A quantity-quality framework for measuring the regional socio-economic impact of tourism – the case of Jämtland Härjedalen

Kai Kronenberg

Main supervisors: Matthias Fuchs
Co-supervisors: Maria Lexhagen

Faculty of Human Sciences
Thesis for Licentiate degree in Tourism Studies
Mid Sweden University
Östersund, 2019-11-08
A quantity-quality framework for measuring the regional socio-economic impact of tourism – the case of Jämtland Härjedalen
Table of contents

Abstract ........................................................................................................................................... i
Summary in Swedish ................................................................................................................ iii
List of tables .................................................................................................................................. v
List of figures ................................................................................................................................... v
Acknowledgement ....................................................................................................................... vii

1 Introduction ................................................................................................................................. 1
  1.1 Tourism’s contribution to regional development ................................................................. 1
  1.2 The limitations of tourism economic impact measurement approaches ....................... 3

2 Problem statement and aim of the thesis ................................................................................... 9
  2.1 Research Questions ................................................................................................................ 11
  2.2 Conceptual framework ......................................................................................................... 12
  2.3 The tourism region Jämtland Härjedalen ......................................................................... 15

3 Theoretical background and literature review ......................................................................... 17
  3.1 A critical reflection on neoclassic economic development theory .................................... 18
  3.2 Socio-economic development .............................................................................................. 23
  3.3 Income inequality and its causes and consequences .......................................................... 27
  3.4 Tourism’s contribution to socio-economic development .................................................... 32

4 Research design and methodology ......................................................................................... 39
  4.1 The regional economic impact model .................................................................................. 41
    4.1.1 Foundations of economic impact modelling ................................................................. 42
    4.1.2 The regional input-output model for Jämtland ............................................................ 45
    4.1.3 Occupation-based modelling ....................................................................................... 52
    4.1.4 Measures of income inequality ..................................................................................... 55
  4.2 Interviews .............................................................................................................................. 56

5 Results and analysis ................................................................................................................... 57
  5.1 The regional industry structure: employment and income multipliers ............................. 57
  5.2 The socio-economic impact of tourism on regional industry sectors ............................... 61
  5.3 The socio-economic impact of tourism on occupational areas ........................................... 73
6 Discussion ................................................................................................................................. 83
6.1 Summary and discussion ................................................................................................. 83
6.2 Theoretical implication ................................................................................................. 86
6.3 Limitations and outlook .............................................................................................. 87
7 References .......................................................................................................................... 89
Abstract

Measuring the economic effects of tourism has always been a high priority for private and public actors in the regional economy (Stabler et al 2009). These estimates provide insights about the generation of sales, jobs, and income associated with tourism, but also support industry officials in the regional development agenda. Measuring tourism’s economic impact in a region typically involves economic impact models that capture both primary and secondary effects (Comerio and Strozzi 2019). However, results gained from these models are limited in regards to highly aggregated and growth-oriented indicators on the macro-level.

These economic impact models ‘fulfil’ their purpose in incorporating the assumptions of mainstream economics and in focusing on macro-level indicators related to economic growth (Elsner 2017). That involves the risk that important socio-economic aspects, such as the distribution of income, are less considered in regional tourism development agendas. Even so-called ‘advanced’ models neglect distributional dimensions in estimating the impact of tourism (Lee 2009). Accordingly, a growing body of literature starts criticizing mainstream economics’ modelling assumptions and its narrow view on economic growth (Söderbaum 2017). Instead, economic analyses should put more focus multi-dimensional perspectives, including the institutional (i.e. meso-level) perspective in addition to the traditional macro- and micro view (Dopfer et al. 2004). Furthermore, various forms of inequalities are identified to typically hamper regional development from a socio-economic point of view (Moulaert and Nussbaumer 2005a).

Against this background, the aim of this thesis is to propose a framework that extends traditional economic impact approaches and allows the measurement of tourism impact from a broader socio-economic perspective. The approach in this thesis comprises a macro as well as a meso level analysis and utilizes a mixed-method approach (Dopfer et al. 2004; Khoo-Lattimore et al. 2017). More concretely, the traditional economic impact methodology is further developed in order to estimate disaggregated employment and income effects for specific occupations, and to estimate the income distribution across occupations in major tourism sectors.

This analysis is conducted for the county of Jämtland and comprises the period + time (Daniels et al. 2004). A series of interviews with major regional industry- and policy representatives complements the impact analysis from
the meso-level perspective. By doing so, the institutional perspectives helped identifying potential reasons for variations in occupation and income developments in tourism.

Findings show that the traditional way of analysing tourism’s impacts does not only provide the full picture of the impacts, but also even gives potentially misleading information. While, in general, the tourism industry benefits from annually growing arrival numbers in terms of sales, the income level of the tourism workforce remains among the lowest in the entire regional economy. In addition, the income inequality across occupations in the main tourism sector accommodation & food is increasing, indicating a negative trend in the industry. This can be partly attributed to decreasing union membership rates, short-term career perspectives, and increasing shares of occupations without requirements for higher education. Like in other branches, the role of education in the tourism industry is particularly important to overcome these trends.

This study shows that extending traditional ways of analysing the economic impact of tourism by incorporating additional socio-economic dimensions contributes to a better understanding the socio-economic sustainability of the regional tourism industry. By putting the focus away from pure growth-driven indicators, this approach proposes an alternative way for measuring tourism’s impacts, which can, hopefully, be implemented and institutionalized in the future.
Summary in Swedish


Jämtlands län utgör den geografiska avgränsningen för analysen och
tidsavgränsningen omfattar perioden 2008–2016 vilket tillåter identifieringen
av variationer över tid (Daniels et al. 2004). En serie intervjuer med stora
regionala politik- och näringslivsrepresentanter kompletterar effektanalysen
från meso-perspektivet. Genom detta institutionella perspektiv kan man att
identifiera möjliga orsaker till variationer i sysselsättning och löneutveckling
inom turism.

Resultaten visar att det traditionella sättet att analysera turismens roll i
samhället inte bara ger en ofullständig bild av dess effekter, men kan även
betraktas som vilseledande på flera sätt. Även om besöksnäringen i Jämtland
län i allmänhet drar nytta av det ständigt växande antalet turister och deras
spending, förblir inkomstnivån för turismarbetarna bland de lägsta i hela
den regionala ekonomin. Dessutom ökar inkomstskillnaden mellan yrken
inom besöksnäringens två största branschsektorer, boende och mat, vilket
signalerar en illavarslande trend i branschen. Detta kan delvis tillskrivas ett
minskande fackligt engagemang, kortare karriärperspektiv och en ökad andel
yrken utan krav på högre utbildning. Liksom i andra näringsar är
utbildningens roll inom turismen särskilt viktig för att övervinna dessa
trender.

Denna studie visar att tillämpningen av socioekonomiska aspekter till
traditionella ekonometriska analysmetoder om turismens effekt på samhället
can bidra till en bättre förståelse av den regionala turistnäringens
socioekonomiska hållbarhet. Genom att förskjuta fokus från renatillväxtdrivna till hållbarhetsorienterade indikatorer föreslår denna strategi
ett alternativt sätt att mäta turismens effekter, som förhoppningsvis kan
implementeras och institutionaliseras i framtiden.
List of tables

Table 3.1 Neoclassic- and socio-economic development ................................................. 17
Table 3.1.1 Overview of major regional development theories ..................................... 19
Table 4.1.2.1 Allocation of activities to sectors ......................................................... 52
Table 5.1.1 Employment multiplier ............................................................................. 58
Table 5.1.2 Percentage changes of employment multiplier to previous year .......... 59
Table 5.1.3 Income multipliers .................................................................................. 60
Table 5.1.4 Percentage changes of income multipliers to previous year .............. 61
Table 5.2.1 Direct economic effects of tourism ......................................................... 62
Table 5.2.2 Summary employment and income effects (annual % changes) .......... 67
Table 5.2.3 Changes of Gini coefficients in tourism-related sectors ...................... 69
Table 5.3.1 Occupational areas in the accommodation and food sector .............. 74

List of figures

Figure 2.2.1 Conceptual framework ........................................................................... 13
Figure 4.1.4.1 Lorenz curve and Gini coefficient ....................................................... 55
Figure 5.2.1 Employment effects ............................................................................... 63
Figure 5.2.2 Income effects ....................................................................................... 67
Figure 5.2.3 Lorenz curve: Tourism-related sectors 2016 ......................................... 68
Figure 5.2.4 Gini coefficients for tourism-related sectors .......................................... 69
Figure 5.2.5 Top- and bottom income earners ......................................................... 70
Figure 5.2.6 Gini coefficients and union membership rates ....................................... 71
Figure 5.2.7 Correlation Gini and union membership rate ........................................ 71
Figure 5.3.1 Employment and income effects per occupational area ..................... 75
Figure 5.3.2 Occupations with and without required higher education ............... 77
Figure 5.3.3 Employment and income effects: SSYK #512, #513, #515 ............... 79
Figure 5.3.4 Employment and income effects for SSYK group #911 ................. 81
Acknowledgement

Conducting this research and writing this monograph has been and is still a long but also fulfilling process for me. I firstly got involved in the field of tourism impact analysis as a project assistant at ETOUR a couple of years ago, and could continue the work for my licentiate education. At some point during this period, I have developed a more critical perspective on contemporary ways of measuring the economic impacts of tourism. The realization of this thesis would have never been possible without my main supervisor Matthias Fuchs, who has inspired me throughout this period. I therefore would like to express my sincere gratitude for supporting me by your thorough supervision, continuous motivation and trust in me finally wrapping up this thesis. I would also like to thank Maria Lexhagen, my second supervisor, who always had time for discussions and guided me through this academic world.

Various people have helped and supported me in various forms and stages of this research, who I would like to thank for: Gunnar from Nordregio; Marten, Nicole, Johan and Mariette from SCB; Jokke from ÅSUB; Hans from Resurs; Anne from JHT; Orjan from SLU; Hannu and Urszula from University of Helsinki; and of course all the interview participants.

I would like to acknowledge my thanks to the colleagues at EJT (former TUG), which are now too many to name, for making this a pleasant and inspirational working environment. Special thanks to Martin for always having time for reflecting on my work, as well as my fellow Germans Uli and Michael and of course all other old and new fellow doctoral students at the department for exchanging experiences about the challenges as a PhD student. Above all, thank you Märit for your infinite support. Without you, the department would not function 😊😊

Finally, I would like to express my love to my girlfriend Ylva, my siblings Colette and Kenta, and my parents Naomi and Jürgen for caring and supporting me although living so far away abroad for such a long time already. Tack så mycket!

Kai Kronenberg
Östersund, October 2019
1 Introduction

1.1 Tourism’s contribution to regional development

In today’s macroeconomic debates, the gross domestic product (GDP) is often used as the only measure to compare the (economic) development of a region or a country. The fragmented tourism industry and its related activities play a more or less important role in contributing to the development of the GDP, depending on the attractiveness of the particular region as a tourist destination. Therefore, it is the aspiration of most regions with considerable tourist activities to measure, in some way, the contribution of the tourism sectors to the regional economic development in general, and to the regional GDP in particular. As Sharpley and Telfer (2014) point out: ‘Owing to this rapid and continuing growth and associated potential economic contribution, it is not surprising that tourism is widely regarded in practice and also in academic circles as an effective means of achieving development’ (p. 4).

The actual growth of the tourism industry is often reported by the increasing or decreasing growth of tourist arrivals on the demand side and corresponding sales variations on the supply side. Evidently, the need to analyse the economic contribution induced by tourism resulted in establishing international standards for collecting and comparing tourism statistics. This is particularly important because ‘[tourism] is not [considered] an ‘industry’ in the conventional sense as there is no single production process, no homogeneous product and no locationally confined market’ (Tucker and Sundberg 1988, p. 145). Today, the most commonly used standardised tool to comparatively measure tourism’s share on economic activities, and hence its contribution to GDP, is represented by the United Nations World Tourism Organisation (UNWTO) framework for Tourism Satellite Accounts (TSA) (UNWTO 2013).

Mainstream economists argue that a growing economy is worth striving for, as it generates higher income, additional employment, and provides higher volumes of goods and services for consumption by the (e.g. regional) population (Mankiw et al. 1995; Blanchard and Illing 2013). However, ‘regional growth’ degenerated as a ‘neoliberal synonym’ and cannot be considered equivalent for the prosperous development of a region (Komlos

1 For example, today’s predominant theoretical perspectives in contemporary economic science.
and Schubert 2019; Stabler et al. 2010; Ulrich 2010). Although the economic contribution of tourism to a region may be considered as positive in many regards, a critical assessment of the development is equally important, especially in light of socio-economic sustainability that has the aim to generate long-term wealth and prosperity for the population (Feigl 2017; Smith and Brent 2001; Hudson 2000). Hence, putting the focus on the growth of GDP does not imply that wealth and prosperity for all parts of the regional population improves. When material needs are satisfied, a further increase of the GDP is often not equally distributed within the population and is frequently followed by negative social- and economic effects for the regional population. Wealth and prosperity in reasonable limits, however, should be the major aim of economic activities in order to provide a better living standard for everyone (Ulrich 2010; Feigl 2017).

Global initiatives for a stronger focus on sustainable development have been discussed by the United Nations already in 1972 in Stockholm (with a focus on environmental sustainability), and by the United Nations Conference on Environment and Development in Rio de Janeiro in 1992. Recently, the 2030 agenda of sustainable development, endorsed by the United Nations Sustainable Development Summit 2015, constitutes various sustainable development goals. These goals comprise, among others, the goal to end and decrease poverty, to increase individual’s prosperity, to promote sustainable economic growth and, above all, to reduce inequality within and among regions and countries (UN 2015).

In the context of tourism, sustainability encompasses the ‘benefit of many, not just a few’ (Ritchie and Crouch 2003, p. 46), meaning that tourism should be beneficial to the widest possible range of the local population. The critical term beneficial implies that a large part of the local population should have access to jobs generated from tourism activities, and also receive sufficient income induced by tourist activities, which, in turn, enables improved standards of living. To make these thoughts measurable, the importance of tools that capture not only direct expenditures spent by tourists, but also the effect of income, its distribution, and jobs generated in the entire regional economy that are (directly or indirectly) linked to tourism activities becomes evident. Especially, as tourism is viewed as a highly labour-intensive service industry, employment and income-related issues, such as income distribution, play a considerable role for sustainable regional development (Baum et al. 2016b; Mihalic 2016; Ritchie and Crouch 2003; Zampoukos and Ioannides 2011).
1.2 The limitations of tourism economic impact measurement approaches

While official tourism statistics are collected in most countries and regions on a regular basis within the framework of the TSA, they typically reflect only direct economic effects in the various tourism sub-sectors (UNWTO 2013). Direct effects are based on tourists’ direct expenditures for tourism products and services. In Sweden, these effects are annually reported by the official tourism statistics published by Tillväxtverket (2018) describing tourism’s contribution to the nation’s GDP and employment, respectively. These statistics are prepared by considering several sources of data, such as accommodation statistics, domestic travel survey, and border surveys for international visitors (Tillväxtverket 2018). Statistical information is usually presented for various tourist types (e.g. leisure, business, domestic, international etc.), and detailed industry sectors, such as transportation (taxi, local transport etc.), retail (groceries, souvenirs etc.) or accommodation (hotels, hostels, camping etc.).

Official tourism statistics, however, do not show the total (economic) contribution of the tourism sector and also omit the flow of tourists’ spending throughout the broader economy. Notably, this includes indirect impacts (i.e. when tourism spending is further re-spent on other sectors), leakages through imports, as well as so-called induced effects resulting from additional spending through increased households’ income (Stabler et al. 2010). Today, state-of-the-art models to comprehensively measure and quantify tourism’s contribution to a country’s or region’s economy are widely discussed in the tourism literature, and frequently applied to support policy decision-making (Klijs et al. 2012). However, a sustainability perspective on tourism and its contribution to regional development requires more than only answering ‘how much’ questions on a high aggregation level, as typically addressed by traditional economic impact models, such as Input-Output (IO), Social Account Matrix (SAM), or Computable General Equilibrium (CGE) models (Lee 2009). Results from studies utilising economic impact models are, therefore, limited to aggregated macroeconomic indicators measuring tourism’s contribution to economic growth, such as increases in employment, sales, and tax income (Dwyer et al. 2004, Kim 2015); however, they neglect socio-economic components, such as income distribution or the quality of employment attributable to the jobs created in tourism and tourism-related sectors, respectively. This is particularly important because an economy should be viewed as a complex system of interdependent social rules and
institutions, where it is, obviously, not enough to just focus on macroeconomic indicators. Rather, the macro level solely represents the aggregated consequences of decisions and choices by individuals and groups (i.e. micro level) acting within these systems of rules and institutions (i.e. meso level) (Dopfer et al. 2004; Elsner 2007, 2017). Very recently, Zou and Huang (2019) took into consideration institutional changes when estimating tourism’s contribution to economic growth. The authors explicitly point out that ‘future research on tourism’s economic contribution should take more meso- or micro-level perspectives’ (p. 11) in order to not necessarily shift, but complement the tourism economic impact analysis from a pure macroscopic to the meso- and micro-level, respectively.

In the academic field of tourism economics, impact models are continuously further developed and validated (Klijs et al. 2012). However, there are also examples where impact models transformed from scientific to commercial purposes2, thus aiming for applications in practice, such as consulting services for the tourism industry.

Contemporary theoretical perspectives in economics (Komlos 2012) and management science (Ghoshal 2005) are dominated by mainstream theories, such as the neoclassic economic theory, where actors act in self-interest and are assumed to behave rationally to seek maximum utility. Prominent economists of the twentieth century with a strong neoliberal orientation, such as Milton Friedman, still have a strong influence on management and planning practices both in private and public sectors (ibid 2005). In this regard, a misuse of economic impact models also in the tourism domain, typically leads to an overemphasis and even an overestimation of economic impacts (Crompton 2006). These biased views are, however, not always evaluated critically enough in the political and academic dialogue, because a positive economic impact is often favoured by decision-makers (Crompton 1995; Crompton et al. 2001). More precisely, the typical tourism activities studied by contemporary economic impact modelling approaches, such as tourists’ consumption activities over time or during temporary tourism (mega)-events are assumed to contribute to the generation of profits and taxes in large numbers. However, traditional economic impact modelling approaches put

2 Especially models on the regional level, such as the Impact Analysis for Planning (IMPLAN): initially developed as a planning tool by the US Forest Service and the University of Minnesota, but then established as an independent corporation to commercialize the database for consultant purposes (IMPLAN 2018)
little or no emphasis on accompanied social effects, economic costs (i.e. externalities) as well as economic leakages (ibid. 2001). In this sense, traditional economic impact models are often considered as a practical tool to support and corroborate industry-friendly decision-making in regional economic development processes (Crompton 1995; Crompton et al. 2001).

Not only the misapplication of impact models implies the risk of obtaining unreliable results (i.e. overestimations). Also, the models incorporate assumptions and limitations that potentially may lead to highly doubtful impact assessments (Dwyer et al. 2004). It is argued that only so-called ‘advanced’ models might minimise the issue of overestimation by considering spill-over effects³ (Blake et al. 2006). These advanced approaches, like CGE models, also consider welfare effects by estimating societal benefits induced by government investments in the base of increased tax income, in turn, generated by the increased economic (e.g. tourism) activity under study (Burfisher 2017). However, in full accordance to neoclassic economic theory, these models mirror the economy as a system of equations solvable in equilibrium. More and more scholars have criticised these approaches for their ‘monetary reductionism’, i.e. trying to explain impacts from socio-economic activities (such as tourism) only in monetary terms (Söderbaum 2017). In fact, ‘human behaviour is shaped by factors, other than conscious, rational self-interest’ (Ghoshal 2005, p. 82). The deterministic and mechanistic explanation of the economy by supply and demand functions and the sole focus on monetary indicators in various kinds of analyses is identified as far too narrow and one dimensional for the complex social world, with the risk of harmful implication for the society (Brodbeck 2001a, 2001b; Ulrich 2010; Komlos 2012; Elsner 2012; Söderbaum 2016; Fuchs and Baggio 2017).

To summarise, economic impact models are perceived as valuable for economic analyses, as they represent one of the few ways to comprehensively estimate the economic effects of a fragmented activity, such as tourism. However, these models do not provide a broader understanding that goes beyond pure economic concepts. Accordingly, an increasing number of studies found in the literature argues that the sole focus on pure economic indicators (i.e. arrival numbers, sales, employment, and income) for assessing regional development is insufficient, thus, demonstrating a one-sided view.

