ($).

\(^{11}\) These refer to IO tables of variant B. For a more detailed discussion on how to treat imports in various types of IO tables, see Kronenberg (2012).
\[ \hat{i}_{ij}^r = \hat{F}LQ_{ij} \times \hat{i}_{ij}^n \]

Finally, the trading coefficients were expressed as \( h^r \), where

\[ h^r = \frac{\hat{a}_{ij}^r}{(\hat{a}_{ij}^r + \hat{i}_{ij}^r)} \]

and the corresponding regional import share \( IM_t^r \) for year \( t \) can be derived by

\[ IM_t^r = 1 - h^r = 1 - \frac{\hat{a}_{ij}^r}{(\hat{a}_{ij}^r + \hat{i}_{ij}^r)} \]

or

\[ IM_t^r = \frac{\hat{i}_{ij}^r}{(\hat{a}_{ij}^r + \hat{i}_{ij}^r)} \]

As a result, the import shares indicated the extent to which each sector in Jämtland Härjedalen was dependent on import rates (in percentages) to produce its total production output (Kronenberg, 2012).

### 4.4.2 Disaggregation of employment and income and their distributional effects

The previous section outlined the methodology used to construct the regional IO model for Jämtland Härjedalen and derive various socio-economic indicators. This section continues with a discussion on the establishment of new monetary measures, including the method for disaggregating socio-economic indicators – namely, occupation-based modelling (Daniels, 2004; Daniels et al., 2004; Lacher and Oh, 2012) – and the resulting measures of income distribution, as expressed by Gini coefficients and Lorenz curves (de Maio, 2007).
4.4.2.1 Analysis of regional employment through occupation-based modelling

Results from the regionalised IO model provided a comprehensive picture of the direct and indirect effects of tourism on employment and income and import shares for Jämtland Härjedalen. However, the employment and income effects remained as totals per sector and did not further outline in more detail, how these numbers are composed. Thus, I was interested in the various types of occupations that benefitted (or did not benefit) from tourism and to what extent. Therefore, the next part of the study used a method called occupation-based modelling (OBM) inspired by the work of Daniels (2004), Daniels et al. (2004) and Lacher and Oh (2012).

OBM combines IO employment effects with additional income data to provide insights on detailed employment and income effects for each occupational area within a specific sector. More precisely, OBM can clarify tourism’s contributions to the number of full-time equivalent (FTE) jobs in particular occupational areas of a tourism sub-sector. By combining the number of FTE jobs with average income levels in these occupational areas, it is possible to estimate tourism’s disaggregated contributions to the total income generated for each occupational area.

Typical occupational areas include leadership positions, receptionists, wait staff or cleaning personnel. OBM has only been applied in tourism for single and temporary tourism events (Daniels, 2004; Daniels et al., 2004) or over a short timeframe (Lacher and Oh, 2012). So far, it has not been used to measure the effects of total tourism demand in a specific region over a longer time period. The difference is visible in the interpretation of effects; applying OBM in the context of a tourism event does not shed light on how much employment is actually generated through this event (Crompton, 1995). Rather, it provides information about 'the number of full- and part-time jobs needed over a year’s time to produce the estimated level of output generated by this event' (Daniels et al., 2004, p. 80). However, an analysis of employment and income effects over multiple years indicates how much
employment and income is actually generated by or retained in tourism (Kronenberg et al., 2018; Kronenberg and Fuchs, 2021a). Hence, tourism demand can be considered the main driver in generating these jobs, at least in core tourism sectors such as food and accommodation or travel agencies (Daniels, 2004). In particular, for backward- and forward-linked regional sectors, in which tourist activities only generate a certain share of total sales, it is rather difficult to provide evidence on tourism’s actual contributions to generating and retaining particular occupational positions. OBM provides a promising way to fill this gap.

On a technical level, this is accomplished by considering the share of each occupational type in total employment in a sector. This method tracks how average IO-based employment effects are distributed across occupation types throughout various economic sectors. Likewise, utilising data on the corresponding income level per occupation type allows a detailed measurement of income distribution effects within the sectors (Daniels, 2004). First, the employment effects per occupation can be formally estimated using the following equation:

\[
\hat{E}_{o,s,t} = R_{o,s,t} \times E_{s,t}
\]

Where \( \hat{E} \) is the occupation-specific employment effect for the occupational area \( o \) in the sector \( s \) in the year \( t \) that results from the change in final demand (i.e. tourist expenditures). The variable \( R \) represents the employment ratio by sectoral occupation, expressed as a percentage. \( E \) is the direct and indirect employment effect for sector \( s \) estimated by the regional IO model. By multiplying \( \hat{E} \) by the average occupation year-round income \( A \), as obtained from SCB data, it is possible to estimate the total income \( \hat{I} \) generated for the particular occupation:

\[
\hat{I}_{o,s,t} = A_{o,s,t} \times \hat{E}_{o,s,t}
\]

These equations apply to each occupational type within the economic sectors under study. Occupational areas are defined by 'standard för svensk yrkesklassificering' (SSYK) codes, the standard for Swedish
occupational classification. Notably, SSYK categories can be disaggregated by level of detail, which ranges from 1–4 digit levels.\(^{12}\)

Analysing an extensive set of occupational areas at the most detailed level for all three tourism sectors from 2008 to 2017 would lead to an extensive amount of data and information. Therefore, for this thesis, I limited the analysis to three main tourism sectors: *accommodation and food services; wholesale and retail trade;* and *sporting, amusement and recreation*. These three sectors employ approximately 98% of all tourism workers in Jämtland Härjedalen. I included the 25 most common occupations in the *accommodation and food services* sector, the 27 most common occupations in the *wholesale and retail trade* sector and the 24 most common occupations in the *sporting, amusement and recreation* sector. These occupations reflected approximately 95% to 97% of IO-based employment estimates in each sector. The analyses for 2008 to 2013 were based on the 1996 version of the SSYK classification. The analyses for 2014 to 2017 used the updated 2012 version of the SSYK classification, which means that some definitions of occupations on the two- and three-digit level were slightly changed. This represents a minor data limitation, as the occupation categories changed between 2013 and 2014. As a result, the time series should not be read as a continuous series of 10 years, but rather two separate series: one from 2008 to 2013 and one from 2014 to 2017. Finally, with regard to the advantages of OBM over SAMs, OBM follows a more detailed assessment of the economic impacts on employment in various sub-sectors. SAMs’ potential to represent detailed income effects for

\(^{12}\) The following example illustrates the application of the OBM approach. The occupational area 'kitchen assistants' (SSYK code 941) comprised 19% of all employment in the *accommodation and food services* sector in 2017, with an average annual income of approximately 212,000 kr. The results of IO modelling demonstrated that the total employment effects of tourism amounted to approximately 2,280 FTE jobs. Accordingly, OBM was used to calculate the employment effects of tourism for kitchen assistants, which consisted of 417 FTE jobs (2,280 × 0.19), and the income effects of tourism for the same group, which amounted to approximately 88 million kr (212,000 kr × 2,280 × 0.19). The same equation was applied to all other occupational areas in the sector under study. Accordingly, it was possible to estimate the total income for each occupational area generated by tourism demand in the region.
various types of households is contingent on disaggregation from the beginning of the modelling process by constructing the SAM table with disaggregated rows for household income (Hara, 2008). OBM, in turn, sequentially disaggregates the effects. Thus, it transforms average and aggregated macro-level IO employment effects into an occupation-specific perspective and thus considers the human resources structure of an average business in tourism sub-sectors (Daniels et al., 2004).

4.4.2.2 Distribution of regional income: Gini coefficient and Lorenz curve

Various techniques have been developed and proposed to measure income inequality in a specific geographic area, sector or industry (de Maio, 2007). Two of the most popular and most frequently used techniques are the Gini coefficient and the corresponding Lorenz curve, as well as their extension in the form of the Atkinson index (Atkinson, 1970; de Maio, 2007). In this thesis, I applied the Gini coefficient and the Lorenz curve to illustrate the impact of tourism on income inequality in the 25 most common occupational areas in the accommodation and food services sector in Jämtland Härjedalen.

The Lorenz curve is a graphical illustration of the income distribution in an area under study (de Maio, 2007). In the context of the current study, it represents differences in the incomes of 25 occupational areas in the accommodation and food services sector. In Figure 1 (adapted from Dorfman, 1979), the x-axis shows the cumulative share of earners, while the y-axis indicates the cumulative share of total income earned.
Figure 1: Lorenz curve and Gini coefficient

The diagonal straight line illustrates total equality, which is achieved when every income class (i.e. occupational area) receives the same proportional share of total income in the sector. A Lorenz curve that falls below the diagonal line indicates the level of inequality. The further the curve falls from the diagonal line, the more unequal the income distribution becomes, and vice versa. The Gini coefficient is directly related to the Lorenz curve and expresses income inequality as a number. Concretely, it represents area A as a percentage of the total area of triangle A + B (i.e. Gini coefficient = \( \frac{A}{A+B} \)). Thus, the closer the Gini coefficient is to 0, the more the Lorenz curve matches the diagonal and thus the more equal the income distribution in the sector (Dorfman, 1979). The combination of graphical and numerical analyses is recommended as a practical way of illustrating income distribution trends in tourism occupations (Lee and Kang, 1998).
4.4.3 Data collection

The data collection process for the macro-level perspective of the socio-economic impacts of tourism comprised quantitative data in various forms. First, a distinction must be made between supply-side data, which was used to construct the model, and demand-side data on consumption and expenditures made by tourists and event attendees in Jämtland Härjedalen.

4.4.3.1 Supply-side data

All data used to develop the regional IO model and the occupation-based model for Jämtland Härjedalen from 2008 to 2017 were secondary data (i.e. data obtained from secondary data sources). Specifically, national IO tables are available on SCB’s official website. SCB provides IO tables of variant B (Kronenberg, 2012), in which the supply and use of domestic production and imports are listed in separate tables labelled 'DOM' for domestic production and 'IMP' for imports. All multipliers and impact assessments were derived from the DOM table; thus, only the impact of tourism and events on domestic production were considered. By contrast, insights on import shares were based on the IMP table, which indicated the use of imported products and services for intermediate demand. The regionalisation of the IO model with location quotients (LQ) required additional employment data for each sector, namely the total number of people employed in each sector at both the national and regional levels. SCB provided annual data on 64 sectors of the economies of Sweden and Jämtland Härjedalen for the period between 2008 and 2017.

Table 3 below lists sectors that typically provide tourism-related products and services for final demand (i.e. to tourists). These sectors were categorised as economic activities according to the Classification of Products by Activity (CPA) format. The CPA is in the same format
as the international systems of national account (SNA). The corresponding Swedish classification for these activities consists of Svensk Näringsgrensindelning (SNI) codes, the Swedish standard for industry classification.

Table 3: Tourism sectors in the input-output table for Jämtland Härjedalen

<table>
<thead>
<tr>
<th>CPA label</th>
<th>SNI code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesale and retail trade</td>
<td>G45–47</td>
</tr>
<tr>
<td>Land transport services</td>
<td>H49</td>
</tr>
<tr>
<td>Air transport services</td>
<td>H51</td>
</tr>
<tr>
<td>Accommodation and food services</td>
<td>I55–56</td>
</tr>
<tr>
<td>Travel agency and tour operators</td>
<td>N79</td>
</tr>
<tr>
<td>Creative, arts and entertainment services</td>
<td>R90–92</td>
</tr>
<tr>
<td>Sporting, amusement and recreation</td>
<td>R93</td>
</tr>
</tbody>
</table>

I only refer to these sectors when discussing the regional industry structure from a supply-side perspective. However, adjustments were needed to estimate the actual impact of tourism activities, as these sectors did not exactly match demand-side expenditure categories.

4.4.3.2 Demand-side tourism data

Similarly, demand-side data on tourism expenditures for the period between 2008 and 2017 was obtained from secondary sources, including the Rese- och Turistdatabasen (TDB) provided by Resurs AB, a private company that the Swedish government commissioned to collect and analyse tourist expenditure data in Sweden at various geographic levels over time. Based on TDB data, the regional tourism board of Jämtland Härjedalen, Jämtland Härjedalen Tourism (JHT), publishes annual reports on tourism statistics for the region. In these
reports, tourism demand is illustrated by the volume of sales attributed to tourism, which I used to model the vector of final demand in the regional model. Several reasons convinced me to use secondary tourism demand data in this study\textsuperscript{13}. First, making use of existing official statistics on tourism demand and supply in the region is more cost and time efficient. Second, official tourism statistics have already been communicated through various public channels, thus, using the same data ensures transparency and comparability. Third, the existing tourism statistics used in this study include data on various types of tourists and their expenditures in various sectors. Thus, these statistics are comprehensively collected through consistent methods over a long period of time.

4.4.3.3 Vector for final demand $y$ in the regional model

Sweden’s national IO table includes 64 aggregated sectors of the economy, which are classified into SNI codes (i.e. ‘Svensk Näringsgrensindelning’). I had to adjust the table during the regionalisation process by removing empty rows in the table, which resulted in a final table with 60 aggregated sectors for the economy of Jämtland Härjedalen. Accordingly, the vector of final demand $y$ consists of a column with 60 rows, representing all 60 sectors in the economy. However, only those sectors are filled with values, which directly sell their products and services to tourists (Stynes and White, 2006; Dwyer, 2013). Defining the vector of final demand required some aggregation of the demand data. This means that TDB statistics on expenditures per product were more detailed than sectors in the IO table. Finally, SNI sectors in the IO table were linked to the activities according to CPA format (i.e. ‘Classification of Products by Activity’), which resulted in the following final allocations:

\textsuperscript{13} Note: The demand data for the WCR2019 case study was primary data.
Table 4: Allocation of activities to sectors

<table>
<thead>
<tr>
<th>TDB format</th>
<th>CPA format</th>
<th>SNI code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodation</td>
<td>Accommodation and food services</td>
<td>I55–56</td>
</tr>
<tr>
<td>Groceries</td>
<td>Restaurant</td>
<td>G45–47</td>
</tr>
<tr>
<td>Restaurants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuel</td>
<td>Wholesale and retail trade</td>
<td></td>
</tr>
<tr>
<td>Shopping Activities</td>
<td>Sporting, amusement and recreation</td>
<td>R93</td>
</tr>
<tr>
<td>Transport</td>
<td>Omitted</td>
<td>H49-51</td>
</tr>
</tbody>
</table>

I omitted transport expenditures because it was impossible to distinguish between modes of transport. In the regional context, it was thus impossible to determine where purchases of transport services were undertaken and allocate points of sale. For instance, expenditures on flight tickets to Jämtland Härjedalen could be included in TDB statistics, but the payment was completed prior the trip and does not relate to Jämtland Härjedalen. Hence, due to this methodological vagueness, expenditures for transport services was not included in the impact analysis.

In summary, the final demand vector $y$ for the Jämtland Härjedalen model consisted of three aggregated tourism sectors: (1) accommodation and food services, (2) wholesale and retail trade and (3) sporting, amusement and recreation. Accordingly, annual tourist expenditures were allocated to these three sectors to define $y$ for each year. These expenditures were adjusted to net expenditures, which only included local production and profit margins. This step was necessary to ensure that only expenditures that remained in the region were considered in the
impact analysis, also known as the local capture rate (Stynes, 1999). As a result, the vector of final demand equalled the direct impact of tourism in each sector.

4.4.3.4 WCR2019 event impact data

Data collection on the socio-economic impacts of WCR2019 was part of a wider side project to estimate the social and economic impacts of major sporting events that I conducted with colleagues from the research environment in the department of economics, geography, law and tourism at Mid-Sweden University (Wallstam et al., 2019; Wallstam and Kronenberg, 2022). The socio-economic impacts of WCR2019, including the FIS Alpine Skiing World Championships in February 2019 in Åre and the Biathlon World Championships in March 2019 in Östersund, were based on visitor expenditure data collected through online surveys sent to event attendees (Dimitrovski, et al., 2022). With the help of organisational committees for both events, we disseminated the survey links via email to all visitors who had purchased tickets to the events and ski pass holders, who could also access the Alpine World Championship. A summary of data collection for both events is presented in Table 5.

\[14\] The capture rate considers the share of expenditures that can be attributed to the region. For manufactured goods sold by the wholesale and retail trade sector, imports are deducted. Thus, only retail margins and regionally produced goods accrue regionally. The capture rate used in this thesis follows the approximation suggested by Huhtala et al., (2010), which amounted to approximately 38%. All services accrue regionally, with producer and purchaser prices being equivalent (Huhtala et al., 2010; Stynes, 1999).
Table 5: Sampling of the visitor surveys

<table>
<thead>
<tr>
<th></th>
<th>Alpine Skiing World Championships</th>
<th>Biathlon World Championships</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Date of distribution</strong></td>
<td>21–22 February 2019</td>
<td>20 March 2019</td>
</tr>
<tr>
<td><strong>Sample</strong></td>
<td>5,647</td>
<td>9,093</td>
</tr>
<tr>
<td><strong>Answered surveys</strong></td>
<td>989 (18%)</td>
<td>3,407 (38%)</td>
</tr>
<tr>
<td><strong>Completed surveys</strong></td>
<td>898 (16%)</td>
<td>3,220 (35%)</td>
</tr>
</tbody>
</table>

Overall, the content of the surveys was identical for visitors to both the Alpine Skiing and Biathlon World Championships, including questions about the respondents' direct events-related expenditures. The expenditure categories were designed to match IO categories in the CPA format. For non-regional visitors, expenditures were adjusted based on the event’s level of influence on their decision to travel. This was an important step in correctly allocating expenditures to the events (Dimitrovski et al., 2022; Tyrrell and Johnston, 2001). Respondents could specify the degree to which the event contributed to their decision to travel to Jämtland Härjedalen as a percentage. An important indicator was the 50% threshold, which indicated that the event was the main reason for the respondent's decision to travel to Jämtland Härjedalen. The purpose was two-fold: to analyse the events' influence on respondents' decision to travel to Jämtland Härjedalen mainly because of the event and visitors who likely would have travelled to Jämtland Härjedalen even if the event did not take place (Dimitrovski et al., 2022). This was particularly important, as Jämtland Härjedalen is an attractive region for tourists even when world championships are not taking place (Tillväxtverket, 2021).

Finally, to estimate the overall socio-economic impact of the WCR2019 events, the total number of unique visitors to the events had to be estimated instead of the total number of tickets sold (Tyrrell and Johnston, 2001). However, this is not a straightforward task (Dimitrovski et al., 2022). To avoid the risk of overestimation by determining one single number of total visitors, two scenarios were
considered for the total number of visitors: minimum number of visitors and maximum number of visitors (Barandela et al., 2022). The 'true' number likely lies between these two numbers and closer to the minimum scenario. This is because not every ticket sold represents a unique visitor. Accordingly, total expenditures per category were calculated by multiplying the share of respondents who actually made expenditures during their visit, average expenditures per person and the total number of visitors in both scenarios:

\[
\text{Total visitor expenditures} = \text{share of respondents} \times \text{average expenditures} \times \text{total number of visitors}
\]

Data on total visitor expenditures per category served as demand-side input for the regional IO model for Jämtland Härjedalen. It is important to note that the events took place in 2019. However, the impact model is dated back to the industry structure of 2017. This is because, at the time of analysis, the 2017 IO table was the latest available version (see section 4.4.1). Using a slightly outdated table entails the risk of possible overestimation or underestimation for economic effects (Kronenberg et al., 2018).

