Industrial Tourism: Where the Public Meets the Private

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ALEXANDER OTGAAR

Industrial Tourism

Where the Public Meets the Private

Industrial Tourism

Where the Public Meets the Private

Industrial Tourism

Where the Public Meets the Private

Industrieel Toerisme

Waar publiek en privaat elkaar ontmoeten

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Voorwoord

"We zijn vrij tot op het moment dat we kiezen, van dan af controleert de keuze de kiezer." (Aleister Crowley, 1875-1947)

In 1993 besloot ik om economie te gaan studeren: een vak waarmee je beter leert te begrijpen waarom mensen bepaalde keuzes maken, maar ook een vak waarmee je 'alle kanten op kunt'. Na nog geen jaar gestudeerd te hebben, vond de universiteit het echter nodig om mij (en vele medestudenten) te laten kiezen tussen algemene economie en bedrijfseconomie. Achteraf bezien begrijp ik waarom ik moeite had met deze gedwongen keuze: ik ben immers vooral geïnteresseerd in hoe bedrijven omgaan met de omgeving waarin ze opereren. Gelukkig kreeg ik al snel de mogelijkheid om een specialisatie te volgen die aan mijn wensen voldeed: ruimtelijke bedrijfseconomie, met vakken zoals economische geografie, regionale economie en de stad als onderneming.

Nadat ik een werkstuk had geschreven over citymarketing begon ik in 1997 als onderzoeksassistent bij de capaciteitsgroep Regionale Economie & Haven- en Vervoerseconomie en het onderzoeksinstituut Euricur. Ik kreeg meteen de kans om mee te draaien in een internationaal vergelijkend onderzoek met bezoeken aan Amsterdam, Barcelona, Keulen en Londen. Daarna volgden nog tal van andere projecten waarbij ik mijn kennis over regionale economie en stedelijk management heb kunnen verbreden. Langzaam maar zeker vulde mijn boekenkast zich met boeken waarvan ik mede-auteur was, met wervende titels zoals *The Attractive City*, *Sports and City Marketing in European Cities*, *City and Enterprise* en *Empowering Metropolitan Regions Through New Forms of Cooperation*. Toch kreeg ik het gevoel dat er iets ontbrak in deze collectie.

De eerste stap in mijn promotie-onderzoek was een studie over maatschappelijk verantwoord ondernemen in steden, uitgevoerd tussen 2000 en 2002. Hieruit kwam naar voren dat strategische betrokkenheid van het bedrijfsleven bij stedelijke ontwikkeling zowel de stad als de ondernemingen zou kunnen baten. De vraag was echter onder welke voorwaarden gezamenlijke belangen ook leiden tot concrete acties. Ik had een aantal ideeën over deze voorwaarden maar onvoldoende empirisch materiaal om ze te toetsen. In 2007 kreeg ik de kans om de benodigde data

te vergaren: een internationaal vergelijkende studie naar de ontwikkeling van industrieel toerisme. Het openstellen van bedrijven voor bezoekers kan namelijk gezien worden als een ontwikkeling waarbij zowel publieke als private partijen belang hebben. De vraag is echter of deze belangen ook te verenigen zijn: hoe kunnen publiek en privaat elkaar ontmoeten? De keuze voor industrieel toerisme als onderwerp van mijn proefschrift was hiermee gemaakt.

Het schrijven van een proefschrift is een eenzame strijd waarbij je in de ring staat tegenover jezelf. Gelukkig zijn er dan ervaren boksers die je af en toe aanvalstactieken influisteren. Mijn dank gaat allereerst uit naar Leo van den Berg, mijn promotor. Hij is er telkens weer in geslaagd mij in de juiste richting te sturen. Zijn soms onconventionele ideeën hebben me gestimuleerd kritische vragen te stellen waarvan sommige beantwoord worden in dit proefschrift. Ten tweede ben ik dank verschuldigd aan mijn copromotor, Erik Braun; voor zijn waardevolle commentaar, maar bovenal voor de mentale steun die hij in al die jaren heeft gegeven. Een speciaal dankwoord gaat uit naar Christian Berger, Rachel Xiang Feng en Ankimon Vernède die mij hebben geholpen met het organiseren van de casestudies. Tevens bedank ik Willem van Winden, Wouter Jacobs, Paolo Russo, Peter de Langen, Marco van Hoek, Chantal van Rooijen, Peter Pol, Jeroen Klijs en Michiel Nijdam voor hun adviezen in verschillende fasen van de strijd. En natuurlijk mag Erwin van Tuijl niet onvermeld blijven: als gezamenlijk huurder van H12-31 zorgt hij altijd voor een luisterend oor. En voor koffie zo nu en dan.

Zonder goede verzorging en een trouw publiek dat je aanmoedigt ben je kansloos in de boksring. Een proefschrift schrijven doe je alleen, maar zonder steun van familie en vrienden kom je niet ver. In het bijzonder bedank ik Cindy voor haar onvoorwaardelijke liefde en steun; ook tijdens mijn bezoeken aan het buitenland en de vele avonden en weekends die ik achter de computer heb doorgebracht. Björn, Yanique en Mats: ook jullie wil ik bedanken. Vraag me niet waarvoor: het heeft iets met geluk te maken. Tot slot wil ik natuurlijk mijn ouders bedanken. Niet alleen omdat het hoort, maar vooral omdat zij er altijd voor mij geweest zijn. Dit boek is ook een beetje van jullie!

Alexander Otgaar
Rotterdam, september 2010

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Chapter 1

Introduction

1.1 Background

Industrial tourism comprehends visits to sites that enable visitors to learn about economic activities in the past, the present and the future (see chapter two). It can be seen as a small but growing segment of the tourism industry, one of the many segments that have emerged since the 1950s (Nylander & Hall, 2005; Robinson & Novelli, 2005). Company visits appeal to the increasing desire for real, authentic and educational experiences among tourists. French car manufacturer PSA states that 'industrial tourism has become increasingly popular in recent years, particularly in Europe' (PSA, 2006). Also Harris (1989) and Prentice (1993) report an increasing public interest in the manufacturing sector. Menzies (1989) even suggested that industrial tourism could become more popular than visiting parks and gardens. In 1989 the English Tourism Board expected the number of industrial tourists in the UK to grow from 5 million per annum to approximately 8 or 9 million in the years that followed. In France the number of visitors to industrial sites grew from less than 5 million visitors in 1980 to more than 10 million in 1993 (Swarbrooke, 2002; also see Stevens, 2000).

In the late 1990s, research from the Dutch Ministry of Economic Affairs revealed that in the Netherlands ten million people would like to visit at least one factory or company a year (Volkskrant, 1998). The possibilities (at that time) were limited, however: nine of out ten companies received visitors, but the majority only opened its doors for business relations. In some cases also neighbouring citizens and

students were allowed to enter the workfloor. Only 4 per cent of the firms accepted leisure tourists.

For companies the reception of visitors is a potential source of income, but also an instrument to communicate with stakeholders (Marcon et al., 2000): not only with business relations but also with other actors who provide the company a license to operate. With the shift of power from the public to the private sector in the last decades, expectations towards companies have increased (Boudhan et al., 1996; Goyder, 1998; Elkington, 1997). Industrial tourism can be used by firms to give evidence of good citizenship, to build sustainable relations with the communities in which they operate and to promote the company and its brands (see Mitchell & Orwig, 2002). In 1990, the English Tourism Board counted 294 industrial tourism attractions, about 6 per cent of all attractions in England (English Tourism Board, 1990). About 90 per cent of these industrial tourism attractions had opened its doors in the 1980s or 1990s (Swarbrooke, 2002).

Since the 1980s several regions and cities have discovered industrial tourism as an interesting segment of the tourism market: among them are for instance Nagoya, Rhone-Alpes, Turin, Rotterdam, Amsterdam, Shanghai and Pennsylvania. Apart from being a source of income and employment, a comprehensive supply of company tours may help to improve the image and reputation of countries, regions and cities and their industries (Frew, 2000). Industrial tourism can become an instrument of co-branding, assuming a two-way interaction between the image of a region and corporate images (Azevedo, 2004).

An important condition for industrial tourism programmes to be successful is the participation of firms and tourism organisations: the benefits have to outweigh the costs. The development of industrial tourism requires coordination and cooperation between the various public and private stakeholders (Otgaar, Van den Berg, Berger & Feng, 2008; 2010). Despite the increasing popularity of industrial tourism as described above we can also observe reservation among both firms and regions to actually get involved in the development of industrial tourism. Many regions, for instance, hesitate to connect tourism with industry in their marketing activities (Schmidt, 1988). At the business side it can be observed that non-consumer oriented companies tend to be sceptical about the benefits of factory tours (How, 1994), while other firms lack the capacity to receive guests (Mader, 2003) or foresee conflicts with the daily production process. In addition safety and security standards impose serious barriers to the development of company tours, the more so since 9/11.

1.2 Problem statement and the objectives of our research

The development of industrial tourism can be seen as a collective action problem requiring the involvement and participation of public and private actors (Olson, 1965): these actors may have an interest in industrial tourism development, but they do not necessarily cooperate to that end. A key challenge in collective action problems is to develop a common agenda: actors have to reach consensus on the main objectives and the strategies to reach these goals (Stone, 1993; Mossberger & Stoker, 2001). For the feasibility of such an agenda insight is needed in the conditions under which actors are willing to invest in industrial tourism development. Can they agree on how to use industrial tourism as a source of income and/or a tool of image management? In other words: how can the public meet the private?

Our research has two objectives: to make a contribution to the theoretical conceptualisation of industrial tourism and to gain insight in the conditions under which public and private actors are willing to invest in industrial tourism development, in both theory and practice. Industrial tourism is not a very well defined concept (Stipanuk, 1993) and worldwide studies on the issue are absent (Morice, 2006; Frew, 2000). There are different views on the definition of the concept – there are various types of industrial tourism and different approaches to its development – and the global, regional and firm-specific conditions that explain industrial tourism development. It is our aim to create common ground by comparing the various views and presenting our own.

Theoretical conceptualisation of industrial tourism is also needed in view of our second objective. Several scholars (e.g. Frew, 2000; Mader, 2003; Mitchell & Orwig, 2000; Otgaar, Van den Berg, Berger & Feng, 2008; 2010) provide some arguments for companies to organise company visits, and for cities or urban regions to stimulate industrial tourism development. Also arguments for firms *not* to receive tourists have been discussed (How, 1994). What seems to be missing, however, is an integrated framework for analysing the conditions under which both firms and regional (tourism) organisations are willing to invest in the (joint) development of an industrial tourism supply. Such a framework requires an in-depth analysis of the costs and benefits of industrial tourism development, on the level of individual firms and on the level of an urban region.

1.3 Research questions and methodology

In view of our aims, we formulate our main research question as follows: "Under what conditions can the development of industrial tourism benefit the companies that open their doors and the urban regions in which they are located?"

This question reflects our ambition to gain insight in the interests and preferences of host firms ('companies that open their doors') and regional organisations with regard to industrial tourism development. It is an explorative question related to a relatively unexplored topic, which supports our choice for case study analysis, as we will explain in chapter six. Our empirical study comprehends four case studies of urban regions with a relatively large supply of industrial tourism, with active host firms and/or regional bodies that promote industrial tourism.

The aim of the case studies is to test the empirical applicability of seven hypotheses that specify the conditions under which host firms and urban regions are willing to invest in industrial tourism. Urban regions are presented in this thesis as a spatial level on which collective interests emerge. To understand the motives of this collectivity we analyse the interests and motives of public, private and public-private organisations that act on a regional level and defend regional interests (e.g. regional economic growth). Examples of such organisations are local and regional governments, tourism organisations and business platforms.

Our research is structured along the following research questions:

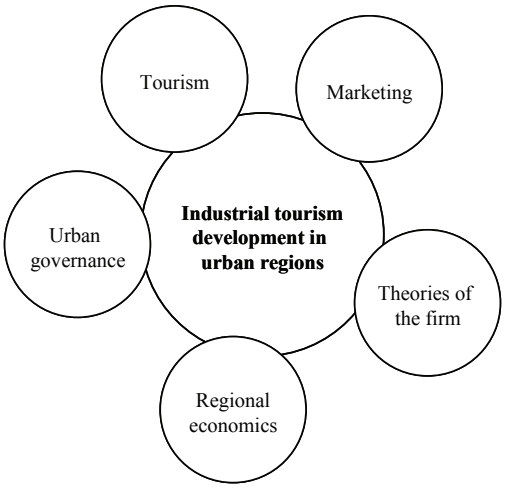
1) What is industrial tourism? Who are the suppliers and customers of industrial tourism?
2) What fundamental developments influence the demand for, and supply of industrial tourism in urban regions?
3) Under what conditions are host firms willing to invest in industrial tourism?
4) Under what conditions are urban regions willing to invest in industrial tourism?
5) Under what conditions can industrial tourism development benefit both host firms and the urban regions in which they are located?

1.4 Relation of our research topic with various disciplines

In the present book we construct a theory on industrial tourism development in urban regions that borrows insights from various disciplines: regional economics,

urban governance, theories of the firm, tourism and marketing. The relation with tourism and marketing needs little explanation: industrial tourism can be seen as a segment of the tourism industry and a marketing tool for both companies and regions (as we will explain in chapter two and three). But how does industrial tourism development relate to the three other disciplines?

Figure 1.1: Disciplines related to our research topic



1.4.1 Regional economics

In regional economics location theories provide different explanations for the relation between a firm and its surroundings. For our study it is particularly important to review the embeddedness of companies in urban regions.

Classical and neoclassical theories use a holistic approach to the firm, neglecting its internal organisation. The entrepreneur is considered a homo economicus who has free and unlimited access to all information needed to make a purely rational decision. Firms aim to find an optimum location by minimizing costs (of land rents and transportation) and/or maximizing revenues. Supporters of this approach use mathematical models to explain or predict location behaviour and the resulting distribution of economic activities. Globalisation and the availability of affordable transportation and communication modes are expected to lower the regional embeddedness of firms. Representatives of the (neo)classical school are Von Thünen (1826), Weber (1909), Hotelling (1929), Christaller (1933), Lösch (1954) and

Krugman (1996). Also the urban life cycle theory of Van den Berg (1987) contains mostly neoclassical elements.

Behavioural location theories look at actual decision-making processes in firms, having eye for the internal organisation. According to these theories, decision makers in companies have limited access to information, being satisficers instead of maximizers. Behaviouralists assume that entrepreneurs make a choice out of a limited number of alternatives, assuming their present location to be one of the most obvious choices also in view of relocation costs. The behavioural approach also recognises the potential importance of non-economic reasons in location behaviour, such as emotional, cultural or historical ties with a city or region. Among the contributors to this approach are Simon (1957) and Pred (1967).

Institutional location theories reason that economic activities are embedded in ongoing social institutions or networks (Granovetter, 1985; 1993). They tend to concentrate on the interaction between firms (and other organisations) rather than the behaviour of individual firms. Institutionalists have introduced concepts such as 'industrial districts' (Pyke et al, 1990; Amin, 2000) and the 'learning region' (Cooke and Morgan, 1998) which consider the relevance of (the interaction between) institutions in economic development. Cluster theories (Porter, 2000) can also be categorised under this heading. Institutionalists tend to focus on the economics of agglomeration, explaining the concentration of activities in metropolitan areas (Marshall, 1920; Fujita & Thisse, 1996).

1.4.2 Urban governance

Theories on urban governance and urban politics help us to gain insight in the relevance of industrial tourism policies for the development of urban regions. Our study relates to a fundamental debate on the ability of local stakeholders to influence the development of urban regions. Essentially the question is: does politics matter? Strom (1996) made a distinction between two schools: structuralists and coalition theorists. This categorisation more or less corresponds with the two perspectives identified by Rosentraub & Helmke (1996): the location theory and the supporters of regime theory and growth machine theory.

Structuralists attach much importance to the power of capital(ism), changes in technology and other non-local developments. They reason that local governments have few means to steer the city's or region's development. Within the group of structuralists a distinction can be made between those who emphasize global trends

such as globalization and the relocation of particular economic activities to low-wage countries, and those who concentrate on the power of capital within cities. The second sub-group includes neo-marxists like Friedland (1982) and Tabb (1982) who talk about the 'systematic disciplinary power of capital', as well as scholars who focus on the power of property owners (business elites) who are considered able to 'use the government' to reach their own goals: growth machine or growth coalition theory (Logan & Molotch, 1987).

Location theorists argue that economic growth generally manifest itself at locations with a favourable cost structure (a neo-classical view), taking into account the costs of inputs and the transporting costs of finished goods or services to markets (Blair & Premus, 1993). Social and political institutions tend to develop automatically at primary and secondary centres of economic activities. In case of mutual benefits, coalitions between governments and businesses can be realised without any special coordination. Although these coalitions can attempt to reach common goals, their power is limited in case of technological or other external changes (Scott & Storper, 1986), which is line with the structuralist approach.

Regime theorists assume that coalitions of public and private actors are able to influence the development of (urban) regions. In other words: policy matters, at least to some extent. Important contributors to urban regime theory are Clarence Stone (1989), Fainstein & Fainstein (1983) and Elkin (1987). Many agree that regime theory is in fact a concept or a model rather than a theory, because it has limited ability to explain or predict variation in regime formation, maintenance, or change (Mossberger & Stoker, 2002). An urban regime can be seen as a specific form of a policy network (Bassett, 1996). Regimes bridge the divide between popular control of government and private control of economic resources (Stone, 1993). The power to influence development is distributed among public and private actors, making a distinction between political power and the power of capital (Bryson & Crosby, 1992). Regime theory assumes the public and private sectors to be mutually dependent on one another. It contains both elitist and pluralist elements. In contrast with the growth machine theory, regime theory attributes the role of initiator in coalition-forming processes to political entities rather than economic entities (Judd & Parkinson, 1990). Regime theory assumes that a relatively stable group (led by the government) has a sustained role in decision making, while the coalition theory foresees the development of short-term oriented partnerships that result from purely economic win-win situations. The concept of organising capacity (Van den Berg et al., 1997) can be seen

as a specific type of urban regime theory, identifying the internal and external factors that influence the development of public-private policy networks in metropolitan regions.

1.4.3 Theories of the firm

Theories of the firm assist us with defining the interests and responsibilities of companies, also with respect to their role in the development of industrial tourism. Our research topic connects with the fundamental debate on the drivers of corporate behaviour. Most relevant, in our opinion, is the distinction between the shareholder and stakeholder view.

The neoclassical shareholder view assumes that companies are only accountable to their owners: shareholders or stockholders. This implies that firms aim to maximise their profits (Friedman, 1962). Supporters of this view often refer to Adam Smith's invisible hand theory: the conviction that society is best off when each individual looks after his own interest: the main task of firms is to produce goods and services in the most profitable way. This does not mean, however, that neoclassicists neglect the responsibilities of firms towards society: they maximise profits under the restriction that they avoid reputational damage by honouring the moral minimum and respecting individual rights and justice (Bowie, 1991). Written and unwritten rules are laid down in a social contract that business has with society (Donaldson & Preston, 1995) – also referred to as 'license to operate' – determining the boundaries of their profit-maximising behaviour.

Most neoclassicists support the involvement of firms in philanthropy, sponsoring or more strategic forms of corporate citizenship as long as this is not conflictive with the interests of the owners. They reason that self-interest forces companies to be concerned with society and community (Drucker, 1974). This view anticipates the agency problem (managers often not acting as the agent of shareholders) as identified by Friedman. Supporters of the shareholder view also recognise the relevance of stakeholders, though again in view of the ultimate aim to defend the interests of shareholders. Bowie (1991) introduced the term 'enlightened Friedmanites' for neoclassicists who combine the shareholder view with stakeholder management.

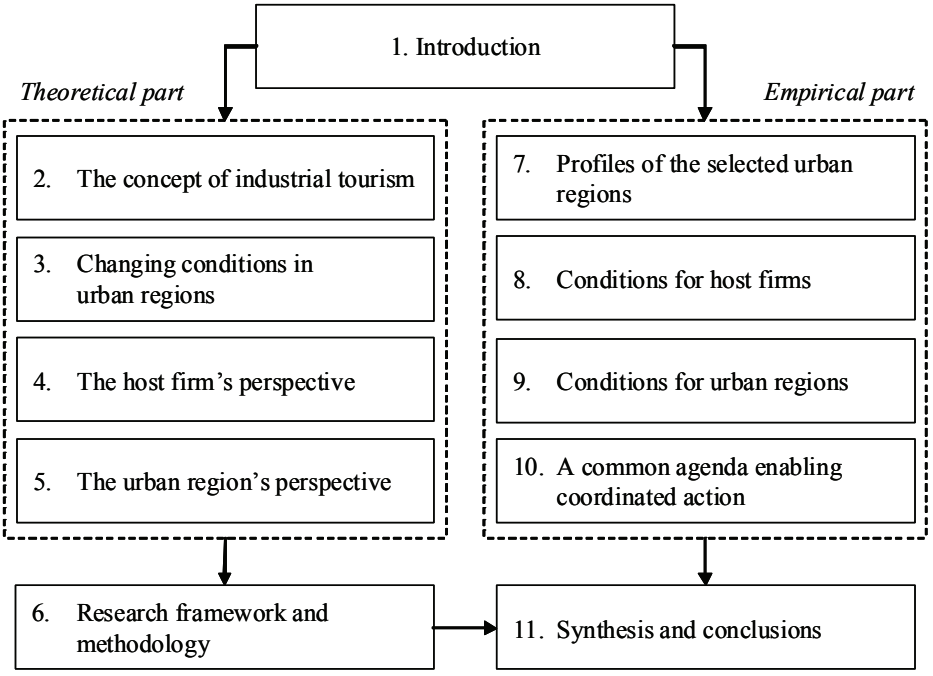
Supporters of the stakeholder view state that companies do not only act in the interest of shareholders, but in the interest of all stakeholders whose interests can affect or are affected by the achievement of the firm's objectives (Freeman, 1984).

Stakeholder theorists expect managers to be accountable to stakeholders, not (only) because that is in the interest of shareholders, but (mainly) because it is just the right thing to do (Bowie, 1991).

1.5 Outline of this book

The structure of this book is depicted in the figure below. In the second chapter we begin our development of a theory on industrial tourism development in urban regions with an introduction into the concept of industrial tourism. After a short historical overview we discuss various views on the concept, relate it to other types of tourism and provide a definition. In this way we answer the first research question.

Figure 1.2: structure of this book



In the third chapter we analyse the urban environment in which the stakeholders of industrial tourism operate. Starting with the Urban Life Cycle (Van den Berg, 1987) we explain how urban regions develop in response to fundamental trends that influence the behaviour of the stakeholders. We identify the main current trends and briefly review their possible impact on the market for industrial tourism, thus formulating answers to the second research question.

The fourth chapter presents a micro-economic view on industrial tourism: we look at the relation between a (potential) host firm and industrial tourists. We identify the costs and benefits for a single firm to open its doors for particular visitor groups, and identify potential sources of attractiveness towards these groups. In this way we provide answers from theory to the third research question.

In the fifth chapter we shift our attention to the aggregated level of an urban region. We look at the costs and benefits of industrial tourism development from the viewpoint of regional bodies such as regional authorities and regional tourism or marketing organisations. In this way we gain insight in their motives to facilitate or promote this segment of the tourism industry. We also analyse the factors that make an urban region attractive for industrial tourists and the conditions under which coordination in industrial tourism development can be realised. Chapter five thus answers the fourth research question.

In chapter six we develop our research framework. We formulate seven hypotheses that provide answers to the fifth (and main) research question and discuss the methodology: case study research.

The empirical part of our research consists of four chapters. Chapter seven contains profiles of the selected urban regions: Cologne, Pays de la Loire, Rotterdam and Turin. These profiles include relevant data on the economic, political, cultural and demographic context of the region and describe their supply of industrial tourism.

In chapter eight we analyse the development of industrial tourism on the level of individual host firms, gaining insight in what conditions are relevant for companies in the selected regions.

The ninth chapter provides a comparative analysis of industrial tourism development at the level of urban regions, and the conditions that are relevant for regional organisations.

In chapter ten we combine the results from the two previous chapters into an assessment of the conditions under which industrial tourism benefits both urban regions and host firms through the development of a common agenda that enables

coordinated action. By comparing the interests of host firms with the collective interests of regions we will be able to identify conflictive and compatible interests (opportunities for consensus) in the development of industrial tourism.

Chapter eleven presents the synthesis and conclusions of our study, answering the research questions and providing recommendations for further research.

Chapter 2

The concept of industrial tourism

2.1 Introduction

In this chapter we introduce the concept of industrial tourism. We briefly summarise the historical background of industrial tourism and discuss various views on how to define the concept. Moreover, we identify the suppliers and customers of industrial tourism. This results in a conceptualisation of industrial tourism to be used in the next chapters.

2.2 Historical background

The idea of visiting active and non-active firms emerged already in the 17th century when the British nobility started to travel to the European mainland (Wolf, 2005; Steinecke, 2002). Many consider this so-called Grand Tour as the roots of modern tourism with a combination of leisure and education. Members of the upper class from England, France and Germany started to visit other parts of Europe to learn more about culture and technology (De Groote, 1999)

More specific examples of company tours started to emerge in the 19th century. Frew (2000) mentions several examples of industrial tourism *avant la lettre*, in the Netherlands (e.g. flower markets, cheese factories), France (vineyards, chocolate factories, tobacco factories, stock exchange), Greece and Malta (lace makers) and the US (chocolate factories, distilleries) (Stevens, 1988; MacCannel, 1976).

In the 19th and 20th century increasing prosperity resulted in the development of mass tourism. Particularly after the Second World War travelling for leisure

became a common pastime for a growing share of the population, at least in the developed countries. The main drivers for this growth were increasing real income and leisure time, declining cost of travel and increasing car ownership (Williams & Shaw, 1991). Tourism became an industry in its own right. In these decades industrial tourism became a common notion to describe a commercial, businesslike approach to tourism development (Rodenburg, 1980; Abbey, 1968). And still today, some use the term industrial tourism when they talk about tourism as an industry. Another important development that took place in the last decades in the diversification of the tourism market: since the 1950s consumer behaviour in tourism has changed drastically, resulting in the development of new market segments and niches (Nylander & Hall, 2005; Robinson & Novelli, 2005). Industrial tourism can be seen as one of these new segments.

Using the term industrial tourism for 'industry as a tourist attraction' is a relatively new phenomenon. In the 1980s the concept of industrial heritage tourism became popular in the cradle of modern industry: Great Britain. After the Second World War this country was the first in Europe to be confronted with industrial decline, resulting in many abandoned factories. Initially these factories were only visited by industrial archaeologists, but in the 1980s several regions became aware of the tourism potential of their industrial heritage (Soyez, 1986; Harris, 1989; Hospers, 2001). Mader (2003) speaks about a real 'heritage euphoria' with 145 million visitors to 2,666 attractions. Since then, also other stagnating European regions – such as the German Ruhr Area – have discovered industrial heritage tourism as an interesting element of their economic restructuring policies.

Gradually the concept of industrial tourism was stretched to include also visits to operational firms. In 1974 Simonson defined industrial tourism as 'visits to the site of a production facility' which 'can include educational tours of the facility, sampling of the product, and the possible purchase of the product and/or souvenirs' (Dodd, 1998, p. 79; Simonson, 1974). In 1988 the British Tourist Authority started the campaign *See Industry at Work* (Mader, 2003), which is considered to be one of the first initiatives to promote visits to active companies. The campaign inspired other countries, regions and cities to take similar initiatives. In the late 1990s, Rotterdam (The Netherlands) developed an industrial tourism tour. In 2000, the County of York in Pennsylvania (US) launched its brand 'Factory Tour Capital of the World'. One year later, in 2001, the French region of Pays de la Loire founded an organisation called 'Visit Our Companies', with the aim to improve the supply of industrial

tourism. In 2005, Shanghai set up an industrial tourism promotion centre, while the Italian City of Turin started a programme called 'Made in Torino; Tour the Excellent'. In 2006, the City of Angers in Pays de la Loire hosted the first European conference on Company Visits, paying attention to the opportunities of industrial tourism for both companies and the rural or metropolitan regions in which they are located. Other examples of cities and regions with industrial tourism programmes are Amsterdam (The Netherlands), Nagoya (Japan), the Rhone-Alpes region (France) and West Australia.

2.3 Different views on industrial tourism

Despite its long history, industrial tourism is still not a very well defined concept. In 1993, Stipanuk came to the conclusion that little has been written about industrial tourism, referring to the work of Simonson (1974) and Cox & Fox[1] (1991). Stipanuk discusses interactions between various types of technology and tourism, illustrating these with examples from the industry in several countries including the USA and New Zealand. One of the possible roles of technology (apart from creator, enhancer, protector, tool, etc.), is being the focal point of the tourism experience. Industrial tourism is described here as 'tourism of homo faber' giving tourists the opportunity to visit man at work (Leroux, 1988).

Some years later other scholars confirmed that industrial tourism is a relatively young and unexplored theme: different terms are used in Europe, and worldwide studies on this issue are absent (Morice, 2006; Frew, 2000). As we discussed, some use the term for something completely different: tourism as an industry (Rodenburg, 1980; Abbey, 1968), while others use other terms for phenomena that are more or less equal to industrial tourism: technical visits, company tours, factory tours, industrial attractions, industrial sightseeing, etc. For a comprehensive literature review of articles, books and reports that deal with industrial tourism, we refer to the PhD thesis of Frew (2000). She also indicates, however, that the majority of the literature she refers to has been found in general trade press articles and books, and not so much in academic papers and books.

In January 2010, Google Scholar[2] found 1,210 hits for 'industrial tourism', 1,270 hits for 'plant tours', 1,150 hits for 'technical visits' and 1,770 hits for

[1] Cox & Fox (1991) provide insight in the tourism potential of agriculturally based leisure attractions.

[2] http://scholar.google.com

'company visits'[3]. Most publications we found with the terms 'plant tours', 'technical visits' and 'company visits' are not about industrial tourism but they either use site visits as empirical research method or they discuss this method itself[4]. Many academic articles on industrial tourism (Plummera et al., 2005; C.M. Hal l & Sharples, 2003; Joliffe, 2003; MacDonald & Deneault, 2001; Telfer & Hashimoto, 2002, McBoyle, 1994) actually focus on food and beverage tourism which can be seen as a specific type of industrial tourism. In the present section we discuss four different views on industrial tourism in order to understand who are the suppliers and customers of industrial tourism. First, however, we discuss the definition of tourists.

2.3.1 Tourists

Tourists can be defined as people who temporarily move to destinations outside their normal places of work and residence (Mathieson & Wall, 1982). The purpose of their visit can be business, leisure, visiting friends or a combination of these motives. An additional condition to distinguish tourists from other travellers (e.g. commuters and expats) is that tourists are not remunerated from within the places they visit.

An often used though somewhat arbitrary definition is provided by the World Tourism Organisation which defines tourists as people who move away from their daily environment to spend at least one night but not more than one year at the destination, regardless of the reason for their visit (business, learning, leisure, visiting friends, etc.) (World Tourism Organisation, 1995). It is arbitrary because it specifies the boundaries for the length of the stay in a rather strict way for the sake of data collection.

In tourism statistics, it is common to distinguish tourists from excursionists who stay outside their daily environment for less than 24 hours (see Van der Borg, 1991). People who recreate in their own region are not counted as tourists either, while it may involve visits to places outside their 'normal places of work and residence'.

[3] Other keywords resulted in considerably less hits: 'industrieel toerisme' (13), Industrietourismus (85), 'industrial sightseeing' (7), 'industrial attractions' (55) and 'manufacturing tourism' (30).

[4] For example: Voss et al. (2002) state that 'case research is not an excuse for "industrial tourism" – visiting lots of organisations without any pre-conceived ideas as to what is being researched.'

2.3.2 Elspeth Ann Frew: a conceptualisation of industrial tourism

The first view on industrial tourism we would like to discuss is the one presented by Elspeth Ann Frew, an Australian scholar who wrote her doctoral thesis on industrial tourism (2000). In this thesis she analyses the industrial tourism behaviour of people using Holland's theory of personality types[5]. Prior to this empirical analysis she conceptualises industrial tourism based on extensive literature review.

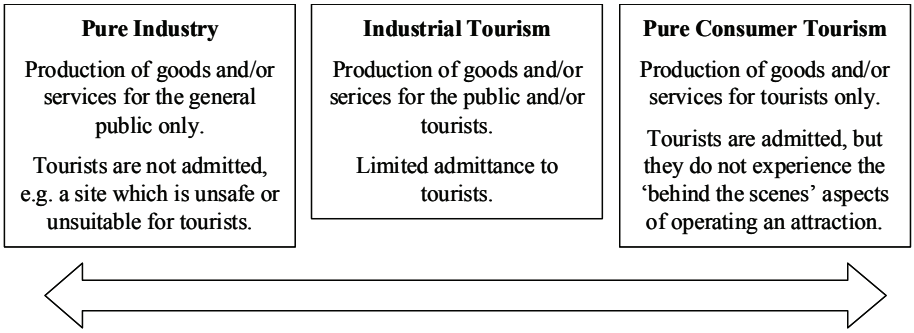
Frew (2000) defines industrial tourism as 'visits by tourists to operational sites where the core activity of the site is non-tourism oriented'. This definition is in line with the tradition in the Anglo-Saxon literature to make a distinction between industrial tourism and industrial heritage tourism (Yale, 1991; 1992). For instance, also Stevens (2000) defined industrial tourism as visits to existing current firms rather than past industries. In contrast with Yale (1991; 1992), who described industrial tourism as the presentation of contemporary manufacturing processes, Frew states that industrial tourism encompasses all firms that open their doors: the term industry should not be interpreted as 'manufacturing industry' but as a sector of the economy (as in 'the tourism industry'). Also organisations in the public sector can receive visitors. Industrial tourism is in her view more than factory tourism: all sectors of the economy can open their doors for industrial tourists. People not only visit companies to learn about the production process, but also to be informed about the way they are managed (Lammers, 1990). Not only production facilities (as suggested by Simonson, 1974) but also service providers such as logistics firms are potential industrial tourism destinations.

Frew's definition implies that industrial tourism sites can only be found at companies whose primary *raison d'etre* is the production of goods and services. Sites that are tourism-oriented are excluded from this definition. To make this clear she presents a categorization of tourism by the market for goods and services. At one extreme – pure industry – there are companies that only produce goods and services for the general public. Tourists are not admitted to their sites. At the other extreme – pure consumer tourism – there are companies that only produce goods and services for tourists, but they do not provide a real 'behind the scenes' experience. Industrial tourism is somewhere in between, producing goods and services for both the general

[5] This theory identifies six personality types: realistic, investigative, artistic, social, enterprising and conventional (Holland, 1985).

public and tourists, although the admittance to tourist may be limited. The main difference between industrial tourism sites and consumer tourism sites is that the former can always return to the pure industry extreme, with a focus on its core function which is not tourism. If a consumer tourism site does not attract visitors, it has to be closed. This implies that in her view corporate museums and brand parks such as the World of Coca Cola (Atlanta), Disneyland and Volkswagen's Autostadt (Wolfsburg) are not to be seen as industrial tourism.

Figure 2.1: Tourism characterised by the market for the goods and the services

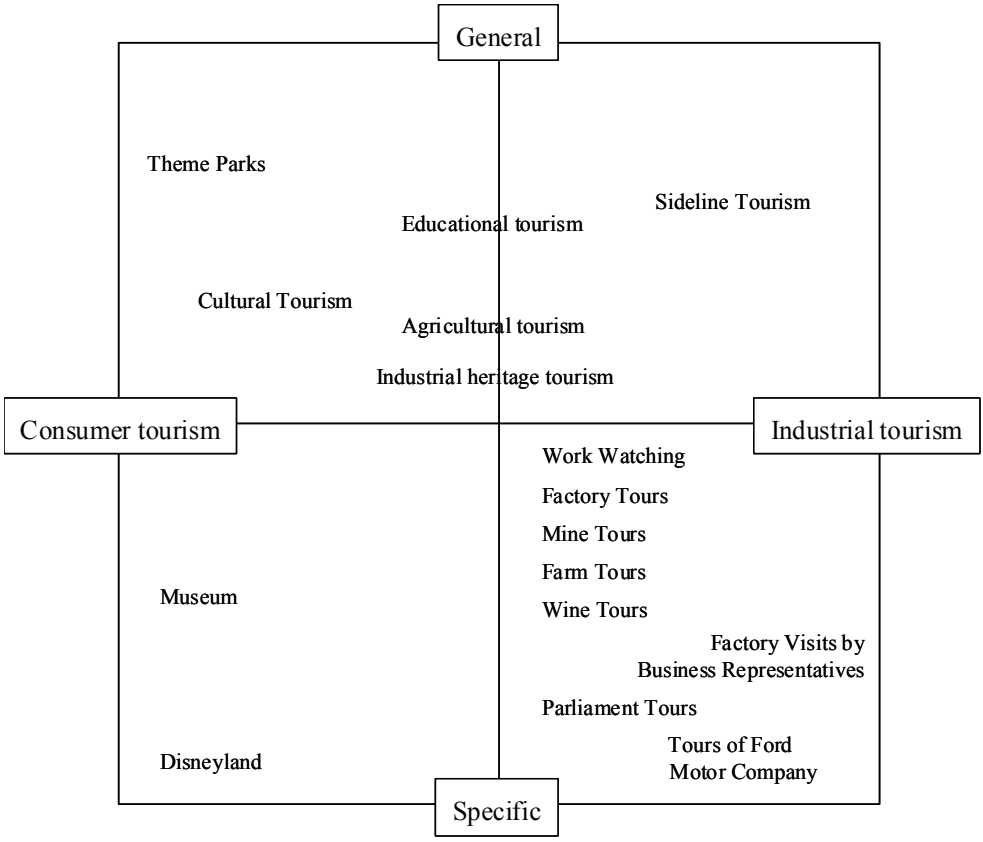


Source: Industrial tourism: a conceptual and empirical analysis (Frew, 2000), adapted by the author

In her definition of industrial tourism Frew mainly focuses on the supply side: what attractions can be considered industrial tourism? At the demand side she only identifies 'tourists' as the customers of company visits, though without defining tourists explicitly. It seems that Frew uses a relatively broad definition of tourists, as she indicates that also visits by students and business representatives (technical visits) can be categorised as industrial tourism, presumably also if they travel within the region or stay for less than 24 hours.

Frew (2000) also provides a comprehensive overview of other concepts that are somehow related to industrial tourism. She categorizes these concepts along two axes: from consumer tourism to industrial tourism along one axis and from specific named tourism attractions to more general concepts along the other. Agricultural tourism and winery tourism are subsets of industrial tourism, while industrial tourism can be seen as a subset of educational and cultural tourism.

Figure 2.2: General and specific types of consumer and industrial tourism



Source: Industrial tourism: a conceptual and empirical analysis (Frew, 2000), adapted by the author

2.3.3 Dietrich Soyez: Industrietourismus

For another view on industrial tourism we take a closer look at the definition of industrial tourism formulated by the German geographer Dietrich Soyez. In 1986 Soyez defined industrial tourism (*Industrietourismus* in German) as a group name for visits to operational and non-operational firms: 'every kind of movement that can be deduced to the appeal of either operational or former industrial systems'.

While Frew explicitly excludes industrial heritage from her definition, Soyez explicitly includes 'former industrial systems' in his definition. Moreover his definition seems to include consumer tourism sites such as corporate museums and brand parks, in contrast with Frew who makes a clear distinction between industrial

tourism and consumer tourism. While Frew looks at a site's reason of existence, Soyez looks at a visitor's reason to visit (the purpose or motive). The last approach also implies that the tourism industry can open its doors for industrial visitors. When you visit a zoo to see the animals, you are a regular tourist. But when you visit a zoo to learn more about how a zoo functions, you are an industrial tourist. In this way tourists do experience the 'behind the scenes' aspects of operating a tourist attraction, in the terminology of Frew, although her definition seems to exclude the tourism industry as host of industrial tourists.

In 1993 Soyez refined his definition of industrial tourism somewhat (also see Fontanari & Fontanari, 2001): 'movements caused by the appeal of former or operational industries on external visitors'. He also wrote that industrial tourism is a kind of tourism of which the essential target are the industrial companies in their own right and the spatial environment they shaped in a characteristic way (Soyez, 1993). With this refined definition he emphasizes that the appeal of the industry itself should actually cause the movement of an industrial visitor, which is a much stronger expression than 'can be deduced to'. Moreover Soyez now explicitly mentions 'external visitors' – and not tourists, as Frew does – as the customers of industrial tourism sites. In this way visits by the employees are not included in the concept. In his 1986 article Soyez identified three groups of visitors that we labelled as follows:

1) *Business visitors* (e.g. engineers visiting other companies)
2) *Educational visitors* (e.g. teachers, students, scholars)
3) *Other visitors* (e.g. leisure tourists, participants of company outings, civil servants)

This categorization is similar to the types of visitors recognised by Frew. Soyez makes clear, however, that not all external visitors are industrial tourists. In his view, the most important difference between regular business travel and other types of mobility (e.g. technical visits, industrial tourism) is whether the stay of those who visit a firm directly serves the production process or not. This would imply that visits by suppliers of production factors and services are not considered industrial tourists, and also visits by (business) customers are to be seen as regular business visits. Soyez also indicates, however, that 'intermediate types' of visits are thinkable.

2.3.4 Economic discoveries

A third view on industrial tourism defines company visits as a subgroup of economics discoveries (*découvertes économiques* in French). At the first European conference on industrial tourism in Angers (2006), the French scholar Jean-René Morice presented his view building on the work of Marcon, Preuilh & Ksouri (2000). Economic discoveries comprehend the following categories:

1) *Le tourisme de visite d'entreprise* (company visit tourism); involves visits to operational sites of firms in all sectors of the economy.
2) *Le tourisme de patrimoine industriel* (industrial heritage tourism); includes heritage sites and museums where visitors can learn about former economic activities.
3) *Le tourism scientifique* (science tourism); concerns museums, cultural centres, science centres, etc. where visitors can learn about science.

The definition of economic discoveries is clearly broader than the definition of industrial tourism as formulated by Soyez (1993). Economic discoveries also include science tourism for which not the industrial system but the knowledge is the main attraction. Furthermore the concept also stretches to sites that Frew considers pure consumer tourism such as museums and visitor centres. The first category (company visit tourism) can be further subdivided into three sub-categories (Marcon et al., 2000) that we labelled as follows:

1) *Open doors.* Companies that open their site without modifying their production units. This includes firms that open their doors incidentally during 'open days'. In general the staff takes care of guiding the visitors. These firms just show how they operate.
2) *Communication centres.* Companies that have duplicated their production units in specially developed visitor centres. Visitors are often accompanied by professional guides. Company visits are seen as a means of communication.
3) *Commercial units.* Companies that treat visits as a commercial activity. They open a shop and/or other commercial units near the production site.

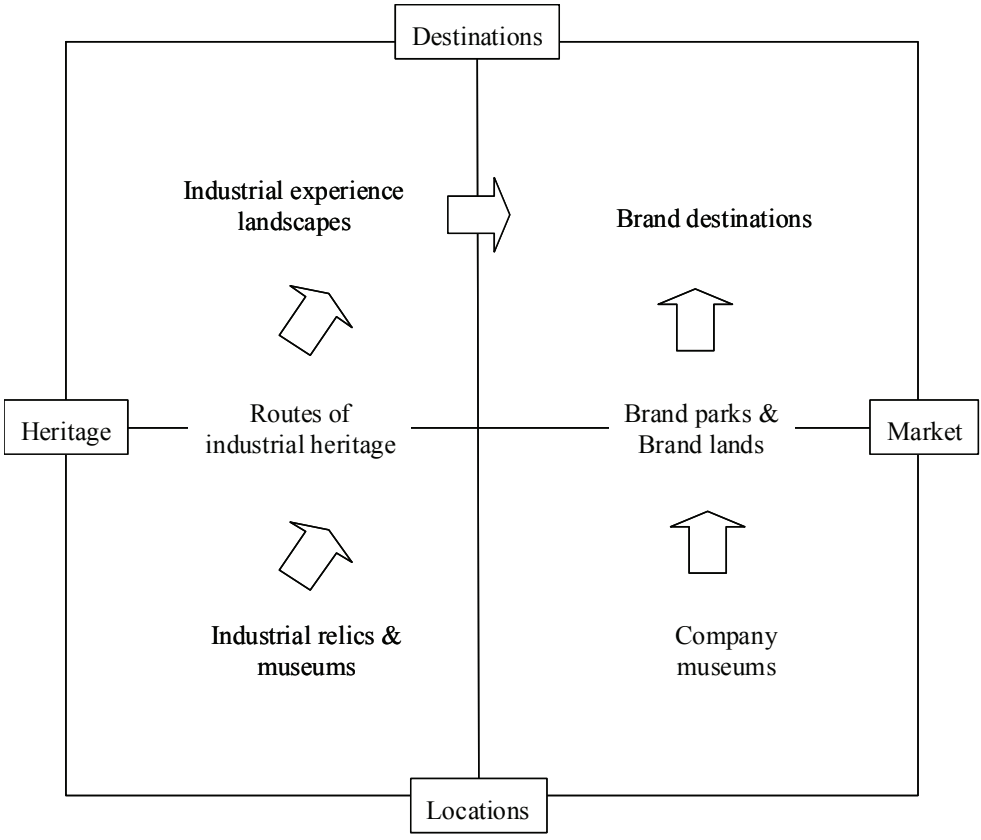
2.3.5 Industrial experience worlds

Another interesting view is presented by the German scholar Steinecke (2001) who introduced the term 'industrial experience worlds' as a group name for attractions that enable visitors to learn more about the industries of the past, the present time and the future. Industrial experience worlds are 'thematic, complex and multifunctional facilities on the interface between economics, entertainment, history, consumption and leisure'. Visitors get to learn something about economic activities mainly through exhibitions. They are typical examples of 'communication centres', although they often also include commercial units (shops). Most examples of pure industrial tourism – open doors – cannot be considered as visits to industrial experience worlds.

According to Steinecke industrial experience worlds can be categorised along two axes. The horizontal axis shows the difference between heritage (industrial heritage tourism) and market. Steinecke uses the term 'market' for types of industrial experience worlds in which operational firms have a clear stake: they use this type of attractions as marketing and public relations tool. He states that industrial heritage attractions are in general developed by the public sector. From the region's and visitors' point of view public and private industrial experiences – heritage and market – can be seen as elements of one tourism product. Although the two types of experiences have to deal with different interests and stakeholders (e.g. conservation versus utilisation), they also share some common interests in the development of a coherent marketing strategy (product development and promotion) in view of the same economic goals.

Along the vertical axis Steinecke describes the development from a location (Standort) to a destination which applies to both heritage and market attractions. In his view successful industrial experience worlds manage to become true destinations which basically implies an increase in scale and multifunctionality. For heritage sites he foresees the development from industrial museum and relics to industrial routes and industrial experience landscapes (e.g. Ironbridge in the UK). For attractions developed by market actors he analyses the evolution from a company museum to a brand park (e.g. Niketown) and a brand destination (e.g. Audi Center).

Figure 2.3: Public and private industrial experience worlds: types and trends[6]



Source: Industrieerlebniswelten: zwischen Heritage und Markt: Konzepte – Modelle – Trends (Steinecke, A., 2001), translated and adapted by the author

2.3.6 Consumer experience tourism

The last view on industrial tourism we would like to discuss is the one developed by Mark Mitchell and Robert Orwig who introduced another group name for economic discoveries: consumer experience tourism (CET). This kind of tourism comprehends all sites for which the goal is to establish a bond between consumers and a brand. This goal can be achieved by plant tours but also by company museums and visitor centres, and even by industrial heritage sites: CET provides consumers a

[6] The arrows indicate future development or strategic orientation.