³ i.e. increasing demand in one market might lead to decreasing demand in other markets.
A broader perspective on regional development is advocated by social and sustainable driven development agendas, which take other dimensions than pure economic indicators into consideration. For instance, Peter Söderbaum (2016) recommends a ‘multidimensional thinking’, suggesting that regional economies should be analysed and governed not only from monetary but also from non-monetary perspectives. The author states:

Costs and benefits are of monetary and/or non-monetary kind and there are, normally, many kinds of non-monetary impacts. According to this holistic conception of economics, the neoclassical strategy of transforming all kinds of impacts to their alleged monetary equivalents is abandoned. The monetary and various non-monetary impacts connected with an alternative of choice are described separately in multi-dimensional profile terms. (Söderbaum, 2016, p. 1)

By doing so, he aims to extend the perspective on pure economics in research as well as in educational context by taking into consideration alternative economic paradigms and ideologies (Komlos 2012). Similarly, Moulaert and Nussbaumer (2005a, 2005b) are highlighting in their framework of the Social Region that the focus should go beyond pure market competition-led development concepts as postulated by contemporary neoclassic economics (and even by so-called ‘modern’ development approaches on innovation and learning named such as Territorial Innovation Models — TIM), towards a broader social development perspective. In particular, they argue that regional development issues should consider social innovation. This concerns, among others, the satisfaction of human needs, which is

[...] much broader than jobs and incomes for a large majority of people in the territorial community. Many of the human needs are insufficiently met by the market economy growth-based strategy put forward by TIMs. [...] The extent to which market allocation mechanisms will manage to satisfy human needs will depend strongly on the distribution of wealth and income. [...] But when there is great disparity in income and wealth, markets will no longer reveal most of the needs of deprived groups. (Moulaert and Nussbaumer 2005b, p. 48-49)

Accordingly, so-called ‘heterodox’ (non-mainstream) economic development theories, such as the Social Region, propagate to put economic impact assessments into a broader socio-economic perspective. In this vein of analysis, already twenty years ago, tourism economists, such as Stynes (1998), argued that tourism’s contribution to a regional economy should always be assessed
on the basis of the concept of economic sustainability, which refers to monetary and non-monetary costs resulting, for instance, from income inequality and disproportionate distribution of sector-specific income (Mikucka and Sarracino 2014). In fact, Sarracino (2011) states that economic growth is often accompanied by an increase in income inequality, and hence is hampering the development of social wealth and increase of subjective well-being. In fact, the sole focus on aggregated and monetary-based indicators employed by traditional impact models implies the risk of increasing income inequality on the cost of the population’s social wealth and subjective well-being.

As described above, economic impact models do — to some extent — consider welfare effects and the contribution of economic activity (such as tourism) to the generation and retention of new and existing employment in a certain region. However, it makes a substantial difference whether tourism workers are in underpaid jobs with difficult working conditions or are provided with a decent income and a respectable work-life balance to sustain a good livelihood. Especially, with constantly increasing tourist arrivals on a global scale, suboptimal working conditions in tourism did improve what becomes visible, for instance, by long working shifts and unfavourable working hours, relatively low salaries, precarious short-term contracts legitimised by seasonality, limited career opportunities, and relatively low status of work (Baum 2015; Choy 1995; Weiermair and Fuchs 1996; Ross 2006; Zampoukos and Ioannides 2011). As indicated by Moulaert and Nussbaumer (2005b), instead of the narrow view on employment and income, a broader perspective is required which focuses particularly on the distribution of wealth and income, as well as on social relations between firm owners or managers and their workers. Economic impact models fulfil their task in providing data on tourism’s effects on regional employment and income in absolute numbers. However, only a few attempts have been made to extend the view on socio-economic impacts towards, e.g. income distribution or labour relationships highlighted by some of the heterodox economic literature mentioned above (Daniels et al. 2004).

At the micro-economic employment level, several prominent scholars emphasise the grievances in the tourism industry (Baum et al. 2016a). For instance, Baum et al. (2016b) reflect on seven of the sustainability goals set by the UN, which refer to the tourism industry in general and employment and workplace conditions in particular. The authors conclude that almost none of these sustainability goals are met in the tourism industry. And, worrying
enough, that workplace sustainability is widely neglected in tourism research agendas, although the tourism workforce is among the key actors in delivering tourism products and services. Thus, debates on workplace sustainability in tourism (Baum et al. 2016b) should definitely receive more attention (Zampoukos and Ioannides 2011). If impact models would put more emphasis on the social dimensions of employment, instead of focusing on aggregated figures reflecting the whole tourism industry, a more meaningful understanding of tourism’s socio-economic impacts could be achieved.
2 Problem statement and aim of the thesis

The introduction revealed that regions with touristic activities clearly demonstrate the aspiration to reliably quantify both the economic but also the social effects of the tourism industry within regional borders, especially considering tourism is a complex, fragmented and demand-driven industry, whose effects are not always reliably measured and understood straight away (Stabler et al. 2010). In fact, the region of Jämtland Härjedalen shows proportionally more people employed in tourism-related sectors compared to other regions in Sweden.

Efforts to provide ways to measure the pure economic size of tourism have been made by specific modelling tools that take into account secondary effects from tourism. However, these economic models neglect important social components that are of significance for a region to prosper, such as the type and character of employment in the industry and corresponding degrees of income inequalities that may exist (Moulaert and Nussbaumer 2005a). The reasons why such aspects are not discussed in traditional approaches lie in their analyses that remain on the macro level and are based on assumptions derived from neoclassic economic theory with a focus on primarily growth-oriented development. Due to the fact that neoclassic theory is the predominant scientific paradigm for decision-makers and also primarily taught in business education programs (Ghoshal 2005), economic impact models fulfil their purpose in this regard as they provide indicators for economic growth, as requested by neoliberally rooted development policy and decision-making approaches (Ulrich 2004, 2010).

However, a growing literature criticises such a narrow view of economic analysis (Brodbeck 2001a, 2001b; Ulrich 2010; Komlos 2012; Elsner 2012; Söderbaum 2016; Fuchs and Baggio 2017). In fact, tourism’s economic impact models are frequently used to support private and public decision-makers (Crompton 1995; Crompton et al. 2001). However, the sole focus on growth- and efficiency-oriented indicators implied that important socio-economic insights relevant to the regional society are not considered at all. Consequently, the risk is that socio-economic grievances within the region are systematically overlooked in decisions aiming to develop the regional tourism industry.
With this thesis, I aim to propose a framework that helps to analyse the effects of tourism from a broader socio-economic perspective. This framework does not propose an entirely new approach from scratch, but rather extends existing approaches to analysing the impact of tourism. By doing so, it is possible to better understand the socio-economic effects of regional tourism beyond a purely aggregate-based view gained by applying traditional economic impact indicators. This implies various levels of analysis using a mixed-method approach: Firstly, I conduct a quantitative study on the macro level of analysis that incorporates an extension of traditional Input-Output methodology towards estimating the socio-economic effects of tourism in terms of employment and income, exemplarily for the region of Jämtland Härjedalen during the period 2008-2016. By doing so, I estimate the employment and income effects for the most frequent occupational areas in the tourism sector. Furthermore, I try to reliably quantify the levels of income inequality across these occupational areas, described in detail exemplarily for the key tourism sector accommodation and food. This approach provides new and valuable insights about the (in)-equality in the distribution of income for tourism workers across the various tourism sub-sectors. In this way, the traditional approach to measuring the total economic impact from tourism is extended towards a more socio-economic perspective, i.e. by quantifying occupation-specific effects as well as the income distribution within major tourism sectors.

Although findings obtained from the quantitative study provide an extended view on tourism’s impact by taking into account socio-economic components, they still remain on the macro analysis level and are expressed in monetary terms as well. Therefore, the aim of the subsequent part in this proposed framework is to obtain additional assessments and reflections on tourism’s socio-economic effects from key actors of the regional tourism system. Accordingly, the analysis conducted at the meso level considers the institutional perspective, i.e. the perception and normative judgment of employment and income development in key tourism sectors by representatives from the tourism industry (Elsner 2007, 2017). The interviewed representatives include tourism branch officials, as well as deputies from the municipality, the region, the employment office, and the ombudsmen from the labour union. To sum up, the proposed framework

4 Other tourism sub-sectors, such as retail trade, are only partly depended on tourists’ expenditures. Hence, tourism only partly contributes to income inequalities in these sectors.
extends the analytical perspective of traditional economic impact models and goes beyond the macro level by taking into account the meso level, as well (ibid 2007; Zuo and Huang 2019). By combining a quantitative and qualitative method approach, this allows me to gain a deeper understanding of tourism’s socio-economic effects in the region.

2.1 Research Questions

From the background and problem statement introduced above, the following research questions can be derived and are addressed in this thesis. More precisely, the overall research question, which is narrowed down by two sub-questions below, is stated as:

*In what way does tourism contribute to socio-economic development in the region of Jämtland?*

This is, in fact, a wide-ranging question, which I try to answer based on discussions and empirical findings related to the below sub-questions. Thus, the aim is to answer these questions based on both quantitative and qualitative data, and by incorporating the macro- and the meso-level perspectives. This means that insights on ‘how much’ are enriched by the additional interpretative dimension of ‘how good’ (Zuo and Huang 2019). The first question refers to the impact of tourism on regional *employment*. This question comprises both the quantification of *how much* of the regional employment in total across all sectors is attributed to tourism activities and the more qualitative assessment of *what type* of occupation (occupational areas) tourism contributed to their generation in the period 2008–2016. The consideration of occupational areas aims at addressing the aggregation bias of traditional economic impact models. Accordingly, the first research question is formulated as follows:

*Q1: What is the impact of tourism on regional employment, and what types of occupations are created?*

---

5 The term employment refers to the overall activity of work in tourism. I use the term *occupation* or *occupational area* when discussing the *types* of jobs, or the types of jobs on a more aggregated level. This is suggested by Daniels (2004), and also used by the Statistical Central Bureau of Sweden (SCB).
The second research question focuses on tourism’s impact on regional income. In accordance with Q1, this question refers to impacts on income across all sectors in the region, as well as the income generated within each occupational area. But most importantly, following the above introduction, this question also addresses the question of how the generated income is distributed across various occupational areas within the sectors. Accordingly, the second research question is stated as follows:

**Q2: What is the impact of tourism on regional income, and how is income in the tourism industry distributed across occupational areas?**

To sum up, the originality of my thesis lies in extending the currently narrow view of traditional economic impact measurement approaches in tourism towards the inclusion of socio-economic perspectives focusing on the type of regional employment (*occupational areas*) as well as income distribution. In contrast to contemporary measurement methods based on orthodox economic paradigms, this approach is inspired by heterodox economic theories that highlight the immense importance of societal issues for regional development. By using a mixed-method approach, the thesis extends current economic impact modelling traditions in tourism by adding further dimensions and levels of analysis, respectively.

### 2.2 Conceptual framework

An overall conceptual framework is presented in Figure 2.2.1 that displays how problem statement, employed theories, methods, and expected findings are interlinked.
Problem statement

- Narrow focus of traditional tourism economic impact modelling approaches: growth-oriented, aggregated indicators, lack of socio-economic aspects
- Negative societal consequences of disregarding employment- and income-related grievances in tourism regions

Theoretical embeddedness

- Limitations of mainstream economic development theories
- Socio-economic development theories take into consideration (among others) distributional aspects and multiple analytical levels (macro-meso-micro)

Methodology

- Input Output-based regional tourism impact modelling: direct and indirect employment effects and income effects per tourism-related sector
- Occupation-based modelling: employment and income effects per occupational area within tourism-related sectors
- Interviews with key representatives of the regional tourism industry to better understand tourism impacts on employment and income in the regional context

Major findings

- Tourism’s contribution to generate employment and income in the region Jämtland Härjedalen
- Effect of tourism on occupation-type specific employment and regional income
- Income distribution across occupational areas
- Better understanding of employment and income-related grievances of regional tourism through mixed-method approach and inclusion of meso-perspective

Figure 2.2.1 Conceptual framework
The research problem, i.e. the narrow focus of traditional tourism economic impact approaches and their limited capability in considering distributional and other socio-economic effects is attributed to the underlying theoretical perspective, which is found in the neoclassic economic development theories. Accordingly, the theoretical embeddedness of this thesis lies in the literature on regional socio-economic development, which explicitly highlights the need to consider distributional aspects and perspectives from various analytical levels when conducting economic analyses.

The methodological approach of this study incorporates these factors and aims to address the limitations of traditional economic impact approaches. By doing so, I further develop and extend the basic Input-Output (IO) methodology that is traditionally used for measuring tourism impacts based on linkages and multipliers. Extending the model allows estimating employment and income effects disaggregated for specific occupational areas by the methodological concept of occupation-based modelling (OBM). Furthermore, this approach also allows to (exemplarily) estimating the income distribution within the key tourism sector accommodation and food. The understanding and interpretation of macro-level results gained from the regional models are supported by qualitative data obtained from interviews with key representatives of the regional tourism industry. This additional meso-level perspective helps to explain and interpret the significance of certain employment- and income-related development patterns in the region.

Major findings include insights about the industry-structure of the tourism sectors and how the tourism industry contributed to the generation of employment and income in the region over time. Most importantly, as these effects are also estimated for specific occupational areas within tourism sectors, findings also give valuable insights about the income distribution across occupational areas and their development patterns over time. Finally, with the help of qualitative data it is possible to better understand and interpret the measured employment and income effects, thus to identify major grievances in the regional tourism industry. Such insights are strongly recommended by socio-economic literature (Hollingsworth and Müller 2008; Elsner 2007, 2017).
2.3 The tourism region Jämtland Härjedalen

In the (tourism) regional development literature, the term *region* is not coherently defined (Dawkins 2003). While a region is a basic entity in geography, it can refer to physical characteristics or human characteristics. The study area of this thesis is the spatial and administrative entity Jämtland county (‘Jämtlands län’). Accordingly, the terms ‘region’ or ‘region of Jämtland’ in this study refers to ‘county’ or ‘Jämtland county’, comprising the two Swedish provinces Jämtland and Härjedalen. Choosing the regional scale instead of the national scale to study the socio-economic impact of tourism has several reasons. The Jämtland county is the third-largest region in terms of total area; however, it is the second smallest region population-wise in Sweden. Natural attractions and tourism-relevant infrastructure provide the basis for the regional tourism industry, which, in fact, is proportionally larger compared to other Swedish regions.\(^6\) Tourism activities within the region (in terms of economic size and total amount of employment) are concentrated in the capital city Östersund, the main winter sports destination Åre, as well as a number of smaller mountain destinations (JHT 2019). Accordingly, tourism plays a significant role in the region’s economy and for economic prosperity, and thus implies socio-economic relevance in terms of employment and income-related issues for the regional population. Therefore, studying employment and income effects in a region with strong touristic activities is particularly important considering the insights gained from the recent study by Brandt (2018). In this work, the author studied wage determinants in the Swedish tourism industry and concluded that earning potentials in the Swedish tourism sector were still negative compared to other sectors (Brandt 2018).

Furthermore, choosing Jämtland county as study region has implications on the applicability of economic impact models. The European Union uses geocodes to classify geographic entities into NUTS regions (*Nomenclature des unités territoriales statistiques*). The hierarchical classification, ranging from the national level NUTS 0 to small regions on the NUTS 3 level, is frequently used for statistical purposes. More concretely, Jämtlands län is classified as a NUTS 3 region. The economic models used for this study are initially only available on the national level. Hence, a region-specific adjustment of the model towards the NUTS 3 level is required, using a top-down approach.

\(^6\) For example, the share of tourism-employment to total regional employment is larger in the region of Jämtland than in other Swedish regions (SCB 2018).
Defining the study area on the NUTS 3 level ensures the availability of statistical data that is needed for these adjustments.

The highlighted shortcomings of impact measurement approaches are, in fact, reflected by the articulated interests of key representatives of the regional tourism industry of Jämtland Härjedalen: During 2013 and 2014, several representatives of regional tourism and work-related institutions and authorities, together with researchers from ETOUR, Mid-Sweden University, have debated about the need for new approaches to comprehensively measure the social and economic impacts of tourism in the region. The participants of various workshops criticised, among others, the lack of a clear and comprehensive picture of the effects of tourism on the entire regional economy and society. The reason for this critique is the commonly known problem that the tourism industry is not consistently defined, and definitions are heterogeneous and based on fragmented documents with different perspectives of regional actors.

Moreover, although current official tourism statistics exist on the regional level, they are not considered as an optimal source of information for a more prudent tourism planning and policy that should benefit all, the community and private and public actors alike. Hence, a clear and standardised approach that incorporates both tourism statistics and comprehensive secondary effects does not (yet) exist in the region of Jämtland Härjedalen. Besides an improved impact measurement of typical economic indicators, such as a reliable estimation of sales for private businesses and tax revenues for the public actors on different geographic levels, specifically socio-economic dimensions of tourism are considered of major interest. More precisely, representatives of regional institutions and authorities are particularly concerned about both, the social effects of tourism for the ones involved in the core-tourism as well as related tourism industries, but also the socio-economic importance of tourism for the regional society as a whole (Kronenberg et al. 2014).

7 These meetings resulted in a pilot project with the aim of providing an overview on state-of-the-art economic impact models, as well as the current analysis practices in Sweden. Findings were published in the ETOUR report *Ekonomiska spridningseffekter inom turism* (Kronenberg et al. 2014).
3 Theoretical background and literature review

In this chapter, the theoretical background for the thesis is discussed, which is structured as follows: The first part provides a short overview of major regional development theories. The focus will be on a critical discussion on assumptions and limitations of the neoclassic economic theory, which is the predominant underlying paradigm for economic impact models in tourism. Subsequently, after identifying the limitations of neoclassic economic theory, the second part of this chapter discusses the importance of socio-economic perspectives in regional development. As Hollingsworth and Müller (2008) point out: '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). Instead of looking at one particular theory, this chapter discusses various ideas and concepts that are relevant for socio-economic development. Accordingly, Table 3.1 below briefly summarises major relevant concepts that I will discuss in this chapter by comparing the neoclassic approach and approaches comprising socio-economic considerations.

<table>
<thead>
<tr>
<th></th>
<th>Neoclassic economic development</th>
<th>Socio-economic development</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Focus</strong></td>
<td>Efficiency and growth</td>
<td>Wealth and prosperity</td>
</tr>
<tr>
<td><strong>Income distribution</strong></td>
<td>Equal distribution of income is the outcome in the development process</td>
<td>Unequal distribution of income hampers regional development</td>
</tr>
<tr>
<td><strong>Analytical perspectives</strong></td>
<td>Macro-micro perspectives</td>
<td>Macro-meso-micro perspectives</td>
</tr>
<tr>
<td><strong>Institutions</strong></td>
<td>Treated as exogenous do not matter</td>
<td>Institutions matter</td>
</tr>
<tr>
<td><strong>Unit of analysis</strong></td>
<td>Monetary focus</td>
<td>New-monetary (monetary, distributional and non-monetary focus)</td>
</tr>
</tbody>
</table>

Table 3.1 Neoclassic- and socio-economic development
Scholars within the field of socio-economic development highlight the importance of considering social aspects for regional development. Moreover, various types of inequalities are identified as a major hamper to ‘good’ development (Zuo and Huang 2019). Instead of efficiency and economic growth, the focus of development should rather be on wealth, welfare, and prosperity for a large part of the regional population. When applying economic impact models, aggregated income effects are one particular type of indicator that is typically reported. However, distribution of income effects are usually neglected in models based on mainstream theory. Furthermore, in addition to traditional macro-micro perspectives, the level of analysis should be expended by also incorporating the meso-level (Elsner 2007; Zuo and Huang 2019). Hence, institutions, i.e. the continuously emerging as well as stabilised normative rules within an economic system, need to be considered to better understand the dynamics in the economy. Finally, the unit of analysis is exclusively seen in monetary terms by mainstream economic theories. This should be complemented with so-called ‘new monetary’ indicators that incorporate distributional aspects, as well as non-monetary factors (Söderbaum and Brown 2010).

The third part of this chapter puts particular focus on income effects and the distribution of income, as these areas are a major part of the study outcome. In the final part of this chapter, a literature review on tourism economic impact studies is presented. This section focuses on those works that also include tourism economic impacts combined with (in)equality dimensions.

3.1 A critical reflection on neoclassic economic development theory

A wide range of economic development theories, paradigms and concepts are discussed in the literature on regional economic development (Leigh and Blakely 2017; Pike et al. 2017; Sharpley and Telfer 2015). Table 3.1.1 provides a brief overview of the main regional economic development theories (adopted from Dawkins 2003; Pike et al. 2017).
<table>
<thead>
<tr>
<th>Major regional development theories</th>
<th>Main concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convergence theories</td>
<td>Assumes per capita income of less developed regions to increase faster than income of developed regions, with the result that eventually all regions catch-up and converge (in terms of income)</td>
</tr>
<tr>
<td>- Neoclassic exogenous growth</td>
<td></td>
</tr>
<tr>
<td>- Export base</td>
<td></td>
</tr>
<tr>
<td>Divergence theories</td>
<td>Predicts a divergence of per capita income in regions if developed regions attract low-wage labour from underdeveloped regions. Developed regions tend to grow ‘on the cost’ of underdeveloped regions</td>
</tr>
<tr>
<td>- Cumulative causation</td>
<td></td>
</tr>
<tr>
<td>- Growth pole</td>
<td></td>
</tr>
<tr>
<td>Structuralist theories</td>
<td>Economic development as an internal- and external-led process of structural adjustments through various stages of economic maturity. For example, evolutions from manufacturing to service industries, economies of scale, flexibility of labour and capital and development induced by ongoing conflicts between capitalist and working classes</td>
</tr>
<tr>
<td>- Stage/Sector</td>
<td></td>
</tr>
<tr>
<td>- Profit/product life cycle</td>
<td></td>
</tr>
<tr>
<td>- Industrial restructuring</td>
<td></td>
</tr>
<tr>
<td>- Flexible specialisation and network</td>
<td></td>
</tr>
<tr>
<td>- Marxist</td>
<td></td>
</tr>
<tr>
<td>Political institutions and economic development</td>
<td>Political institutions as important factors in regional economic development, due to the strong influence of politics and development. Achieved, e.g., through tax incentives and regulations</td>
</tr>
<tr>
<td>- Growth Machine</td>
<td></td>
</tr>
<tr>
<td>- New institutional economics</td>
<td></td>
</tr>
<tr>
<td>Emerging neoclassical theories</td>
<td>Address some critiques against neoclassic theories. For example, new economic geography provides further understandings about uneven spatial distribution of economic activities which leads to industry clusters</td>
</tr>
<tr>
<td>- Endogenous growth</td>
<td></td>
</tr>
<tr>
<td>- New economic geography</td>
<td></td>
</tr>
</tbody>
</table>

Table 3.1.1 Overview of major regional development theories

Both convergence and divergence theories have in common that growth and development is measured predominantly by the region’s per capita income over time (Dawkins 2003). This implies that other relevant social- and economic factors that indicate a region’s development are omitted, such as income equality or well-being dimensions. Neoclassic economic theory is still today the dominant theoretical paradigm and foundation for most economic (development) models (Dobusch and Kapeller 2009; Lee and Keen 2004). In short, neoclassic economic theory models and studies the economy as an
abstract equilibrium system based upon a set of simplified assumptions of rational behaviour.