### 4.5 Qualitative meso-level perspectives on the regional socio-economic impacts of tourism

In the following sub-sections, the discussion of qualitative data collection measures relates to both regional tourism institutions in general and the WCR2019 initiative in particular.
4.5.1 Regional tourism institutions

Over two rounds, I conducted a total of 12 in-depth, face-to-face interviews. The first round of interviews took place during the summer and autumn of 2018, while the second round of interviews took place during the summer of 2021. I intended to include a variety of representatives from regional tourism institutions with broad and diverse perspectives on regional tourism, events and employment in the industry. Accordingly, the interviewees were representatives of major institutions in both the public and private sectors of the regional tourism industry. Overall, eight regional institutions were included in the qualitative inquiry, some of which were interviewed twice (see Table 6): the regional division of the gastronomy association (Visita), the regional administrative board for Jämtland Härjedalen (Region Jämtland Härjedalen), the municipality of the regional capital city of Östersund (Östersunds kommun), the regional tourism association (Jämtland Härjedalen Tourism or JHT), the local destination management organisation (Destination Östersund), the regional chamber of commerce (Handelskammaren Mittsverige), the regional labour union for the accommodation and food services sector (Hotell- och restaurangfacket or HRF) and the regional division of the public employment service (Arbetsförmedlingen). Table 6 summarises the 12 interviews that I conducted with eight tourism institutions.
The interviewees were selected based on their roles and duties at their institution; their roles should involve the general areas of tourism and gastronomy. At the beginning of the interviews, I introduced the approach used in this research project, namely to study the socio-economic impacts of tourism based not only on aggregated indicators. However, I did not inform respondents about the quantitative results to avoid influencing their responses. The interviews were semi-structured and contained open-ended questions, which allowed me to ask follow-up questions when required or deemed appropriate.
The questions were designed to gain context-specific insights about current socio-economic issues in the regional tourism industry, including aspects of employment and income related to the regional tourism workforce and local and regional development trends and issues in regional tourism and events. More specifically, the topics discussed during the interviews covered the employment and income situation in tourism, hospitality and events; shortcomings and problem areas; the role of income and individual capabilities; and monetary and non-monetary benefits offered by certain occupations. Insights from the interview data enriched the quantitative results through a convergent mixed-methods approach, which allowed me to identify and explain certain employment- and income-related developments in the sector in general and specific occupational areas in particular during the period under study.

The interviews were conducted in both Swedish and English and lasted between 45 minutes and two hours. The recorded material was transcribed and eventually translated into English. The data analysis began with the organisation and coding of the transcribed text in the qualitative data analysis software NVivo 12. The coding process led to the emergence of themes and topics (Creswell, 2014). Following the convergent mixed-methods approach, topics from the interview data guided further quantitative analyses. Specifically, I deepened insights on key topics that emerged from the analysis of the interview data through the triangulation of existing quantitative data from the IO and occupation-based model (Creswell and Clark, 2017). Thus, the qualitative data provided information about which parts of the extensive quantitative dataset I should filter out and focus on. There were also times in which I could not further enrich the qualitative insights with quantitative data, and vice versa. In this case, the analysis of a particular topic was based on only one method: either quantitative or qualitative data.
4.5.2 World Championships Region 2019

Qualitative data on the WCR2019 initiative included primary data collected from a focus group interview conducted in May 2021 with four members of the WCR2019 board. Table 7 provides an overview of participants in the focus group and the institutions that they represented.

Table 7: Participants in the WCR2019 focus group

<table>
<thead>
<tr>
<th>Institution</th>
<th>Participant(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swedish Biathlon Association</td>
<td>President</td>
</tr>
<tr>
<td>Swedish Alpine Skiing Association</td>
<td>President</td>
</tr>
<tr>
<td>World Championships Region (WCR2019)</td>
<td>President, Board chair</td>
</tr>
</tbody>
</table>

A focus group is a qualitative data collection method in which several respondents are invited to share their own perspectives and opinions in a group interview (Krueger, 2014). Often, participants represent various interest groups with different perspectives on a certain topic or phenomenon, but a focus group can also include participants with deep knowledge on a topic. Such gatherings create a group dynamic that triggers discussions with either opposing or similar perspectives and in-depth views on a particular topic (Finn et al., 2000).

Compared to traditional interviews with individual respondents, focus groups allow researchers to simultaneously reflect on a topic with several informants and obtain a more comprehensive picture of it. In this study, participants in the focus group were active members of the WCR2019 board. At the time of data collection, the board consisted of four members from various organisations in the domain of winter sport, including the Swedish Biathlon Association, and the
Swedish Alpine Skiing Association (see Table 7). Thus, the size of the focus group was rather small compared to other focus groups in which participants discuss their experiences with a certain phenomenon (Krueger, 2014). However, a small group size was preferable, as each participant shared an in-depth understanding of the WCR2019 due to their position and thus allowed me to gain valuable insights on the WCR2019 concept as a whole (Krueger, 2014).

Broadly, topics covered in the focus group interview included the WCR2019 initiative’s aims to contribute to socio-economic development of Jämtland Härjedalen, how progress was defined and observed, what challenges and institutional barriers occurred during the project’s implementation and what outcomes the project could realise. The focus group interview lasted approximately 60 minutes and was held in Swedish. The recorded interview data was transcribed and translated into English. The data was coded using NVivo 12, which led the identification of key themes. In line with the convergent mixed-methods approach, the analysis of data from the focus group interview was enriched with findings from the quantitative data, which provided broader insights on the themes.
5 Results and analysis

In this chapter, I present and analyse the results from the mixed-methods study. The convergent approach puts less emphasis on a clear sequential character and thus allowed me to concurrently analyse both quantitative and qualitative data. Since the quantitative portion of the study was predominant, I complemented macro-level perspectives with data from qualitative interviews (i.e. meso-level perspectives), where applicable. The qualitative data also helped to identify the focus of the occupation-specific analysis, given the immense size of the quantitative dataset for occupation-specific employment and income effects. Where insights from quantitative data were limited, some results remained solely on qualitative data. Following Dopfer et al.’s (2004) micro-meso-macro framework for analysing economic activities in a region, I first present the macro-level empirical findings.

The first section of this chapter focuses on the supply side and region-wide industry structure of Jämtland Härjedalen. By considering changes in linkage structures, the results of the regionalised IO model demonstrate how the regional tourism industry developed its potential to trigger further region-wide output and create and retain employment and income over the 10-year period between 2008 and 2017. The first section also illustrates how regional import shares changed over time and indicates the level of importation dependency for different tourism sectors in Jämtland Härjedalen.

Based on the discussion of the regional industry structure, the second section considers the demand-side data by analysing the actual impact of tourism in the region from 2008 to 2017. I examine the distribution of socio-economic impacts across occupational areas and related income distribution effects in the key accommodation and food services sector. In line with institutional capability perspectives, these results highlight various positive and negative socio-economic impacts of tourism on the regional workforce.
In the last section of this chapter, I analyse the impacts of the 2019 Alpine Skiing and Biathlon World Championships on the region of Jämtland Härjedalen. Also this analysis includes both macro-level perspectives on the economic impacts of event attendees on the region Jämtland Härjedalen, and meso-level perspectives from the board members of WCR2019 on the initiative’s contributions to regional socio-economic development.

5.1 Development of the regional tourism industry structure: interlinkages and sectoral dependencies

This section addresses the regional industry structure in terms of the degree of interlinkages and their development over time. In the process, I present multipliers for various socio-economic indicators. As previously mentioned, multipliers refer to region-wide changes in certain economic indicators resulting from a one-unit increase in final demand. Section 5.1.1 presents multipliers for regional production output, employment and income. The current quantitative discussion mostly aligns with the contemporary growth-oriented literature on the economic impacts of tourism, which usually only report multipliers in aggregated form for a one-year period (Kronenberg et al., 2018; Mazumder et al., 2012). Section 5.1.2 focuses on the development of regional import rates and thus addresses a form of new monetary measure (Kronenberg, 2012; Söderbaum and Brown, 2010). The results are presented in tables and colour-coded by value for each sector. The lowest values are shown in red, the highest values in green and values in between in various shades of yellow.
5.1.1 Inter-sectoral linkages and multipliers

5.1.1.1 Regional output multipliers

Regional multipliers for production output are presented in Table 8, and corresponding rates of annual change compared to the previous year are presented in Table 9. Each column represents one tourism-related sector (expressed as an SNI code), with annual multipliers from 2008 to 2017.

Table 8: Regional output multiplier per sector, 2008–2017

<table>
<thead>
<tr>
<th>Year</th>
<th>G45–47</th>
<th>H49</th>
<th>H51</th>
<th>I55–56</th>
<th>N79</th>
<th>R90–92</th>
<th>R93</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>1.120</td>
<td>1.115</td>
<td>1.101</td>
<td>1.084</td>
<td>1.126</td>
<td>1.160</td>
<td>1.011</td>
</tr>
<tr>
<td>2009</td>
<td>1.117</td>
<td>1.131</td>
<td>1.145</td>
<td>1.092</td>
<td>1.111</td>
<td>1.181</td>
<td>1.011</td>
</tr>
<tr>
<td>2010</td>
<td>1.113</td>
<td>1.132</td>
<td>1.220</td>
<td>1.089</td>
<td>1.097</td>
<td>1.193</td>
<td>1.097</td>
</tr>
<tr>
<td>2011</td>
<td>1.112</td>
<td>1.137</td>
<td>1.291</td>
<td>1.094</td>
<td>1.095</td>
<td>1.187</td>
<td>1.087</td>
</tr>
<tr>
<td>2012</td>
<td>1.113</td>
<td>1.120</td>
<td>1.269</td>
<td>1.091</td>
<td>1.095</td>
<td>1.185</td>
<td>1.085</td>
</tr>
<tr>
<td>2013</td>
<td>1.114</td>
<td>1.124</td>
<td>1.309</td>
<td>1.091</td>
<td>1.091</td>
<td>1.177</td>
<td>1.083</td>
</tr>
<tr>
<td>2014</td>
<td>1.102</td>
<td>1.113</td>
<td>1.214</td>
<td>1.094</td>
<td>1.077</td>
<td>1.167</td>
<td>1.083</td>
</tr>
<tr>
<td>2015</td>
<td>1.118</td>
<td>1.113</td>
<td>1.130</td>
<td>1.096</td>
<td>1.140</td>
<td>1.157</td>
<td>1.084</td>
</tr>
<tr>
<td>2016</td>
<td>1.120</td>
<td>1.114</td>
<td>1.122</td>
<td>1.098</td>
<td>1.143</td>
<td>1.152</td>
<td>1.086</td>
</tr>
<tr>
<td>2017</td>
<td>1.121</td>
<td>1.115</td>
<td>1.168</td>
<td>1.098</td>
<td>1.142</td>
<td>1.152</td>
<td>1.082</td>
</tr>
</tbody>
</table>

G45–47 = Wholesale and retail trade; H49 = Land transport services; H51 = Air transport services; I55–56 = Accommodation and food services; N79 = Travel agencies and tour operators; R90–92 = Creative, arts and entertainment services; R93 = Sporting, amusement and recreation.
Output multipliers express the change in production throughout the regional economy resulting from a one-unit increase in demand for the particular sector. Thus, all multiplier values remained above 1 but showed annual fluctuations throughout the period under study. Between 2008 and 2017, the highest multipliers were found for the creative, arts and entertainment sector, with values above 1.15 and a peak of 1.193 in 2010. This means that a one-unit increase in demand for services produced by this sector had an additional effect of 0.193 units in all other sectors of the regional economy. Thus, among all tourism sectors, the creative, arts and entertainment sector demonstrated the strongest linkages with the regional economy in terms of generating further production (Mudambi, 2008). However, despite having the highest values, development in this sector after 2010 has been rather negative, with annually decreasing multipliers. This means that interlinkages and the potential to further impact the regional economy weakened over time.
Air transport services had the second highest output multipliers and even demonstrated an overall positive growth of 6.1% from 2008 to 2017. This was mainly due to growing relationships from 2008 to 2011. By contrast, a key tourism sector, accommodation and food services, demonstrated rather stagnating development for output multipliers. Thus, this sector's ability to generate further production in the regional economy remained at a similar level, at approximately 1.09. Similarly, the trade sector changed very little over time, with slight annual changes and multipliers hovering around 1.12. By examining overall development throughout the period under study, it can be observed that all tourism sectors retained inter-sectoral relationships with the regional economy.

5.1.1.2 Regional employment multipliers

Regional employment multipliers express the change in FTE employment throughout the regional economy resulting from a 1 million kr increase in demand for a particular sector. It is important to interpret multipliers as region-wide contributions, not merely as employment contributed to one sector. Table 10 shows regional employment multipliers for the seven tourism sectors. Corresponding annual and periodic percentage changes are illustrated in Table 11.
Table 10: Regional employment multiplier per sector, 2008-2017

<table>
<thead>
<tr>
<th>Year</th>
<th>G45–47</th>
<th>H49</th>
<th>H51</th>
<th>I55–56</th>
<th>N79</th>
<th>R90–92</th>
<th>R93</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>1.086</td>
<td>0.858</td>
<td>0.332</td>
<td>1.285</td>
<td>0.375</td>
<td>1.054</td>
<td>1.328</td>
</tr>
<tr>
<td>2009</td>
<td>1.125</td>
<td>0.904</td>
<td>0.307</td>
<td>1.301</td>
<td>0.349</td>
<td>1.091</td>
<td>1.332</td>
</tr>
<tr>
<td>2010</td>
<td>1.075</td>
<td>0.875</td>
<td>0.332</td>
<td>1.306</td>
<td>0.333</td>
<td>1.100</td>
<td>1.278</td>
</tr>
<tr>
<td>2011</td>
<td>1.020</td>
<td>0.842</td>
<td>0.321</td>
<td>1.242</td>
<td>0.319</td>
<td>1.052</td>
<td>1.200</td>
</tr>
<tr>
<td>2012</td>
<td>1.036</td>
<td>0.811</td>
<td>0.306</td>
<td>1.272</td>
<td>0.295</td>
<td>1.053</td>
<td>1.166</td>
</tr>
<tr>
<td>2013</td>
<td>1.032</td>
<td>0.798</td>
<td>0.272</td>
<td>1.268</td>
<td>0.290</td>
<td>1.031</td>
<td>1.124</td>
</tr>
<tr>
<td>2014</td>
<td>0.980</td>
<td>0.766</td>
<td>0.272</td>
<td>1.216</td>
<td>0.304</td>
<td>1.030</td>
<td>1.141</td>
</tr>
<tr>
<td>2015</td>
<td>0.802</td>
<td>0.733</td>
<td>0.229</td>
<td>1.143</td>
<td>0.262</td>
<td>1.026</td>
<td>1.197</td>
</tr>
<tr>
<td>2016</td>
<td>0.789</td>
<td>0.717</td>
<td>0.235</td>
<td>1.092</td>
<td>0.249</td>
<td>0.984</td>
<td>1.201</td>
</tr>
<tr>
<td>2017</td>
<td>0.776</td>
<td>0.681</td>
<td>0.237</td>
<td>1.055</td>
<td>0.233</td>
<td>0.956</td>
<td>1.102</td>
</tr>
</tbody>
</table>

G45–47 = Wholesale and retail trade; H49 = Land transport services; H51 = Air transport services; I55–56 = Accommodation and food services; N79 = Travel agency, tour operator; R90–92 = Creative, arts and entertainment services; R93 = Sporting services, amusement, and recreation

Table 11: Annual percentage changes of regional employment multiplier

<table>
<thead>
<tr>
<th>Year</th>
<th>G45–47</th>
<th>H49</th>
<th>H51</th>
<th>I55–56</th>
<th>N79</th>
<th>R90–92</th>
<th>R93</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008–2009</td>
<td>3.6%</td>
<td>5.4%</td>
<td>-7.5%</td>
<td>1.2%</td>
<td>-7%</td>
<td>3.5%</td>
<td>0.3%</td>
</tr>
<tr>
<td>2009–2010</td>
<td>-4.4%</td>
<td>-3.3%</td>
<td>8.3%</td>
<td>0.4%</td>
<td>-4.5%</td>
<td>0.8%</td>
<td>-4%</td>
</tr>
<tr>
<td>2010–2011</td>
<td>-5.2%</td>
<td>-3.7%</td>
<td>-3.3%</td>
<td>-4.9%</td>
<td>-4.2%</td>
<td>-4.4%</td>
<td>-6.1%</td>
</tr>
<tr>
<td>2011–2012</td>
<td>1.6%</td>
<td>-3.7%</td>
<td>-4.9%</td>
<td>2.4%</td>
<td>-7.4%</td>
<td>0.2%</td>
<td>-2.8%</td>
</tr>
<tr>
<td>2012–2013</td>
<td>-0.4%</td>
<td>-1.6%</td>
<td>-11%</td>
<td>-0.4%</td>
<td>-1.8%</td>
<td>-2.1%</td>
<td>-3.7%</td>
</tr>
<tr>
<td>2013–2014</td>
<td>-5%</td>
<td>-4.1%</td>
<td>0%</td>
<td>-4.1%</td>
<td>4.8%</td>
<td>-0.1%</td>
<td>1.5%</td>
</tr>
<tr>
<td>2014–2015</td>
<td>-18.2%</td>
<td>-4.3%</td>
<td>-15.8%</td>
<td>-6%</td>
<td>-13.8%</td>
<td>-0.4%</td>
<td>4.9%</td>
</tr>
<tr>
<td>2015–2016</td>
<td>-1.6%</td>
<td>-2.1%</td>
<td>2.6%</td>
<td>-4.4%</td>
<td>-5.1%</td>
<td>-4.1%</td>
<td>0.4%</td>
</tr>
<tr>
<td>2016–2017</td>
<td>-1.7%</td>
<td>-5.1%</td>
<td>0.9%</td>
<td>-3.4%</td>
<td>-6.2%</td>
<td>-2.8%</td>
<td>-8.3%</td>
</tr>
<tr>
<td>2008–2017</td>
<td>-28.6%</td>
<td>-20.6%</td>
<td>-28.5%</td>
<td>-17.9%</td>
<td>-37.7%</td>
<td>-9.3%</td>
<td>-17%</td>
</tr>
</tbody>
</table>

G45–47 = Wholesale and retail trade; H49 = Land transport services; H51 = Air transport services; I55–56 = Accommodation and food services; N79 = Travel agency, tour operator; R90–92 = Creative, arts and entertainment services; R93 = Sporting services, amusement, and recreation
Notably, higher multipliers were found for typically labour-intensive sectors (Baum et al., 2016), such as accommodation and food services and sporting, amusement and recreation. For instance, a 1 million kr demand for accommodation and food services in 2009 contributed to approximately 1.3 FTE jobs in the region. By contrast, the sectors for air transport services and travel agencies and tour operators accounted for the lowest employment multipliers, generating only approximately 0.3 FTE jobs from a 1 million kr increase in demand. Sectors with low employment multipliers require less labour for the same number of sales generated, compared to sectors with high employment multipliers. Thus, these sectors also contribute less employment in the regional economy for the same number of generated sales.