"bonding experience regarding a brand, its operation, its production process, history and historical significance" (Mitchell and Orwig, 2002, p.37). While Soyez looks at the motives of visitors, Mitchell and Orwig focus on the motives of companies.

The term 'consumer experience tourism' is somewhat misleading because it not only targets current and potential consumers, but also business partners and community stakeholders. Also companies that do not sell products to end consumers directly can be active in CET, as it may help them to "establish trust and understanding in the supply chain". Moreover, CET may be used in the public and non-profit sectors as well (Mitchell and Mitchell, 2001).

2.4 Conclusions: our definition of industrial tourism

Our review of the literature confirms that a generally accepted definition of industrial tourism does not exist. Also in practice policy makers and other actors seem to use different terms for this phenomenon, while they define industrial tourism – or whatever term they use – in different ways. Industrial tourism is often associated with 'industry' as in manufacturing industry and 'tourism' as in inbound leisure tourism. Our definition of industrial tourism is clearly broader:

> *Industrial tourism involves visits to sites that enable visitors to learn about economic activities in the past, the present and the future.*

This definition provides answers to relevant questions such as: 1) what are industrial tourists? 2) what is meant with industry? 3) what sites are industrial tourism attractions?

2.4.1 What are industrial tourists?

In our definition of industrial tourism we avoid the term 'tourists' – as in the definition of Frew – because it must be clear that also other groups can visit industrial tourism attractions, such as students, researchers, journalists, neighbouring residents, politicians and business delegations. In accordance with Soyez we focus on the argument to visit a site: to learn about the economic activities. This implies that visits for business or commercial reasons only are not categorised as industrial tourism; hereby we refer to the condition formulated by Soyez that a visit should not directly serve the production process. Another important condition is that visitors are not

remunerated by the companies they visit (comparable with the definition of a tourist). However, we also emphasize that it will be difficult to distinguish industrial tourists from business travellers as business and education (learning about economic activities in a region) often go hand in hand.

In our view, industrial tourists are not necessarily visitors from another region: also people who travel in their own can be categorised as industrial tourists as long as they move 'outside their normal places of work and residence'. This implies, for instance, that factory visits for family members of employees can also be seen as industrial tourism because they move away from their daily environment.

2.4.2 What is meant with industry?

We define industrial tourism as visits that inform people about 'economic activities' in the past, the present and the future. In this way we emphasize that industry should not be defined as manufacturing industry only, referring to the work of Frew. We choose not to use the condition that 'the core activity of the site' has to be 'non-tourism oriented' because we argue that industrial tourists may also be interested in the economic activities of tourism-oriented businesses such as a zoo or a museum. Also companies that produce services or store and distribute products (e.g. logistics firms) are potential suppliers of industrial tourism. Agricultural tourism, wine tourism, beer tourism, parliament tours: they are all examples of specific types of industrial tourism related to one sector or product.

Another conclusion from the literature review is that industrial tourism involves visits to companies (private sector), but also to governments or government-funded institutions such as universities (public sector) and non-profit organisations (Mitchell & Mitchell, 2001).

2.4.3 What sites are industrial tourism attractions?

In our approach industrial tourism involves visits to sites where people can learn something about economic activities 'in the past, the present and the future'. Our literature review demonstrates that industrial tourism is often linked to both industrial heritage tourism and visits to operational sites. Following the definition of Soyez, we choose to adopt a relatively broad definition of industrial tourism, considering company visits and heritage tourism as specific forms of industrial tourism. We agree with Marcon et al. (2006) that also science tourism can be seen as industrial tourism – they use the term 'economic discoveries' – if these attractions inform visitors about innovation in economic activities: in the past, the present and the future.

The literature review demonstrates that there are various types of industrial tourism attractions. As Steinecke (2001) explained, industrial tourism attractions – both heritage and market sites – may evolve into full-fledged tourist destinations such as brand parks and brand destinations. The three categories of Marcon et al. (2000) can also be seen as three stages in the development from a relatively passive and reactive open-door policy to a more proactive industrial tourism strategy. In each stage an additional function of industrial tourism – industrial tourism as a means of communication and a source of income – justifies additional investments. In the case of visits to operational firms, this evolution implies that industrial tourism attractions acquire characteristics of consumer tourism[7] (see Frew, 2000), thus becoming less dependent on the production site and more dependent on the influx of visitors. In other words: a development from sideline to core business.

2.4.4 Focus on the market side of industrial tourism and the urban region as unit of analysis

Using the definition of industrial tourism as we formulated it above, we choose to focus on the market side of industrial tourism, in the terminology of Steinecke (2001). This choice is consistent with our main research question: under what conditions can the development of industrial tourism benefit the companies that open their doors and the urban region in which they are located? We analyse the development of industrial tourism in which active, operational companies 'open their doors'. We argue that companies can open their doors in different ways, ranging from participation in open-door days to the development of a company museum or brand park. This implies that the development of industrial heritage tourism is not a primary subject of study although we do acknowledge relations between the market and heritage side of industrial tourism. For one thing both sides are relevant for the attraction of visitors who may be interested in combining visits to both types of industrial tourism attractions. As Mitchell & Orwig (2002) explained companies may also communicate their historical significance to enhance the loyalty of customers and other stakeholders.

Our focus on the market side also implies that we concentrate on visits to companies rather than on visits to governments and non-profit organisations. The

[7] Our definition of industrial tourism is clearly broader than the definition of Frew as we also include sites Frew would categorise as consumer tourism.

reason is that we are interested in the conditions under which industrial tourism benefits private actors with a (long-term) profit motive as well as regional actors who defend collective interests. Companies with public ownership also deserve our attention if they are – to some extent – autonomous in their decisions.

Another choice we make is to consider the urban region as primary unit of analysis. We are interested in the development of industrial tourism in urban regions, discussing the conditions under which individual firms and the urban region in which they are located benefit from this development.

2.4.5 Terminology

We have chosen to use the term industrial tourism although there are indeed various other terms for the same phenomenon and some use the term industrial tourism for a 'commercial, businesslike approach to tourism development' (Rodenburg, 1980; Abbey, 1968). Another problem is that industrial tourism is often associated with manufacturing industry and leisure tourists, while most scholars agree that it should be defined broader (as we did). Nevertheless we prefer to use the term 'industrial tourism' because it seems the most common name for the phenomenon of visiting sites that provide a combination of education and leisure related to economic activities in a region. Economic experiences (Marcon et al., 2006) would be a good alternative but this term – also in French – is not widely used. Consumer experience tourism (Mitchell & Orwig, 2002) is a type of industrial tourism that is too narrow for our definition as it focuses on one stakeholder group (consumers) and one argument for companies to open their doors (creating a bond with them).

In the chapters that follow we will use the term industrial tourism but also many other terms that are related to this phenomenon:

- *Industrial tourism attractions* are the sites that can be labelled as industrial tourism;
- *Industrial tourists* are the consumers of industrial tourism: they visit industrial tourism sites;
- *Company visits* are visits to industrial tourism attractions linked to one specific (operational) company;
- *Company tours* are guided tours offered by a specific (operational) company to an industrial tourism attraction; company tours are specific types of company visits;

- *Host firms* or *host companies* are the companies that (consider to) open their doors through the reception of industrial tourists.

Taking this all together: host firms can be seen as the suppliers of industrial tourism while industrial tourists generate demand for company visits and company tours at industrial tourism attractions.

2.4.6 From reactive to proactive

An important conclusion from the literature review is that companies may adopt different approaches to industrial tourism:

- Frew (2000) made a distinction between pure industry (no visitors allowed, e.g. because of safety restrictions), industrial tourism (limited admittance to tourists) and pure consumer tourism (for tourists only).
- Morice (2006) recognised three types of company visit tourism: open doors, communication centres and commercial units.
- Steinecke (2001) presented a typology of industrial experience worlds ranging from locations to destinations.

In the present study we use another typology that combines elements of the three authors mentioned above.

Table 2.1: Reactive and proactive approaches to industrial tourism

Characteristic	*Reactive*	*Proactive*
Reason to receive visitors	Good citizenship	Communication / Income
Pressure	External	Internal
Admittance	Limited	Entrance for all
Modifications in the site	No	Yes
Tour guides	Staff	Professionals
Strategic policy	No	Yes

In our view companies can be inactive or active in industrial tourism. Inactive simply means that firms do not want to receive industrial tourists at all, for instance because of safety restrictions. Active companies can be reactive at the one extreme, or proactive at the other. Host firms with a proactive approach consider industrial tourism as a source of income and/or a tool of marketing and public relations (internal pressure), while firms with a reactive approach open their doors in response to requests (external pressure). These and other characteristics of the reactive and proactive approach to industrial tourism are summarised in table 2.1.

Companies with a reactive approach to industrial tourism hardly invest in guided tours or the quality of the site. Hence, the costs are kept low; but the same applies to the benefits. Host firms with a proactive approach do invest in site modifications and professional tour guides. They want to turn their site into a destination for a larger audience. Large benefits in terms of income and communication are expected, justifying the higher costs involved. In chapter four we will further elaborate this analysis of costs and benefits. First, however, we will discuss the changing conditions in urban regions that explain the drivers and barriers in the development of industrial tourism.

Chapter 3

Changing conditions in urban regions

3.1 Introduction

In the previous chapter we described the development of industrial tourism as a segment of the tourism market. The aim of the present chapter is to provide a theoretical framework for understanding the changing conditions that are relevant for the development of industrial tourism in cities and urban regions. We identify several external factors that influence the decisions of actors in the urban system (companies, governments, visitors, investors, etc.) with an impact on urban development in general and industrial tourism development in particular. Through this analysis we aim to gain insight in the possible functions of industrial tourism for companies and urban regions, identifying the drivers and barriers in industrial tourism development. To that end we discuss several theories and concepts helping us to identify the reasons why people visit companies or not, why companies open their doors or keep doors closed and why cities promote industrial tourism development or decide not to.

3.2 The urban life cycle

Since the industrial revolution in the late 18th century cities have experienced an unprecedented growth of their population. Today, more than half of the world's population is living in metropolitan areas, with shares up to 90 per cent in developed countries. In economic terms a city can be defined as a spatially integrated economic and social system at a given location (J. Friedman, 1986). The development of cities

has been influenced by several global trends that influence the decisions of actors in the urban system, and that will continue to do so.

One of the models for understanding the spatial-economic development of cities is Van den Berg's urban life cycle theory (1987). Essentially this theory explains how general social, political, demographic and technological changes influence the behaviour of urban actors and how this relates to the spatial-economic development of cities. The idea that cities evolve through a life cycle already emerged in the early twentieth century (Geddes, 1915), but it took until the 1980s before the concept was conceptualised by Van den Berg et al. (1982), Hall & Hay (1980) and others.

The theory starts with the assumption that families and companies maximise their wellbeing by choosing a location that provides access to elements that add to their wellbeing. In line with this thought the attractiveness of a location – for residents or companies – depends not only on the local supply of welfare elements, but on the accessibility of such elements in the relevant environment as well (also see Braun, 2008). Location decisions depend on the actors' preferences (what welfare elements are important), their aspiration levels (desired levels of welfare elements) and their mobility. These individual factors are influenced by external changes such as a general increase in prosperity, changing social values and the availability of new transport modes. Through their spatial behaviour families and companies affect the spatial-economic development of cities.

Van den Berg uses his model of 'urban systems in a dynamic society' to explain the development of European and US cities through the stages of the urban life cycle: urbanisation, suburbanisation, desurbanisation (deconcentration) and re-urbanisation. Each stage of development can be related to fundamental changes in recent history such as: industrialisation (I), the rise of the service and transport sector (II), the increased importance of quality of life and environment (III), and the transition to an information society (IV). These and other fundamental changes explain the growth, decline and spatial distribution of population and employment in central cities and their suburbs (the core and its ring, in the vocabulary of Van den Berg).

The urban life cycle provides insight in the process of urban sprawl and the transition from monocentric to polycentric urban regions; a trend that has been recognised by other scholars as well (e.g. Hall, 1995; Kloosterman & Musterd, 2001; Van der Knaap, 2002; Parr, 2004; Harris & Ullman, 1945). The life cycle theory

explains how cities develop from places with high concentrations of people and jobs to multi-node systems with various residential, commercial and industrial areas. Also for the development of industrial tourism it is important to understand the dynamic spatial distribution of (industrial) firms and citizens. In the first stage of the life cycle people live at a relatively short distance of (industrial) workplaces. In the second stage, competition among land uses forces residents and firms to move out of the city; a trend which is continued in the third stage when people and companies start to leave the metropolitan area. This process of urban sprawl is accompanied by an increase in the average distance between people and workplaces. With the rise of the transport and service sector and the increased importance of quality of life and environment (to be further discussed in the next section), industrial activities have been relocated away from residential areas and the emerging central business districts of cities. As a consequence industries have become less visible in cities. This phenomenon also manifests itself in port cities that have been confronted with a relocation of port activities. The transition to an information society provides city centres opportunities to regain attractiveness as business location, but this trend will not necessarily result in a shorter distance between (industrial) jobs and people.

Another relevant aspect of the urban life cycle for industrial tourism development concerns the role of the (local) government. Assuming that the aim of a municipal board is to promote the welfare of its local population, local governments respond to changes in the urban system and its dynamic environment by changes in their policies on housing, facilities, leisure, environment, transport and infrastructure, and industrial locations. Through these policies governments influence the relative attractiveness of a region as location for companies and residents. During the first three stages of urban development policies typically follow demand, implying that the government stimulates the transition to a next stage in urban development. For instance, urban sprawl is accommodated by investments in (public) transport infrastructure and the development of business parks and residential areas outside the city centre[8]. The fourth stage is clearly different from the first three stages because it is not an automatism that cities will succeed in entering this process of revitalisation (Van der Borg, 1991; Nystrom, 1992). Van den Berg (1987) states that a proactive local government is needed to create an environment that is attractive for innovative

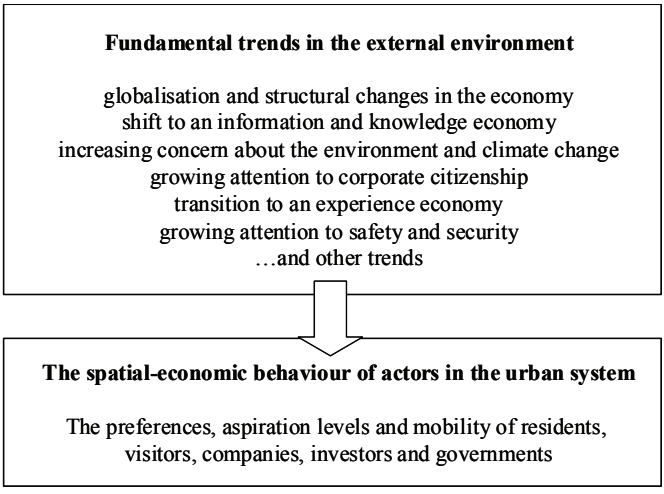
[8] To be precise: transport infrastructure facilitates urban sprawl, but at the same time urban sprawl facilitates the development of transport infrastructure (Rodrigue, Comtois & Slack, 2006).

companies and its well-educated staff. In the next sections we will discuss if and how industrial tourism development can help local governments to reach these objectives.

3.3 Fundamental trends

The urban life cycle makes clear that the economic structure of cities is subject to fundamental developments and trends. They set the playing field for cities (Braun, 2008). Below we discuss the external factors that we find most relevant for industrial tourism development in cities: globalisation and structural changes in the economy, the transition to an information and knowledge economy, increasing concern about the environment and climate change, growing attention to corporate citizenship, the transition to an experience economy and the growing attention to safety and security. As indicated in the figure below these and other trends affect the spatial-economic behaviour (preferences, aspiration levels, mobility) of actors in the urban system (residents, visitors, companies, investors, governments).

Figure 3.1: The impact of fundamental trends on spatial-economic behaviour



3.3.1 Globalisation and structural changes in the economy

One of the most fundamental trends is, without any doubt, the globalisation or internationalisation of the economy, enabled by the advance in transport and information and communication technologies (Hall, 1995; Sassen, 1991). Globalisation can be described as ‘the whole movement toward a single world

economy and a single world society' (Stonecipher[9], 1996, p. 251). Globalisation implies that ever more economic activities are organised on the world scale and that the geographical market areas have become much more coherent (Dicken, 1992). However, the term not only refers to the ongoing internationalisation of business, but also encompasses the increasing political, social and cultural exchange.

As a result of globalisation, cities have become nodes in a global village: a worldwide network in which economic activities tend to take place at the most favourable location. Companies increasingly ignore national borders, taking an ever larger area in consideration when it comes to location decisions (Ohmae, 1995). Europe, North America, Japan and Australia face increasing competition from Latin America, China, India and other Asian countries. Many companies nowadays operate on a global level not only in terms of sales but also with production sites at various locations. Company mergers and takeovers have resulted in the creation of global firms with an annual income that surpasses the gross domestic product of numerous (small) countries (Klein, 2000).

International trade has been facilitated by the liberalisation and privatisation of markets that used to be under government control (energy, banks, transport, telecommunication, etc.). Moreover, trade barriers have been reduced to a great extent by the development of trade blocs such as the European Union and the North American Free Trade Agreement, but also because of other important political changes: in Europe the disappearance of the iron curtain after the disintegration of the Soviet Union has facilitated the gradual expansion of the European Union, while trade with China has increased dramatically since Deng Xiaoping's policy of opening up to the outside world.

Globalisation has changed the world, but also the economies of urban regions. From the 1950s onwards industrial cities in Europe and North America began to face industrial decline, due to the relocation of activities to countries with a more favourable business environment, notably in terms of labour costs. The number of jobs in the manufacturing industry started to decline, not only because plants were relocated but also as a result of automatisation. While some regions were able to cope with this structural change – replacing jobs in industry with jobs in public and private services – other cities still find it difficult to adapt to the new situation. As a result of globalisation, today's regions have to face the impact of global competition on their

[9] Harry Stonecipher is a former president and CEO of McDonnel Douglas.

economic structure. For instance, it will be difficult for European metropolitan regions to compete with Chinese cities on the large-scale production of low-tech consumer products. Labour costs in Europe are often too high for these kinds of activities. Competition from 'cheap labour countries' has forced European regions and their businesses to focus on quality, design and innovation rather than price.

The growing interdependency of locations has strengthened the global competition between urban regions. Although some state that competition should be an attribute of companies only, and not of cities, regions or nations (Krugman, 1996; Georghiou & Metcalfe, 1993), the fact is that places are in active competition for citizens, visitors, investors and firms as production is becoming more fragmented and footloose (Kotler et al., 1999). Competition stimulates local governments to become more active in securing an attractive location and living environment, and marketing their regions (Bramezza, 1996; Begg, 1999; Braun, 2008).

3.3.2 The shift to an information and knowledge economy

Another fundamental trend that affects the development of urban regions is the shift to an information and knowledge economy. In the late 1980s, Van den Berg (1987) and Castells (1989; 1996) already foresaw that the rise of information sector would have a great impact on the functioning of cities, talking about a transition to an information age or era.

An important driver of the information economy is technological change, particularly in the field of information and communication technologies (ICT). Innovations in ICT stimulate the exchange of information in many ways: information can be exchanged on longer distances, with higher speeds, with more interaction, with more flexibility, etc. ICT has at least two important implications for economic activities. First, it allows activities to be 'fragmented into tasks that are widely distributed over space and across time' (Couclelis, 2000, p. 346). Second, ICT makes it possible to combine work with other activities: the traditional boundaries between work, home and leisure seem to blur (Wellman, 2001; Wittel, 2001).

In the past, several scholars (e.g. Cairncross, 1997) have predicted that globalisation and the ICT revolution would cause a 'death of distance'. If distance died, cities would lose their right to exist too. Others, however, argue that cities are still the engines of economic growth, for one thing because of 'massive location inertia' (Hall, 1995). One explanation for the survival of distance is that economic activities are embedded in ongoing social institutions or regional networks

(Granovetter, 1985; 1993). Another is that new means of communication (mobile phone, the internet) have not reduced the number of face-to-face contacts. Technological innovation has indeed made it easier and cheaper to transport goods, people and ideas, but this reduction in generalised transportation costs has been partly offset by increased opportunity costs of travelling due to higher income levels: time has become more expensive (Glaeser, Kolko & Saiz, 2001). Economic activities still tend to cluster in cities because they are linked by 'commonalities and complementarities' (Porter, 2000, p.16). They benefit from positive externalities such as knowledge spillovers, access to specialised inputs and services from supporting industries, and access to a common labour pool (Marshall, 1920).

More recently, the emphasis has shifted from information to knowledge as the main driver of urban economies. Nowadays, many scholars define knowledge as a production factor which can produce benefits (referring to Drucker, 1969). Countries and regions in Europe want to develop their knowledge-based economy, mainly because of increasing competition on a global scale (see Malecki, 2002; Kearns & Paddison, 2000). As a logical consequence, access to information has become an increasingly important location factor (Hall, 1995). In theory, metropolitan areas have good opportunities since they provide the places where information and knowledge is supplied and can be exchanged, and because proximity and critical mass reduce the costs of moving ideas (Glaeser, 1998). This particularly applies to 'tacit knowledge' which requires face-to-face exchange (Lever, 2002). Important assets of cities in the current knowledge economy are their universities and knowledge centres, but also the meeting places and the metropolitan atmosphere. Especially in so-called high-touch sectors (media, design, fashion, advertisement, etc.) cities can facilitate unprogrammed exchange of information (Hall, 1995). In this creative industry firms seem to appreciate close relations with the customers (citizens, companies), and urban areas are often the cradle of new trends in music, design, fashion and arts.

A key feature of the knowledge economy is the importance of networks. Complex production processes and a highly dynamic technological and economic environment demand strong interaction between firms and knowledge institutions. Product life cycles become shorter, requiring faster product development, and hence, faster exchange of information and knowledge. There is a shift from closed to open innovation models (Chesbrough, 2003). For companies it is increasingly important to be embedded in local and global networks that provide them access to information, and allow them to respond more quickly to changes in the macro-environment

(changing markets, changing technologies, etc.). Networks are needed to make new combinations ('neue Kombinationen') by innovations in products, processes, markets, inputs, and organizational forms (Schumpeter, 1934). Cities can respond to that need by providing an environment which supplies good conditions for entrepreneurship, network development and innovation.

3.3.3 Increasing concern about the environment and climate change

Since the Club of Rome published its report 'The Limits to Growth' (Meadows et al., 1972) concern for the environment has gained importance on the global agenda, as well as on the agendas of local policy makers. The increasing attention to the environment can be seen as a by-product of increasing prosperity which generally makes people more aware of higher-order needs (Maslow, 1943). But of course, the most important reason is simply the fact that worldwide economic growth, spurred by globalisation, has already damaged the environment. Also the impact of tourism on the environment has become an important topic of debate (M.V. Russo, 1999) Since the 1990s worries about climate change and evidence of structural changes in climate conditions have strengthened the call for environmental preservation. National governments have committed themselves to international agreements such as the Kyoto Protocol (1997) and the Copenhagen Accord (2009)[10] with the aim to reduce the greenhouse effect. To meet such goals governments on various levels have introduced numerous policies to stimulate or to oblige companies and consumers to adapt their behaviour. As the majority of the world population live in urban areas, cities play a key role in tackling environmental problems.

The increasing environmental concern can be related to another development the world is confronted with, and a direct result of globalisation and economic growth: the increasing shortage of energy, raw materials and food. As far as energy is concerned, the increasing oil and gas prices and the growing awareness that the world runs out of oil and gas have stimulated governments and companies to look for other sources of energy. This energy shift will undoubtedly change the economy (it will become 'greener'), with a considerable impact on cities. Also the growing shortage of raw materials and food will influence urban development: there is a growing pressure to re-use waste (cradle to cradle) and to re-introduce agriculture in cities.

[10] In contrast with the Kyoto Protocal, the Copenhagen Accord is not legally binding.

3.3.4 Growing attention to corporate citizenship

Globalisation and increasing environmental concern are both related to a third fundamental trend we want to discuss here: the increasing pressure on companies to give evidence of good corporate citizenship or corporate social responsibility (CSR). CSR can be defined as 'a concept whereby companies integrate social and environmental concerns in their business operations and in their interactions with their stakeholders on a voluntary basis' (European Commission, 2001, p.8). The shift of power from the public to the private sector (due to liberalisation and globalisation) has increased society's expectations towards companies (Boudhan et al., 1996; Goyder, 1998; Elkington, 1997). Companies have to do their best to become a 'neighbor of choice' (Burke, 1999). With increasing prosperity and concern about the environment, but also about social and economic conditions, society increasingly forces companies to give account of their contribution to the communities in which they operate; for instance by including triple P (People, Planet, Profit) performance indicators in their annual reports. As a result reputation and stakeholder management become more important for companies.

One of the main drivers behind this development is the increasing transparency of corporate behaviour: particularly the development of internet and other mass media has strengthened the influence of non-governmental organisations, interest groups and individuals on a company's license to operate. Because more information on corporate behaviour is available, stakeholders who are potentially involved in transactions with a company (consumers, employees, job seekers, governments, suppliers, buyers, etc.) take this information into account. While some companies adopt a reactive or defensive approach – denying or contesting responsibilities – many companies nowadays have adopted a proactive approach: doing more than is required (Clarkson, 1995). While passive CSR strategies are aimed at damage control, proactive CSR strategies focus on competitive advantages (Burke, 1999; Boudhan et al., 1996; Goyder, 1998). As companies get more aware of their dependence on stakeholders, they will become more inclined to choose a more (inter)active style of communication in their public relations strategy (Grunig, 1992; Kitchen, 1997). Kaptein and Van Tulder (2003) refer to the stakeholder dialogue as a model of 'consultation and cooperation' that could replace the model of 'competition and confrontation' typical for a stakeholder debate. A proactive or interactive approach to international corporate responsibility implies that multinational

companies respond to globalisation by searching for active partnerships in all the communities in which they operate[11] (Van Tulder & Van der Zwart, 2006).

Table 3.1: Different CSR strategies

	Rating	*Posture or strategy*	*Performance*
1.	Reactive	Deny responsibility	Doing less than required
2.	Defensive	Admit responsibility but fight it	Doing the least that is required
3.	Accommodative	Accept responsibility	Doing all that is required
4.	Proactive	Anticipate responsibility	Doing more than is required

Source: A stakeholder framework for analyzing and evaluating corporate social performance (Clarkson, 1995)

3.3.5 The transition to an experience economy

Another relevant trend for understanding the development of industrial tourism is the transition to what some have labelled an experience economy. Pine and Gilmore (1998; 1999) wrote about the 'progression of economic value' from the extraction of commodities, the production of goods and the delivery of services to the creation of an experience. An important driver behind this transition is the rising affluence of the population which allows suppliers of experiences to charge higher prices. The transition should not be understood as the disappearance of goods and services, but rather as the addition of experience to existing products (Braun, 2008). Experience can help companies but also cities to differentiate their products and their competitive position. In a dynamic and competitive environment it becomes increasingly difficult to claim unique selling points based on product characteristics.

[11] Van Tulder & Van der Zwart (2006, p. 144) distinguish four approaches to corporate social responsibility: inactive ('doing things right'), reactive ('don't do things wrong'), active ('doing the right things') and proactive or interactive ('doing the right things right').

3.3.6 Growing attention to safety and security

A very relevant trend that may hinder the development of industrial tourism is the growing attention to safety and security[12]. With rising prosperity people attach more importance to these values: security needs rank second in Maslow's hierarchy of human needs, coming right after the most basic physiological needs such as housing and food (Maslow, 1943). In addition to this fundamental trend, the terrorist attacks in the United States on 11 September 2001 changed the society's view on safety and security dramatically – with far reaching consequences for the tourism industry (Wilks & Page, 2003).

3.4 Implications for urban development

Globalisation and structural changes in the economy, the shift to an information and knowledge economy, increasing concern about the environment and climate change, growing attention to corporate citizenship, the transition to an experience economy and the growing attention to health, safety and security are fundamental trends that change the playing field for cities. None of these trends can be isolated from the other: they are all interrelated. Together they influence the behaviour of the actors in the urban system: (potential) residents, investors, companies and visitors, but also governments and institutions such as schools, hospitals and housing corporations. On their turn, the actors in the urban system affect the spatial-economic and socio-cultural development of the city; for instance by deciding to visit a city (or not to), by choosing to settle down (or not to) or by investments in infrastructure and facilities. In this system each actor has its own specific, public or private interests or objectives: motives and priorities (preferences and aspiration levels), that change under influence of fundamental trends such as the ones we discussed above.

For the development of industrial tourism, we consider three impacts on urban development particularly relevant (see figure 3.2): 1) sustainable urban development as a leading paradigm for actors in the urban system; 2) the increasing need for cooperation between stakeholders; and 3) the increasing attention to city marketing.

[12] Security is a broader notion than safety (Van den Berg et al, 2005) as it also comprehends more intangible threats such as terrorist attacks and disasters.

Figure 3.2: Implications for urban development and industrial tourism

3.4.1 Sustainable urban development as leading paradigm

The growing concern about the environment has made public and private actors aware that the competitiveness of cities should not only be defined in terms of productivity, as for instance Porter (2000) suggested, or as the ability to create and sustain jobs (Markusen, 1996; Fry, 1995). It has become more common to define urban competitiveness as a multifaceted performance indicator as proposed by Begg (1999) and Deas & Giordano (2001). Accepting this broader definition of competitiveness, an attractive location environment is a key determinant of economic performance (Van den Berg, Van der Meer & Otgaar, 2000).

In conformity with this broader view on urban competitiveness, sustainable urban development has become a leading paradigm in urban development and urban management (see i.a. Bramezza, 1996; Van den Berg & Braun, 1999). Sustainable urban development can be defined as a type of development that is in the interest of present generations, but at the same time respects the needs of future generations,

building on the well-known Brundtland definition (WCED, 1987). Like urban competitiveness, sustainable urban development is a multifaceted notion with economic, environmental, social and cultural dimensions (Hall & Pfeiffer, 2000; Van Winden, 2003). According to this broader definition, sustainable development also relates to health, safety and security.

3.4.2 The increasing need for cooperation between stakeholders

The competition between cities, the shift of power and responsibilities from the public to the private sector and the growing concern about the environment have increased the importance of cooperation between stakeholders as a determinant of urban competitiveness. Urban competitiveness is not only subject to economic determinants such as factors of production, infrastructure, location, economic structure and urban amenities but also to strategic determinants such as government effectiveness, urban strategy, public-private cooperation and institutional flexibility (Kresl, 1995). The changing environment in which cities operate requires new forms of (urban) governance with more intense public-private interaction in two directions (Harvey, 1989; Kooiman 1993, 2002).

The city can be seen as a 'shared power world' in which the required knowledge, power and resources to improve competitiveness are distributed among various organisations and sectors (Bryson & Crosby, 1992). The actors in the urban system have their own specific interests but also share a collective interest in an attractive environment. A city or metropolitan region "establishes a special collective interest among individuals", possibly allowing the development of urban regimes, growth coalitions or policy networks (Logan & Molotch, 1987; Castells, 1983; Stone, 1989). Urban governance assumes a 'multi-stakeholder scenario' which implies that governments can only solve collective problems if they succeed in involving other actors such as citizens and companies (Bovaird & Loffler, 2003). In accordance with this philosophy, Van den Berg, Braun & Van der Meer (1997) introduced the concept of organising capacity: the ability to enlist all actors involved and, with their help, to generate new ideas and to develop and implement a policy designed to respond to fundamental developments and create conditions for sustainable development. Not only scholars but also international organisations such as the United Nations and the World Health Organisation have identified citizen and business involvement as important conditions for a healthy and sustainable development of cities.

3.4.3 Increasing attention to city marketing

The third implication we want to discuss is the increasing attention to city marketing. Braun (2008) defines city marketing as a shared philosophy that puts the city's customers central resulting in the coordinated use of marketing tools. The main reasons why cities have become interested in marketing is the increasing competition between cities and the growing importance of quality of the living environment (Van den Berg, Klaassen & Van der Meer, 1990; Buursink, 1991; Ashworth and Voogd, 1990). Another important driver is the structural change of the economy which has intensified competition for inward investment, notably among cities with an industrial past (Paddison, 1993).

Furthermore cities have become more concerned about their image (Ashworth & Voogd, 1990) as a determinant of competitiveness. Strategic image management has gained importance (Kotler et al., 1999): cities are increasingly interested in how they are perceived by various target groups and in interventions to improve these perceptions. They look for attractions that can support the desired image. Promotional activities are not sufficient to change the image of a city or region. In tourism, for instance, the perceptions of travellers are dependent on various sources of information: television, travel, friends, magazines, the internet, newspapers etc. (Govers, Go & Kumar, 2007). City marketing thus also encompasses the development of products (e.g. attractions and events) that confirm the identity and the image to be projected.

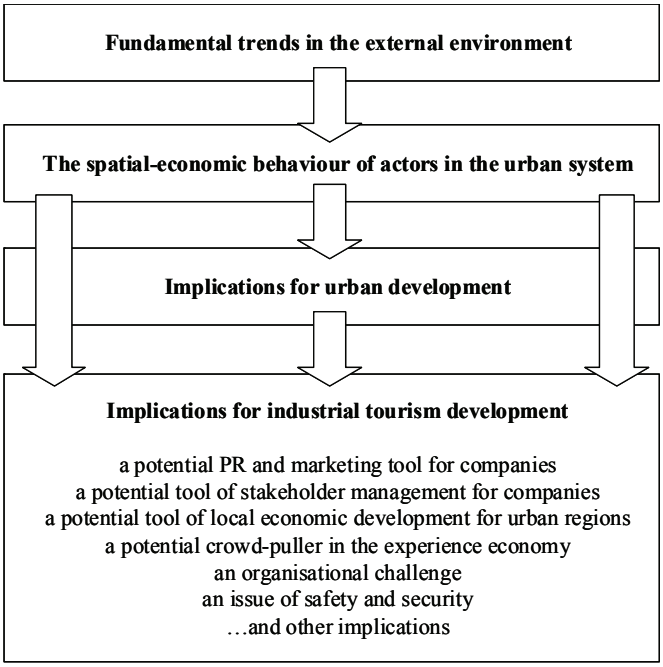
City marketing can be used to make cities more competitive in the broader sense of the word. As Braun (2008) explained, it is a philosophy that can benefit the city's population, emphasising that 'marketing is not necessarily restricted to the purpose of making profit, but (…) it could also be useful in achieving broader citywide objectives'. Furthermore it should be noted that city marketing is not only a task of the local government but part of urban governance as defined above.

3.5 Implications for industrial tourism development

The fundamental trends in the external environment have implications for urban development in general, but what are the more specific implications for industrial tourism development? How do these trends explain why companies open their doors or keep them closed, why urban regions develop industrial tourism or choose not to do so and why people visit companies? Below we discuss various

drivers of industrial tourism but also identify two important barriers in the development of company tours (see figure 3.3).

Figure 3.3: Implications for industrial tourism development



3.5.1 Drivers of industrial tourism development

The growing concern about the environment and climate change and the increasing attention to corporate citizenship make companies aware that they have to communicate with their stakeholders. Although there are numerous ways of reaching stakeholders – facilitated by innovations in ICT – face-to-face communication is still one of the most effective, though also relatively expensive, methods to influence people's perceptions. The increasing pressure on the license to operate and the growing transparency of corporate behaviour make company visits a potentially useful tool of public relations and marketing. Company tours not only provide the opportunity to inform visitors about a firm's CSR policies but also to demonstrate how they have implemented these policies. In this way, visitors can be convinced that corporate citizenship is more than window dressing. Industrial tourism thus fits well in the trend of 'green tourism' (McBoyle, 1996).

Another driver for companies to open their doors is the transition to a global knowledge economy in which local networks are as important as global networks. Many companies are embedded in local clusters with suppliers, customers and common pools of production factors. This implies that their individual performance depends on the performance of the cluster, and in particular the (strategic) interactions between actors (Van den Berg, Braun & Van Winden, 2001). On the level of a firm, such interactions require awareness of the knowledge, power, expertise and networks of other (potential) cluster members. In an increasingly complicated and dynamic network economy industrial tourism is an instrument to enhance the visibility of a company's assets, but also to facilitate high-grade face-to-face contacts with (potential) business partners: governments, research institutions, customers, suppliers, employees. Industrial tourism possibly helps to establish trust and understanding within the supply chain (Mitchell & Orwig, 2002).

On the level of an urban region, this implies that industrial tourism development can be seen as an essential element of local economic development. Company visits may be used to strengthen the profile of clusters (improving competitiveness) but also to enhance the governance of clusters and cross-sector interaction (organising capacity) in general.

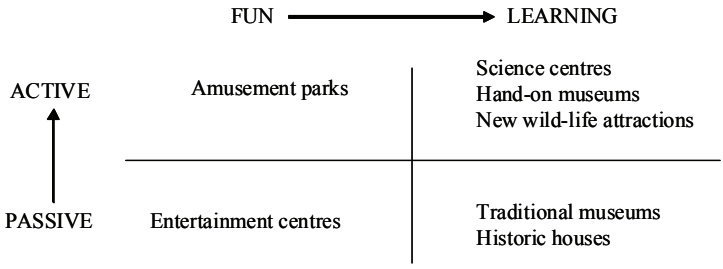
Company tours also respond to the increasing value of experience and search for authenticity and distinctiveness. In their article on consumer experience tourism, Mitchell & Orwig (2002) give some explanations for the increasing interest in factory tours. One of the reasons is the fact that the transition to a service economy has reduced the number of people who work in manufacturing and hence the population's knowledge about industrial work. This lack of knowledge makes young people curious about what is going on in these factories (Harris, 1989; Prentice, 1993), while older people show interest in going back to their roots. The rise of the experience economy not only explains an increase in the demand for company visits, but also an increase in the supply of company visits. Industrial tourism may be a strategy for firms to differentiate their products. If company tours are not expected by the customers (read: if they are not demand-driven) they could still be supplied as part of the 'augmented product': trying to exceed the expectations of customers (Levitt, 1980).

Company visits may also be part of a marketing or branding strategy. Mitchell & Orwig (2000) argue that "consumers who have witnessed a production process may become more brand loyal as a result of their identification with the product, their

familiarity with the production process, their first-hand interaction with employees, first-hand witness to their quality-assurance processes, and other internal needs" (p.35). This so-called involvement theory can be applied to companies but also to urban regions as we will explain in chapters four and five.

Industrial tourism may also reduce the difference between the image of the (manufacturing) industry and 'the reality of modernised industries' (Frew, 2000). Moreover, McIntosh (1972, p. 111) claimed that many travellers – and international travellers in particular – are "intellectually curious about the economy of any state or country". Industrial tourism facilitates the need for authentic and real experiences: 'a taste of the real thing' (Speakman & Bramwell, 1992, p.2). According to Frew (2000), company tours also fit in the trend that a growing number of tourists want to be educated during their stay. She refers to Martin & Mason (1993) who predicted a shift in the demand for tourist attractions from passive to active and from fun to learning. Richards & Raymond (2000) introduced the term 'creative tourism' as a form of tourism in which the visitor truly participates (active involvement). Creative tourism implies that tourists get the opportunity to create their own products, e.g. making perfume or painting porcelain (Richards & Wilson, 2006).

Figure 3.4: Predicted shift in demand for tourist attractions



Source: What's the attraction? Success in the Market for Places to Visit (Leisure Consultants, 1990)

3.5.2 Barriers in the development of industrial tourism

The first barrier in the development of industrial tourism relates to one of the fundamental trends we identified above: the increasing attention to safety and security. Industrial sites are not only possible targets of terrorists but also places where accidents happen now and then: some examples of industrial disasters are the Chernobyl accident (1986), the Enschede Fireworks disaster in the Netherlands

(2000), and the explosion at Azote de France (2001) near Toulouse. Although the chance an industrial tourist will become the victim of such an accident is very small, these widely broadcasted events strongly affect the perception of safety at industrial sites. An example of an accident in which industrial tourists were actually killed, is the collapse of a footbridge at a shipyard in St. Nazaire (France) in 2003.

In the last decade governments have introduced numerous policies to reduce the risks, with far reaching implications for the reception of visitors. In France, for instance, the national security system (Vigipirate) put a stop to nuclear plant tours (PSA, 2006). In general, it has become more difficult to enter companies: people often need to register several days in advance, they have to show their ID and at some companies visitors – industrial tourists, but also business travellers – even have to pass security control. Furthermore, companies that want to open their doors for visitors, have to guarantee a safe environment for both visitors and employees. As we will explain in the next two chapters these safety measures require substantial investments, for instance in insurance premiums for the visitors.

The second barrier in industrial tourism development results from one of the implications of the fundamental trends for urban development: the increasing need for cooperation between stakeholders. We argued above that industrial tourism can be a tool to bring actors together: in the supply chain, a sector or the urban region at large. At the same time, however, the development of industrial tourism also requires cooperation between actors: the government, the tourism industry, the host firms and other stakeholders. This implies that the development of a regional industrial tourism supply is an organisational challenge. First, the question is if actors are willing to cooperate and invest in industrial tourism; a question to be answered in the present study. A second question is how to organise the development and promotion of industrial tourism on a regional level; a question that has our attention but one that will not be answered in the present study.

3.6 Summary and conclusions

Fundamental trends in the external environment change the behaviour of actors in the urban system which influences industrial tourism development directly, and indirectly via their influence on urban development (see figures 3.1, 3.2 and 3.3). The most relevant trends are globalisation and the structural change of the economy, the shift to an information and knowledge economy, increasing concern about the environment and climate change, growing attention to corporate citizenship, the

transition to an experience economy and increasing attention to safety and security. As a consequence of these trends, sustainable development, city marketing and cooperation between stakeholders have gained importance in urban development. For urban regions, industrial tourism can be an instrument that fits in each of these three policy fields. And obviously this is not only a public matter: also the private sector has an interest in these and other determinants of urban competitiveness. Moreover, companies are expected to recognise their interest in industrial tourism because they can strengthen the relations with stakeholders: consumers, neighbouring residents, governments, suppliers and so on. In conclusion: company visits are not only a potential source of income and employment, but also a marketing and public relations tool for both companies and urban regions.

As indicated in the three figures (3.1, 3.2 and 3.3) the changes in the urban system and its environment explain the dynamics in the market for industrial tourism at both the demand and supply side, while supply and demand are (as in any market) mutually dependent. At the supply side the changes affect the functions of industrial tourism (income and employment, marketing, public relations, governance and urban development) for different host firms and urban regions (as well as other entities such as sectors and countries). In the next two chapters we will further analyse this part of our research framework. We will discuss the various functions of industrial tourism thus gaining insight in the costs and benefits of industrial tourism for the various entities that are potentially involved in its supply.

Chapter 4

The host firm's perspective

4.1 Introduction

In the two previous chapters we defined industrial tourism and analysed the changing conditions in urban regions for the development of industrial tourism. In this chapter we assess the costs and benefits of industrial tourism development on the micro level of one company: a potential supplier of company visits. Although we use insights from theories on cost-benefit analysis, the present chapter should not be seen as an attempt to actually carry out a cost-benefit analysis. We only use cost-benefit analysis as a 'theoretical frame' to gain insight in the reasons why particular firms decide to open their doors, while others refuse to receive visitors. It is important to understand the interests of firms since their participation is crucial for distributors such as tourism bureaus and travel agencies. We will explain that the costs and benefits of a company tours depend on the firm and its products (the industrial tourism potential), their approach to industrial tourism (from reactive to proactive; the qualities of the company tour and supporting services), the number of visitors, the variation in visitor numbers (seasonality) and the composition of the visitor group.

4.2 Costs

Frew (2000) indicates that development costs are for many companies a reason not to develop industrial tourism[13]. Firms have to invest in visitor facilities such as car parking, a reception and toilets and may even need to consider investments in exhibitions, galleries, shops and catering facilities (Carter, 1991). Furthermore, firms often have to take all kinds of safety and security measures ranging from checking the identity of visitors and paying insurance premiums for them to building elevated walkways to avoid logistical problems and conflicts with the production process. In the previous chapter we explained that safety and security have become important values, forcing companies to invest in measures to reduce risks. Not only the safety of visitors and employees is at stake, but also the threat of theft and industrial espionage plays a role (Frew, 2000). The development costs obviously depend on a company's approach to industrial tourism (reactive versus proactive): a company tour by a staff member requires less investments than the development of a fancy visitor experience including a museum and all kinds of facilities.

4.2.1 Fixed and variable costs

As far as the costs are concerned, it is important to make a distinction between fixed costs and costs that vary with the amount of products produced. In our analysis below we define the product as one company visit by one visitor.

In industrial tourism, fixed costs are costs that are independent from the number of visitors given the visitor capacity for a particular period. We emphasize that costs are, by definition, not fixed in the long run. Companies may decide to expand the capacity to receive visitors through investments in visitor facilities; for instance by buying more equipment for company tours (e.g. vehicles that are used to drive visitors around a plant). For fixed costs the average costs per visitor will decline more than proportionally when the number of visitors grows within the given capacity.

Variable costs are costs that change in proportion to the number of visitors. Variable costs are for instance the costs of offering each visitor a cup of coffee and a

[13] In 1992 Wooder provided an overview of the characteristics of industrial tourism attractions in the UK. At that time the development costs of industrial tourism attractions in the UK varied between £15,000 and £1 million.

goody bag. For variable costs the costs per visitor are often assumed to remain stable when the number of visitors (or actually company visits) increases; however, (dis)economies of scale may also lead to an increase or decrease of the variable costs per visitors. For instance, when a company receives more visitors it might be possible to buy the coffee for a lower price ('big order discounts').

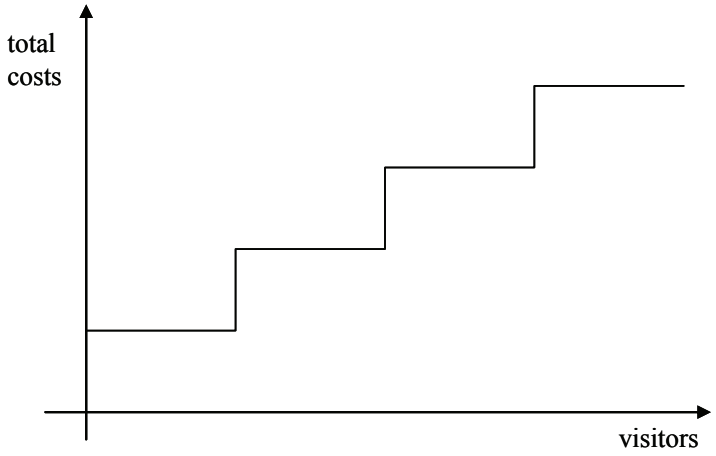
4.2.2 Step costs

Apart from fixed costs and variable costs, there is a third type of costs to be mentioned here: the step costs. In industrial tourism, step costs are costs that increase when the number of visitors increases but in increments. In case of wide steps one could also use the term 'step fixed costs' while 'step variable costs' refer to a cost pattern with small steps (Battacharya, 2005).

Step costs are for example the costs of external guides. Each guide has a maximum capacity of visitors he or she can handle. When the number of visitors surpasses this limit, an additional guide is needed, resulting in a sudden increase of the costs. Both step costs and fixed costs depend on the visitor capacity of a site, but the main difference is that fixed costs relate to long-term investments, while step costs relate to purchases that cannot be spread out over time. Long-term investments can be written off over a longer period in which the costs 'have to be earned back'.