From a macroeconomic perspective, neoclassic models consider factors of production (i.e., land, labour, and capital) as perfectly mobile, so that firms are able to allocate them in a most efficient way (Blanchard and Illing 2013). The main driver behind this allocation is the interaction between demand and supply, i.e. total market equilibrium, where supply curves meet demand curves when all individuals and firms behave rationally in terms of full self-interest, with the primary aim to maximise their utility and profit (i.e. neoclassic behavioural assumptions follow the metaphor of the *homo oeconomicus*). It is further assumed that actors in the economy have full access to all information relevant for their rational decision making (i.e. *market efficiency hypothesis*). This also implies that labour, i.e. individual workers, chose their jobs solely based on the relative wage rate. In other words, individuals with the aim to maximise their own utility are assumed to immediately and costlessly change their workplaces if they see better earning opportunities elsewhere. Such absurd assumptions about human behaviour are based on the further theoretical supposition that individuals are perfectly mobile and fully aware of wage differentials on the base of salaries offered in different sectors and/or regions. Finally, while workers are assumed to seek out regions with the highest income opportunities (i.e. highest relative rates of utility), firms are also assumed to choose the most profitable location with highest relative rates of return (Pike et al. 2017).

However, the model assumptions of neoclassic economic theory about human rationality were since decades criticised to be unrealistic, and hence neither able to satisfactorily explain human behaviour, nor to prognosticate any economic crises (Sen 1977; Brodbeck 2001a, 2001b; Ghoshal 2005; Dobusch and Kapeller 2009; Ulrich 2010; Elsner 2007, 2012, 2017; Komlos 2012; Egan-Krieger 2014; Söderbaum 2016; Fuchs and Baggio 2017; Komlos and Schubert 2019). For instance, neoclassic theory implies a social isolation of the *homo oeconomicus*, as his behaviour is solely driven by self-interest without considering any social embedment of economic actors. This implies that societal and especially *moral* aspects guiding social behaviour, such as social rules and bonds, are completely missing in neoclassic economic theories (Ghoshal 2005). In one of his 15 curses about the neoclassic economic theory, Kolmos (2012) criticised that ‘society does not exist in blackboard economics, only individuals who hardly interact with one another’ (p. 44). In fact, neoclassic economics postulates that even moral values are subject of rational exchange
on markets, and thus relative prices are assumed to signal the ‘right’ value of ethics defined (and definable) as a unit of exchange (Becker 1993; Dierksmeier and Pirson 2010; Egan-Krieger 2014). In the mid-’70s, the Nobel-prize awarded economist Amartya Sen (1977) criticised the absence of morality in neoclassic economic theory, thereby challenging the absurd axiomatic assumption with empirical observations gained in the course of controlled experiments. Interestingly enough, although the experiments were originally designed to provide evidence that participants act in self-interest (to support neoclassic theory), they clearly behaved altruistically and unselfishly in most instances (ibid 1977). However, instead of acknowledging that the underlying theory is not appropriate to appropriately explain human behaviour, researchers advocated to neoclassic economic theory concluded that participants have failed, i.e. did not behave rationally enough (Dobusch and Kapeller 2009). Not without cynicism, Sen introduced the notion of ‘rational fools’ (Sen 1977).

In fact, the assumption of utility maximisation implies that all agents in an economy behave with the mind-set that more of something is always better, which, in turn, implies the absence of any kind of saturation (Dierksmeier and Pirson 2010). Again, this assumption has often been criticised for being unrealistic. It implies that there is no limit to the products or services that someone is capable to consume, i.e. the consuming individual can never be satisfied in a sustainable manner (Hanauer and Beinhocker 2014; Koppl et al. 2015). A further fundamental problem with microeconomic theory is known by its critics. It is not possible to define and clearly (commensurably) rank utility, typically mathematically (or graphically) conceptualised as ‘indifference curve equations’ (Chen 2008; Dobusch and Kapeller 2009). In fact, since propositional goods produced and offered to satisfy short-term needs can hardly be related in any way to humans’ primary goals, such as well-being, authentic relationships or a sustainable environment, Neumann and Morgenstern (2004) recommend the rejection of the ‘completeness axiom’ in neoclassic economic theory (Bernacchio 2015). Indeed, consumer preferences as conceptualised by contemporary economic theories remain an unexplained (i.e. empty) notion, either opaquely defined as ‘unconscious rules’ (Hayek 1967) or banned from economic model building as ‘exogenous variable’ (see: Lancaster’s 1971 ‘revealed preference theory’). Ulrich (1993, 2010) critically points out that the assumption of utility maximisation does not take into consideration fairness, and, thus neglects any distributional aspect. In fact, according to orthodox economic theory, a redistribution of income (e.g. in the form of higher tax categories for high earning groups) in favour of the poor
would never be recommended, although this would increase the encompassing society’s socio-economic situation, and hence also the social wellbeing of the entire population (Clark and Oswald 1996; Ferreira 1999; Ferrer-i-Carbonell 2005). From a strict utility maximisation point of view, such re-distribution would imply disadvantages for the ones with a high socio-economic status, thus, an equally distributed income is not considered as normatively desirable (Egan-Krieger 2014).

Utility maximisation furthermore implies that any kind of comparisons by the individual with peers would not exist. However, a growing body of behavioural economics literature shows that a person assesses both its ‘utility’ and ‘preferences’, as well as its subjective wellbeing, according to its relative position in society, i.e. people compare themselves to their peers (Clark et al. 2010; Senik 2005; Stutzer 2004; Wunder and Schwarze 2006). For instance, a working person’s income in comparison with a reference group, such the same employment position throughout a region, indeed affects individual’s attitude and, ultimately, its behaviour (Alesina et al. 2004; Clark and Oswald 1996).

Ghoshal (2005) and Egan-Krieger (2014) further highlight that economic theories are closely connected to the practice: On the one hand, economic theories shape and influence the reasoning and behaviour of people, as shown by Frank, Gilovich and Regan (1993) and by Nelson (2016). The authors came to the conclusion that students of traditional economic programs behave less and less cooperative the further they advance in their studies. This implies that economics not only portray and theoretically model an economy, but in fact also influence the social world by ‘educating’ humans about economic ‘mechanics and laws’. Later on, graduates will act in sub-systems of the economy (as managers, investors, politicians, lobbyists, journalists etc.) most likely according to mainstream theory as studied in their economics courses.8 On the other hand, economic theories are regularly used as a ‘scientific’ foundation and justification for various economic development programs, thus aiming to support policy decision-making. This leads back to one dimension of the problem statement of my thesis: Often economic impact models are applied to evaluate the outcome of tourism activities (for a specific period of time), or a periodic tourism event, without sufficiently and critically reflecting on the limitations of the employed models. Both the traditional

---

8 This phenomenon is well known and described in critical economics literature as ‘double hermeneutics’ (Ghoshal 2005).
models and the so-called ‘advanced’ models of tourism economic impact analysis are fully based on the assumptions of neoclassic theory; therefore, they should not be applied without critical considerations of their underlying assumptions and effects on human behaviour (Dwyer et al. 2004).

3.2 Socio-economic development

A common misconception, even in economic literature, is that economic development equals economic growth (Stabler et al. 2011). Development, however, comprises more dimensions than those of economic growth (Schumpeter 2010). In everyday language, economic growth is often reported (by economists and the media alike) in terms of aggregated one-dimensional indicators, such as GDP, unemployment rate, or per capital income. The positive growth of these indicators does indeed benefit a certain share of the regional population. However, a growing economy does not necessarily imply better lives for all. Ulrich (2010) and Komlos and Schubert (2019) clearly point out that ‘good’ development is, in fact, primarily a social matter and not solely an economical affair. This is relevant to all countries and regions, no matter in which stage of development. In this regard, Ulrich (2004, 2010) provocatively argues that no region has reached the end of any kind of development, and so every region has to be considered as a ‘developing region’. More precisely, at any time a region chooses the direction of its development, and not often do economically advanced countries pay a high ‘social price’ for their economic growth, typically as an increase of the social-and economic gap between the poor and the rich (i.e. increasing income inequalities), described in the literature as a society’s social disintegration (Dabla-Norris et al. 2015). Therefore, especially for advanced economies, it is relevant to critically ask what direction the ‘economic’ development should take. Particularly, when societal problems and inequalities are addressed, there must be a balance between (traditional) economic positions and the wider socio-economic development perspectives.

Accordingly, Ulrich (2004, 2010) asserts that a ‘civilized market economy’ is desired because ‘the forces of free market tend to undermine the unfulfilled project of a well-ordered society of free and equal citizens’ (p. 8). In his critical view, a ‘civilized market economy’ aims at empowering citizens by providing the opportunities to both integrate themselves in the market, but also to partially emancipating themselves from the economic constraints of market
competition. The former refers to the opportunity to evolve entrepreneurial capabilities, i.e. in terms of equal access to labour-, goods-, and capital markets that enable entrepreneurial behaviour. At the same time, however, Ulrich’s (2010) notion of emancipation implies that one’s livelihood should be secured for those who cannot (or do not want) assert themselves in the competitive market economy. This includes, for instance, the opportunity to self-supply (e.g. subsistence, basic income etc.) access and usage of public infrastructures (i.e. the pool of ‘commons’) etc. In fact, Ulrich’s (2010) socio-economic development approach implies a dual direction. It allows people to express and, more importantly, implement entrepreneurial activities, but, at the same time, to be also able to (e.g. partially) emancipate from the constraints of the market. The latter aspect becomes more and more of an issue for ‘highly developed’ countries and regions, where the ‘the market’ does not provide solutions for socio-economic shortcomings (such as income inequalities), but rather becomes the central cause of the problem. Ulrich (2010) argues that neoliberally dominated markets contribute to increased performance requirements of employees (leading to overextension), or even to cutting and rationalising away employment positions as well as entire job types, particularly for middle- and lower-class households (Komlos 2016; Komlos and Schubert 2019). Accordingly, also in highly productive economies (explained by the notion of unconditional growth), socio-economic problems are a central issue for an increasing part of the population, especially considering that the productivity of the industry already achieved surpluses in supply that are more than enough to satisfy the basic needs for everyone (Young 2004; Clapp 2014).

Similarly to Ulrich (2004, 2010), Novy et al. (2013) argue that unconditional economic growth should not be the main goal of a region’s development strategy. Economic growth should rather be considered as the means necessary for development. But without considering other dimensions, economic growth itself cannot be sufficient to obtain prosperity in a region. In other words, markets cannot solve socio-economic problems, especially in advanced economies with highly competitive markets. The authors, therefore, state that instead of a narrow growth-based direction, socio-economic development comprises a multi-dimensional thinking on social, cultural, economic, and political dimensions and their dynamics in a region.

In this regard, economic activities should aim to satisfy socially durable needs, for instance, obtaining overall wellbeing through meaningful work (Milliman et al. 2018; Steger et al. 2012), reproduction of social and psychological capital
as well as the building of cooperative government structures relying on democratic principles (Luthans et al. 2004; Moulaert and Nussbaumer 2005a; Lans et al. 2015). However, the orthodox economics discipline and its propagated market principles are not the only underlying force that has to be criticised in the context of socio-economic development. Coburn (2000) argues that ideologies influencing political directions are capable of undermining existing welfare programs. Welfare systems, he argues, are the structural causes for social cohesion. If these are, however, not sufficiently provided or even become eroded, negative effects on equal developments will arise. While neoliberal ideologies prioritise free market developments, it has been shown that competitive-driven economies do not necessarily solve societal problems (Ulrich 2010; Komlos 2016; Elsner 2017; Komlos and Schubert 2019). Rather, Coburn (2000) argues that the neoliberal advocates successfully promote resistance against welfare programs, aiming to reduce market-induced inequalities (e.g. income distribution). In this sense, inequalities are rather welcomed, or at least not opposed, because industries benefit from low labour costs (Kenworthy 1998). In contrast, welfare states indicate much lower inequality through established distribution systems (Coburn 2000). This means that adherence to different types of economic orthodoxy leads to the application of differing redistribution measures, which in turn, have substantial impacts on income inequality. In fact, it is argued that increasing income inequality is a threat to modern democracy and socio-economic development (Alesina et al. 2004; Piketty 2015; Söderbaum 2017).

The critical work by Söderbaum (2007; 2017) and Söderbaum and Brown (2010) highlights that a one-dimensional analysis of regional development is not sufficient to reach development that is socially, economically, and ecologically sustainable. He refers a one-dimensional analysis to the sole focus on profits and economic growth, i.e. ‘monetary reductionism’. Such thinking will never contribute to reaching sustainable development goals (UNWTO 2017). Accordingly, the author argues that there is a need for a more fundamental change of political-economic thinking towards multi-dimensional ways of thinking. Thus, regional dynamics go beyond the accumulation of growth, as other interrelated (non-monetary) aspects must be taken into consideration that favour development also from a lower geographical scale, such as locally and community-based development (Moulaert and Nussbaumer 2005). Similarly, Dopfer et al. (2004) argue that an analysis of socio-economic development over a period of time requires perspectives from various analytical levels. Analysing the social- and economic impacts of tourism in a region should ideally comprise various measurement techniques, and not
only a one-dimensional perspective, which is often the case in tourism economic impact studies (Lee and Kang 1998).

Although monetary reductionism has been criticised, it does not imply that regional development analyses should neglect monetary perspectives. It should rather shift the focus from growth and efficiency towards distributional aspects. The so-called ‘new-monetary measures’ particularly ‘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 other words, new monetary measures add another perspective to the ‘market value’, which previously has been measured solely by growth and profit-focused indicators. As an example, tourist arrival numbers in a region might be growing positively from year to year. However, due to regional industry structures, it might be possible that tourists’ spending leaks out of the region, with the result being that less and less income reaches the regional population (Dwyer et al. 2010). Accordingly, the ‘value’ of the industry, and hence its contribution to sustainable development should be analysed by multi-dimensional terms, instead of focusing on growth indicators alone. Such ‘new-monetary measures’ that take into account the distribution of costs and benefits among stakeholders (Söderbaum and Brown 2010) typically refer to the issues of unequal income distribution within a country, a region or a specific industry (Dabla-Norris et al. 2015).

As a matter of fact, advocates of socially and economically sustainable development agendas critically reflect on the shortcomings of predominant mainstream development theories that underlie the political-economic systems of most advanced economies. Further evidence is found in academic textbooks for micro- and macro-economics, which primarily consist of neoclassic economic theories (Dobusch and Kapeller 2009; Elsner 2017). Accordingly, Kolmos (2012) points out 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). Particularly, these views focus on the supply-side and the propagated capability of deregulated markets to satisfy the full spectrum of human needs. Thus, growth and its main drivers, such as efficiency and profitability, become a development goal in itself. This, however, does not follow the idea behind socio-economic development.
3.3 Income inequality and its causes and consequences

It is commonly observed that social and economic inequality are major reasons for socio-economic development of a region to be hampered (Elsner 2017; Moulaert and Nussbaumer 2005a, 2005b; Ulrich 2004, 2010). Inequalities are typically differentiated between two causes, namely inequalities of opportunities and inequalities of outcomes. Inequalities of opportunities refer to circumstances that are beyond an individual’s control, such as gender, family- and socio-economic background, place of birth etc. On the other hand, inequalities of outcomes refer to the combination of these uncontrollable circumstances and efforts that individuals are responsible for themselves. It is certainly a combination of both, because the efforts undertaken by individuals to overcome inequalities are most often depending on the circumstances of that person. Therefore, it is not easy to separate outcomes from opportunities, considering both are equally important to understand societal inequalities. Accordingly, it is argued that income inequality is a measure of inequality of outcomes, i.e. dependent on both a person’s uncontrollable circumstances and his/her own efforts (Dabla-Norris et al. 2015; Lefranc et al. 2008).

Causes of income inequality

The economic development of recent decades contributed to the increase of wealth for a certain share of the population, especially in so-called developed or developing countries and regions (Pike et al. 2017). This development is strongly associated with efficient production of goods and services by reducing costs for transportation, automation and communication. However, economic growth often occurs at the cost of the working population, as often only the top income group benefits from productivity growth and innovation (Komlos 2016). Wages and salaries of low- and medium-income households grew disproportionately slow, resulting in the rise of income inequality on the global level (Dabla-Norris et al. 2015; Dew-Becke and Grodon 2005; Komlos and Schubert 2019). The reasons behind income inequalities associated with economic growth are typically discussed on a global level and/or a highly abstract and theoretical way.

9 It should also be considered that political initiatives influence the degree of income inequality, such as labour laws, progressive taxation, subsidies, etc.
For instance, Kuznet’s (1955) inverted U-curve indicates a non-linear positive relationship between economic growth and income inequality. Economic growth (measured by per capita income through industrialisation) creates market forces that, first, increase income inequality, but then are expected to decrease after a certain point of development. Kuznet’s hypothesis has, however, been criticised for having limited empirical support. For instance, Ferreira (1999) points out that empirical studies found even negative correlation, such as the study by Li and Zou (1998), which analysed 112 developed and developing countries. Ravallion and Chen (1997) looked at 67 developing countries and also found no correlation between income inequality and standard of living. They indicate that inequality decreased as often as it increased in growing economies. However, Ferreira (1999) as well as Ravallion and Chen (1997) conclude that although an empirical link between growth and inequality is not found, there is no doubt that growth helps to reduce poverty. Further critiques stem from Deininger and Squire (1998) who argue that large shares of Kuznet’s dataset consist of middle-income countries located in Latin America, with historically high-income inequality. When applying a standard robustness test in the form of differently defined Gini coefficients, the inverted U-curve seems to disappear.

Logan and Moloch (1987) and Bartik (1991) similarly argue that low-income households pay the price for economic growth because it increases property values and assets disproportionately higher than wages and salaries. Accordingly, ‘economic growth likely increases inequality within places through its effects on the distribution of rents. Increases in urban scale […] inflates land prices relative to wages and other wealth sources’ (Logan and Moloch 1987, p 95). Consequently, economic growth seems to worsen the distribution of income. Nevertheless, the authors do not find evidence for a generalisable break point at a certain stage of development, where the correlation turns negative as suggested by Kuznets’ U-curve.

A common explanation for income inequality is found in technological advancements through innovation, which substantially impacted the production of goods and services in recent decades (Jaumotte and Osorio-Buitron 2015; OECD 2011). In particular, developments in information and communication technology have affected the daily lives of a broad swath of the population in advanced economies, leading to increasing wealth and well-being (ibid. 2015). However, technological development also has negative consequences (Komlos 2016). Some researchers argue that, for instance, a large share of low- or unskilled occupations are at risk of being replaced.
through continuous computerisation and automation, such as travel agencies (Frey and Osbourne 2013). Other authors oppose such statements, arguing that only single tasks of the overall job become automated, and only a small share of total jobs are at risks (Arntz et al. 2016). While, it is claimed that new technology requires both un- and low skilled workers to adjust job tasks, at the same time, the need for well-educated workers increases disproportionately. The positive correlation between educational inequality and income inequality shows that the rising income gap between low- and high skilled workers leads to higher income inequality (Alvaredo et al. 2013; Baum 2015; Card and Dinardo 2002; Dabla-Norris et al. 2015; Field and Yoo 2000).

Checci (2001) further investigates the influence of education on income inequality and concludes that income inequality, in fact, reflects the educational level of the population. De Gregorio and Lee (2002) confirm these findings; however, they argue that the relationship between education and income inequality is not always clear. Overall, there seems to be a positive correlation between educational inequality and income inequality. However, they take into account so-called composition and wage compression effects, respectively. This means that larger shares of highly educated people initially elevate inequality. However, if the relative amount of educated people increases, wages and salaries for a higher share of people also increases. Differences between high- and low-income groups, thus, tend to become smaller, leading to lowering income inequality (Knight and Sabot 1983).