Based on Table 11, it is evident that all employment multipliers in Jämtland Härjedalen decreased between 2008 and 2017. Employment in some sectors decreased more than in others. In particular, the ability to generate further employment through demand for the travel agencies and tour operators sector decreased by nearly 38% over 10 years. Thus, generating sales in this sector required fewer and fewer employees in the long run. Moreover, regional interlinkages between the transport and retail trade sectors weakened by nearly 30%. Somewhat similarly, employment multipliers in the accommodation and food services sector also decreased by approximately 18% and in the creative, arts and entertainment sector by a comparatively modest 9%.

From an efficiency perspective (following the neoclassical economic paradigm), this might be a positive observation, as employment per output ratio in the regional tourism industry becomes more efficient (Blanchard and Illing, 2013). However, these results are also clear and provide an important indication that interlinkages between tourism and other economic sectors in Jämtland Härjedalen have weakened over the years. Over time, the structure of the tourism industry potentially creates less and less employment in the regional economy. From an aggregated perspective, the industry’s contributions to regional development have decreased over time.
5.1.1.3 Regional income multipliers

Regional income multipliers relate to changes in wages and salaries for employees in the regional economy resulting from a one-unit increase in demand in a sector. The scale of this unit is 1 Swedish kronor. Table 12 presents regional income multipliers for the seven tourism sectors per year of the period under study. Corresponding annual and total periodic percentage changes are shown in Table 13.

Table 12: Regional income multipliers per sector, 2008–2017

<table>
<thead>
<tr>
<th>Year</th>
<th>G45−47</th>
<th>H49</th>
<th>H51</th>
<th>I55−56</th>
<th>N79</th>
<th>R90−92</th>
<th>R93</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>0.305</td>
<td>0.223</td>
<td>0.117</td>
<td>0.284</td>
<td>0.118</td>
<td>0.247</td>
<td>0.311</td>
</tr>
<tr>
<td>2009</td>
<td>0.327</td>
<td>0.237</td>
<td>0.121</td>
<td>0.293</td>
<td>0.114</td>
<td>0.248</td>
<td>0.318</td>
</tr>
<tr>
<td>2010</td>
<td>0.311</td>
<td>0.242</td>
<td>0.159</td>
<td>0.292</td>
<td>0.106</td>
<td>0.243</td>
<td>0.311</td>
</tr>
<tr>
<td>2011</td>
<td>0.306</td>
<td>0.240</td>
<td>0.191</td>
<td>0.295</td>
<td>0.110</td>
<td>0.243</td>
<td>0.307</td>
</tr>
<tr>
<td>2012</td>
<td>0.319</td>
<td>0.235</td>
<td>0.230</td>
<td>0.302</td>
<td>0.102</td>
<td>0.245</td>
<td>0.313</td>
</tr>
<tr>
<td>2013</td>
<td>0.326</td>
<td>0.237</td>
<td>0.178</td>
<td>0.306</td>
<td>0.106</td>
<td>0.241</td>
<td>0.310</td>
</tr>
<tr>
<td>2014</td>
<td>0.322</td>
<td>0.235</td>
<td>0.126</td>
<td>0.309</td>
<td>0.108</td>
<td>0.245</td>
<td>0.311</td>
</tr>
<tr>
<td>2015</td>
<td>0.284</td>
<td>0.234</td>
<td>0.107</td>
<td>0.319</td>
<td>0.101</td>
<td>0.241</td>
<td>0.305</td>
</tr>
<tr>
<td>2016</td>
<td>0.284</td>
<td>0.236</td>
<td>0.108</td>
<td>0.319</td>
<td>0.097</td>
<td>0.240</td>
<td>0.302</td>
</tr>
<tr>
<td>2017</td>
<td>0.284</td>
<td>0.233</td>
<td>0.114</td>
<td>0.324</td>
<td>0.092</td>
<td>0.241</td>
<td>0.306</td>
</tr>
</tbody>
</table>

G45−47 = Wholesale and retail trade; H49 = Land transport services; H51 = Air transport services; I55−56 = Accommodation and food services; N79 = Travel agencies and tour operators; R90−92 = Creative, arts and entertainment services; R93 = Sporting, amusement and recreation.
Table 13: Annual percentage changes in regional income multipliers

<table>
<thead>
<tr>
<th>Year</th>
<th>G45–47</th>
<th>H49</th>
<th>H51</th>
<th>I55–56</th>
<th>N79</th>
<th>R90–92</th>
<th>R93</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008–2009</td>
<td>7.3%</td>
<td>6.2%</td>
<td>3.1%</td>
<td>3.2%</td>
<td>-3.3%</td>
<td>0.5%</td>
<td>2.4%</td>
</tr>
<tr>
<td>2009–2010</td>
<td>-5.1%</td>
<td>1.9%</td>
<td>31.5%</td>
<td>-0.6%</td>
<td>-7.5%</td>
<td>-2%</td>
<td>-2.3%</td>
</tr>
<tr>
<td>2010–2011</td>
<td>-1.4%</td>
<td>-0.8%</td>
<td>20.4%</td>
<td>1%</td>
<td>3.8%</td>
<td>0.1%</td>
<td>-1.2%</td>
</tr>
<tr>
<td>2011–2012</td>
<td>4.2%</td>
<td>-1.9%</td>
<td>20.3%</td>
<td>2.4%</td>
<td>-7.3%</td>
<td>0.8%</td>
<td>1.9%</td>
</tr>
<tr>
<td>2012–2013</td>
<td>2.2%</td>
<td>0.9%</td>
<td>-22.5%</td>
<td>1.5%</td>
<td>3.7%</td>
<td>-1.6%</td>
<td>-0.8%</td>
</tr>
<tr>
<td>2013–2014</td>
<td>-1.3%</td>
<td>-1%</td>
<td>-29.6%</td>
<td>0.9%</td>
<td>2.6%</td>
<td>1.8%</td>
<td>0.4%</td>
</tr>
<tr>
<td>2014–2015</td>
<td>-11.8%</td>
<td>-0.4%</td>
<td>-14.8%</td>
<td>3.2%</td>
<td>-6.7%</td>
<td>-1.5%</td>
<td>-2%</td>
</tr>
<tr>
<td>2015–2016</td>
<td>0.1%</td>
<td>0.8%</td>
<td>1%</td>
<td>0%</td>
<td>-3.6%</td>
<td>-0.6%</td>
<td>-1.1%</td>
</tr>
<tr>
<td>2016–2017</td>
<td>-0.1%</td>
<td>-1.1%</td>
<td>5.8%</td>
<td>1.7%</td>
<td>-6%</td>
<td>0.3%</td>
<td>1.4%</td>
</tr>
<tr>
<td>2008–2017</td>
<td>-6.8%</td>
<td>4.5%</td>
<td>-2.5%</td>
<td>14%</td>
<td>-22.5%</td>
<td>-2.4%</td>
<td>-1.6%</td>
</tr>
</tbody>
</table>

G45–47 = Wholesale and retail trade; H49 = Land transport services; H51 = Air transport services; I55–56 = Accommodation and food services; N79 = Travel agencies and tour operators; R90–92 = Creative, arts and entertainment services; R93 = Sporting, amusement and recreation.

The highest multipliers were found for the *accommodation and food services* sector at approximately 0.3, which means that this sector potentially paid 0.3 kr in wages and salaries for every 1 kr in sales. The lowest income multiplier was found for the *travel agencies and tour operators* sector, which was approximately 0.09 at the lowest level.

Overall, the Jämtland Härjedalen tourism industry's potential to contribute income in the region was more optimistic than its potential to contribute employment. In particular, the *accommodation and food services* sector improved its capacity to generate wages and salaries in the regional economy by 14% between 2008 and 2017. Moreover, the income multiplier for the *land transport services* sector increased by 4.5%. However, trends were slightly negative in more recent years. The *air transport services* sector experienced strong declines from 2013 to 2015 but seemed to recover in recent years. The most negative development was seen for the *travel agencies and tour operators* sector, with a total decline of 23%. Thus, weakened inter-sectoral linkages between this
sector and other sectors in the economy were also reflected by declining wages and salaries paid to the working population.

These quantitative findings provide preliminary critical indications that tourism sectors’ contributions to both employment and income in the regional economy tended to become less significant over the 10-year period between 2008 and 2017.

5.1.2 Regional imports

While the results for output, employment and income multipliers mainly relate to the growth paradigm, this section presents a way to shift the focus towards new monetary measures in the form of regional import shares (De Cuello, 2001; Haddad, et al., 2013; Supradist, 2004). As highlighted, the development of regional import shares over time relates to the share of imports used by the regional sectors in Jämtland Härjedalen to produce their own output (intermediate demand) (Kronenberg, 2012). Thus, regional import shares indicate the percentage of total products and services used by tourism sectors to produce their own output that come from imports. Annual regional import shares for each of the seven tourism sectors are presented in Table 14, while annual and periodic percentage changes are displayed in Table 15.
### Table 14: Regional import shares per sector, 2008-2017

<table>
<thead>
<tr>
<th>Year</th>
<th>G45–47</th>
<th>H49</th>
<th>H51</th>
<th>I55–56</th>
<th>N79</th>
<th>R90–92</th>
<th>R93</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>18.9%</td>
<td>10.1%</td>
<td>41.4%</td>
<td>18.8%</td>
<td>26.3%</td>
<td>9.1%</td>
<td>10.4%</td>
</tr>
<tr>
<td>2009</td>
<td>18.1%</td>
<td>15.4%</td>
<td>61.9%</td>
<td>18.6%</td>
<td>25.2%</td>
<td>8.9%</td>
<td>10.4%</td>
</tr>
<tr>
<td>2010</td>
<td>19.5%</td>
<td>17.3%</td>
<td>57.1%</td>
<td>19.9%</td>
<td>23.2%</td>
<td>7.9%</td>
<td>9.9%</td>
</tr>
<tr>
<td>2011</td>
<td>19.5%</td>
<td>17.1%</td>
<td>50.1%</td>
<td>18.9%</td>
<td>18.4%</td>
<td>8.1%</td>
<td>10%</td>
</tr>
<tr>
<td>2012</td>
<td>18.9%</td>
<td>13.8%</td>
<td>52.2%</td>
<td>19.2%</td>
<td>18.9%</td>
<td>7.5%</td>
<td>9.5%</td>
</tr>
<tr>
<td>2013</td>
<td>18.8%</td>
<td>13.9%</td>
<td>48.7%</td>
<td>19.5%</td>
<td>18.3%</td>
<td>7.7%</td>
<td>9.6%</td>
</tr>
<tr>
<td>2014</td>
<td>20.1%</td>
<td>8.6%</td>
<td>34.3%</td>
<td>18.9%</td>
<td>22.3%</td>
<td>9%</td>
<td>10.1%</td>
</tr>
<tr>
<td>2015</td>
<td>18.6%</td>
<td>8.4%</td>
<td>51.3%</td>
<td>20.3%</td>
<td>13.6%</td>
<td>11%</td>
<td>9.8%</td>
</tr>
<tr>
<td>2016</td>
<td>18.6%</td>
<td>7.8%</td>
<td>49.5%</td>
<td>20.5%</td>
<td>11.8%</td>
<td>11%</td>
<td>10.2%</td>
</tr>
<tr>
<td>2017</td>
<td>18.4%</td>
<td>6.8%</td>
<td>49.4%</td>
<td>20.4%</td>
<td>11.9%</td>
<td>11.8%</td>
<td>11%</td>
</tr>
</tbody>
</table>

G45–47 = Wholesale and retail trade; H49 = Land transport services; H51 = Air transport services; I55–56 = Accommodation and food services; N79 = Travel agency, tour operator; R90–92 = Creative, arts and entertainment services; R93 = Sporting services, amusement, and recreation

### Table 15: Annual percentage changes of regional import shares

<table>
<thead>
<tr>
<th>Year</th>
<th>G45–47</th>
<th>H49</th>
<th>H51</th>
<th>I55–56</th>
<th>N79</th>
<th>R90–92</th>
<th>R93</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008–2009</td>
<td>-4.5%</td>
<td>53.1%</td>
<td>49.5%</td>
<td>-1.3%</td>
<td>-4.3%</td>
<td>-2.4%</td>
<td>0%</td>
</tr>
<tr>
<td>2009–2010</td>
<td>8.1%</td>
<td>11.9%</td>
<td>-7.8%</td>
<td>7.2%</td>
<td>-7.9%</td>
<td>-12.0%</td>
<td>-5.0%</td>
</tr>
<tr>
<td>2010–2011</td>
<td>-0.3%</td>
<td>-0.7%</td>
<td>-12.3%</td>
<td>5.2%</td>
<td>-20.5%</td>
<td>3.1%</td>
<td>0.7%</td>
</tr>
<tr>
<td>2011–2012</td>
<td>-3.1%</td>
<td>-19.8%</td>
<td>4.2%</td>
<td>1.6%</td>
<td>2.7%</td>
<td>-7.0%</td>
<td>-5.2%</td>
</tr>
<tr>
<td>2012–2013</td>
<td>-0.1%</td>
<td>0.8%</td>
<td>-6.6%</td>
<td>1.5%</td>
<td>-3.3%</td>
<td>2.5%</td>
<td>1.7%</td>
</tr>
<tr>
<td>2013–2014</td>
<td>6.7%</td>
<td>-38.2%</td>
<td>-29.7%</td>
<td>-2.8%</td>
<td>21.7%</td>
<td>16.7%</td>
<td>5.3%</td>
</tr>
<tr>
<td>2014–2015</td>
<td>-7.7%</td>
<td>-2%</td>
<td>49.6%</td>
<td>7.2%</td>
<td>-38.9%</td>
<td>21.8%</td>
<td>-3.1%</td>
</tr>
<tr>
<td>2015–2016</td>
<td>0.1%</td>
<td>-7.1%</td>
<td>-3.4%</td>
<td>1.1%</td>
<td>-13.2%</td>
<td>0.2%</td>
<td>4.1%</td>
</tr>
<tr>
<td>2016–2017</td>
<td>-1%</td>
<td>-13.3%</td>
<td>-0.2%</td>
<td>-0.4%</td>
<td>0.3%</td>
<td>7.3%</td>
<td>7.7%</td>
</tr>
<tr>
<td>2008–2017</td>
<td>-2.7%</td>
<td>-32.9%</td>
<td>19.5%</td>
<td>8.5%</td>
<td>-54.9%</td>
<td>29.1%</td>
<td>5.5%</td>
</tr>
</tbody>
</table>

G45–47 = Wholesale and retail trade; H49 = Land transport services; H51 = Air transport services; I55–56 = Accommodation and food services; N79 = Travel agency, tour operator; R90–92 = Creative, arts and entertainment services; R93 = Sporting services, amusement, and recreation
The results demonstrate that the level of regional import shares considerably differed across the economic sectors under study. They ranged as low as approximately 10% for the land transport; creative, arts and entertainment; and sporting, amusement and recreation sectors and as high as approximately 60% for the air transport sector. Other sectors, such as wholesale and retail trade, accommodation and food services and travel agencies and tour operators remained at around 20% import shares in their use of intermediate products and services. While some sectors maintained a very steady rate of import shares over the period under study (e.g. retail trade or sporting, amusement and recreation), others sometimes experienced large fluctuations over time. For instance, the land transport services sector experienced a 53% increase in import shares in 2009 and a 12% increase in 2010 compared to the previous years, followed by a steady reduction in import shares in subsequent years. Similarly, import shares for the travel agencies and tour operators sector decreased by 55% over the 10-year period. Interestingly, import shares for the key accommodation and food services sector experienced stagnating growth overall but slightly increased by 9% over the entire period.

While these figures provide insights on the share of imports used in regional production, understanding the various motivations behind each sector’s importation behaviour and strategies solely on this basis remains difficult. On the one hand, regional supply may be insufficient for satisfying the production needs of regional companies or non-existent. Thus, high import shares indicate a low level of regional self-sufficiency (De Cuello, 2001; Garrigós-Simón et al., 2015). On the other hand, import shares may also indicate that some sectors prefer imported goods for purely financial reasons, which means that regional businesses can access national or international markets at cheaper prices due to cost savings from purchasing intermediate goods from outside the region (Muchdie and Kurniawan, 2018).

The results discussed and analysed in this section focus on the supply side in terms of linkage structures and import shares in the regional tourism industry. To continue the analysis on the socio-economic
impacts of tourism, the next section presents and analyses results related to the actual economic impacts of tourism of events, including both direct and indirect impacts on various tourism sectors in the regional economy.

5.2 Economic impacts of tourism and events on the regional economy

The first step in estimating the economic impacts of tourism and events is to examine their effects on the aggregated output of the regional economy. As a reminder, this part of the analysis aligns with traditional growth-oriented tourism impact studies. However, the purpose of including this step is to illustrate and highlight this narrow perspective of tourism development. The extension of these standard indicators is presented in section 5.4, which focuses on disaggregated and distributive perspectives on socio-economic development.

Applying demand-side tourist expenditures in the regional model shows the extent to which they contributed to the generation of regional output. Direct impacts include net changes in output only for the following tourism sectors: wholesale and retail trade, accommodation and food services, and sporting, amusement and recreation. Indirect impacts refers to net changes in regional production for all sectors of the economy. These results are illustrated in Figure 2.
Generally, the direct impacts indicate steady growth, which can be explained by annual increases in tourist arrivals in Jämtland Härjedalen. In monetary terms, the industry experienced positive growth. This is because the underlying IO model only shows positive effects as long the final demand vector consists of positive values.

The results demonstrate that, overall, the largest direct impacts occurred in the accommodation and food services sector, which had the largest tourist expenditures and thus represented the key tourism sector in Jämtland Härjedalen (Hara, 2008). Annual growth in demand for accommodation and food services also reflects growth in this sector’s output; it only experienced slightly negative trends in 2012 and 2014 due to temporary recession in the region. The sporting, amusement and recreation sector recorded minor decreases in 2009 and 2012, followed by a constant upwards trend in subsequent years. By contrast, the wholesale and retail trade sector experienced constant positive annual growth. Figure 2 also shows corresponding indirect impacts on regional output throughout the region, which represented approximately 10% of combined direct impacts and thus constituted a
significant share of the tourism industry’s contributions to the regional economy.

In the tourism industry, constant annual growth indicates the region’s attractiveness to tourists, which consolidated tourism as a major part of the regional economy. The representative of the local municipality highlights: 'if Östersund wants to develop as a city, then we need all the transport-related infrastructure, considering the remote location. We would never have this if it wasn’t for the tourists' (Östersunds kommun). Particularly for rural economies, tourism has become an increasingly important part of local development: 'if we want small towns to grow and develop...yes, then through tourism. I don’t see any other option. Even if we build a new hydroelectric plant or a new battery factory, it will probably not have such a strong impact as tourism' (Östersunds kommun). Despite a strong regional tourism industry, tourism institutions do not appear to be very concerned about and critical of tourism growth, and overtourism does not yet seem to be an issue: 'we are far away from hyper-tourism. Apart from a few crowded places, we don’t have the problems that Venice or Gotland have' (Östersunds kommun). In fact, a large proportion of tourists in Jämtland Härjedalen spend time in rural mountain destinations: 'we don’t have big theme parks or large hotel chains in the mountain destinations. We have cottages, we are small and we have space' (Jämtland Härjedalen Turism).