For step costs, the costs per visitors will decrease more than proportionally as the number of visitors grow until the number of visitors reaches the limit which results in a sudden increase of the costs per visitor to the initial level. This particularly applies to step fixed costs. Because companies are very flexible with purchases that incur step costs, they will generally not accept average costs per visitor to surpass a certain threshold. To give an example: if one guide can handle a group of 20 persons and 15 persons are needed to break even, an extra guide will only be hired if 10 additional visitors show up: in that case, there are two groups of 15 people. With 25 interested guests a firm faces a dilemma: either the visitor manager has to disappoint 5 guests or (s)he may choose to comprise on the quality of the tour, assuming that the (external) guide is willing to participate.

Figure 4.1: Step costs in (industrial) tourism



4.2.3 Some examples of cost categories

Labour costs are fixed for permanent staff involved in the delivery of industrial tourism (e.g. visitor management and guidance). In case of external guides the costs are step-variable. Another category of costs is related to visitor facilities: parking facilities, information displays, signs, a reception, a meeting room, a shop, a restaurant, visitor toilets or a transportation system. Such capital investments normally induce fixed costs, although one could also think about the possibility to hire facilities (e.g. buses); in that case visitor facilities are step-variable costs. In the category 'security and safety' some costs are fixed (e.g. camera system and elevated walkways) while some costs are variable (e.g. security checks for visitors). The expenses on marketing and promotion are typical examples of fixed costs.

4.2.4 Seasonality

A relevant issue for the costs of industrial tourism is seasonality or more in general: variation in the number of visitors, not only during a year, but also during a week. This variation depends on the type of visitors as leisure tourists have other preferences (weekend, holidays) than business visitors (workdays). Investments in the visitor capacity (fixed costs) can be based on the average number of (expected) visitors or on the maximum number of (expected) visitors. If the first option is selected this implies that many interested people have to be disappointed during peak days, but the advantage is that the average costs per visitor remain relatively low

because of an efficient use of visitor capacity. With the second option nobody has to be sent away but the visitor capacity is much too large during off-peak days resulting in high costs per visitor on an annual basis. No matter what option is selected it can be stated that the costs per visitor will increase as the variation in the number of visitors becomes larger.

Companies can realise a more efficient use of visitor capacity in several ways. One strategy is to make the visitor capacity more flexible by replacing long-term investments (fixed costs) with short-term purchases (step costs). This can be realised by outsourcing the provision of visitor facilities and services to other organisations (e.g. tour operators, tourism offices or external guides). Another strategy for companies is to lower the variation in visitor numbers by promoting visits on off-peak days (events, discounts, etc.) and/or by attracting a bigger variety of visitors (e.g. business tourists, leisure tourists, educational tourists) since they tend to visit industrial attractions on different days and in different periods of the year.

4.3 Direct financial benefits

The first type of industrial tourism benefits we discuss below are the direct financial benefits for host firms: profits from the sales of entrance tickets and products or services.

4.3.1 Entrance tickets

The most direct financial benefit of company tours is generated through the sales of entrance tickets. The turnover from entrance fees is by definition related to the price of a ticket and the number of visitors. Furthermore the collection of entrance fees also induces transaction costs that need to be taken into account. If there is one fixed price of entrance tickets, the revenues from entrance fees will grow proportionally with the number of visitors. Companies may, however, also choose to apply a price differentiation strategy, taking into account the purchasing power of different visitor groups (business visitors are able and willing to spend more than leisure and educational visitors) and/or the added value of receiving particular visitor types (depending on the benefits they bring to be discussed hereafter).

Firms can decide to attract particular visitor groups with low purchasing power or, more in general, less willingness and/or ability to pay either by accepting a lower income from ticket sales (which is in fact a subsidy of the firm itself) or by raising the price of tickets for other groups (a cross-subsidy). There are two reasons to do this:

one is because the subsidised visitor groups are interesting in view of other benefits to be expected (e.g. cost savings on recruitment or on-site sales, see below); the other argument is that firms might feel the pressure to be accessible for weaker groups in society as well. By applying price differentiation to the entrance tickets companies can use industrial tourism to secure the relations with their stakeholders.

The income from ticket sales only goes directly to a company if it organises its own tours. If an intermediary organisation (a tour operator, a tourism office, etc.) takes care of visitor management, companies probably only receive a percentage of the income or maybe even nothing at all. In this case the intermediary organisation will make its own analysis of costs and benefits.

4.3.2 On-site sales

The second direct financial benefit of industrial tourism concerns profits generated by on-site sales. There are two categories of on-site sales: 1) selling products that would otherwise have been sold to retailers or wholesale traders; 2) selling services and products that have been specifically developed for industrial tourists. The first category includes selling normal, first-class products but firms can also use industrial tourism to sell second-class products. In both cases the company earns some extra money. By selling products to customers directly, manufacturing companies take a larger share of the margin that would otherwise have gone to companies lower down the distribution channel. Henly (1988) argues that the sales of slightly damaged products – or products with a damaged packaging – reduces waste disposal costs and generates extra income for the firm. The second category includes souvenirs and merchandising, but also food and beverages to be consumed on the site (e.g. in a restaurant or bar). This type of sales is only profitable if the turnover outweighs the associated variable and fixed costs.

The income earned by on-site sales depends on the number of tourists but, to a larger extent than the income generated by ticket sales, on the type of tourists: their motive to visit, their budget and preferences. In general leisure-oriented visitors spend more on souvenirs than business-oriented visitors. Groups may be more inclined to combine a visit to an industrial site with a lunch – if available – than individual travellers are. Also the visitors' willingness and ability to spend money is a relevant factor.

4.4 Reputational benefits

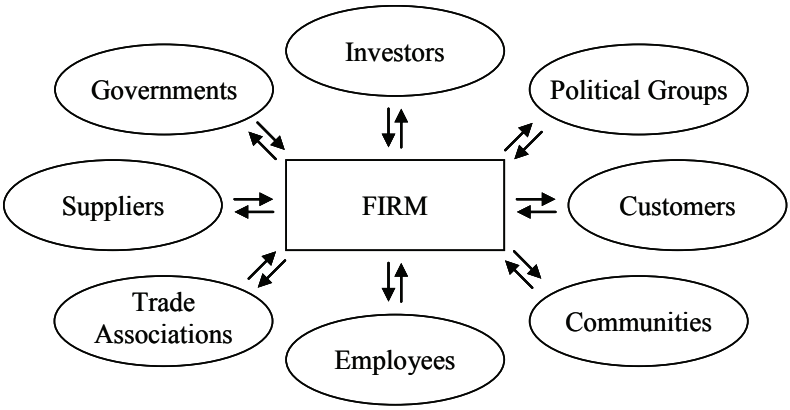
Industrial tourism not only generates direct financial benefits for companies but also reputational benefits. Company visits can help firms to improve the corporate image and reputation, to promote its products and brands and to develop sustainable relations with society. Each visitor is a potential ambassador for the firm (Rudd & Davis, 1998). Industrial tourism is an instrument for marketing, public relations and corporate social responsibility policies. As is common for these kinds of policies the benefits are more indirect, less tangible and more difficult to quantify. Involvement theory teaches us that an open door policy for customers, consumers and other stakeholders assist firms to gain their loyalty which will pay off, either on the short or long run (Mitchell & Orwig, 2002). According to this theory, which can also be applied to tourism (Pearce & Kang, 2009), direct experience with a product, service or setting changes the attitude of customers: they become more loyal, more committed and more interested (Kapferer & Laurent; 1985). In line with this philosophy McBoyle (1994) stated that a company visit creates a bond between the visitor and the product, the brand and the industry, which helps to improve customer loyalty and to get new customers.

The degree to which a company tour generates reputation benefits depends on the qualities of the tour and the visitors it attracts. A negative visitor experience will obviously cause harm to the reputation of a company and its brands. As Mader (2003) explained for some firms company visits are less adequate as reputation tools because a confrontation with the production process might work counterproductive. This particularly applies to companies in the food manufacturing industry. Considering the visitors attracted, it is clear that some visitor types are more relevant for companies than other visitor types. The most essential question is: what is the relation between a visitor and the company? Stakeholder theories can be helpful to answer this question.

Already in the 1980s theories (of the firm) were introduced to explain the relation between companies and their stakeholders. As an alternative for the neo-classical shareholder view (Friedman, 1962), Freeman (1984) claimed that companies should not only be accountable to shareholders but to other actors who can affect or are affected by the firm as well. Not altruism, but self-interest forces companies to be concerned with society and community (Drucker, 1974). As we indicated in chapter one, also many supporters of the shareholder approach now realise that interests of stakeholders need to be taken into account, because it is also in the interest of

shareholders (Bowie, 1991). Stakeholder management is an instrument to be successful in the marketplace.

Figure 4.2: The Stakeholder Model



Source: The Stakeholder Theory of the Corporation: Concepts, Evidence, and Implications (Donaldson & Preston, 1995)

Stakeholders are individuals or groups 'with a legal, economic, moral and/or self-perceived opportunity to claim ownership, rights or interests in a firm and its past, present, or future activities – or in parts thereof' (Madsen & Ulhøi, 2001, p.78). Examples of stakeholder groups are suppliers, customers, shareholders, neighbouring residents and the government. Several scholars (e.g. Clarkson, 1995; Post et al., 1999; Goyder, 1998) distinguish primary stakeholders from secondary stakeholders. Primary stakeholders are usually defined as individuals or groups that are directly engaged in transactions with the firm. They provide the production factors (land, labour, capital, knowledge) or buy the company's products, and thus directly influence the marketplace success of a firm. Examples of primary stakeholders are suppliers, investors, customers and employees. Although secondary stakeholders are not essential for a company's survival, their support does influence the performance of a firm. They are able to put pressure on the company, through their influence on primary stakeholders; moreover, individuals often fulfil several stakeholder roles, so-called 'overlapping relations' (Post et al., 1999): a visitor can be a neighbouring citizen, a (potential) employee, a customer/consumer and a politician at the same time. Examples of secondary stakeholders are interest groups, neighbours, the media and political groups. The status of governments is unclear. Some (e.g. Madsen & Ulhøi,

2001; Wheeler & Sillanpää, 1997) consider governments as secondary stakeholders, while Clarkson (1995) emphasizes that governments and communities are primary stakeholders because they provide the laws, the infrastructure and the markets.

Although the distinction between primary and secondary stakeholders is not always clear-cut (Van den Berg, Braun & Otgaar, 2004), it does help us to understand the relation between companies and different groups of stakeholders and the expected benefits of their visits. In our view, the main determinant of visitor relevance for reputational benefits is the (potential) influence of visitors on a firm's continuity; or to formulate it differently: their ability to withdraw or provide a 'license to operate' (Goyder, 1998). The license to operate is a label increasingly used by professionals and scholars to refer to the idea that companies have to comply with the expectations of regulators, local communities, and the public in order to continue operations (Gunningham et al. 2003, 2004; Howard-Grenville 2005). In general, it can be said that the reputational benefits are higher for visitors who are (potentially) relevant for the provision of production factors (land, labour, capital, knowledge) and the sales of products and services. Each company, however, will make its own specific stakeholder analysis, identifying the actors that have the largest influence on the firm's continuity.

4.4.1 Consumers and customers

One of the visitor groups that is most relevant for companies in view of reputational benefits are consumers and customers. Although these two target groups of firms are often used in the same sentence, it is very important to understand the difference between these two. Consumers are the ultimate users of the product or service while customers purchase the product or service. They are both important for the sales of products and services, but while customers are involved in financial transactions with the company, this is not necessarily the case for consumers. Consumers are individuals or households situated at the end of the distribution channel and often there are resellers or trading companies acting as intermediaries between the producing firm and the consumer. In industrial tourism consumers are leisure-oriented, while customers tend to be business-oriented. It is hard to imagine a company without customers, but consumers are not a relevant visitor group for all firms. In the manufacturing industry it is common to make a distinction between the production of business-to-consumer (B2C) products and business-to-business (B2B) products. Companies that are mainly involved in the production of B2C products can

be defined as consumer-oriented. Consumer-oriented companies tend to use different marketing techniques and approaches than non-consumer-oriented companies: the first group is more transaction oriented while the second group focuses on relation management (Coviello & Brodie, 2001).

Customers are by definition a relevant visitor group for companies. Company tours can be used to promote the company and its brands, but also to inform customers about quality management, social and environmental policies, the history of a company and other details that help to gain their trust and loyalty. The same can be said for consumers, at least for consumer-oriented firms. Involvement theory states that by involving consumers in the production process they are more likely to buy the products (Mitchell & Orwig, 2002). Although consumers are often not buying customers for the manufacturing firm – they buy from resellers – their influence on the firm's license to operate is critical. For non-consumer oriented firms, the relevance of consumers as industrial tourists is considerably lower, but they are often not completely irrelevant either. Companies that sell semi-products or raw materials to businesses (B2B) could also benefit indirectly from enhanced consumer loyalty towards the end products manufactured by their customers. Nevertheless, non-consumer oriented firms often do not see the benefit of industrial tourism if it attracts the general public only (How, 1994).

While customers are relatively easy to identify, consumers are not. Not only leisure-oriented visitors (tourists, citizens spending leisure time), but also business- and education-oriented visitors (business partners, students) are potential consumers of the firm's products/services. When a company opens its doors the benefits of enhanced promotion among consumers depends on the composition of the visitor group. First of all substantial benefits can be expected if the group includes current users of the company's products or services. In that case company visits can increase the users' loyalty which makes it more likely that they keep on using the products and services (repetition purchases) and promote the company and its brands among other potential users (word of mouth marketing) (Mitchell & Orwig, 2002). Second, considerable reputational benefits can be generated if a visitor group comprehends potential users of the company's products or services. The chance that a visitor will become a user depends on numerous individual factors (the individual profile): age, income, sex, level of education, lifestyle, preferences, country of origin, etc. A company visit for potential consumers can be compared with a TV commercial: by promoting a product or service before, after or during a television programme that

attracts viewers with a particular profile, it is more likely that the commercial reaches the target group. Marketing professionals talk about 'wastage' when a promotional campaign reaches many people who are not very likely to buy the product or service (Morgan & Pritchard, 2001). If company tours attract people who are not able, allowed or willing to buy the product or service, this is a waste of money and efforts, at least in view of the expected promotional benefits. Because it is nearly impossible to avoid wastage in company tours for potential users, current users are almost by definition a more interesting target group for company tours. In comparison with other marketing tools (e.g. advertising) company tours are maybe more effective in changing people's minds, but their reach is often limited simply because the capacity to receive visitors is limited (restricted access).

If companies have to select visitors when the visitor capacity is limited, they would choose current users but also potential users that are likely to become good ambassadors for the company and its brands. They would prefer to receive people who fit in the company's branding strategy (e.g. in terms of age and lifestyle) and who have access to large social networks with potential users. For new products and services firms may prefer to receive innovators and early adopters: the most relevant target groups in the introduction and growth stages of the product life cycle (Levitt, 1965; Mahajan, Muller & Bass, 1990). As far as the country of origin is concerned, the potential promotional benefits of industrial tourism are obviously higher if a product or service is actually available in the visitor's country of origin.

4.4.2 Business partners

Our discussion on the difference between consumers and customers and the relevance of these groups as industrial tourists has made clear that customers are business partners and consumers are usually not. We define business partners as the actors that are (potentially) involved in transactions with the company: the exchange of capital, land, labour and knowledge (production factors). This definition comes very close to what others have called primary stakeholders: suppliers (of inputs, services and knowledge), financiers (shareholders, investors and banks), employees (trade unions) and customers (resellers, manufacturing companies). We would like to emphasize that governments should also be seen as business partners: sometimes because governments are customers, but in most cases because governments are responsible for subsidies, licenses and the legal and fiscal framework in which companies (and their business partners) have to operate. Another relevant stakeholder

group are knowledge institutions such as universities since they provide both skilled labour and knowledge. Together with the business sector, governments and knowledge institutions make up the triple helix[14]: interaction between the three sectors has become an importance source of innovation and knowledge-based economic development (Etzkowitz, 2002).

In general the loyalty and willingness to cooperate of business partners, regardless of the region they come from, is important for a company's continuity and license to operate. The business partners are needed to produce goods and services with a good quality and a fair price respecting social and environmental standards. The loyalty of actors at the input side (suppliers of production factors) is needed to secure good relations with actors at the output side (customers, consumers) and vice versa. Also for business partners we can make a distinction between current and potential business partners, discussing the importance of targeting potential business partners that are likely to become involved in transactions with the company (minimising waste). In general, business partners are primarily interested in trade (business). However, they may also visit a company to learn about the firm and its activities: a combination of business and knowledge motives.

4.4.3 Employees and recruitment

In industrial tourism one of the most relevant target groups concerns potential employees. Particularly in case of labour market shortages a firm may use company tours to promote itself as employer. In many sectors of the economy human capital (knowledge and creativity) has become a decisive production factor. The benefits of promoting a company as employer through industrial tourism become more tangible and direct if the profile of a visitor corresponds with the profile of a potential employee. When a company opens its doors for a primary school, there is more wastage and it will take longer before benefits emerge in comparison with a company tour for students who are about to graduate in a relevant field of study in view of the firm's activities.

For most companies potential employees can be mainly found in the region; the maximum distance between a site and the workers is subject to the availability of infrastructure, but also to the income, mobility and preferences of the employees in

[14] An extended version is the quadruple helix which includes consumer involvement in innovation (Kostiainen, 2007).

question (think about the willingness to commute or change residence). For some companies, however, the relevant employee community (Goyder, 1998) is as large as the world, attracting knowledge workers from faraway places (who in that case become expats who live and work in the region). In general the chance that potential employees visit firms as tourists is smaller for groups from outside the region than for groups from inside region.

For (future) recruitment children and young people are the most relevant target groups, although with the trends of lifelong learning and more dynamism in labour markets, also adults become interesting as target group. Only for people that are not able or willing to work (e.g. retired people) it does not make sense to use company visits as instrument to promote the firm as employer; at least, not in a direct way, because they may still become ambassadors for the firm as employer (e.g. for their children or grandchildren) through word-of-mouth communication.

4.4.4 Neighbouring citizens and regional interest groups

To secure their license to operate companies also need to build sustainable relations with the communities in which they operate (Goyder, 1998). Company visits for neighbouring citizens and interest groups (environmental action groups, animal right groups, human rights groups, etc.) constitute one of the instruments to respond to the society's demand for transparency and corporate social responsibility (CSR). The benefits of opening doors for these visitor groups depend on the pressure on the license to operate which is strongly influenced by the negative and positive externalities generated by a firm's activities, affecting the wellbeing of communities. Or to be more precise, what matters, is the perception of these externalities. Industrial tourism can be an adequate instrument to create a more positive image of the externalities it generates by informing people about social and environmental policies aimed at reducing negative impacts, and about the contributions of a company to the communities in which it operates (positive impacts).

Although large multinationals and companies with a high profile generally get more (negative) attention of action groups and media – for instance because they are associated with the negative sides of globalisation and capitalism – the size of a firm is not the most relevant determinant of pressure on the license to operate. Russo and Tencati (2009) found no significant differences between the CSR strategies of large firms and SMEs. Small and medium-sized firms also need to comply with social and environmental demands from society, for the simple reason that their economic future

strongly depends on good community relations. Not only stakeholder theory can be used to analyse CSR strategies, but also social capital theory (Putnam, 2000) which seems more appropriate for SMEs (Perrini, 2006) as it recognises the intangible assets of reputation, trust, legitimacy and consensus (Habisch et al., 2001; Spence et al., 2003). CSR strategies are the result of the interplay between the company and its stakeholders: companies have some freedom to choose a strategy ranging from reactive and defensive to adaptive and proactive (Eilbert & Parket, 1973; Carroll, 1979)[15].

Although all companies may benefit from the strategy to use company visits for a demonstration of good citizenship, it seems particularly relevant for firms in industries that are topic of debate in society; for instance because they play a role in global warming (e.g. car manufacturers and energy companies) or use production methods that are accused of being unethical (e.g. in terms of human and animal rights). Also ports and airports are typical examples of 'companies' (either public or private) that are topic of debate in society: should they expand or not, what is their contribution to the economy, and what is their impact on the environment? Looking at the development of industrial tourism it is important to realise that neighbouring citizens and regional interest groups are regional target groups. The reception of tourists from outside the region will not help a company to improve its relation with neighbouring citizens and organisations.

4.4.5 Media and publicity

Company visits can also be used as instruments to get (free) publicity. The media (television, radio, newspapers, popular magazines, business magazines, scientific magazines, etc.) are relevant stakeholders because they influence (intentionally or not) other stakeholders with direct influence on a company's license to operate. Positive coverage may help companies to improve their reputation as producer, employer and citizen, and to promote their brands and products. The benefits of publicity depend on factors such as the size of the audience (e.g. the number of copies sold), the (geographic) market, the relevance of the audience for the company (as potential consumers and employees and as neighbouring citizens), the reputation of the publisher, the position of an article (front page or not), the number of

[15] See table 3.1.

words, etc. For instance it is probable that local media have a stronger influence on the loyalty of local stakeholders than international media.

4.5 Productivity gains and losses

Industrial tourism is a source of financial and reputational benefits, but what is the impact on productivity, a key determinant of business performance? Productivity can be defined in terms of output/input ratios. Output relates to the production of goods or services, while the use of production factors is relevant for the input. For instance, labour productivity is usually defined as the amount of units produced per working hour. The development of industrial tourism not only impacts the productivity of workers who participate in receiving visitors, but also the productivity of other employees.

4.5.1 The labour productivity of staff involved in arranging company visits

If company visits generate income – either directly or indirectly, e.g. via promotion – employees who are involved in the supply of company tours are productive. Industrial tourism creates jobs for tour guides and shop attendants (Frew, 2000). The question is, however, if the value workers add with industrial tourism is higher or lower than the value they would have added if they spent their time on other activities. This matter not only applies to production workers but also to those who are involved in marketing and management. If industrial tourism is used as a marketing or PR tool, productivity gains for marketing and PR staff can only be expected if company visits are more cost-efficient (in terms of output and input) than other tools (used before). An example of cost efficiency is the case of Celestial Seasonings, an American tea producer, whose director said that 'one visit has more value than one hundred commercials when guests relate their positive experiences to friends and family' (Mitchell & Orwig, 2002). Mader (2003) suggest comparing the salary costs of a guide with an advertisement in a magazine.

In general, if one worker has to spend one hour on industrial tourism instead of doing something else (production, marketing, management), productivity gains depend on the added value of the alternative. In other words: if you have some hours left, it is more likely that productivity will increase if you spend these hours on industrial tourism, than in case you are already fully booked. Opportunities to realise productivity gains for production workers can be expected in seasonal industries – in that case, the seasonality of (industrial) tourism can be an advantage! – and in case of

declining demand. The opportunities to use industrial tourism to improve labour productivity for instance apply to agricultural companies (e.g. Weaver & Fennel, 1997; Frew, 2000).

4.5.2 The labour productivity of staff not involved in arranging company visits

Company tours can also affect the productivity of employees who spend no time at all on arranging visits. Productivity losses can be expected if the visitors cause any inconvenience to the production process: for instance if machines have to be switched off due to safety regulations or if visitors distract employees from their work. More indirectly industrial tourism can also influence the working moral, although this very much depends on the concept and the type of visitors. The reception of visitors can make employees feel proud about their work and the company they work for, thus improving the working moral. The interests in the goods and the industry make them aware of the importance of their jobs (Frew, 2000). An interesting visitor group for stimulating company pride concerns the family and friends of employees. Possibly the idea that they are watched by visitors also stimulates employees to show their best, although the loss of privacy could also demotivate them. The issue of privacy is particularly relevant if companies open their doors for leisure-oriented visitors who bring their cameras to make photos.

Another more indirect and immeasurable advantage of industrial tourism on productivity comes to effect via an improved working environment. On the one hand, this type of productivity gains can be realised if facilities primarily targeted at visitors also become accessible for employees; for instance, a restaurant or a garden. On the other hand, company visits may also stimulate firms to improve the working environment and facilities for employees only, assuming that they want to be seen as a good employer (and good citizen).

4.6 Industrial tourism potential

We have assumed that all companies *can* open their doors for visitors – taking advantage of industrial tourism – but this does not imply that all firms are equally attractive to industrial tourists. Some companies are endowed with more ‘industrial tourism potential’ than other ones.

4.6.1 Attractive products

First of all several scholars indicate that the attractiveness of the products is an important determinant of the ability to attract industrial tourists (Mader, 2003; Swarbrooke & Horner, 1999; Swarbrooke, 2002). Mader (2003) identified several types of products that appeal to industrial tourists: products with a symbolic character for the region, branded goods, consumption goods, everyday products, luxurious good, technologically advanced products, special interest products and handmade products.

Table 4.1: Product categories that appeal to industrial tourists

Category	*Examples of products*
Products with symbolic character for the region (traditional goods)	Coal and energy, steel and machines, port
Branded goods	Cars, sports articles, fashion, beer, soft drinks, chocolate, newspapers
Consumption goods	Soft drinks, beer, chocolate, newspapers, toothpaste
Everyday products	Cars, energy, newspapers, television, water, mobile phones, detergent, computer chips, food
Luxurious goods	Cars, coffee machines, watches, jewelry,, perfume
Technologically advanced products	Cars, computer chips, mobile phones, compact discs
Special interest products	Energy, water, newspaper, television, public facilities, food, theatre (backstage)
Handmade products	Glass, porcelain, sculptures, forging, musical instruments, hats

Source: Produzierende Betrieben als Touristische Attraktionen (Mader, 2003), translated by the author

Although Mader's list is based on a limited number of interviews with German experts only, it does give an indication of what products make a company attractive as

a place to visit[16]. Swarbrooke & Horner (1999) – who looked at visitor numbers of industrial sites in France – and Swarbrooke (2002) confirm that branded goods, exclusive luxurious products, everyday life products and services and traditional or handmade products are popular among industrial tourists. Mader uses his list to explain why the automotive industry has always attracted many visitors: car producers have several sources of industrial tourism potential at their disposal. Another attractive product category – not mentioned by Mader – comprehends 'unusual products' (Swarbrooke & Horner, 1999). Since tourists can be seen as collectors of unique experiences companies that produce unusual products have a competitive advantage in the market for industrial tourism. These products might also be typical for the region.

4.6.2 Attractive production processes

Another important source of industrial tourism potential is the attractiveness of the production process. Swarbrooke (2002) claims that both modern and traditional processes are attractive for visitors: his list of attractive firms includes companies that produce products which are made in a traditional or picturesque way as well as companies that produce products where the production process involves high levels of skill. This claim corresponds with the results of Mader's survey which identifies companies that produce handmade products and companies that produce technologically advanced products as preferred destinations of industrial tourists.

Swarbrooke and Mader pay less attention to another aspect of the production process we consider more important: its visibility and tangibility. It can be assumed that industrial tourists find it more attractive to visit places where they actually can 'see, smell, hear, touch and taste' the production process than places where production processes can hardly be observed. Martin & Mason (1993) state that attractions that enable involvement of the visitor are in a better position. Some companies have the advantage of an attractive production process – often in combination with attractive products – which allows visitors to get close to action and maybe even to participate in the process. Other companies are in a less favourable situation, because production takes places in 'closed systems' or because safety and security standards create a

[16] The category 'special interests products' can be criticised as it seems a collection of products that do not fit in the other categories: environment, media, culture, intermediate products, etc.

distance between the production process and the visitor (e.g. production takes place behind glass).

4.6.3 Attractive sites

The third source of industrial tourism potential we want to discuss here is the attractiveness of the site. According to Swarbrooke & Horner (1999), two types of sites are particularly attractive among industrial tourists: factories where products can be bought at discount prices and establishments where visitors hope to receive free samples of a desirable product (also see Swarbrooke, 2002). This implies that producers of consumer products, branded goods, luxurious products and handmade products are in a better position than producers of services or intermediate products. Consumer-oriented firms that actually want to utilise this potential have to invest in a shop at or near their production site.

Another relevant determinant of industrial tourism potential is the accessibility of the site. Dodd (1988) even suggests that industrial tourism may change the location decisions of firms: 'instead of locating an industrial facility near the source of a raw material or on land already owned by the proprietors, a chief consideration has now become how accessible the facility may be to visitors' (p. 79-80). In addition the ability to attract visitors depends on promotional activities such as the distribution of brochures, sign posting, advertisements and cooperation with local tourism offices (McBoyle, 1994). In his study on the influences on the search behaviour of industrial tourists, Dodd (1988) arrives at the conclusion that word-of-mouth communication is the most decisive factor.

4.7 Conclusions

In this chapter we discussed the costs and benefits of industrial tourism from the viewpoint of one single company: a micro-economic view. We identified fixed, variable and step costs in industrial tourism development and explained how these cost types vary with visitor numbers. This analysis appeared to be particularly helpful for understanding the impact of visitor fluctuations (seasonality) on costs. The benefits of industrial tourism development depend on numerous factors such as the characteristics of the firm and its products, but also the characteristics of the company tour and the visitors attracted. Company visits can generate direct financial benefits via ticket sales and the on-site sales of products, but also indirect income and employment benefits via improved stakeholder relations. Stakeholder analysis is a

helpful tool to assess the usefulness of receiving particular visitor groups for different types of companies. Companies are expected to use specific policies for various visitor groups, resulting in a different marketing mix (price, product, place, promotion) for each visitor group. We also discussed the impact of industrial tourism on the productivity of staff involved in arranging visits. It became clear that investments in company tours should be cost-efficient in comparison with other investment options. Moreover it is important to asses the impact on the productivity of staff not involved in company visits: conflicts between company tours and the primary production process should be avoided.

The conclusion from this chapter is that individual firms are only willing to receive particular groups of visitors if the benefits outweigh the costs and if the required investments are cost-efficient. This, however, does not imply that company tours have to be financially profitable! Quite on the contrary: because many benefits are non-financial (non-monetary) and intangible (reputation benefits), it is much more likely that company tours are loss-making in strictly financial terms. Shops and catering facilities on the site may partly compensate for the costs made to hire guides and to modify the site (e.g. visitor facilities). More indirectly industrial tourism can result in a better relationship with stakeholders such as customers, employees, suppliers, governments and neighbouring citizens, adding to the long-term continuity of a firm. Improved stakeholder relations may justify investments in the site, turning them into communication centres.

As a rule the indirect benefits of industrial tourism are less tangible and more difficult to quantify than the direct benefits. It is beyond the scope of this dissertation to quantify the intangible benefits, although we would acknowledge the added value of such an analysis. Particularly if company visits are seen as a tool of public relations and marketing, the return on investment is less certain than in case of direct income. But also *a posteriori* it is difficult to evaluate the benefits of marketing tools. This all implies that decisions to invest in industrial tourism depend on *expected* or *perceived* benefits, accepting some uncertainty and impreciseness.

Chapter 5

The urban region's perspective

5.1 Introduction

In the previous chapter we analysed the costs and benefits of industrial tourism from the viewpoint of one host firm: a micro-economic analysis. In the present chapter we change the perspective to the urban region in which (potential) host firms are located: a macro-economic analysis. Instead of reviewing the individual interests of one single company we now consider the collective interests of an urban region and its inhabitants. Again it is not our intention to carry out a complete cost-benefit analysis: we only review costs and benefits to gain insight in the conditions under which regional bodies and organisations are willing to facilitate industrial tourism development.

5.2 Collective interests

The shift from a micro-economic to a macro-economic analysis implies that we no longer concentrate on only one actor: the company that faces the decision to receive visitors or not. Instead we look from hereon at industrial tourism development on the aggregated level of an urban region. What are the aggregated costs and benefits of developing a supply of several company tours in an urban region?

We choose to analyse industrial tourism development on the level of urban regions rather than cities. Like cities, urban regions can be defined as spatially integrated economic and social systems at a given location (see J. Friedman, 1986). Also the term functional urban region can be used to define such an integrated system, with flows of commuters, goods and information as the glue between its components.

Political and administrative definitions rarely coincide with functional and economic definitions of (urban) regions. As we discussed in chapter three, cities and urban regions essentially exist because for many firms (and people) the agglomeration economies such as knowledge spillovers exceed the agglomeration diseconomies such as higher land prices. This implies that individual actors share collective or common interests on the level of a city (Logan & Molotch, 1987) or urban region. For instance they may all benefit from an attractive urban environment and a good image of the region, while they are all bothered by nuisance, congestion and other agglomeration disadvantages.

The urban region is, however, not the only geographic level on which the collective costs and benefits of industrial tourism can be assessed. Also neighbourhoods, districts, regions and countries establish collective interests. Furthermore some actors simply share collective interests because they are in the same industry (sector) or supply chain. In that case, the fact that they are in the same city or region (or whatever area) is less relevant for understanding the common interests. Another relevant collectivity is a cluster. Porter (2000, p.16) defined a cluster as a 'geographically proximate group of interconnected companies and associated institutions in a particular field, linked by commonalities and complementarities'. De Langen (2004, p.10) defined a cluster as 'a population of business units, associations and public(-private) organisations centered around a distinctive economic specialisation'. Key characteristics of a cluster are the geographic concentration (it is a localised network), and the interdependency between its members: their production processes are linked through the exchange of goods, services and/or productivity (Van den Berg, Braun & Van Winden, 2001). Together they constitute a localised network, but not necessarily on the level of an urban region. Moreover, cluster members not only share a place but also the 'business' (the economic specialisation), for instance tourism, health or culture.

This all implies that there is not just one aggregated view on industrial tourism development. Although our analysis below concentrates on an urban region, we also pay attention to other collectivities such as sectors and clusters.

5.3 Costs

5.3.1 Direct costs

In his cost-benefit analysis of tourism[17], Van der Borg (1991) made a distinction between two sources of direct costs which also apply to *industrial* tourism.

1) All efforts needed to run the tourist firms: both investments and operational costs.
2) Expenses of local public authorities laid out for the express purpose of reinforcing tourism. Examples are the costs involved in promotion campaigns, maintenance of tourist information offices and public attractions.

The first source of direct costs has been discussed in the previous chapter: the development and maintenance of company tours requires several investments, depending on the approach to industrial tourism. We concluded that individual firms only participate in industrial tourism if the benefits of industrial tourism outweigh the costs. On the aggregated level of the urban region the question is what costs come at the expense of host firms and what costs are covered by regional organisations. If there are collective benefits of industrial tourism (to be identified in the next sections) and individual firms are not willing to invest, area- and/or sector-based organisations could decide to provide subsidies or take care of the investments themselves. In that case these organisations are confronted with the same issue as the host firms: the influence of variations in visitor flows (seasonality) on fixed, variable and step costs.

In our micro-economic analysis we argued that for individual firms it makes sense to replace long-term investments (fixed costs) by short-term purchases (step costs), which can be realised by outsourcing visitor services. On an aggregated level, the advantage of outsourcing visitor services to specialised organisations is that these parties are less vulnerable to variations in visitor numbers because they deliver to several companies with different visitor profiles. In this way economies of scale help to reduce the costs of visitor services that can be shared such as guides, booking systems and security checks for visitors. However, not only intangible visitor services can be shared; the same applies to tangible visitor services such as parking places,

[17] Van den Borg uses the term 'tourism balance'.

restaurants and shops. Collective or public investments are required to develop and maintain these facilities. In comparison with intangible services there is one important condition for sharing tangible facilities: physical nearness is required to benefit from the economies of scale.

The second source of direct costs relates to collective investments that can be attributed to the purpose of promoting *industrial* tourism. These investments can be made by public authorities – as suggested by Van der Borg – but also by partnerships involving the private sector, whether or not via private-sector platforms such as the Chamber of Commerce. On the level of an urban region, the promotion of industrial tourism requires collective investments because no single actor is willing to cover the costs of investments that generate non-exclusive benefits (there are free riders). Also the costs associated with the development of public attractions and events that promote company visits in general could be categorised under this heading. Public attractions, events and promotional campaigns not only make the industrial tourism product more attractive, they can also be used to reduce the variation in visitor flows.

5.3.2 Indirect costs

Van der Borg (1991) identified three sources of indirect costs that can be related to tourism development in general, but also to industrial tourism development:

1) Public expenditure on facilities, attractions and other infrastructure not directly destined to the tourist market.
2) Induced costs as a result of the excessive pressure on a tourist attraction; e.g. the negative impact on congestion and pollution.
3) The long-term influence on other economic functions, e.g. the crowding out effect.

We define indirect costs as costs that are not directly accountable to the development of industrial tourism. The first source of indirect costs concerns expenditure on facilities, attractions and other infrastructure not directly destined to the *industrial* tourist market. Industrial tourists make use of infrastructure and facilities that are available to all users of the urban region. This also implies that the attractiveness of a company tour depends on the attractiveness of the region and its facilities and attractions as well as on the internal and external accessibility. The

development of infrastructure to make industrial areas with tourism potential more accessible is a typical example of an investment that requires collective action.

Also the second source of indirect costs is associated with the use of facilities and infrastructure by industrial tourists: the arrival of visitors brings along negative externalities such as congestion and pollution. These negative effects on the environment make a city less attractive for all its users including host firms and their visitors. The environmental impact of industrial tourism depends on the number of visitors, fluctuations in visitor flows and the actual behaviour of visitors (e.g. the use of more sustainable modes of transport). Excessive pressure on a city's infrastructure can cause damage, particularly if the number of visitors surpasses the maximum carrying capacity (A.P. Russo, 2002). The negative externalities of company visits are relatively low if they attract few visitors and/or mainly attract people during off-peak days.

Considering that industrial tourism is only a small segment of the tourism sector, the third source of indirect costs seems less relevant for our cost-benefit analysis. It is not very likely that the development of industrial tourism becomes a threat for the diversity of a city chasing away other functions (the crowding out effect). Quite the contrary: industrial tourism can be seen as a form of tourism that enables cities to use land and buildings for both tourism and other (economic) functions (Mader, 2003; Baumann, 1999).

5.4 Direct and indirect income and employment benefits

Industrial tourism generates income and employment, not only for the host firms (direct income and employment) but also for suppliers of products and services used by the host firms (indirect income and employment) and firms in the tourism industry or other sectors that benefit from the arrival of industrial tourists (induced income and employment) (based on Van der Borg, 1991). Industrial tourism helps to create jobs in the tourism industry via the multiplier effect (Frew, 2000). The multiplier effect can to some extent be influenced by changing some of the following conditions:

- *The supply of company tours*. An attractive supply of company tours can encourage tourists to extend their stay, resulting in more expenses to the benefit of local firms (Frew, 2000).

- *The local supply of specialised services*. Indirect benefits depend on the local supply of specialised services such as consultancy firms that advise companies on how to develop company tours and tour agencies specialised in company visits. For this kind of economic activities to be viable, a city should have a considerable supply of company tours, or at least the potential to develop such as supply.
- *The local supply of tourist attractions and supporting tourism infrastructure*. Induced benefits relate to the degree to which industrial tourists combine company visits with visits to other tourist attractions and the use of supporting tourism infrastructure such as hotels, restaurants and shops. When a city has more to offer, the chance is bigger that people stay for a longer period.
- *The composition of visitor flows*. Some visitors are more inclined to use other facilities than other visitors. The spatial-economic behaviour of visitors is influenced by factors such as their motives to visit (business, education or leisure), their budget and their place of origin. These factors also determine the length of a visitor's stay: excursionists (people who stay in a city for less than 24 hours) generate often less benefits than tourists as defined by the World Tourism Organisation (who stay for more than 24 hours).
- *Accessibility*. The interaction between industrial tourism attractions and other tourism attractions and facilities depends on accessibility: for visitors it is easier to combine visits to two sites if the generalised transportation costs (money, time) are low. Interaction can thus be facilitated by either clustering (industrial) tourism functions or by developing good transport connections.
- *Information*. Websites, brochures, information desks and road signs help to make attractions and facilities findable.
- *The supply of packages*. Another option to strengthen the multiplier effect is to develop packages enabling visitors to combine visits to industrial tourism attractions with visits to other (industrial or traditional) tourism sites.

Through investments in these conditions – which add to the costs of industrial tourism – stakeholders in the urban region can raise the tangible, income-related

benefits of company visits. The willingness to invest obviously depends on the balance between the additional costs and additional benefits.

One of the most relevant factors listed above is the composition of the visitor flow. Particularly important is the difference between tourists as defined by the World Tourism Organisation[18] and visitors from the region. If companies attract visitors from abroad industrial tourism can be considered an export industry, which makes it legitimate for public authorities to promote its development (Bartik, 2001). If firms mainly attract residents, the government could hold the argument that their expenses do not create income and jobs but only result in a redistribution of income and jobs. In that case public investments would support one sector to the disadvantage of another sector. On the other hand, one could also argue that residential tourism is in fact a business that substitutes for local imports: it makes the city more attractive as a place to recreate and reduces travel to other places.

Whether or not regional actors actively promote the development of industrial tourism as a source of income and employment depends on the relative importance of this tourism segment compared to other segments. This can, for instance, be measured by looking at the share of visits to industrial tourism attractions in the number of visits to all tourism attractions in a particular region[19]. This relative importance of industrial tourism is, in our view, an important condition for the regional industrial tourism development strategy. For some regions industrial tourism is only a small niche, while for other regions it could be one of the spearheads in the tourism promotion policy. For some destinations it is even possible that industrial tourism becomes the number one segment. The share of company visits is by definition not only determined by the actual supply of industrial tourism but also by the supply of other tourism products. Following this line of reasoning, regions with a broad and diverse tourism offer that already attract many tourists (e.g. popular destinations of city trips) are less inclined to

[18] Here we refer to the strict WTO definition of tourism according to which people who temporarily stay outside their daily environment without being remunerated from within these destinations are considered tourists.

[19] The relative importance of industrial tourism as a source of income and employment can be defined, in theory, as the income and employment benefits generated by company visits compared to all income and employment benefits generated by tourism. This implies that not only the number of industrial tourists should be taken into account but also more qualitative aspects such as their spending pattern, and the multiplier effects they generate.

invest in the development and promotion of company tours than regions with a relatively small supply.

5.5 Reputational benefits: marketing and public relations

Apart from being a source of income and employment industrial tourism can also be used as a marketing and public relations tool. Van der Borg (1991) identified the formation of formal and informal networks as one of the benefits of tourism, and business travel in particular. Company tours can not only be used to improve relations with external actors (stakeholders in other cities), but also to enhance relations between stakeholders in the urban region. Just like individual firms, collectivities such as sectors, clusters and urban regions can employ industrial tourism to secure their reputation and image. The involvement and stakeholder theories we introduced in the previous chapter thus may also be applied to these aggregated levels.

Collective action is most likely on the level of a sector, cluster or supply chain as their members share interests in securing relations with (potential) consumers and customers, business partners, employees, neighbouring citizens, interest groups and the media. What we said about the benefits of receiving particular visitor groups in the previous chapter thus also applies to these collectivities. Company visits facilitate the development of relations between stakeholders in a sector, cluster or supply chain. In addition they make economic activities more visible to investors, companies, governments and knowledge institutions, from the city and from abroad.

Industrial tourism can also be seen as an instrument of place marketing or branding (Frew, 2000). There are three ways in which (industrial) tourism changes the image of regions: first the supply of company tours and supporting infrastructure makes the region more attractive for visitors, but also for residents (Van der Borg, 1991); Kavaratzis (2004) explained that cities communicate their image through actions for which communication is not the main goal. This type of impact on a city's image is strongly related to how company tours are conceptualised: do they actually contribute to a city's appeal? Second, company visits help to display a positive and realistic image of the city showing its economic vitality and attractiveness as place to live, work, recreate or invest in. Industrial tourism changes the perception of visitors, but indirectly also the perception of other people through word of mouth. Industrial tourists can be seen as ambassadors of a city. The influence of industrial tourism on the image of a city and its industries grows with the number of visitors, but also depends on the composition of visitor groups. Some visitors are better ambassadors

because they are more influential, such as journalists[20]. Third, industrial tourism programmes affect the perception of non-visitors through the media. When people read or hear about company tours in advertisements, editorial articles or advertorials, their general opinion about a city (its attractiveness, its economic vitality) may change.

Industrial tourism can be used to improve a city's image, but not necessarily by actively promoting company visits as a key segment of a city's tourism supply. Also without integration of industrial tourism in a city's promotional campaigns, people will visit firms and become ambassadors. Different industrial tourism strategies are available for urban regions, just like host firms may choose the strategy they consider most appropriate (see chapter two and four). Several characteristics of the urban region are possibly relevant in the selection of a strategy.

First of all there is some resistance among cities to use industrial tourism as a tool of place marketing (Fontanari & Weid, 1999; Schmidt, 1988). The argument is that leisure tourists still connect industry with negative values such as pollution and noise. These cities avoid the association with its industrial activities, trying to evoke different connotations such as leisure, culture, shopping and access to an attractive natural environment. Particularly for regions with a negative industry profile, intensive promotion of industrial tourism could be conflictive with the ambition to promote the region as a place to live or to visit. For some regions, the term 'industrial tourism' – or similar terms – connects the undesired image of the past (industry) with the desired image of the future (a tourist destination).

Second, regional bodies are probably selective in the promotion of company visits. They can be expected to focus on those sectors and firms that actually fit in the desired image of the region, reasoning that industrial tourism is an instrument of co-branding: product branding influences place branding and vice versa (Kavaratzis & Ashworth, 2005; Azevedo, 2004). This implies that regional actors tend to favour industrial tourism development in sectors and firms with a positive image. More in particular they are expected to favour visits to companies that project similar images or values as the city or the region[21] (Pechlaner, Fischer & Go, 2006). In general,

[20] More examples can be found in chapter four.

[21] Pechlaner, Fischer & Go (2006) analysed the identity-creating values of Ingolstadt, the region, the enterprises and car manufacturer Audi AG. While some of these values are similar, other values are conflictive.

companies and sectors with substantial industrial tourism potential (as defined in the previous chapter) are in a better position for regional support. This particularly applies to firms that produce products with 'symbolic character for the region' and companies that are representative for the economic development strategy of a region: sectors that are relatively large or sectors with considerable growth potential.

Regional actors could, however, also decide to promote visits to firms and sectors with less industrial tourism potential and a less appealing image. Company visits may help to change the image of a sector, which benefits the image of the region. Such a strategy seems particularly useful in case of a relatively large sector that has a negative influence on the image of a region as the result of a lack of knowledge rather than a lack of attractiveness (an image gap).

In sum, the usefulness of industrial tourism as marketing and public relations tool is dependent on the fit between the image of the companies and sectors that can be visited and the desired image for the region. Regions can adopt a relatively defensive approach – focussing on the sectors that have an appealing image – or a more offensive approach – using company tours as instrument to reduce persistent image gaps affecting the reputation of industries and the regions in which they are located.

5.6 The industrial tourism potential of an urban region

The benefits of industrial tourism for an urban region depend on the ability to actually attract industrial tourists. Also on this aggregated level sources of industrial tourism potential can be assessed by simply analysing the attractiveness of the companies and the products they produce (Mader, 2003; Swarbrooke & Horner, 1999; Swarbrooke, 2002). This method is not fundamentally different from analysing an urban region's potential to attract other types of tourists: people go to places that have something to offer. The attractiveness of host firms is, however, not the only factor that determines the ability of urban regions to attract industrial tourists. Other factors need to be taken into account as well.

Murphy et al., 2000 make a distinction between the destination environment (social, cultural, economic, technological, political and natural factors) and the service environment (accommodation, transport, travel, food, shopping and recreation and attraction services). In this hierarchy of influential factors the destination environment is a primary factor, while the service environment is secondary (Mo, Howard & Havitz, 1993). In a similar way Van den Berg et al. (1995) distinguish primary

tourism products (the reasons why people visit cities) from complementary or secondary tourism products (supporting infrastructure such as hotels and restaurants). When we apply to this way of analysing tourism potential to industrial tourism, host firms can be considered part of the destination environment while they are able to provide primary tourism products. Whether or not urban regions actually attract industrial tourists depends on the service environment and the complementary products.