Another key aspect in explaining income inequality developments is the role of labour unions (Jaumotte and Osorio-Buitron 2015). Labour unions have several crucial functions, such as the provision of support, advice and protection in cases of conflicts, or securing income in case of unemployment for its members. Increasing union memberships specifically strengthen workers’ bargaining power for wages and salaries, and hence contribute to a reduction of income inequality. While income inequality has risen considerably in recent decades in advanced economies, union membership rates are constantly declining (Komlos and Schubert 2019). Declining union rates (triggered by political measures) are strongly associated with increasing income inequality. The reasons are multiple: For instance, the bargaining power of employees is reduced, which negatively influences the average wage earners (Benjamin et al. 1998). Furthermore, declining union membership rates increase unemployment, and hence widen the gap between income levels of a region’s population. As a result, top income shares rise
proportionally higher than the low-income shares, leading to higher income inequalities (Frederiksen and Poulsen 2010; Kjellberg 2017). In Sweden, for example, union membership rates have traditionally been high at ca. 70% compared to ca. 33% in other advanced economies in 2011 (Jaumotte and Osorio-Buitron 2015; Kjellberg 2017; Komlos and Schubert 2019). However, Swedish union density also shows a declining rate, especially for blue collar workers, falling from 77% in 2006 to 62% in 2016. Most interestingly for the study at hand, a sector-specific decline in union membership rates is visible for the accommodation and food sector, i.e. falling from 52% in 2006 to only 28% in 2016, a significant decline of 24% in 10 years (Kjellberg 2017). Sub-optimal working conditions, such as low wage levels, high total membership fees (introduced by the centre-right government in 2007), high labour turnover, as well as part-time workers due to seasonality, potentially contributed to this drop of membership rates, and hence likely increasing income inequality (Dabla-Norris et al. 2015; Jaumotte and Osorio-Buitron 2015; Kjellberg 2017).

Consequences of income inequality

Consequences of income inequality vary tremendously as they show various dimensions, ranging from consequences for the national or regional economy (i.e. macro level perspective), to personal consequences for individuals (i.e. micro perspective). On the macro level, literature rather uncritically discusses whether income inequality causes positive or negative economic growth.¹⁰ While income inequality is usually associated with negative economic growth, some authors conclude that income inequality may even have positive growth consequences for a region. For instance, by also considering several non-monetary variables in their regression model (e.g. population growth rate, ratios for urbanisation, and primary school enrolment), Li and Zou (1998) identify a positive and significant relationship between income inequality and GDP. Explanations for this relationship lie mainly in the phenomenon that increasing income inequality together with large shares of a low-income population reduces the portion of risk-averse individuals; hence, the

¹⁰ This thesis neglects this aspect, as the primary aim is not to analyse economic growth but rather the socio-economic effects of tourism. However, since a wide range of literature deals with the consequences of income inequality on economic growth, the following paragraph briefly summarizes major previous studies in this domain.
possibilities and willingness of investments typically related to housing or entrepreneurship (Alesina and Rodrik 1994; Clarke 1992; Persson and Tabellini 1994; Panizza 1999).

Voitchovsky (2005) argues that it is important to consider the various areas of the income-spectrum when discussing consequences of income inequality. In fact, the majority of the empirically found positive associations relate to the upper end of the income inequality spectrum, whereas negative effects on growth typically refer to the lower-end of the distribution. These are important insights, as they show that only the high-income groups contribute to economic growth. Accordingly, the larger the distance between low- and high-income earners, the more nuanced the economic growth. This asocial argument for economic growth frequently leads to decisions that are unfavourable for large shares of the population (Voitchovsky 2005).

Several authors from different disciplines have studied the consequences also at the individual level.11 Putting someone’s income in relation to another’s income is known as the concept of comparison income, which can have several effects on subjective well-being. For instance, Ferrer-i-Carbonell (2005) argues that neoclassic economic theory erroneously assumes that ‘more income is [always] better’, as other factors than the individual income may play a more significant role. Income, first of all, is perceived as hygiene factor (Herzberg et al. 2011), and thus as the fulfilment of a basic need. However, several other monetary-related factors need to be considered, such as the household’s total income, the distance to reference incomes, and, most importantly, demographic parameters. In fact, Senik (2005) points at the role of comparison income on individual well-being: while the income level itself has a positive effect on job- and pay satisfaction, large distances to reference income clearly shows a negative effect on job- and pay satisfaction. In a multi-country comparison Alesina et al. (2004) found out that a large gap between individual income and the reference income can also act as an indicator for future possible income, thus showing positive effects on well-being. However, this motivational effect depends on the degree of social mobility, i.e. to what degree the relatively poor can move up the income ladder while the relatively rich might not fear to fall down. In a similar vein, Wunder and Schwarze (2006) note that income inequality can positively affect well-being because individuals may interpret it as a signal for future improvement of their own

---

11 Although the individual level, i.e. the micro-level analysis, is not part of this licentiate thesis, it is included in this discussion as it will be relevant for upcoming studies towards the full PhD.
relative position. In fact, in order to improve their informational basis, humans try to predict their future (e.g. wages) on the basis of the present situation of people in comparable circumstances (Festinger 1954). Finally, Clark et al. (2010) looked at the effects of comparison income on work effort. He argues that high income does not necessarily have incentive effects to work harder or more, or to balance out suboptimal working conditions. Rather, so-called crowding-out effects of monetary rewards on intrinsic motivation occur. The authors conclude that the predominance of either the income effect or the substitution effect depends on the income profile over time, including own and other’s income levels, respectively (Clark et al. 2010).

3.4 Tourism’s contribution to socio-economic development

While the previous sub-sections discussed contemporary debates on regional socio-economic development as well as the causes and consequences of income inequality, this sub-chapter reviews the literature on tourism’s role for regional socio-economic development. It is frequently argued that the tourism industry creates and secures employment and income for the citizens of a country or a region, and hence plays an important role for regional economic growth and, more importantly, regional development. However, the fragmented character of the tourism industry remains a challenging fact to validly and reliably estimate tourism’s contribution to a region’s social and economic development (Crompton 1995; Crompton et al. 2001; Dwyer et al. 2004; Mazumder et al. 2012; Smeral 2015; Tohmo 2018; UNWTO 2014).

Most academic tourism studies that investigate the economic impacts of tourism apply economic tools and models to estimate the impacts of tourism on a region or a country (Comerio and Strozzi 2019). Those models were summarised by the UNWTO (2013) and discussed recently by Comerio and Strozzi’s review paper on tourism’s economic impact (ibid 2019). Among those, basic accounts, such as Tourism Satellite Accounts (TSA), as well as economic models, such as Input-Output (IO), Social Account Matrix (SAM), or Computable General Equilibrium (CGE) are the most prominent approaches (Comerio and Strozzi 2019). As indicated in the introductory chapter, the vast majority of tourism papers utilising these models solely look at aggregated economic indicators, thereby neglecting important socio-economic aspects, such as income distribution in the tourism industry and its related sectors (Lee 2009). The core concepts of tourism economic impact
studies typically consider sectoral interlinkages and multipliers, which allow for the secondary effects from tourism to be measured (Stabler et al. 2009). Typically, however, the focus lies on aggregated macroeconomic indicators, such as sales, employment, income, tax, and value-added, with the predominant aim to measure economic growth. These aggregation levels can be sectoral (i.e. for a specific industry) or geographical, i.e. for a specific country, region, city or tourism destination (Bonn and Harrington 2008; Mazumder et al. 2012; Miller and Blair 2009; Stynes 1998; Thomo 2018).

The majority of papers studying tourism’s economic impact based on these models do not incorporate a detailed discussion of socio-economic dimensions in terms of income distribution and remain at aggregated analysis levels in terms of employment or income effects attributed to tourism demand (Daniels 2004; Lee 1998; Li 2015; Mazumder 2012). The only exceptions are SAM models, which build upon basic IO models but are extended by incorporating additional actors of the economy in question. For instance, the expenditures of both households and the government can be additionally considered. However, again, these extensions remain on an aggregated level of analysis (Hara 2008). As mentioned, the extensive tourism economic impact literature has recently been critically reviewed by Comerio and Strozzi (2019). Therefore, literature is not reviewed based on basic impact modelling approaches. Instead, the relevant literature is reviewed, namely tourism economic impact studies that also include socio-economic impacts and, in particular, income distribution effects, which thus goes beyond aggregated employment and income indicators.

Tourism literature shows ambivalent evidence as to whether tourism contributes to or hampers equal development of income. For instance, Lee and Kang (1998) found evidence that tourism activities in a particular region contribute to equal development. They studied income distributions of various industry sectors in Korea, by comparing the tourism industry with other primary (e.g. mining), secondary (e.g. manufacturing), and tertiary (e.g. finance) industries. By utilising Gini coefficients and Lorenz curve-based analyses, the following results are obtained: Although the median earnings of tourism are relatively low, the income difference between high and low earners is lower compared to secondary and tertiary industries. Interestingly, the authors could further show that especially female workers benefit from working in the tourism industry. Compared to other Korean industries, income in tourism has the third most equal distribution as well as the third highest median income for female workers.
On the other hand, there is tourism literature that argues that tourism in fact hampers equal socio-economic development. For example, the study by Alam and Paramiti (2016) starts off by critically reflecting the limited consideration of socio-economic dimensions in current 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’ (p. 112). The authors argue that the majority of the literature on tourism development and impact focusses on positive direct and indirect effects. Accordingly, they criticise 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). As discussed, most economic impact models are based on neoclassic economic theory, and hence do not take into consideration distributional aspects of tourism effects in general, and income in particular. In their econometric study, Alam and Paramiti (2016), as a rare exception, investigate the impact of tourism on income distribution in 49 countries over a period of 21 years. Findings show that tourism significantly contributed to the increase in income inequalities. Reasons behind these developments lie in monopolistic market structures in developing countries causing considerable leakages or benefits for only a few large-sized corporations. Accordingly, tourism activities benefit mainly the upper social and income classes, such as owners, entrepreneurs and investors. The authors conclude, that although tourism may contribute to the development of the region by creating new employment positions in absolute terms, these jobs typically remain at the lower salary end (i.e. low-wage service jobs).

The idea of pro-poor tourism seems to be one way to attenuate income inequalities. This concept highlights the importance of equity with the aim to close the gap between low and high-income groups. However, Schilcher (2007) reveals that the effectiveness of reducing income inequality mainly depends on the predominant ideology internalised by current governments and institutions. In fact, the author showed, that economic actors, governments and institutions oriented towards the neoliberal doctrine were to increase income inequalities, although the original strategy was to support pro-poor tourism initiatives. The author points out that in resource-poor regions,
tourism is often considered as a tool for regional development, however, becomes frequently instrumentalised to only promote economic growth. Indeed, the neoliberal agenda suggests that growth has to be achieved to ensure regional competitive advantages (Porter 1980). Typically, the role for competitive advantage is seen in tourism products and services, due to its natural and cultural uniqueness of a region (Webster and Ivanov 2014). Unfortunately, the promotion of tourism under a neoliberal regime occurs frequently at the expense of the low-income classes. As Schilcher (2007) points out ‘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 is to strengthen small-scaled and domestically controlled tourism, the lack of domestic financial capital leads to a deregulation of the market, resulting in negative implications of local economies, shown by high leakages and increasing income inequality. Schilcher (2007) concludes, that as long as the neoliberal agenda dominates economic reforms, low-wage service industries (to which tourism belongs) will emerge as the predominant industry in the respective deregulated region (Schilcher 2007).

Another example of tourism impeding income equality is shown by Blake (2010) for Eastern African countries. He investigated the effects of tourism and other export industries on various household income categories by analysing interlinkages between households and the industry sectors. For each African country, a Social Account Matrix (SAM) has been employed and the hypothesis was tested that lower income households could participate in tourism activities. Although, lower income households are not homogeneous (i.e. there is always a residual share of low income households that does not have the opportunities to be involved in the first place), his results show that tourism is a strong backward linked sector, i.e. creating the tourism product requires purchases from other sectors, resulting in high multipliers. However, the core tourism sectors, i.e. accommodation and food, mainly provides income to richer households. The author, therefore, concludes that the idea of tourism development for reducing income inequality can only be verified if low-income households are enabled and empowered to participate in these economic activities. So far, his findings show negative trends, i.e. tourism does not benefit low-income groups, thus, does not reduce income inequalities.

Similarly, Incera and Fernández (2015) highlight the problem that only few tourism economic impact studies focus on distributional effects. Although they acknowledge that the effect of tourism can be positive and may reduce
regional income inequalities, their findings show the opposite. The authors apply a SAM for the region of Galicia, Spain, with eight disaggregated household categories, with stepwise income levels from low to high. A potential positive effect of tourism on income inequality is frequently argued by the fact that the industry mainly employs low-income and low-skilled workers, and that the unique characteristic of a region or destination allows self-employment also for poorer households. The SAM analysis, however, showed that despite low-income households are involved in tourism production, the income inequality further increases because the high-income households benefit far more than the low-income households. The authors, therefore, conclude, that the main beneficiaries from tourism are the richer households, not at least because they are less affected by relative price increases for food, real estate, and primary products.

Kinyodo and Pelizzo (2015) show ambiguous effects of tourism on income inequality. Their argument for tourism contributing to regional development is that the industry creates employment for poor households that often would not find employment in other sectors in the local and regional economy. However, negative aspects are often omitted, for instance, that the income of tourism jobs remain on a low level, and leakages occur in favour to international actors, i.e. due to high importation rates and predominantly foreign owners of and investors in tourism infrastructures. In fact, findings show that tourism-led growth could not reduce income inequality, mainly due to three factors: vertical integration, foreign ownership and insufficient wage packages for workers in the tourism sector. Thus, the authors argue that tourism can contribute to reduce poverty only if the created wealth is distributed more equally.

In a similar vein, Lee (2009) criticises regional development strategies that focus on growth, assume a static functional economy, and neglect socio-economic dynamics. In fact, according to Bartik (1991), regional growth raises property values faster than income does at the same time. This leads to the problem that property becomes unaffordable for low-income households.

Lee (2009) addresses the importance of economic justice, which means that costs and benefits attributed to the local population need to be considered when assessing the social and economic significance of tourism. This includes leakage effects, the types of employment generated, and the distributional equity of economic benefits. The author argues that causes of (i.e. income) inequality mainly lie in economic restructuring of so-called developed regions, shifting from traditional manufacturing sectors to the low-wage service sectors. Thus,
he compares income distributions between tourism services-dependent and manufacturing-dependent counties in the US for the years 1990 and 2000, using mean incomes and Gini coefficients for both groups. Interestingly enough, in 2000, both the service and the tourism-dependent counties show significantly higher degrees of income inequality than manufacturing-dependent counties. This implies, that over the period of 10 years, tourism has contributed to worsen income inequality in respective regions. As a consequence, income inequality reduces the opportunities on the labour market, and hence can decrease the standard of living for low and even middle-class households. In extreme cases, it can lead to conflicts within communities, and divisions among community members by class. Apparently, socio-economic problems cannot be solved by free market solutions.

Scheyvens and Momsen (2008) studied small islands and argue that these regions frequently suffer from poverty and inequality due to their colonial heritage, ethnic diversity, postcolonial economic dominance of (foreign) tourism multinational corporations, and low levels of education. Tourism typically perpetuates unequal relations of dependency as well as encourages uneven and inequitable socio-economic and spatial developments (Milne 1997). Therefore, tourism development aiming to support lower income groups should be promoted, for instance, in the form of a pro-poor tourism approach by, first, empowering the poor to participate in the tourism industry at all levels and scales of operations. Their study concludes that tourism can contribute to economic growth and development, but does not necessarily have influence on reducing income inequality and poverty if ‘the importance of social sustainability is [not] directly addressed, rather than included as an add-on to strategies, emphasizing […] economic growth’ (p. 36).

Finally, Tosun et al (2003) examine the impacts of growth in coastal tourism on the development of rural regions. They similarly criticise that despite tourism clearly contributes to a rising GDP and increases employment in absolute terms, the notion of ‘economic development’ typically neglects distributional aspects. Thus, the authors conclude that growth in form of per capita income or industry output is not an appropriate development goal. Rather, the goal should be to strengthen the regional potential to satisfy basic needs. They particularly warn that tourism as a tool for regional development is not a panacea, and that it requires a sufficient degree of integration of other (tourism-related) industries, appropriate infrastructures, and, above all, supportive socio-political conditions. Regional development agendas should,
therefore, carefully consider *stages* of economic development and decisively aim for goals of *social transformation* (Thirwall 1989, Todaro 1989), e.g. the reduction of income inequality (Tosun et al. 2003). The study particularly reveals that the concentration of investments into mass tourism infrastructures at developed coastal regions has significantly increased income inequality among income classes.
4 Research design and methodology

This section illustrates the methodology of my thesis which aims to analyse the socio-economic effects of tourism in Jämtland Härjedalen. To overcome some of the limitations of conventional tourism economic impact studies (i.e. particularly the narrow focus on aggregated macroeconomic indicators), I embed the analysis in a micro-meso-macro framework (Dopfer et al. 2004; Elsner 2007; Hollingsworth and Müller 2008) by applying a mixed-method approach (Creswell et al. 2017; Khoo-Lattimore et al. 2017).

In their seminal paper, the evolutionary economists Dopfer, Foster and Potts (2004) propose a conceptual framework to analyse economic activities from more than a one-dimensional perspective, such as the typical micro- or macro views, respectively. They argue that analysing economic systems based on the micro and/or macro perspective is seriously limited and, therefore, does not fully express the dynamics of an economy under study. Instead, the authors propose a micro-meso-macro framework that highlights the system of rules that exists in an economy. In their institutional economics’ tradition, they claim that the economy must be viewed as a ‘complex system of rules that have evolved over a long period of time’ (Dopfer et al. 2004 p. 266). Within the analytical framework, the micro domain refers to the individual economic agent that carries and uses 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 as the meso domain, which is concerned with the rules that continuously evolve, stabilise and change over time. It describes the essential normative aspects that typically are negotiated and change in the process of economic development. Finally, the macro level refers to the analysis of the economic structure, i.e. the system structure of the economy as a whole. In this way, the authors recommend analysing the economic system from various perspectives, assuming that the micro and macro domains are two different perspectives of the rules and rules system of the economy. The authors, ironically argue that also ‘a traditional architecture without the ‘invisible’ meso level, would, effectively, be dead’ (p. 269). The institutional economist Wolfram Elsner (2007) even argues that ‘the meso-level is the proper aggregate level for social economic analyses of complex systems and processes’ (p. 1). Similarly, also Hollingsworth and Müller (2008) highlight the importance of multi-level analyses by also considering the meso-level. Indeed, in social science (in general) and economic analyses (in particular), all levels are constantly interacting with each other, and no level exists without relationships of other levels (pg. 415). Therefore, understanding the complexity of an economic
system requires to understand how the different levels interact. The authors conclude that understanding the interaction of the levels is among the major goals on the socio-economics research agenda.

With their framework, Dopfer et al (2004) provide a valuable analytical architecture suitable for my thesis, as it helps to address and overcome the typical narrow focus on aggregated macroeconomic indicators of contemporary economic impact models that are traditionally used to estimate regional economic effects of tourism (Klijs et al. 2012). Following Dopfer et al.’s (2004) micro-meso-macro framework allows me to expand the analytical perspective beyond the macro-level perspective, typically the only level of perspective in most tourism impact studies (Daniels 2004; Mazumder et al. 2012). Nevertheless, the starting point of my study, still focusses on macroeconomic effects, which, subsequently is followed by a (qualitative) meso-level analysis of the regional tourism industry. However, due to time and space limitations, the micro-level analysis is planned as part of the full PhD-thesis later on.

To begin with, the macro-perspective of my study focusses on region-wide effects, i.e. how much of employment and income in the Jämtland Härjedalen region is associated with tourism activities during the period 2008–2016. This quantitative analysis considers approximately 60 economic sectors in the region. I particularly look into the employment and income effects for specific occupational areas within the regional tourism sectors. By doing so, it is possible to estimate the economic effects for a wide range of occupational areas within each of the 60 sectors in the regional economy. However, this would lead towards an extensive amount of data to analyse what would go beyond the scope of this thesis. Therefore, I rather focus on the socio-economic effects by the key tourism sector ‘accommodation and food’. This implies that I ask in particular the following questions: To what extent does tourism demand contribute to the generation of employment in a particular occupational area in the accommodation and food sector in Jämtland Härjedalen? What is the average and total annual income of those workers?

Based on the retrieved income effects of various occupational areas within the accommodation and food sector it should be then possible to gather the income distribution for these occupations. Annual changes over a period of nine years will show the development trend of income’s distributional (in)equality. Technically, income inequality patterns are quantified by the Gini coefficient and graphically displayed by the Lorenz curve (De Maio 2007).
The meso-level analysis of my study refers to the institutional perspective to better understand and interpret macro-level results. More precisely, I am conducting a qualitative study with official representatives at major regional institutions that help me to better understand and interpret the quantitative results on employment-, income-, and income distribution effects on the macro-level gained in the course of the quantitative analysis part. As Dopfer et al. (2004) point out, the meso (or institutional) level refers to the rules and dynamics in the economic system. Therefore, on the institutional level, as typical for democratic systems, an intensive and continuous dialogue regarding these rules and rule systems occurs, thus, it should provide a suitable source of qualitative data to further interpret the findings gained on the macro-level. In turn, the study outcomes are considered as valuable input for further discussion and reflections at the meso-level with regard to future rule adaptation (Dopfer et al. 2004; Elsner 2007).

Accordingly, I conduct semi-structured interviews with six representatives of the regional tourism industry which provide me valuable feedback and insights about context-specific socio-economic dynamics of regional tourism. Interview partners represent various regional institutions, such as the municipality, the regional tourism organisation, major tourism associations, and the labour union.

Following the objective of the thesis, a mixed-method approach is chosen which integrates quantitative and qualitative methods (Cresswell et al. 2017; Khoo-Lattimore et al. 2017). More precisely, findings from the quantitative macro-level impact study are enriched with qualitative insights gained through additionally conducted meso-level interviews. This triangulation (i.e. the use of various methodological means to examine a social phenomenon) allows me to better answer my research questions (Creswell et al. 2017). Combining and integrating quantitative and qualitative methods provides a broader and deeper, and hence a more comprehensive and valid picture of the socio-economic effects in the Swedish region of Jämtland Härjedalen.