However, the availability of infrastructure enables the region to host large-scale events, such as the Alpine and Biathlon World Championships in 2019, which were combined and branded under the WCR2019 umbrella. Besides the appeal of the region's nature-based activities, hosting events has been a key strategy in tourism development, thus providing income and sales for regional businesses and residents:

We have specific budgets to support and stimulate events, because we want to be an event city and region. [...] In our decisions, we look at indicators that stimulate sales but also give something to society. For example, which indirect spin-off
The quantitative results of the WCR2019 economic impact analysis are illustrated in Figure 3. They demonstrate that these events significantly contributed to the generation of regional sales and output in 2019, both directly and indirectly (Hodur and Leistritz, 2006; Wallstam et al., 2019; Wood and Meng, 2020).

Figure 3: Direct and indirect impacts of WCR2019

Both world championships' economic impacts on regional output were largest for the *accommodation and food services* sector and estimated to be between 100 million kr and 194 million kr (Barandela et al., 2022). In the context of events, which are periodic in character, these figures relate to the monetary amount of regional output required to satisfy demand from event attendees who came from outside of Jämtland.
Härjedalen. Impacts on other tourism sectors were significantly smaller, with the *wholesale and retail trade* sector experiencing the second highest impacts, followed by the *sporting, amusement and recreation* sector. Overall, direct impacts amounted to approximately 161 million kr in the minimum scenario and up to 313 million kr in the maximum scenario. The corresponding indirect impacts on non-tourism sectors ranged from 17 million kr to 33 million kr, with production in the *real estate* and *food and beverage* sectors benefitting the most from the world championships. Compared to total impacts from all tourist activities, contributions from periodic events are significant and known. One participant said, 'I consider events to be vital for the local and regional industry. [...] Events, actually, carry the largest traffic in terms of private individuals visiting the region. [...] Mountain destinations have their lifts and slopes; we have events' (Destination Östersund).

The results also demonstrate that, from an institutional perspective, the IO-based results on tourism growth and thus tourism and events' contributions to strengthening regional production are generally perceived as a positive trend (Hodur and Leistritz, 2006; Oklobdžija, 2015). However, it is typical to provide indications of economic growth based purely on multipliers in contemporary and basic economic impact models (Crompton 1995; Crompton et al., 2016). This emphasises their narrow perspective of socio-economic development (Söderbaum, 2017). The next section discusses results related to tourism and events' impacts on regional employment and income.

### 5.3 Tourism employment and regional socio-economic development

Based on total direct impacts, the IO model was used to derive both employment and income effects. Figure 4 indicates accumulated direct impacts and the impacts of tourism demand on regional employment
in Jämtland Härjedalen. Employment effects refer to the total amount of FTE employment required to satisfy demand in a sector (Crompton, 1995; Daniels et al., 2004). In other words, Figure 4 depicts the number of FTE jobs per year that are directly and indirectly involved in providing products and services to tourists in the region. Besides sector-specific values, Figure 4 also shows employment effects for the entire region of Jämtland Härjedalen. Figure 5 reports corresponding annual percentage changes.

**Figure 4: Impact of tourism on regional employment**
The results demonstrate that the tourism industry’s contributions to regional employment do not always follow the same pattern as growth in regional output. This is clear for 2011, which saw a decrease in employment effects for all sectors, although tourism demand (i.e. direct impacts) increased in the same year. This means that tourism contributed less employment in 2011 despite an increase in direct impacts. The same trend was visible for 2015, when employment effects decreased for the accommodation and food services and wholesale and retail trade sectors, although demand and direct impacts for these sectors grew. This development can be explained by a decrease in employment multipliers in 2015 for wholesale and retail trade (-18%) and accommodation and food services (-6%). Eventually, the focus on economic growth in terms of increasing output obscures negative employment multipliers. In fact, the effect of negative multipliers is not immediately visible if tourism demand increases at the same time. However, this became clear for these particular years, when growth in total tourism demand could not offset negative multipliers. As a result,
increasing demand had a decreasing effect on employment in Jämtland Härjedalen in 2011 and 2015.

However, employment effects refer not only to the creation of jobs in the region, as suggested by the macro view; they also have significant socio-economic implications. This becomes clear when tourism institutions elaborate on the societal aim of tourism employment: ‘we know tourism has a large impact that is bigger than just the businesses. […] The effects [of increased tourism activities] on the local economy, such as welfare and income, […] are often unseen. Therefore, we want to strengthen this industry’ (Östersund kommун). Thus, tourism institutions are aware of tourism-related businesses’ socio-economic relevance for the regional population.

In this regard, the macro-level results provide insights on changes in income for the regional workforce. Figure 6 illustrates macro-level changes in overall income effects from 2008 to 2017. Corresponding annual percentage changes are displayed in Figure 7. The impact on regional income includes wages and salaries paid to employees in tourism sectors. Figure 6 also shows the income generated in the regional economy of Jämtland Härjedalen as a whole.

![Figure 6: Impact of tourism on regional income](image-url)
In accordance with changes in income multipliers discussed in the previous section, the estimated income effects were mostly positive, compared to employment effects. Specifically, the total impact of tourism on regional wages and salaries was an increase from 747 million kr in 2008 to 1.2 billion kr in 2017. Thus, growth in tourism demand translated into additional wages and salaries paid to tourism workers. At the sectoral level, the highest number of total beneficiaries consisted of tourism workers in the accommodation and food services sector, who represented more than half of the total regional income generated by tourism (i.e. 701 million kr). The second place was held by employees in the sporting, amusement and recreation sector, who also experienced constant annual increases in income. By contrast, workers in the wholesale and retail trade sector experienced a decline in income effects in 2010 and 2015 compared to the previous years. Again, this was related to declining income multipliers in this sector, particularly
In 2015, when its potential to contribute to regional income decreased by nearly 12%.

On the one hand, the tourism industry strengthened its potential to generate regional income. On the other hand, employment multipliers indicated a steady decrease in its potential to create employment, as relationships between sectors weakened over time. Nevertheless, tourism institutions continue to play a role in supporting regional businesses to improve the generation of regional employment:

The institutions have that kind of supporting system in the society [...]. The university is a very important resource for educating employees in tourism, which — hopefully — will be recruited. The branch associations work more specifically for their member companies; the regional tourism association has close collaboration with the branch associations. The region has people working on staff competence questions. So does Arbetsförmedligen..., everyone has their own role. Sometimes, things are discussed back and forth, but everyone works together as well as possible to provide companies with opportunities. But, in the end, the companies must decide themselves. It is always better to have a good dialogue and to point out the challenges. (Jämtland Härjedalen Turism)

Continuous critical dialogues between various regional actors aim to address employment-related issues. At the meso level, industry representatives seem to play a crucial role in supporting the regional tourism industry to not only maintain and create more tourism occupations but also the right type of tourism occupations (Daniels, 2021). In fact, a central form that highlights the region’s dependency on tourism consists of structural issues in the regional economy: 'We are a region with a lot of small businesses, regardless of the sector. This is because of the industry structure. We do not have big plants; we do not have big sawmills or similar. [...] We are, in fact, more dependent on the tourism industry and have to work it out as well as possible' (Region Jämtland Härjedalen). In particular, smaller destinations with a weaker industrial structure strongly rely on tourism because this is
the major reason why such destinations exist: 'The mountain destinations would probably not exist. The question is what would remain there if there wasn’t a strong tourism industry' (Jämtland Härjedalen Turism).

Tourism is highly relevant for the entire economy, as seen in the analysis of inter-sectoral linkages; tourism expenditures have additional indirect impacts of at least 10% in backward-linked industries. Although tourism is a tertiary (i.e. service-oriented) industry, it can act as the structural foundation of a society: 'there are schools, there are public services...and actually that’s what [tourism] organisations are working with: to ensure tourism development in order to create jobs so that the society remains. They have the role of, so to speak, a "society builder"' (Jämtland Härjedalen Turism). The fact that tourism often provides entry-level jobs is also a reason why it plays an important role in rural destinations: 'you don’t need to be an engineer to open a bed and breakfast' (Östersunds kommun). However, in the event of crises such as the ongoing Covid-19 pandemic, the tourism industry’s fragility is revealed through frequent job-cutting measures (Parvin et al., 2021). In addition, as a service-oriented sector, tourism does not receive the public reputation and institutional support from the government: 'tourism is a relatively new industry. We don’t have a big lobby organisation like the manufacturing industry and don’t get the support we need' (Östersunds kommun).

With regard to events, hosting two world championships and meeting demand from visitors requires a large labour force (Schwark, 2016). Overall, the WCR2019 events contributed 157 to 304 FTE jobs in the regional economy, as shown in Table 14 (Barandela et al., 2022). Table 14 also illustrates the distribution of direct impacts on tourism sectors and corresponding indirect impacts on all other sectors of the regional economy.
Table 16: WCR2019’s impact on employment and income

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Min. scenario</th>
<th>Max. scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>157 (FTE)</td>
<td>304 (FTE)</td>
</tr>
<tr>
<td>Tourism sectors</td>
<td>145 (FTE)</td>
<td>3,281 (FTE)</td>
</tr>
<tr>
<td>Other sectors</td>
<td>12 (FTE)</td>
<td>23 (FTE)</td>
</tr>
<tr>
<td>Income</td>
<td>49,333,000 kr</td>
<td>95,651,000 kr</td>
</tr>
<tr>
<td>Tourism sectors</td>
<td>45,545,000 kr</td>
<td>88,304,000 kr</td>
</tr>
<tr>
<td>Other sectors</td>
<td>3,788,000 kr</td>
<td>7,347,000 kr</td>
</tr>
</tbody>
</table>

Specifically, the impact of WCR2019 on regional income amounted to approximately 49 million kr to 96 million kr, with the lion’s share allocated to tourism sectors. However, this does not mean that the events created new employment (Daniels, 2004). This was not the case, as events are temporary and tourist demand is usually met by adding work hours or hiring short-term staff (Preuss, 2011). Therefore, the correct interpretation is that a workforce of 157 to 304 FTE jobs was needed to satisfy demand from event attendees (Daniels et al., 2004).

Hosting and running large-scale events also depend on the efforts of unpaid volunteers (Gheaus and Herzog, 2016), which are usually not reflected in official employment statistics: ‘it is impressive how many [people] volunteer and work for free at these events… considering events are still not non-profit organisations but rather commercial organisers who earn money’ (Jämtland Härjedalen Turism). Volunteers who are not financially reimbursed experience other benefits from working for event organisers (Elias-Varotsis, 2006): ‘inhabitants are proud that the region can pull off such events here in Östersund or in Åre. […] They take three weeks’ holiday and work as volunteers. This is an interesting phenomenon’ (Jämtland Härjedalen Turism). The fact that regional populations voluntarily engage in hosting mega-events demonstrates that events play a crucial role in
terms of both economic and social impacts resulting from active and passive participation and engagement (Wallstam and Kronenberg, 2022). Interestingly, even the labour union representative interviewed in this study believe that the positive social impacts outweigh negative effects from eventual overtime work that is connected with long and additional working shifts: ‘Sure, working during events can be stressful for many. But, at the same time, it is also fun when events happen, and you are participating in something big that does not happen every day. […] I would say that, overall, it is a welcoming and positive development when events come to our region’ (Hotell och Restaurang Facket). Nevertheless, there have also been critical perspectives of large sporting events from the local population, particularly from residents who live in close proximity to the venues (Phi et al., 2014). These mainly relate to the events’ negative impacts on residents’ everyday quality of life, such as crowding, noise, forced changes in mobility (Wallstam and Kronenberg, 2022) and a decrease in earning opportunities for local retailers (Cao et al., 2017). This is because officials, athletes and their accompanying team members make fewer expenditures in local retail sectors than ‘regular’ tourists during large-scale sport events (ibid., 2017).

However, net benefits prevailed, and regional institutions are aware of the crucial role that tourism and events play in creating employment, income and, in the long run, a certain standard of living and providing a structural foundation for rural societies (Hassan and O’Connor, 2009; Li and McCabe, 2013; Perić, 2018). Although socio-economic considerations and continuous efforts have been undertaken at the meso level, the development of employment multipliers and thus inter-sectoral linkages indicates that the structure of the tourism industry provides an increasingly weak foundation for generating regional employment (Cai et al., 2006). This development trend can be interpreted as confirmation for critics of contemporary economic development theories: namely, that the market itself does not solve socio-economic ‘problems’ but aims to ensure efficiency, profitability and cost reductions (Ulrich, 2010; Brodbeck, 2001a, 2011; Komlos, 2010; Söderbaum, 2017).
The results discussed in this section reveal valuable insights on the role of tourism and events in regional development and their contributions to regional employment and income. However, as the discussion remained at the aggregated level, the subsequent section examines the distributive and disaggregated effects of tourism and events on regional employment and income in greater depth.

5.4 Distributional effects of tourism on employment, wages and salaries

Following a discussion of the impact of tourism on regional employment and income, this section focuses on the distributional effects of employment and income resulting from tourist expenditures and their corresponding direct impacts. As discussed above, total employment effects for the accommodation and food services sector in 2017 amounted to approximately 2,280 FTE jobs (see Figure 4). Disaggregating these effects through occupation-based modelling clarified how these jobs were distributed between the 25 most common occupations in this sector, which reflected approximately 96% of all IO-based employment effects. Table 15 shows the tourism industry’s contributions to FTE employment area, the share of total employment and average income levels for each occupational. The SSYK codes comprise nine occupational groups: Group 1 includes chief executive officers (CEOs) and leading management; Groups 2 and 3 include occupations that require advanced higher education; Group 4 includes administration and customer service staff; Groups 5, 7 and 8 include vocational professions; and Group 9 includes elementary occupations without any educational requirements. The latter also encompasses Group 0, which represents elementary occupations that are not registered under a specific SSYK code (SCB 2021). Group 6, which includes agriculture and forestry occupations, did not have sufficient representation in the accommodation and food services sector in 2017.
Table 17: Impacts on occupations in the *accommodation and food sector* 2017

<table>
<thead>
<tr>
<th>SSYK</th>
<th>Occupation</th>
<th>FTE Employment</th>
<th>Employment share</th>
<th>FTE WCR 2019</th>
<th>Income (weighted average)</th>
<th>Income (rank 1-25)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Managers</td>
<td>184</td>
<td>8.4%</td>
<td>8</td>
<td>359,000 kr</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>Politician, CEO, Senior official</td>
<td>16</td>
<td>0.7%</td>
<td></td>
<td>359,000 kr</td>
<td>3</td>
</tr>
<tr>
<td>12</td>
<td>Manager in finance, HR, marketing, sales, administration</td>
<td>17</td>
<td>0.8%</td>
<td></td>
<td>418,000 kr</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>Manager in IT, logistics, research, real estate, construction</td>
<td>7</td>
<td>0.3%</td>
<td></td>
<td>339,000 kr</td>
<td>4</td>
</tr>
<tr>
<td>17</td>
<td>Manager in other service occupations</td>
<td>144</td>
<td>6.6%</td>
<td></td>
<td>362,000 kr</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Occupations requiring advanced higher education</td>
<td>28</td>
<td>1.3%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Advanced qualification in education</td>
<td>22</td>
<td>1%</td>
<td></td>
<td>177,000 kr</td>
<td>23</td>
</tr>
<tr>
<td>24</td>
<td>Advanced qualification in finance and management</td>
<td>6</td>
<td>0.3%</td>
<td></td>
<td>288,000 kr</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>Occupations requiring higher education</td>
<td>65</td>
<td>2.9%</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>Qualification in finance and management</td>
<td>30</td>
<td>1.4%</td>
<td></td>
<td>286,000 kr</td>
<td>8</td>
</tr>
<tr>
<td>34</td>
<td>Qualification in culture, and social work</td>
<td>35</td>
<td>1.5%</td>
<td></td>
<td>275,000 kr</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>Administration and customer service</td>
<td>147</td>
<td>6.7%</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>General administrative support</td>
<td>35</td>
<td>1.6%</td>
<td></td>
<td>326,000 kr</td>
<td>5</td>
</tr>
<tr>
<td>42</td>
<td>Customer service</td>
<td>112</td>
<td>5.1%</td>
<td></td>
<td>243,000 kr</td>
<td>17</td>
</tr>
<tr>
<td>5</td>
<td>Service, care and shop sales workers</td>
<td>787</td>
<td>36.1%</td>
<td>34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>511</td>
<td>Travel attendant, conductor and guide</td>
<td>4</td>
<td>0.2%</td>
<td></td>
<td>197,000 kr</td>
<td>22</td>
</tr>
<tr>
<td>512</td>
<td>Chefs</td>
<td>266</td>
<td>12.2%</td>
<td>11</td>
<td>248,000 kr</td>
<td>16</td>
</tr>
<tr>
<td>513</td>
<td>(Head-) waiter and bartender</td>
<td>240</td>
<td>11%</td>
<td>10</td>
<td>230,000 kr</td>
<td>18</td>
</tr>
<tr>
<td>515</td>
<td>Building and housekeeping supervisor</td>
<td>54</td>
<td>2.5%</td>
<td>2</td>
<td>259,000 kr</td>
<td>13</td>
</tr>
<tr>
<td>52</td>
<td>Sales in retail</td>
<td>136</td>
<td>6.2%</td>
<td>6</td>
<td>213,000 kr</td>
<td>19</td>
</tr>
<tr>
<td>53</td>
<td>Care professions</td>
<td>71</td>
<td>3.2%</td>
<td>3</td>
<td>168,000 kr</td>
<td>24</td>
</tr>
<tr>
<td>541</td>
<td>Protective security</td>
<td>16</td>
<td>0.8%</td>
<td></td>
<td>261,000 kr</td>
<td>11</td>
</tr>
<tr>
<td>7</td>
<td>Building and manufacturing workers</td>
<td>61</td>
<td>2.8%</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>71</td>
<td>Construction and civil engineering</td>
<td>16</td>
<td>0.8%</td>
<td></td>
<td>260,000 kr</td>
<td>12</td>
</tr>
<tr>
<td>72</td>
<td>Metal and repair</td>
<td>34</td>
<td>1.5%</td>
<td></td>
<td>308,000 kr</td>
<td>6</td>
</tr>
<tr>
<td>761</td>
<td>Butcher, baker and food processor</td>
<td>11</td>
<td>0.5%</td>
<td></td>
<td>249,000 kr</td>
<td>15</td>
</tr>
<tr>
<td>8</td>
<td>Mechanical manufacturing, transport</td>
<td>43</td>
<td>2%</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>83</td>
<td>Driver and mobile plant operator</td>
<td>43</td>
<td>2%</td>
<td></td>
<td>271,000 kr</td>
<td>10</td>
</tr>
<tr>
<td>9</td>
<td>Elementary occupations</td>
<td>873</td>
<td>39.8%</td>
<td>38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>911</td>
<td>Domestic, hotel and office cleaner</td>
<td>112</td>
<td>5.1%</td>
<td>5</td>
<td>203,000 kr</td>
<td>21</td>
</tr>
<tr>
<td>941</td>
<td>Food preparation assistant</td>
<td>417</td>
<td>19%</td>
<td>18</td>
<td>212,000 kr</td>
<td>20</td>
</tr>
<tr>
<td>96</td>
<td>Refuse worker, newspaper distributor</td>
<td>28</td>
<td>1.3%</td>
<td></td>
<td>251,000 kr</td>
<td>14</td>
</tr>
<tr>
<td>0</td>
<td>Miscellaneous</td>
<td>316</td>
<td>14.4%</td>
<td>13</td>
<td>147,000 kr</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2,190</td>
<td>96%</td>
<td>96</td>
<td>231,000 kr</td>
<td>25</td>
</tr>
</tbody>
</table>
The direct impacts of tourism amounted to approximately 2,190 FTE jobs distributed among 25 occupations in the regional *accommodation and food services* sector. The 10 most common occupations covered approximately 85% of all employment in the *accommodation and food services* sector. Most jobs corresponded to elementary occupations that did not require any education (approximately 873 FTE jobs or 39.8%) and vocational occupations, including chef or supervising positions in restaurants (approximately 787 FTE jobs or 36.1%). Group 1 leadership positions 1 (approximately 184 FTE jobs or 8.4%) and other Group 2 and 3 occupations that require higher education (approximately 93 FTE jobs or 4.2%) represented a minority of tourism occupations, along with administrative occupations (approximately 147 FTE jobs or 6.7%) and more technical occupations in Groups 7 and 8 (approximately 104 FTE jobs or 4.8%). The weighted average income for workers in the *accommodation and food services* sector was approximately 231,000 kr.