Most essential is, of course, the supply of company tours either by host firms or other intermediary organisations (travel services, recreation and attraction services), enabling people to enter the sites. Less essential though not irrelevant for the appeal are visitor facilities such as catering facilities (food services), shops and hotels (accommodation services). Another relevant factor is the accessibility of the industrial tourism attractions. Van den Berg et al. (1995) make a distinction between the external accessibility of a destination and the internal accessibility of the (primary and secondary) tourism products. The external accessibility depends on an urban region's position in national and international transportation networks with airports and high-speed train stations as important assets. Obviously these external connections are particularly relevant for attracting industrial tourists from abroad. The internal accessibility of industrial tourism products is determined by their position in regional transportation networks and the availability of transport services. In the previous section we already indicated that internal accessibility facilitates interactions between industrial tourism and the use of other services thus generating income and employment through multiplier effects. In the present section we would like to add that connections between host firms as well as connections between industrial tourism and other (tourism) products also help to create a more attractive supply that appeals to industrial tourists. Such connections are not only facilitated by transport and travel services but also by the provision of information (e.g. cross-referencing).

5.7 Cooperation and coordination in industrial tourism development

The main hypothesis of our research is that a common agenda on industrial tourism resulting in coordinated action benefits both companies and urban regions. Above we already identified some possible advantages of coordination to the benefit of various actors. Several collective benefits we identified only become available if actors cooperate: if companies open their doors, if public authorities invest in the

required infrastructure, if tourism and city marketing agencies promote company tours, et cetera. In chapter three we indicated that industrial tourism may enhance or facilitate cooperation between stakeholders. The present chapter, however, makes clear that cooperation and coordination between stakeholders facilitate industrial tourism development in urban regions. Presumably the development of an attractive regional industrial tourism supply depends on the presence of existing partnerships and agreements as well as the ability to create new ones. Some insight in the factors that facilitate the coalition-forming process will help us to identify the conditions under which coordinated action in industrial tourism development can be realised. Below we discuss the four factors we consider most relevant: added value, leadership, a common policy agenda and commitment and trust.

5.7.1 Added value

One of the most important preconditions for the creation of cross-sector coalitions is that cooperation produces added value that benefits all participants (Henton et al., 1997; Austin, 2000). This added value can result from economies of scale, scope or skill. There is only added value if the benefits of cooperation outweigh the costs of coordination, such as the money and time spent on meetings and the costs of coordinating staff.

Partnerships can, for instance, generate external resources (for instance subsidies from national governments) which otherwise might not have been made available to any individual partner, partners can learn from one another about the nature of the problems and their potential role in that respect, and consider new ways to solve them (Miller, 1998). In other words: partnerships require that the actors recognise their mutual dependence (Klijn & Teisman, 2000; Stone, 1989). Moreover, the benefits of participation have to outweigh the costs for all actors: stakeholders stick to participation if they cannot achieve their goals any other way (Nicholls, 2005). Individuals join groups for a variety of reasons, but the two most dominant motivations are (1) to receive benefits they could not otherwise receive (Olson 1965), and (2) to advance common policy goals and preferences (Rothenberg 1992). Urban regime theory assumes that individual actors lack sufficient levels of power to generate and implement an overarching agenda for the urban system (Harding, 1994).

The development of industrial tourism can be seen as a collective action problem (Olson, 1965). Although all actors have an interest in cooperation, partnerships do not always evolve spontaneously. Collective action problems explain

why actors sometimes refuse to cooperate: for instance when non-participating firms take advantage of spillover effects (acting as free riders) such as an improved reputation of the sector. Because these collective benefits are non-excludable, firms are inclined *not* to participate while companies that do take their responsibility are confronted with a relatively high investment. To avoid freeridership and other collective action problems, collective action regimes are needed (Mossberger & Stoker, 2001). In such a regime stakeholders aim to overcome the collective action problems by means of a 'relatively stable collaborative agreement'. Coordinating mechanisms can range from formal (contracts and institutions) to informal (social networks) (Stone, 1986; 1989; 1993).

5.7.2 Leadership

A key condition for the development of cross-sector partnerships is leadership: someone who is willing to overcome the costs of collective action (Salisbury, 1969; Wilson, 1995; Schneider, Teske & Mintrom, 1995). Leadership is needed to ensure the maintenance of (unstable) governance regimes and coalitions (Baraize & Négrier, 2001; Borraz & John, 2004). Leaders have two important roles to play: 1) to focus the attention of individual stakeholders on long-term benefits of co-operation rather than short-time losses; and, 2) where short-term losses of an individual are perceived to outweigh long-term benefits, to ensure co-operation through the distribution of selective material incentives (Stone, 1989). Actors have an incentive to form groups when they receive a disproportionate benefit from the group. The benefit may be in the form of a job with the organization, access to institutional powers and resources of the group, economic gain, or the satisfaction of a specific issue addressed (Post, 2004). The need for leadership grows as the number of stakeholders increases and the competences needed are more distributed among the envisaged partners (Van den Berg, Braun & Van Winden, 2001). In industrial tourism development the leadership role can not only be fulfilled by the government but also by leader firms. In his analysis of seaport clusters, De Langen (2004) defined leader firms as 'firms that have – due to their size, market position, knowledge and entrepreneurial skills – the ability and incentive to make investments with positive externalities for other firms in the cluster'. When applied to industrial tourism, leader firms are able and willing to develop collective facilities that benefit other stakeholders as well, essentially because they receive substantial benefits themselves.

5.7.3 A common policy agenda

Collective action regimes can only be effectuated if the stakeholders agree on a common policy agenda; they have to reach consensus on the main objectives and the strategies to reach these goals (Stone, 1993; Mossberger & Stoker, 2001). Austin (2000) defined seven conditions for strategic cross-sector cooperation (between businesses and nonprofits), of which two relate to a common policy agenda: 1) actors should establish a connection based purpose that engages people; 2) the purpose should be clear; ensuring the mission, strategy and values of the partners organisations are congruent[22]. Also in the case of joint industrial tourism development, stakeholders are more likely to cooperate if they succeed in reaching agreement on the objectives and the visitor groups to be targeted in particular. As stakeholders in industrial tourism have very different interests (as we discussed in the present and previous chapter), the development of a common vision and strategy is a challenging task. Most host firms prefer to receive only (potential) business partners, while from the city's point of view it seems desirable to target larger audiences with positive spin-off effects for the local economy.

5.7.4 Commitment and trust

Other factors in the development of cross-sector partnerships are commitment (Austin, 2000; Kanter, 1999) and trust (Borys & Jemison, 1989; Kouwenhoven, 1991; Miller, 1998). Sustainable commitment and trust are needed when collective benefits of public-private partnerships emerge in the long run, and if these benefits are uncertain (Klijn & Teisman, 2000). Our analysis of costs and benefits related to industrial tourism development has indeed made clear that many individual and collective benefits are intangible and uncertain, requiring some patience from the investors. The importance of trust in developing cross-sector partnerships also implies that the rational actor model has insufficient explanatory capacity. Stakeholders (e.g. in industrial tourism) are not 'rational and strategic individuals who make choices within constraints to obtain their desired ends, whose decisions rest on their assessment of the probable action of others' (Levi, 1997, p.23). Their rationality is bounded (see Simon, 1957) because they do not have full access to all information

[22] The other five conditions are the creation of value for both parties, effective communication between the parties, continuous learning of partners to keep the coalition viable, and long-term commitment to the partnership.

that is needed to make a decision. As we concluded in chapter four, not the actual (costs and) benefits but expected (costs and) benefits determine whether or not a company wants to receive guests. This also applies to other stakeholders. In the end, decisions have to be made by individuals with perceptions, believes and values. In general stakeholders are more inclined to cooperate if they share a sense of urgency or *Sachzwang* as the Germans call it (Hendriks & Tops, 2002). A serious threat or opportunity (such as a big event) can stimulate actors to cooperate, also because it helps to create a common policy agenda: a joint rationale for cooperation (Van den Berg & Braun, 1999). Another factor that influences coalition-forming processes is the 'history of cooperation' (Mossberger & Stoker, 2001): if actors do not fully agree on the mission and objectives of an industrial tourism development programme, it is easier to reach consensus if they have a tradition to cooperate (also see Otgaar, Van den Berg, Van der Meer & Speller, 2008). Essentially the argument is that partnerships and platforms (intermediary organisations) facilitate new forms of cooperation (De Langen, 2004; Van den Berg, Braun & Otgaar, 2004).

5.8 Conclusions

In this chapter we analysed the costs and benefits of industrial tourism on the macro-economic level of an urban region. We explained that the urban region is just one of the levels on which common interests can be analysed: other relevant levels are sectors, clusters and supply chains. In our macro-economic analysis of costs we concluded that through cooperation and coordination stakeholders in industrial tourism are able to: 1) reduce the costs of tangible and intangible visitor services; 2) share the costs of public attractions, events and promotion. Collective action is also needed to secure an attractive, accessibility and sustainable urban region in which industrial tourism harmonises with other functions. Obviously some investments can only be made by the public sector, for one thing because they also benefit other functions (e.g. residential).

Looking at the income and employment benefits of industrial tourism for urban regions, we can draw the conclusion that the tourism industry is likely to have an interest in high visitor numbers, being considerably less selective than host firms. The willingness of regional actors to actively promote industrial tourism is related to the relative importance of industrial tourism in comparison with other segments, for instance in terms of visitor numbers. Furthermore, regions are able to benefit from company tours if substantial multiplier effects occur, which depends on several

factors such as the supply of company tours and tourist attractions, accessibility, the provision of information and the supply of packages.

With respect to the marketing and public relations benefits of industrial tourism for urban regions, the conclusion is that urban regions may use different strategies ranging from reactive to proactive. Reactive approaches can be expected from cities that want to avoid the association with industry. A proactive approach implies that an urban region considers industrial tourism as a tool to promote (some of) its industries, expecting a positive interaction between company brands and place brands (co-branding). A region's strategy to industrial tourism is closely related to a region's industrial tourism potential: sufficient potential may explain why actors adopt a proactive approach which presumably results in additional investments in the industrial tourism potential. If the potential is too low, we expect a lack of willingness among regional actors to invest in industrial tourism development. The attractiveness of host firms and their offer to visitors has more weight in the regional industrial tourism potential than supporting conditions such as visitor facilities, accessibility and the promotion of company tours.

A final conclusion is that coordination and cooperation in industrial tourism development can produce benefits for urban regions, but also for the companies that open their doors. The problem, however, is that stakeholders do not cooperate automatically: apart from added value, we identified leadership, a common policy agenda and commitment and trust as important factors in the coalition-forming processes.

Chapter 6

Research framework and methodology

6.1 Introduction

In chapters two and three we defined industrial tourism and we analysed the changing conditions in urban regions helping us to identify possible drivers of industrial tourism development and potential barriers in this development. In chapters four and five we analysed the interests of individual firms and regional actors by looking at the (aggregated) costs and benefits of industrial tourism. In these chapters we presented industrial tourism development as a collective action problem, in view of our main question: under what conditions can the development of industrial tourism benefit the companies that open their doors and the urban regions in which they are located?

The aim of the present chapter is to formulate hypotheses and sub-hypotheses in response to this question. The first set of hypotheses concerns the development of industrial tourism from the viewpoint of host firms, building on the theory of chapter four. The second set of hypotheses is defined from the perspective of urban regions using insights from the theories discussed in chapter five. The final and main hypothesis of our research framework deals with the interaction between the two perspectives.

6.2 The host firm's perspective

6.2.1 Contributions to the performance of a firm

Why do companies open their doors? What makes firms decide to supply company tours? Theoretically the answer is straightforward: companies get involved in industrial tourism if it contributes to their 'long-term economic performance'. As we concluded in chapter four the expected (tangible and intangible) benefits have to outweigh the expected costs. Benefits can be expected from the income from ticket sales and on-site sales, but more importantly also from the impact on corporate image, improved relations with stakeholders and increases in productivity. As we discussed in chapter four the balance between costs and benefits depends on the characteristics of the visitor flow: the number of visitors, the composition of the visitor flow and the spread of visitors in time. Hence, the first hypothesis reads as follows:

H1	*The contribution of industrial tourism to the performance of a host firm depends on three aspects of the visitor flow:*

In this hypothesis the term 'performance of a host firm' should be understood as the *long-term economic* performance, which not only concerns a company's profitability but also its viability and long-term ability to secure the license to operate. We use the common term 'visitor flow' to describe and analyse the arrival of industrial tourists. The three aspects of the visitor flow that are relevant for the contribution of industrial tourism to a host firm's performance are specified in three sub-hypotheses:

H1.1	*The contribution of industrial tourism to the performance of a host firm depends on the number of visitors.*

The relevance of industrial tourism for a host firm's performance increases with the number of visitors. If a company receives only a couple of industrial tourists a year, it will be less inclined to invest in industrial tourism. The reason is that purchases that incur (step) fixed costs need to be earned back by the reception of a 'sufficient' number of visitors. All potential benefits of industrial tourism for a firm's

performance – ticket sales, on-site sales, reputation benefits, etc. – depend on the size of the visitor flow.

H1.2 *The contribution of industrial tourism to the performance of a host firm depends on the composition of the visitor flow.*

The second characteristic of the visitor flow that influences the contribution of industrial tourism to a host firm's performance is the composition. It is not only quantity that matters; also the quality of industrial tourists has to be taken into account. The income from ticket and on-site sales depends on a visitor's willingness and ability to spend money on a company tour and related services and products. Potentially relevant criteria are income, age, region/country of origin, gender, etc. Reputation benefits hinge on the relevance of particular visitors for a host firm's license to operate. Assuming a limited capacity to receive visitors companies are expected to target visitors with the largest influence on their license to operate. We foresee that companies are more hospitable to visitors that are either directly (potentially) involved in transactions with the company (suppliers, buyers, employees, financiers) or have considerable influence on these transactions (e.g. media, NGOs). There are several possible indicators for such a policy: firms open their doors for visitors with significant impact on the license to operate only, they give these visitors a preferential treatment, or their communication mainly targets these types of industrial tourists. Examples of visitor characteristics that determine the influence on the license to operate are the motive of the visit (business, knowledge, leisure, or a combination of these factors) and the region and country of origin (relevant for a company's business or not?).

H1.3 *The contribution of industrial tourism to the performance of a host firm depends on the spread of visitors in time.*

Apart from the quantity and quality of visitors also their spread in time determines their contribution to the performance of a firm. The capacity of a host firm to receive visitors is limited. When too many people visit a site at the same time conflicts with the primary process are likely to reduce productivity. Therefore,

companies are expected to prefer an equal spread of visitors (during the week, the month and the year), as long as size requirements (the first sub-hypothesis) are met. If the total size of the visitor flow (for a year) is relatively small it makes more sense for host firms to receive groups of industrial tourists on a limited number of selected days.

6.2.2 Contributions to the corporate image

Companies open their doors if the arrival of industrial tourists helps to increase their performance. Apart from being a source of direct income and employment, industrial tourism is a potentially adequate instrument of marketing, branding and reputation management. Contributions to the corporate image depend on the characteristics of the visitor flow (as we discussed above) but also on the adequacy of company tours as marketing tool. This second condition can be hypothesized as follows:

H2	*The contribution of industrial tourism to the corporate image depends on the fit between industrial tourism and the intended corporate image.*

The applicability of company tours as a tool for marketing, branding and reputation management is subject to firm-specific factors such as the products it produces, the production processes, the markets on which it is active and its marketing strategies. As indicated in the literature, for some firms the confrontation of visitors with the production process is not the most effective strategy to improve the reputation of a firm and its brands; company tours may even cause harm to a corporate image (e.g. in the food industry). Company tours become an interesting option for firms if they (can be used to) reflect corporate values and competitive strengths. The 'intended corporate image' should be understood as the values and strengths a company wants to communicate. Possible ingredients of such a communication strategy are quality, sustainability, good citizenship (corporate social responsibility) and commitment to the urban region.

6.2.3 The potential to attract industrial tourists

Contributions of industrial tourism to the long-term economic performance and corporate image depend on the ability to actually attract industrial tourists. This

brings us to the following question: what explains the attractiveness of a firm for visitors? Why do some firms make it into the list of most visited tourist attractions, while other companies only receive a handful of technical visitors? The third hypothesis of our research framework specifies the factors that explain a company's ability to attract industrial tourists.

H3	*A firm's potential to attract industrial tourists depends on the combination of four factors:*

We expect that the interplay between four factors determines a firm's ability to attract (particular types of[23]) industrial tourists: the attractiveness of the firm, the supply of company tours, the quality of the location and visitor facilities and the promotion of industrial tourism. As we will explain the first two factors can be considered 'essential conditions' to attract industrial tourists while the last two are 'supporting conditions'.

H3.1	*A firm's potential to attract industrial tourists strongly depends on the attractiveness of the firm.*

Industrial tourists are by definition primarily interested in the firm. If the company itself is not attractive then it will be extremely difficult to tempt visitors to the workplace. A firm's lack of attractiveness can make investments in other conditions specified in the four sub-hypotheses hereunder ineffective and inefficient. Building on the work of Mader (2003) and Swarbrooke & Horner (1999), potential sources of a firm's attractiveness are, for example, the products, the brands, the production process and the management process. The second sub-hypothesis is the following:

[23] The third hypothesis can be linked to the first hypothesis: what matters for firms is not the ability to attract 'all' industrial tourists but the ability to attract industrial tourists that contribute to their long-term economic performance. Apart from the number of visitors, also the composition of the visitor flow and their spread in time are relevant determinants.

H3.2 *A firm's potential to attract industrial tourists strongly depends on the supply of industrial tourism.*

A firm can be very attractive but without a supply of industrial tourism (e.g. company tours) or a poor supply of industrial tourism (qualitatively or quantitatively) its potential to attract industrial tourists is limited. An important indicator for the potential attractiveness of a firm as a place to visit is the maximum visitor capacity: this can for instance be measured by multiplying the number of company tours a year with the capacity of one tour. For virtual experiences (museums, brandparks, etc.) the visitor capacity is dependent on opening hours. If a company actually succeeds in attracting these visitors depends on numerous, more qualitative, factors such as restrictions on age, group size (maximum and minimum) as well as safety and security restrictions. The most important qualitative factor, however, is the quality of the company visit itself: does it provide an experience that meets the demand of industrial tourists?

While the first two sub-hypotheses describe essential conditions for companies to attract visitors, the two other sub-hypotheses present conditions that support the development of industrial tourism. This implies that if a company has a bad score on the first two conditions, it is nearly impossible to compensate this by positive scores on the two other conditions. Nevertheless, the two supporting factors do present possibilities to make companies and their tours more attractive for visitors. Our model is in many ways comparable with Van der Borg's theory that explains the tourism potential of cities. In this theory he makes a distinction between primary tourism products that explain why people visit cities (places of interest, museums, tourist attractions) and secondary tourism products that can make a city more attractive (hotels, restaurants, etc.). Even if a city or region has the best hotels and restaurants it will be extremely difficult to attract visitors if the supply of primary tourism products is weak. The same can be said about (internal and external) accessibility: it makes a city more attractive but only if there are good reasons to visit the place. The first supporting sub-hypothesis reads as follows:

H3.3 *A firm's potential to attract industrial tourists is supported by the quality of the location and visitor facilities.*

The quality of a company's location and visitor facilities makes company tours more attractive but only if the tour itself appeals to the industrial tourist. These assets are supportive or secondary in the terminology of Van der Borg, though highly relevant for the ability to attract industrial tourists. If the quality of the location and visitor facilities is poor, even an attractive firm with a good supply of industrial tourism will find it difficult to tempt visitors. The quality of the location and visitor facilities can be assessed on at least three spatial levels: by looking at the site itself, its immediate environment and its position in the region. At the level of the site, relevant conditions are, for instance, the aesthetic qualities of the buildings (exterior and interior) and the supply of visitor facilities such as parking places, catering facilities, meeting rooms, a reception and information displays. Examples of supporting conditions in the immediate environment are the quality of the environment, the design of the landscape and adjacent building and the access to nearby facilities (e.g. restaurants and shops) and other tourist attractions. When we look at the position in the region, most relevant is the accessibility of the site (the presence and quality of infrastructure and transport services), considering the distance to other places of interest and facilities in the city in particular.

The second supporting condition concerns the promotion of industrial tourism:

H3.4 *A firm's potential to attract industrial tourists is supported by the promotion of its industrial tourism supply.*

The promotion of a company's industrial tourism supply (such as company tours), for instance by providing information about the possibilities to visit a firm, makes company visits more visible and accessible for industrial tourists. Information can be provided by the host firms, but also by travel agencies or cities: on the internet, in brochures and advertisements but also on signposts.

We assume that the supply of industrial tourism for specific visitor groups – with their specific preferences – depends on the demand for company visits and vice versa. As in any other market supply and demand are in a system of communicating vessels. The relevance of the four conditions for the ability to attract industrial tourists can be assessed in at least three ways. First, the conditions may explain why particular firms are more successful in attracting industrial tourists than others, looking at differences in the size and composition of visitor flows. Second, we assume that the

four factors provide arguments for firms to open their doors or to keep doors closed for particular visitor groups. Third, we expect that companies (consider to) invest in the conditions if they want to attract specific types of industrial tourists. Insight in the four conditions thus helps us to explain why some firms are in a more favourable 'starting position' (because they are more attractive or due to their site) but also why other firms are to some extent able to improve their potential through relatively small investments (for instance in company tours, visitors services and communication).

6.3 The urban region's perspective

In chapter five we shifted our attention away from the individual firm towards the urban regions in which companies are located. What are the costs and benefits of industrial tourism development from the viewpoint of regional governance arrangements? Under what conditions are organisations on the level of cities and regions willing to invest in the promotion of company tours? What factors determine the industrial tourism policies of urban regions?

Industrial tourism policies are most likely to be developed and implemented by governments and public bodies, whether or not in close cooperation with other (private) actors that have a stake. Particularly organisations that represent private-sector interests such as Chambers of Commerce & Industry and tourism offices are relevant partners for authorities. Organisations that operate on this level can support the development of industrial tourism through promotional activities (websites, brochures, advertisements, etc.) and the development of supporting infrastructure: expenses laid out for the express purpose of reinforcing industrial tourism. The question is under what conditions these organisations are willing to undertake these activities and to make these investments. Our analysis of collective costs and benefits helps us to formulate several hypotheses concerning the industrial tourism policies of urban regions.

6.3.1 Contributions to the economy of an urban region

Organisations on the level of an urban region are expected to defend public or collective rather than private or individual interests. In theory their aim is to improve the prosperity and wellbeing of inhabitants. While companies get involved in industrial tourism if it adds to their individual long-term economic performance, urban regions are assumed to assess the contribution of industrial tourism to the economy of the urban region. This contribution can be measured in terms of income

and employment (including multiplier effects) also taking into account positive and negative externalities of industrial tourism (e.g. pollution, congestion, impact on the image of the urban region, etc.). Also for urban regions industrial tourism can be a source of direct income and employment as well as a tool to improve the reputation and image of the region, which generates income and employment benefits in a more indirect way. The fourth hypothesis is comparable with the first hypothesis, though with a focus on the urban region:

H4	*The contribution of industrial tourism to the economy of an urban region depends on three aspects of the visitor flow:*

The three relevant aspects are the same as for individual host firms: the number of visitors, the composition of the visitor flow and the spread of visitors in time. It is, however, very likely that the weights of the various aspects differ between the host firm's and urban region's perspective. The first relevant aspect of the visitor flow is its size:

H4.1	*The contribution of industrial tourism to the economy of an urban region depends on the number of visitors.*

Economic contributions of industrial tourism increase with the number of visitors. If company tours generate a substantial number of tourist arrivals and bed nights industrial tourism may become an interesting source of income and employment for the urban region. The interest of urban regions in facilitating industrial tourism development is presumably determined by the relative importance of this segment in comparison with other segments: it is a small niche, a key segment or even the number one segment? What are actual visitor numbers (e.g. of industrial tourist attractions, compared with other attractions) and what is the (expected) future growth potential? If urban regions expect industrial tourism to grow, they are more inclined to invest, for instance in the promotion of the segment.

The second aspect relates to the composition of the visitor flow:

H4.2 *The contribution of industrial tourism to the economy of an urban region depends on the composition of the visitor flow.*

As for other segments of the tourism industry the contribution of industrial tourism to the economy not only depends on the quantity but also on the quality of the visitor flow. For some types of industrial tourists the economic impact – including positive and negative externalities – is more substantial than for other types. The economic impact of industrial tourists is determined by their behaviour (e.g. length of stay, time of the visit, spending pattern, etc.) which is subject to factors such as the their places of origin (region, country, abroad), spending power and motives to visit a region (leisure, business, knowledge or a combination of these motives). Comparable with the host firm's perspective urban regions prefer to target visitors that influence the region's 'license to operate': either because they are involved in transactions with the region (e.g. foreign investors, tourists) or because they are able to influence these transactions (e.g. media, researchers). Insight in the (expected) composition of the visitor flow may thus help us to explain why organisations on the level of urban regions promote industrial tourism or not, and if they target specific groups. This analysis may also result in the conclusion that regions attach more value to the number of visitors (mass tourism) than the composition of the visitor flow.

The third aspect of the visitor flow to be considered is the spread in time:

H4.3 *The contribution of industrial tourism to the economy of an urban region depends on the spread of visitors in time.*

The balance between positive and negative contributions of industrial tourism to the regional economy is not only determined by the size and composition of the visitor groups but also by the timing of their visits. The question is if industrial tourists put additional pressure on the carrying capacity of a destination. To answer that question we need to analyse the spread of industrial tourists in time compared to the spread of other visitors. A regional supply of company tours can be particularly beneficial for the economy if it attracts visitors during the offseason or less crowded

days of the week. In that situation industrial tourists generate (economic) benefits while their arrival has relatively few negative impacts on the environment (e.g. congestion, pollution). In addition a more equal spread of visitors makes it easier to run facilities for (industrial) tourists (e.g. company museums and visitor centres but also restaurants and hotels).

6.3.2 Contributions to the regional image

Industrial tourism is, as we indicated earlier, not only a source of income and employment. It can also be an instrument of marketing for urban regions. Company visits change the reputation of host firms but also of the urban regions in which they are located. A regional supply of industrial tourism influences the perception of those who visit the firms, their friends, relatives and business partners, as well as other actors who are informed somehow about the supply. This implies that industrial tourism can be used as a tool of place marketing even if the quantity, quality and timing of industrial tourists is unfavourable for the direct economic impact. The relevant question now is if the regional image actually benefits from the association with industrial tourism in general, and the companies that open their doors in particular. The fifth hypothesis is the urban region's version of the second hypothesis:

H5	*The contribution of industrial tourism to the regional image depends on the fit between industrial tourism and the intended regional image.*

As in the host firm's perspective the intended regional image can be assessed by identifying the values and strengths an urban region wants to communicate. In other words: what is the image local and regional authorities and their marketing and tourism organisations want to display? The contribution of industrial tourism to this intended image grows if the values and strengths communicated by the host firms correspond with the values and strengths communicated by organisations on the level of urban regions. As indicated in the literature review some urban regions may choose not to facilitate industrial tourism development at all because they want to avoid the association with industry in general. Our research framework, however, recognises more alternatives regions can opt for. For instance regions can decide not to use the term industrial tourism, using another term such as technical visits instead. Moreover

it can be expected that urban regions prefer to focus on sectors and companies that fit in their marketing and economic development strategies.

6.3.3 The potential to attract industrial tourists

To analyse the contributions of industrial tourism to the economy and image of an urban region insight in an urban region's potential to attract industrial tourists is essential. Similar to the host firm's perspective, supply and demand cannot be isolated from one another in the regional market for industrial tourism. The sixth hypothesis is the aggregated version of the third hypothesis:

H6	*An urban region's potential to attract industrial tourists depends on the combination of four factors:*

According to this hypothesis four factors together influence a region's ability to attract (particular types of) industrial tourists: the attractiveness of the firms, the supply of company tours, the quality of the locations and visitor facilities, and the promotion of industrial tourism. Also in the urban region's perspective the first two factors can be considered 'essential conditions' to attract industrial tourists while the last two are 'supporting conditions'.

The first sub-hypothesis considers the attractiveness of the firms:

H6.1	*An urban region's potential to attract industrial tourists strongly depends on the attractiveness of the firms it accommodates.*

Some urban regions are in a more favourable starting position for attracting industrial tourists than other regions. A key determinant of an urban region's industrial tourism potential is the attractiveness of the firms that are located in the region. As we discussed in the host firm's perspective individual firms owe their attractiveness to factors such as the products, the brands, the production process and the management process. On an aggregated level the attractiveness can be explained by analysing data such as the economic structure (what sectors are well represented?) and lists of a region's largest employers. Urban regions may improve their industrial

tourism potential if they succeed in acquiring attractive firms or provide incentives for attractive start-ups.

The second sub-hypothesis relates to the supply of company tours:

> *H6.2* *An urban region's potential to attract industrial tourists strongly depends on the supply of industrial tourism.*

The ability of an urban region to attract industrial tourists is dependent on the quantity and quality of the industrial tourism supply: company tours and other possibilities to a visit industrial sites supplied by host firms and intermediary organisations such as tour operators, travel agencies and tourism bureaus. On the level of an urban region the supply of industrial tourism can be enhanced in several ways. For instance by stimulating firms to open their doors (providing incentives), by helping companies to enhance the quality of company visits or by developing packages of company visits that respond better to the demands of visitors.

The third sub-hypothesis refers to the relevance of visitor facilities:

> *H6.3* *An urban region's potential to attract industrial tourists is supported by the quality of the locations and visitor facilities.*

As we explained above the quality of the locations and visitor facilities can be assessed on three levels: the sites, their immediate environment and their position in the region. Regional actors presumably play a key role in improving supporting conditions such as the accessibility of the industrial sites, the quality of the environment and the design of buildings and public space and the access to facilities such as shops, restaurants, hotels and other tourist attractions. We need to realise, however, that most public investments in the quality of the locations and visitor facilities also serve people who are *not* industrial tourists. The development of hotels, restaurants and infrastructure benefits industrial tourism, but other segments of the tourism industry as well. In our empirical study we only consider investments in visitor facilities that can be clearly linked to industrial tourism. In addition regional organisations may also stimulate firms to improve the quality of the location and visitor facilities, for instance through subsidies, quality standards or workshops.

Furthermore we need to realise that the position of the region in (inter)national networks determines the ability to attract (industrial) tourists. Investments in airports and high-speed train connections are examples of regional interventions that improve the overall tourism potential of a region.

H6.4 *An urban region's potential to attract industrial tourists is supported by the promotion of industrial tourism.*

The second supporting factor is the promotion of industrial tourism: are visitors sufficiently informed about the opportunities to visit firms? Again there are several ways for urban regions to improve this condition; for instance by developing a special industrial tourism programme or through promotion via websites, advertisements or free publicity. Another option is to stimulate suppliers of (industrial) tourism products to refer to each other.

The combination of the four conditions described above explains the potential of urban regions to attract industrial tourists. This hypothesis can be verified in three ways. First, urban regions that are endowed with favourable conditions are expected to attract more industrial tourists than urban regions with a lower score on the four attributes. Second, we assume that the four conditions provide reasons for urban regions to facilitate industrial tourism development (a proactive approach) or to neglect this segment of the tourism industry (a reactive approach). Third, it can be foreseen that urban regions with ambitions to attract industrial tourists – based on the four conditions – will invest in the four conditions.

6.4 Coordinated action

From the firm's as well as the urban region's point of view industrial tourism generates benefits in terms of income and image. Above we described how private benefits (for the firm) and public benefits (for the urban region) depend on the characteristics of the visitor flow, the adequacy of industrial tourism as tool to improve corporate and regional images, and the ability to actually attract industrial tourists that bring these benefits. The seventh hypothesis connects the two viewpoints stating that the development of a common agenda which facilitates coordinated action generates benefits for both sides:

H7 *The benefits of industrial tourism for both an urban region and the host firms depend on the development of a common agenda enabling coordinated action.*

With coordinated action we refer to any type of cooperation in the development of industrial tourism: a partnership or an agreement in which the host firms and organisations that represent the interests of the urban region are involved somehow. Models to coordinate action in the development of industrial tourism can range from relatively formal and institutionalised coalitions to more informal and non-institutionalised interactions. It is, however, not the organisational model itself that we want to review, but the possibilities to reach public-private consensus on priorities and ambitions. We assume that consensus results in synergies: 'additional benefits that could not have been created by uncoordinated action'. According to our research framework synergies can be realised if actors succeed in developing a common agenda based on compatible interests of host firms and regional actors.

What do we mean with compatible interests? Our model makes clear that the interests of host firms and organisations on the level of urban regions are different. Companies aim for individual goals (their long-term performance, their viability), while regional organisations are expected to defend collective interests (the economy of the urban region). Hence, we expect that host firms and regional bodies look at industrial tourism development from different angles. They may have different preferences when it comes to the size, composition and spread of the visitor flow and the fit between industrial tourism and the corporate or regional image they aim for[24]. Moreover they will think differently about the weights of the factors that determine the ability to attract industrial tourists. In other words: the conditions under which urban regions are willing to invest in the development of industrial tourism are fundamentally different from the conditions under which firms want to open their doors. In brief: it is not realistic to expect stakeholders in industrial tourism to have similar interests.

What is realistic, however, is to assume that a common agenda facilitates the development of coordinated policies or interventions that benefit both host firms and the urban regions in which they are located. In that case host firms and regional

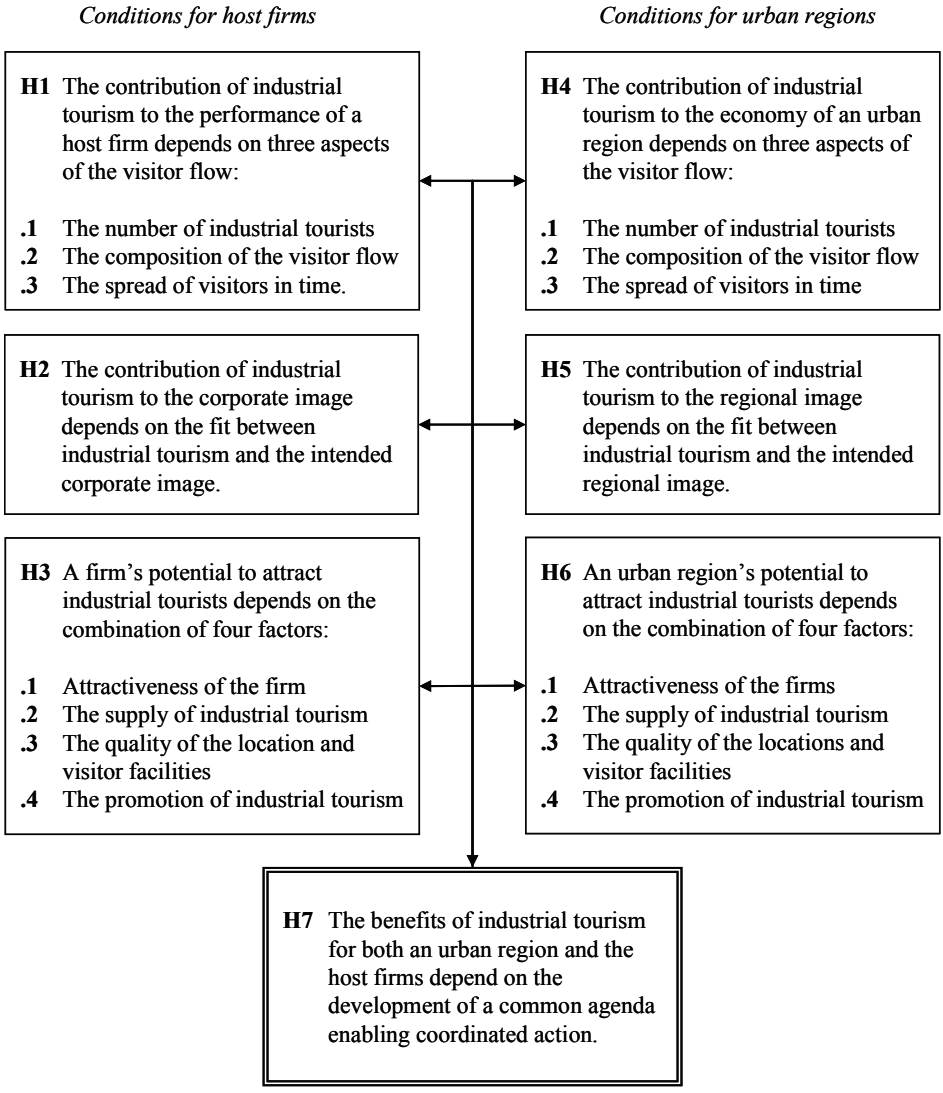
[24] Different preferences are also likely to be found between (different types of) host firms.

bodies have different though compatible interests because they (also) have similar preferences. In theory compatible interests are feasible for all three groups of conditions:

- *The visitor flow*. Actions of stakeholders may be coordinated in such a way that industrial tourism generates a visitor flow which benefits host firms as well as the urban regions in which they are located. Synergies are created if a common agenda results in coordinated action that enhances the characteristics of the visitor flow for both sides in terms of size, composition and spread.
- *The image fit*. A common agenda based on compatible interests may be helpful to optimise the use of industrial tourism as an instrument to improve the image of both host firms and urban regions. Synergies can be realised if host firms and urban regions agree on the communication of similar values and strengths.
- *The industrial tourism potential*. Compatible interests of host firms and urban regions can also result in an improvement of the ability of an urban region and its businesses to attract industrial tourists. As the power, competences and means to improve this potential are distributed among various actors, coordination between actors with complimentary powers, competences and means can generate synergies.

The seven hypotheses that constitute our research framework are depicted in figure 6.1. The hypotheses on the left side (H1, H2, H3) will be tested in chapter eight which deals with the conditions for host firms. The hypotheses on the right side (H4, H5, H6) all relate to the conditions for urban regions and will be tested in chapter nine. In chapter ten we will compare the results from the two previous chapters (as indicated by the arrows), enabling us to draw conclusions on our final hypothesis (H7).

Figure 6.1: A common agenda for industrial tourism: the research hypotheses



6.5 Methodology

6.5.1 Case studies

The aim of our study's empirical part is to test the hypotheses formulated above. Can we find evidence that is in line with our expectations about the conditions

under which host firms and urban regions get involved in industrial tourism development? What is the relevance of the various conditions and how can a common agenda result in a more coordinated development of industrial tourism that benefits both public and private actors?

Our empirical research consists of four case studies. We consider case studies most appropriate in view of our research questions. A survey could have been useful to get insight in visitor statistics, but would not have provided us in-depth understanding of the motives and interests of actors involved in industrial tourism development. Because industrial tourism is a relatively new topic in the literature (as we found in chapter two), exploratory case studies can deliver valuable insights for theory development. Moreover, case studies are considered useful when a researcher wants to gain insight in why or how contemporary events – over which the researcher has little or no control – take place (Yin, 2003). These criteria apply to our situation: we want to gain understanding of *why* companies and urban regions invest in industrial tourism development and *how* these investments can be effectuated to the benefit of both sides. Tellis (1997) emphasizes that case studies are 'multi-perspectival analyses': the researcher analyses events from different perspectives considering the interests of various groups and the interaction between them. This is exactly the aim of our study.

Case studies have often been criticised, arguing that the results from only a few cases can not be generalised. Yin (2003), however, made clear that case studies can be effective in meeting research objectives if designed in a proper way, e.g. by identifying the unit(s) of analysis and specifying questions. Tellis (1997) states that case studies *can* be used for generalisations using falsification tests. One observation that contradicts with a hypothesis can thus be sufficient to revise or reject the hypothesis (also see Popper, 1959). Studies with a multiple-case design, such as ours, are not to be seen as an attempt to compile a statistically large enough sample, but rather to replicate an empirical analysis. Four case studies thus help us to strengthen the 'robustness of the theory' (Yin, 2003). Another point of criticism to case studies is the fact that it gives researchers relatively much freedom in interpreting the findings. Following Yin's advice, we tackled this construct validity problem by using several sources of evidence (triangulation), establishing a chain of evidence and inviting our key informants to review draft versions of the case study reports.

Gibbert, Ruijgrok & Wicki (2008) identified four criteria that rigorous case studies should meet: internal validity, construct validity, external validity and reliability. Our empirical research complies with these conditions:

- *Internal validity*. We use a clear research framework that formulates hypotheses concerning the (internal or external) conditions under which particular types of host firms or regional bodies are willing to invest in industrial tourism.
- *Construct validity.* We establish a clear chain of evidence and use different sources to confirm findings (e.g. by combining results from interviews with statistical data and policy reports).
- *External validity.* We try to generalise results from individual case studies through a cross-case analysis. Details on the case study context are included enabling us to asses the relevance of context factors.
- *Reliability.* We used a case study protocol including questionnaires for different types of discussion partners, guidelines for local experts who assisted us with selecting discussion partners and a standard for writing case study reports. All documents have been stored in a case study database.

6.5.2 Case study selection and collection of data

The primary unit of analysis of our research is the urban region. The purpose of our case selection strategy was to 'maximize the utility of information' from a relatively small sample: information-oriented selection, in the terminology of Flyvbjerg (2004). To optimise the utility of information we identified four European urban regions with a relatively large supply of industrial tourism, with active host firms and/or regional bodies that promote industrial tourism (the main rationale for case study selection):

- *Cologne* (Germany), a city that offers a broad supply of tours to firms in a range of sectors: e.g. the automotive industry, the chemical industry, the media, logistics and energy.
- *Pays de la Loire* (France), a region that actively promotes its industrial tourism supply with the slogan 'visit our companies' and the host of the first European conference on industrial tourism.

- *Rotterdam* (The Netherlands), one of the first cities in Europe that developed an industrial tourism programme, with its port and industrial complex as main attraction.
- *Turin* (Italy), a city which developed an industrial tourism programme with the tagline 'made in Torino' to show its excellence in various sectors: automotive, design, aerospace, foodstuffs, etc.

The host firm can be seen as the secondary unit of analysis. In our selection of urban regions and host firms we aimed to construct a sample with a high diversity of companies in different sectors. In this way we were able to include consumer-oriented firms (B2C), as well as firms that are less consumer-oriented (B2B). The companies have been selected because of their role in the development of industrial tourism in the urban regions we selected earlier. There is a clear bias to more active firms.

Research data has been primarily collected by means of interviews with key stakeholders such as representatives of host firms, tourism organisations, marketing organisations and local/regional authorities[25]. In total we had interviews with 44 experts (see Annex A). In addition we used open sources of information such as academic papers, policy reports, annual reports and online databases. In the next chapter we will introduce the four urban regions and the key stakeholders we interviewed.

[25] The case studies are partly based on the international comparative study 'Industrial Tourism: Opportunities for City and Enterprise' (Otgaar, Van den Berg, Berger & Feng, 2008; 2010).

Chapter 7

Profiles of the selected urban regions

7.1 Introduction

In the present chapter we introduce the four urban regions we selected. For each urban region we first provide a general profile that contains the most relevant context factors (demography, economy, location, administrative structure, etc.). The analysis of the region's economic structure leads us to some more details on tourism and company tours. Each section ends with some information about the key stakeholders we interviewed, introducing several host firms and regional organisations.

7.2 Cologne

7.2.1 General profile: the context

Cologne is the fourth largest city of Germany with a population of 997,200 (Stadt Köln, 2009). It is situated at both sides of the river Rhine, in the western part of Germany near the borders with Belgium and the Netherlands. The city has a long history: it was founded by the Romans in 38 BC. Colonia, as the city was called in these days, belonged to a network of cities at strategic locations of the Roman province Germania. Due to the strategic location at the river Rhine the city has always been an important centre since its foundation. In the Middle Ages the city joined the Hanseatic League and became one of the largest and most prosperous European cities with more than 35,000 inhabitants. The industrial revolution in the nineteenth century brought Cologne a new period of growth in which the city developed into one of the

main industrial centres of Germany. The city appeared particularly strong in engine and vehicle manufacturing, although heavy industry was not as dominant as in the Ruhr area. At the start of World War I the city counted 700,000 inhabitants.

During the World War II Cologne was bombed by allied forces exactly because of its importance for German industry. Not only industrial sites but also residential areas were destroyed severely. Moreover the number of inhabitants had dropped to 500,000 in 1945. After the war the city had to be rebuilt completely. Only a small part of the city centre has been preserved, but many other parts have been rebuilt in the original style. In the post war period Cologne again experienced a rapid increase of the population, reaching one million in 1975. In the decades that followed the population remained relatively stable, with numbers just below one million. Because the city covers a relatively large surface (405 km^2) it managed to facilitate suburbanisation within its own borders. What did change, however, was the composition of the population: the share of foreigners increased. At the end of 2008, 17.0% of the population had a foreign passport, while 31.6% was registered as having a migration background. With more than 63,000 citizens, the Turkish community is by far the single most important foreign group, followed by approximately 18,500 Italians. Also the Serbian, Polish and Greek communities count more than 5,000 members (Stadt Köln, 2008)

The city is located in the densely populated Rhine-Ruhr region, a polycentric urban area that is among the biggest metropolitan areas of Europe and boasts around 12 million inhabitants. Administratively Cologne is an independent (*kreisfreie*) city[26] in the Federal State of North Rhine Westphalia, with Düsseldorf (around 40 km to the north) as capital. The Cologne region, which corresponds with the work area of the Chamber of Commerce, has a population of 2.2 million and covers the cities of Cologne and Leverkusen, and three districts (IHK, 2009a). Since 1992, the city participates in a regional partnership with neighbouring city Bonn (40 km to the south, former capital of West Germany), Leverkusen and several districts. The Cologne Bonn region counts 3.13 million inhabitants.

Cologne's external accessibility is excellent, with ten national highways that radiate from the highway ring encircling the city (Cologne Tourism 2007) and three international airports (Cologne-Bonn, Düsseldorf and Frankfurt) within easy reach. The city's main train station is the intersection point of the German ICE high-speed-

[26] Independent means that there is no intermediate district level (Kreis).

rail network and the Thalys high speed lines to Amsterdam, Brussels and Paris (Cologne Tourism, 2008). The station is located directly next to the Cathedral of Cologne right in the heart of the largely pedestrianised city centre on the left bank of the river Rhine. Cologne hosts the second biggest inland port in Germany, which underlines the city's function as a traffic and logistics hub. Eleven lines of the *Stadtbahn* (a combination of metro and tram) connect the various parts of the city.

Although the Cologne region – as many other regions – has experienced a shift from industry to services, the manufacturing industry is still a relatively important employer providing more than 146,000 jobs (18.6% of all jobs) (IHK, 2009a). Well represented sectors are the chemical industry (life sciences in particular, with the Bayer Group as leading firm), automotive (including the European headquarters of Ford), mechanical and electrical engineering and the metal producing and processing industry[27]. With approximately 171,000 employees, trade and logistics take a share of 21.8% in the economic structure. Furthermore the Cologne region is relatively strong in financial services (banks and insurance companies), tourism, culture and media. The city is one of Germany's most important media centres, with headquarters of TV stations such as RTL, WDR and VOX, and around 1,200 film shootings per year. Cologne is also a university town accommodating approximately 70,000 students in higher education (Stadt Köln, 2008).