4.1 The regional economic impact model

This section describes major methodological aspects and issues related to the macro level analysis of socio-economic effects of tourism. In the first part, I briefly outline a few theoretical foundations important to understand (tourism) economic impact analyses. The second part describes the process undertaken to develop the regional Input-Output (IO) model for Jämtland. The
third part discusses the extension of the model to estimate disaggregated effects per occupational area (occupation-based modelling). The last part of this sub-chapter introduces the approaches to measure the income distribution in the regional economy.

**4.1.1 Foundations of economic impact modelling**

Tourism economic impacts are usually triggered by the demand side of the industry, i.e. the expenditures tourists undertake before-, during-, and after their visit (Hara 2008). However, economic impact models, in turn, are applied to measure changes in socio-economic indicators pertaining to the supply side. These indicators typically refer to aggregate measures, like sales, income, employment, value-added, and tax revenues within the entire (e.g. regional or national) economy. Moreover, for all these measures of economic effects, estimates are derived that signal proportional change through additional demand for products offered by the sector under study. In my study, obviously, the focus is on employment and income indicators, respectively. Several elements either magnify or reduce the effect. First, the level of inter-sectoral linkages determines the magnitude of the effects. Leakages outside of the region reduce the effects, mostly due to importations from other regions (Stabler et al. 2010). The basis for the measurement of these magnitudes is the multiplier, which is considered in all state-of-the-art economic impact models in tourism (Crompton et al. 2016).

*Combined demand- and supply side analysis*

The analysis of socio-economic impacts of tourism on the level of regional economy requires to look at both, the demand and the supply side of the industry. The demand side analysis is needed, because all economic impacts are assumed to be triggered by (i.e. annual) expenditures made by tourists for tourism services and products in a specific region under study. This demand-side view is recommended because tourism cannot be defined from the supply side in terms of a specific and homogenous industry, but rather as an amalgamation of different products and services consumed by tourists, i.e. tourism is defined a demand-driven phenomenon (UNWTO 2013). Hence, in order to estimate the economic effects of tourism for an economy (i.e. including the supply side, but also households), it is important to know how much tourism contributes to employment, income, and sales, respectively. Therefore, tourists’ expenditures for tourism products- and services are
typically described as the primary, or direct (economic) effects of the sector. However, physical goods and products sold to tourist (such as souvenirs) that are imported into the region must be deducted. This is because imports are equivalent to money directly flowing out of the region, and hence do not benefit the regional economy. Naturally, this does not apply for products and services prepared and created in the region (Stynes 1998).

The subsequent supply side view mainly considers changes of socio-economic indicators in the selected sectors of a particular region. As such, primary effects are changes of socio-economic indicators by sectors directly involved in the production and sale of tourism products and services, such as accommodations, food, entertainment, groceries etc. (Stynes 1998; Stabler et al. 2010). By contrast, secondary effects comprise indirect and induced effects. The former are the effects on industry sectors linked to the primary tourism sectors. For instance, if restaurants buy vegetables and meat from local farmers. Induced effects occur when employees in all affected sectors gain income from tourism expenditures and further spend these increased incomes on their own consumption within the region under study (Stynes 1998; Miller and Blair 2009; Stabler et al. 2010).

A regional IO model provides a database architecture which, first of all, reflects the supply-side. Demand side data, i.e. tourist expenditures for specific products and services, are then added to this model. This additional step allows for estimating primary and secondary effects among socio-economic dimensions. In the case of my thesis, employment and income effects, respectively.

Inter-sectoral linkages

Inter-sectoral linkages describe and quantify the interrelationship of tourism sub-sectors among each other, as well as with the remaining sectors in the (e.g. regional) economy (Miller and Blair 2009). Inter-sectoral linkages occur when businesses either purchase or sell products and services from and to each other. Such transactions typically can occur within the same sector or between different sectors. These backward linkages show the relative significance of the tourism sector as a consumer of upstream produced goods, for instance when restaurants buy products from wholesalers (Stynes 1998; Stabler et al. 2010). On the other hand, forward linkages indicate the significance of the tourism sector as a supplier of downstream activities. In this case, the supply of tourism products and services is meant for other business’ uses (i.e.
intermediate demand, business-to-business transactions etc.), and not for tourists as the end consumer (Smeral 2015; Stabler et al. 2010). When inter-sectoral linkages within a country or region are strong, regional capacities are considered as strong as the economy tends to become self-sufficient (Sinclair and Sutcliffe 1978). Hence, in this case, the impact of tourism demand on the regional economy is large (Stabler et al. 2010). However, small regions with weak economic strength and interrelations, a small population, or a less diverse industry structure are usually not able to provide all products and services for tourism consumption from its own region (ibid. 2010). Consequently, in order to satisfy tourists’ needs, products and services must be imported from outside the region. Thus, leakages occur, money flows out the region, and the benefit for the regional population can become even marginal (ibid. 2010; Miller and Blair 2009).

The multiplier

The multiplier is the crucial underlying concept that estimates how ‘new money’ (i.e. from outside the region) flows and circulates through an economy (Stabler et al. 2010). A multiplier is defined as the ratio between a generated value of a specific economic indicator and the initial change in consumer (e.g. tourist) spending (Miller and Blair 2009; Stynes 1998). As mentioned above, the initial money spent by tourists does not only cause direct effects on where it was spent, but since it is re-spent by suppliers within the economy, it also triggers indirect effects on related sectors in the economy (Cooper 2008; Kasimati 2008). However, employees working both in tourism and tourism-related sectors gain their wages and salaries from the products and services sold to tourists. Therefore, the final loop of economic effects are the induced effects, which are triggered by increased incomes of employees in all economic sectors. Total economic impact can, thus, be defined by the simple equation:

Total effect = direct + indirect + induced effects

As mentioned, the ratio between the generated economic total value and initial tourist expenditures is defined as the multiplier (Stabler et al. 2010). More precisely, type I multipliers consider indirect effects, whereas type II multipliers take into account indirect and induced effects (Stynes 1998). Usually, strong and highly diversified economies showing large sectoral inter-linkages and small levels of leakages tend to have large multipliers, and vice versa (Miller and Blair 2009). To sum up, multipliers illustrate the effects from changes in tourist spending on every sector in the economy, and can be
expressed in various forms, such as output, employment, income or value-added multipliers, respectively (Crompton 1995; Kasimati 2008; Miller and Blair 2009; Stabler et al. 2010; Stynes 1998; Kronenberg et al. 2018). For the socio-economic impact study at hand, the focus is on type I employment and income multipliers.

### 4.1.2 The regional input-output model for Jämtland

To capture both primary and secondary socio-economic effects on the regional economy, I have developed and applied a regional input-output model for Jämtland Härjedalen (Miller and Blair 2009). As outlined in previous chapters, the IO model is one type of economic impact model that is able to estimate both primary and secondary effects of a specific activity on the regional economy. The model considers transactions between the sectors required to produce the tourism products and services demanded by the end consumers (i.e. tourists).

Although the literature widely discusses the limitations of IO models and also more complex models exist (Dwyer et al. 2004), the basic IO framework was applied in this study because of the following reasons:

- I am interested in the socio-economic effects of tourism on employment and income in the region. To quantify secondary employment and income effects based on inter-sectoral linkages, there is, to the best of my knowledge, no other way than applying one of the economic impact models available in the literature.
- The decision to choose IO over more complex models, such as CGE, was based on several reasons. First, even a CGE model incorporates the IO architecture, i.e. IO assumptions are also applied in CGE models (Burfisher 2017). Second, the database of CGE models are often outdated or older than the database in basic IO models. This is because CGE models, besides IO tables, require also additional data which is rarely updated. Third, CGE models include a range of equations that attempt to describe the behaviour of actors in an ‘equilibrium economy’ (Chen 2008). These modelling assumptions, however, are based on pure neoclassic economic theory (Burfisher 2017). As shown above in my thesis, I rather criticise this theoretical paradigm (Komlos 2012). This implies that most of the ‘advancements’ (Dwyer et al. 2004) CGE models may show over IO models, actually are not considered so advanced from a critical (i.e. heterodox) economic point of view. Fourth, unlike IO...
models, CGE models are costly (time- and money-wise), non-transparent, and usually do not consider regional specific characteristics

- The results I gain from regional IO models allow me to conduct further analyses in order to obtain occupational specific effects and the corresponding income distributions in the sector.

The transparency in terms of modelling process, assumptions, and limitations of the model further support the decision to apply the input-output methodology in my thesis (Miller and Blair 2009).

The Input-Output (IO) model

The first modern-type Input-Output model was developed in the 1940s by Wassily Leontief (Kasimati 2008) who was awarded for his academic achievement with the Nobel Prize for Economics in 1973. 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 IO framework quantifies the relative importance of interrelationships of the sectors in an economy. The database for the IO model is the IO table defined as a so-called transaction matrix. The columns of this matrix display the monetary values of received input units, while the rows are reflecting the corresponding units of output. The input of each sector includes products and services required from other industry sectors to generate the sector’s output (i.e. sector to sector input), as well as the sector’s contribution to value-added (i.e. comprising tax contribution, profits, as well as salaries and wages). The corresponding level of output comprises the monetary value of the sector’s output to final demand and other sectors in the economy. The latter output level shows how much each sector sells to other sectors, households and to the governments. Both intermediate and final demand generate total demand for inputs and thus determine the total amount of output produced (Frechtling 2011, Hara 2008, Klijs et al. 2012, Lindberg and Hansson 2009, Stabler et al. 2010; Stynes 1998).

The IO model, typically derived via matrix algebra, can be expressed as follows:

\[ \Delta x = (I - A)^{-1} \Delta y \]

where \( x \) represents the vector of total sales of each sector, \( I \) is the identity matrix whose diagonal elements are all 1 and the rest zero. The technology matrix \( A \) shows the degree of inter-industry transactions. These transactions are
represented as IO coefficients for each cell in the matrix. In detail, the coefficient simply shows the percentage share of each input on the total input. The vector \( y \) indicates the final demand (Miller and Blair 2009).

The impact of tourism can, thus, be studied by altering values for final demand (i.e. \( \Delta y \)), in my case tourist expenditures in each sector. This results in corresponding changes in sectoral output, employment, or income. Notably, the IO model consists of the inherent structure of an economy, i.e. the interlinkages between the sectors as well as importation rates. Accordingly, when demand in one sector increases, let’s say a tourist consumes accommodation and food services, the model allows for estimating the amount of output, employment (and the corresponding income) required from other, backward-linked, sectors to satisfy this demand (Stabler et al. 2010; Stynes 1998). In this way, the model is able to capture direct and indirect effects. The induced effects follow the same logic. With the additional consideration of wages and salaries as input, and final household demand as output in the technology matrix \( A \), the model inverts additional expenditures made by employees of each sector. By doing so, it is possible to capture the consumption made by households, which is equivalent to employees of each sector (Hara 2008, Klijs et al. 2012). However, the literature warns for potential overestimations of induced effects (i.e. based on type II multipliers), as this third round of household-spending can become too unreliable (Miller and Blair 2009). Therefore, the Jämtland model in this thesis considers only direct and indirect effects from tourism.

Regionalisation of the national Input-Output model

Unlike, for instance, the US-based IMPLAN database (Minnesota Implan Group 2015), the statistical bureaus in Sweden and other countries do not provide IO tables on the regional level. Hence, multipliers for tourism-related sectors are rarely available on the regional level (Kowalewski 2012). To address this issue, various regionalisation techniques were developed with the aim to capture region-specific industry structures as represented by regional multipliers. The available techniques fall into three categories: the survey-, the non-survey-, or the mixed method approach, respectively (Hewings 1985, Richardson 1972). For this study, I adopted the cost- and time efficient non-survey method. With this method, national IO coefficients are adjusted to regional coefficients, i.e. the technology matrix \( A \) from the national model is adjusted for region-specific values. The criteria for the adjustment is the Flegg
Location Quotient (FLQ) (Flegg and Webber 2000). The FLQ method adjusts the size of each regional industry sector from the perspective of its specific employment structure. More precisely, every sector requires a certain amount of employment necessary to generate its known output level, defined as the employment per output ratio. If a sector’s regional ratio is below the respective sector’s national ratio, it is assumed that the sector is underrepresented in the region. Hence, the sector needs to import a certain amount of the resources into the region to satisfy the specific demand. Most importantly, FLQ further considers the relative size of the regional economy by incorporating a weighting indicator (Flegg and Webber 2000). Accordingly, the FLQ regionalisation technique implies a certain degree of self-sufficiency of each sector in the regional economy as well as the corresponding importation requirements (Gerking et al., 2001; Kuhar et al. 2009; Var and Quayson, 1985; Flegg and Webber 1997; Miller and Blair 2009). FLQ is defined for the respective year \( t \) as:

\[
FLQ_{ijt} = \frac{RE_i / NE_i}{RE_j / NE_j} \left[ \log_2 \left( 1 + \frac{TRE_i}{TNE} \right) \right]^\delta
\]

Subscripts \( i \) and \( j \) indicate the supplying and purchasing sectors in year \( t \), respectively. \( RE \) is Jämtland Härjedalen’s regional employment; \( NE \) is the national employment; \( TRE \) reflects Jämtland Härjedalen’s total employment; and \( TNE \) is Sweden’s total employment. The term \( \log_2 \left( 1 + \frac{TRE_i}{TNE} \right)^\delta \) is a weighted measure for the region’s relative size. The parameter \( \delta \) takes values between 0 and 1 (Flegg and Tohmo 2011). The larger a region, the greater the input coefficient and the smaller the importation coefficient. The literature recommends \( \delta = 0.3 \) as the most accurate value (Bonfiglio and Chelli 2008; Flegg and Webber 1997, 2000; Flegg and Thomo 2011; Lindberg et al. 2012), which has been adopted for the Jämtland Härjedalen model. For cells with a FLQ values below 1, regional coefficients are obtained by multiplying national coefficients with the corresponding FLQ value. For cells with a FLQ value above 1, no adjustments are necessary by definition, thus the regional coefficients are the same as the national coefficients.

Assumptions of Input-Output models

As mentioned earlier, the IO framework is based upon various modelling assumptions. These assumptions can be summarised as follows (Miller and Blair 2009):
• The output generated from each sector is aggregated by only one product or service. It is assumed that, for instance, hotels only provide accommodation services, although in practice some of the sales revenues are generated through the lounge/bar, souvenirs etc. This assumption is known as industry technology assumption (ITA)

• Any increase in demand can be satisfied, and there are no resource limitations assumed, such as lack of skilled workers or limited intermediate products

• The commodity input structure is assumed to be fixed, meaning that concepts such as economy of scale to increase efficiency do not apply. Thus, increasing demand requires the same ratio of inputs. Hence, in basic IO models there are no (price) elasticities or substitution effects incorporated (Dwyer et al. 2004)

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

In particular, the limited consideration of price changes have led to a relatively large sub-community of economists who believe that results from IO models are not reliable. However, the reliability question mainly depends on the combination of the following aspects: 1) how and for what purpose the model is applied, and 2) how the results are interpreted, and 3) whether the limitations are sufficiently discussed and considered for interpretation and policy recommendation (Crompton 1995).

For instance, if one wants to study specific what-if scenarios for forecasting purposes, such as the effect from 5% more tourism demand in the upcoming year, the IO model, indeed, is limited and would lead to unreliable results. A 5% increase in tourism demand will not necessarily generate 5% more jobs, income, or additional sales throughout the regional economy. There are likely chances that the increase in demand can be met, at least partially, by existing employees, even without increasing wage levels, thus not triggering jobs and income effects at all. Moreover, although a company may need additional inputs from other sectors, this does not necessarily imply that the company’s costs for additional input will proportionally increase by 5%, especially when considering economy of scale effects in practice. Thus, the correct interpretation would be that the model only shows how much employment and income would be required to supply an additional 5% demand (Hara 2008; Klijs et al. 2012; Stabler et al. 2010). The final empirical reliability aspect relates to the industry structure of a specific year. As described above, IO models are usually outdated by at least 2-3 years. If these outdated models are then used
for purposes of estimating economic impacts, it can obviously lead to significant over- or underestimations (Kronenberg et al. 2018).

To conclude, the context applied to the IO model here clearly is not a what-if scenario. Instead, a retrospective study on tourism’s impact on the regional economy is conducted (Miller and Blair 2009). This means that the study shows how much of the employment and income in the region of Jämtland Härjedalen can be attributed to tourism activities in each particular year during the period 2008–2016. Compared to a one-year perspective, which would not allow the conclusion that tourism generated all these jobs in the region, a perspective over nine consecutive years, indeed, allows it to be deduced that those jobs are generated and retained from tourism (Daniels 2004; Kronenberg et al. 2018).

Furthermore, this analysis is based on supply and demand data from the same year, respectively. More precisely, demand data (i.e. tourist expenditures) of a particular year is applied to the corresponding model of the same year. This allows me to most precisely estimate the impact of tourism, without the risk of making over- or underestimations due to outdated IO models. Again, the purpose is not to conduct a potential forecast scenario for the future, but rather to estimate how tourism contributed to the generation and retention of employment and income during a past period, i.e. from 2008 to 2016.

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

**Data collection**

All data to develop the regional input-output model for Jämtland Härjedalen for the years 2008-2016 are secondary data, i.e. obtained from secondary data sources. More precisely, national IO tables are available on the official website of the statistical central bureau of Sweden (SCB). The regionalisation of the IO model by the FLQ method required additional employment data per sector. This comprises the total amount of people employed in each sector for both
the national and the regional level. The data was bought from SCB for 64 sectors of the Swedish economy for the years 2008–2016.

The demand sided data is similarly provided from secondary sources, including the TDB (Rese- och Turistdatabasen), released by Resurs AB, a private company originally commissioned by the Swedish government to collect and analyse tourist expenditure data in Sweden on various geographic levels over the years. Based on TDB data, the regional tourism board of Jämtland Härjedalen (Jämtland Härjedalen Tourism — JHT) publishes their annual reports on tourism statistics in the Jämtland region. In these reports, tourism demand is illustrated by volume of sales attributed to tourism, which, in turn, is used modelling the vector of final demand in the regional model. The reasons for using secondary demand data in this study are as follows:

- Cost and time efficiency: To make use of already existing, official statistics on tourism demand in the region
- Transparency and comparability: Official statistics have already been communicated through various public channels
- Comprehensiveness: These statistics include various types of tourists and expenditures on all sectors under study

Vector for final demand (y) in the regional model

Originally, Sweden’s national input-output table consists of 64 aggregated sectors of the Swedish economy, classified into SNI codes (Svensk Näringsgrensindelning), the Swedish standard for industry classification. The table had to be adjusted for the regionalisation process, resulting in a final table with sixty aggregated sectors for Jämtland Härjedalen’s economy. Accordingly, the vector of final demand (y) allocates the products and services that tourists consume in these sectors, respectively (Stynes 1998; UNWTO 2013). Defining the vector of final demand required some aggregation of the demand data. This means that TDB statistics on expenditures per product are of higher detail level than the sectors of the IO table. The SNI sectors of the IO table are, finally, linked to the activities according to the CPA format (Classification of Products by Activity). More precisely, the following allocation process was conducted:
<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>I</td>
</tr>
<tr>
<td>Groceries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restaurant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuel</td>
<td>Wholesale and retail trade</td>
<td>G</td>
</tr>
<tr>
<td>Shopping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activities</td>
<td>Sporting services, amusement and recreation services</td>
<td>R93</td>
</tr>
<tr>
<td>Transportation</td>
<td>omitted</td>
<td>H49-51</td>
</tr>
</tbody>
</table>

**Table 4.1.2.1 Allocation of activities to sectors**

Expenditures on transportation have been omitted because TDB does not distinguish between modes of transportation. On the regional context, it is, therefore, not possible to estimate where the purchase of transportation service have been undertaken. For instance, expenditures on flight tickets to Jämtland Härjedalen might be included in the TDB, but the payment was done prior the trip and the money does not relate to the Jämtland Härjedalen region. Hence, it should not be included in the impact analysis.

The final demand vector \((y)\) for the Jämtland Härjedalen model consists of three aggregated tourism-related sectors: (1) accommodation and food, (2) wholesale and retail trade, and (3) sporting services, amusement and recreation services. Accordingly, annual tourist expenditures are allocated to these three sectors to define \(y\) for each year. These expenditures are adjusted towards net expenditures, i.e. comprising local production and profit margins. This step is necessary to ensure that only the amount staying in the region is considered in the impact analysis (Stynes 1998). As a result, the vector of final demand equals the direct effects of tourism per sector.

### 4.1.3 Occupation-based modelling

Results from input-output modelling provide a comprehensive picture of tourism’s direct, indirect and induced effects on employment and income in the region. However, these numbers remain as totals per tourism sector, and do not indicate which type of occupations benefit from tourism, and to what extent. Therefore, the next part of the study comprises a method called occupation-based modelling (OBM), inspired by the work of Daniels (2004).
OBM combines IO employment effects with additional income data to gain insights about detailed employment- and income effects for each occupational area that exists within a specific sector. More precisely, the contribution of tourism to the amount of full-time equivalent (FTE) jobs of particular occupational areas within one particular tourism sub-sector becomes evident. By combining the amount of FTE with average income levels of these occupational areas, it is possible to estimate tourism’s contribution to the total income generated for each occupational area.