The impact of the Alpine and Biathlon World Championships (column 'FTE WCR2019' of Table 17) on various occupations amounted to a total of approximately 96 FTE jobs. In other words, 96 FTE jobs were needed to satisfy demand from event attendees (Daniels et al., 2004). Notably, most of these jobs were distributed among elementary occupations (approximately 38 FTE jobs) and service, care and sales workers (approximately 34 FTE jobs). Given that the share of occupations that required higher education was low in this sector, no jobs corresponded to this group. Interestingly, building and (mechanical) manufacturing occupations in transport only accounted for five FTE jobs despite the immense technical workload required to build and prepare event venues. Workers in these jobs often come from outside the region and are thus not considered in statistics on regional impacts (Daniels, 2004).

The rightmost column of Table 17 indicates the income rank for each occupation on a scale from 1 to 25. Perhaps unsurprisingly, the highest-ranked occupations were CEOs and senior managers, who had the highest weighted average income (up to 418,000 kr). By contrast, elementary occupations that did not require any education, such as
cleaners and kitchen assistants, were at the lowest end of the income rank. Nevertheless, they represented the largest share of the tourism workforce (around 24%). Thus, the majority of total income from tourism was earned by cleaners and kitchen assistants. Interestingly, the income level of crucial and typical industry professions, such as chefs, head waiters and bartenders, fell only at the weighted average or slightly above average for the sector. Moreover, chefs, head waiters and bartenders represented a substantial share of the total tourism workforce (approximately 23%).

In particular, according to tourism institutions, occupations that have direct contact with guests and visitors should also be better-compensated in financial terms: 'service jobs are poorly paid for what they do. The marketing job that workers do with guest service is the value for tourists, which makes them return and further recommend the place. They don’t get paid for this' (Jämtland Härjedalen Turism). This observation was confirmed by examining the income ranks of occupations that typically involve direct contact with guests and visitors, which all fell in the lower half of income ranks for 25 occupations. Such occupations include customer service (5.1% of all jobs, ranked 17), head waiters and bartenders (11% of all jobs, ranked 18), retail sales workers (6.2% of all jobs, ranked 19) or care professions (3.2% of all jobs, ranked 24). Tourism representatives also believe that relatively low wages and salaries did not necessarily make the tourism industry unattractive to workers: 'they might not earn so much, but the industry also works hard to individually reward tourism workers' (Visita). This remark indicates a common challenge in the industry: providing higher wages and salaries (Baum, 2015).

Notably, the occupation-based modelling approach used in this study enabled a more in-depth analysis of income effects and income distribution (i.e. level of income inequality) in the three main tourism sectors. This distribution included weighted average income in the 25 most common occupations in the accommodation and food services, wholesale and retail trade and sporting, amusement and recreation sectors. Figure 8 shows sectoral income inequality across occupations. For
illustrative purposes, each sector’s Lorenz curve is displayed for the year 2017.

![Income inequality in tourism-related sectors in 2017](image)

**Figure 8: Income inequality across tourism sectors in 2017**

The three Lorenz curves below the red diagonal line, which represents distributional equality, indicate that the income distribution across occupations was relatively similar for all three sectors under study. Among these, the *accommodation and food services* sector exhibited the lowest level of income inequality, as it is closest to the diagonal line. Distance from the diagonal line indicates that the *wholesale and retail trade* sector showed slightly higher inequality across lower-income groups, while the *sporting, amusement and recreation* sector had slightly higher inequality across higher-income groups.

A more detailed view of changes in income inequality showed the corresponding Gini coefficients, which ranged from 0 to 1. Values closer to 0 indicate lower income inequality, whereas values closer to 1 indicate higher income inequality. Figure 9 illustrates changes in Gini
coefficients for each sector from 2008 to 2017, while Figure 10 shows annual percentage changes in Gini coefficients.

Figure 9: Changes in Gini coefficients across tourism sectors

Figure 10: Percentage changes in Gini coefficients across tourism sectors
Overall, income inequality in tourism sectors fluctuated rather strongly over the period under study. It was lowest for the accommodation and food services sector, ranging from 0.12 in 2009 to 0.15 in 2012. In particular, in the early first half of the period (2008–2012), income inequality steeply increased, followed by stagnation and a slight decrease in subsequent years. This was because top earners enjoyed a relatively high increase in income (approximately 8%) during this period. By contrast, the income of the lowest earners increased by only by 0.9% to 1.4% over the same period (see Figure 11). Still, total income inequality increased by 5% over the 10-year period under study, which implies that the gap between low-income and high-income occupations widened.

Results for the wholesale and retail trade sector showed slightly higher income inequality, but this remained stable at around 0.16 over time. The most significant changes in Gini coefficients were observed for the sporting, amusement and recreation sector, which saw an increase of 58% over the 10-year period under study. Along with decreases in employment and income multipliers, increases in import shares, and strong increases in income inequality, this demonstrates that the
sporting, amusement and recreation sector demonstrated negative overall trends in socio-economic development. These critical findings indicate that economic analyses of an industry based purely on growth in sectoral demand and direct impacts (see Figure 2) are seriously limited and omit crucial socio-economic dynamics that can result in negative effects on the regional workforce in different sectors.

An important influence on income inequality is institutional conditions, including union membership rates (Evans and Block, 2002). In general, membership in labour unions strengthens working conditions for tourism employees, including wages and salaries (Dabla-Norris et al., 2015). The representative of the regional labour union for the accommodation and food services sector was well aware of decreasing union membership rates and even identified a reasonable explanation for this trend:

the industry is losing some members. […] Often, people work in the tourism industry early in their career, with the plan to continue working in another sector. Therefore, they do not join the union in the first place or leave the union when they change work. So, that’s a bit unpredictable. (Hotell och Restaurang Facket)

A study by sociologist Anders Kjellberg (2020) examined various aspects of employment conditions, labour union membership and collective agreements for various groups of workers and sectors in the Swedish economy. Notably, data for the accommodation and food services sector indicated that union membership rates decreased from approximately 40% in 2008 to 27% in 2017, which represents a negative trend over time. Figure 12 shows the evolution of union membership rates alongside sectoral income inequality.
The relationship between income inequality and union membership rates can be expressed through correlation coefficients. The non-parametric Spearman’s rank correlation enables the measurement of correlations based on a small number of empirical observations (Zar, 2005). In this case, the correlation included 10 time series-based observations, with a significant negative correlation coefficient of $-0.62$. Although this result does not show that falling union membership rates necessarily 'cause' income inequality, there was a significant relationship between these two trends ($p < 0.05$). Tourism workers hesitated to join labour unions and eventually deemed membership in a union to be unnecessary despite their clear benefits:

The industry union can and should have more members. We think everyone is doing good and everything is ok...but if you do not get the right number of extra hours paid, you will be there alone and request it by yourself from the employer. Unfortunately, this is what many are unable to accomplish. Then, they must contact the union representatives. (Hotell och Restaurang Facket)

In this study, other regional actors shared similar observations about why they did not wish to join a labour union, especially since the
tourism industry offers limited or no long-term career-opportunities: 'some parts of working in the tourism industry are very attractive, but large parts are, in fact, entry-level jobs' (Jämtland Härjedalen Turism). In particular, workers in low-income and entry-level jobs should have the opportunity to go further in their career, as observed by regional tourism representatives: 'there must be career opportunities. No one wants to do dishes all their lives. Owners of tourism businesses rather employ people in higher positions, who have experience as a dishwasher' (Jämtland Härjedalen Turism). However, one reason why tourism workers may not want to join the labour union lies in the industry’s reputation for providing limited career opportunities: 'The tourism and hospitality industry still has this reputation that employees think that they are working in tourism until they get a real job. [...] But there are good career paths, and it is not only the bad things, instead, we need to lift the positive sides of the professions that exist in the tourism industry' (Arbetsförmedlingen). Many still have the impression that the industry mainly provides occupations with unattractive working conditions: 'there are many companies in our industry that offer nine-to-five jobs, Monday to Friday. You don’t always have to work in the evenings and at weekends. I think this is what many still don’t really understand' (Visita). Hence, the industry’s reputation as an employer challenging working conditions is compounded by a high share of poorly paid occupations and limited career opportunities (Brandt, 2018). Consequences include decreasing labour union membership and increasing income inequality.

Following various perspectives on the distributional effects of tourism and events on the regional workforce, the next section deepens the discussion on employment capabilities in the regional tourism industry. These include educational aspects for working in tourism, recruitment practices and the industry’s approach to addressing individual capabilities in certain occupational areas.
5.5 Employment capabilities in the regional tourism industry

Subsequent to the discussion on distributive aspects of tourism employment and income, participants from regional tourism institutions further revealed that socio-economic issues related to elementary occupations remain a challenge. There is broad consensus that, in general, education in tourism is crucial to tackling income inequality (Brandt, 2018; Gregorio and Lee, 2002). Tourism education can be provided by various types of institutions, including public and private schools, universities or professional tourism and gastronomy programmes (Sheldon and Hsu, 2015). A major desire of tourism institutions is to employ more educated staff, particularly in leadership positions, through internal or external recruitment:

What we see is that the industry needs more people with higher education. The perception is that you do not need much education. And maybe we didn’t back in the das, but now we do because there are different occupations within the industry that need higher education. Many people don’t even know that there’s a university here that has a tourism programme. In this regard, the industry is still behind when it comes to higher education. (Visita)

If you think a bit more long-term and strategically, I think that the regional industry must re-think leadership education. If you don’t sufficiently consider this locally at the company level, then there won’t be any change. Then, it doesn’t matter what others do and talk about at the regional level. I think one must continue to work on leadership questions. (Jämtland Härjedalen Turism)

Table 17 shows that approximately 39.8% (i.e. the majority) of tourism workers are employed in elementary positions. Thus, it is difficult to justify the need for highly educated candidates when there are limited
job opportunities for them: 'I don’t think we should deceive candidates with a university degree with the idea that there are many jobs that fit their profile. That is not always the case' (Jämtland Härjedalen Turism). Particularly when there is competition between internal and external candidates: 'we always say that we want to employ people with high competence from formal education and, at the same time, we also reward and promote those who go the long way through practical training' (Jämtland Härjedalen Turism). In fact, only around 12.6% of all occupations in Jämtland Härjedalen in 2017 required a university degree, compared to 36.1% of industry-specific vocational workers.

Furthermore, macro-level data from the quantitative portion of the study revealed that employment positions that require higher education (i.e. a formal education or university degree) only accounted for a small share of total employment in the accommodation and food services sector (see Figure 13). In fact, this percentage decreased from around 16% in 2008 to 13% in 2017.

![Figure 13: Occupations with and without higher education requirements](image-url)
By contrast, the share of employees in occupations that do not require any formal education increased from 84% to 87% over the 10-year period under study. This trend should raise serious concerns about whether it aligns with desired sectoral professionalisation, as the regional tourism industry tends to employ non-educated staff and thus entails limited career opportunities. Figure 13 also shows weighted average income levels for both, occupations with and without higher education requirements; in particular, developments were positive for the lower-income group. Specifically, wages and salaries for occupations without higher education requirements increased by 32% compared to 25% for occupations with higher education requirements. Although increases in wages and salaries are probably welcomed by tourism workers, meaningful and satisfying work also requires a long-term perspective and the opportunity to pursue a career within the industry (Sen, 2009; Winchenbach et al., 2019).

Many regional businesses are small and medium-sized and thus lack career opportunities, which is also reflected by limited knowledge to train, educate and – in particular – empower employees (Croes et al., 2020, 2021), especially young, ambitious employees who demonstrate a high degree of intrinsic motivation to assume additional tasks. However, a pre-requisite for business owners is to identify their employees' capabilities, which is often a missing step in this process:

Businesses have to understand their employees, their capabilities and in what ways they are ambitious and want to develop. If business owners do not understand their employees, then they will lose them. Consequently, they will have high staff turnover, which is not only expensive and time-consuming but also hampers the development of the overall company. Therefore, our task is to help businesses understand the importance of seeing their employees' capabilities. (Handelskammaren Mittsverige)

Education and training remain a challenging task for many small and medium-sized companies, which comprise the majority of businesses in Jämtland Härjedalen: ‘Only a few larger companies have internal
staff training, but many companies are small, and the owners themselves are the main operator. They rarely find the time to both develop the business and further train and educate their staff (Visita). Consequently, staff promotions largely occur through on-the-job experience, without additional formal education. Companies might address and respect the capabilities of individual employees, but imposing more work responsibilities must also be balanced: 'There is the tradition that, after three years, the boss says, "Okay, tomorrow you’re going to be the head of reception". So, employees change their title, still the same person, no education, and the next day you have to lead your friends' (Visita).

Thus, incorrectly or insufficiently 'seeing' employees and their capabilities, which is crucial for their satisfaction and well-being, exacerbates well-known problems in the tourism industry, namely entry-level industry jobs with limited career opportunities and high staff turnover (Baum, 2015; Croes, 2012; Croes et al., 2020; Sen, 2009). Particularly for occupations that do not require further education, such as elementary jobs, the notion of empowerment was considered necessary by participants from tourism institutions, who were concerned about the current situation:

Some occupations, such as cleaners, are more difficult to develop in terms of career opportunities. However, it is important to also see their capabilities. If one is engaged and interested, they should have the opportunity to change occupations. Maybe they want to meet and work with customers. This can be a next step in empowering employees. [...] So, starting as a cleaner does not mean that one must clean forever. In this sense, the industry’s offer of entry-level jobs also provides opportunities' (Handelskammaren Mittsverige).

To some extent, the regional tourism and gastronomy industry attempts to empower employees: 'in general, I would say that our industry is quite good at lifting up individuals and seeing the potential in their employees and letting them grow' (Visita). However, a more or less distinct shift in occupations also involves further formal
education instead of simply assigning new tasks to employees. This can be more challenging for some workers than others: 'it is difficult for adults, who maybe have a loan to pay off, to simply pursue an education for a couple of weeks' (Visita). Although providing education and training seems like an appropriate way to address individual capabilities, these capacity-building initiatives are far from being the norm in the tourism industry. They mainly involve workers at larger companies: 'I wouldn’t say that there are many who participate in courses, mostly managers in human resources divisions of larger companies' (Handelskammaren Mittsverige). Overall, training initiatives are not widely adopted due to a lack of awareness: 'I don’t think that everyone is aware of these initiatives. This is a challenge for us to further inform and establish such solutions' (Visita).

Instead of focusing on individual capabilities and needs, most tourism employees must often conform to job-specific practices, which eventually has negative consequences for their well-being (Dwyer, 2022):

> Workers have to constantly adjust to the practices of the industry. If you cannot conform to the requirements of the job, then you will not remain long. Maybe some larger companies are concerned with individual capabilities and can adjust work tasks to [employees’] needs, but most businesses are small and have limited opportunities. (Hotell och Restaurang Facket)

Conforming to job requirements related not only individual competences and skills but also the dynamics of the work environment and one’s attitude: 'In the end, you are going to quit because the work tasks are too demanding. Work should be done properly and quickly… workers perceive a lot of pressure and a hard working-climate' (Hotell och Restaurang Facket). Although ideas of the capability approach are also anchored as formal rules, the daily practice often shows the opposite: 'actually, there are rules that say that one must adjust work tasks according to the individual’s capabilities. However, I don’t think this really happens in practice' (Hotell och Restaurang Facket). In fact, this is a structural and ideological issue aimed at reducing costs and
maximising profits. The tourism industry is not alone in this regard: 'the overall trend – not only in tourism – is towards a lean organisational structure with a fast pace to please the customer' (Hotell och Restaurang Facket).

Thus, regional tourism institutions advocate recommendations from the capability approach but do not translate them into key strategies for regional socio-economic development. Consequently, practical implementation still seems to be a continuous challenge. Instead, efforts have focused on the provision of high-quality education: 'there are actually many schools with a very high quality of education' (Visita). This would prepare tourism workers for the industry’s fast-paced: 'I often think that companies that recruit workers always want to know what they get. If they want a chef, they want a well-educated chef. They don’t want someone that is just good at cooking' (Handelskammaren Mittsverige). Thus, institutional participants observed that formal education for tourism workers and professionals is crucial for the industry.

However, most of the tourism workforce remain in occupations that do not require any education and thus fall at the lower end of the income spectrum (Brand, 2018). The socio-economic implications of this situation, particularly for the majority of tourism workers, are discussed in the next section.

5.6 Secure and stable employment and income for tourism workers

A crucial aspect to consider in tourism employment is seasonality (Baum and Hai, 2019). The distinction between high and low seasons with unstable employment opportunities, combined with low-income occupations, is a crucial impediment in respect to the capability approach. As highlighted, tourism workers in low-income elementary
occupations represent the majority of tourism jobs in the region (see Table 17). Their unstable and irregular employment entails serious grievances, including the risk of being replaced and the day-to-day challenges of maintaining a decent standard of living and thus achieving well-being (Robinson et al., 2019; Baum and Hai, 2019). The participant from the labour union elaborated on the wider implications of low-income work:

No one thinks about these workers’ plans and dreams. Maybe they want to have a house someday. People work six to seven days a week but still do not have a high income. If you work that much, you can easily become ill. If they had a good salary, they wouldn’t need to work so hard and so much all the time, and there are also many who don’t work full-time and are part-time workers, which is not good for sustaining one’s livelihood. (Hotell och Restaurang Facket)

Workers in low-income occupations do not necessarily consist of young seasonal workers who made an active choice to pursue periodic employment. Instead, typical low-income positions in tourism are occupied by less educated workers with limited mobility who have few employment alternatives (Zampoukos, 2018). These include cleaners and kitchen and restaurant assistants, who cover a large share of total employment in the accommodation and food services sector (Kronenberg and Fuchs, 2021a). Stable and secure employment is limited for this group of workers in elementary occupations:

Kitchen assistants and hotel cleaners have it the worst. How can working conditions get better when the staff is replaced all the time? It will not happen! When you start your first job, you don’t make demands – not unless you are permanently employed and able to say "The situation here is not good".' (Hotell och Restaurang Facket).