7.2.2 Tourism and the supply of company tours

Cologne is the fifth most visited city of Germany with more than 3.4 million tourists[28] in 2004 (Urban Audit, 2004). In 2008, the region registered 6.8 million overnight stays, foreigners taking a share of 27.5 per cent (IHK, 2009a). In the same year the city registered almost 2.4 million visitors who generated over 4.3 million bed nights, of which 35.2 per cent can be accounted to foreign visitors (NRW, 2009). The city attracts visitors from all over the world; the six most important countries of origin are (apart from Germany) the UK, the US, the Netherlands, Italy, France and

[27] Based on the number of employees in 2008 (IHK, 2009a): Chemicals industry (22,698), Automotive (27,186), Mechanical engineering (16,306), Eletrical engineering (11,968), Metal producing and processing industry (14,845).

[28] Tourists are defined here as visitors who spend at least one night at a registered accommodation. Excursionists and people visiting friends and relatives are not included.

Belgium[29]. Many visitors come to Cologne for trade fairs and exhibitions. In 2008, Köln Messe counted 1.6 million visitors (36.3% representing foreign companies) and more than 27,000 exhibitors (62.2% foreign companies) (IHK, 2009a). The Cologne trade fair premises cover an exhibition area of 284,000 m^2, located opposite the city centre on the right side of the river Rhine. The Cologne Tourist Board estimates that around 28 per cent of all bed nights can be attributed to trade fair visitors, around 19 per cent to congress and convention visitors, around 30 per cent to 'conventional' business travellers, and only around 23 per cent to leisure visitors.

According to the website Welcome to Cologne[30] 'nearly all major firms offer guided tours to their *holy halls'*. For the Cologne Tourist Board the promotion of industrial tourism is a side activity: a list of company tours (technical visits) is included in the annual Sales Guide which is accessible on the internet[31]. This list provides contact details as well information on the schedule (if applicable; most tours are on request or by agreement), the price of entrance tickets (including discounts), age restrictions and group size restrictions. One tour is only available for customers. The list not only includes factory visits, but also 'behind the scenes' visits to the airport, TV studios and theatres.

Furthermore the Cologne Tourist Board is involved in the organisation of the annual event Expedition Colonia: during one month of the year (April) people get the opportunity to 'discover Cologne' by participating in a wide array of guided tours. On average the event attracts 8,000 visitors a year[32]. Some of these tours involve visits to companies such as Ford, Coca Cola, RheinEnergie, MMC, WDR and Egetürk (meat production). There is also a special children's edition of this event in the summer (July/August)[33], including a company visit to Ford. Expedition Colonia is organised by Cologne Comedy Festival, a private organisation sponsored by, among others, RTL and WDR (two media firms).

[29] Based on bed nights in 2008: UK (214,659), US (140,998), Netherlands (127,691), Italy (94,830), France (77,598), Belgium (76,316).

[30] www.willkommeninkoeln.de

[31] www.welcometocologne.com

[32] Source: http://www.citynews-koeln.de/index.php?menuid=41&reporeid=32.

[33] In previous years the children's edition of the event also took place in other months of the year.

Table 7.1: Technical visits in Cologne

Company	*Sector*	*Scheduled*	*Price*	*Age*	*Group*
Ford	Automotive	Yes	€7	16+	-40
Renault-Nissan	Automotive	No			10-
M-Real Zanders	Paper	No	Customers only!		
Knapsack Park	Chemical	No			-50
RheinEnergie	Energy	No	€0		15-
Rheinauhafen	Real Estate	No			
RWE Power AG	Energy	No			25-50
Köln-Bonn Airport	Logistics	Yes	€3-€10		-30
MMC	Media	Yes	€4.20-€7.40	13+	15-100
WDR (set/studio)	Media	Yes	€0		-25/-50
Lanxess Arena	Theatre	No	€2.60-€5.50		-30
Theatre am Dom	Theatre	No	€0		8-20

Source: 'Sales Guide Greater Cologne 2009' (Messe Treff Verlag, 2009)

Another important actor in the supply of company tours is the Cologne Chamber of Commerce and Industry, which represents the interests of around 12,000 firms in Cologne and two neighbouring districts. One of the Chamber's activities is the reception of foreign delegations, which also includes the arrangement of company visits on demand of the companies or authorities that visit the city. Their website includes a section on *Firmenbesichtigungen* (company visits) which provides access to a list of 28 firms that can be visited (IHK, 2009b). The list specifies the branch, the firm, the schedule, the length of a visit, restrictions on the group size, prices and the contact person. In most cases an appointment has to be made[34]. Some examples of companies included in the Chamber's list but not on the list of the Tourist Board are Bayer (chemical industry), Vaillant (metal industry), Coca Cola (food industry) and Egetürk (food industry).

[34] All companies with scheduled visits are included in the list of the Tourist Board, except for the German Aerospace Centre (a research centre).

7.2.3 Key stakeholders

To gain more insight in how company tours are organised and how host firms and regional organisations perceive the (potential) benefits of industrial tourism, we organised interviews with representatives of the following organisations:

- *Cologne Chamber of Commerce and Industry*. See above.
- *Cologne Tourist Office*. See above.
- *InfraServ Knapsack GmbH*. This company owns and operates chemical industrial park Knapsack – listed in the sales guide – on which twelve companies are located, including eight firms that produce intermediary chemical products.
- *Häfen und Güterverkehr Köln AG*. Developer of Rheinauhafen (also in the sales guide), the site of Cologne's former goods traffic port, and a new harbour basin in the port of Godorf which can be visited as well.
- *Bayer*. A transnational business group with activities in health care, crop science and material science with several production facilities in the region (including one in the Knapsack park) and a visitor centre (BayKomm) in Leverkusen (included in the Chamber's list).
- *Magic Media Company (MMC) GmbH*. A large film and TV studio operator, and co-producer of films and TV productions with two sites in the Cologne region that can be visited (listed in the sales guide).
- *RheinEnergie AG*. A supplier of energy and water that operates four sites that are open to the public: two waterworks, a long-distance heating tunnel and a gas-fired power plant.

7.3 Pays de la Loire

7.3.1 General profile: the context

With 3.5 million inhabitants (INSEE[35], 2008), Pays de la Loire is the fifth most populated region of the 26 administrative regions in which France has been divided. It is a region that was 'artificially created' by the French government in 1955, with a name that is based on the geographic location: lands of the Loire river. Pays de la Loire comprehends (parts of) historical provinces such as Anjou, Brittany, Maine,

[35] Institute Nationale de la statistique et des etudes economiques (www.insee.fr).

Perche, Poitu and Touraine. The oldest settlements date back to the Roman empire, with the historical towns of Angers and Le Mans. Administratively Pays de la Loire consists of five departments: Loire Atlantique, Maine-et-Loire, Mayenne, Sarthe and Vendee.

The capital and largest city of Pays de la Loire, and the prefecture of Loire Atlantique, is Nantes: the sixth city of France with a population of 290,871 (INSEE, 2006). Nantes, located at both sides of the Loire river, is one of the so-called *Métropoles d'Equilibres* (balancing metropoles) that was appointed in the 1960s by the national government as part of a policy to promote the development of a more balanced urban system with less economic dominance of Paris (Couch, Fraser & Percy, 2003). Although the concept of 'balancing metropoles' was abandoned in 1982 – the policy could not prevent Paris from growing (Lefèvre, 2007) – it is still used as a selling point by Nantes and Pays de la Loire. City marketeers use the slogan *l'Effet Côte Ouest* (the West Coast Effect) to indicate the (desired) tendency of companies from Paris relocating to the Greater Nantes area (Rosemberg, 2000).

Angers is the second city of Pays de la Loire and the prefecture of Maine-et-Loire with a population of 156,965 (INSEE, 2006). It is located at approximately 80 km distance to the northeast of Nantes, and near but not along the Loire river. Angers is an important centre of knowledge and education with several research institutions and colleges and two universities within its borders: the (state) University of Angers and the Catholic University of the West. The fourth most populated city in the region (Le Mans is the third) is St Nazaire with 71,373 inhabitants, at about 80 km distance to the west of Nantes. In contrast with the three largest cities of the region, St Nazaire is a relatively young city founded in the 19th century as a port city for Nantes[36]. Its town centre is even younger because the city was bombed by allied forces in 1942. Nantes and St Nazaire make up a metropolitan region (a so-called territorial coherence scheme[37]) with about 850,000 citizens.

The port of Nantes-St Nazaire is the fourth largest port of France and covers 20,000 acres along the Loire River estuary. Before the 1970s the Nantes Island (*Île de Nantes*), located in the centre of the city of Nantes, used to be the main location of the port, but since then may port-related activities have been relocated downstream to St Nazaire and other port areas to the west of the city. As a consequence, the Nantes

[36] St Nazaire has a longer history as a small village.

[37] Schéma de Cohérence Territoriale (SCOT), see www.nantesmetropole.fr.

Island has become available for redevelopment into an attractive area in which residential and (new and existing) commercial functions are combined. Also some former port areas of St Nazaire will be redeveloped into an attractive centre with residential, commercial and leisure functions (VillePort, 2008). The international airport of Pays de la Loire is Nantes Atlantique Airport located 8 km to the south of the region's capital. Due to its limited capacity (3 million passengers a year) it will be replaced by a new and larger airport (*Aeroport du Grand Ouest*) to be developed 30 km to the northwest of the city[38]. Nantes and Angers are both connected to the French system of high-speed trains. The travel time to Paris is 1 hour and 32 minutes from Angers and 2 hours and 10 minutes from Nantes.

In the Pays de la Loire region, the share of industrial activities in the gross added value is relatively high: 15.6 per cent compared to 12.3 per cent for metropolitan France[39]. In terms of jobs the share of industry is 19 per cent (INSEE, 2007). Well represented industrial sectors are the agricultural and food industry and the production of capital and intermediary goods; the share of industries that produce consumption goods is comparable with the national average (2.2 per cent). Two other sectors with a relatively high share are construction (8.4 compared to 6.5) and commerce (10.9 compared to 9.9).

7.3.2 Tourism and company tours

Pays de la Loire attracts many tourists, but not as many as some other French regions such as Rhone-Alpes, Provence-Alpes-Côte d'Azur and Ile-de-France (Paris). The region is particularly known for its castles, historical cities and natural parks; and of course also the Atlantic coast is an attraction in its own right. In 2008, hotels and campings in Pays de la Loire registered 5.24 million arrivals and 15.93 million bed nights. International visitors spent 3.08 million nights all together: a share of 19.3 per cent. Most people visit the region between May and September: about 55 per cent of all bed nights are registered in this period (INSEE, 2004[40]). Great Britain and Ireland are by far the most important countries of origin, consuming 44.3 per cent of all bed

[38] Expected opening in 2015.

[39] Overseas territories not included.

[40] Source: 'La fréquentation dans le Grand Ouest et par département' (Visits in the Grand Ouest and by department), Observatoire Régional du Tourisme des Pays de la Loire - Mai 2005, accessible via www.enpaysdelaloire.com.

nights. Other important countries of origin are the Netherlands (29.9%), Germany (7.1%) and Belgium (5.8%) (INSEE, 2006, Observatoire Régional du Tourisme des Pays de la Loire, 2007). In comparison with other French regions, Pays de la Loire is more successful in attracting camping visitors (being responsible for 10.1 per cent of all bed nights in France) than hotel guests (only 3 per cent).

In 2001, the decision was taken to create the association Visit Our Companies in Pays de la Loire (*Visitez nos entreprises en Pays de la Loire*) in response to a study carried out by the Regional Observatory of Tourism in 1999. This study made clear that several companies in the region were interested in opening their doors to the public, while other companies that were already open expressed their wish to share experiences in order to improve their supply. Moreover, the initiators expected that the demand for 'economic discoveries' would grow: people are increasingly interested in their roots, in the working life of their fathers and forefathers, and in the 'economic identity' of the region they live in or they visit.

The association is a joint initiative of the regional committee of tourism, the regional Chamber of Commerce and Industry (CCI), the local chambers and an initial core group of 24 companies. The professional organisation is (financially) supported by the region and the State. The regional committee of tourism and the chamber of commerce both finance half of the budget; the other half has to be financed by the member companies, by donations and through commercial revenues. For the region, the development of industrial tourism fits in a broader framework of developing 'economic discoveries' which also comprehends the development of science tourism and industrial heritage tourism.

The main objectives of the association are to promote the knowledge base of regional companies, to develop industrial tourism in the region, to stimulate exchange between the different members of the association, to professionalise the activities and to measure visitor numbers (Visit Our Companies, 2008). In September 2009 the association counted 87 members (see table 7.2). They all contribute to the continuity of the association by paying a fee depending on the number of employees[41]. The food sector is well represented with more than 50 per cent of the memberships. Information on company tours is provided via the website of the association[42] (in French) and the

[41] Companies with more than 50 employees pay €500 per year, smaller companies pay €230.

[42] www.visiteznosentreprises.com

website of the regional tourism committee[43] which provides information in seven languages (French, English, German, Dutch, Spanish, Chinese and Japanese). Other means of communication are an annual guide (50,000 copies), press meetings, special tours to member companies for tour operators and travel agencies (*Eductours*) and free publicity. Only in 2005, more than 60 media articles appeared concerning meetings organised by the association or reports on the member companies (Charuel, Leblanc & Brin, 2006).

Table 7.2: Members of Visit Our Companies

Category	*Members*	*Examples of host firms*
Industry	5	Airbus St Nazaire (aeroplanes), Aker Yards (shipbuilding), The Autonomous Port of Nantes-St. Nazaire
Recycling and environmental industries	5	Valorena (garbage treatment and recycling) EDF New Energy (wind turbines)
Taste and gastronomy	26	La Mie Caline (industrial bakery), Le Lactopole (dairy)
Wood, paper, textile and leather industries	7	Fonlupt (clothing), Goubault (printing), Pedi Girl (shoes)
Artisanal food industry	13	Terre de Sel (salt)
Distilleries and breweries	15	Carre Cointreau (liqueur)
Handicraft	7	
Nature and agriculture	7	Terres des Sciences (fruit and trees)
Media and communication	2	

Source: www.visiteznosentreprises.com, accessed on 24 September 2009

Furthermore, the association is responsible for organising the national open door days (*Journées Nationales de Portes Ouvertes en enterprises*) in the Loire region. Through this event Visit Our Companies not only reaches a larger audience (promoting the industrial tourism product), but it also helps to convince companies to

[43] www.enpaysdelaloire.com

open their doors, at least for once a year, and maybe to become member of the association later on. In 2005, more than 60 non-members were participating in the manifestation, opening their doors for the first time to the public (Charuel, Leblanc & Brin, 2006). The organisation has also played a key role in the introduction of a national quality programme for company visits (*Destination Entreprises*). This programme helped Visit Our Companies to identify conditions that their members should meet (obligatory conditions) or should try to meet (recommended or preferred conditions) (see table 7.3). Members are assessed by a quality commission which consists of one representative on behalf of the Regional Tourist Committee, one from the Chamber of Commerce and Industry, one representing the member companies and the managing director of the association. Visit Our Companies organises workshops (free of charge for its members) and meetings at active member firms to transfer knowledge on visitor management. Another task of the association is the collection of visitor numbers, to be supplied to the database of the Regional Observatory of Tourism.

In Pays de la Loire, Angers and St Nazaire are the two most active cities in the field of industrial tourism. Every year in February/March, the Tourism Office of Angers organises the event Made in Angers: a four-week event with the participation of more than 100 companies and 50 craftsmen from the region, drawing about 17,000 visitors a year. In total, 15 sectors are represented including the metal industry, agriculture, services, media and communication, architecture, the environmental industry, and research & education. The Tourism Office cooperates with the Chamber of Commerce and the University of Angers, which also developed a professional bachelor's programme in 'economic discoveries' together with Visit Our Companies[44]. In 2006 Angers hosted the first European conference on industrial tourism.

The tourism organisation of St Nazaire is Escal'Atlantic which owns and operates the Ocean Liner Museum and the Submarine Espadon. In addition, Escal'Atlantic organises tours to three companies in the region: the autonomous port of Nantes-St. Nazaire, STX Europe (formerly known as Aker Yards) and Airbus. Escal'Atlantic has signed multi-year contracts in which they got the exclusive right to

[44] The bachelor's programme includes courses in communication (foreign languages), quality management, industrial heritage and industrial tourism, and provides knowledge on the regional economy. Moreover, students are expected to do a traineeship at one of the active companies, or the associated organisations (e.g. Made in Angers or Visit Our Companies).

organise leisure-oriented visits to these companies. Company tours to these firms are responsible for one third of the 200,000 tourists that visit the attractions managed by the tourism organisation. For the three companies Escal'Atlantic provides the equipment that is needed for the organisation of guided tours, while they also invest in visitor facilities at the sites (e.g. a footbridge in one of the assembly halls at Airbus).

Table 7.3: Conditions for membership of Visit Our Companies

Obligatory conditions	*Recommended conditions*
• Firms should allow visits to production site or display site (*site vitrine*) • The objective of visits should not be strictly commercial; firms need to present their technology, knowhow and knowledge in an active and lively way • Sufficient parking facilities • One 'reference person' who understands how to receive guests and with sufficient knowledge about the company • Provision of a reference paper including safety and insurance guarantees • Companies have to accept individuals in group • Communication of opening hours and tariffs • Visits should be possible at least six months of the year (seasonal production excluded) • Participation in promotion efforts • Regular supply of visitor figures	• Reception • Room for presentations • Toilets • Attractive immediate environment • Signing • At least one reference person who speaks one or more foreign languages (e.g. English) • Documentation, videos • Preferably a site is open at least three months between May and September • Opening hours on at least four days a week (Monday – Friday) *or* three days a week and during the weekend

Source: Visit Our Companies in Pays de la Loire (2008)

7.3.3 Key stakeholders

For our in-depth analysis of how host firms and regional organisations evaluate the costs and benefits of industrial tourism development, representatives of the following organisations were selected as discussion partners:

- *Visit Our Companies*. See above.
- *The Regional Chamber of Commerce and Industry.* Initiator of Visit Our Companies.
- *Escal'Atlantic.* See above.
- *University of Angers*. See above.
- *The Autonomous Port of Nantes-St Nazaire*. See above.
- *STX Europe*. Shipyard formerly known as *Chantiers de l'Atlantique*, became part of the international Aker Yards Group (with headquarters in Norway) in 2006, which changed its name into STX Europe in 2008.
- *Airbus*. Subsidiary of the European Aeronautic Defence and Space Company (EADS[45]) headquartered in Toulouse with production sites in Nantes and St Nazaire.
- *Remy Cointreau Group*. Producer of alcoholic beverages and owner of the Cointreau distillery in Angers that includes visitor centre Cointreau Carré. Headquarters are in Paris.
- *Les Salines de Guerande*. Cooperative which represents 190 salt workers, being responsible for buying, storage, packing and marketing. It owns and operates visitor centre Terre de Sel in the town of Guérande located 20 km to the north of St Nazaire.
- *Terre des Sciences*: a cluster organisation for science centres in the region Angers-Nantes that can be visited, founded by (among others) INRA Angers-Nantes, a regional centre that belongs to the French National Institute for Agricultural Research (INRA).

[45] The headquarters of EADS are located in the Netherlands.

7.4 Rotterdam

7.4.1 General profile: the context

Rotterdam is the second city of The Netherlands – after Amsterdam – providing homes to 588,398 residents (COS, 2009). Almost 47 per cent of the citizens have a migration background with approximately 170 nationalities being represented. The main countries of origin are Surinam, Turkey, Morocco, Cape Verde and the Netherlands Antilles. The municipality covers an area of 304 km^2, which is a considerably larger surface than the three other major Dutch cities – Amsterdam, Utrecht and The Hague – cover. The city is located in the so-called south wing of the Randstad, a conurbation of the four largest cities in the Netherlands and several smaller ones. Although the Randstad has no official status, it is often considered a spatial-economic entity comparable with the German Ruhr Rhine region. The south wing of this ring-shaped metropolitan region includes the regions of Rotterdam (1.2 million inhabitants) and The Hague (1 million inhabitants), as well as the cities of Leiden and Dordrecht (both with more than 100,000 inhabitants). The straight-line distance between the centres of Rotterdam and The Hague is less than 25 kilometres. The distance between Rotterdam and the other two major cities – Amsterdam and Utrecht – is considerably larger, for both more than 60 kilometres.

Rotterdam was founded as a small settlement along both sides of the Rotte river, currently known as a tributary of the Nieuwe Maas. After it was awarded city rights in 1340, the town first developed into a medium-sized trading city. From the 17th century onwards, the city gained further importance, starting to benefit from its location near the sea. The population grew from 30,000 in 1650 to 210,000 in 1890. In the second half of the 19th century, Rotterdam started to expand its port, with the development of several port areas (Maashaven, Rijnhaven and Waalhaven) and the construction of a canal to the sea (Nieuwe Waterweg). The most impressive growth of the city took place between 1890 and 1920: a period in which the city welcomed 305,000 new residents.

In the Second World War Rotterdam was bombed by the Germans resulting in the devastation of nearly all historical buildings in the city centre, located on the north bank of the Nieuwe Maas. After the war it was decided not to rebuild the historical city – as several other European cities did – but to develop a new, modern city centre in what could be called a North American style. As a consequence of this decision Rotterdam gradually became a city with high-rise buildings and an impressive

skyline, at least for European standards. Since the 1960s port activities were gradually relocated toward the sea with the development of Europoort (1957-1970), the Botlek Area (1955-1966) and the first Maasvlakte (1967-now).

The expansion of the port (the busiest port of the world between 1962 and 2004) enabled the city to grow to a (record) population of 732,000 in 1965. At that time the port and industrial complex provided jobs to 116,000 people. After 1965, however, the city entered a period of decline, with as result a net population loss of 160,000 between 1965 and 1985. Greater mobility, changes in residential preferences and decreasing average dwelling occupancy were the main drivers behind this trend of suburbanisation (Braun, 2008). Moreover the city experienced a strong decline in industrial employment with a loss of about 70,000 jobs between 1970 and 1985, particularly in shipbuilding and ship repair. This decline was only partly compensated by an increase of the service sector. From the mid 1980s onwards the population number has remained relatively stable.

Currently, industry generates 8.4 per cent of all jobs in Rotterdam. This is much lower than it used to be, but still considerably higher than in Amsterdam where industry has a share of only 4.5 per cent (City of Rotterdam, 2008[46]). The port and industrial complex still generates jobs[47] but not as many as in the past, for one thing because of automatisation. The port increasingly needs higher-educated workers to manage the complicated logistical processes, for instance with computer-controlled vehicles and high-precision cranes. Another fact is that many jobs created by the port – notably in transport and distribution activities – accrue to inland regions (Van Klink, 1996). The port is now to be expanded with the Second Maasvlakte of which the first will be ready for use in 2013.

The international accessibility of Rotterdam is excellent. The city has its own regional airport, located to the north of the city, with more than 1.1 million passengers in 2007 (Rotterdam Airport, 2008) travelling from and to more than 25 destinations in Europe. Moreover, Rotterdam is one of the stops of the high-speed train from Amsterdam to Brussels and Paris (and London via Brussels). This new direct line has

[46] Data: 1st of January, 2007.

[47] With a goods throughput of more than 400 millions of tons, the Port of Rotterdam is still the largest port of Europe (Annual Report, Port of Rotterdam, 2007). In 2000, it was calculated that the port provides direct employment to 60,000 people (in 2006 the port generated 86,500 jobs according to the 2007 annual report), and indirect jobs to an additional 250,000 people, however not necessarily to Rotterdam citizens (this applies to both numbers) (Port of Rotterdam, 2008).

reduced the travel time from Rotterdam Central Station to Schiphol Airport, the fifth larges airport of Europe, to 26 minutes[48]. The travel time from Rotterdam to Paris is 2 hours and 36 minutes.

7.4.2 Tourism and company tours

In 2007, Rotterdam welcomed more than 1 million visitors who spent one or more nights in the city, more than ever before, but considerably less than the 8 million bed nights registered in Amsterdam (CBS[49], 2006 *cited in* OBR, 2006). Between 2002 and 2006, the share of Dutch hotel guests increased from 32 to 42 per cent. In absolute numbers, however, also more and more foreign guests arrive in the city: an increase of 23 per cent. Almost 25 per cent of the foreign visitors are British (OBR, 2007). German tourists are responsible for 13 per cent of all bed nights, while visitors from the US take a share of eight per cent. The total number of visits to Rotterdam – including excursionists (same-day visitors) – increased from 15.7 million in 2001 to 17.6 million in 2005[50]. Rotterdam has been particularly successful in attracting visitors to events such as the Rotterdam Film festival (358,000), the Rotterdam Marathon (825,000) and Rotterdam Summer Carnival (700,000).

In 1997 the city's development corporation (OBR) took the initiative to set up the foundation Industrieel Toerisme (Industrial Tourism), with financial support of the Dutch Ministry of Economic Affairs. Scheduled tours for both individual leisure tourists as well as professional groups could be booked at the tourist office[51]. In 1998, six different day tours for leisure tourists by coach were offered, departing from the city centre (Coolsingel). For business groups up to 50 tours were available. Ticket prices for one day tour varied between €27.23 and €37.44 per person (Telegraaf, 20 June 1998). In 2003 the decision was taken by the city to no longer invest in industrial tourism, partly in view of disappointing visitor numbers. The foundation became fully independent from the municipality and decided to focus on groups only, arguing that

[48] With a conventional train on the rail track via The Hague travel time used to be 46 minutes. With the use of high-speed trains (maximum speed 250 km/h) on the new direct rail track between Rotterdam and Schiphol travel time can be reduced to less than 20 minutes.

[49] Statistics Netherlands.

[50] This is the total number of visits. The number of visitors is lower as many people visit the city more than once.

[51] Initially by the VVV, that was integrated in Rotterdam Marketing in 2001.

the market conditions for group travel were considerably better than for individual leisure tourists. The organisation's website[52] provides an overview of tour examples, but most tours are tailor-made. Visitors get to see various parts of the port (e.g. Europoort, Maasvlakte) and places where goods (e.g. fruit, cars, bulk goods) are transhipped or stored. Industrieel Toerisme receives 10 to 15 thousand visitors a year with an estimated share of foreigners of at least 40 per cent[53].

Table 7.4: Examples of companies with open doors during the World Port Days

Category	*Examples*
Containers	ECT
Food	Seabrex (fruit), Meneba (grain)
Green	Happy Shrim Farm (shrimps), E.On Benelux (energy)
Maritime	Damen Shiprepair, Keppel Verolme, Van Brink
Storage and loading	Van Uden Stevedoring, EMO (bulk goods)
Petrochemical	Shell Pernis, Vopak (storage)
Specials	Falk Nutec (firefighting), Stena Line (cargo shipping)

Source: World Port Days (2008)

Two other important actors in the supply of industrial tourism are the Educational Information Centre Mainport Rotterdam (EIC) and the foundation World Port Days. EIC represents the interests of the port and port-related companies and organises excursions for students and technical visitors to a range of firms in five categories: liquid bulk, dry bulk, container/general cargo, industry and other firms. In 2005, EIC received 22,000 visitors (Deltalinqs, 2008). The foundation World Port Days is responsible for organising this annual event in September which includes company visits to about 70 companies and organisations in various categories (see Table 7.4). During three days approximately 25,000 people seize the opportunity to

[52] www.industrieeltoerisme.com

[53] As indicated by Industrieel Toerisme.

enter a company. Another relevant supplier is the Rotterdam Port Promotion Council (RPPC) which is funded by the Port of Rotterdam and several port-related companies. RPPC offers so-called 'port safaris': guided visits to the port for professional visitors, mostly customers of its donors.

For tourists that want to discover the port, but not necessarily want to visit firms, there are three alternatives worth mentioning. They can book one of the boat tours (operated by Spido), they can visit the Rotterdam Port Experience (a theme park developed by the city and the Port of Rotterdam[54]) or they can visit FutureLand: the visitor information centre for the second Maasvlakte.

7.4.3 Key stakeholders

To gain understanding of the motives and interests of the actors that play a role in the supply of company tours we organised interviews with representatives of the following organisations:

- *Industrieel Toerisme*. Private foundation that organises company tours for groups (see above).
- *Rotterdam Marketing.* The foundation responsible for promoting Rotterdam as a tourist destination.
- *OBR*. Rotterdam's City Development Corporation: the municipal body that provides funds to Rotterdam Marketing. Important financer of World Port Days.
- *The Regional Chamber of Commerce*. Representing the interests of businesses in the region.
- *Chief Marketing Office*. Coordinating unit for city branding and city marketing which reports to the mayor directly.
- *Port of Rotterdam*. Main financer of World Port Days, Educational Information Centre Mainport Rotterdam, the Rotterdam Port Experience and FutureLand.
- *World Port Days*. Foundation responsible for organising this annual event.
- *Smit Internationale*. Global supplier of maritime services (towage, salvage, lifting, etc.) with headquarters and a warehouse with

[54] Rotterdam Port Experience had to close its doors in 2010 due to disappointing visitor numbers.

equipment for salvage operations in Rotterdam. Does participate in World Port Days but without opening doors; they only receive professional visitors.

- *Broekman Group*. Company that is headquartered in Rotterdam with global activities in logistics, automotive and shipping. Owner and operator of the Rotterdam Car Center, one of the attractions that can be visited via Industrieel Toerisme.
- *Schmidt Zeevis*. A Rotterdam-based company that processes, sells, and distributes fish and fish products to business customers all over the world. The main location is a site for distribution, storage and processing which also includes a shop. The production facilities are only open to professional visitors.
- *Happy Shrimp Farm*. Producer of shrimps with a site located on the Maasvlakte. An innovative firm that uses the water heat of the neighbouring power plant (operated by E.On). One of the participants of the World Port Days 2008. Went bankrupt in 2009.
- *Verstegen*. Producer of herbs, spices, mixtures, sauces, marinades and various functional ingredients. The company only receives professional visitors.

7.5 Turin

7.5.1 General profile: the context

With 908,263 residents, Turin is the fourth largest city of Italy after Rome, Milan and Naples (ISTAT, 2008)[55]. The city is located in the northwest of the country at 80 km from the French border and 100 km from the Swiss border. Turin is the capital of the province of Turin (almost 2.2 million inhabitants) as well as the Piedmont region (population: 4.4 million), one of the 20 autonomous regions in which Italy is divided. Turin's international accessibility is secured by the regional Turin airport and a high-speed train connection with the international airport Malpensa near Milan (travel time: 50 minutes).

In 29 B.C. Turin was founded as a colony of the Roman Empire. In the first millennium the town was part of several other empires before it became an

[55] L'Istituto nazionale di statistica (National Institute of Statistics), 1 January 2008.

autonomous city-state in the 12th century. In 1280, the city was captured by the dukes of Savoy, marking the beginning of a new era in which Turin developed into an important centre of artisan manufacturing, with a specialisation in textiles. In the 18th century Turin became an important centre of trade and finance and it was chosen as the first administrative capital of the unified Italy in 1861, a status it lost to Florence four years later (Rome became the capital in 1871). From then on the city started to invest in developing new industries, with the car manufacturing industry as one of the pillars. In 1911 a third of the city's expanding workforce was employed by the automotive sector.

In the decades that followed the city's flourishing economy was accompanied by a massive inflow of immigrants, notably from the south of Italy. Between 1921 and 1939 the population grew from 500,000 to almost 700,000. After the Second World War the city recovered fast, mostly because 38 per cent of the Marshall Plan Funds earmarked for the Italian engineering sector had been invested in Fiat. With the expansion of the automobile market Turin became even more dependent on its car manufacturing industry: at the end of the 1950s approximately 80 per cent of all industrial activity was related to the production of cars. Between 1951 and 1971 Fiat expanded its workforce in Turin from 47,000 to 145,000 (including 30,000 white-collar workers). The growth of the population further continued, reaching a peak of 1.2 million in 1975.

The period of economic growth came to a halt in 1973 with the global oil crisis. It soon turned out that Turin had become too dependent on one industry and one company in particular. For several decades the share of industry in local employment had remained fairly high, because declines in the textile, clothing and food production industry were offset by increases in the automobile industry. Fiat, started to shift production away from Turin, mainly to the struggling south of Italy, with financial incentives of the State. The relation between the city and the (automobile) industry also suffered from the tensions between workers and the company resulting in strikes, anti-capitalist protests and even terror movements.

In 1980, the metropolitan area lost 100,000 industrial jobs (Maggi & Piperno, 1999). In several stages Fiat reduced its workforce, with 23,000 jobs in 1980, and 45,000 jobs between 1986 and 1996 (Rosso, 2004). Without the support of the Italian State – in the years before the European Union prohibited such trade protections – Fiat would probably not have been able to survive in this period. The share of Turin plants in the production of Fiat dropped from 60 per cent in the early 1990s to less

than 30 per cent in 2002. In 2006, Fiat only employed about 30,000 people in the city (Symcox & Cardoza, 2006).

With the rise of the service sector, the share of industry in Turin's economy decreased from more than 60 per cent in 1971 to less than 40 per cent in 2002. In 2005, the share of industry in the active population was 34.4 per cent, while private services took a share of 44.4 per cent. The share of industry is, however, still higher than in many other Italian and European cities. The city now has a more diversified economic structure. The automotive industry is no longer the only key sector in Piedmont: other important sectors are aerospace, ICT, life sciences and biotechnology, logistics, nanotechnology, environment and renewable energy, artistic handicraft, home textile, contemporary art, writing tools, agro-food and the movie industry (Chamber of Commerce for the Turin Province, 2008). In terms of export, however, the automotive industry is still the most important sector, accounting for 40.5 per cent.

7.5.2 Tourism and company tours

The Piedmont region has a long history of tourism – the old spa town of Acqui already attracted visitors two thousand years ago – but it is not a typical tourist destination. In comparison with other historical cities (like Rome, Florence and Venice) and coastal towns (like Rimini) Piedmont is a latecomer to tourism (Piedmont Region, n.d.). Geographically, the tourism product of the Piedmont region can be divided into four sub-areas: the Olympic mountains (skiing and hiking), the lake area (including Lago Maggiore), the hills (including Langhe), with wine, castles (some of which are royal residences) and culture, and the City of Turin, an important MICE (meetings, incentives, conferences, exhibitions) destination.

In 2007, the total number of bed nights registered in the region was 10.3 million. The Province of Turin accounted for 38 per cent (more than 3.9 million bed nights), while the metropolitan region of Turin (a smaller area than the Province) took a share of about 24 per cent. The share of foreigners in the number of bed nights registered in the Province is relatively modest with less than 26 per cent, with the UK (5.3%), Russia (4.0%), Spain (1.9%) and France (1.8%) as main countries of origin. Other parts of the region are more successful in attracting tourists: the Lake District, for instance, counted 3.3 million bed nights, with a share of foreigners of more than 71 per cent. As is common for cities, most tourists arrive during springtime and in the autumn (Sviluppo Piemonte Turismo, 2007; City of Turin, 2005).

Many local policies in tourism – including those on industrial tourism – can be related to the strategic plan (*Piano Strategico*) 2000-2010 which formulates 20 objectives and 84 actions, categorised in six strategic lines (City of Turin, 2000)[56]. One of the six strategic lines is to promote Turin as a city of culture, tourism, commerce and sport. Another is to promote enterprise and employment. With the loss of jobs in industry, more and more attention is being paid to the development of other sectors, tourism being one of them. The Winter Olympics of 2006 have been used by the city to realise many of these objectives, but notably to improve accessibility (another strategic line), to diversify the economy and to promote the city as a tourist destination and business location (Van den Berg, Braun & Otgaar, 2002).

One of the objectives of the strategic plan is to position the destination of Turin and the Piedmont region in the international tourism market. Before the Olympic Games took place, Turin clearly had an image problem in the international market. Most people had no image of the city whatsoever, while the remaining minority mainly associated the city with Fiat and the (car) manufacturing industry, the image of the city being 'still very much tied to its industrial past' (City of Turin, 2000, p.99). Two actions have been defined to improve the image: 1) to create and expand the Turin and metropolitan area product into the national and international tourist market; and 2) to create a 'committee' to spread the wine and food culture of both the city and region into a national and international arena.

In 2005, one year before Turin hosted the Olympic Winter Games, the Chamber of Commerce and the local tourism organisation Turismo Torino took the initiative to develop an industrial tourism programme. Under the slogan 'Made in Torino; Tour the Excellent' visitors get the opportunity to see companies in five selected sectors: automotive, design, pens, aerospace and taste makers. As indicated in Table 7.5 these sectors have been added to the programme step by step.

[56] The strategy is based on a vision that presents Turin as a European metropolis that is ready to compete in the knowledge economy. The plan has been developed in consultation with universities, industry, banking, foundations, and other relevant stakeholders such as the general public (with public meetings).

Table 7.5: Participants in Made in Torino; Tour the Excellent

Sector	*Since*	*Companies*
Automotive	2005	Fiat, IED, Iveco (2007), New Holland Kobelco (2007)
Design	2005	Bertone, Giugaro, Pininfarina, Gufram (2006)
Pens	2005	Aurora, Lecce Pen, Stilolinea (2005-2007)
Aerospace	2006	Alenia Aeronautica, Thales Alenia Space, Galileo Avionica
Taste makers	2008	Caffarel, Galup, Caffè Vergnano, Lavazza, Martini & Rossi, Pastiglie Leone, Associazione Panificatori della Provincia di Torino

Source: Turismo de Torino/Chamber of Commerce (2005-2008)

Each Friday a coach brings tourists from the city centre to one of the participating firms where they get a company tour or visit a company museum. With 40 tours to 20 companies (an average of two visits per company) and an average group size of 20, the number of people that visit firms through this channel is limited. Most participating firms receive many more industrial tourists through other channels. In 2005 all Made in Torino tours were fully booked, with about 400 visitors participating in 24 tours. The majority of the visitors (an estimated 70 per cent) came from the region, and an additional 20 per cent came from the North of Italy). About 60 per cent of the visitors were more than 50 years old[57]. Due to security reasons, the minimum age for visitors is 16. Tours can be booked over the internet and by telephone. Visitors pay €8 to €10 for a tour to cover the costs made by Turismo Torino (transportation, insurance and staff).

Made in Torino is part of a promotional campaign to demonstrate the 'excellence' of Turin and its companies to the outside world, in line with the city's strategic plan. The Chamber of Commerce co-finances the initiative with an annual subsidy that mounted from €60,000 in 2006 and 2007 to €100,000 in 2008.

[57] 23 per cent of the visitors is between 36 and 50 years old, 9 per cent between 26 and 35 and 5 per cent between 16 and 25 (source: Turismo Torino/Chamber of Commerce).

7.5.3 Key stakeholders

For our analysis of the conditions under which host firms and regional organisations participate in Made in Torino and other forms of industrial tourism, we selected discussion partners from the following organisations:

- *Regional Chamber of Commerce and Industry*. A public organisation with legal tasks, representing regional businesses, and the main financer of Made in Torino.
- *Turismo Torino e Provincia*. The local tourism organisation[58] which operates tourist information centres, and is responsible for the organisation of Made in Torino.
- *Sviluppo Piemonte Turismo*. The regional tourism organisation for Piedmont.
- *Piedmont Region*. The regional government.
- *Fiat*. Car manufacturer and participant in Made in Torino. The main site in Turin is the Mirafiori factory with the neighbouring Mirafiori Motor Village: a new type of sales centre which also includes exhibition space and a designated area for test drives. There are scheduled tours for visitor groups.
- *Gufram*. Producer of design objects for individual consumers and armchairs for large venues located in the small municipality Balangero, about 30 km to the northwest of Turin. Member of the international Poltrona Frau Group, an international manufacturer of home furnishings based in Tolentino, a small town in central Italy. Participates in Made in Torino and organises tours for professional visitors.
- *Aurora*. Producer of writing instruments, luxury leather goods and paper. Operates a production site in Stura Abbey: an historic monument comprising a church and a cloister. Participates in Made in Torino, but also receives visitor groups through other channels.

[58] In Italian: *Agenzia di accoglienza e promozione Turistica Locale* (ATL). Turismo Torino e Provinica is one of the nine ATLs in the Piedmont region.

Chapter 8

Conditions for host firms

8.1 Introduction

In the present chapter we analyse the conditions under which individual host firms benefit from industrial tourism development. The aim of this analysis is to test the empirical applicability of the first three hypotheses, including the sub-hypotheses. The chapter is structured along the three main conditions we identified: the three characteristics of the visitor flow (H1.1, H1.2 and H1.3), the fit between company tours and the intended corporate image (H2) and the four determinants of industrial tourism potential (H3.1, H3.2, H3.3 and H3.4). For each (sub-)hypothesis we first discuss the main findings from the four urban regions referring to the individual firms we analysed in detail. Second we draw some conclusions confronting our findings with the theoretical framework.

8.2 Characteristics of the visitor flow

The degree to which companies are able to benefit from industrial tourism first of all depends on the characteristics of the visitor flow: the number of visitors, the composition of the visitor flow and their spread in time.

8.2.1 The number of visitors

The first aspect of the visitor flow we consider relevant for is its size. What can we say about the interests of host firms when it comes to the number of visitors?

Companies in the four urban regions use different approaches to industrial tourism which seems to influence their preferences regarding the number of visitors.

The host firms we analysed can be categorised into three groups: 1) companies that prefer to receive many industrial tourists; 2) companies that prefer to receive some industrial tourists, but not too many (they are more selective); 3) companies with a restrictive policy on the reception of industrial tourists. The preferences of a firm concerning visitor numbers can to some extent be assessed by analysing actual visitor numbers. Another important indicator is the firm's policy: how many industrial tourists are they willing to accept? What restrictions apply? What are the entrance fees?

One of the companies in **Cologne** that prefers to receive many visitors is Bayer. Its visitor centre BayKomm receives 120,000 non-paying visitors a year. For visits to the operational sites (also for free) the company has clearly adopted a more defensive policy. Magic Media Company receives approximately 10,000 tourists a year; the capacity is limited and the firm earns some money with company tours. Studio tours are used to boost the inflow of live audience for TV shows, which is in the interest of MMC's customers (e.g. Endemol). HKG welcomes every year 10,000 visitors at Rheinauhafen and 1,000 at the Port of Godorf. The City of Cologne – one of the shareholders of HGK – has an interest in relatively high visitor numbers; the company (read: other shareholders) is compensated with a net income of €1 for each visitor. RheinEnergie supplies company tours to about 7,200 visitors a year at four different sites. Within the limited visitor carrying capacity the company prefers to receive many visitors, which is also reflected in the free entrance (except if arranged via Expedition Colonia, to cover their costs). InfraServ Knapsack changed its approach to company tours from restrictive to selective. The business park considers including agreements on the reception of visitors in the contracts with tenants.

In **Pays de la Loire** most of the firms we interviewed prefer relatively large visitor numbers. The most visited attraction in the region is Terre de Sel with 55,000 tourists a year. For Terre de Sel company tours are an additional source of income with ticket prices between €4 and €12 and considerable sales in the shop. Other crowd pullers are STX Europe (32,500), Airbus (25,000) and the port (10,000). These three firms have outsourced the organisation of company tours to Escal'Atlantic in order to enable a growth in visitor numbers[59]. Although they earn some money through ticket sales (€6 - €12), the direct financial benefits are negligible[60]. Together with

[59] For the eastern part of the port visits are arranged by the tourist office of Nantes.

[60] Aker Yards earns €4,000 a year.

Escal'Atlantic the three companies also develop ideas to attract more visitors, such as the Allovist Card: a guided tour to the port by mobile phone. Cointreau is an interesting example of a company that has become more selective. In 2007 22,000 people entered the distillery, considerably less than the 30,000 entrees in 1999. Entrance fees have been raised (from €5.50 to €9.50) not to make a profit but to get in specific target groups (see 8.2.2). Terre des Sciences welcomes only 1500 visitors a year: the small firms that participate lack the capacity to receive more guests.

The Port of **Rotterdam** (a public company, owned by the City of Rotterdam) prefers to receive many visitors. The authority itself is visited by 20,000 technical visitors a year. Together with Deltalinqs (representing companies in the port) the port set up the Educational Information Centre Mainport Rotterdam (EIC) which generates another 22,000 visits with an educational motive. Visitors with a leisure motive can see the port during the World Port Days (25,000 company visits). To reach an even larger audience the Rotterdam Port Experience had the ambition to offer virtual tours to more than 200,000 guests a year[61]. For all these activities there are no substantial direct financial benefits for the port and the companies that can be visited. In the 2008 edition of the World Port Days 2,000 people made a tour to the Happy Shrimp Farm, while another 1200 technical visitors entered the workplace throughout the year. Because of limited capacity the Farm had to be very selective, although it had the ambition to attract a larger public by developing a visitor centre, possibly together with its only customer Schmidt Zeevis. Also for Schmidt Zeevis limited capacity makes it difficult to attract more visitors than the present number of 1,750 a year; the company would support ideas to increase the number of visitors somehow; currently the tours are not a source of income with small fees for companies and free entrance for scholars. For Verstegen capacity and safety issues explain why only 1,000 people can enter the workplace every year. Limited capacity has also been mentioned by Smit Internationale (between 800 and 1,000 visitors a year) and Broekman Automotive. The difference between these two firms is that the car handling company does receive groups via Industrieel Toerisme, though with restrictions on the number of visits per week.

With more than 23,000 industrial tourists in 2007, Fiat is one of the most frequently visited companies of **Turin**. In comparison with other car producers, however, Fiat is not one of the most active companies in industrial tourism. In the

[61] Based on estimations (market analysis), which were apparently too optimistic.

same year Volkswagen counted more than 150,000 visitors to the plant in Wolfsburg with neighbouring brand park Autostadt as the ultimate crowd puller with two million visits a year (Otgaar, Van den Berg, Berger & Feng, 2008). Nevertheless it is fair to say that Fiat prefers to receive many visitors, with group tours that are free of change (except if arranged through Turismo Torino; in that case visitors have to pay €10 to cover the costs of the tourism organisation). Aurora is more selective also in view of limited capacity: about 2,000 interested people enter the workplace. Entrance fees cover costs only and vary between €10 and €20. Gufram is an example of a company with a very selective or even restrictive approach. Leisure tourists can only visit the company via Turismo Torino, for which however the firm receives no compensation (as with visits to Fiat, tourists have to cover the costs made the tourism organisation).

The observations in the four urban regions lead us to the following general conclusions concerning the relevance of the number of visitors as a condition for host firms in the development of industrial tourism:

- In general companies are reluctant to receive large numbers of visitors. Representatives from regional organisations informed us that many companies *not* included in our sample argue that the benefits of industrial tourism cannot outweigh the costs, particularly in view of safety and security.
- Among the companies we interviewed – more active firms – we observed more willingness to open doors for a larger audience. Because the visitor capacity is limited (particularly in case of SMEs) the composition of the visitor flow and their spread in time are important conditions, as we will explain below.
- Host firms that can use industrial tourism to earn an additional income (through ticket and on-site sales) are more in favour of attracting larger audiences than firms for which the direct financial benefits are not substantial or absent.
- In many cases the capacity for visits is restricted while the demand is high. This results in more attention of the host firm for the composition and the spread of visitors.
- Some companies look for strategies to increase visitor numbers without causing conflicts with the primary process: 1) developing visitor centres; 2) developing open door events or participating in these

events; 3) outsourcing the organisation of industrial tourism (e.g. guides).

In sum, our observations support sub-hypothesis H1.1 which states that the contribution of industrial tourism to the performance of a host firm depends on the number of visitors. Importantly, however, host firms are not necessarily interested in *high* visitor numbers. Some companies want to optimise the arrival of tourists within the given capacity (selective approach) while others aim to minimise the burden (restrictive approach). The most ambitious firms look for alternatives to increase the visitor carrying capacity.

8.2.2 Composition

The second aspect of the visitor flow is the composition. Can we find evidence that the composition of the visitor flow is relevant for the contribution of industrial tourism to the performance of a host firm?