Typical occupational areas are, for instance, leadership positions, receptionists, waiter/waitress, or cleaning personnel. Interestingly, OBM has only been applied in tourism for single temporary tourism events, but not so far as to measure the effects of total tourism demand within a specific region over a longer period of time. The difference will be visible in the interpretation of these effects: An application in a tourism event context does not tell us how much employment is actually generated by this event (Crompton 1995). It rather tells us 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, a long-term analysis of employment and income effects over multiple years indicates how much of employment and income is actually generated or retained from tourism sectors (Kronenberg et al. 2018). Hence, tourism demand can be considered the main driver in generating these types of jobs in tourism core sectors, such as hotels or travel agencies (Daniels 2004). Particularly, in back- and forward-linked regional sectors, where tourism only generates a certain share of the total sales, it is difficult to provide evidence of tourism’s actual contribution to occupational positions. OBM provides one way to fill this gap.

Technically, this is done by considering the share of each occupational type on total employment in the respective sector. By doing so, this method tracks how the average IO-based employment effects are distributed across occupation types throughout the economic sectors. Likewise, utilising data on the corresponding income level per job type allows a detailed measurement of income distribution effects within the sectors (Daniels 2004). The equation for the occupation-based model is defined as:

$$I_{o,s,t} = A_{o,s,t} \times R_{o,s,t} \times E_{s,t}$$

where $I$ is the total income effect for the occupational area $o$ in the sector $s$ in the year $t$, resulting from the change in final demand (i.e. tourist expenditures). $A$ is the average occupation year-round income, as obtained from SCB data. The
variable $R$ represents the employment ratio by sectoral occupation expressed in percentage terms. $E$ is the employment effect for sector $s$, estimated by the regional IO model. This equation applies to each occupational type within the economic sectors under study. More precisely, occupational areas are defined by the SSYK codes, the standard for Swedish occupational classification (‘standard för svensk yrkesklassificering’). SSYK categories can be disaggregated, depending on the level of detail, ranging between 1-4-digit levels.

In fact, analysing an extensive set of occupational areas on the most detailed level for all three tourism-related sectors from 2008–2016 will lead to an extensive amount of data and information. Therefore, for this thesis, the focus of analysis will be limited to the approximately 20 most often occurring occupational areas within the core tourism sector ‘accommodation and food’. The analyses for the years 2008–2013 are based on the SSYK1996 version. From the years 2014–2016, the SSYK classification has been updated according to the SSYK2012 version. This means that some positions on the two- and three-digit levels have been changed. This implies a minor data limitation, as the constellation of the occupation categories change from 2013 to 2014, and hence the time series should not be read as a continuous series of nine years, but rather two separate series, one from 2008–2013 and one from 2014–2016.12

The advantages of OBM over the SAM technique follow a more detailed assessment of the economic impact on employment within various subsectors. Most importantly, OBM transforms average and aggregated macro-level IO employment effects towards an occupation-specific perspective, thereby considering the human resource structure of an average firm within the respective tourism sub-sector(s) (Daniels 2004).

12 The following example illustrates the application of the OBM approach: the occupational area ‘kitchen assistants’ (SSYK code 941) makes up 17% of all employment in the accommodation & food sector in 2016 with an average annual income of approximately 192,000 SEK. The results from IO modelling show that the total employment effects from tourism is approximately 2300 full time equivalent (FTE) jobs. Accordingly, OBM calculates the income effects for kitchen assistants of approximately 75 million SEK (192,000SEK * 2300 * 0.17). The same equation is applied to all other occupational areas in the sector. Accordingly, it is possible to estimate the total amount of income for each occupational area, as generated by tourism demand in the region.
4.1.4 Measures of income inequality

Various measurement techniques have been developed to measure income inequalities in a specific geographic area, or within a specific category, sector, or industry. Among the most popular techniques, frequently the Gini coefficient and the corresponding Lorenz curve are mentioned, as well as their advancement in the form of the Atkinson index (Atkinson 1969; DeMaio 2007). I am applying the Gini coefficient and the Lorenz curve to illustrate income inequality among the twenty most often occurring occupational areas within the accommodation and food sector of the Jämtland Härjedalen region.

The Lorenz curve is a graphical illustration of the income distribution of a specific area under study (De Maio 2007). In the specific study context, it is the differences in incomes of approximately twenty occupational areas in the accommodation and food sector. As illustrated in Figure 4.1.4.1, the x-axis shows the cumulative share of earners, while the y-axis indicates the cumulative share of total income earned (adopted from Dorfman 1979).

The diagonal (i.e. straight) line illustrates total equality, which is achieved if every income class (i.e. occupational area) receives the same proportional share of total income in the sector. A Lorenz curve falling below the diagonal indicates the level of inequality, i.e. the further away the curve from the diagonal, the more inequal the income distribution (and vice versa). The Gini coefficient is directly related to the Lorenz curve, expressing the income inequality by numbers. Concretely, it represents the percentage share of the area A of the total area of the triangle A + B, i.e. \( Gini \ coefficient = \frac{Area\ A}{Area\ A+B} \). Thus, the closer the Gini coefficient towards 0, the more the Lorenz curve matches the diagonal, and hence the more equal is the income distributed in the sector (Dorfman 1979). The combination of a graphical and numerical analysis is recommended as a practical way to illustrate income distribution trends in tourism occupations (Lee and Kang 1998).
4.2 Interviews

Qualitative data collection comprises in-depth *face-to-face* interviews with tourism representatives at various regional institutions. In total, six interviews were conducted during summer and autumn 2018. Interviews were held in Swedish and English, and subsequently transcribed and translated into English. The institutions were selected with the aim of collecting data from the perspectives of major institutional stakeholders of the regional tourism industry, i.e. from both the public- and private sectors (Dopfer et al. 2004). More precisely, data was collected from the following regional institutions: The regional division of the gastronomy association (*Visita*), the region Jämtland Härjedalen (*Region Jämtland Härjedalen*), the municipality of the regional capital city Östersund (*Östersunds kommun*), the regional tourism association (*JHT — Jämtland Härjedalen Tourism*), the regional labour union for the accommodation and food sector (*HRF — Hotell- och restaurangfacket*), and the regional division of the public employment service (*Arbetsförmedlingen*).

Interview partners were selected according to their roles and duties in their respective institution, i.e. their roles should comprise the general area of tourism and gastronomy. The conducted semi-structured interviews allowed for follow-up questions of the topics when required or deemed appropriate. Interviews were particularly designed to gain context-specific insights about employment and income aspects and development trends within the regional tourism industry. Interview partners were, first, introduced to the idea of the framework for measuring socio-economic effects of tourism, but not informed about the quantitative results in order to avoid any influence of their response behaviour. Rather, the discussed topics comprised current issues of the regional tourism industry related to employment and income in general as well as specific occupational areas that are also considered in the IO-OBM analysis. This includes, among others, the employment and income situation in the sector, shortcomings and problem areas, but also benefits that certain occupational areas experience. In this regard, it is possible to enrich the quantitative results with qualitative data to identify and also to explain certain employment and income developments for the sector itself, and, most importantly, for specific occupational areas during the period under study.
5 Results and analysis

The following results and analysis section does not separate between quantitative and qualitative findings. Instead, the presentation and discussion of empirical findings follows an amalgamation-based structure, i.e. departing from region-wide results over sectoral results to results for specific occupational areas within the accommodation and food sector. This means that quantitative results, mainly illustrated by tables and graphs, are complemented and simultaneously discussed (where it applies) on the base of data from qualitative interviews. Due to the fact that the quantitative dataset for occupation-specific employment and income effects is so immense, the qualitative data helps to identify the focus of the analysis, i.e. occupational areas that require further analyses. This comprises both positive and/or negative aspects as elucidated from the interviews.

The chapter is divided into three parts: The first part gives insights on sectoral interlinkages of the regional tourism industry. More precisely, a perspective on the multipliers for seven tourism-related industry sectors provides insights about the potential of these sectors to contribute to the generation of employment and income in the entire regional economy. The periodic perspective further shows how these linkages changed over time (i.e. from 2008-2016). The second part of this chapter presents the findings of the tourism impact study. This comprises both direct and indirect effects on sectoral employment and income triggered by tourism activities in the period from 2008 to 2016. Finally, the third part presents the findings gained from the occupation-based modelling approach, i.e. employment and income effects per occupational area. As mentioned above, due to space limitations, this chapter will focus on selected occupations within the accommodation and food sector in the region of Jämtland Härjedalen.

5.1 The regional industry structure: employment and income multipliers

The first step in analysing the socio-economic impacts of tourism in Jämtland is the regionalisation of the national IO model which resulted in the estimation of various types of multipliers for each of the 60 sectors in the regional economy for the period between 2008 and 2016 (Miller and Blair 2009). As outlined, employment and income multipliers are the focus in this
Licentiate study. The full range of economic effects based on IO multipliers was published elsewhere (see: Kronenberg et al. 2018). To recall, multipliers provide insights about the industry’s structure in terms of interlinkages of the sectors in question. These are the supply-sided results that provide the basis for applying the actual impact study. The latter involves determining the demand vector, i.e. how much demand in each sector can be attributed to tourism. The impact results will be presented in the consequent section 5.2.

Employment multipliers

Table 5.1.1 shows the regional type I employment multipliers for seven tourism-related sectors, while Table 5.1.2 displays the corresponding annual and periodic percentage changes. The green-yellow-red coloured nuances are aligned for each column (i.e. sector), showing the lowest multiplier in red, the highest value in green, and the values in between, accordingly, in yellow.

<table>
<thead>
<tr>
<th>Year</th>
<th>Wholesale and retail trade</th>
<th>Land transport services</th>
<th>Air transport services</th>
<th>Accommodation and food services</th>
<th>Travel agency, tour operator</th>
<th>Creative, arts and entertainment services</th>
<th>Sporting services, amusement, recreation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G45-47</td>
<td>H49</td>
<td>H51</td>
<td>I55-56</td>
<td>N79</td>
<td>R90-92</td>
<td>R93</td>
</tr>
<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>0,937</td>
<td>0,743</td>
<td>0,256</td>
<td>1,185</td>
<td>0,286</td>
<td>1,034</td>
<td>1,116</td>
</tr>
<tr>
<td>2016</td>
<td>0,915</td>
<td>0,728</td>
<td>0,253</td>
<td>1,104</td>
<td>0,281</td>
<td>0,970</td>
<td>1,077</td>
</tr>
</tbody>
</table>

Table 5.1.1 Employment multiplier

13 The colour nuances only highlight the differences in magnitudes and are not meant to indicate values, i.e. green is not meant to be a ‘good’ effect, neither does red mean to be a ‘bad’ effect.
Highest multipliers are found in typically labour-intensive sectors, such as accommodation and food and sporting services, amusement and recreation (Baum et al. 2016b; Zampoukos and Ioannides 2011). In turn, the sectors air transport and travel agency, tour operator account for the lowest employment multipliers, which means that these sectors contribute to less employment in the regional economy in satisfying demand of the same amount. More precisely, the unit of analysis in regard to employment multipliers is 1 million SEK. This means, for instance, that in 2016, the sector travel agency, tour operator contributed to 0,281 full-time-equivalent jobs in the entire regional economy for every 1 million SEK in demand for services provided by this sector. Moreover, out of the 0,281 FTE jobs, 0,265 are attributed directly to its own sector, and the remaining difference (0,016) are contributed indirectly to the entire regional economy.  

Interestingly, in contrast to the low employment multiplier sectors, the labour-intensive sector accommodation and food contributed nearly four times as much to employment (i.e. 1,104) for demanded tourism services worth the same amount, i.e. 1 million SEK. This implies that these sectors are stronger interlinked with the regional economy, and thus contribute more strongly to the generation of employment in its own sector, but also in other sectors of the regional economy.

Table 5.1.2 Percentage changes of employment multiplier to previous year

<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>‘08 – ‘16</td>
<td>-15,73%</td>
<td>-15,09%</td>
<td>-23,80%</td>
<td>-14,14%</td>
<td>-25,13%</td>
<td>-7,94%</td>
<td>-18,92%</td>
</tr>
<tr>
<td>‘08 – ‘09</td>
<td>3,63%</td>
<td>5,42%</td>
<td>-7,49%</td>
<td>1,23%</td>
<td>-6,95%</td>
<td>3,48%</td>
<td>0,25%</td>
</tr>
<tr>
<td>‘09 – ‘10</td>
<td>-4,42%</td>
<td>-3,26%</td>
<td>8,30%</td>
<td>0,36%</td>
<td>-4,54%</td>
<td>0,83%</td>
<td>-3,99%</td>
</tr>
<tr>
<td>‘10 – ‘11</td>
<td>-5,18%</td>
<td>-3,71%</td>
<td>-3,25%</td>
<td>-4,85%</td>
<td>-4,24%</td>
<td>-4,37%</td>
<td>-6,11%</td>
</tr>
<tr>
<td>‘11 – ‘12</td>
<td>1,56%</td>
<td>-3,66%</td>
<td>-4,93%</td>
<td>2,42%</td>
<td>-7,36%</td>
<td>0,15%</td>
<td>-2,81%</td>
</tr>
<tr>
<td>‘12 – ‘13</td>
<td>-0,38%</td>
<td>-1,64%</td>
<td>-11,02%</td>
<td>-0,37%</td>
<td>-1,80%</td>
<td>-2,14%</td>
<td>-3,65%</td>
</tr>
<tr>
<td>‘13 – ‘14</td>
<td>-5,00%</td>
<td>-4,07%</td>
<td>0,01%</td>
<td>-4,09%</td>
<td>4,81%</td>
<td>-0,09%</td>
<td>1,53%</td>
</tr>
<tr>
<td>‘14 – ‘15</td>
<td>-4,37%</td>
<td>-2,94%</td>
<td>-5,66%</td>
<td>-2,55%</td>
<td>-5,75%</td>
<td>0,44%</td>
<td>-2,20%</td>
</tr>
<tr>
<td>‘15 – ‘16</td>
<td>-2,37%</td>
<td>-2,00%</td>
<td>-1,51%</td>
<td>-6,87%</td>
<td>-2,05%</td>
<td>-6,19%</td>
<td>-3,50%</td>
</tr>
</tbody>
</table>

14 The distinction between direct and indirect employment multipliers are not illustrated in the tables due to space limitations. Hence, the multipliers always comprise the total of direct and indirect effects.
However, in general, the results in both tables clearly indicate that employment multipliers in all seven tourism-related sectors seem to have dramatically decreased over the period of nine years, ranging from -8% (creative, arts, and entertainment) up to -25% (travel agency and tour operator). This is a clear and important sign that in the region of Jämtland Härgedalen, the interlinkages between tourism industry sectors and other economic sectors are becoming weaker over the time. Obviously, over the years, the structure of the tourism industry creates less and less employment in the regional economy. In mainstream economic jargon this trend is interpreted in terms of efficiency. More precisely, over the nine-year period, the tourism industry of Jämtland Härgedalen becomes more labour efficient, i.e. each employee generates more sales output over time with the help of, for instance, advancements in information and communication technology (Capello 2007; Blanchard and Illing 2013).

**Income multipliers**

The potential of Jämtland Härgedalen’s tourism industry to contribute to income in the region looks more optimistic, compared to the industry’s potential to contribute to employment. Over the period of nine years, four sectors have improved their capacity to generate income within the regional economy of Jämtland, namely wholesale and retail trade, land transport, air transport, and accommodation and food.

<table>
<thead>
<tr>
<th>Year</th>
<th>Wholesale and retail trade</th>
<th>Land transport services</th>
<th>Air transport services</th>
<th>Accommodation and food services</th>
<th>Travel agency, tour operator</th>
<th>Creative, arts and entertainment services</th>
<th>Sporting services, amusement, recreation</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>0.312</td>
<td>0.233</td>
<td>0.115</td>
<td>0.303</td>
<td>0.106</td>
<td>0.234</td>
<td>0.307</td>
</tr>
<tr>
<td>2016</td>
<td>0.314</td>
<td>0.234</td>
<td>0.119</td>
<td>0.299</td>
<td>0.105</td>
<td>0.227</td>
<td>0.298</td>
</tr>
</tbody>
</table>

Table 5.1.3 Income multipliers
Table 5.1.4 Percentage changes of income multipliers to previous year

<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>'08 – '16</td>
<td>3,06%</td>
<td>4,70%</td>
<td>1,14%</td>
<td>5,29%</td>
<td>-11,60%</td>
<td>-7,98%</td>
<td>-3,98%</td>
</tr>
<tr>
<td>'08 – '09</td>
<td>7,34%</td>
<td>6,21%</td>
<td>3,08%</td>
<td>3,16%</td>
<td>-3,27%</td>
<td>0,47%</td>
<td>2,38%</td>
</tr>
<tr>
<td>'09 – '10</td>
<td>-5,06%</td>
<td>1,91%</td>
<td>31,45%</td>
<td>-0,57%</td>
<td>-7,54%</td>
<td>-2,02%</td>
<td>-2,34%</td>
</tr>
<tr>
<td>'10 – '11</td>
<td>-1,43%</td>
<td>-0,82%</td>
<td>20,44%</td>
<td>0,98%</td>
<td>3,79%</td>
<td>0,12%</td>
<td>-1,18%</td>
</tr>
<tr>
<td>'11 – '12</td>
<td>4,22%</td>
<td>-1,88%</td>
<td>20,26%</td>
<td>2,44%</td>
<td>-7,32%</td>
<td>0,75%</td>
<td>1,89%</td>
</tr>
<tr>
<td>'12 – '13</td>
<td>2,24%</td>
<td>0,90%</td>
<td>-22,45%</td>
<td>1,46%</td>
<td>3,69%</td>
<td>-1,61%</td>
<td>-0,83%</td>
</tr>
<tr>
<td>'13 – '14</td>
<td>-1,29%</td>
<td>-1,04%</td>
<td>-29,57%</td>
<td>0,92%</td>
<td>2,56%</td>
<td>1,76%</td>
<td>0,35%</td>
</tr>
<tr>
<td>'14 – '15</td>
<td>-3,13%</td>
<td>-0,99%</td>
<td>-8,31%</td>
<td>-2,05%</td>
<td>-1,97%</td>
<td>-4,53%</td>
<td>-1,42%</td>
</tr>
<tr>
<td>'15 – '16</td>
<td>0,70%</td>
<td>0,55%</td>
<td>2,91%</td>
<td>-1,05%</td>
<td>-1,43%</td>
<td>-3,06%</td>
<td>-2,79%</td>
</tr>
</tbody>
</table>

Among those, the *accommodation and food* sector stands out with an increase of income multipliers by more than 5% in 2016 compared to the base year 2008. Interestingly, this core tourism-sector also accounts for the second highest multipliers among the seven tourism sectors, followed by the highest interlinked sector *wholesale and retail* trade. The unit of analysis for income multipliers is 1, which means that 1 SEK in demand for accommodation and food services generates 0,299 SEK income in the entire economy of Jämtland Härjedalen in 2016. In contrast to the positive development of the accommodation and food sector, the income multipliers related to the sector *travel agencies and tour operators* account for the lowest among all sectors (i.e. 0,105 in 2016), and also decreased by almost -12% within the nine years of the study — the poorest development among all sectors. These quantitative findings provide a first critical hint that the contribution of the tourism sectors to both employment and income in the regional economy tends to become less significant.

### 5.2 The socio-economic impact of tourism on regional industry sectors

Based on the findings gained from employment and income multipliers presented above, the following sub-chapter presents the results from the regional tourism impact study. Following the IO approach, the impact of tourism on employment and income is always the result from initial demand for tourism-related products and services (Stynes 1998; Stabler et al. 2010). This initial demand, the *direct* effect, is measured in monetary terms allocated
to the three sectors wholesale and retail trade, accommodation and food services, and sporting services, amusement, recreation. The annual direct effects of tourism are illustrated in Table 5.2.1.

<table>
<thead>
<tr>
<th>Year</th>
<th>Wholesale and retail trade</th>
<th>Accommodation and food services</th>
<th>Sporting services, amusement, recreation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G45-47</td>
<td>I55-56</td>
<td>R93</td>
</tr>
<tr>
<td>2008</td>
<td>446 990 000 SEK</td>
<td>1 479 000 000 SEK</td>
<td>612 000 000 SEK</td>
</tr>
<tr>
<td>2009</td>
<td>475 020 000 SEK</td>
<td>1 597 000 000 SEK</td>
<td>597 000 000 SEK</td>
</tr>
<tr>
<td>2010</td>
<td>480 600 000 SEK</td>
<td>1 800 000 000 SEK</td>
<td>680 000 000 SEK</td>
</tr>
<tr>
<td>2011</td>
<td>497 150 000 SEK</td>
<td>1 891 000 000 SEK</td>
<td>703 000 000 SEK</td>
</tr>
<tr>
<td>2012</td>
<td>529 670 000 SEK</td>
<td>1 889 000 000 SEK</td>
<td>701 000 000 SEK</td>
</tr>
<tr>
<td>2013</td>
<td>532 250 000 SEK</td>
<td>2 069 000 000 SEK</td>
<td>725 000 000 SEK</td>
</tr>
<tr>
<td>2014</td>
<td>587 090 000 SEK</td>
<td>2 065 000 000 SEK</td>
<td>755 000 000 SEK</td>
</tr>
<tr>
<td>2015</td>
<td>621 036 500 SEK</td>
<td>2 136 700 000 SEK</td>
<td>789 650 000 SEK</td>
</tr>
<tr>
<td>2016</td>
<td>660 344 300 SEK</td>
<td>2 271 940 000 SEK</td>
<td>839 630 000 SEK</td>
</tr>
</tbody>
</table>

Table 5.2.1 Direct economic effects of tourism

It is no surprise that the largest direct effect is attributed to the accommodation and food sector, which is considered as the key tourism-sector in the region (Hara 2008). Interestingly, the growth in demand for this sector’s service output increases almost steadily year by year, only with a slightly negative growth in 2012 and 2014, due to temporary recession years in the region. In a similar way, the sporting services, amusement, recreation sector was recording minor decreases in 2009 and 2012. The wholesale and retail trade sector, however, indicates constant positive growth in terms of direct economic effects.