The quantitative results revealed that, overall, the tourism industry’s creation and retention of employment for these occupations increased over time. The share of cleaners ranged between 5% and 7%, whereas
the share of restaurant and kitchen assistants reached up to 20% of total tourism employment in the accommodation and food services sector during the analysis period. A steady increase in income levels was observed for both groups (see Figure 14). However, despite their high volume, workers employed in cleaning occupations and kitchen and restaurant assistants had the lowest income in the entire sector (see Figure 15).

![Figure 14: Employment and income effects for cleaners](image-url)
Securing stable long-term employment and thus achieving well-being and a decent standard of living in accordance with the capability approach can be challenging for a large portion of the tourism workforce employed in elementary occupations. In recent years, however, Jämtland Härjedalen has taken various steps to become a year-round destination, thereby tackling the socio-economic risks that accompany seasonality. The aim is to offer tourist activities during most of the winter and summer months: ‘Only recently have we had so many people working during the summer’ (Region Jämtland Härjedalen). Attempts to transform a seasonal tourism destination into one with broader appeal that can offer year-round employment, income and thus a living to local residents is a strong indication of sustainable socio-economic development (Baum and Hai 2019). This provides the right pre-conditions to overcome unstable employment, especially to workers with little or no education: ‘We are supporting the industry in creating year-round employment. We are fully aware that this doesn’t happen overnight, but the aim is for people who live
here to have more reliable year-round employment' (Jämtland Härjedalen Turism).

In Sweden, working conditions and factors related to wages and salaries, including sick pay or pensions, are usually ensured by collective agreements between labour unions and employers (Burgess et al., 2013). Thus, tourism institutions are confident that these collective agreements will be followed: 'we work under the premise that all companies respect Swedish law and especially follow collective agreements. This is a pre-requisite for being a serious employer' (Handelskammaren Mittsverige). However, responsibility for following and implementing these agreements is a matter for labour unions: 'we mainly work with economy and growth. I can’t say our focus lies on the workers, their working conditions and how well they have it. That’s more a question for the unions or Visita' (Destination Östersund).

Indeed, employees, especially those in unstable occupations, cannot always access these benefits if their positions are not covered by collective agreements. In addition, some companies sign agreements but do not follow them. Accordingly, the participant from the labour union said that 'it is the employer’s responsibility to follow the agreement. There are many employers who signed collective agreements, but never looked at them...they don’t know what kind of rules are written in there' (Hotell och Restaurang Facket). The most worrying observation is that there have been cases in which employers did not even pay the correct amount into employment pensions for their workers:

We did some research and registered cases in which employment pensions were not paid. When affected workers went in to get their pension, there was not much to get. We investigated companies by looking at how many workers were employed and how much they paid in employment pensions. There was a big difference in how much should have been paid and how much was really paid in. In the end, the workers were
compensated, but the employer could probably get away with it if no one looks at these figures. (Hotell och Restaurang Facket)

Consequently, there have been numerous cases in which tourism workers asked for help to contact labour unions and discuss critical questions about employment conditions: 'there are many who contact us through a friend, because they can neither speak English nor Swedish. [...] There is even a large number of unknown cases that don’t even contact us because they are not union members' (Hotell och Restaurang Facket).

To address grievances at the workplace, labour unions and some larger companies have initiated so-called union clubs. In these clubs, employees and employers regularly meet to openly discuss important aspects of precarious employment and aim to resolve employment grievances in a timely manner. These initiatives are particularly valuable for workers in positions that do not have union representation because they provide opportunities to make their collective voices heard (Evans and Block, 2002).

Precarious working conditions and insecure and unstable employment also negatively affect workers’ health (Burgess et al., 2013). Participants noted a ‘high risk of burnout’ (Region Jämtland Härjedalen) and the reality that ‘75–80% of [workers] take painkillers every day to be able to perform their tasks’ (Hotell och Restaurang Facket). Few precarious workers in the tourism industry can bear a high workload and lack of sustainability in the long run: 'Look at the hotels in Sweden and look at how many workers are over 55. You’ll not find that many... few work until official retirement in this sector, and this means something!' (Hotell och Restaurang Facket).

Although there are many ‘serious employers that follow and implement collective agreements’ (Handelskammaren Mittsverige), interviews with participants from regional institutions revealed that there are tourism companies, which consider growth orientation and profit maximisation as major aims. This can have direct consequences for the most vulnerable tourism workers. Indeed, markets do not
appear capable of solving socio-economic problems (Martinelli et al., 2013; Söderbaum, 2016; Brodbeck, 2011). Thus, the existence of institutional support systems is important (Daniels, 2021). Interestingly, representatives of the regional tourism association stated, 'we must dare to talk about these issues. It is crucial to have dialogues between the private and the public sectors' (Jämtland Härjedalen Turism). Recently, regional institutions undertook a promising collaborative project to assess and address challenges related to employment and competence building in the regional tourism industry (Elsner, 2017; Söderbaum, 2017). One of the main objectives concerned the needs of employees, especially those in lower-income groups: 'It is clear that we want to have positive development, but it must also be sustainable in every way, especially socially' (Jämtland Härjedalen Turism).

The next section continues the discussion about the socio-economic impacts of tourism and events by focusing on the case of the WCR2019 initiative. Specifically, it demonstrates how institutional involvement in mega-events can contribute to socio-economic development for both the regional population and regional businesses.

5.7 Institutional initiatives to leverage the impact of regional sporting events

5.7.1 Inbound tourism and the relevance of major regional sporting events

So far, results on the macro-level have revealed that event tourism in Jämtland Härjedalen has largely had positive impacts on regional output and income (Sak et al., 2022). Events also play an important role in the region’s development strategy, as evidenced by regular organised efforts to stage various types of music and sporting events.
Tourism events attract visitors from outside the region and thus contribute to sales, employment and income for the regional workforce (Agha and Taks, 2018). Positive social impacts of events arise from the provision of attractive leisure opportunities for local and regional populations, therefore considering to be crucial for a inhabitant’s well-being (Wallstam and Kronenberg, 2022).

Since sporting events have been important drivers of tourism development in Jämtland Härjedalen for many years, it is notable that two major winter sport world championships happened to take place in the region during the same season: the FIS Alpine Skiing World Championships and the Biathlon World Championships:

'The Alpine Skiing Association gets its World Championships and then Biathlon Association gets its World Championships, and everything happens in the same winter season in 2019. It’s like the Olympics; usually, these things happen every four years.'

Hosting two large-scale events was a large pull factor for inbound tourism to Jämtland Härjedalen (Ziakas, 2020). The results of the visitor survey showed the degree to which the events influenced non-regional visitors’ decision to travel to Jämtland Härjedalen (Dimitrovski et al., 2022). More precisely, these visitors could have travelled to Jämtland Härjedalen specifically for the events, or they could have travelled to the region independently from the events taking place or not. Only then we can correctly understand and attribute the socio-economic impacts of visitor expenditures to the events (Tyrrell and Johnston, 2001). Alternatively, it could be said that the events were the main reason why certain impacts occurred in the first place. Figure 16

15 All interview quotes in this section are from the focus group with members of the WCR2019 board.
illust rates the extent of the sport events’ influence on travel decisions (y-axis), according to respondent quantiles (x-axis).16

For the current study, it was most relevant to identify the cut-off point for the 50% event influence threshold. Values above 50% represent the share of visitors who considered the event(s) as the main reason to travel to Jämtland Härjedalen (Dimitrovski et al., 2020; Wallstam et al., 2019). Figure 16 shows the distribution of the events’ influence on visitors’ decision to travel to Jämtland Härjedalen (thus, it excludes the local population). Visitors of the FIS Alpine Skiing World Championships were further sub-divided into ticket holders who actively purchased admission to the competition and general ski pass holders whose admission to the competition was complementary.

Figure 16: Events’ influence on visitors’ travel decisions

16 A quantile divides the total number of respondents into two groups and is expressed as a percentage. For instance, the 25% quantile (or lower quartile) is the cut-off point that divides respondents into two groups: 25% of respondents fall below the quantile, and 75% fall above it.
In Figure 16, the further the slope is to the left of the graph, the higher the events’ influence on visitors’ decision to travel to Jämtland Härjedalen. For example, the slope for visitors to the Biathlon World Championships lies furthest left. For this slope, the 50% value of the events’ influence on the y-axis crosses the x-axis approximately at the 12% quantile. This means that, for 12% of the Biathlon visitors, the influence of the Biathlon World Championships to travel to Jämtland Härjedalen was below 50%. This means that the event was not the main reason why these visitors travelled to the region. In turn, for 88% of the Biathlon visitors, the Biathlon World Championships were the main reason for traveling to Jämtland Härjedalen. Furthermore, the 100% value of the event’s influence on the y-axis crosses the x-axis at the 45% quantile, which means that, for 55% of Biathlon visitors, the events were the only reason for traveling to Jämtland Härjedalen. The mean value of the Biathlon World Championships’ influence on visitors’ decision to travel to Jämtland Härjedalen was approximately 85%.

By contrast, the FIS Alpine Skiing World Championships’ influence on visitors’ decision to travel to Jämtland Härjedalen exhibited a lower mean value. The 50% threshold on the y-axis of Alpine Skiing visitors with ordinary tickets crosses the x-axis at the 18% quantile. This means that, for 18% of Alpine Skiing visitors with ordinary tickets, the event was not the main reason for traveling to Jämtland Härjedalen. In turn, 82% of ticket holders travelled to Jämtland Härjedalen mainly because of the events. The 50% threshold on the y-axis for Alpine Skiing ski pass holders crosses the x-axis approximately at the 50% quantile; in other words, only half of respondents stated that the event was the main reason for visiting Jämtland Härjedalen (Tyrrell and Johnston, 2001). Overall, it is clear that the events were a strong pull factor for tourists who otherwise would have not visited Jämtland Härjedalen. As previously indicated by the quantitative analysis, the magnitude of the events’ economic and socio-economic impacts for regional businesses and the corresponding workforce was shown to be significant (Ziakas, 2020).
5.7.2 Institutional initiatives to leverage the socio-economic impacts of regional sporting events

Hosting large-scale events motivated regional institutions to translate the resulting impacts into socio-economic benefits for regional stakeholders (Sak et al., 2022). Through collaboration between relevant regional federations in alpine skiing and biathlon and the regional administrative board for Jämtland Härjedalen, the combination of two large-scale winter sporting events gave rise to the idea of initiating a wider project with socio-economic relevance for both regional businesses and the regional population. This led to the formation of an umbrella organisation called WCR2019, which aimed to create a platform for regional businesses and entrepreneurs to develop their businesses in connection to the world championships (Getz et al., 2012).

Interestingly, the initial motivation to implement WCR2019 was mainly economic and financial in nature: to support regional businesses and thus contribute to regional economic growth. One participant said, 'We saw it more from a strictly commercial perspective, that we could offer our partners and companies two events in the same region'. Thus, in line with contemporary growth-oriented perspectives, regional small and medium-sized businesses should gain economic leverage from marketing activities in connection to the world championship events (Ziakas, 2020). Without an initiative such as WCR2019, they would not have the capacity to derive economic benefits from these events (e.g. in the role of a sponsor): 'Since these events are world championships, local companies would never have financially managed to participate as an official sponsor for the respective world championship brands.'

Given that Jämtland Härjedalen is a scarcely populated and remote region, the notion of development was mainly reflected by attracting new entrepreneurs and inhabitants (thus, potential future taxpayers) to move to Jämtland Härjedalen as legacy effects from the WCR2019
(Li and McCabe, 2013): 'there was a good amount of in-migration into the region, it was very much appreciated by our partners and sponsors'. This eventually led to a side project called 'Ta Steget',\(^{17}\) which focused on marketing the attractiveness of the World Championships Region with help from public institutions. The motivation behind this project is not only focussed on increasing guest nights, but contributing to the wider regional development and growth discourse (Mair and Smith, 2021):

And then we talked our way into the project, which we then called ‘Ta Steget’, which had major regional funding and was actually, I think, unique given its size in terms of regional funding and focus. And it was precisely about avoiding what is often discussed when it comes to engagement, namely focusing on the hospitality industry and that we need to attract the hospitality industry instead of talking about in-migration, that this should attract people to move to the area.

Accordingly, the WCR2019 initiative aimed to create substantial long-term legacy effects for the region (Chalip, 2004; Ziakas, 2020). However, the main motivation behind WCR2019 and its desired long-term effects seemed to be mainly driven by economic and financial interests through the generation of sales, profits and – eventually – strong branding for participating businesses (Hassan and O’Connor, 2009; Li and McCabe, 2013).

### 5.7.3 Establishing cooperative relationships

The focus group discussion further highlighted that the WCR2019 initiative enabled a more inclusive approach to sponsorship and engagement at various levels of the regional community and contributed to a sense of event ownership and therefore a sense of

\(^{17}\) 'Ta Steget' translates to 'Take the step.'
regional pride in being a part of a region that hosts large-scale events (Castyana et al., 2022; Elias-Varotsis, 2006): 'This is a huge collaboration that spans the entire spectrum of regional stakeholders: from sport federations and public institutions and municipalities, over immigration projects to regional businesses that are basically owned and run by the local population'. Thus, despite the WCR2019 project's growth-oriented objective to make the events economically beneficial for regional businesses, an inclusive approach also supported regional entrepreneurs and businesses' development according to their capabilities (Mair and Smith, 2021):

It was not only the financial exchange we were looking for but also joint forces. [...] In this region, we should include every entrepreneur in the region by asking: "Are you supporting? Would you like to be a part of what we do and partner with us?" [...] It was a way to create opportunities for the region's companies to participate in the World Championships journey. [...] We wanted to create the conditions for regional companies to be involved throughout the World Championships journey and actually be able to participate as well. [...] We also wanted to include the public sector to emphasise that this is something that will contribute to the development of the entire region, not only the business community.

The cooperative and inclusive nature of WCR2019 was operationalised through so-called network meetings, which aimed to gather various small and medium-sized businesses and institutions (Lans et al., 2015). These network meetings (which were standalone events) were happening long periods before the actual World Championships events, but also during and after the World Championships have ended. Participation in these meetings not only allowed businesses to pursue their economic interests by receiving exposure to build their brand, but it also gave their representatives and workers an opportunity to engage in activities related to the events:

Networking is usually an overused word and often only includes a certain exclusive circle in an industry or class, with
a certain pressure to attend. But with sports, it becomes non-exclusive, mixing all kinds of people with the same interests. It naturally becomes non-exclusive or inclusive, with a high willingness to participate. [...] These meetings were very well-attended. There was some kind of pride among the companies in the region to be part of the network. And it also spread to their employees and families.

This was further reflected by the responses that organisers received from participants who could strengthen collaborative relationships and build social capital (Lans et al., 2015; Morgan et al., 2020):

Not everyone gets all the exposure they might desire. But they get a lot of other, more socially relevant things, like network meetings, strengthening social capital, knowledge sharing and so on. It is a relatively new way of thinking for many.

Notably, when the WCR2019 project was initiated with the aim to foster inclusiveness, there was little criticism of the project’s motivation among regional institutions and companies: 'I have never encountered anyone who has been openly critical of what we do. Of course, there were some who did not believe there were any benefits to participating, but no criticisms have been directed at the project itself. We had a very good support in general'. However, this does not mean that WCR2019 did not have any negative socio-economic outcomes. Large-scale events, including institutional projects such as WCR2019, are usually accompanied by crowding-out effects (Preuss, 2011). The involvement of various regional actors in financially supporting WCR2019 might have certainly steered private consumption in favour of the events and had a negative impact on other sectors of the economy (Cao et al., 2017; Phi et al., 2014).18

18 Measuring and understanding the crowding-out effects of events falls outside the scope of this study, as it requires a considerably different methodology. Usually, studies on crowding-out effects are based on assumptions borrowed from neoclassical economic theory, including concepts related to supply and demand and price elasticities (Preuss, 2011).
5.7.4 Deficits in legacy planning

One of WCR2019's objectives was to establish a long-lasting legacy. Eventually, the initiative should lead to the branding of Jämtland Härjedalen as an 'event region' or 'World Championships region' where events are an inherent part of the regional economy and thus provide the regional working population with a stable and secure income (Thomson et al., 2019). However, this vision requires strategic planning to realise WCR2019 objectives in the long run, particularly after the World Championships competitions (Li and McCabe, 2013). However, this strategic planning has been completely absent:

We didn’t really have a very clear plan. We had a clear plan for how we would handle our final report and all those parts. But we did not really have anyone established, where we had a long process about how things should be moving forward. […] It’s kind of like when you have reached the finish line at the World Championships: after the award ceremony, we felt like "been there, done that, over and out". […] And, of course, that’s where we should have had something there to continue, really. Because after an event period like this, many of the people involved in the process disappear. And it was difficult, I have to admit.

Retrospectively, there appeared to be a missed opportunity to continue leveraging the impacts and enthusiasm brought into the region by the World Championships: 'the region realised that they did not want to stand there after the World Championships and answer questions like, "What did we make of this?"' Paradoxically, on the one hand, the ambition was to create a long-term World Championships Region in which events were inherent to the region. On the other hand, there are also negative implications when the regional population grows accustomed to events taking place in Jämtland Härjedalen (Ziakas, 2020). This has been a challenge for WCR2019 initiative, as the potential for economic and social opportunities for all stakeholders
would be much greater if hosting events was not taken for granted: 'sometimes, I have the feeling that we are getting spoiled with events'.

In addition, the outbreak of the Covid-19 pandemic and the resulting suspension of activities was a major challenge for the WCR2019 initiative: 'since the beginning of the coronavirus pandemic, a real vacuum has been formed here. [...] it would be interesting to see whether we can turn that into something that is not taken for granted after the pandemic'. Thus, it is difficult to evaluate the long-term socio-economic impacts of event-based initiatives such as WCR2019 since Covid-19 restrictions shut down the entire events industry for an extended period of time (Gössling et al., 2021).