The relevance of composition can be assessed by analysing the policies of the host firms and, to some extent, by the actual characteristics of the visitor flow. Our research demonstrates that most firms consider industrial tourism as a tool of stakeholder management. In a situation of limited capacity this results in preferential treatments for visitors with a substantial influence on the host firm's performance and license to operate. Target groups can be categorised by their functional relation with the company (consumer, customer, supplier, etc.), the motive of the visit (business, leisure, education) and their place of origin (the region, the country or from abroad).

In the **Cologne** region four of the five companies we interviewed consider industrial tourism as a PR instrument to reach stakeholders. Although BayKomm is open to everybody, the firm specifically targets children and students and in particular teachers and health care professionals that are seen as so-called 'multipliers': they can influence other stakeholders. For company visits to operational plants customers, students and politicians are preferred. The share of foreign visitors is relatively high: 10 to 15 per cent. RheinEnergie uses factory tours to communicate with consumers (inhabitants of the region) – for instance about energy prices – and to promote itself as employer to students and pupils (in cooperation with educational institutions). The firm has indicated they get valuable feedback from visitors, which helps them to adjust communication policies. While the port of Godorf (HGK) mainly attracts people from the region, Rheinauhafen is popular among a broad range of visitors

(leisure tourists, architects, journalists, students) including many foreigners (with a share of 25 per cent). Knapsack clearly focuses on potential employees in view of the lack of skilled labour. The exception is MMC: although the visitors are all consumers of the television and film productions, the company does not really consider the studio tours as PR instruments, except in case of technical visitors.

Also in **Pays de la Loire** the majority of the firms we analysed in detail use industrial tourism for public relations. The port wants to communicate its added value and to promote itself as employer, notably to inhabitants of the region. The company argues that also relations with leisure visitors need to be secured because they may have business interests as well (overlapping relations). The port stimulates port-related companies to open their doors as well, with the increasing demand for transparency and a good reputation as main argument. Looking at the place of origin other port areas and regions in the hinterland are important suppliers of tourists. STX Europe and Airbus have in common that they outsourced visits for leisure tourists, while they care of professional visitors themselves. Most illustrative is the pricing policy of Airbus: groups with a direct business relation pay nothing, other groups do. Professional and educational visitors get to see more than leisure visitors. Airbus proactively invites teachers and their classes to visit the plants, promoting the company as employer. At STX Europe professional visitors can register one day in advance, while leisure visitors have to register two days in advance. The shipyard prefers to receive students (potential employees), subcontractors, journalists and representatives of the municipality (needed for permissions). Cointreau targets consumers of its alcoholic drinks, with a clear focus on people between 25 and 50 years of age[62]. The company has successfully reduced the share of seniors (50+) between 1999 and 2007, with increased spending at the shop as positive side effect. The firm proactively invites people who have the potential to become ambassadors for the fashionable brands. Terres des Sciences wants to attract inhabitants of the region in their role as potential employees and the general public that provides them a license to operate. Comparable with MMC in Cologne, Terre de Sel does attract consumers of its products but the tours are not really seen as instruments of stakeholder management.

For **Rotterdam** we can conclude that stakeholder management is a guiding principle in the industrial tourism strategies of all six firms we analysed. All

[62] Cointreau is no longer promoted as a digestive but rather as good ingredient for cocktails.

companies prefer to receive professional and educational visitors. A representative of Broekman Automotive emphasized that 'some relation with the company's business is preferred'. Smit Internationale is also very selective in honouring requests. The director of the Happy Shrimp Farm made clear that they target 'friends': actors who support the company, financially or otherwise. Verstegen approaches clients and schools to visit the firm. Comparable with Cointreau and Bayer, Schmidt Zeevis hopes to receive visitors who can become ambassadors: interestingly they argue that international leisure visitors could help the company to gain access to foreign markets. As we explained in 8.2.1 the Port of Rotterdam reaches various groups via different channels (EIC, World Port Days, Port Experience). In general it can be said that relations with regional inhabitants get priority because they are potential employees and since they are affected by the negative and positive externalities of the port.

In the **Turin** region, the three host firms consider industrial tourism as a tool to enhance stakeholder relations. For Fiat this implies that the company has no reason to be very selective because nearly all people are potential car buyers. Being a global firm, an international audience is preferred. Aurora initially only opened its doors for distributors, but gradually more stakeholder groups were added to the guest list: customers, bankers, suppliers, students, etc. The share of foreign visitors is small, but the company is willing to receive international guests as well. Gufram is the most selective firm we analysed in Turin: they prefer to welcome customers and employees.

Combining the results from the four case studies we are now able to draw some general conclusions with regard to the composition of the visitor flow.

- Nearly all companies we analysed consider industrial tourism as a tool of stakeholder management and public relations. In line with stakeholder theories they prefer to develop relations with actors that have a relatively large influence on the performance of the firm. As a consequence most host firms prefer business and educational visitors above leisure visitors. Access to the labour market is a crucial motive for almost all companies that open their doors for visitors.
- The preferences for the composition of the visitor group highly depend on the characteristics of the firm. As we expected consumer-oriented companies are more willing to receive leisure tourists, particularly if

wastage is low (if many visitors are potential buyers) and direct financial benefits can be expected.

- The host firms we interviewed favour particular stakeholders in various ways: 1) other stakeholders are simply not welcome; 2) the preferred stakeholders get to see more of the company (quality differentiation); 3) the preferred stakeholders pay less (price differentiation); 4) the barriers for preferred stakeholders to enter the firm are lower (e.g. number of days visitors have to register in advance).
- Some companies (not all!) recognise the importance of multipliers and ambassadors as they understand that one person may fulfil several stakeholder roles and may influence other stakeholders as well. This can be an argument to open doors for (some) leisure visitors; it is not necessarily an argument however to actually give priority to leisure visitors.
- The interviews with representatives of the private sector make clear that the scale on which companies operate (local, regional, global) influences the preferences regarding the visitors' place of origin. Countries and regions in which a company is active are preferred suppliers of industrial tourists.

Sub-hypothesis H1.2 states that the contribution of industrial tourism to the performance of a host firm depends on the composition of the visitor flow. The experiences of the 20 companies are clearly supportive for this hypothesis. For many host firms, the quality of the visitor flow is more important than the number of visitors. The case studies show that companies have different preferences regarding the composition of the visitor flow, resulting in different strategies to attract the visitor groups they favour.

8.2.3 The spread in time

Apart from the number and types of visitors, the spread of visitors in time is another relevant characteristic of the visitor flow. The spread of visitors in time relates to variations in the arrival of visitors during the week but also during the year (seasonality). What observations in the four urban regions inform us about the host firms' preferences and conditions on this aspect?

For an evaluation of this factor it is important to gain some insight in the cost structure of company tours supplied by a host firm. In case of high fixed costs (e.g. a visitor centre) an optimal spread of visitors is probably desirable. When only the labour costs of a guide have to be taken into account, higher peaks are maybe desirable in order to fill the groups and use the capacity of the guide to the full. In addition we asked companies if they have any preferences with regard to the timing of visits, which may also be reflected in opening hours and strategies to attract visitors at preferred times.

Most companies in the **Cologne** region do not explicitly prefer an equal spread of visitors in time. RheinEnergie, for example, has appointed four employees as guides: they take care of company tours besides many other tasks. The logical consequence is that workdays are preferred. The same applies for Knapsack and the company tours of Bayer. Knapsack does participate in open door days such as Expedition Colonia (once every year). The regional Chamber of Commerce and Industry confirms that many companies are not willing to open their doors during the weekend. This however does not apply to companies that make use of professional guides such as HGK, BayKomm and MMC. To make a small profit MMC applies a minimum group size of 15, while a maximum size of 40 is employed for quality reasons. Sunday is the most convenient day because no TV productions take place taking away the need to attune the schedule of the tours to the schedule of TV shows. There are clear peaks in May and September: two popular months for school trips. During school holidays in these months there are many visitors for both tours and TV productions that are deliberately planned in these days enabling them to use pupils to fill their studios. Bayer's visitor centre is open all days of the week and an optimal planning of visits is desired, which can be illustrated by the fact that groups have to register two to three months in advance.

Just like BayKomm, Cointreau Carré (**Pays de la Loire**) welcomes visitors seven days of the week. An optimal spread is therefore desired although the company is quite flexible because the guided tours for leisure tourists are done by part-timers. During the offseason (November – April), there are no tours on Sunday and Monday. Terre de Sel finds itself in a similar position: they have an interest in spreading the arrival of visitors. Remarkably the scheduled tours, given by professional fulltime guides, always take place even if there is only one participant. Terre de Sel attracts many beach tourists on cloudy summer days. Due to high peaks in the summer one of the highlights (a storehouse) can even not be visited: in this way nobody gets

disappointed. Airbus, STX Europe and the port can be visited seven days a week. Some variation in visitor numbers is accepted although extreme peaks may cause danger as the shipyard experienced in 2003 when a footbridge collapsed causing the death of 15 people. Airbus prefers to have more tours during the weekend in order to avoid production delays and other risks. For Terres de Sciences timing is an important issue: participating firms open their doors when the plants are flowering (so in the winter all firms are closed).

In **Rotterdam** individual leisure tourists have the opportunity to enter port-related firms during three days of the year: the World Port Days in September. Because of security restrictions and other conflicts with the production process many firms in the port prefer to receive a relatively high number of visitors on only three days instead of a small number of visitors all year long. In other words: there is hardly any spread of visitors in time. The Rotterdam Port Experience has the characteristics of a regular tourist attraction and clearly favours less variation in visitor flows. The Educational Information Centre works with guided tours for which groups have to register in advance. All other firms we analysed in Rotterdam work with guided tours on workdays only[63] for which visitors have to make an appointment at least one day before their arrival enabling the company to arrange a guide and sometimes a translator (mostly by allocating internal capacity).

People can visit Fiat (**Turin**) on workdays only. With scheduled tours and a maximum group size some spread of visitors is desired. As groups have to register in advance and most guides are part-timers (students or graduates) this is a matter of planning. The pressure on the visitor carrying capacity is generally higher during the spring and the autumn. Gufram and Aurora receive guests from Monday to Friday. Because both firms attract relatively few (and mostly technical) visitors the spread of visitors during the week is not a key issue in their visitor management.

Hence, what can we say in general about the preferences of host firms with regard to the spread of visitors in time?

- Companies with a reactive approach to industrial tourism tend to be pragmatic in the planning of visits. These firms prefer visits on workdays and registration in advance, as they have to reserve working hours of the management and/or staff to show people around. Although

[63] Exceptions are made occasionaly.

these working hours can be seen as step costs that need to be earned back (comparable with the costs for external guides), it is not very common for this type of companies to apply a minimum group size[64]. They are interested in open door events that combine relatively large visitor numbers on a few days with limited costs.

- Other companies we analysed prefer to receive more visitors than they can handle themselves (they prefer high visitor numbers, as indicated in the previous sub-section) and hire guides, mostly on a part-time basis. As we discussed in our theoretical chapters these guides incur step costs. To minimise these costs most of the firms ask people to book tours a priori enabling them to make optimum use of the available capacity, using minimum and maximum group sizes.
- Firms that use professional guides may also decide to open their firm during the weekend when the site is not operational (or 'less operational'). Both Airbus and MMC indicate that the reception of visitors during the weekend is to be preferred in view of potential conflicts with the primary processes during the week.
- Some firms (Bayer, Cointreau, Terre de Sel) actually invest in industrial tourism by developing a visitor centre – of which the amortisation brings along fixed costs – with the characteristics of a 'normal' tourist attraction including personnel with fixed contracts. To benefit from these investments an equal distribution of visitors in time is desired, with visits all week long (including weekends).

According to sub-hypothesis H1.3 the contribution of industrial tourism to the performance of a host firm depends on the spread of visitors in time. Evidence from the four urban regions demonstrates the relevance of this factor for companies that invest in industrial tourism. As the number of visitors grows, the spread of visitors in time gradually becomes an issue. If a firm has to hire professional guides, it has an interest in visitor flow management, the challenge being to use capacity to the full. With more permanent investments in industrial tourism (instead of hiring part-time guides) this interest gets stronger; in that case host firms get an interest in a more

[64] A maximum size is sometimes used but mainly for safety or quality reasons; not in view of income.

equal distribution of visitors throughout the year. In other words: they start to favour less seasonality.

8.3 The fit between company tours and the intended corporate image

The second condition that determines the involvement of individual firms in industrial tourism is the fit between company tours and the intended corporate image. In the previous section we found that many companies we analysed consider industrial tourism as a tool of stakeholder management. In the present section we take a closer look at the expectations of companies regarding the contribution of industrial tourism to the corporate image they desire. In what ways do company tours contribute to the reputation of host firms and their brands? How can industrial tourism be helpful to secure the license to operate?

We assess the relevance of this factor by analysing the motives of companies to open their doors and their selection of target groups as discussed above. Moreover we review the position of company tours in the organisational structure of the firm to gain some insight in the value attached to this activity.

For all five companies we analysed in the **Cologne** region company tours match with the image they want to display. Industrial tourism is for several firms an effective though subtle instrument to influence perceptions. RheinEnergie views tours – organised by the corporation communications department – as adequate tools for customer retention, informing critical citizens about energy prices and corporate citizenship in a liberalised energy market. Good citizenship is also an important driver for Bayer, HGK and Knapsack. For Bayer the visitor centre is one of the few possibilities to enrich the corporate image (‘more than Aspirin’, ‘not only chemical industry’) in view of the restrictions that apply to advertising in this industry. Exhibitions are used to clarify the link between Bayer’s products and everyday products; real factory tours are considered less effective also because most production processes take place in shut systems hardly visible for observers. Visits to BayKomm are arranged by Currenta, a spin-off of Bayer that takes car of the firm’s public relations. MMC distinguishes itself from the four other firms because it does not see company tours as a tool of image management; this is reflected in a relatively low priority within the organisation. Nevertheless it is likely that the studio tours help to improve the firm’s reputation.

In **Pays de la Loire** Terre de Sel and Terre des Sciences have in common that they both represent small firms or even single entrepreneurs. Their expectations towards industrial tourism are, however, very different. While Terre de Sel uses tours as an additional source of income and distribution channel for products (with a better image as by-product), Terre des Sciences looks at industrial tourism as a tool to release the growing pressure on the license to operate in view of the public opinion against genetically modified plants. Corporate citizenship is also mentioned by Cointreau which explicitly pays attention to 'responsible drinking' with an alcohol check at the end of the tour. Industrial tourism – organised by a separate business unit belonging to the marketing and communication division – is seen as an alternative for advertising because restrictions also apply to producers of alcoholic beverages (comparable with Bayer). However, with only 2 per cent of the promotional budget the relevance of company visits should also not be exaggerated. STX Europe and Airbus have in common that they were both stimulated by their business customers to organise tours for end consumers (people who book a cruise or an airline ticket) as a tool of pre-sales promotion. By providing information on quality control Airbus can take away people's fear of flying to the advantage of the airlines that buy Airbus planes. The port is active in industrial tourism because tours can inform people about the added value of the port for the region and what the port does to be become 'a neighbour of choice'.

Industrial tourism is for most companies we analysed in the **Rotterdam** region a suitable instrument for marketing, communication and public relations. For Schmidt Zeevis tours are particularly helpful to demonstrate their care for quality, notably to (potential) customers. Other firms such as Verstegen and Broekman Automotive expect significant contributions of industrial tourism to their image as employer. For the port authority company tours fit in the strategy to communicate the port's contribution to the economy, the care for safety and the environment and the attractive working environment. This strategy is reflected in the themes of the World Port Days: 'working on a world-class port' (2007), 'green light for the port' (2008) and 'new energy' (2009). The Happy Shrimp Farm saw industrial tourism as a tool to demonstrate its innovative response to climate change, helping the company to win the sympathy (and subsidies) of decision makers[65]. The only exception is Smit

[65] The Happy Shrimp Farm was very successful in acquiring subsidies for its activities, but without the expected success in the marketplace.

Internationale for which a lack of industrial tourism potential (see next section) probably explains why company tours are less adequate for image management.

As many other car producers Fiat (**Turin**) considers industrial tourism as an adequate public relations tool; not only to promote the brands (Fiat, Alfa Romeo, Lancia, Maserati, Ferrari) but also to improve the image as employer. The PR department uses the tours to show that factories are not the gray, dark and sad places people may have in mind. A similar strategy can be observed at Aurora: company visits are used to create a positive feeling around the company and its products. Furthermore the firm argues that the association with Italy – strengthened by company tours – adds a premium to the brand. Gufram participates in Made in Torino to improve the visibility of the brand and to strengthen relations with local stakeholders (e.g. the municipality). Industrial tourism is not seen, however, as the most effective tool to improve its corporate image and to promote its brands: exhibitions and fairs are more effective.

Experiences from companies in the four selected urban regions bring us to the following general conclusions concerning the fit between industrial tourism and the intended corporate image:

- Nearly all companies we analysed expect company visits to be beneficial for their image as producer, employer and citizen and their products and brands. They agree that tours can be used to demonstrate care for quality, internal and external safety, and the environment. According to many people we interviewed, industrial tourism is an effective instrument for public relations: giving evidence of corporate citizenship (CSR). Hence, company tours are in most cases organised by corporate communication or public relations departments.
- Some host firms explicitly use industrial tourism to emphasize their embeddedness in the region. This applies to both ports (Rotterdam, Nantes-St Nazaire) but also to Aurora and Gufram (Turin) and RheinEnergie (Cologne). Several other firms, however, seem to attach less value to the association of their company with the region. Obviously not all companies are equally interested in co-branding.
- Company tours are less relevant as image builders for firms that use industrial tourism to generate additional income as in the case of Terre

de Sel and MMC. This, however, does not imply that the tours do not help to improve their image; it is very likely that they do.

- Industrial tourism appears to be particularly interesting as marketing and public relations tool for companies that 1) get often criticised (Bayer, RheinEnergie, Terre des Sciences, Fiat, the ports) which implies pressure on the license to operate; and/or 2) have limited access to other marketing and public relation tools (Bayer, Cointreau).

In sum, we conclude that our observations support hypothesis H2 which states that the contribution of industrial tourism to the image of a firm depends on the fit between company tours and the intended image for the firm. Companies expect tours to improve their image towards various stakeholder groups. Even if firms open their doors primarily to earn some extra money, the arrival of tourists should not cause harm to a firm's reputation.

8.4 Determinants of industrial tourism potential

In the two previous sections we analysed the preferences of firms regarding the composition of the visitor flow and the usefulness of industrial tourism as tool for image management. We found that most companies in the four urban regions are interested in receiving (particular) visitor groups. Whether it actually makes sense to open doors for these groups also depends on the demand conditions: does the supply meet the needs and preferences of the targeted audience? We hypothesised that this 'industrial tourism potential' depends on the combination of four factors: the attractiveness of the firm, the supply of industrial tourism, the quality of the location and visitor facilities and the promotion of industrial tourism.

As we discussed in the research framework the relevance of the four factors can be assessed in (at least) three ways: 1) by reviewing their impact on the ability to attract visitors; 2) by gaining insight in the motives of companies to allow particular visitor groups to enter their premises; and 3) by identifying investments in these conditions. One indicator for the ability to attract visitors is the actual visitor number. Although the visitors numbers mentioned in 8.2 are not easily comparable – companies use different definitions of industrial tourists – they give us a first impression of what companies are successful in attracting visitors. The 20 firms in our sample can be categorised in three categories:

- Companies with a relatively *high* ability to attract visitors (more than 20,000): Bayer, the Port of Rotterdam, Terre de Sel, STX Europe, Airbus, Fiat and Cointreau.
- Companies with a *moderate* ability to attract visitors (more than 2,500): HGK, MMC, Autonomous Port of Nantes-St Nazaire, RheinEnergie and the Happy Shrimp Farm.
- Companies with a relatively *low* ability to attract visitors (less than 2,500): Aurora, Terre de Sciences, Verstegen, Knapsack, Gufram, Schmidt Zeevis, Smit Internationale and Broekman Automotive.

8.4.1 The attractiveness of the firm

The first determinant of industrial tourism potential is the attractiveness of the firm. Some company sites are simply more popular as places to visit than other sites because of the characteristics of the firm, the production process and the products they produce. The question now is if this also applies to the 20 firms we analysed in the four urban regions: how does the attractiveness of the firm influence its willingness to open doors and its ability to attract visitors?

In the **Cologne** region Bayer is the most attractive firm with the highest visitor number. Bayer is a global firm with well known brands and products that respond to everybody's need: health. Possible weaknesses are the unattractive and often invisible (high-tech) production process and the fact that many products are not consumer products. Three firms are in the second category: MMC, HGK and RheinEnergie. MMC itself may be less attractive (it is not a global brand), but its products (TV shows and films) appeal to many consumers directly, with an interesting and high-tech production process. In the case of HGK not the company but its products (new port in Godorf and new city area in Rheinauhafen) attract visitors. One of the factors of attraction is the organisational concept of the project: one landowner who takes care of public space and branding the area. RheinEnergie faces the disadvantage of an intangible product (energy) while its name is only known among regional inhabitants. On the other hand energy is a hot issue in which many people (including consumers) are interested. Knapsack is less attractive which is also reflected in a lower number of industrial tourists. Some companies at Knapsack are well known (e.g. Bayer), but most of them do not produce consumer goods. The business park has identified 'energy' as strength with a gas and steam plant that produces energy out of waste (Statkraft) within its borders.

Four of the six firms we analysed in **Pays de la Loire** can be described as highly attractive with various sources of appeal that result in relatively high visitor numbers. Airbus is a global brand: airplanes are a typical example of products that are not sold to consumers but that do appeal to consumers because they use the products. The same applies to the cruise ships of STX Europe: the shipyard in St Nazaire is one of the few places in the world where the ships are built. Other strengths for both Airbus and STX Europe are a high-tech production process and the large size of components (visibility of the production process). In the case of Airbus, only sites where the final assembly takes place (e.g. Toulouse and Hamburg) are more attractive. Cointreau is a well known consumer brand in many countries; the production process is a combination of high-tech (bottling) and low-tech (distillery). Also Terre de Sel has the advantage of a consumer product and a brand (Sel de Guerande) that is well known in France and neighbouring countries. The production process is very traditional. Moreover both Cointreau and Terre de Sel are typical for the region. Although this also applies to the Port of Nantes-St Nazaire, their situation is somewhat less favourable with a moderate visitor number. Compared to for instance Rotterdam the attractiveness of the port for international visitors is limited, being the fourth port of France. The companies affiliated with Terres de Sciences are all small and unknown, and the production process is clearly less appealing. The number of visitors is low.

In our small sample the Port of **Rotterdam** is by far the most attractive firm of the Rotterdam region. According to a survey Dutch people consider the port the second most attractive element of Rotterdam (TNO NIPO, 2006 *cited in* OBR, 2006). Size is one of its main assets being the largest port of Europe and a well known global brand. Other sources of attractiveness are the high-tech processes (logistics) and the way the company is managed. The only disadvantage is that many products do not appeal to consumers directly. Smit Internationale may not be as famous as the port but many people know the company because of the salvage of the Kursk. The primary process is innovative and high-tech, but mostly takes places on sea. Although Broekman Automotive does not deal with consumers directly, the goods handled by the firm appeal to many visitors. Moreover the company is very interesting in terms of management and innovation. Schmidt Zeevis, the Happy Shrimp Farm and Verstegen have in common that they are all active in the food industry: consumers may not always be interested in getting to know how food is produced. The degree of automatisation (high-tech) might be a disadvantage rather than an asset giving

Schmidt Zeevis and the Happy Shrimp Farm a more favourable position than Verstegen. In the three firms production processes are interesting – from a (quality) management point of view – but not necessarily appealing.

Car producer Fiat (**Turin**) is a well known company with famous brands. Cars are attractive and luxurious consumer products and the outputs of high-tech production processes. Furthermore Fiat is 'typical for the region'. All these circumstances add to the firm's industrial tourism potential which is reflected in the visitor number. The ability of Gufram and Aurora to attract visitors is lower because their brands are known among specific groups only. Aurora has the advantage of a luxurious consumer product (pens). While Gufram's design objects are interesting products with an attractive though low-tech production process; the armchairs for theatres and other venues are not the most attractive product to show.

The observations in the four urban regions lead us to the following conclusions on the relevance of the firm's attractiveness in the industrial tourism development process:

- The attractiveness of the firm is an important determinant of the ability to attract visitors. Our findings are in line with the assumption that host firms owe their appeal to various assets: the production process, the brands, the products, etc.
- Companies that produce goods that directly appeal to consumers have an advantage over firms that produce or handle goods without this appeal. This advantage applies to products that are sold to consumers as in the case of cars, foods and drinks but also to products that are sold to businesses to be included in a consumer product; airplanes and cruise ships fall in this category.
- For companies that do not produce consumer goods, the appeal to end consumers seems to depend on the recognisability of their inputs in consumer products. Company tours can be used to clarify the link between inputs and consumer products, but some firms are in a more favourable starting position than others.
- Innovative (high-tech) production and management processes are important assets to attract technical visitors. For leisure-oriented visitors a high degree of innovation is not always a source of

attractiveness, particularly not in the food industry. Traditional production processes are often more visible and tangible.

- Particularly visitors with a leisure motive are attracted by brands. Our findings support the idea that firms are more attractive if their brands are known among a large audience (e.g. Fiat, Port of Rotterdam and Bayer). Some brands of the companies we analysed are only known in specific countries or among particular groups in society (e.g. Aurora, Gufram and Sel de Guerande).

All in all, the observations support sub-hypothesis H3.1 claiming that a firm's potential to attract industrial tourists strongly depends on the attractiveness of the firm. To put it simple: attractive firms are more popular among industrial tourists than unattractive firms. Attractive companies are in a more favourable position to attract the visitor groups they prefer to receive. We also learned however that attractive firms may feel the pressure to open doors for visitors they do not prefer to receive. Another conclusion is that the benefits of industrial tourism are too small to justify investments in the attractiveness of the firm. In the decisions of firms to open their doors or not, the attractiveness of the firm is considered a given fact[66].

8.4.2 The supply of industrial tourism

The second factor that determines the ability to attract industrial tourists is the supply of industrial tourism: not only in quantitative terms (e.g. the number of company tours and opening hours) but also in qualitative terms (e.g. the quality of guides). What are the main findings in the four urban regions, looking at the supply of company tours?

Four of the five firms in the **Cologne** region supply a substantial number of company tours. Bayer, RheinEnergie, HGK and MMC offer sufficient possibilities to visit their sites. In the case of Bayer the quality of company tours is not optimal, however. Most visitors of Bayer have to be satisfied with a visit to the BayKomm visitor centre including various exhibitions and professional guides, but not the real experiences of seeing a factory in operation. For 'real' company tours, the supply is limited. The other three firms do allow visitors to enter the work floor. At MMC, for

[66] This does not mean that companies cannot improve their attractiveness. Companies can indeed become more attractive but in that case other interests than industrial tourism motivate such decisions.

instance, people get to see all aspects of a TV production. The guides are often (female) students who also work as hostesses during the TV shows: good looks and communication skills are their main strenghts. HGK works with an external professional guide and has included an elevator ride in one of the crane houses to make the tour more attractive. Knapsack – where employees are responsible for showing people around – has the ambition to improve the supply, also qualitatively. Students from nearby universities have been asked to come up with ideas to make the tours more attractive, resulting in the suggestion to develop a thematic walk and an elevated walkway.

In **Pays de la Loire** Cointreau is an example of a firm with a high-quality supply of industrial tourism that meets the demand. The company has invested in a museum with exhibitions. Guides (students) are trained and replaced now and then to keep them enthusiastic and avoid standardisation. The visit takes no longer than 90 minutes reasoning that visitors cannot pay attention for a longer period of time. The programme of the visit is sometimes adjusted to make sure people see the production line in operation. At the end of the programme visitors can mix their own drink and they are kindly requested to fill in evaluation forms. An elevated walkway enables people to see the bottling process, only from behind glass because of safety and hygiene standards. With the recent change of strategy, the maximum group size has been reduced from 60 to 25 while the entrance fee has gone up. The other companies also invest in a good supply, but to a lesser degree. Terre des Sciences has developed quality standards for its participants and a special card that provides entrance to five firms. Terre de Sel offers a broad range of tours for various target groups under professional guidance. The shop should be seen here as part of the experience – it attracts visitors – and not as visitor facility, as in the case of Cointreau. Airbus has improved its appeal to visitors by creating a small museum with model of airplanes. The firm cooperates with Escal'Atlantic to secure an attractive and sufficient supply of company tours. The same applies to the port and STX Europe. The port's communication department also assists companies in the port with professionalising company visits, in cooperation with Visit Our Companies.

The supply of visits to the Port of **Rotterdam** is not optimal. The Rotterdam Port Experience does not offer authentic company visits while the World Port Days event only lasts three days. The Educational Information Centre offers a broad range of tours (70 tours in five categories) but only to professional and educational visitors. Also at other firms in Rotterdam the number of company tours is insufficient. While

some argue that safety and hygiene standards act as barriers for industrial tourism (reasons to keep doors closed), others (Schmidt Zeevis and Verstegen) indicate that hygiene procedures are part of the experience. Until it had to stop its activities, the Happy Shrimp Farm was one of the most active firms in the development of an industrial tourism supply: the firm introduced tours combined with workshops and lunches or dinners. Most of the Rotterdam-based companies we interviewed ask their employees to take care of guided tours. They prefer to use their own staff – or otherwise former workers – to make sure that the story is told in the most authentic way. One of the most attractive companies, the Rotterdam Car Centre, does not allow visitors to take pictures, making this site less attractive for leisure-oriented tourists.

Also in the **Turin** region the companies we analysed have made some efforts to improve their supply of industrial tourism. Fiat works with professionally trained guides who speak many languages: mostly students or graduates who are relatives of employees (in view of confidentiality). The company offers combined visits to the nearby Motor Village (see previous chapter). Some disadvantages cannot be removed: not all processes can be observed (the design department and the safety department are only accessible for specific professionals[67]) and also here it is not allowed to take pictures. Aurora offers three tour packages: basic, advanced and luxurious. The company has invested in art objects and a photo gallery to upgrade the work floor which also makes tours more attractive[68]. Visitors get to see all aspects of the production process. Gufram cooperates with Made in Torino to make tours more attractive (see next chapter). The company often shows it commitment to the programme by rescheduling the painting process for design objects: the highlight of the tour.

Our empirical study arrives at the following general conclusions with regard to the supply of industrial tourism:

- A majority of the companies we analysed are willing to invest in the supply of industrial tourism. The investments are in most cases, however, relatively small. Most firms only invest in external or internal guides for company tours. Just a few companies are also willing to invest in museums and exhibitions.

[67] These are the departments where new car models are designed and tested.

[68] Aurora is also developing a Museum of Signs and Pens (www.aurorapen.it).

- Investments in the attractiveness of the industrial tourism supply can sometimes be legitimised if they also benefit the employees: in the case of Cointreau and Aurora the investments in the company tour have upgraded the workplace.
- The development of visitor centres enhances the industrial tourism supply quantitatively but not necessarily qualitatively; they do not provide the authentic experience of real company tours.
- Firms with more than 10,000 visitors a year use professionally trained guides. Companies that attract fewer visitors prefer to deploy their own workers. Our experience is that professional trained guides are often needed to take care of large visitor numbers.
- Employees or retired workers can add value to the industrial tourism supply because they are able to communicate authentic stories with interesting anecdotes.

Taking all this into consideration we can conclude that indeed, the firm's potential to attract industrial tourists strongly depends on the supply of industrial tourism, as we formulated in sub-hypothesis H3.2. Host firms with the ambition to attract industrial tourists recognize the importance of a good supply of company tours and other possibilities to visit their sites. However, because the expected benefits do not always outweigh the expected costs firms are sometimes reluctant to invest.

8.4.3 The quality of the location and visitor facilities

The third factor that determines a firm's ability to attract industrial tourists is the quality of the location and visitor facilities. This quality of the location can be assessed by analysing the characteristics of the site and its immediate environment, but also by reviewing its position in the urban region. Particularly visitor facilities add to the appeal of an industrial tourism attraction. They can be distinguished from the industrial tourism supply by a negative answer on the question: are they a reason to visit the firm? Restaurants and parking facilities are typical examples. Sometimes also a small shop can be treated as a visitor facility. What do the host firm's think about the relevance of this factor?

In the **Cologne** region several examples confirm the importance of the site's quality. Bayer has selected an attractive location for its visitor centre with good accessibility by public and private transport (a train station nearby), and a major

tourist attraction near the site: a Japanese garden. Moreover the company has invested in an attractive landscape with trees and plants. RheinEnergie has experienced that its long-distance heating tunnel attracts many tourists because of its strategic location near the town centre where many shops and restaurants are located. The location of the gas-fired power plant in Niehl – at considerable distance of the centre – is clearly less favourable. The old waterworks – in fact, an example of industrial heritage that is still in operation – are near the centre and attract more visitors than the site in Niehl. The Rheinauhafen (HGK) is a perfect location for industrial tourists, also because of a newly built embarkation point for passenger boats. Knapsack and the MMC studios are both located in Hürth at 12 km distance from the city centre of Cologne. MMC has the advantage of being located near the train station. Both sides are not particularly attractive in terms of landscape. In Cologne most companies agree that visitor facilities could make their companies more attractive for industrial tourists but most of them (HGK, Knapsack and MMC) do no invest in such facilities. An exceptional case is RheinEnergie which has decided to include lecturing rooms for visitors (but also for other purposes!) in new plants to be built in the future. They argue that it is cheaper to include such facilities in the original design of a building instead of renovating a building. Bayer is obviously the best performing company in this field with a state-of-the-art visitor centre.

In **Pays de la Loire** four companies we analysed – the port, STX Europe, Airbus and Terre de Sel – benefit from their favourable location near the beaches of the Atlantic coast where many leisure tourists celebrate their holidays. Short distances enable people to make combined visits to two or more firms. Terre de Sel has the additional advantage of being in the middle of an attractive natural environment with historical value. Cointreau is located at a relatively short distance of Anger's city centre in an attractive building. The companies that participate in Terre des Sciences are all located in the region around Nantes and Angers. With respect to visitor facilities, Cointreau is (again) one of the most proactive firms in the region. They built a special visitor centre with a small shop and they constructed an elevated walkway for visitors and to be used by employees as well. Also Terre de Sel developed a visitor centre that includes a shop (as we mentioned in the previous sub-section: an attraction in its own right). The other companies have no special facilities, apart from the facilities that have been realised in cooperation with Escal'Atlantic to be discussed in the next chapter.

In the case of **Rotterdam** it becomes clear that location is a weakness of the Port of Rotterdam, and of some other firms as well. Many port activities are located at a relatively long distance from the city centre, up to 45 km. The Educational Information Centre – from where many company tours depart – and the Happy Shrimp Farm are both located in remote parts of the port. The Rotterdam Port Experience is much better situated, right in the city centre near the place where boat tours to the port (by Spido) start. Schmidt Zeevis is located in the same part of the town: a good location near the Nieuwe Maas river. Furthermore we have observed that most companies in the Rotterdam region back away from investments in visitor facilities. The investments are simply too high in view of the benefits expected. Visitors often can use the facilities for employees such as toilets and the canteen. Exceptions to the rule are Smit Internationale and the Port of Rotterdam which both receive their professional guests in special rooms for visitors, or in the case of Smit Internationale: a floating platform. The Happy Shrimp Farm had ideas to develop a visitor centre (possibly together with Schmidt Zeevis), but these ideas have never resulted in concrete actions.

Analysing the companies in the **Turin** region, we can state that Fiat's Mirafiori factory is well located near the centre of Turin. Although the site is operational, it contains elements of heritage as well. The same goes for Aurora with its very favourable location: an historical monument (church and cloister) near the town centre. The location of Gufram is poor in many ways: the design of the building, the quality of the surrounding environment and the accessibility do not add to the firm's attractiveness as a place to visit. The Turin case also shows that Fiat has not invested a lot in visitor facilities (particularly not in comparison with other car manufacturers such as Volkswagen and BMW). The company did invest in electrical vehicles to drive visitors around, including one for disabled people. Aurora demonstrates that also a small company with a limited number of visitors can invest in visitor facilities: signboards inform visitors about what they see. Gufram has no visitor facilities.

This brings us to the following general conclusions:

- Several host firms have indicated that their location (an important aspect of the site's quality) adds to their ability to attract visitors. The proximity of a city centre or holiday resorts (as in the case of St. Nazaire) increases the industrial tourism potential.

- Most companies we analysed are located at relatively unattractive sites in terms of landscape and architecture of the buildings. Those firms that have the privilege of being situated in a more attractive environment seem to acknowledge the added value. Particularly heritage sites are in a favourable position for attracting visitors with a leisure motive.
- The majority of the host firms regard their location as a given fact, comparable with the attractiveness of the firm. They may change their location but not to improve the access for industrial tourists. We found no evidence that supports the suggestion that industrial tourism will change the location decisions of firms (Dodd, 1988). Only companies that decide to open a visitor centre are able to choose an optimal location for this centre, though not necessarily near the operational site, as in the case of the Port of Rotterdam.
- About half of the firms we analysed have special visitor facilities such as a lecturing/meeting room or reception. Other firms in the four regions do not deny the relevance of visitor facilities but argue that investments in such facilities are not feasible (in financial terms).
- Visitor centres are as a rule better equipped with visitor facilities. They are only built by firms that expect to attract a substantial number of visitors (more than 20,000).
- Cointreau and Aurora have both developed visitor facilities that can also be used by employees; in this way such facilities are also feasible for smaller firms with fewer visitors.
- If the number of industrial tourists that visit a firm is limited the need for separate visitor facilities is lower: in that case facilities for employees can be used by visitors.

The findings summarised above are in line with sub-hypothesis H3.3 which says that a firm's potential to attract industrial tourists is supported by the quality of the location and visitor facilities. Although host firms have limited ability to influence the quality of the location they seem to be aware of its relevance. Companies with high visitor numbers have in common that they are all well accessible. A good location may even partly compensate moderate scores on attractiveness and the supply of industrial tourism as in the case of RheinEnergie's long-distance heating tunnel.

Although some companies are reluctant to invest in visitor facilities, the need to develop such facilities grows if companies prefer and/or expect to welcome more people, and the capacity of facilities for employees becomes insufficient for the reception of visitors.

8.4.4 The promotion of industrial tourism

The fifth factor that influences a firm's industrial tourism potential is the promotion of industrial tourism. Do the host firms inform people about the possibilities to enter their sites? A good indicator for how host firms deal with the promotion of industrial tourism is the findability of information on their own website. An additional indicator is the presence or absence of a strategy to stimulate other organisations to promote visits to the company in question[69].

In **Cologne** the five companies we analysed use different strategies with regard to promotion. HGK and Knapsack provide no information at all on their corporate websites. RheinEnergie does give information on company visits under the heading 'engagement' (two mouse clicks from the homepage) in German only. MMC has a similar page, but with direct access from the homepage (one mouse click) and in English as well. Information about the studio tours is also available on other websites (portals, event bureaus and travel agencies), though not as the result of a strategy to promote tours. MMC has indicated that the studio tours are so attractive that advertisement is not needed: other organisations promote their tours 'for free'. Bayer does not advertise company tours either, but the firm does promote its visitor centre BayKomm via a special section of the corporate website in English and German.

Four of the six companies we reviewed in **Pays de la Loire** provide relatively few information on company visits. The Port of Nantes St Nazaire, STX Europe and Airbus have all contracted out promotion to the tourism organisation Escal'Atlantic. Of these three firms only the port authority has one difficult to find page with information in French and English. Information about visits to the companies of Terre des Sciences is only available in French and hard to find. Apart from the website the tours of Terre des Sciences are promoted by the media. Free publicity helps to attract visitors but also stimulates firms to participate. Moreover Terre des Sciences cooperates with regional tourist offices which take care of the promotion and

[69] Websites of other organisations (e.g. tourism organisations) also provide information about company visits. In the present chapter we will in most cases only refer to these websites if references are the result of a company's strategy to promote their own tours.

reservation of tours. Cointreau and Terre de Sel are very active in promoting their industrial tourism supply, with easily accessible sections on their multilingual websites. Terre de Sel clearly looks for a broader audience: they made deals with hotels and local tourist offices enabling them to book guided visits via an online booking system in return for a share of the fee. The cooperative of salt workers also cooperates with Escal'Atlantic, with an exchange of brochures as main result. Cointreau has a long history of cooperation with another tourist attraction in the region: the Angers castle. Already in the 1930s they agreed to redirect visitors. Cointreau also uses the strategy of approaching interesting target groups directly. Furthermore they cooperate with the tourism bureau of Angers and several travel agencies.

The majority of the firms we interviewed for the **Rotterdam** case have no information about company visits on their website: this applies to the Happy Shrimp Farm, Verstegen, Smit Internationale and Broekman Automotive. The website of Schmidt Zeevis includes one, difficult to find, page on company visits in Dutch and English, including photos of groups that visited the firm. The Port of Rotterdam is somewhat more active in the field of promotion. The Dutch version of the corporate website comprehends a section on 'how to experience the port' including links to EIC and the Port Experience[70]. A link to Industrieel Toerisme can only be found in the list of Frequently Asked Questions. The news and media section shows visitors the way to the World Port Days website in Dutch and English. The Rotterdam Port Experience and Future Land – two visitor centres in which the port has a stake – are also active in promoting themselves.

Two of the three firms in **Turin** do not promote company tours at all: both Fiat and Gufram provide no information on their corporate web pages. Fiat easily attracts visitors for its daily scheduled tours without giving any information, which confirms the company's attractiveness. Aurora is the exception: they do inform the visitors of its webpage about the possibilities to enter its premises, including a link to Turismo Torino. This information is, however, relatively difficult to find, on a page about the head offices.

Taking all this into consideration what can be said about the relevance of promotion for the ability to attract industrial tourists?

[70] Including information on walk and bike routes in the port.

- Many companies we analysed do not promote their industrial tourism supply. This particularly applies to firms with a defensive or restrictive approach, but also companies with a selective approach sometimes prefer to approach targeted visitors themselves rather than informing the general public.
- Other firms (e.g. MMC, RheinEnergie, Port of Nantes-St Nazaire, Aurora, Schmidt Zeevis, Terre des Sciences, Port of Rotterdam) provide very little information about the possibilities to enter the work floor. They do not really promote company tours but only give some basic information for those who are interested. In several cases these pages are difficult to find, requiring several mouse clicks from the homepage or even the use of a search engine. For international visitors the findability of information is often more troublesome because of language barriers.
- Only firms that have developed special visitor centres use promotional tools to attract industrial tourists. Examples are Bayer, Cointreau and Terre de Sel[71]. Terre de Sel and Cointreau both have a strategy to actively promote their supply among distributors and other actors in the tourist industry (hotels, tourism bureaus, travel agencies, etc.).
- Fiat and MMC are two examples of firms that do not need to promote company tours because there is sufficient demand to use the visitor capacity to the full[72]. Very attractive companies with very attractive products do not need to advertise their tours.

The observations are in concordance with sub-hypothesis H3.4 which states that a firm's potential to attract industrial tourists is supported by the promotion of its company tours. If companies prefer to welcome a relatively large number of visitors, they tend to invest in promotion except when there is no excess visitor capacity. Also firms with a more restrictive policy deliberately do *not* promote site visits because they expect it will generate more demand which cannot be met.

[71] The Rotterdam Port Experience is not mentioned here because the Port of Rotterdam is only one of the financiers.

[72] In the case of MMC the main source of industrial tourism potential is the attractiveness of the product, not the attractiveness of the company.

8.5 Conclusions

Experiences from 20 firms in the four urban regions (Cologne, Pays de la Loire, Turin and Rotterdam) have confirmed the relevance of the conditions we formulated for host firms. The observations are in line with the first three hypotheses including the sub-hypotheses. The empirical study has provided insight in the conditions under which various types of firms are willing to open their doors for industrial tourists.

An important observation is that the (sub)hypotheses are related to one another. What companies expect from industrial tourism (as hypothesised in H2) influences their preferences regarding the visitor flow (H1) and their willingness to improve the industrial tourism supply (H3). If firms look upon industrial tourism as a source of income they have an interest in high visitor numbers; as a consequence they are more eager to invest in the attractiveness of the company tours, visitor facilities, the location and the promotion of company tours. If companies mainly see industrial tourism as a tool of public relations, their policies highly depend on what stakeholders they want to reach.

Two limitations of our analysis need to be addressed here. First there may be other factors than the ones we identified that are also relevant for companies in industrial tourism development. The observations only confirm the relevance of the factors we have identified. Second, we emphasize that we have not actually measured the impact of the attractiveness of the firm, the supply of company tours, the quality of visitor facilities and the location and the promotion of company visits on industrial tourism potential. Our analysis merely provides insight in how companies evaluate the relevance of these aspects for their ability to attract industrial tourists.

Chapter 9

Conditions for urban regions

9.1 Introduction

In this chapter we discuss the conditions under which urban regions expect to take advantage of industrial tourism development. The structure is similar to the previous chapter. We test the empirical applicability of the hypotheses and sub-hypotheses related to the conditions for urban regions: the characteristics of the visitor flow (H4.1, H4.2 and H4.3), the fit between industrial tourism and the intended regional image (H5) and the four determinants of industrial tourism potential (H6.1, H6.2, H6.3 and H6.4). For all of these (sub-)hypotheses we present the main observations in the four urban regions to be followed by general conclusions.

9.2 Characteristics of the visitor flow

Also for urban regions three characteristics of the visitor flow influence their ability to benefit from industrial tourism: the number of visitors, the composition of the visitor flow and their spread in time.

9.2.1 The number of visitors

An important aspect of the visitor flow is its size: more industrial tourists bring more benefits to the urban region. What are the main interests of the regional organisations we interviewed as far as the number of visitors is concerned?

In general we can say that most regional organisations are not against an influx of industrial tourists. The four urban regions we analysed are not yet in the stage in

which the (external) costs of additional visitors are higher than the benefits in terms of income and employment. The question however is if urban regions are also willing to promote industrial tourism. To assess if urban regions actually make efforts to realise high visitor numbers in industrial tourism we take a closer look at the interests and actions of regional organisations.

The **Cologne** Tourist Board does not expect industrial tourism to generate a substantial number of bed nights, although there are no data to confirm this. They see company tours as an 'add-on': a niche segment that gives tourism some extra flavour. Accordingly the policy attention to company tours is small. Apart from the list of firms they published (see chapter seven) the Tourist Board is also involved in the organisation of Expedition Colonia. This open-door event attracts about 7,500 visitors a year[73]. The Chamber of Commerce and Industry for the Cologne region recognises the added value of company tours – in terms of bed nights and the use of tourist infrastructure in general – but there is no policy to promote industrial tourism actively.

Pays de la Loire clearly has a different view on industrial tourism. The regional authorities consider company visits as a substantial and growing segment of the tourist industry. Company tours have become a spearhead of tourism policy under the heading of 'economic discoveries' together with industrial heritage tourism and science tourism. Members of the association Visit Our Companies are requested to keep track of visitor numbers, facilitating integration in the Regional Observatory of Tourism. This database makes clear that industrial tourism generates approximately 11 per cent of all visits to tourist attractions, with an absolute number of almost one million visitors a year. The organisers of the event Made in Angers also prefer high visitor numbers, but not because they expect direct economic benefits. The event draws approximately 17,000 visitors each year.