Employment effects per sector

As discussed in previous chapters, the direct economic impact of tourism itself has minor socio-economic relevance, as it is reported only in aggregated monetary values. However, indirect effects are part of the database to gain further insights on employment and income effects. The results of the employment effects triggered by tourism in the region of Jämtland are presented in Figure 5.2.1 below. The dotted line firstly shows the initial total direct effects of all three sectors in monetary terms (i.e. the added values of Table 5.2.1 above). The line below the dotted line indicates the total employment effect for the entire county of Jämtland, expressed in full-time equivalent (FTE) employment. The three lowest lines indicate the total amount of FTE employment in each sector required to satisfy the demand for
the respective sector. In other words, it shows how many FTE jobs are directly and indirectly involved to provide the products and services tourists consume in the region.

Figure 5.2.1 Employment effects

First of all, the direct effects indicate a steady growth, which can naturally be explained by annual increases in tourist arrival numbers in Jämtland. The industry might positively grow in monetary terms. However, the corresponding development of employment does not always follow the same pattern. This is clear for the year 2011, which records a decrease in employment effects in all sectors, although tourism demand increased in the same year. This basically means that tourism contributed to less employment during this year, which can be explained by the decrease in employment multipliers for the majority of the tourism-related sectors. Similarly, the years 2014 and 2016 recorded a decrease in employment effects, particularly in the accommodation and food sector, although tourism demand increased significantly. This can be explained by the particularly negative development of the underlying employment multipliers by -5% in 2011, -4% in 2014, and even -7% in 2016 compared to the respective previous years (see Table 5.1.2). In fact, the effect of negative multiplier developments are not necessarily visible if, at the same time, the tourism demand increases. However, in these particular years, the growth in total demand was not strong enough to outweigh the negative multiplier development. As a result, increasing demand has a decreasing effect on employment in Jämtland in general, and in the accommodation and food sector in particular.
From a critical point of view, employment multipliers and the corresponding employment effects resulting from the regional Input-Output model show the *one-dimensional* character of this approach. The concept of IO effects refers to an increase in monetary demand for one (or more) specific sector(s) and the potential contribution to employment in a particular sector or the entire regional economy. In fact, the growth of one-dimensional indicators does not necessarily give much insight into the ‘quality’ of these effects. Tourism officials, however, are interested to know whether these effects not only have economic significance, such as increasing purchasing power, but also show societal significance, e.g. in the form of improving welfare for the regional population by reducing income inequality:

*Jämtland Härjedalen wants more tourists but also a quality tourism product. Definitely. And the basic motivation for the regions and municipalities is to create employment. Because this is a branch that grows, and therefore jobs are important. [...] It is not only the sales from businesses, it’s also the income of employees and their consumption. That comes from the local population, and this is also one important issue why we focus on the tourism industry, because we know it has a large impact, that is bigger than just the businesses. [...] The effects on the local economy, such as welfare, [...] are often unseen. Therefore, we want to strengthen this industry.*

(Representative Östersunds Kommun)

The figures above show that the employment effects do not always show the same growth patterns as the direct effects do. This gives valuable insights about the regional industry structure and its changes over time. However, the results are limited to aggregated employment information, thus, do not provide deep insights on the social and institutional dynamics behind these structures. This is a typical example of economic analyses that has been criticised by the socio-economic development literature, such as Ulrich (2010), Söderbaum (2017) or Feigl (2017), who address the *monetary reductionism* of contemporary mainstream economic models and analyses. Thus, as outlined, the findings from the qualitative inquiry at the meso level should provide more in-depth insights on employment-related dynamics for the regional tourism industry of Jämtland.

Remember the quantitative results identified a steady decrease in aggregated employment *linkages* between sectors of the regional tourism industry, which implies that the collaboration between the sectors became weaker over the years. At the same time, however, the regional tourism industry together with the regional tourism institutions maintain its crucial role in contributing to the
generation of regional employment. This is especially evident when considering that a range of public and private institutions collaborate and critically discuss employment-related needs and challenges for the regional tourism industry. For example, one interviewed representative of a public institution argues that:

_We have that kind of supporting system in the society [...]. I mean the university is a very important resource to educate employees in tourism, which — hopefully — will be recruited. The branch associations works more specifically for their member companies; the regional tourism association has a close collaboration with the branch associations. The region has people working with staff-competence questions. So does Arbetsförmedlingen...yes, everyone has its own role. Sometimes things are discussed back and forth, but everyone works together as good as possible to provide the companies the 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._ (Representative Jämtland Härjedalen Tourism).

It shows that a range of critical dialogues among different actors in the regional tourism industry are constantly undertaken to discuss employment-related issues. These dialogues among industry representatives at the meso-level seem to have a crucial role in supporting the regional industry to maintain and create more, but also the right type of, tourism occupations. Furthermore, the employment multipliers and employment effects refer to the region-wide economy. Nature-based tourism as well as small and less populated destinations, however, are important for Jämtland Härjedalen’s tourism:

_We are a county with a lot of small businesses, regardless the sector. This is because of the industry structure. We do not have big plants; we do not have big sawmills or similar. We differ in this way a bit, industry-structure-wise. When you look at Västernorrland, you find another structure, heavy industry at the coast. If you look at Norrbotten, they still have a very strong mining industry. They do a good job with the tourism industry, which is in close proximity to Swedish Lapland. But structure wise, there are differences. We are, in fact, more dependent on the tourism industry, and have to work it out as good as possible._ (Representative Jämtland Härjedalen Tourism)

Obviously, especially, the smaller destinations with weaker industrial structure rely strongly on tourism, because tourism activities are the major reason why these destinations even exist:
The mountain destinations would probably not exist...they are the society. The question is what would remain there if there wouldn’t be the strong tourism industry. So, the relevance [of tourism] is extremely high for everyone, for taxi, for construction companies, for all sorts of people to be able to stay...there are schools, there are public services...and actually that’s what the [tourism] organisations are working with. To ensure tourism development to create jobs so that the society remains. They have the role of, so to say, a ‘society builder. (Representative Jämtland Härjedalen Tourism)

Although socio-economic considerations and continuous efforts are undertaken on the meso-level, the development of interlinkages between the sectors indicate that the structure of the tourism industry provides a more and more critical precondition for generating regional employment. This development trend can, of course, be interpreted as a hint confirming the critics of contemporary economic development theories, namely, that the market itself does not solve socio-economic ‘problems’, but rather aims for efficiency and cost reductionism (Ulrich 1993; Brodbeck 2001a, 2001b; 2004, 2010; Komlos 2010, 2019; Söderbaum 2017).

Income effects per sector

With the employed Input-Output approach, the estimated income effects attributed to regional tourism activities remain on a high aggregate level, i.e. total values per sector or per the entire region (Daniels 2004). These are briefly presented in the following graph for the nine-year period 2008–2016. Similarly to employment effects, the income effects are based on the magnitude of tourism demand per year, i.e. the direct effects indicated by the dotted line.

The total income generated by tourism activities in Jämtland ranges from 747 million SEK in 2008 to 1136 million SEK in 2016. Out of the 1136 million SEK in 2016, more than half of the amount (i.e. 627 million SEK) has been generated by workers in the accommodation and food sector, followed by 233 million SEK in the sporting services, amusement, recreation sector and 196 million SEK in the wholesale and retail trade sector.
Figure 5.2.2 Income effects

Due to the predominantly positive developments of income multipliers, the constant increases in tourism demand, but also increasing salary and wage levels over the years, the industry’s contribution to income in the region has grown positively throughout the years. Interestingly, even decreasing multipliers in the year 2015 (-2%) and 2016 (-1%) for the accommodation and food sector have not shown any negative consequences when considering the aggregated effects of total incomes. A summary of both the employment and income effects for tourism-related sectors is presented in Table 5.2.2.

<table>
<thead>
<tr>
<th>Year</th>
<th>Wholesale and retail trade</th>
<th>Accommodation and food services</th>
<th>Sporting services, amusement, recreation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Direct effects</td>
<td>Employment</td>
<td>Income</td>
</tr>
<tr>
<td>'08-'16</td>
<td>47,73%</td>
<td>26,45%</td>
<td>54,77%</td>
</tr>
<tr>
<td>2009</td>
<td>6,27%</td>
<td>10,41%</td>
<td>14,30%</td>
</tr>
<tr>
<td>2010</td>
<td>1,17%</td>
<td>-2,34%</td>
<td>-3,12%</td>
</tr>
<tr>
<td>2011</td>
<td>3,44%</td>
<td>-1,90%</td>
<td>2,05%</td>
</tr>
<tr>
<td>2012</td>
<td>6,54%</td>
<td>7,73%</td>
<td>10,56%</td>
</tr>
<tr>
<td>2013</td>
<td>0,49%</td>
<td>0,07%</td>
<td>2,65%</td>
</tr>
<tr>
<td>2014</td>
<td>10,30%</td>
<td>5,47%</td>
<td>9,72%</td>
</tr>
<tr>
<td>2015</td>
<td>5,78%</td>
<td>1,58%</td>
<td>2,88%</td>
</tr>
<tr>
<td>2016</td>
<td>6,33%</td>
<td>3,49%</td>
<td>6,91%</td>
</tr>
</tbody>
</table>

Table 5.2.2 Summary employment and income effects (annual % changes)
Income distribution per sector

The measurement of income inequality is part of the occupation-based modelling approach and refers to the weighted average income in the 25 most occurring occupations in the accommodation and food sector, 27 occupations in the wholesale, retail and trade, and 24 occupations in the sporting, amusement, recreation sectors, respectively. These occupations reflect approximately 95-97% of the IO-based employment estimates in each sector. As a result, the Lorenz curves in Figure 5.2.3 below graphically illustrate sectoral income inequalities across occupations.

![Lorenz curve: Tourism-related sectors 2016](image)

**Figure 5.2.3 Lorenz curve: Tourism-related sectors 2016**

The three bent Lorenz curves below the straight diagonal indicate that the income distribution across occupations is relatively similar for all three analysed sectors. Among those, the accommodation and food sector (I55-56) indicates the lowest level of inequality as it lies the closest to the diagonal line representing distributional equality. Interestingly enough, variations in distances of the Lorenz curves to the equality line indicate that the wholesale and retail trade sector (G45-47) shows a slightly higher inequality across the lower income groups, while the sporting, amusement and recreation sector (R93) records a slightly higher inequality among the higher income groups. The corresponding Gini coefficients for each sector for the entire period under study are presented in Figure 5.2.4 and their annual changes in Table 5.2.3:
The **Gini coefficient** takes values between 0 and 1, i.e. values towards 0 indicate low inequalities, and values towards 1 indicate highest inequalities. The series for the *accommodation and food* sector shows an increasing income inequality between 2008 and 2012, followed by a relatively stable development for the remaining years. Over the entire period of nine years, income inequality rose by approximately 10% (see table 5.2.3). The negatively developing income distribution for the *accommodation and food* sector particularly during the first years of the study period, i.e. from 2008-2013, can be explained by the fact that the top income earners in particular enjoyed a relatively high increase of income by approximately 8%. In comparison, bottom income earners
benefitted only by 0.8%–1.4% of the positive income development during the same period (Figure 5.2.5).

![Weighted average income: total change between 2008-2013](image)

**Figure 5.2.5 Top- and bottom income earners**

The wholesale, retail and trade sector indicates, on average, higher Gini coefficients and also a more fluctuating development throughout the years. However, the total change of the Gini coefficient between 2008 and 2016 almost remained unchanged (i.e. +1%). The most negative development of the income distribution is recorded for the sporting, amusement and recreation sector, with an increased Gini coefficient by 34% over nine years. So far, all the socio-economic results gained and discussed in this study for the sporting, amusement and recreation sector have been developed negatively. These worrying findings show that economic analyses of an industry purely based on the growth of the sector’s demand (as indicated above by direct effects in Table 5.2.1) is seriously limited. Thus, it implies the importance of overseeing crucial socio-economic aspects that might have a negative effect on the regional workforce within the respective industry.

As highlighted, literature argues, among others, that the development of union membership rates can affect the development of the distribution of income over time (Dabla-Norris et al. 2015; Jaumotte and Osorio-Buitron 2015). The study by Kjellberg (2017) provides data on union membership rates for the accommodation and food sector in Sweden, ranging from 40% in 2008 to 28% in 2016. Accordingly, Figure 5.2.6 below illustrates development trends for decreasing union membership rates and slightly increasing income inequality.
Figure 5.2.6 Gini coefficients and union membership rates

Illustrating the two variables in a scatter plot (Figure 5.2.7 below) helps identifying the pattern between Gini coefficients and union membership rates. Indeed, by doing so, a negative correlation can be observed. The (non-parametric) Spearman’s rank correlation is used to compute correlations based on only a small amount of empirical observations (Zar 2005). The rank-based correlation coefficient indicates a correlation value of $r = -0.58$ that is statistically significant at the 10% level ($p = .102$).

Figure 5.2.7 Correlation Gini and union membership rate
Representative of the tourism institutions are well aware of decreasing union membership rates, and even find reasonable explanations for this development trend:

*It remains quite still, but the industry is losing some. […] 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 from the first place, or at least they leave the union when they change the work. So that’s a little bit unpredictable.* (Representative Hotell- och Restaurangfacket)

Similarly, respondent from Arbedsförmedlingen mentions that the tourism and hospitality industry ‘still has this reputation, that employees think that they are working in tourism until they get a real job. Many of these jobs are not real jobs’. The reason for such critical thinking lies in the often-predominant negative reputation of the industry as an unserious employer, compound by high shares of poorly paid occupations and limited career opportunities (Brandt 2018).

*The tourism industry is an industry that people do not really understand […], which causes especially parents to have a wrong or traditional picture of the industry. So, they do not know which career opportunities in the tourism industry exists. They do not know much about the job professions, the networking opportunities, and so on. They also wonder why their children should work there and make a career within the tourism industry. This means, that we need to inform much earlier about the career paths that exist. And that it is not only the negative sides, i.e. poorly paid, illicit labour, stressful, a lot of evening and weekend shifts, that it exploits people etc. 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.* (Representative Arbedsförmedlingen)

To what extent low- and high-income occupations account for in total employment in the accommodation and food sector will be discussed in the next chapter. So far, the results above indicate that there is a significant relationship between decreasing union membership rates and increasing income inequality. The fact that still today, occupations in the tourism industry are often considered as (low) entry-level jobs might be one reason that tourism workers hesitate to join the unions. This can give the impression that joining a labour union is not at all necessary, although the benefits are evident:

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

The following section presents and discusses effects from a more disaggregated perspective. By putting the focus on income and employment effects for specific occupational areas, this section seeks to gain deeper insights of context-specific effects in the tourism industry in the county of Jämtland.

5.3 The socio-economic impact of tourism on occupational areas

This chapter presents the employment and income effects for the 25 most occurring occupations in the main tourism sector accommodation and food. Table 5.3.1 lists the respective occupations categorised into 8 major groups according to their SSYK (2012) code. These 25 occupations represent approximately 96% of the IO generated employment estimates in the sector.

The occupations in group 1 refer all to manager and executive positions, respectively. Groups 2 and 3 show (advanced) qualifications from higher education, i.e. university degrees. Group 4 are office workers in administration and customer service. Groups 5, 7, and 8 comprise vocational professions in various areas. Group 9 represent elementary occupations without further educational requirements. Finally, some workers with elementary occupations were not registered under a specific SSYK code, and are, therefore, grouped under 0 (SCB 2018).

15 Due to space limitations, the other tourism-related sectors were omitted in this thesis. However, the methodological approach is the same, and can be applied for every other sector.
<table>
<thead>
<tr>
<th>SSYK 2012</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Managers</td>
</tr>
<tr>
<td>11</td>
<td>Politician, CEO, Senior official</td>
</tr>
<tr>
<td>12</td>
<td>Manager in finance, HR, marketing, sales, administration</td>
</tr>
<tr>
<td>13</td>
<td>Manager in IT, logistics, research, real estate, construction</td>
</tr>
<tr>
<td>17</td>
<td>Manager in other service occupations</td>
</tr>
<tr>
<td>2</td>
<td>Occupations requiring advanced levels of higher education</td>
</tr>
<tr>
<td>23</td>
<td>Advanced qualification in education</td>
</tr>
<tr>
<td>24</td>
<td>Advanced qualification in finance and management</td>
</tr>
<tr>
<td>3</td>
<td>Occupations requiring higher education qualifications (or equivalent)</td>
</tr>
<tr>
<td>33</td>
<td>Qualification in finance and management</td>
</tr>
<tr>
<td>34</td>
<td>Qualification in culture, and social work</td>
</tr>
<tr>
<td>4</td>
<td>Administration and customer service clerks</td>
</tr>
<tr>
<td>41</td>
<td>General administrative support and keyboard clerks</td>
</tr>
<tr>
<td>42</td>
<td>Customer service</td>
</tr>
<tr>
<td>5</td>
<td>Service, care and shop sales workers</td>
</tr>
<tr>
<td>511</td>
<td>Travel attendant, conductor and guide</td>
</tr>
<tr>
<td>512</td>
<td>Cook</td>
</tr>
<tr>
<td>513</td>
<td>(Head-) waiter and bartender</td>
</tr>
<tr>
<td>515</td>
<td>Building and housekeeping supervisor</td>
</tr>
<tr>
<td>52</td>
<td>Sales in retail</td>
</tr>
<tr>
<td>53</td>
<td>Personal care</td>
</tr>
<tr>
<td>541</td>
<td>Protective security</td>
</tr>
<tr>
<td>7</td>
<td>Building and manufacturing workers</td>
</tr>
<tr>
<td>71</td>
<td>Construction and civil engineering</td>
</tr>
<tr>
<td>72</td>
<td>Metal and repair</td>
</tr>
<tr>
<td>761</td>
<td>Butcher, baker and food processor</td>
</tr>
<tr>
<td>8</td>
<td>Mechanical manufacturing and transport workers etc.</td>
</tr>
<tr>
<td>83</td>
<td>Driver and mobile plant operator</td>
</tr>
<tr>
<td>9</td>
<td>Elementary occupations</td>
</tr>
<tr>
<td>911</td>
<td>Domestic, hotel and office cleaner</td>
</tr>
<tr>
<td>941</td>
<td>Food preparation assistant</td>
</tr>
<tr>
<td>96</td>
<td>Refuse worker and newspaper distributor</td>
</tr>
<tr>
<td>0</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Table 5.3.1 Occupational areas in the *accommodation and food* sector
The following Figure 5.3.1 illustrates employment and income effects exemplarily for the year 2016. The labels of the $x$-axes refer to the SSYK codes per occupation. The left $y$-axes labels the total number of employment attributed to tourism activities in the accommodation and food sector, as indicated by the bar chart. The right $y$-axes refers to the weighted average annual income level in this sector, indicated by the dots. The straight horizontal dotted line represents the weighted average income level for the entire sector, which lies at approximately 223 500 kr.

![Figure 5.3.1 Employment and income effects per occupational area](image)

**Figure 5.3.1 Employment and income effects per occupational area**

Figure 5.3.1 is an alternative way to illustrate sectoral income inequality. Instead of a single value, the bar chart combined with the line indicates how many employees earn how much SEK on average per year. The bar chart is sorted by occupations with the highest amount of full-time-equivalent jobs on the left, and occupations with the lowest amount of FTE jobs on the right. The ten most often occurring occupations (i.e. the first 10 from the left) cover 85% of all employment in the accommodation and food sector. Among those, only three occupations earn more than the weighted sectoral average income (i.e. dotted red line). These three occupations represent the very industry-specific professions, such as cooks (SSYK #512) or housekeeping supervisor (SSYK #515). Management and executive occupations (SSYK #17) also represent a
large share of the employment in the sector, displaying the third highest income level. Interestingly, the most often occurring occupations in the accommodation and food sector are elementary occupations (ca. 40% of total employment in the sector) that do not require higher levels of education (i.e. SSYK 941, 911, 0). It is, thus, not fully surprising, that the income level of those jobs lies below the weighted sectoral average. The remaining occupations on the middle and right side of the x-axes account for less employment in the sector (i.e. all occupations listed right of SSYK 515) but are characterised with relatively high average income levels. Interestingly, among these less frequented occupations only three occupations lie below the dotted line (i.e. SSYK 23, 24, 511), of which two of them require higher education (SSYK 23, 24). Furthermore, this figure further shows that by far the highest income level accounts for politicians, CEOs and senior officials, which is more than twice of the sectoral average income.