Previous results from this study have shown that socio-economic grievances in the tourism and events industry often relate to the fact that most jobs are low-income, with low barriers to entry and limited career opportunities (Baum, 2018). This issue is not specific to events but the entire tourism and hospitality industry (Robinson et al., 2019). The focus group showed that resolving socio-economic issues related to the regional workforce in the event tourism sector was not a primary objective of the WCR2019 initiative. Instead, the initial motivation was growth-driven. Nevertheless, the inclusive character of WCR2019 enabled collaborative networks between institutions, sport associations and regional companies and their employees. This may lead to long-term societal effects that contribute to better employment conditions for the regional tourism and hospitality industry. However, the WCR2019 initiative's objective to establish lasting positive social and socio-economic effects received relatively little attention. Instead, implementation and operational tasks for the World Championships themselves were the main focus of the WCR2019 board. Consequently, the WCR2019 and the network's inclusive approach can only be considered a preliminary step in supporting the development and success of regional businesses in connection to both mega-events and the building of social networks.
6 Discussion

The purpose of this thesis is to provide new perspectives on the economic and socio-economic impacts of tourism to better understand the role of tourism and events in regional socio-economic development (Elsner, 2017; Filiposki et al., 2016; Hollingsworth and Müller, 2008; Mbaiwa, 2005). This study is embedded in the field of tourism and its economic impacts, a broad and established area of tourism studies (Jennings, 2009). However, a review of the historical and contemporary literature on the economic impacts of tourism revealed that the vast majority of studies have examined regional development through the lens of growth-oriented economics, which is often empirically reflected by aggregate economic indicators (Dwyer, 2020; Egan-Krieger, 2014; Lee and Kang, 1998). However, socio-economic development relates to various social aspects associated with economic activities in a region (Etzioni, 2005). Thus, the aim of this thesis is to show how current approaches to the economic impacts of tourism can be extended to shift focus away from a growth perspective and towards issues which are most relevant to the tourism workforce (Baum et al., 2020; Biagi et al., 2020; Dwyer, 2020).

To accomplish this, it is important to first understand the paradigm that underlies most traditional studies on the economic impacts of tourism. Their focus on growth indicators typically reflects neoclassical economic development theory. Regional development is assumed to be achieved through monetary means, including growth in GDP (through increases in sales and profits) and per capita income, which disregards the negative socio-economic outcomes of growth (Egan and Nield, 2003; Lee, 2009b; Ulrich, 2010). However, a growing number of scholars, including economists, have criticised this narrow and one-dimensional view, as socio-economic grievances risk being systematically overlooked. Thus, they have proposed more comprehensive and broad perspectives of regional development (Dwyer, 2020; Elsner, 2017; Moulaert and Nussbaumer, 2005; Brodbeck, 2011; Söderbaum, 2016, 2017; Fuchs, 2022; Ulrich, 2010). Economic
activities are, in principle, social activities and occur within a social context. Thus, socio-economics focus on highlighting the social implications of economic activities, such as tourism and events (Etzioni, 2015). To better understand specific social dynamics and implications, the literature suggests the consideration of several perspectives in economic analyses, including micro-meso-macro perspectives to highlight institutional dynamics and social norms and practices that shape social activities such as tourism and events (Baum et al., 2016; Dopfer et al., 2004; Elsner, 2007).

Against this background, the main objective of this research is to propose how traditional models on the economic impacts of tourism can be extended to better understand the role of tourism and events in regional socio-economic development. Notably, in the context of this thesis, tourism encompasses events in general and large-scale sporting events in particular, as events are considered key strategic elements in regional tourism development in Jämtland Härjedalen (Sak et al., 2022).

By adopting a mixed-methods approach (Khoo-Lattimore et al., 2019), I extended the narrow perspective of traditional tourism economic impact approaches. By doing so, I supplemented their growth-oriented indicators with new monetary measures enriched with institutional meso-level perspectives of the regional tourism and events industry, based on qualitative interviews. New monetary measures can be used to better understand a region’s self-sufficiency and how benefits from tourism are distributed among the tourism workforce (Söderbaum and Brown, 2010). To gain insights on the self-sufficiency of Jämtland Härjedalen, I included import shares in a macroeconomic analysis of tourism impacts (Garrigós-Simón et al., 2015; Kronenberg, 2012; Muchdie and Kurniawan, 2018). Moreover, the distributional perspective involved the disaggregation of employment and income effects for particular occupations within the accommodation and food services sector (Daniels, et al., 2004; Lacher and Oh, 2012). By analysing Gini coefficients and Lorenz curves, it was possible to explore income inequality in different tourism sectors and changes over time. Finally, a focus group interview with board members of WCR2019 revealed
how institutional efforts and large-scale sporting events can contribute to regional socio-economic development (Sak et al., 2022).

### 6.1 The structural dynamics of the regional tourism industry

The first research question relates to the structure of the regional tourism industry: ‘To what extent does the regional tourism industry structure contribute to socio-economic development?’ To answer this question, I examined the tourism industry’s general capacity to contribute to socio-economic development and how this developed over the time period under study (i.e. 2008–2017). Through multipliers and indications on import shares for seven tourism sectors and their development over time, I gained an overview of linkages between tourism sectors and other sectors of the regional economy in Jämtland Härjedalen (Miller and Blair, 2009; Muchdie and Kurniawan, 2018). However, deriving highly aggregated multipliers for production output, employment and income at the sectoral level is a typical procedure used in traditional IO-based models. Nevertheless, in contrast to previous studies, which often derived conclusions about the impacts of tourism from a one-year snapshot based on outdated models (e.g. Pratt, 2015; Artal-Tur, et al., 2020; Kim and Kim, 2015), my own research considered annual changes in multipliers over a 10-year period between 2008 and 2017. Thus, I could allocate each year’s tourism demand to the model of the same year. The subsequent tourism impacts could be estimated much more accurately based on annual changes in industry structure (Kronenberg et al., 2018). A periodic view and changes in industry structure showed how the regional tourism industry contributed to regional socio-economic development.

As a result of the regionalisation process, I presented the development of three main economic multipliers. The first output multipliers
referred to the generation of additional production in all other sectors of the region-wide economy (Miller and Blair, 2009). These remained relatively stable over the entire period, which indicates that the relationship between regional sectors in terms of intermediate demand changed only slightly over time (Hara, 2008).

By contrast, employment multipliers decreased in all seven tourism sectors. They indicated each sector’s potential to generate region-wide employment (Crompton, 1995). However, the findings showed that the regional tourism industry experienced negative growth during the period under study, which means that tourism sectors’ contributions to employment declined over time. Some sectors’ potential to generate and maintain tourism employment in the region even substantially weakened. This trend clearly contrasts with efforts made by regional institutions to strengthen the industry’s ability to create jobs and income. Thus, in terms of socio-economic development, these findings are rather negative for Jämtland Härjedalen, as residents should be able to live a decent life based on employment in the tourism and events industry (Etzioni, 2015; von Wieser, 2013). This is particularly insightful, since tourism is considered a key industry in rural areas of the region and serves as a structural foundation for local society (Filipovski et al., 2016).

A decrease in employment multipliers implies that the industry becomes more ‘labour-efficient’, from an economic perspective (Bengtson, et al., 2018; Cracolici et al., 2008). In other words, less labour is required to meet the same level of tourism demand compared to the previous years (Daniels 2004). A factor that may have contributed to increasing labour efficiency is the increased use of ICTs (Fuchs and Sigala 2021; Sigala, 2003). In fact, as more and more tasks become automated and digitalised, less labour – especially less unqualified labour – is required to generate a given number of sales. Often (but not always), this implies the elimination of existing jobs (Ivanov, 2020). This is evident in the case of travel agencies and tour operators, in which employment effects were shown to have substantially decreased. However, the implementation of ICTs is not the only factor that leads
to increased labour efficiency. As Ulrich (2010) argued, typical signs of predominantly neoliberal markets include increasing performance requirements for workers, which leads to the elimination of employment positions, particularly for middle- and low-income households. Such systems present challenges to maintaining and protecting employment positions (Griffith and Lucas, 2016; Schilcher, 2007). The results related to employment multipliers hint at this negative development.

In contrast to employment multipliers, tourism sectors' contributions to the region-wide generation of income was positive overall in a key sector, accommodation and food services. Regional income multipliers indicated changes in the regional workforce's wages and salaries resulting from a 1 kr increase in demand in a given sector (Miller and Blair, 2009). In particular, positive developments were observed for the accommodation and food services sector, in which income multipliers increased by 14% over 10 years. This is a positive sign that the amount of wages and salaries paid to workers for every 1 kr in sales continuously increased over time.

However, multipliers alone do not provide information about income distribution among tourism workers (Lee, 2009a) since they only provide a rough indication at the sectoral level (Miller and Blair, 2009). In fact, it is important to consider that some sectors’ potential to generate wages and salaries for the regional workforce significantly decreased. Again, travel agencies and tour operators were prominent in this regard; as with employment multipliers, income multipliers for this sector substantially decreased over time. Not only did this sector contribute less employment given a fixed amount of sales, but its capacity to generate income for the working population also weakened. It is important to note that these developments do not necessarily imply that actual income levels for employees in this sector decreased (Miller and Blair, 2009). Rather, they demonstrate that less income was generated for each additional unit in sales. A weakened capacity to generate income is an indication that the sector became more efficient at generating sales, thereby weakening its contributions to financially
benefit the working population (Baaijens et al., 2010; Fuchs and Sigala, 2021).

Further interesting macro-economic insights provide the results on import shares and their respective development over time (Haddad et al., 2013; Supradist, 2004). Import shares refer to the proportion of intermediate products and services imported into a region and thus indicate leakage effects in the regional economy (Archer et al., 2005; De Cuello, 2001). Intermediate products and services are resources used by a sector to produce its output. Accordingly, import shares provide insights on a region’s self-sufficiency (Kronenberg, 2012). The empirical findings demonstrated that import rates substantially varied between the seven sectors under study. In particular, air transport services obtained approximately half of intermediate products and services from imports and thus procured relatively little from regional production. Instead, large shares of capital flowed out of the region with respect to the industry’s total intermediate demand (Khanal et al., 2014). By contrast, other tourism sectors (e.g. creative, arts and entertainment; sporting, amusement and recreation; and accommodation and food services) obtained the majority of their intermediate products and services from regional suppliers. Thus, these sectors had a much higher level of self-sufficiency and maintained low leakages; thus, they contributed to strengthening the regional economy (Garrigós-Simón et al., 2015). Therefore, intermediate demand can be satisfied through the regional supply rather than imports (Supradist, 2004).

From a socio-economic development perspective, low leakages are a positive sign, as it further contributes to workers employment and income opportunities (Garrigós-Simón et al., 2015). Companies in sectors with low leakages have the advantage of choosing regional supply over imported goods. There may be several reasons for this, such as higher quality (e.g. regional products and services suit context-specific needs), financial reasons (e.g. the regional supply is cheaper and faster to procure) or the sector’s overall desire to avoid imports in order to contribute to regional economic development (Muchie and Kurniawan, 2018). In a highly globalised economy, however, a
worrying trend of increasing import shares for regional tourism sectors has been observed in recent years. At the same time, this shows that the role of regional supply for intermediate production has become weaker over time (Miller and Blair, 2009). The tourism industry’s stronger dependence on globalised markets has various negative consequences, including a higher ecological footprint, the risk of outsourcing and shutting down regional suppliers, price instabilities, and the risk of exploiting industries in developing countries (Sugiyarto et al., 2003).

Several representatives of regional tourism institutions expressed the importance of the tourism infrastructure for regional socio-economic development, particularly in rural areas. Moreover, institutional efforts demonstrated that collaboration between public and private actors was strengthened – or, at least, the ambition to collaborate among major actors exists (Wallstam, 2022). Finally, events are considered a key strategic component in regional development (Sak et al., 2022). Inclusive institutional projects to stage and promote large-scale sporting events, such as WRC2019, shows how local and regional businesses can engage and create promising networking opportunities to strengthen social capital (Lans et al., 2015). Although such projects initially seemed successful, with well-attended network meetings, it is questionable whether the WCR2019 initiative resulted in any long-term (legacy) effects for Jämtland Härjedalen (Pentifallo and VanWynsberghe, 2012). The Covid-19 pandemic and related restrictions resulted in the temporary suspension of any event- and tourism-related activities (Gössling et al., 2021). However, the findings from this thesis demonstrate that, during the planning and implementation period, the WCR2019 board already paid relatively little attention to the project’s long-term implementation and strengthening its potential to contribute to socio-economic development in the regional tourism industry (Pentifallo and VanWynsberghe, 2012). This was partly because follow-up studies and clear strategic concepts were not sufficiently formulated in connection to large-scale sporting events; thus, the continuation of events-related business networks could not be justified (Farinda et al., 2009; Misener
and Mason, 2006). The lack of follow-up studies is one problem, which is typical for many event studies. They mainly focus on the short-term impacts of events, not their contributions to the wider discourse on regional socio-economic development (Mair and Smith, 2021).

The results further demonstrated that, overall, tourism demand increased over time, at first a positive observation for generating employment and income in the region. Such developments are in line with the growth paradigm of neoclassical economic theory (Lee, 2009b). However, increasing growth led to higher efficiency in production (Cracolici et al., 2008). Thus, the corresponding socio-economic impacts became less significant, as interlinkages between regional sectors showed. Overall, relationships between sectors weakened, thereby limiting the industry’s generation of regional employment and income (Griffith and Lucas, 2016; Higgins-Desbiolles et al., 2019). Furthermore, the trend of increasing import shares demonstrates that regional supply might not be sufficient in the future to satisfy intermediate demand. Regional development, however, is primarily a social matter and thus should focus on the social aspects of economic activities such as tourism and leisure activities (Etzioni, 2015; Deery and Jago, 2010; Hollingsworth and Müller, 2008; Martinelli et al., 2013; Ulrich 2010; von Wieser, 2013). However, the overall industry structure of regional tourism is rather counter-productive to socio-economic development.

6.2 An occupational perspective of regional employment in tourism

The second research question focuses on specific occupations in the tourism sector: ‘What is the socio-economic impact of tourism and events on the regional tourism workforce, and how do they affect various tourism occupations?’ Examining occupation-specific effects requires the disaggregation of IO-based impacts on regional
employment (Daniels et al., 2004). After the analysis of industry structure, occupation-based modelling demonstrated how the quantitative effects of tourism and events on employment were distributed among various occupations in the regional tourism industry.

Overall, the generation of employment in the accommodation and food services sector grew by approximately 30% during the period under study: from 1,765 FTE jobs in 2008 to 2,280 FTE jobs in 2017. An analysis of distributional effects demonstrated that, out of 2,280 jobs, around 96% (or 2,190) were distributed among the 25 most common occupations. In line with previous research on the tourism workforce, the results demonstrated that most workers were employed in elementary jobs (i.e., low-skilled and low-income occupations; Baum and Hai, 2019; Filipovski et al., 2016; Frechtling, 1994; Holloway and Humphreys, 2019; Solnet et al., 2016). In particular, occupations that did not require any education occupied the majority of tourism jobs in 2017 (i.e. approximately 40%), followed by industry-typical vocational occupations such as chefs and bartenders (approximately 36%). These findings provide quantitative evidence of concerns voiced by representatives of regional tourism institutions. In fact, the latter are aware of the potential socio-economic consequences associated with a large share of low-income and low-skilled tourism employees’ precarious work in positions that do not require any education (Brandt, 2018; Checchi, 2001).

As organisational entities, institutions have the function in structuring established rules, norms and social practices in the society (Laksmanan and Button, 2019; Linarelli, 2010). The findings demonstrated that industry representatives strongly targeted workers with a higher education level. They aimed to employ more educated workers in the industry to professionalise informal recruiting processes and develop regional tourism offers (Sheldon and Hsu, 2015). However, quantitative data also demonstrated that the industry’s employment structure did not necessarily warrant the recruitment of a larger share of workers with high school or university degrees. Instead, workers
should be equipped with the skills needed to adjust to new work models, leadership capabilities and motivation to pursue a long-term career in the industry (Hsu, 2018). The desired benefits from these steps include better recruiting practices, more stable and secure employment and a better reputation for the tourism industry (Checchi, 2001; Möller, 2014; Solnet et al. 2016). Moreover, tourism institutions aimed to further professionalise the tourism, hospitality and event industry and develop year-round regional tourism products and destinations (Vanhove, 2005). In particular, rural areas are challenged by issues of seasonality, as peak tourist seasons dominate the economies of many destinations in Jämtland Härjedalen. Thus, efforts to establish year-round offers may provide promising employment and income opportunities for a larger share of the population (Kinyondo and Pelizzo, 2015). However, small and medium-sized tourism businesses have limited knowledge to further train, educate and address their employees’ capabilities (Croes et al., 2020, 2021).

Sen’s capability approach (Sen, 2009, 2012) implies that an individual capabilities and needs must be addressed to achieve well-being, ensure a decent standard of living and thus ensure justice for the tourism workforce (Higgins-Desbiolles, 2010). A large share of occupations in the tourism industry, however, do not conform to Sen’s notion of capabilities. In particular, workers in entry-level positions struggle with precarious working conditions, low incomes, limited career opportunities and a lack of empowerment practices (Baum and Hai, 2019; Croes, 2012). Instead of focusing on individual capabilities and needs, most of the tourism workforce must fit into working norms, practices and requirements in their positions, including unstable and irregular employment, serious grievances and the risk of being replaced between seasons (Croes et al., 2020, 2021; Robinson et al., 2019). These tourism workers are mainly employed as cleaners or as restaurant and kitchen assistants. In Sweden, collective agreements usually protect workers’ rights (Burgess et al., 2013). However, this is contingent on collective agreements being correctly implemented, which is not always the case in tourism occupations. This often results
in negative consequences on tourism workers' well-being and ability to live a decent life.

Regional tourism institutions are aware of the capability approach (Sen, 2012), however, they are not implemented as key strategies in regional socio-economic development to improve the situation of workers in elementary occupations (Croes, 2012; Griffiths and Lucas, 2016; Higgins-Desbiolles and Bigby, 2022). In this regard, a paradox exists. On the one hand, regional institutions desire to increase the share of tourism occupations with higher education requirements, as this is a sign that the tourism industry can provide qualified work and increase its professionalisation (Sheldon and Hsu, 2015). These concerns are understandable, as the industry struggles to attract skilled workers who want to build a long-term career (Milliman et al., 2018), especially since workers in low-skilled occupations tend to suffer from socio-economic issues such as low incomes and inadequate working conditions (Checchi, 2001; Möller, 2014).

On the other hand, the quantitative results confirmed previous research by demonstrating that the regional tourism industry still involves many ‘simple’ tasks that are suitable for entry-level and early career workers, seasonal workers or workers with little or no education (Robinson et al., 2019). Therefore, it seems that the reality of the industry’s demand for continuously employing workers in elementary occupations is contrasting to the direction that is desired by representatives of tourism institutions, who welcome to see a higher share of highly educated workers. Thus, an important question arises about whether the need for highly educated workers in the tourism industry expressed by institutional representatives is even meaningful or realistic, as many tasks in the accommodation and food services sector tend not to require any formal education.

More emphasis should be placed on soft skills and the individual capabilities of tourism employees (Sen, 2012; Solnet et al., 2016). Today, tourism jobs are being redefined and transformed and constantly require new roles and skill sets (Hsu, 2018). In this regard, one can also carefully discuss the official categorisation of occupations into those
with or without education requirements. In my thesis, I based this distinction on the SCB’s official SSYK classification (SCB, 2021). However, does the SSYK classification appropriately represent the tasks of tourism workers at all levels? Occupations with education requirements do not simply need workers with a degree or a good understanding of certain work-related practices; potential graduates should also be equipped with problem solving, lifelong learning and critical thinking skills (Hsu, 2018). Thus, tourism institutions should be aware of these dynamics and thus have a clear idea of the employment structure of tourism occupations; they should not only focus on the industry’s demand for certain occupational groups or categories of potential candidates with or without higher education.