In the case of **Rotterdam** we can observe a change in the approach to industrial tourism since 1995. Initially, the city's tourism organisation saw company tours as a small but growing segment, comparable to the approach of Turin and its province. Because scheduled tours to the port by coach for tourists appeared to attract insufficient numbers of visitors – often resulting in cancellations – the city decided to

[73] Around 70 per cent of the 220 tours offered during the event in 2008 can be considered industrial tourism as we defined it.

end this industrial tourism programme[74]. Despite this change in policy organisations such as Rotterdam Marketing, the Chief Marketing Office and the Chamber of Commerce are still in favour of policies to promote industrial tourism. Although there are no statistics on the total number of industrial tourists, it is fair to say that Rotterdam is quite successful in attracting this type of visitors with the port and the related industrial complex as main attraction. Being the only shareholder in the port authority, the city also invests in events and attractions to facilitate (virtual) tours to the port.

In **Turin** the city and the province seem to have a different opinion on the relevance of industrial tourism compared with the region of Piedmont. The two local authorities look upon industrial tourism as a small but relevant niche, with substantial indirect benefits in terms of image (see next section). Regional tourism organisations, however, hardly pay attention to this segment arguing that industrial tourists generate an insignificant number of bed nights[75]. With about 1200 participants the impact of the Made in Torino programme is indeed not very high. On the other hand visitors also find their way through other channels (as in the cases of Fiat and Aurora) and to other firms (particularly agricultural tourism is very popular in the region).

Comparing the observations in the four urban regions we are now able to draw some general conclusions about the relevance of the visitor flow:

- Our empirical study confirms that urban regions attach much value to the number of industrial tourists. Not only present numbers but also future growth possibilities are relevant conditions for policy attention to this segment. Particularly tourism organisations tend to focus on segments that generate sufficient bed nights.
- Looking at visitor numbers, the relevance of industrial tourism compared to other forms of tourism varies from relatively small (Cologne) to substantial (Pays de la Loire). The share of company visits in the regional tourism industry seems to be a critical factor for the policy attention of regional tourism organisations to industrial tourism (high in Pays de la Loire, low in Cologne). Turin and

[74] In 2001 about 9,500 people participated in one of the tours (Volkskrant, 25-05-2002).

[75] Regional tourism organisations largely depend on financial support from the State: the number of bed nights is decisive for how much money they receive.

Rotterdam both see opportunities to develop industrial tourism but the policy attention is not as high as in Pays de la Loire. In both cities industrial tourism is not (yet) seen as a source of income but mainly as a tool of image management.

- One explanation for the difference between strategies is the ability of a region to attract other types of tourists. Cologne claims to be a traditional tourist destination with a broad tourism supply, while Turin and Rotterdam look for new segments. Interviewees in Pays de la Loire have also emphasized that the region is not the most touristic region of France[76].
- The actual share of company visits in tourism is difficult to measure because three of the four urban regions do not count industrial tourists. The experiences of Pays de la Loire demonstrate that substantial shares of about 10 per cent in visits to tourist attractions are feasible. The contribution of industrial tourism to bed nights remains unclear in all four urban regions; this applies, however, to most types of tourism[77].

All together the conclusion can be drawn that our observations support hypothesis H4.1 which states that the contribution of industrial tourism to the economy of an urban region depends on the number of visitors. Not only facts and figures but also expectations and perceptions about the size of the visitor flow explain decisions of regional bodies to support industrial tourism or to refrain from such policies.

9.2.2 The composition of the visitor flow

From an urban region's point of view the economic impact of industrial tourism not only depends on the number of people but also on the composition of the visitor flow. What are the preferences and policies of regional organisations with regard to this aspect?

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[76] Discussion partners have indicated that this factor plays a role. This conclusion should, however, not be generalised: urban regions that *are* successful in tourism may also want to diversify their supply, as in the case of Amsterdam.

[77] In general it is difficult to attribute bed nights to one specific type of tourism; for instance, people who visit a conference (their primary motive) may also visit a company.

To gain insight in the relevance of this factor we will take a closer look at the policies of regional organisations. If they target industrial tourists, what kind of visitors do they prefer? And what are the underlying motives for these preferences? We also review the actual visitor statistics on industrial tourism, if available: where do visitors come from, what is their age, and what are their motives to visit the region?

In **Cologne** the Tourist Board has no explicit policy on industrial tourism; no matter what kind of tourist, the Board aims to increase the length and spending volume per visitor. While the Tourist Board focuses on leisure tourists, the Chamber of Commerce mainly serves business travellers (individuals and groups). The Chamber's efforts – also with regard to the supply of company tours – depend on the added value an investor could potentially bring to the regional economy. Both the Chamber and the Tourist Board have identified trade fair visitors (approximately 2 million a year) as an important target group.

Visit Our Companies in **Pays de la Loire** has no strategic focus on particular visitor groups; members have to accept all visitors, whether they travel in groups or individually. The organisation does stimulate participating firms to provide tours in other languages, which indicates that international visitors are also desired. For regional tourism organisations Great Britain is as an important country of origin which also brings in industrial tourists. Holidaymakers from Great Britain but also Belgium and the Netherlands in the nearby beach resorts are the main customers for Escal'Atlantic (St Nazaire). Visitor statistics for Pays de la Loire demonstrate that the share of international visitors at industrial tourism attractions is twice the average for all sites[78]. Important customer groups are schools (53 per cent), tour operators (24 per cent) and clubs for the elderly (13 per cent) (Charuel, Leblanc & Brin, 2006). The event Made in Angers – a joint initiative of the Chamber of Commerce and local tourist offices – clearly targets inhabitants of the region with a preferential policy for students and pupils, which is in line with the ambition of the initiators to narrow the growing gap between business and the local population.

Before **Rotterdam**'s change of policy on industrial tourism the city's tourist office aimed to attract leisure tourists as well as professional visitors. This policy changed in 2003 when industrial tourism was outsourced to a private foundation (not subsidised) which only targets professional and educational visitors. Although

[78] For individuals 25 per cent of all visitors are foreigners, compared to the average of 12 per cent. For groups this share is 15 per cent compared to the average of 7 per cent (Charuel, Leblanc & Brin, 2006).

Rotterdam Marketing and the Chamber of Commerce have no explicit strategy on industrial tourism, they both seem to acknowledge the opportunities of industrial tourism: as a product for (leisure) tourists (Rotterdam Marketing) and technical visitors (the Chamber of Commerce).

The industrial tourism programme of **Turin** targets inhabitants of the region as well as leisure-oriented visitors from abroad. Citizens are expected to become better ambassadors for the city, though without a clear focus on 'multipliers'. The lack of focus is reflected in visitor statistics: with a share of more than 60 per cent, people aged 50 and above are well represented. With only 5 per cent of all visitors, the share of young people (under 25) is modest, also because children under 16 are not allowed to enter the sites. The minimum age also explains the relatively low share of the age group 26-50 as many of them are parents of children under 16. Regarding their place of origin most visitors come from the region (70 per cent); international visitors take a share of only 10 per cent. The programme appears to be quite successful among people who visit friends and relatives who live in the region. All tours have been deliberately planned on Friday in order to enable people who stay for a long weekend to visit sites in operation (ruling out Saturday and Sunday).

The findings in the four case studies result in the following conclusions regarding the composition of the visitor flow from the urban region's point of view:

- Although most regional bodies we interviewed find the composition of the visitor flow relevant for the contribution to the urban economy this does not imply that they actually develop policies to attract specific industrial tourists. In two of the four cases (Cologne and Rotterdam) the authorities have no explicit strategies to attract industrial tourists.
- In case regional organisations have developed a policy on industrial tourism they may have preferences with regard to the type of visitors, but they are often not in the position (as a public organisation) to exclude visitors or give preferential treatments. A good illustration is the Made in Torino tour which aims to attract 'new ambassadors for the city' but without any strategy to reach the most influential people.
- One of the characteristics of the visitor flow that is most relevant for urban regions is the place of origin. Most regional bodies would appreciate the arrival of industrial tourists from abroad, notably in view of their spending patterns (longer stays resulting in more bed nights).

The fact that Visit Our Companies (Pays de la Loire) stimulates its members to offer multilingual tours is just one example.

- Regional bodies are to some extent also interested in the age structure, particularly if they view industrial tourism as a tool to narrow the gap between business and society a relatively young audience is preferred. Pays de la Loire is clearly more proactive and successful in this respect than Turin.
- Chambers of Commerce and Industry are generally more interested in technical visitors than tourism organisations. Representing the interests of the private sector they look upon industrial tourism as a tool of stakeholder management, preferring to receive guests with a high (positive) influence on the local economy (e.g. investors, customers, suppliers, etc.).

The case studies make clear that the contribution of industrial tourism to the economy of an urban region indeed depends on the composition of the visitor flow, in conformance with hypothesis H4.2. Urban regions that recognise industrial tourism as a significant segment also have general preferences with regard to the type of visitors, notably with regard to the country of origin, their motives (business, leisure or knowledge) and age.

9.2.3 The spread in time

The third aspect of the visitor flow we identified is the spread in time. What are the preferences of regional organisations concerning the variation in visitor flow during the week and the year?

Again we analyse the policies and actions of regional organisations. Do they expect industrial tourists to put pressure on the carrying capacity of an urban region? Have they developed any policies to influence the spread in time? Do they prefer company visits on particular days of the week?

The regional bodies in the **Cologne** region do not expect industrial tourists to cause congestion. This explains why the city's Tourist Board is largely indifferent about when company visits take place. The only exception is the event Expedition Colonia which has been developed to attract visitors during the Easter period: one of

the two periods during the year in which demand for hotel beds is low[79]. For the junior edition of the event (expeditions for children, including some company tours) the initiators have selected weeks during official holidays. The Chamber of Commerce and Industry has no clear preferences with regard to the timing of company visits: they get requests all year long and for all days of the week including weekends.

Visit Our Companies in **Pays de la Loire** has high expectations of the demand for industrial tourism, but not to the extent that it would put pressure on the carrying capacity. The regional organisation compels its members to open doors for a longer period of the year (at least six months except for seasonal production). Moreover companies are advised to receive visitors at least three months between May and September, which makes clear that the regional bodies expect more demand for (industrial) tourism during the summer period. The fact that companies are stimulated to open doors at least four days of the week (or alternatively three days of the week and during the weekend) demonstrates that from a regional point of view a spread of industrial tourists is desired.

Although **Rotterdam** attracts a relatively large number of industrial tourists, regional organisations have not yet developed any policies on what groups to target and at what time of the year or the week. Currently many visitors are counted during only three days of the year: the World Port Days. Because people can visit firms on Friday, Saturday and Sunday families with children are attracted as well.

With a limited number of participants the direct impact of Made in Torino (**Turin**) is small, which implies that the pressure on tourism capacity is negligible. The tours all take place on Fridays in order to attract people who stay in Turin for the weekend and who want to see a site in operation. The tourism organisation prefers to have tours in the spring and the autumn, which is the high season as for most city destinations.

The findings in the four urban regions enable us to draw the following conclusions on the relevance of the visitors' spread in time from the viewpoint of the region.

[79] The other period comprehends the two weeks after New Year's Day. After the first successful edition it was decided to organise the event every year in April, though necessarily during Easter.

- For urban regions with excess visitor capacity (which applies to all four cases) the pressure of company visits on tourism infrastructure is insignificant. Consequently company visits are not expected to cause congestion, explaining some indifference towards the spread of visitors.
- Industrial tourism development can nevertheless be used as a strategy in response to existing variations in visitor flow, either to attract tourists during periods with low demand (as with Expedition Cologne) or to benefit from the influx of visitors during periods with high demand (as in Pays de la Loire and Turin). The first strategy (low season) results in less variation in hotel occupancy and the use of other tourist infrastructure which is desirable from a regional-economic point of view. The problem, however, is that industrial tourism is not always able to generate incoming tourism: in such cases the second strategy (high season) prevails.
- As a rule regional organisations are in favour of long 'opening hours', providing a supply of industrial tourism on as many days as possible. Only in one case (Pays de la Loire), however, these preferences have actually resulted in policies to promote longer opening hours.

These conclusions are in line with hypothesis H4.3 which says that the contribution of industrial tourism to the economy of an urban region depends on the spread of visitors in time. Although the regional organisations we interviewed do not expect visitor capacity problems, they recognise the importance of this factor. Some have also developed spread-related policies to optimise the contribution of industrial tourism to the region economy.

9.3 The fit between industrial tourism and the intended regional image

The involvement of regional organisations in industrial tourism not only depends on the characteristics of the visitor flow but also on the usefulness of industrial tourism as a tool to enhance the regional image. To assess this fit between industrial tourism and the regional image we have tried to gain insight in the image-related motives of regional bodies to use industrial tourism as a tool of promotion or

not to do so. Does industrial tourism development fit in the marketing strategies of the cities and regions we studied?

In the **Cologne** region we got two different answers to this question. On the one hand regional (tourism) organisations tend to avoid the term industrial tourism because of the association with manufacturing industry. They reason that factory visits do not harmonise with the slogan 'Cologne is a feeling': industrial tourism would be to sober to fit with this message. On the other hand company visits have been identified as tools to strengthen the city's image, particularly to confirm Cologne's reputation as media town, but also to highlight location advantages as in the case of the Rheinauhafen project.

Regional actors in **Pays de la Loire** have less problems with using the term 'industrial tourism'. In their view industrial tourism is one of the instruments to promote the region as an alternative for Paris, turning citizens and visitors into ambassadors. Also local authorities recognize the marketing value of company tours: St. Nazaire sees industrial tourism as a strategic element of a more comprehensive strategy to improve the image of the city, complementary to physical changes such as the waterfront redevelopment project. Angers uses the event Made in Angers to promote the city and its industries, though mostly among citizens.

Not only the City of **Rotterdam** but also neighbouring towns (e.g. Schiedam and Dordrecht) have discovered industrial tourism as a means to improve their reputation. They also use the term industrial tourism, being proud of what they have to offer. For Rotterdam, the aim of the city's involvement in industrial tourism (EIC, World Port Days, the Rotterdam Port Experience and until 2003 Industrieel Toerisme) is clearly to improve the relation between the port and the city which is also reflected in the current tagline "world port – world city". The ambition is to become a 'city with a port' rather than a port city, also highlighting other strong sectors such as the medical sector and the creative industries (architecture).

In the case of **Turin** local and regional authorities hold different views on the image fit of industrial tourism. Local organisations look at industrial tourism as an instrument to improve the image of Turin. It became an integrated element of a comprehensive strategy that used the Olympic Winter Games 2006 as catalyst for change. Company tours turn tourists into ambassadors, but also add to the pride of Turin citizens who tend to be somewhat modest about their own town. The aim is to demonstrate the region's excellence in various sectors: automotive, design, pens, aerospace, luxury products and food. Nearly all these sectors are recognised as 'key

sectors' by the Chamber of Commerce[80]. Local organisations clearly use industrial tourism to convey a more diverse picture of the region, making clear that Turin is more than Fiat. Regional organisations, however, are reluctant to promote industrial tourism as they prefer to avoid any association with industry. They prefer to put emphasis on other assets such as the mountains, the lakes and cultural amenities.

The observations in Cologne, Pays de la Loire, Rotterdam and Turin support the following conclusions with regard to the image fit of industrial tourism from the region's point of view:

- In all four urban regions representatives of regional organisations confirmed that company visits are adequate tools to improve the image of the place and its industries (co-branding). Some actors, however, prefer not to use the term industrial tourism because of the association with manufacturing industry (as we also discussed in chapter two).
- Many discussion partners representing the region expect that industrial tourism can be used to make both citizens and tourists more aware of their economic diversity but also to confirm existing images (such as media town Cologne, port city Rotterdam and Turin – home of Fiat).
- Pays de la Loire, Rotterdam and Turin have all adopted a more strategic approach to industrial tourism than Cologne; the three regions have explicitly mentioned company visits as an integral part of comprehensive strategies to enhance their image and competitive position[81].

According to hypothesis H5, the contribution of industrial tourism to the regional image depends on the fit between industrial tourism and the intended regional image. The findings in the four case studies as discussed above are in line with this hypothesis: a good image fit is a highly relevant factor that explains the degree of involvement of regional organisations in industrial tourism development.

[80] Only 'luxury products' is not recognised as a key sector.

[81] In Rotterdam the explicit policy attention for industrial tourism as a strategic tool of image management decreased considerably with the reorganisation of Rotterdam Marketing in 2003.

9.4 Determinants of industrial tourism potential

The previous sections have provided insight in the interests of urban regions in attracting particular types of industrial tourists to the benefit of the economy and the image of the region. This brings us to the third group of conditions: the determinants of industrial tourism potential. Below we will address the four factors we distinguished by reviewing their actual impact on the ability to attract industrial tourists, the motives of regional organisations to target specific visitor groups and public investments in the conditions.

Also on a regional level the number of industrial tourist is a good proxy for the ability to attract visitors. Regrettably such visitor statistics are only available for Pays de la Loire. This region appears successful in attracting industrial tourists also compared to other French regions. The other three regions have no comparable data. Therefore we not only take into account actual visitor numbers but also estimations and expectations.

9.4.1 The attractiveness of the firms

The urban regions are endowed with different economic structures, which relates to the first determinant: the attractiveness of the firms located in the region. To what extent is this a relevant issue in the four case studies?

If we analyse the economic structure of the **Cologne** region it becomes clear that two sectors are particularly attractive from an industrial tourism point of view: the media sector and the automotive industry. Other strong sectors with somewhat less direct appeal to consumers but interesting for technical visitors are the pharmaceutical industry, chemical industry and energy production.

In the **Pays de la Loire** region, the agricultural and food industries are well represented: consumer-oriented activities with industrial tourism potential. Other sectors on the membership list of Visit Our Companies are recycling and environmental industries, wood, paper, textile and leather and aerospace (see chapter seven). Most members supply products that appeal to consumers.

Rotterdam's number one industrial tourism product is the port: very attractive for a larger audience although several discussion partners also emphasize that most companies in the port are not consumer-oriented. The transhipment and storage of consumer goods (e.g. cars, fruit) is expected to have more industrial tourism potential than the transhipment and storage of non-consumer goods. Other sectors that have

been identified as potentially attractive for mostly technical visitors are the health sector and the creative industries (architecture and design in particular).

The **Turin** region has a diversified economic structure with several key industries (see chapter seven). Most sectors that participate in Made in Torino are consumer-oriented: automotive, design, pens, food and luxurious products. Particularly the food and beverages sector is popular among tourists – also through other channels – as we expected. The only business-to-business sector that has been selected is the aerospace industry which however does appeal to the general public. Turismo Torino and the Chamber of Commerce have the ambition to add a new sector to the programme every year. Looking at the list of key industries, the movie industry is the only consumer-oriented sector that does not participate yet. Other key industries such as life sciences and biotechnology have the potential to attract mainly technical visitors.

The case studies enable us to formulate two general conclusions on the relevance of the attractiveness of firms as determinant of industrial tourism potential:

- There is broad consensus among regional organisations that the attractiveness of the firms is a key determinant of the region's ability to attract industrial tourists. In most cases we observe a focus on consumer-oriented sectors such as food, media, design and automotive. This implies that regions with many firms in these sectors have an advantage over regions with few of these companies. In Rotterdam some regional actors consider the lack of consumer-oriented firms a reason not to promote industrial tourism development.
- Several business-to-business sectors have been identified as possible attractions for technical visitors. Regions tend to focus on the sectors in which they are specialised and sectors with growth potential (e.g. sustainable energy production). Several discussion partners in Rotterdam have high expectations of the region's ability to attract this type of industrial tourists, with the 'smart port' known all over the world as major attraction.

In conclusion: the findings support sub-hypothesis H6.1 which argues that a region's potential to attract industrial tourists strongly depends on the attractiveness of the firms it accommodates. Particularly relevant in this respect is the mix of

consumer-oriented firms and business-to-business firms. Another conclusion is that regional organisations take the attractiveness of the firms as a given fact, just like host firms do. Regional policies that potentially improve the attractiveness of the firms (e.g. stimulating start-ups, attracting inward investment) are not primarily driven by industrial tourism considerations. What regional organisations can do is making attractive firms (B2C and B2B) more aware of their attractiveness for visitors. In this way they may enhance the supply of industrial tourism, to be discussed in the next sub-section.

9.4.2 The supply of industrial tourism

The second determinant of industrial tourism potential is the supply of industrial tourism: the quantity and quality of company visits offered in a region. Can we find evidence in the four regions that demonstrates the relevance of this factor?

Regional organisations in **Cologne** have no explicit policies to stimulate firms to open their doors or to improve quality. Host firms do not have to comply with any requirements if they want to be included in the lists of the Chamber of Commerce and/or the tourism organisation. Although Expedition Colonia may stimulate firms to open their doors – also at other occasions – this is not the explicit aim of the initiators (the tourism organisation being one of them). The tours during this event are made attractive, however, for instance by asking VIPs (famous actors, politicians, etc.) to become tour guides.

A more proactive approach can be observed in **Pays de la Loire**. In this region Visit Our Companies stimulates attractive firms to open their doors, while the organisation supports improvements in the supply of company tours through quality control (participation in a national programme). In addition they organise workshops – often combined with a visit to one of the 'model' firms – which enable members to exchange ideas on how to make tours more attractive. In St Nazaire Escal'Atlantic has taken a leading role in enhancing the supply of company tours to Airbus, STX Europe and the port. With the assistance of this public organisation the companies can be visited more often, while professional guides have added to the quality. In Angers several initiatives have been taken by regional actors to improve the supply of company tours: the event Made in Angers, the university's bachelor's programme in economic discoveries and the joint hosting of an international conference on industrial tourism.

Also in **Rotterdam** we have observed several public initiatives to enhance the supply of industrial tourism, notably by making companies more aware of the benefits of industrial tourism. Already in the 1990s the foundation Industrieel Toerisme produced a brochure together with the Dutch Ministry of Economic Affairs on how to use company tours as PR tool. The World Port Days may also stimulate participants to open their doors more often, but this is not an explicit aim. The Rotterdam Port Experience (opened in 2008, closed in 2010) is the most recent addition to the region's supply of industrial tourism: a virtual experience that had the potential to become a portal for real company visits, according to one of our discussion partners.

In the case of **Turin** the initiators of the Made in Torino programme combine a proactive approach on the selection of sectors (as we discussed in the previous sub-section) with a relatively defensive approach in their attempts to stimulate firms to open their doors for visitors. It is not an explicit aim of the programme to make companies aware of their interest in industrial tourism. Turismo Torino does not advise companies on how to improve the quality of their tours: they only deliver professional guides.

Taking this all together we arrive at the following conclusions on the supply of company tours as a determinant of a region's industrial tourism potential:

- We have observed different approaches to the supply of company tours in the four urban regions we analysed. Pays de la Loire has the most proactive policy which may also explain the achievements of this region in the field of industrial tourism. Quality control seems to have become an instrument that not only helps to secure the quality of tours but also to enhance the quantity: an increasing number of companies want to be 'accredited' as host firms.
- Comparable with Pays de la Loire, Rotterdam wants to make companies more aware of their interest in industrial tourism. This can be done by a brochure, but probably more interactive means of communication are more effective: workshops, conferences, courses, etc. Cologne and Turin have adopted a more defensive approach making few efforts to enhance the supply of (potential) host firms.
- The impact of open door events and public visitor centres such as the Rotterdam Port Experience on regular company visits has remained unclear. On the one hand it can be argued that such events and facilities stimulate companies to open their doors (more often). On the

other hand they may also be perceived as replacements for regular company visits.

Our empirical study has made clear that the supply of company tours is indeed an important factor for a region's ability to attract industrial tourists (sub-hypothesis H6.2). Regions that want to attract industrial tourists are looking for ways to enhance the supply of company tours, either by investing themselves (public investments) or by stimulating the private sector to take action.

9.4.3 The quality of the location and visitor facilities

Apart from the attractiveness of the firms and the supply of company tours two supporting conditions for industrial tourism potential have been identified. The first supporting factor concerns the quality of the locations where company tours are supplied – the immediate environment but also the position of the region in (inter)national networks – and the access to visitor facilities in particular.

In the case of **Cologne** companies that open their doors are situated at different locations in the region with relatively good access from the city. Public transport is well organised. Furthermore Cologne has the advantage of being well connected to the outside world with a high-speed train station and international airports at short distance. There are no industrial tourism policies to improve the quality of locations apart from the redevelopment project Rheinauhafen which is an attraction in its own right. Regional organisations do not develop visitor facilities that are specifically meant for industrial tourists. Companies are also not stimulated to invest in visitor facilities. The Chamber of Commerce and the tourism organisation may see the relevance of visitor facilities, but they do not define industrial tourism development as a strategic aim.

In **Pays de la Loire** members of Visit Our Companies can be found in all five departments, though with a clear concentration around Nantes, St Nazaire and Angers. Many firms are located in the countryside and can only be reached by private transport. The ability to attract international (industrial) tourists will be further enhanced with the construction of a new airport. Visit Our Companies has identified the quality of the location as an important condition to attract visitors: they stimulate firms to improve the quality of their immediate environment. Escal'Atlantic expects to receive more (industrial) tourists after the completion of the waterside redevelopment project Ville Port. Visit Our Companies attaches much value to visitor

facilities. Members are required to arrange sufficient parking space for visitors, while other facilities such as a reception, a room for presentations and toilets are recommended. The organisation stimulates exchange of ideas to upgrade facilities. In St Nazaire, the public organisation Escal'Atlantic plays a key role with investments in visitor facilities on the site such as a footbridge, information signs and indicated routes for coaches (outside) and visitors on foot (inside the production halls). Such facilities not only serve the interests of visitors but also of the host firms: they ensure the safety of visitors and help to avoid production delays.

In the case of **Rotterdam** the port and water infrastructure play an important role in the development of industrial tourism. The size of the port may be a source of attraction but also acts as barrier for company visits. Congested roads result in long and uncertain travel times, which is problematic for the coaches of Industrieel Toerisme (and EIC). Water transport could definitely add to the experience but is considered too slow. More expensive 'fast ferries' may be the solution although apart from costs also safety issues complicate the use of this mode of transport for industrial tourism in the western part of the port. The external accessibility of Rotterdam, however, is excellent and has been improved with the connection to the high-speed train network which has reduced travel time to the international airport of Schiphol. Many regional stakeholders have high expectations of the redevelopment of Stadshavens, which could make the city more attractive but also generates opportunities for industrial tourism. The lack of visitor facilities has been recognised by several discussion partners as a barrier in the development of industrial tourism. Particularly in the remote parts of the port (Maasvlakte, Europoort), the supply of facilities is poor. The foundation Industrieel Toerisme has adopted a pragmatic approach with regard to visitor facilities, making use of existing facilities on the sites (toilets, canteen) and nearby[82].

In the region of **Turin** public transport infrastructure is relatively weak which complicates travel for all tourists. Accessibility is an important condition for industrial tourism: the organisers of Made in Torino only cooperate with firms that can be reached within a one hour drive from the city. They argue that a visit including travel time should not take longer than one morning or afternoon. The external accessibility is sufficient and will be improved with the high-speed train connection to the international airport of Milan. The policy of Made in Torino with regard to visitor

[82] For example Hotel De Beer located in the port area.

facilities is comparable to the approach of Industrieel Toerisme (Rotterdam). They provide transport from the city to the site and the only thing they need is entrance to the site and a parking place for the coach.

This leads us to the following conclusion with respect to visitor facilities:

- Only in one of the four regions (Pays de la Loire) regional actors try to convince companies to invest in their immediate environment. Other regions find the quality of the immediate environment relevant for industrial tourism but develop no specific policies to improve the quality of the environment.
- Many discussion partners representing regional organisations indicate that accessibility is an important factor in the development of industrial tourism. This particularly applies to regions in which host firms are located at long distance of other tourist infrastructure (e.g. Rotterdam), and to regions with general infrastructure problems (Rotterdam, Turin).
- Redevelopment projects such as Ville Port (St Nazaire), Rheinauhafen (Cologne) and Stadshavens (Rotterdam) help to improve the attractiveness of the city but also attract industrial tourists that are interested in the development project itself and/or companies located in the area or nearby.
- Regions with the ambition to develop industrial tourism recognise the relevance of visitor facilities for industrial tourists. However, they anticipate the need for these facilities in different ways. While actors in Cologne, Rotterdam, and Turin hardly do anything to improve the situation (apart from supplying transport), Pays de la Loire has clearly invested in visitor facilities: directly and indirectly by stimulating the private sector to take action.

The observations listed above are in line with sub-hypothesis H6.3 which states that a region's potential to attract industrial tourists is supported by the quality of the locations and the visitor facilities. Improvements in the location and accessibility would definitely enhance the ability to attract industrial tourists. A good supply of visitor facilities makes an urban region more appealing as destination for industrial tourists. In practice, however, most improvements are not driven by the ambition to develop industrial tourism but by other ambitions: to develop the region

or parts of it. Visitor facilities are particularly relevant if attractive host firms are located at long distance of other tourist infrastructure.

9.4.4 The promotion of industrial tourism

A region's ability to attract industrial tourists can also be improved by means of promotional activities. Do the regional organisations actively promote company visits or is information difficult to find?

In **Cologne** the city's aim to promote itself as media capital of Germany has resulted in much attention to studio tours on the homepage of the Tourist Board – linking to a list of TV and film productions 'made in Cologne'. In the section 'guided visits' only the tour to Rheinauhafen (HGK) can be found. Visitors of the website are not redirected to the list of company tours. This list is included in a Sales Guide which has been composed by a publisher (Messe Treff Verlag) in cooperation with the Tourist Board and several other regional organisations[83]. It is the task of the publisher to keep the list up to date. The guide is online accessible via the website Welcome to Cologne which includes one page of information about company visits, in the German language only. This all makes clear that the regional promotion of industrial tourism in Cologne is limited, with the studio tours and the Rheinauhafen tour as exceptions.

In chapter seven we already explained that Visit Our Companies in **Pays de la Loire** uses various means of communication to promote company tours: an annual guide, press meetings, special tours for tour operators and travel agencies and free publicity. The organisation's website – in French only – provides a comprehensive overview of all tours supplied by its members. Tourists can easily find company tours via several multilingual regional and local tourism websites. In customer-friendly databases of tourist attractions 'visits to local business, crafts and local products' have been labelled as one of the categories. The promotional activities are in line with the region's ambitions in the field of industrial tourism.

The promotion of industrial tourism in **Rotterdam** is fragmented. Several organisations (e.g. Industrieel Toerisme, EIC and Rotterdam Marketing) inform industrial tourists about the possibilities, but there is no database or list of company tours. Rotterdam Marketing refers to various industrial tourism products (e.g. Futureland, Rotterdam Port Experience, the tours of Industrieel Toerisme), though

[83] Köln Bonn Airport, the Cologne Trade Fair (Messe), Regionale 2010, the City of Leverkusen, Naturarena Bergisches Land, Rhein-Erft-Kreis, Rhein-Kreis-Neuss and the Region Bonn/Rhein-Sieg/Ahrweiler.

without highlighting the region's total supply. The website of the foundation Industrieel Toerisme is easily findable and presents information in four languages, but does not provide a complete overview of company visits either.

In the case of **Turin** information about industrial tourism is provided by the website of Turismo Torino (in Italian, English and French). This website, however, only gives information about the tours organised by Made in Torino. Another weakness is the findability of this information. The initiators clearly invest more time in getting free publicity to promote the programme itself than in actually selling the tours. Given the excess demand and the limited capacity there is no need to promote the tours more actively.

The findings in the four case studies regarding the regional promotion of industrial tourism eventuate in the following conclusions:

- While all four urban regions provide information about company tours on tourism websites we have observed different approaches to the promotion of industrial tourism. Pays de la Loire is more active than the other urban regions expecting industrial tourism to be(come) a source of income and employment.
- In Rotterdam, Turin and Cologne the findability of information on company visits is weak. Most websites only present a selection of industrial tourism products without giving a complete overview; with the exception of the two lists that circulate in Cologne. These lists are, however, not easily findable.
- In Turin and Pays de la Loire we have seen that promotional activities not only target visitors but also other stakeholders such as travel agencies, tour operators and the media. The empirical study shows that (free) publicity for industrial tourism programmes is expected to improve the image of the region, even if the actual number of visitors is low (as in Turin).

These conclusions are in line with sub-hypothesis H6.4 which states that an urban region's potential to attract industrial tourists is supported by the promotion of industrial tourism. If urban regions look at industrial tourism as a source of income, investments in promotion are seen as a relatively inexpensive way of improving the

ability to attract visitors. Obviously promotion only makes sense if there is sufficient supply to meet the demand for company visits.

9.5 Conclusions

The four case studies have provided supporting evidence for the hypotheses we formulated with regard to the conditions under which regions benefit from industrial tourism development. We have illustrated the relevance of the fourth, fifth and sixth hypothesis – including sub-hypotheses – with various data from the four urban regions. We have demonstrated that characteristics of the visitor flow, the image fit of industrial tourism and the industrial tourism potential influence the policies of regional organisations. Our comparative analysis has also made clear that some regions are in a more favourable position to benefit from industrial tourism development than other regions. Context factors – such as the inherited economic structure and the presence of other tourist attractions – often explain the region's view on industrial tourism.

Similar to the conditions for host firms as discussed in chapter eight the conditions for regional bodies are interrelated. For instance promotional activities (H6.5) depend on the degree to which industrial tourism fit in the regional image (H5) and the desired composition of the visitor groups (H4.2). Also for regional organisations we found that some regard company visits mainly as a source of income while others see industrial tourism mainly as a tool of public relations, with consequences for their preferences and policies regarding many other aspects of the model.

The analysis of regional conditions has the two same limitations as the analysis of conditions for firms. First, we cannot rule out the existence of other relevant conditions. Second, we have not measured the actual impact of determinants on the industrial tourism potential of a region; we focused on perceptions, preferences and policies rather than on impacts and outcomes.

Chapter 10

A common agenda enabling coordinated action

10.1 Introduction

In the two previous chapters we empirically tested the validity of the conditions under which host firms (chapter eight) and urban regions (chapter nine) expect to benefit from industrial tourism development. The present chapter combines both perspectives testing the conditions under which both host firms and urban regions can take advantage of a common agenda that enables coordinated action in the development of industrial tourism. Our goal is to test the empirical applicability of the seventh hypothesis (H7).

In our theoretical framework we assumed that coordinated action in industrial tourism development can create added value that benefits both the companies that open their doors and the regions in which they are located. Coordinated action requires a common agenda that not only sets priorities and objectives but also specifies the division of roles and tasks between the various actors.

In the present chapter we analyse the possibilities to develop a common agenda on industrial tourism development by comparing the conditions for host firms (as discussed in chapter eight) with the conditions for urban regions (as discussed in chapter nine). In this way we will be able to see if the interests of host firms and urban regions are compatible or conflictive – and what the implications are for the

development of a common agenda on industrial tourism development. Our analysis is structured along the three conditions that are relevant for both sides: the characteristics of the visitor flow, the fit between industrial tourism and intended images and determinants of the industrial tourism potential.

10.2 Characteristics of the visitor flow

Is it possible for regional organisations and host firms to reach agreement on the desired characteristics of the visitor flow? The empirical study demonstrates that host firms and regional organisations tend to have different – potentially conflictive – views on all three aspects of the visitor flow: number, composition and spread.

10.2.1 The number of visitors

For regional bodies the number of industrial tourists is often a critical factor in view of their expenses at hotels, restaurants, shops, etc. If the share of industrial tourists in tourism statistics is low, this is for regions either a reason not to focus on this segment (e.g. Cologne and Piedmont region) or to aim for higher visitor numbers, assuming excess capacity (e.g. Pays de la Loire).

Table 10.1: Comparing conditions for the number of visitors

Host firms	*Urban regions*
▪ In general reluctant to receive large numbers of visitors	▪ Attach much value to high visitor numbers
▪ More willingness to open doors for a larger audience among (pro)active firms…	▪ Attention to industrial tourism depends on share of company visits in regional tourism industry…
▪ …and companies that can use industrial tourism as a source of income	▪ …and hence, on the ability to attract other types of tourists
▪ Capacity is restricted resulting in attention for composition and spread	▪ Actual share of company visits in tourism is difficult to measure
▪ Visitor centres, open door events and outsourcing organisation: strategies to increase visitor numbers without causing conflicts with primary process	

On the contrary, host firms are dealing with limited capacities to adsorb visitors. They either tend to be reactive (and restrictive, paying attention to the

composition) or they are looking for ways to increase visitor numbers without causing conflicts with the primary process. Visitor centres (e.g. the Rotterdam Port Experience) and open door events such as Made in Angers, the World Port Days, Made in Torino and Expedition Colonia present options to meet the preferences of both regions and companies with regard to visitor numbers. Hence, although host firms and urban regions have different preferences (conflictive interests), there are some possibilities to satisfy both sides.

10.2.2 Composition

Comparing the views and policies of regions and firms on the composition of the visitor flow the conclusion must be that this aspect is much more relevant to host firms. They tend to be more selective with stakeholder management as guiding principle, explaining closed doors for leisure tourists at non-consumer oriented firms. Also the scale on which companies operate is reflected in preferential policies. Regional organisations are in general less choosy, with the exception that they seem to prefer travellers from abroad which sometimes conflicts with the preferences of host firms.

Table 10.2: Comparing conditions for the composition of the visitor flow

Host firms	*Urban regions*
▪ Prefer visitors with a large influence on the performance of the firm: visitors with business and educational motives ▪ Consumer-oriented firms are more willing to receive visitors with leisure motives ▪ Favour particular stakeholders in various ways (e.g. price and quality differentiation) ▪ Pro-active firms recognise importance of multipliers and ambassadors ▪ Scale of operations determines preferences regarding place of origin	▪ Consider the composition of the visitor flow relevant, but not necessarily resulting in actual policies ▪ Not in the position to exclude visitors or to give preferential treatments ▪ Most relevant is the place of origin: visitors from abroad (who stay longer) are preferred ▪ Prefer a young audience if industrial tourism is considered a tool of business society management ▪ Chambers of commerce are more interested in specific technical visitors than tourism organisations

Compatible interests manifest themselves if both companies and regional organisations consider industrial tourism as a tool of managing the relation between business and society, often resulting in a focus on relatively young inhabitants of the region. Good examples are the open door events in Rotterdam, Angers and Cologne. Another potential element of a common agenda – identified by the Chambers of Commerce and Industry in Rotterdam and Cologne – is a joint focus on technical visitors, with business opportunities for individual firms that benefit the regional economy as well regions with a large share of consumer-oriented firms such as Pays de la Loire may find it easier to reach public-private consensus on attracting leisure-oriented visitors.

10.2.3 The spread in time

Also the spread of industrial tourists in time is much more an issue for host firms than it is for regions. Regions without visitor capacity problems – which applies to regions that are not typical tourist destinations such as Rotterdam, Turin and Pays de la Loire – can use industrial tourism to attract tourists during low season (as we expected), but also to attract more tourists during high season.

Table 10.3: Comparing conditions for the spread in time

Host firms	*Urban regions*
▪ Reactive companies prefer visits on workdays by staff and registration in advance; no minimum group size	▪ Pressure of company visits on tourism infrastructure is insignificant in urban regions with excess capacity…
▪ Reactive companies are interested in open door events	▪ …explaining some indifference towards the spread of visitors
▪ Proactive firms want to make optimum use of capacity, using minimum and maximum group sizes and registration in advance	▪ Industrial tourists can be attracted during low season resulting in less variation in hotel occupancy and the use of other tourist infrastructure…
▪ Proactive firms use professional guides enabling them to open doors when the site is not operational	▪ …or during high season taking advantage of existing influx of visitors
▪ Companies that operate visitor centres prefer an equal distribution of visitors	▪ Prefer long opening hours, but not always translated into actual policies

The case studies show that although regional organisations prefer long 'opening hours' this not always results in actual policies to that end (e.g. incentives to open doors more often, as in the case of Visit Our Companies in Pays de la Loire). Host firms find the spread of visitors more relevant. We found that their preferences depend on how they organise company tours which is closely related to what they expect from industrial tourism (their strategies). Are the tours given by employees or professional guides? Do they operate visitor centres? Most relevant is the cost structure: if tours incur fixed costs companies prefer equal spread; if tours incur step costs they attach importance to an optimum use of capacity (some spread, some concentration); if there are only internal costs they aim for short 'opening hours'. In general we can conclude that it becomes easier to develop a common agenda that targets an equal spread of visitors the more companies (are willing to) invest in industrial tourism. Without private investments it is more likely that regional bodies and host firms find each other in the joint organisation of open door events, which implies a concentration of visitors in a week or month that suits both parties.

10.3 The fit between industrial tourism and intended images

The second condition that applies to both firms and the regions in which they are located is the adequacy of industrial tourism as a tool of image management. The question to be answered now is if host firms and regional organisations can reach consensus on this aspect. The empirical study demonstrates that the interests of both sides are often compatible thus presenting opportunities for the development of a common agenda that enables coordinated action.

The case studies reveal that host firms and regions are primarily concerned about their own image. Many firms consider company visits as a tool of public relations, while urban regions see industrial tourism as an integrated element of their place marketing and economic development strategies. What binds the two together, however, is the common interest in a good image of a region's industries. From our analysis of public and private interests we can draw the conclusion that it must be feasible to reach agreement on common agendas that promote a better relation between businesses and society (a good example is Made in Angers) as well as agendas that demonstrate the excellence or innovativeness of economic activities in the region (for instance Made in Torino).

Table 10.4: Comparing the conditions for the image fit

Host firms	*Urban regions*
▪ Nearly all consider company tours beneficial for the corporate image: also as an instrument of PR and CSR	▪ Company visits are seen as adequate tools to improve the image of places and industries (co-branding)
▪ Some firms use industrial tourism to communicate their relation with the region as a form of co-branding	▪ In some cases the term industrial tourism is avoided because of the association with manufacturing industry
▪ Industrial tourism is less relevant as image builder for companies that use site visits to earn an additional income	▪ Industrial tourism can be used to communicate economic diversity and confirm existing messages
▪ Industrial tourism is particularly relevant as marketing and PR tool for companies that get often criticised…	▪ Proactive regions integrate industrial tourism in their economic development and marketing policies
▪ …and firms that have limited access to other marketing and PR tools	

Our study confirms that there is some resistance among regional organisations (notably in Turin and Cologne) to connect industry with tourism in place marketing, particularly if leisure tourists are targeted. Also various companies we interviewed do not use the term industrial tourism but rather the more neutral term 'company visits' or technical visits. In several cases public and private actors appear to be supportive of joint initiatives in which the term industrial tourism is not pushed forward (e.g. Made in Torino, Visit Our Companies, Made in Angers, Expedition Colonia). In other words: we have identified possibilities to harmonise public and private interests on this issue. The resistance of regions against industrial tourism is however not only a matter of terminology: they are also less enthusiastic about opening the doors of companies that do not fit in the desired image of the region. Regional bodies that aim to take away the association of the region with the 'traditional' manufacturing industry tend to prefer the development of company visits in other sectors such as agriculture, handicraft, the creative industries, services and real estate development.

10.4 Determinants of industrial tourism potential

The third group of conditions have been labelled as determinants of the industrial tourism potential. We have assumed that the industrial tourism potential of

an urban region has a two-way relation with the industrial tourism potential of an individual host firm. To gain insight in the conditions under which a common agenda can be developed we take a closer look at differences and similarities in how both types of actors assess the relevance of the four determinants and how they see their own role and the role of others in improving the determinants: the attractiveness of the firm(s), the supply of company tours, the quality of the location and visitor facilities and promotion. As we indicated in our research framework the relevance of these determinants strongly depend on the preferences regarding the characteristics of the visitor flow and the usefulness of industrial tourism as a tool of image management.

10.4.1 The attractiveness of the firm(s)

The empirical study demonstrates that host firms and regional organisations agree that the attractiveness of the firm(s) is a key determinant of the industrial tourism potential of a single company and the region. They both expect consumer-oriented firms to have more appeal to tourists with leisure as prime motive to visit a company. This applies to companies that produce consumer goods but also to firms that produce products that can be recognised as a component of a consumer good. Producers with strong brands are assumed to be in a better position. Companies that do not meet these criteria have the potential to attract mainly visitors with a business or knowledge motive. For this type of visitors other sources of attraction are more relevant: companies with an innovative production process or management process have a relatively high potential.

The attractiveness of companies is a critical factor that is difficult to change on the short run: a given fact. Neither host firms nor regional organisations see opportunities to influence this condition, although regional organisations could make companies more aware of their attractiveness. Because they tend to share a common vision on this aspect we expect no difficulties in reaching consensus.

Table 10.5: Comparing conditions on the attractiveness of the firm(s)

Host firms	*Urban regions*
▪ Attractiveness of the firm is an important determinant of the ability to attract visitors ▪ Companies that produce goods that appeal to consumers directly have an advantage… ▪ …while the appeal of other firms depends on the recognisability of their inputs in consumer products ▪ Innovative production and management processes are important assets to attract technical visitors ▪ For leisure-oriented visitors, well-known brands are important sources of attraction	▪ Attractiveness of the firms is a key determinant of the ability to attract visitors ▪ A clear focus on consumer-oriented sectors such as food, media, design and automotive ▪ In addition regions tend to focus on B2B sectors in which they are specialised and/or expect growth

10.4.2 The supply of industrial tourism

Both firms and regional organisations acknowledge the relevance of a good supply of company tours as a determinant for the ability to attract industrial tourists. The willingness of host firms to actually invest in company tours – for instance by hiring professional guides or investing in a visitor centre – highly depends on what they expect from industrial tourism (the strategic value). For regional organisations support of the private sector is often needed to improve the supply of company tours. Regional bodies can try to influence the decisions of firms by making them aware of the benefits of industrial tourism – for instance by organising open door events – and quality control as we observed in the cases of Rotterdam and Pays de la Loire.

Furthermore we have seen that companies with public ownership (such as the ports of Rotterdam and Nantes-St Nazaire) can become ambassadors for industrial tourism. Analysing the interests of public and private actors we observe converging interests in a good supply of company tours on the condition that both sides recognise the strategic value (as a source of income and/or PR tool). It is a determinant of industrial tourism potential that can be changed on a relatively short notice through relatively small investments from host firms and regional organisations. The joint

development of a visitor centre (such as the Rotterdam Port Experience) or the outsourcing of company visits for particular groups requires more mutual trust and long-term commitment, and often more investments from both sides. A good example of a strategic partnership is the cooperation between the regional tourism organisation Escal'Atlantic and three companies in St Nazaire.

Table 10.6: Comparing conditions for the supply of industrial tourism

Host firms	*Urban regions*
▪ Majority is willing to make – mostly relatively small – investments in industrial tourism supply ▪ Investments can be legitimised if they also benefit employees ▪ Visitor centres improve the supply of industrial tourism in terms of quantity, but not always in terms of quality ▪ Companies with more than 10,000 visitors a year use professionally trained guides, needed to care of such large numbers ▪ Employees or retired workers can add value to the quality of the industrial tourism supply	▪ Proactive regions develop policies to secure quality of the supply and to enhance the quantity ▪ Regions also use brochures and more interactive means (workshops, conferences, courses) to stimulate companies to take action ▪ Impact of open door events and public visitor centres on company visits remains unclear: complements or substitutes?

10.4.3 The quality of the location(s) and visitor facilities

Regional organisations and host firms agree that the quality of the location(s) and visitor facilities is an important determinant of the ability to attract industrial tourists. However, they also tend to take the quality of the location as a given fact: in most cases they reason that the benefits of industrial tourism are too small to justify relatively large investments in the quality of the location. Nevertheless the study makes clear that the quality of the location(s) could be part of a common agenda on a higher strategic level: such an agenda could for instance address the (re)development of an area and/or the internal accessibility of a region. Industrial tourism is not often the 'driver of change' but it can play a role in improvements in the attractiveness and accessibility of urban areas. For instance, industrial tourism could provide additional

motives for the Rotterdam region to further develop its public transport by water system. With regard to the supply of visitor facilities most firms and regional organisations have adopted a pragmatic approach. Facilities for industrial tourists are often combined with facilities for other users taking away the need for large investments while meeting basic quality requirements. Also the quality standards formulated by Visit Our Companies in Pays de la Loire can be met without large investments. Visitor centres for industrial tourists are only developed if the expected benefits outweigh the costs. A common agenda that concerns the development of a visitor centre is feasible if actors prefer and expect a substantial number of visitors that generate sufficient benefits.