So far, the results of the OBM approach provided valuable additional insights on the employment and income effect beyond the purely aggregated perspective of IO-based impact studies. Moreover, the qualitative inquiry with industry representatives on the meso level identified which particular occupational areas in the sector were in need of further analysis (i.e. occupations which require higher education, cooks, and cleaner). By doing so, a further analysis of the quantitative data can be steered into a meaningful direction that addresses context-specific issues and challenges of the industry.

**Occupations with required higher education**

According to the qualitative data, the accommodation and food sector is constantly developing in terms of career opportunities. Therefore, the industry’s ambition is to generate and maintain an increasing number of occupations that require higher education, i.e. also to distance themselves from the reputation of being an industry that only provides elementary occupations (Solnet et al. 2016):

> 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 days, but now we do, because there exist different occupations within the industry that needs higher education. Many people do not even know that there’s a university here that has a tourism program. In this regard, the industry is still behind when it comes to higher education. (Representative Visita)
These concerns are particularly important, as especially micro-, small- and medium-sized companies in the sector aim to develop and grow by not only strengthening the linkages between the companies but also creating sustainable leadership positions that are occupied by employees with higher degrees of education and qualification:

*If the company wants to develop, they must find persons who want to be in leading positions and take more responsibility. Because existing employees or owners of small companies who do not have higher education might not have the time for thinking about how to approach company development.*  
(Representative Arbedsförmedlingen)

IO and OBM data provide further valuable insights on how the share of occupations with (i.e. SSYK 1-3) and without required higher education (i.e. SSYK 4-9) has developed during the nine years under study:

![Figure 5.3.2 Occupations with and without required higher education](image)

**Figure 5.3.2 Occupations with and without required higher education**

Interestingly, despite the ambitious aspirations by representatives of the meso (i.e. institutional) level, the time series data shows that the share of occupations with required higher education in the accommodation and food sector is constantly decreasing, from approximately 17% in 2008 to 13% in 2016. In contrast, the share of occupations without required higher education further increased from 83% in 2008 to 87% in 2016. On the one hand, the results in this graph confirm the concerns of industry representatives that occupations with higher education only account for a small share of total employment in the regional tourism industry. On the other hand, the share is decreasing from year to year, which should raise concerns about whether the development is
going the direction of desired sectoral professionalisation. The need for higher educated employees in the tourism industry directly refers to the industry’s ambition to develop by reducing seasonality and becoming an all-year-round destination (Baum et al. 2016b). The reason behind this development goal, clearly, has social implications, as a respondent representing the Region Jämtland Härjedalen points out that one of the main aims is to secure meaningful long-term employment:

*What we wish is to get more people into our villages, that people have all-year-round employment.* (Representative Region Jämtland Härjedalen).

Ideally, this can be implemented by further developing the tourism product provided in the region:

*The region needs to develop the product. Because we have to try to offer a product that appeals to everyone. So, we must have products that are good for the summer; we have a good product for the winter, but that can always be further developed. But if you are coming in September/October, why would you have guests deciding to come to us? These things we must try to develop.* (Representative Region Jämtland Härjedalen).

Indeed, major drivers in the process of product development are related to leadership styles, the propensity to take responsibility as well as the freedom to act creatively in the workplace (Zhouh and Hoever 2014; Fuchs and Baggio 2017; Fuchs 2019):

*Well, some tourism companies already took this step to create a workforce which is there all-year-round. They take on more responsibility, are creative and in the end create a better product.* (Representative Region Jämtland Härjedalen)

Apparently, being creative at a workplace does not necessarily require a university degree. The point the respondents make is that the qualitative development of an industry also requires internal development at the micro-level, i.e. the company and the individual level. By doing so, the industry seeks employees that take on more responsibility and have the ambition to make it a career, seeking to stay in the tourism industry for a longer period of time in order to meaningfully transform theirs and others’ futures (Bednarska 2013).
**Kitchen chefs and other vocational professions**

But the fact that there is a lack of tourism workers with high educational levels is a concern for industry representatives. The latter mutually agree that well-trained vocational professions, such as cooks, are lacking. The combined quantitative and qualitative results offer interesting insights regarding this profession, as the representative from Östersunds Kommun highlights: ‘The challenges for the industry are employing kitchen chefs in the restaurants, due to the strong competition for chefs.’ Similarly, the representative from Arbedsförmedlingen argues:

*When I talk with employers in the restaurant sector, the big challenge is not to fill positions of the simple jobs, but rather good waiters/waitresses, stewards, and kitchen chefs who have a bit of experience. Not newly educated, but experienced ones.*

One might think that if there is a lack of certain employees in certain occupations, then these positions are also highly paid. At least, this is what neoclassic economic theory would suggest (Benjamin et al. 1998; Lee and Keen 2004). However, findings regarding the income effects of cooks and kitchen chefs (see: Figure 5.3.1 above) show that the respective income level ranges just slightly above the industry’s average income level, i.e. far away from highly paid positions, such as those of CEO’s or senior managers. Figure 5.3.3 below illustrates the development of employment and income effects for these occupations:

![Figure 5.3.3 Employment and income effects: SSYK #512, #513, #515](image-url)
Although the income level in these professions lie just above the average, the periodic perspective shows that it is constantly increasing. However, the share of cooks on total employment is rather stagnating. In 2016, appears a positive effect on these occupations, with a clear increase in employment positions and income levels. Nevertheless, the industry seems not to consider paying an extraordinarily high salary to these positions they need to fill the most. Or, the regional tourism industry is simply not able to pay higher salaries to kitchen chefs. On the other hand, the region of Jämtland Härjedalen also provides non-monetary benefits to employers, as typical to tourism attractive destinations:

‘This is because it is a beautiful region with the proximity to the mountains and nature, both in the winter and in the summer. Good preconditions for a lot of life-style opportunities. The strong tourism industry had considerable share in this development, by bringing in money to build lift systems, hotels, restaurants etc. that everyone can use, not only the tourists. This aspect, I think, is worth to talk about and be aware of. ’ (Representative Jämtland Härjedalen Tourism).

In this example, non-monetary factors concerning the region’s attractiveness to perform different types of lifestyles might play a role in attracting vocational professions, such as kitchen chefs. These findings provide a hint that both employees and employers do not necessarily try to maximise their monetary utility dimensions, a neoclassical assumption that has been criticised by heterodox regional development theories as being unrealistic (Egan-Krieger 2014).

**Elementary occupations**

Finally, the analysis highlights the socio-economic effects obtained for elementary occupations under the SSYK group #9. This group of occupation mainly refers to the domestic, hotel and office cleaner (#911) and food preparation assistants (#941). Although the latter group accounts with approximately 20% for the highest employment numbers in the accommodation and food sector (see: Figure 5.3.1), the qualitative inquiry directed the focus on domestic, hotel and office cleaner occupations. Figure 5.3.4 below illustrates the results for employment and income effects based on the IO-OBM analysis:
Overall, quantitative results indicate a constant increase in the weighted average income over the period of nine years. However, the income of this occupation remains the second lowest throughout the sector.

*They often get the lowest income. They usually never get more than the minimum salary of the agreement. It is like this for many. They start with the agreement’s lowest and remain there. [...] Very often they never receive more than that. One can work in this sector and have a very good salary. But not as a cleaner.* (Representative Hotell- och restaurangfacket)

Also, the employment effects show an overall positive growth with annual fluctuations. The total share of this occupational area lies between 5% and 7% of total employment in the sector. While the quantitative results indicate an overall positive development, qualitative data provides additional insights about the working conditions of these occupations. Employment conditions, such as minimum wage or maximum working hours, are to some extent, regulated by the industry’s collective agreement between employer and employee:

*If the employer follows the collective agreement, then I think there are no bad wages and salaries. [...] We have a quite good regulation in Sweden, in terms of job-safety, when the collective agreement is implemented.* (Representative Arbetsförmedlingen)
However, many workers in elementary occupations are not aware of their rights due to lacking information or language barriers (Solnet et al. 2016). In fact, it is the employers’ responsibility to implement the collective agreement for their employees:

*It is the employers’ responsibility to follow the collective agreement. There are many employers who have collective agreements but never looked at it or implemented them… they do not know what kind of rules are written in there. In fact, these are the rules they agreed with.* (Representative Hotell- och restaurangfacket).

Since these positions do not require previous education, the risk of being replaced is high. Exploitation can be a consequence, especially in combination with high workload as a consequence of low-income levels:

*The salary development in other industries is steep. In tourism, however, a steep salary development is mainly in the beginning of the career. And then it stands a bit still. In other industries, for example, it climbs all the time, more or less. Here, we do not have so many steps. After 6 years of experience you can have a higher salary than when you started. But then there are no considerably further steps. So, in order to earn more, you must actually work more hours.* […] *They [cleaners] are not paid the first 45 minutes they come earlier, because of too much work. And then they also go home later to be able to make it, which is, of course, without extra payment again.* (Representative Hotell- och restaurangfacket).

These results for elementary occupations in general, and *domestic, hotel and office cleaner* occupations in particular show that on the one hand, a purely quantitative (monetary) analysis provide more or less a positive development of this occupation. Although the income level is among the lowest in the sector, over the period of nine years the average income level is increasing. The same can be said for the amount of employment created in absolute numbers. However, the complementary qualitative data gives further insights on the socio-economic dimensions of these effects. A growing income for more and more workers in this occupational group is clearly positive. However, growing employment and income itself does not explain an overall positive socio-economic development, if not taken into account that still many workers are exposed to work-related grievances (Baum et al. 2016b).
6 Discussion

6.1 Summary and discussion

The aim of this thesis is to propose a new framework to measure the socio-economic effects of tourism in a regional context. The focus lies on the quantification of occupational area effects and corresponding income effects, as well as on income distribution effects, exemplarily analysed for the accommodation and food sector. The research is embedded within the domain of tourism economic impact analysis, considering direct and indirect effects through multipliers and cross-sectoral linkages within the regional economy (Comeria and Strozzi 2019). The literature review on regional economic development theories and tourism economic impact analysis revealed that the large majority of current impact studies is inadequately limited in providing solely insights about growth- and profit-focused aggregates (Egan-Krieger 2014; Lee and Kang 1998). However, a growing number of scholars criticises this narrow, aggregated and one-dimensional view on economic development, particularly because contemporary impact studies rarely consider socio-economic aspects of regional development (Elsner 2017; Moulaert and Nussbaumer 2005; Söderbaum 2016, 2017; Ulrich 2004, 2010). Thus, a more comprehensive approach for the analysis of socio-economic effects in a region should comprise a combination of macro- meso- and micro perspectives, as pointed out by scholars within the field of socio-economic development, such as Dopfer et al. (2004), Elsner (2007) and Söderbaum (2017). Also, tourism scholars, such as Baum et al. (2016a), recently recommended a macro-meso-micro framework for tourism workforce analyses.

Within this thesis, an entirely new way of analysing the impact of tourism on the regional level was not proposed. Rather, existing economic impact approaches were first critically, and on the basis of this and gained insights, additional socio-economic dimensions were incorporated on a more disaggregated level. This is methodologically achieved by applying a mixed-methods approach (Khoo-Lattimore et al. 2017), i.e. by extending traditional economic impact models and complementing the results with qualitative interview data (Creswell and Clark 2017).

The first research question, i.e. ‘What is the impact of tourism on regional employment, and what types of occupations are created?’ refers to the industry’s capability to contribute to region-wide employment during the period 2008–2016. The Input Output-based macro-analysis of the industry structure
revealed valuable findings about development patterns of *employment multipliers* for seven tourism-related sectors, which are interpreted as the potential of each sector to contribute to the generation of region-wide employment (Miller and Blair 2009). More precisely, findings show that the regional tourism industry overall developed negatively during the period under study, which means that tourism-related sectors contribute to less employment today than they did in previous years. Nevertheless, although the multipliers decreased from year to year in all seven sectors, tourism demand increased at the same time. This means that the total contribution of the industry to employment in fact increased overall. On the one hand, this has to be interpreted as an alarming development, as the industry’s capability to contribute to employment in the region becomes weaker (Crompton 1995). On the other hand, decreasing employment multipliers also imply that the industry becomes more ‘labour efficient’ (Cracolici et al. 2008). In other words, less employment is required to satisfy the same amount of tourism demand (Daniels 2004). That the tourism industry becomes more ‘labour efficient’ can be attributed to a large degree to the increased usage of information and communication technologies (ICT) (Sigala 2003; Scholochow et al. 2010; Fuchs et al. 2010; Baum et al. 2016; Torrent-Sellens et al. 2016). In fact, as more and more tasks become automated and digitalised with the result that less labour, and particularly, less qualified labour is required to generate a certain amount of sales. Consequently, findings from occupation-based modelling (OBM) for the accommodation and food sector indicate an increasing share of elementary occupations on total employment. This implies that the number of occupations that do not require previous education levels is continuously growing, thus supporting and corroborating the commonly known image and reputation problems of the tourism industry as being a sector with low formal education requirements (Brandt 2018).

More precisely, findings show that even today, more than 40% of total employment in the accommodation and food sector (i.e. ca. 900 out of 2230 employees) account to elementary occupations. Despite this negative trend, there is a strong need for tourism workers with higher education on the supply side, mainly for the purpose of developing regional tourism products and tourism destinations towards all-year-round offerings. According to the interviewed industry representatives, the ideal is to provide and secure employment for the local population on a more permanent base. By doing so, industry representatives target employees with higher education levels who entail skills to adjust to new work models, leadership capabilities and are motivated to pursue a long-term career in the industry (Solnet et al. 2016).
However, findings gained by occupation-based modelling (OBM), again, show that the share of occupations with higher education are, in fact, decreasing. This is a signal that the regional tourism industry, comprising both public organisations (including the university that educates future tourism workforce) and private companies, need to continue their initiated efforts in developing the tourism industry towards higher education and professionalisation, in order to become more attractive for long-term career planning (Brandt 2018).

The second research question refers to the income effects in the region: ‘What is the impact of tourism on regional income, and how is income in the tourism industry distributed across occupational areas?’ In contrast to employment multipliers, the income multipliers of the regional tourism industry have developed rather positively for most tourism-related sectors. This implies that the industry’s contribution to generate income in the entire region has been strengthened (Miller and Blair 2009). Evidence is provided by the impact analyses, showing that the contribution of income in all sectors has grown throughout the years under study. Thus, a sole macro-level analysis based on Input-Output methodology would signal that the regional tourism industry develops positively, which fully coincides with assumptions of contemporary economic theories focusing on aggregate-based monetary growth.

However, this study further shows that the consideration of additional socio-economic dimensions, such as the income distribution, but also the meso-level perspectives, provide valuable insights in relation to the effects measured by mainstream methodology (Dopfer et al. 2004; Söderbaum 2017). In fact, the overall trend goes towards increasing income inequality among all the analysed tourism-related occupational areas, which can be demonstrated by several aspects. For instance, during the period 2008–2013, the bottom 15% of income earners experienced extremely little increases of their average income levels. In addition, the share of occupations that do not require higher education is constantly increasing, meaning that the total amount of people in lower income groups steadily increases, and hence contributes to higher Gini-coefficients, which confirms the argumentation of Checci (2001) and Dabla-Norris et al. (2015). The reason why income is relatively low for these occupations can, for instance, be explained by the fact that these employees do not stay in the industry permanently, i.e. these occupations are characterised by extremely high turnover rates. However, the opposite also may hold true; workers do not tend to remain in the tourism industry for long, particularly due to low salary levels. This implies that constantly newly hired
employees remain on the minimum wage level. Seasonality, the industry’s reputation as a ‘low entry-level’ industry, as well as challenging working conditions and even exploitation are well-known reasons for high labour turnover in the tourism work domain (Baum et al. 2016b). Brandt (2018) points out, that in order to obtain higher average income levels in the tourism industry it requires first and foremost higher average levels of formal education.

Furthermore, literature highlights the negative association between Gini coefficients and union membership rates (Jaumotte and Osorio-Buitron 2015). This negative relationship has been empirically identified in the socio-economic impact study at hand, i.e. the decrease in union membership rates, most likely, also contributed to the negative development of income distribution across major occupational areas of tourism in the Jämtland Härjedalen region. Further econometric analysis with a higher number of observations would be needed to cross-evaluate this empirical finding and to estimate the exact magnitude of this effect.

Finally, the occupation specific analysis revealed that the income of highly demanded professions is, in fact, not extraordinarily high. This is surprising from the perspective of mainstream economics, as prices for scarce and highly demanded ‘resources’ (such as ‘human resources’) are supposed to be high (Blanchard and Illing 2013). Instead, findings might be interpreted as a sign that income and monetary benefits at tourism workplaces do not necessarily play the primary role when attracting and hiring tourism workers (Ferrer-i-Carbonell 2005; Herzberg et al. 2011).

6.2 Theoretical implication

In one of his recent articles, Baum (2015) argues that the workplace situation in the tourism industry has not been improved significantly since 2007. He refers to the fact that employees are often claimed to be ‘a company’s most valuable asset’ (p. 207), and organisations do not live up to the aspiration of valuing workers in elementary occupations. With the socio-economic impact study at hand, this study attempts to provide an alternative way to obtain insights on current developments in the regional tourism industry of Jämtland Härjedalen, with the particular focus on employment and income effects, respectively. This thesis is titled as a quantity-quality framework because it allows traditional ways of quantifying the impact of tourism to be
conducted, while at the same time extending and deepening the analysis to gain more insight on the quality of these impacts. Hence, this study’s contribution to the scientific literature is the following: While traditional economic impact approaches are based on mainstream neoclassic economic theory, the theoretical perspective of this thesis is embedded in the socio-economic development literature. This clearly shifts the perspective of the economic analysis from an aggregated one-dimensional (i.e. growth-oriented) perspective towards more disaggregated and socio-economic perspectives (e.g. distributional effects), as strongly suggested in the socio-economic development literature (Ulrich 2010; Moulaert and Nussbaumer 2005b; Söderbaum 2017).

Conducting the Input-Output and OBM-based analysis over multiple years allowed to estimate trends and patterns of tourism’s economic impact. At the same time, this multi-period approach avoids estimation bias typically found in previous studies on IO-based tourism impacts using cross-sectional data (Kronenberg et al. 2018). Finally, the employed mixed-method approach integrates the meso-level, and thus extends the analytical perspective by qualitative insights complementing quantitative findings, and hence helps to better understand and interpret the patterns of socio-economic impact of tourism in Jämtland Härjedalen (Khoo-Lattimore et al. 2017).

6.3 Limitations and outlook

The limitation of this study can be seen, first of all, in the complexity of the framework. The combination of macro- and meso-level perspective, combined with a mixed-method approach, produces a large amount of data that requires a disproportionately high amount of time for being analysed. In fact, the qualitative data helps to find the direction of further analyses. This implies that a lot of the subsequent analyses on the disaggregated level fully depends on the respondents who provide meaningful insights related to socio-economic impacts for specific occupational areas in tourism.

Furthermore, the proposed framework to analyse regional socio-economic impacts should not be considered as complete and finalised. There will be large room for the generation of more data and the application of additional methods to further verify the various assumptions and concepts of socio-economic development theories by means of triangulation (Creswell and Clark 2017), or by further adjustments of existing methodologies. For instance, I envisage to regionalise Input-Output models also at the level of tourism.
destinations, thus, to apply a bottom-up (survey-based) approach to obtain even more precise and timely tourism multipliers at the local level (Kuhar et al. 2009). More focus can, similarly, be put on distributional effects by considering other types of income inequality measurements, due to the complexity of measuring the concept of income inequalities (Komlos 2018). For instance, the Atkinson index, which further identifies, which income range (low to high) is affected the most the inequality (Atkinson 1970); or further deepening the qualitative analysis by incorporating more specific types of tourism workers, such as seasonal employees, who can be found in a wide range of tourism occupations, but were not considered as an own occupational area in the current dataset. Furthermore, an interesting aspect is to identify and understand those occupations that decreased over the period of time, and how those tourism-workers were affected by this development.

Indeed, the most important outlook in this thesis, is the extension of the framework towards the integration of the micro-level perspective (Baum et al 2016a; Dopfer et al. 2004). The micro-level refers to individual actors working in the industry, such as tourism managers, occupied company owners, as well as individual tourism workers at all occupational levels. In particularly the consequences of income inequalities on the individual level can be further studied on the micro-level. This can be done by including concepts like comparison income (Alesina et al. 2004; Clark et al. 2010; Senik 2005), which already has been briefly discussed in this thesis.

Further consideration can be put on the framework of the social region (Moulaert and Nussbaumer 2005a, 2005b), which highlights that markets may have other characteristics than being competition-based and price-driven. Accordingly, the framework recommends the following intervened concepts that are of relevancy for regional tourism as well but have not been empirically analysed so far. These concepts comprise managers’ knowledge and leadership styles (Thielenmann and Ulrich 2009; Minett et al. 2009), intrapreneurship and workplace creativity (Antoncic and Hisrich 2001; Jyotirmay 2007) aiming to constantly improve the quality of both tourism service-concepts (e.g. enriched by eudaimonic experience components) and workplace conditions (Wang 2011; Zhou, and Hoever 2014). The experienced quality of relations to customers and superiors is expected to be mirrored by employees’ organisational commitment, self-determination, social awareness, trust, justice and perceived meaningfulness of the tourism workplace (Ng 2017).
7 References


Di Maria, Ch. H., Peroni, Ch. & Sarracino, F. (2014). Happiness matters: The role of well-being on productivity, MPRA Paper, Munich Personal RePEc Archive No. 56983.


Pike, A., Rodríguez-Pose, A. & Tomaney, J. (2017). Local and Regional Development, 2nd edt., Routledge, USA.