In turn, workers in elementary occupations are exposed to the socio-economically challenging efficiency dilemma: while positions with low skill requirements primarily provide income opportunities for uneducated members of the population and youth, they are also likely the first to be affected by automation (Fuchs and Sigala, 2021; Solnet et al., 2016). However, automation can support the elimination of undignified and exploitative jobs, which are not uncommon in this sector, as discussions have shown (Winchenbach et al., 2019). Despite technological developments and the implementation of ICTs in many sectors (e.g. travel agents and tour operators), tourism offers still mainly depend on hospitality, social interactions and personal relationships and encounters (Gretzel et al., 2020). These require elementary occupations performed by workers without direct contact with guests or tourists (e.g. housekeeping). Thus, automation cannot entirely replace people in the tourism industry (Ivanov, 2020). Although the share of occupations that do not require education has increased over time, the tasks performed by such workers may also benefit from technological transformation (ibid., 2020). For instance, when tourism companies aim to improve efficiency through automation and ICTs, these technologies should ideally function as convivial technology (Illich and Lang, 1973; Lehto et al., 2020; Samerski, 2018). Convivial technology helps tourism workers in elementary occupations to increase their autonomy in decision making and
effectiveness in task performance, which eventually adds meaningfulness to their work (Gretzel et al., 2020; Sen, 2012). Thus, it does not necessarily replace existing jobs through automated processes but rather creates new and more meaningful tasks or event positions. For instance, convivial technology can provide digital real-time information on room service or improved equipment for housekeeping tasks (Ivanov, 2020). Thus, mitigating an overshooting of efficiency on the cost of the workers adds social meaning to the use of convivial information and communication technologies (Kronenberg and Fuchs, 2021b; Fuchs and Sigala, 2021).

The impact of events on regional employment is difficult to assess, as periodic and short-term events do not necessarily create new employment but rather maximise the capacity of the existing workforce (Daniels, 2004). This was also the case for the two major sporting events that took place in Jämtland Härjedalen in early 2019. Like other large-scale events, the two world championships caused temporarily more challenging working conditions for some workers (Schwark, 2016; Sen, 2012). Ideally, a study should be conducted at the micro level to investigate these impacts on workers to complement insights gained from the macro-meso perspective adopted in the current thesis. Nevertheless, regional institutions seemed to agree that the social benefits of events for both tourism workers and the local population outweighed their negative consequences (i.e. a higher workload or stress levels). The WCR2019 initiative seemed to have positive short-term socio-economic impacts, such as engagement in network meetings (Misener and Mason, 2006; Wallstam, 2022) and participation in various auxiliary activities (Tonga Uriarte et al., 2019). Whether these initiatives created sustainable employment and income opportunities for the regional population was too early to determine at the time of data collection.
6.3 Regional income effects for the tourism workforce

The third research question relates to income effects for the regional tourism workforce: ‘What is the socio-economic impact of tourism and events on regional income, and how is income in the tourism industry distributed across various occupations?’ From an aggregated perspective, income effects for the regional tourism industry were positive for most tourism sectors over the 10-year period under study. Both income multipliers increased, and the impact of expenditures from tourism and events had positive effects on workers’ wages and salaries. This finding implies that the industry’s ability to generate and secure income across the region was strengthened (Baaijens et al., 2010; Miller and Blair, 2009).

However, the literature on socio-economic development argues that valuing the economy and its tourism sectors based on aggregate measures alone (including income) is insufficient (Griffith and Lucas, 1996, 2016). As one type of new monetary measure, the distribution of costs and benefits among stakeholders should also be considered (Moulaert and Nussbaumer, 2005; Söderbaum and Brown, 2010). In contrast to the positive developments associated with income multipliers and the impacts of tourism on total income in the region, examining the distributional effects of income in different occupational areas of the tourism industry between 2008 and 2017 yielded a different picture (Coburn, 2000; Dabla-Norris et al., 2015). Despite relatively low Gini coefficients, the overall trend was an increase in income inequality. In the accommodation and food services sector, for instance, the bottom 15% of earners experienced very little income growth during the first half of the period. At the same time, the share of elementary occupations at the lower end of the income range increased (Brandt, 2018). Thus, the total number of workers in lower-income groups steadily increased, which contributed to increasing Gini coefficients (Checchi, 2005). This development would eventually be
considered social disintegration as the gap between poor and rich households widens over time (Dabla-Norris et al., 2015).

However, income inequality is not necessarily a negative sign in socio-economic terms, as many social economists and philosophers have advocated that a certain degree of unequal income distribution is acceptable if it also benefits the poor (Holmwood, 2013). For instance, Rawls’s (2009) difference principle explicitly sanctions social and economic inequality as long as it benefits the poor or improves the socio-economic conditions of most workers (Green, 2014). Accordingly, Alesina et al. (2004) argued that income inequality can motivate workers to identify their potential future income. However, the results showed that growth in tourism and the financial benefits that arise from tourist expenditures do not directly translate to income-related improvements for most tourism workers, who are employed in lower-paid occupations. Thus, overcoming inequalities remains a challenge for many workers, as they must simultaneously address inequalities of opportunity and outcomes (Coburn, 2000; Rawls, 2009; Dabla-Norris et al., 2015). Often, uncontrollable circumstances and the worker’s socio-economic background make it difficult to move up the income ladder (Wunder and Schwarze, 2006). Thus, efforts undertaken by individuals to overcome inequalities may be hampered (Lefranc et al., 2008). This is a sign of social disintegration, which demonstrates that the tourism industry can exacerbate injustice for a large share of regional tourism workers (Alesina et al., 2004; Croes, 2012; Lacher and Oh, 2012; Sen, 2009, 2012; Tiku et al., 2022; Voitchovsky, 2005).

Discussion with industry representatives revealed that a reason for the relatively low income growth among workers in elementary occupations is high staff turnover rates. Workers in low-income occupations usually do not remain in the tourism industry due to limited career opportunities and the fact that it has a reputation for offering entry-level jobs (Brandt, 2018; Baum et al., 2016; Solnet et al., 2016). These findings contrast with the idea that income inequality can have a motivational effect as an indicator of future income (Alesina et al., 2004). Usually, collective agreements determine wage and salary
levels for most tourism occupations. However, responsibility for implementing the agreements lie with the employer. If they are not implemented, precarious and limited income opportunities can negatively affect tourism workers and thus contribute to high turnover rates, a situation that not every regional tourism institution is aware of (Baum et al., 2016). When new employees are constantly hired, they remain at the minimum wage level. Brandt (2018) argued that the provision of higher average income levels in the tourism industry first requires higher average levels of formal education, which participants from tourism institutions also expressed. However, this is a challenging task given the industry's employment structure (i.e. a large share of occupations do not require any education) and the prevailing inequality of opportunities for uneducated workers.

Nevertheless, political and institutional conditions can influence the degree of income inequality through various instruments, such as labour laws, workers' unions or progressive taxation (Dabla-Norris et al., 2015). However, this study demonstrated that union membership rates have declined for various reasons, such as many workers' reluctance to pursue a long-term career in tourism. Such developments do not help to alleviate socio-economic grievances (Kjellberg, 2020). The literature has explicitly highlighted the negative association between income inequality and union membership rates (Jaumotte and Osorio-Buitron, 2015). This aligns with the statistically significant negative correlation between declining union membership rates and increasing Gini coefficients over time identified in this study. Thus, when workers do not join (or leave) labour unions in the hotel and restaurant sector, their decision most likely also contributes to negative developments in income distribution across major occupational areas. Further applications of more advanced distribution coefficients (e.g. the Atkinson index, Palma ratio or Theil index) and econometric analyses with a higher number of observations are needed to cross-evaluate this empirical finding and estimate the precise magnitude of this effect (de Maio, 2007; Kinyondo and Pelizzo, 2015; Maria Sarabia et al., 2017).
However, income alone cannot resolve socio-economic grievances, as higher income levels do not automatically translate into higher satisfaction or well-being (Herzberg et al., 2011; Senik, 2005). In fact, the occupation-specific analysis revealed that incomes in service-oriented professions that involve personal contact with customers or guests were relatively low. Among the 25 most common occupations, occupations that involve personal contact fall in the lower half of the income range. Accordingly, participants from tourism institutions highlighted the need to provide greater financial compensation to workers who have direct contact with guests and visitors (Brandt, 2018). These findings could be interpreted as an indication that low income and monetary benefits at tourism jobs do not necessarily play the primary role when attracting and hiring tourism workers. In other words, despite relatively low incomes, the industry continuously succeeds in attracting workers for such positions (Herzberg et al., 2011).

In conclusion, this study provides novel methodological and empirical insights on the socio-economic impact of tourism and events by considering multiple perspectives at the macro and meso levels (Elsner, 2007; Filiposki et al., 2016). Tourism in Jämtland Härjedalen steadily grew over the investigated period, as evidenced by positive economic impact estimates. However, this study also demonstrates the negative consequences of growth (Hanauer and Beinhocker, 2014). Intersectoral linkages weakened over time; that is, the same level of profit can be achieved today with less employment than in previous years (Cai et al., 2006; Khanal et al., 2014). Similarly, import shares increased over time, which demonstrates the region’s increased dependence on foreign products (Garrigós-Simón et al., 2015). Despite collective agreements, the tourism workforce experienced negative socio-economic consequences, particularly employees in occupations in the lower income range. This was evident from increasing income inequality, decreasing union membership, increasing shares of low-income positions and precarious working conditions (Burgess et al., 2013). Thus, benefits from tourism growth were not equally shared among tourism workers (Griffith and Lucas, 2016).
However, despite negative socio-economic trends, the tourism industry is and continues to be a crucial part of regional society, as the tourism infrastructure serves as a foundation for income opportunities for local residents (Croes et al., 2021; Dawkins, 2003; Dwyer, 2020). As the literature on institutional economics suggests, socio-economic conditions – particularly negative trends over time – should be countered with various institutional efforts (Groenewegen, 2010; Hodgson, 2012). Also for large-scale periodic events it is important to implement institutional practices. As seen in this thesis, institutional projects such as WCR2019 can drive societal activities, but they must be continued after the conclusion of the main event(s).

6.4 Research contributions and implications

This thesis study is embedded in the broad research field of tourism economics and focuses on the economic impacts of tourism (Jennings, 2009). Historically, advancements in this field were mainly characterised by improvements in the ‘accuracy’ of economic impact models applied to tourism (Klijs et al., 2012). The literature put little emphasis on critically examining underlying theoretical assumptions in these models, which heavily rely on growth-oriented convergent theories and focus on aggregated economic indicators (Dawkins, 2003; Dwyer, 2020). Accordingly, critical reflections that question the assumptions of mainstream economic development theories can mainly be found in the literature on alternative and more socially oriented theories in the field of socio-economics (Etzioni, 2015).

Through the current study, I aim to contribute to the tourism economic impact discourse by critically addressing the growth paradigm that underpins models on the economic impacts of tourism (Egan and Nield, 2003; Griffiths and Lucas, 2016). Thus, I recall the main research objective:
How can traditional models on the economic impacts of tourism be extended to better understand the role of tourism and events in regional socio-economic development?

Socio-economic development explicitly highlights the need to focus on societal effects in the development agenda, including aspects of employment and labour, income distribution and justice (Baum et al., 2016; Daniels, 2004; Etzioni, 2015; Lee, 2009a; Sen, 2012). The main contribution of this research is the adaptation of these ideas, concepts and perspectives through the extension of approaches to the economic impacts of tourism with new monetary measures, including the disaggregation of economic indicators and the inclusion of leakage effects and distributive perspectives on regional employment and income (Söderbaum and Brown, 2010; Garrigós-Simón et al., 2015). Moreover, previous research on the economic impacts of tourism was mainly limited to the macro, meso or micro level. By contrast, this study analyses socio-economic impacts from both a macro-level and institutional meso-level perspective using mixed methods (Alam and Paramati, 2016; Khoo-Lattimore et al., 2019). Accordingly, I implemented selected concepts of borrowed from the socio-economic development literature, by focusing on emerging tourist activities in the Swedish region of Jämtland Härjedalen between 2008 and 2017. Since this region has the preconditions for hosting various types of sporting events (i.e. infrastructure, natural amenities and institutional support), I also included the case of two large-scale winter sporting events in 2019 (Hodur and Leistritz, 2007).

The main implications of this research relate to public policy recommendations for the relevant national and regional administrations. The main recommendation is that tourism- and events-related development decisions should not be purely based on monetary growth indicators (Söderbaum, 2017). Often, policy makers confuse economic growth with economic sustainability. Economic sustainability is desirable as a normative goal in economic development, given that few monetary benefits from tourism and events actually reach local and regional populations. As shown in this
thesis, I recommend that regional tourism institutions and policy makers be aware that growth indicators give sufficient insights into the process of economic sustainability. Insights on the regional tourism industry and employment structure in terms of inter-sectoral relationships, leakage effects and the distribution of employment groups and income levels provide a crucial basis for policy decisions. In particular, the impact of events is often a black box, as their long-term effects are rarely considered. In their events portfolios, regional institutions and governments should include policies on post-event evaluations that actively address leakage effects and the inclusion of local and regional stakeholders. Such considerations about event legacy demonstrate how events-related tourism can contribute to regional socio-economic development.

In particular, socio-economic issues that affect the tourism and events workforce should be centred in the future tourism development discourse (Mooney et al., 2022). The importance of tourism workers’ contribution for creating the regional tourism offer cannot be neglected, since it relates to the idea of hospitality at its core (Gretzel et al., 2020). The empirical findings from this study show that a large share of tourism workers is employed in low-income, entry-level occupations with sub-optimal working conditions. However, regional tourism institutions often refer to the legal framework for protecting employment. From a justice perspective, this is insufficient, which means that institutional efforts are even more relevant to improving the socio-economic situation for workers (Sen, 2012). Therefore, regional tourism institutions should critically discuss labour and employment conditions for all occupational groups and avoid leaving responsibility for addressing these issues to branch-specific labour unions. In the process, tourism-related labour policy decisions should benefit the majority of workers, who already have low incomes and career development opportunities (Baum, 2018; Wang et al., 2022). Hopefully, this will guide regional tourism development in the right direction.
7 Limitations and future research

As with all research, this study has its limitations. With regard to economic modelling, the IO model used was linear in nature. Linearity implies that changes in socio-economic impacts develop linear in regards to the underlying changes in tourism demand (Miller and Blair, 2009). As discussed, this requires a careful interpretation, especially with regard to employment effects; for example, a 20% increase in tourism demand from one year to the next does not result in 20% more employment. Therefore, in this thesis, I referred to the number of FTE jobs needed to address such changes. In the economic impact literature, efforts have been made to introduce non-linear IO models (e.g. West and Gamage, 2001), which would particularly help in the estimation of more accurate employment effects (Daniels et al., 2004).

At the same time, a large body of literature on the economic impacts of tourism has emphasised the use of CGE models, which also consider non-linearity (Dwyer et al., 2004). However, I chose not to recommend CGE models for estimating regional economic impacts, as they require the definition of a wide variety of behavioural assumptions about economic actors that are applied to Input-Output and Social Account Matrices. These are the type of assumptions that are based on neoclassical economic theory, which I criticise in my thesis.

Furthermore, the collection of survey responses from visitors to the FIS Alpine Skiing World Championships resulted in a relatively low response rate, which can cause overrepresentation or underrepresentation of certain respondent groups (Dimitrovski et al., 2022). This limitation is known as non-response bias, which occurs when non-respondents significantly differ from respondents. Further investigation of reasons for the low response rate is needed to overcome this limitation and assess the significance of potential differences between these groups (Hair, 2009).
In addition, the focus on events in this study only included one case study: the 2019 Alpine Skiing and Biathlon World Championships. Therefore, a comprehensive understanding of the role of sporting events in regional socio-economic development could not be established. Additional discussions on different types of events can deepen the insights gained from this thesis (Hodur and Leistritz, 2007).

Furthermore, this study leaves also room for estimating event’s impact in a more sophisticated manner. So far, the quantitative discussion was only demand-based impacts from visitor expenditures. This can be complemented by other factors that also generate socio-economic impacts, based on various types of data sources: For instance, hosting and staging large-scale sporting events also involves a variety of supply-side and public investments, such as infrastructure investments (Getz et al., 2012; Schwark, 2016). These also have substantial impacts on the regional economy and residents, which can be discussed with institutional representatives of the regional events sector (Perić, 2018). Moreover, this thesis only includes a limited discussion of the long-term effects of the events, as they occurred only a few years ago during the finalisation of the research. A follow-up study would be helpful for identifying the actual long-term effects of large-scale sporting events in Jämtland Härjedalen (Pentifallo and VanWynsberghe, 2012).

Another limitation was the relative homogeneity of focus group participants, which consisted only of members of the WCR2019 board. However, since the aim was to gain insights on the WCR2019 concept, other stakeholders with a connection to regional events in general were not considered for the focus group; this can be part of a follow-up study. Notably, the various negative socio-economic impacts of events are not extensively discussed in this thesis. It is clear that tourism and events, especially large-scale sporting events, have provoked substantial criticism from the regional population (Wallstam and Kronenberg, 2022). To gain more insights on negative aspects of hosting regional sporting events, the meso-level perspectives of a variety of stakeholders must be considered, not only those of WCR2019
board members. In particular, addressing tourism and event workers' concerns about the negative aspects of hosting large-scale sport events would provide a much more comprehensive picture of the role of events in regional socio-economic development.

In addition, the qualitative data for this mixed-methods study encompassed 12 individual interviews and one focus group, which collectively involved nine regional institutions. The relatively low number of interviewees can be considered a limitation of the study. Additional institutional representatives and follow-up interviews would deepen the understanding of long-term institutional dynamics in the tourism and events industry. These could include participants from the regional government and the tourism education system (Sheldon and Hsu, 2015). Moreover, shedding light on the consequences of Covid-19 restrictions for the tourism and events industry and tourism workforce would enrich the long-term perspectives provided by this study (Gössling et al., 2021).

Finally, future follow-up research based on this thesis work could include methods from network analysis. Specifically, it is possible to study networks of regional industry sectors at the macro and meso levels based on regional IO data to identify nodes and understand the nature of relationships between sectors and the topology of regional economic networks (Tsekeris, 2017). By considering the economy as a complex and adaptive socio-communicative network (Freeman, 2004; Fuchs, 2022), future research could focus on employment-related networks, such as networks and collaboration between individual companies and employees. Moreover, integrating micro-level perspectives from tourism businesses, employees and entrepreneurs into this framework would be an important research direction for analysing the socio-economic impacts of tourism. In the process, more attention could be given to individual employees and companies' perspectives on topics such as workplace creativity (Baggio, 2014; Fuchs and Baggio, 2017; Zhou and Hoever, 2014) and intrapreneurship (Antoncic and Antoncic, 2018). Various aspects of labour-related (in)justice could also be identified (Ghoshal, 2005; Kardos et al., 2016;
Nelson, 2016; Sen, 2012), for occupations in the tourism sector. Such micro-level perspectives would deepen knowledge on the tourism industry’s contributions to regional socio-economic development (Dopfer et al., 2014).
8 References


203


Kronenberg, K., & Fuchs, M. (2021b). The socio-economic impact of regional tourism: an occupation-based modelling perspective from


Pentifallo, C., & VanWynsberghe, R. (2012). Blame it on Rio: Isomorphism, environmental protection and sustainability in the