Table 10.7: Comparing conditions for the quality of location(s) and visitor facilities

Host firms	*Urban regions*
▪ The quality of the location adds to the ability to attract visitors (e.g. proximity of city or beach and heritage) ▪ Location is considered a given fact: industrial tourism does not change location decisions… ▪ …except in case of a visitor centre for which a location can be selected at some distance of the operational site ▪ About half of the firms is willing to invest in visitor facilities, particularly in case of visitor centres that attract many visitors ▪ In case of few visitors, facilities may be shared by employees and visitors	▪ Proactive regions develop policies to secure quality of the supply and to enhance the quantity ▪ Accreditation and quality control may work as incentives for companies to open doors ▪ Regions also use brochures and more interactive means (workshops, conferences, courses) to stimulate companies to take action ▪ Impact of open door events and public visitor centres on company visits remains unclear: complements or substitutes?

10.4.4 Promotion

The case studies show that promotional activities can help to attract more industrial tourists to a region and its industries. However, we also observed that companies are visited if the information about tours is difficult to find. Apparently the demand for company tours is so strong that people find their way to the firms even

without active promotion. This particularly applies to attractive firms with a good location. An important conclusion – that in fact applies to both host firms and regional actors – is that promotional activities not only reach visitors but also other groups. Industrial tourism programmes often generate free publicity that may help to improve the image of a region and its industries as we observed in Turin. It is relatively easy to reach consensus on promotion if actors want to attract as many visitors as possible. In other cases a common agenda on promotion requires agreement on what groups to target and compatible interests in image change.

Table 10.8: Comparing the conditions for the promotion of industrial tourism

Host firms	*Urban regions*
▪ Companies with reactive and selective approach often do not promote their industrial tourism offer ▪ Firms with a selective approach prefer to approach targeted visitors directly rather than informing the general public ▪ Findability of information on industrial tourism supply is poor and information is limited ▪ Firms that operate visitor centres promote their supply more actively, possibly in cooperation with other actors in the tourism industry ▪ Very attractive firms that use their visitor capacity to the full do not need to promote their supply	▪ Regions provide information about industrial tourism on their websites ▪ The findability of information on company visits is often weak ▪ Promotional activities may also target non-visitors such as travel agencies, tour operators and the media

10.5 Conclusions

Although the interests and preferences of host firms and regional organisations are fundamentally different our study has shown that a common agenda can be developed by identifying compatible interests of public and private stakeholders. Such an agenda facilitates coordinated action to the benefit of all. Hence, the observations are in line with hypothesis H7 which has been formulated as follows: the benefits of industrial tourism for both an urban region and the host firms depend on the

development of a common agenda enabling coordinated action. In such a common agenda public and private stakeholders could agree, to some extent, on the characteristics of the visitor flow and the use of company tours to improve the image of the region and its industries. Moreover they may reach agreement on priorities and a division of tasks and responsibilities in order to enhance the ability to attract the industrial tourists that generate benefits for both sides. Ideally such an industrial tourism agenda fits with a common agenda on a higher strategic level that formulates priorities and ambitions for the development of the region.

The analysis above has two limitations we would like to mention. First, it is focused on the compatibility of interests and preferences without questioning the added value of having a common agenda that enables coordination and cooperation. We have assumed that coordination generates synergies to the benefit of all, outweighing the costs of coordination. Second, we have not paid specific attention to organisational issues such as leadership, trust and the tradition to cooperate in the development of industrial tourism coalitions. Obviously these organisational factors do play a role in the development of a common agenda, but they are more difficult to make objective, in contrast with the factors we have addressed.

Chapter 11

Synthesis and conclusions

11.1 Introduction

In this final chapter we present the synthesis and conclusions of our study on industrial tourism development in urban regions. This research had two objectives: to make a contribution to the theoretical conceptualisation of industrial tourism and to gain insight in the conditions under which public and private actors are willing to invest in industrial tourism development, in both theory and practice. By analysing costs and benefits of company visits on the level of individual firms and the aggregated level of urban regions, we have been able to identify conflictive and complementary interests in industrial tourism development.

The present chapter is structured along the research questions we formulated in chapter one. First we define industrial tourism and analyse the changing conditions in urban regions as far as they explain the development of industrial tourism. Second, we synthesise our research framework presenting the seven hypotheses that are based on our assessment of costs and benefits from the host firm's point of view and the region's point of view. Third we summarise the main findings from our empirical study, discussing the conditions for host firms and urban regions as well as the feasibility of a common agenda on industrial tourism development. In the final section we draw conclusions and discuss implications for researchers and practitioners who are interested in industrial tourism.

11.2 Industrial tourism development in urban regions

11.2.1 What is industrial tourism? Who are the suppliers and customers of industrial tourism?

Our analysis of various views on industrial tourism in chapter two results in the conclusion that industrial tourism is indeed 'a not very well defined concept'. Some use the term industrial tourism for something different (a more commercial approach to tourism), while others use different terms for similar or related phenomena: company visits, industrial sightseeing, technical visits, plant tours, etc. Scholars, but also practitioners, who do use the term industrial tourism seem to disagree on its definition. More in particular they provide different answers to three questions: 1) what are industrial tourists? 2) what is meant with industry?; and 3) what sites are industrial tourism attractions? In other words: who are the suppliers and customers of industrial tourism? We have suggested the following definition of industrial tourism:

> *Industrial tourism involves visits to sites that enable visitors to learn about economic activities in the past, the present and the future.*

This definition makes clear that industrial tourism is a somewhat confusing term because it does not only involve visits by tourists (also visits by inhabitants of the region and excursionists are included) and because also non-manufacturing industries can supply industrial tourism. Industrial tourists differ from other types of visitors (e.g. business travellers, regular customers) because they want to learn about economic activities. Furthermore our definition emphasises that the industrial tourism supply of a region comprehends a broad range of sites: from industrial heritage and company museums to visits to operational firms and brand parks.

In view of our main research question, we have focused our attention on the market side of industrial tourism, analysing the development of industrial tourism sites that inform visitors about *operational* firms. These types of industrial tourism require the involvement of active firms. From the literature review we conclude that companies may use different approaches to industrial tourism, ranging from inactive (keeping doors closed) and reactive (limited admittance, motivated by need for good citizenship) to more proactive and strategic approaches (industrial tourism as a source

of income and communication tool). An important characteristic of a proactive approach is that the host firm is willing to invest in modifications of the site and professional guides.

11.2.2 What fundamental developments influence the demand for, and supply of industrial tourism in urban regions?

Van den Berg's urban life cycle theory has been used to analyse the impact of changing conditions in the global environment on the behaviour of citizens, companies, governments and other city users. Through a comprehensive review of the literature on urban and regional development in chapter three we have been able to identify the trends we consider most relevant for industrial tourism development in urban regions: globalisation and the structural change of the economy, the shift to an information and knowledge economy, increasing concern about the environment and climate change, growing attention to corporate citizenship, the transition to an experience economy and increasing attention to safety and security. These trends influence the market for industrial tourism (supply and demand) directly and indirectly via the implications for urban management: sustainable urban development as a leading paradigm for actors in the urban system, the increasing need for cooperation between stakeholders; and the increasing attention to city marketing.

We conclude that many of the trends are potential drivers of industrial tourism development in cities. They explain why company visits are expected to become a tool of marketing, public relations and stakeholder management for firms, and a tool of local economic development and marketing for urban regions. For both regions and firms, industrial tourism has the potential to become a crowd puller, in view of the transition to an experience economy. At the same time, however, we also observe fundamental developments that present barriers for industrial tourism. Industrial tourism development may strengthen the relation between business and society but also requires public-private cooperation: it is an organisational challenge. Moreover, the increasing attention to safety and security is a serious practical problem for regions and firms with the ambition to open doors for visitors.

Our analysis of the external environment demonstrates that several developments create opportunities for industrial tourism – with potential benefits for host firms and regions – while other developments complicate its development – for instance by raising the costs associated with safety and security measures.

11.3 Conditions for host firms and regional organisations

11.3.1 Under what conditions are host firms willing to invest in industrial tourism?

In our micro-economic analysis of the conditions under which host firms are willing to invest in industrial tourism we have identified various categories of costs and benefits in chapter four. Particularly important is the distinction between fixed costs, variable costs and step costs. Benefits can be expected from ticket sales and on-site sales, but also from improved stakeholder relations. Furthermore we have discussed how company visits may affect the productivity of employees that are involved in the organisation of industrial tourism as well as the productivity of other employees. Presumably companies only invest in company visits if the expected benefits outweigh the costs. Stakeholder and involvement theories teach us that the willingness of firms to receive particular visitor groups depends on the characteristics of the firm and the relation between a company and a potential visitor. In general companies are more hospitable towards people with a direct and substantial impact on the firm's continuity. In this respect it is particularly important to make a distinction between producers of B2B (business-to-business) and B2C (business-to-consumer) products.

Another relevant aspect in the view of host firms is the ability to attract visitors: the industrial tourism potential. This potential depends on the attractiveness of the products, the production process and the sites where industrial tourism is supplied. The interaction between supply and demand influences the preferences of companies with regard to company visits. A proactive approach implies substantial investments (e.g. in visitor facilities, professional guides, modifications in the site) incurring costs that need to be earned back by substantial benefits.

11.3.2 Under what conditions are urban regions willing to invest in industrial tourism?

To gain insight in the urban region's perspective we have analysed the costs and benefits that emerge on the level of collectivities such as sectors, clusters and regions in chapter five. We draw the conclusion that cooperation and coordination can reduce the collective costs of industrial tourism development and/or raise the collective benefits. Moreover attention has been paid to possible negative externalities such as excessive pressure on the tourism infrastructure and the urban environment, and the long-term influence on other functions (the crowding out effect). We have

also identified various conditions that determine the multiplier effect and accordingly the relevance of company visits as a source of regional income and employment. Place marketing theories (e.g. on co-branding) help us to analyse conditions under which industrial tourism can become an effective tool of marketing and public relations. We conclude that urban regions can use various strategies ranging from reactive to proactive.

An important condition for urban regions is the industrial tourism potential. Apart from the supply of industrial tourism – the attractiveness of host firms and their tours – several other supporting or secondary factors have been discussed that potentially influence the ability to attract industrial tourists. Furthermore we have provided some theoretical foundations for the governance-related conditions – the process of coalition-forming – building on insights from urban management and governance theories (e.g. regime theory and the concept of organising capacity).

11.3.3 Under what conditions can industrial tourism development benefit both host firms and the urban regions in which they are located?

The conditions we have identified for host firms and urban regions in chapter four and five have been combined into one research framework (figure 11.1) in chapter six. This framework indicates that the willingness of host firms and urban regions to invest in industrial tourism depends on three conditions:

1) Characteristics of the visitor flow: the number of industrial tourists, the composition of the visitor flow and the spread of visitors in time.
2) The fit between industrial tourism and the intended corporate image (for host firms) and regional image (for regions).
3) The industrial tourism potential which is dependent on the attractiveness of the firm(s), the supply of industrial tourism, the quality of the site(s) and visitor facilities and the promotion of industrial tourism.

We state that host firms and urban regions take these conditions into consideration in their decisions to participate in industrial tourism development. Reasoning that public-private coordination can generate additional benefits (synergies) for both actors, we formulate our main hypothesis as follows:

The benefits of industrial tourism for both an urban region and the host firms depend on the development of a common agenda enabling coordinated action.

This hypothesis presents a common agenda – based on shared objectives and strategies – as a crucial condition for the coordinated development of industrial tourism in urban regions. We have argued that insight in conflictive and compatible interests (comparing the interests and preferences of host firms and urban regions) is needed to analyse the feasibility of such an agenda. The seven hypotheses (including sub-hypotheses) are summarised in figure 11.1.

11.4 Main findings of the empirical study

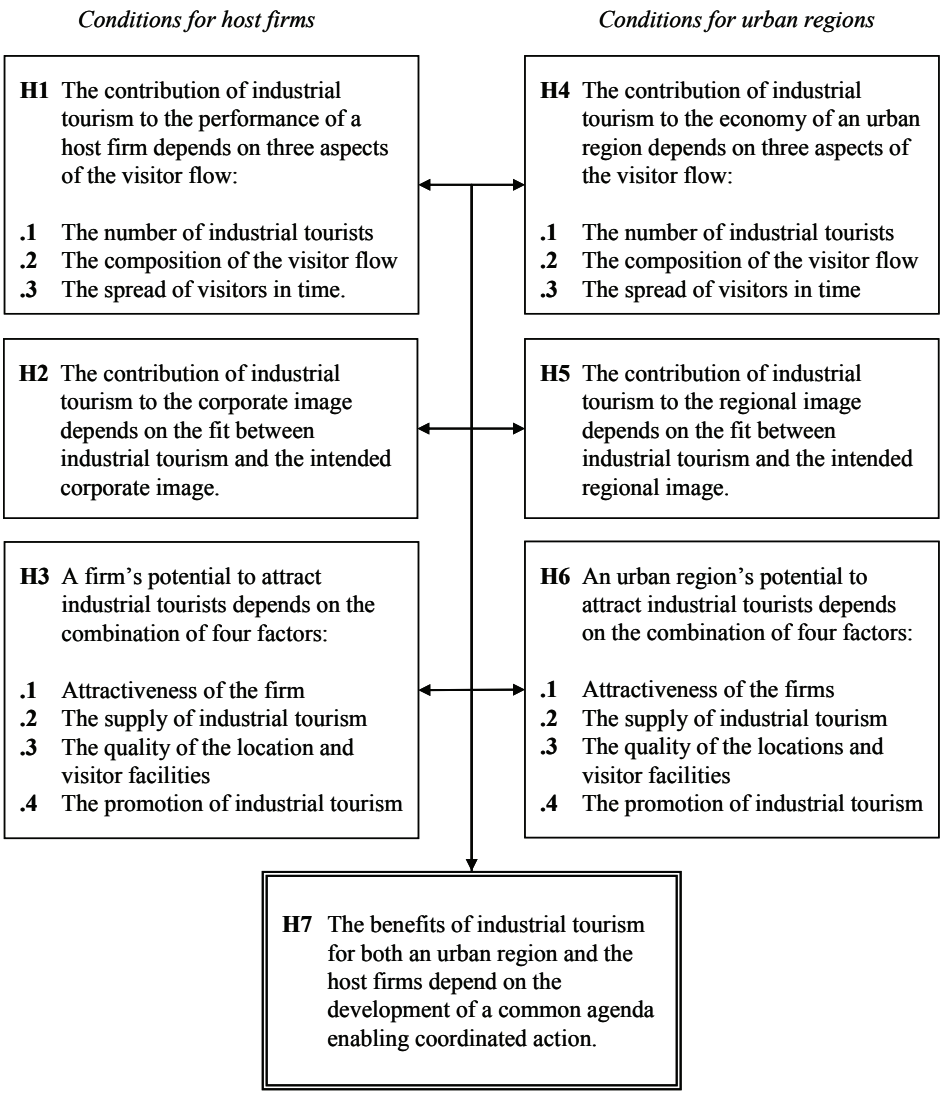
To test the empirical applicability of our research framework we have carried out four case studies of urban regions in Europe with a considerable supply of industrial tourism: Cologne, Pays de la Loire, Rotterdam and Turin (see chapter seven for profiles of these regions). This analysis has resulted in the following conclusions regarding the seven hypotheses and sub-hypotheses in chapters eight, nine and ten.

11.4.1 Characteristics of the visitor flow (H1 and H4)

The case studies confirm that the characteristics of the visitor flow are important conditions for both individual host firms and regional organisations: there is sufficient empirical support for the six sub-hypotheses we formulated with regard to the number of visitors, the composition of the visitor flow and the spread of visitors in time. An important conclusion from our analysis is that the preferences of host firms and regional organisations concerning the three characteristics of the visitor flow are often conflictive. In general host firms are more selective than regional organisations, paying more attention to the composition and the spread.

Many of the entrepreneurs we interviewed consider industrial tourism as a tool of stakeholder management, in line with our expectations. Since the visitor capacity is limited they prefer to receive (potential) business relations: suppliers, customers, employees, etc. Their preferences regarding the spread of visitors depend on how they organise industrial tourism and the cost structure in particular. Most companies we analysed are in favour of (some) concentration.

Figure 11.1: A common agenda for industrial tourism: the research hypotheses



Regional bodies in the four regions tend to focus on the number of visitors: their willingness to invest in industrial tourism as a source of income depends on the relevance of company visits compared to other forms of tourism. Moreover they prefer travellers from abroad who generate bed nights. Regional organisations are in favour of long opening hours and an influx of industrial tourists all year long.

11.4.2 The fit between industrial tourism and intended images (H2 and H5)

Our observations in the four regions support the two hypotheses we formulated concerning the fit between industrial tourism and the corporate image and the regional image respectively. Both host firms and urban regions recognise the relevance of this 'image fit' for the reputation of places and industries which also explains why they are sometimes reluctant to invest. This is not only a matter of terminology but also of co-branding: regions and firms not always see the added value of getting connected.

Almost all companies in our sample expect company visits to be beneficial for the reputation of their firms and the products they produce. Some firms also use industrial tourism to showcase their relation with the region, as a form of co-branding. Particularly firms that experience pressure on their license to operate and firms with limited ability to use other marketing tools have high expectations of company visits as marketing and public relations tool.

Regional organisations also see the marketing value of industrial tourism: they expect company visits to confirm existing images, but also to enrich these images with new elements. In three of the four regions (Pays de la Loire, Rotterdam and Turin) we observed explicit strategies to use industrial tourism as such. A strategic approach also implies that regions want to avoid negative associations with (the manufacturing) industry, for instance by employing an alternative term for industrial tourism (e.g. 'visit our companies, 'made in Torino').

11.4.3 The industrial tourism potential (H3 and H6)

The empirical analysis confirms the relevance of the four conditions that determine the industrial tourism potential: the attractiveness of the firm(s), the supply of industrial tourism, the quality of the location(s) and visitor facilities and the promotion of industrial tourism. The eight sub-hypotheses that deal with this matter have all been approved. The empirical study makes clear that the attractiveness of the firm(s) and the quality of the locations(s) are more difficult to change than the supply and promotion of industrial tourism. The willingness of actors to actually invest in these conditions increases with a more proactive approach to industrial tourism.

Our study demonstrates that consumer-oriented firms are better able to attract visitors than companies that do not produce consumer goods. Other sources of attraction are brands and a visually attractive production process. In general private-sector investments in industrial tourism are relatively small: only a few companies in

our sample actually invest in the site or professional guides. Company tours by employees or retired workers are, however, not by definition less attractive than professionally-guided visits. The quality of the location is an important supporting condition: the nearness of a city or holiday resort adds to the visitor attracting ability. Also firms located at heritage sites seem to have a competitive advantage. While companies hardly invest in the location, about half of the firms we looked at do invest in visitor facilities such as a lecturing/meeting room or reception. Promotional activities highly depend on the approach to industrial tourism: only firms with visitor centres make active use of promotional tools. Other firms do either not promote their industrial tourism supply or provide very limited information.

Regional organisations agree that consumer orientation is a key determinant of industrial tourism potential, but they also expect business-to-business sectors to attract (technical) visitors. Regional bodies are able to identify and support attractive industries, in accordance with their economic development strategy. Other instruments regions can use to improve industrial tourism potential are investments in visitor facilities, quality control, workshops, courses, conferences, brochures for potential host firms and websites. In our small sample Pays de la Loire is clearly the most proactive region, notably in the promotion of industrial tourism. Regional organisations agree that the quality of the location(s) is important, but industrial tourism is rarely a sufficient motive for investments in the public realm.

11.4.4 A common agenda for industrial tourism (H7)

By comparing the interests and preferences of host firms with the interests and preferences of urban regions we draw the conclusion that both can take advantage of a common agenda that enables coordinated action. The case studies support the main hypothesis of our research. Although the interests of both sides are fundamentally different and sometimes conflictive, we also observe compatible interests. Host firms and regional organisations tend to disagree about the characteristics of the visitor flow: nevertheless they are able to develop joint industrial tourism products such as visitor centres, open door events and industrial tourism programmes, apparently to the satisfaction of both.

What binds public and private actors together is their joint interest in a good relation between the business sector and the community and their common interest in a good image of a region's industries. Programmes and events such as Visitor our Companies in Pays de la Loire, Made in Angers, Made in Torino, Expedition Colonia

and the World Port Days (Rotterdam) are examples of coordinated actions that result from a common agenda. They make clear that industrial tourism is not only regarded as a relevant segment of the tourist industry, but also a tool of co-branding and business society management.

11.5 Conclusions

In the present study we developed a theory on industrial tourism development in urban regions using insights from various disciplines: tourism, marketing, regional economics, urban governance and theories of the firm. We formulated various hypotheses concerning the conditions under which both host firms and host regions are able to take advantage of industrial tourism. The overall conclusion of our research is that industrial tourism can benefit all actors involved if they agree on a common agenda that enables coordinated action. Through an in-depth analysis of individual and collective costs and benefits – in theory and practice – we have been able to gain insight in the conditions under which both sides are willing to invest in industrial tourism development. While some conditions can be influenced to some extent, other conditions are inherited and part of the regional context such as the locations of attractive industries, the economic structure, the tourism profile and the relation between the public and private sectors (the tradition to cooperate). A common agenda on industrial tourism development recognises and accepts the contextual factors, and concentrates on those conditions that can be changed.

Industrial tourism is a growing segment of the tourism industry with potential benefits for business, regions and society at large. It enables the public to meet the private. But how to develop industrial tourism in such a way that everyone actually takes advantage? How to make sure that public interests meet private interests? That is the question we answered in this book. Now it is up to urban regions and host firms to actually develop a common agenda that not only enables coordinated action, but also results in coordinated action. After all, the implementation of a coordinated approach to industrial tourism development is not only a matter of identifying compatible interests: it probably also requires leadership and organising capacity of public and private actors.

In our study we focused on the development of industrial tourism. The present book makes a significant contribution to the relatively small body of literature on this topic, and hence, to the literature on urban and regional tourism in general. In addition, however, our study also contributes to the literature on urban governance: it

provides insight in *how* to reach agreement on a common agenda, an issue that has received relatively little attention in the governance literature. What are the conditions under which public and private actors are willing to cooperate? The development of industrial tourism can be seen as just one example of a common agenda in which public and private actors have a stake. We expect that our approach – a systematic analysis of public and private interests – is applicable to other issues in urban governance and regional economic development as well.

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Annex A: Interviewees (2007-2008)

Cologne
Dirk Binding, Chamber of Commerce and Industry Cologne
Franz-Xaver Corneth, Häfen und Güterverkehr Köln (HGK) AG
Günther Geisler, Chemical Park Knapsack (InfraServ Knapsack)
Christoph Hanke, Chamber of Commerce and Industry Cologne
Thomas Kuhlow, Chemical Park Knapsack (InfraServ Knapsack)
Klaus Odenthal, Cologne Tourist Office
Nicole Müller, Magic Media Company GmbH
Frank Straube, RheinEnergie AG

Pays de la Loire
Emmanuel Blanc, Terre de Sel
Philippe Broix, Angers Tourism office
Christian Charuel, Visitez nos entreprises en Pays de la Loire
Sylvain Dourneau, Chamber of Commerce and Industry De Maine et Loire
Daniel Dupuis, Tourism Committee of Pays de la Loire
Pascal Frenau, Port of Nantes Saint-Nazaire
Jean-Luc Gaignard, Terre de Sciences / INRA
Catherine Houdet, Chamber of Commerce and Industry Pays de la Loire
Isabelle Huyghe, STX Europe
Julie Leblanc, Visitez nos entreprises en Pays de la Loire
Emmanuel Mary, Escal'Atlantic
Jean-Rene Morice, University of Angers
Valerie Quinaud, Remy Cointreau
Philippe Rettig, Airbus

Rotterdam
Claudia van Andel, Smit Nederland
Marcel van Breda, Schmidt Zeevis
Gilbert Curtessi, Happy Shrimp Farm
Mai Elmar, Chief Marketing Officer

Annie Gruisen, Spido
Rene Hanssens, OBR
Corinne van Iersel, Port of Rotterdam
Jan Kerremans, Verstegen
Marianne Klein, Rotterdam Marketing
Annemieke Loef, World Port Days
Frits Mehrtens, Broekman Automotive Divison
Maartje den Teuling, Chamber of Commerce Rotterdam
Kees Vrijdag, Chamber of Commerce Rotterdam
Ton Wesselink, Rotterdam Marketing
Irma de Winter, Stichting Industrieel Toerisme

Turin
Marzia Baracchino, Piedmont Region
Cristina Cerutti, Turismo Torino e Provincia
Fabrizio Gardella, Gufram
Gianpiero Masera, Chamber of Commerce Turin
Gabriella Ragazzone, FIAT Group
Maria Elena Rossi, Sviluppo Piemonte Turismo
Cesare Verona, Aurora

Nederlandse samenvatting (summary in Dutch)

De ontwikkeling van industrieel toerisme kan gezien worden als een *collective action* probleem: publieke en private partijen hebben er potentieel belang bij, maar dat betekent nog niet dat ze ook willen samenwerken. De centrale vraag in dit proefschrift luidt daarom onder welke voorwaarden de ontwikkeling van industrieel toerisme baten oplevert voor de bedrijven die hun deuren openen alsook voor de (stedelijke) regio waarin zij gevestigd zijn. Deze vraag kan opgesplitst worden in vijf deelvragen die hieronder beantwoord worden.

Wat is industrieel toerisme? Wie zijn de aanbieders en afnemers?

Industrieel toerisme is in de literatuur niet erg goed gedefinieerd. Sommigen gebruiken de term voor een 'commerciële benadering van toerisme' terwijl anderen afwijkende termen (zoals *technical visits*) gebruiken voor het bezoeken van bedrijven. Zij die wel over industrieel toerisme spreken, verschillen van mening over 1) wie industriële toeristen zijn; 2) waarop 'industrie' betrekking heeft; en 3) welke locaties gerekend worden tot industrieel toerisme. Wij stellen voor de volgende definitie te gebruiken:

> *Industrieel toerisme behelst het bezoeken van locaties die bezoekers in staat stellen kennis te nemen van economische activiteiten in het verleden, het heden en de toekomst.*

Deze definitie maakt duidelijk dat de term 'industrieel toerisme' enigszins verwarrend is omdat die niet alleen betrekking heeft op toeristen (ook bezoeken van bewoners en excursionisten tellen mee), en omdat ook bedrijven buiten de maakindustrie industrieel toerisme kunnen aanbieden. Wat industriële toeristen onderscheidt van andere bezoekers is hun interesse in economische activiteiten. Daarnaast stellen we dat industrieel toerisme in verschillende vormen wordt aangeboden variërend van industrieel erfgoed en musea tot bedrijfsbezoeken en themaparken. Ons onderzoek richt zich echter hoofdzakelijk op locaties die bezoekers informeren over operationele

bedrijven aangezien daarbij de betrokkenheid van bedrijven vereist is. Ondernemingen kunnen kiezen voor verschillende benaderingen: van inactief (gesloten) en reactief (beperkte toegang omwille van goed burgerschap) tot meer proactieve en strategische benaderingen (industrieel toerisme als bron van inkomsten en communicatiemiddel). Een proactieve benadering vereist doorgaans investeringen in de locatie en in professionele gidsen.

Welke fundamentele ontwikkelingen beïnvloeden de vraag naar, en het aanbod van industrieel toerisme in stedelijke regio's?

Op basis van literatuurstudie stellen we vast dat enkele trends bepalend zijn voor de ontwikkeling van industrieel toerisme: globalisering en structurele veranderingen in de economie, de transitie naar een informatie- en kenniseconomie, toenemende zorgen over het milieu en klimaatverandering, toenemende aandacht voor maatschappelijk ondernemerschap, de transitie naar een ervaringseconomie en toenemende aandacht voor veiligheid. Deze trends beïnvloeden de markt voor industrieel toerisme direct en indirect omdat ze implicaties hebben voor stedelijk management: 1) duurzame stedelijke ontwikkeling wordt een leidend principe voor overheden en andere partijen; 2) er is in toenemende mate behoefte aan afstemming en samenwerking tussen belanghebbenden; en 3) daarbij wordt méér aandacht besteed aan citymarketing. Veel van deze ontwikkelingen zijn mogelijke drijfveren voor de ontwikkeling van industrieel toerisme in steden. Ze verklaren waarom verwacht kan worden dat bedrijven industrieel toerisme zien als marketing- en PR-instrument en als onderdeel van stakeholdermanagement, en ze verklaren waarom regio's het inzetten als instrument voor economisch beleid en marketing. Voor zowel regio's als bedrijven is industrieel toerisme een mogelijke publiekstrekker met het oog op de transitie naar een ervaringseconomie. Aan de andere kant zien we ook trends die barrières opwerpen. De ontwikkeling van industrieel toerisme kan de relatie tussen het bedrijfsleven en de samenleving wellicht verbeteren; daarvoor is echter enige mate van publiek-private samenwerking nodig. Kortom, het is een organisatorische uitdaging. Daarnaast bemoeilijkt de toenemende aandacht voor veiligheid het openstellen van bedrijven voor bezoekers: een serieus praktisch probleem.

Onder welke voorwaarden zijn bedrijven bereid te investeren in industrieel toerisme?

In onze analyse besteden we aandacht aan diverse kosten en baten die voor bedrijven (die wij aanduiden met *host firms*) relevant zijn. We maken onderscheid tussen vaste,

variabele en stapsgewijze kosten. Baten komen voort uit de verkoop van toegangskaarten en artikelen ter plaatse, maar ook uit verbeterde relaties met stakeholders. Tevens hebben bedrijfsbezoeken invloed op de productiviteit van medewerkers of ze nu wel of niet betrokken zijn bij de organisatie van bezoeken. De literatuur maakt duidelijk dat de bereidheid om bepaalde groepen te ontvangen afhankelijk is van de relatie tussen het bedrijf en de potentiële bezoeker. De gastvrijheid neemt toe naarmate bezoekers een directe en meer substantiële invloed hebben op de continuïteit van de onderneming. In dit verband is het belangrijk onderscheid te maken tussen producenten van *business-to-business* en producenten van *business-to-consumer* producten.

Eveneens van belang is het vermogen om industriële toeristen aan te trekken. Bepalend hiervoor zijn de aantrekkelijkheid van producten en het productieproces, evenals de locaties waar industrieel toerisme wordt aangeboden. Vraag en aanbod beïnvloeden de voorkeuren van ondernemers ten aanzien van bedrijfsbezoeken. Bedrijven met een proactieve benadering zijn bereid tot substantiële investeringen (in o.a. bezoekersfaciliteiten, professionele gidsen en aanpassingen aan de locatie) die terugverdiend moeten worden door substantiële baten.

Onder welke voorwaarden zijn stedelijke regio's bereid te investeren in industrieel toerisme?

Door samenwerking op het niveau van regio's, sectoren of clusters kunnen de collectieve kosten van industrieel toerisme verlaagd worden en/of de baten verhoogd worden. Denk bijvoorbeeld aan het verminderen van negatieve externaliteiten zoals een bovenmatige druk op de toeristische infrastructuur en het stedelijk milieu, en de ongunstige invloed van toerisme op andere functies (zoals verdringing). De mate waarin industrieel toerisme zorgt voor inkomsten en werkgelegenheid is afhankelijk van de multiplier. De geschiktheid van industrieel toerisme als marketing- en PR-instrument verschilt per regio: strategieën lopen uiteen van reactief tot proactief. Belangrijk hierbij is het vermogen om industriële toeristen aan te trekken: behalve het aanbod van industrieel toerisme – de aantrekkelijkheid van bedrijven en rondleidingen – kunnen ook secondaire, ondersteunende factoren benoemd worden.

Onder welke voorwaarden levert de ontwikkeling van industrieel toerisme baten op voor zowel bedrijven als de stedelijke regio's waarin zij gevestigd zijn?

Het onderzoekskader zoals weergegeven in figuur N.1 verenigt de voorwaarden die van toepassing zijn op bedrijven enerzijds en stedelijke regio's anderzijds. Hun bereidheid om te investeren in industrieel toerisme hangt af van drie aspecten:

1) Eigenschappen van de bezoekersstroom: het aantal bezoekers, de samenstelling van de bezoekersstroom en de spreiding van bezoekers over de tijd.
2) De *fit* (mate van aansluiting) tussen industrieel toerisme en het beoogde imago van bedrijven (hun *corporate image*) en regio's.
3) Het vermogen om industriële toeristen aan te trekken dat bepaald wordt door de aantrekkelijkheid van bedrijven, het aanbod van industrieel toerisme, de kwaliteit van locaties en bezoekersfaciliteiten en de promotie van industrieel toerisme.

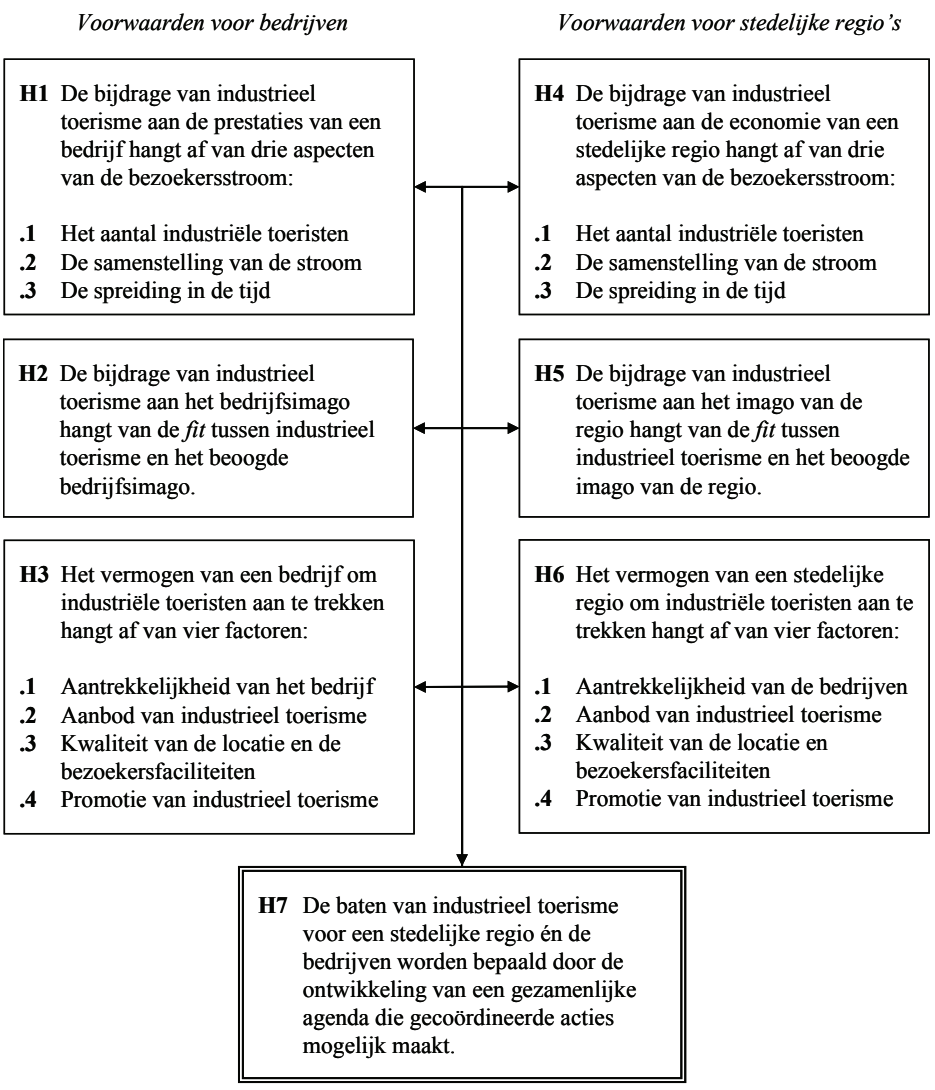
Ervan uitgaande dat publiek-private afstemming extra baten (synergie) oplevert voor zowel bedrijven als regio's, luidt onze centrale hypothese als volgt:

> *De baten van industrieel toerisme voor een stedelijke regio én de bedrijven worden bepaald door de ontwikkeling van een gezamenlijke agenda die gecoördineerde acties mogelijk maakt.*

Een gezamenlijke agenda – gebaseerd op gedeelde doelen en belangen – is een cruciale voorwaarde voor de gecoördineerde ontwikkeling van industrieel toerisme in stedelijke regio's. Inzicht in conflicterende en verenigbare belangen verschaft duidelijkheid over de haalbaarheid van een dergelijke agenda. De zeven hypothesen (inclusief subhypothesen) zijn samengevat in figuur N.1.

De empirische toepasbaarheid van ons onderzoekskader is getoetst met behulp van vier case studies van stedelijke regio's in Europa met een aanzienlijk aanbod van industrieel toerisme: Keulen, Pays de la Loire, Rotterdam en Turijn. Hieronder bespreken we de belangrijkste conclusies.

Figuur N.1: Een gezamenlijke agenda voor industrieel toerisme: hypothesen



Eigenschappen van de bezoekersstroom (H1 en H4): verschillende preferenties

De eigenschappen van de bezoekersstroom (omvang, samenstelling en spreiding) blijken van belang voor bedrijven en regionale organisaties. De preferenties van bedrijven op dit punt conflicteren vaak met die van regionale organisaties.

Ondernemingen zijn meestal selectiever dan regionale organisaties: ze besteden meer aandacht aan samenstelling en spreiding.

Zoals verwacht beschouwen veel geïnterviewde ondernemers industrieel toerisme als een instrument van stakeholdermanagement. Bij een beperkte capaciteit geven ze de voorkeur aan (potentiële) zakenrelaties: leveranciers, afnemers, werknemers, etc. Hun preferenties ten aanzien van spreiding zijn afhankelijk van hoe industrieel toerisme wordt georganiseerd en de bijbehorende kostenstructuur.

Regionale organisaties richten zich vooral op het aantal bezoekers: hun bereidheid te investeren is afhankelijk van het belang van industrieel toerisme ten opzichte van andere vormen van toerisme. Ze ontvangen graag bezoekers van buiten de regio die overnachtingen opleveren. Hun voorkeur gaat uit naar ruime openingstijden en een continue toestroom van industriële toeristen gedurende het jaar.

De fit tussen industrieel toerisme en beoogde imago's (H2 en H5): belangrijk voor bedrijven en regionale instanties

Zowel bedrijven als regionale instanties erkennen dat industrieel toerisme moet aansluiten op het beoogde imago. Het ontbreken van een dergelijke *fit* verklaart soms ook de terughoudendheid van partijen om te participeren in industrieel toerisme. Ze zijn wellicht negatief over de term 'industrieel toerisme' en zien niet altijd de toegevoegde waarde van co-branding (een verbinding tussen regio en bedrijf).

Bijna alle bedrijven die we gesproken hebben, verwachten dat bedrijfsbezoeken de reputatie van hun onderneming en producten versterken. Sommige ondernemingen gebruiken industrieel toerisme om hun relatie met de regio uit te dragen (een vorm van co-branding). Vooral bedrijven die te maken hebben met druk op hun *license to operate* en bedrijven die weinig andere marketinginstrumenten tot hun beschikking hebben, koesteren hoge verwachtingen van industrieel toerisme als instrument voor marketing en PR.

Regionale organisaties zien ook de marketingwaarde van industrieel toerisme: ze verwachten dat bedrijfsbezoeken bestaande beelden kunnen versterken maar ook verrijken met nieuwe elementen. In drie van de vier regio's (Pays de la Loire, Rotterdam en Turijn) hebben we expliciete strategieën waargenomen om industrieel toerisme als zodanig te gebruiken. Een strategische benadering houdt ook in dat regio's negatieve associaties met (industriële) bedrijvigheid trachten te voorkomen, bijvoorbeeld door alternatieve termen voor industrieel toerisme te introduceren (zoals *Visitez nos Entreprises* en *Made in Torino*).

Het vermogen om industriële toeristen aan te trekken (H3 en H6): relevant, maar soms moeilijk te beïnvloeden

De casestudies bevestigen het belang van de vier factoren die het vermogen om industriële toeristen aan te trekken bepalen. Het onderzoek maakt duidelijk dat de aantrekkelijkheid van bedrijven en de kwaliteit van locaties lastiger is te veranderen dan het aanbod en de promotie van industrieel toerisme. De bereidheid om te investeren in deze aspecten neemt toe naarmate actoren een meer proactieve benadering ten aanzien van industrieel toerisme hanteren.

Consumentgerichte bedrijven blijken beter in staat bezoekers aan te trekken dan bedrijven die geen consumentengoederen produceren. Daarnaast komt aantrekkingskracht voort uit sterke merken (*brands*) en een visueel aantrekkelijk productieproces. Over het algemeen zijn de private investeringen in industrieel toerisme beperkt: slechts enkele van de door ons onderzochte bedrijven investeren daadwerkelijk in de locatie of professionele gidsen. Rondleidingen door (ex-) werknemers zijn echter niet per definitie minder aantrekkelijk dan rondleidingen door professionele gidsen. De kwaliteit van de locatie is een relevante ondersteunende factor: de nabijheid van een stad of vakantieoord draagt bij aan het potentieel om bezoekers te trekken. Bedrijven die gesitueerd zijn in historisch erfgoed lijken een initieel voordeel te hebben. Ongeveer de helft van de door ons geanalyseerde ondernemingen investeert in bezoekersfaciliteiten zoals een receptie of presentatieruimte. Promotie is afhankelijk van het bedrijf en de gekozen benadering. Een actief beleid wordt gevoerd door bedrijven met bezoekerscentra. Andere ondernemingen geven weinig tot geen informatie over rondleidingen.

Regionale organisaties zijn het erover eens dat de aantrekkingskracht in sterke mate wordt bepaald door de oriëntatie van bedrijven op consumenten, maar ze verwachten ook dat *business-to-business* producenten (technische) bezoekers aantrekken. Regionale instanties zijn in staat om aantrekkelijke sectoren te identificeren en te ondersteunen, in het verlengde van hun economische ontwikkelingsstrategie. Daarnaast kan het potentieel vergroot worden door investeringen in bezoekersfaciliteiten, kwaliteitscontrole, workshops, opleidingen, congressen, brochures voor potentiële gastbedrijven en websites. In ons onderzoek is Pays de la Loire duidelijk de meest proactieve regio, vooral wat betreft de promotie van industrieel toerisme. Regionale organisaties erkennen het belang van de kwaliteit van locaties, maar industrieel toerisme is zelden een doorslaggevend motief voor investeringen in de openbare ruimte.

Een gezamenlijke agenda voor industrieel toerisme is mogelijk (H7)

Wanneer we de belangen en preferenties van bedrijven vergelijken met die van regionale organisaties kunnen we concluderen dat beide kanten kunnen profiteren van een gezamenlijke agenda die gecoördineerde acties mogelijk maakt. Hoewel hun belangen fundamenteel verschillen en soms conflicteren, zijn er ook verenigbare belangen. Ze verschillen doorgaans van mening over de gewenste eigenschappen van de bezoekersstroom. Ze blijken echter wel in staat om het eens te worden over de ontwikkeling van gezamenlijke producten zoals bezoekerscentra, open (deur) dagen en programma's.

Wat publieke en private partijen bijeenbrengt, is hun gezamenlijk belang in een goede relatie tussen samenleving en bedrijf en een goed imago van de regionale bedrijvigheid. Programma's en evenementen zoals Visitez nos Entreprises in Pays de la Loire, Made in Angers, Made in Torino, Expedition Colonia en de Wereldhavendagen in Rotterdam zijn voorbeelden van gecoördineerde acties die voortkomen uit een gezamenlijke agenda. Ze bevestigen dat industrieel toerisme niet alleen wordt gezien als een relevant toeristisch segment, maar ook als een instrument voor co-branding en *business society management*.

Tot slot

Met behulp van inzichten uit diverse disciplines – toerisme, marketing, regionale economie, *urban governance* en *theories of the firm* – hebben we een theorie ontwikkeld voor de ontwikkeling van industrieel toerisme in stedelijke regio's. Deze theorie omvat diverse hypothesen en subhypothesen over de voorwaarden waaronder bedrijven en regio's profiteren van industrieel toerisme. De slotconclusie luidt dat industrieel toerisme baten oplevert voor alle betrokken partijen indien ze het eens worden over een gezamenlijke agenda die gecoördineerde acties mogelijk maakt. Een diepgaande analyse van individuele en collectieve kosten en baten – in theorie en praktijk – heeft inzicht verschaft in de voorwaarden waaronder beide zijden bereid zijn te investeren in de ontwikkeling van industrieel toerisme. Sommige voorwaarden zijn tot op zekere hoogte te beïnvloeden, andere zijn 'erfelijk bepaald' en onderdeel van de regionale context zoals de locaties van aantrekkelijke bedrijven, de economische structuur, het toeristisch profiel en de relatie tussen publieke en private partijen (de traditie van samenwerken). Een gezamenlijke agenda voor industrieel toerisme erkent en accepteert deze contextuele factoren en richt zich op de voorwaarden die wél veranderd kunnen worden.

Industrieel toerisme is een groeiend toeristisch segment met potentiële baten voor bedrijven, regio's en de samenleving als geheel: waar publiek en privaat elkaar ontmoeten. Stedelijke regio's en bedrijven staan voor de uitdaging om gezamenlijke agenda's te ontwikkelen die niet alleen gecoördineerde acties mogelijk maken, maar daar ook toe leiden. Dit vereist niet alleen het identificeren van verenigbare belangen, maar ook leiderschap en organiserend vermogen aan publieke én private zijde.

Met deze studie hebben we een wezenlijke bijdrage geleverd aan de literatuur niet alleen over industrieel toerisme, maar ook over *urban governance*. We hebben duidelijk gemaakt *hoe* partijen een gemeenschappelijke agenda kunnen ontwikkelen, een onderwerp dat in de literatuur relatief weinig aandacht krijgt. Onder welke voorwaarden willen publieke en private partijen samenwerken? De ontwikkeling van industrieel toerisme is slechts één voorbeeld van een gezamenlijke agenda waarin publieke en private partijen een belang hebben. We verwachten dat onze benadering – een systematische analyse van publieke en private belangen – ook toepasbaar is op andere aspecten van *urban governance* en economisch beleid.

Biography

Alexander Otgaar was born on December 28, 1974 in Leiderdorp, the Netherlands. He obtained his Master of Science in Business Economics from Erasmus University Rotterdam in 1998 and started his academic career there in 1997 at the Department of Regional Economics, Port and Transport Economics of the Erasmus School of Economics. He participated in various international research projects that were carried out by the European Institute for Comparative Urban Research (Euricur).

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INDUSTRIAL TOURISM
WHERE THE PUBLIC MEETS THE PRIVATE

This thesis is about the development of industrial tourism in urban regions. It presents a systematic analysis of the conditions under which companies and regions can take advantage of industrial tourism development. By combining insights from tourism, marketing, regional economics, urban governance and theories of the firm we develop a theory that specifies the interests of host firms and urban regions. We state that a common agenda creates opportunities for coordinated action in industrial tourism development resulting in benefits for public and private actors. We test the empirical applicability of this theory by means of four case studies of urban regions with a considerable supply of industrial tourism: Cologne, Pays de la Loire, Rotterdam and Turin.

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