20(2)

City Brands in the Mediatised World: Economic Profiles of Nordic Capitals Aggregated from City

Rankings Ari-Veikko Anttiroiko\*



Ari-Veikko Anttiroiko School of Management

University of Tampere kuaran@uta.fi

Keywords: Image Brand City branding Economic profile Ranking Mediatisation

Scandinavian Journal of Public Administration 20(2):97-118 C Ari-Veikko Anttiroiko and School of Public Administration 2016 ISSN: 2001-7405

e-ISSN: 2001-7413

#### **Abstract**

This article provides an overview of the images of Stockholm, Copenhagen, Oslo and Helsinki on the basis of international city rankings. City rankings are conceptualised as intermediary-generated 'aggregate images', which through their impact on investors and other stakeholders tend to intensify intercity competition. They reflect increased mediatisation, which brings a special kind of uncontrollable element into city branding. The empirical analysis of economic profiles of Nordic capitals leads to the conclusion that Stockholm stands out as the major Scandinavian producer city with highest rankings in business, high-tech, finance and knowledge. Copenhagen dominates the categories of culture, tourism, conferences and logistics. Concerning the other two, Oslo has strengths in finance and logistics, whereas Helsinki is profiled primarily as a high-tech city. All Nordic capitals utilise rankings in their brand communication. Yet it seems that only Stockholm has been able to integrate rankings effectively into its branding and to reap significant benefits from brand-related symbolic capital in its economic development policy.

### Introduction

In today's world changes in public administration, often characterised as a transition from government to governance, or from hierarchies to networks, require that politicians and public managers are able to manage interactions in the dynamic multi-stakeholder governance field. Indeed, public administration as an institution and practice of governance with a special role in implementing public policies, has gone through fundamental changes in the past few decades regarding customer, stakeholder and media relationships. Such changes relate closely to the role of communication in governance and development (Zavattaro, 2014). This trend manifests in the involvement of public administration in the branding of public organisations, policies and services (Eshuis & Klijn, 2012). Instead of exerting their authority, public administrations may opt themselves to involve in governance and policy processes by creating and using images or brands to persuade their stakeholders or to create loyalty among them. A special sphere in such an emerging public 'brandscape' concerns cities. Namely, public communication in cities has gone from a public information focus hinging on a just-thefacts approach to a public relations and marketing focus on selling and image generation to please customers and stakeholders (Zavattaro, 2013). Branding is thus increasingly used by city governments, among other things, to enhance their collective symbolic capital in competitiveness and development policies

\*Ari-Veikko Anttiroiko is an Adjunct Professor in the School of Management, University of Tampere, Finland. His main research interests include local governance, local development policy, egovernment and public sector innovations. He has collaborated with academics and experts all over the world and also conducted expert work in developing countries. He is a member of the editorial boards of several international journals. Anttiroiko's academic contributions include a large number of monographs, edited books and peer-reviewed articles, one of the most recent being The Political Economy of City Branding published by Routledge in 2014.

(Rainisto, 2003; Allen, 2007; Dinnie, 2011). When public managers and administrators implement such policies, they inevitably become involved in and obviously need to learn more about brand leadership and management.

City branding takes place in an elusive symbolic field, which is affected by the pervasiveness of mass and social media (Rawolle & Lingard, 2010). Related to this, various forms of comparative and evaluative knowledge of cities have recently attracted the attention of local developers and public managers, including city rankings, league tables and benchmarking studies. They crystallise many aspects of the symbolic battles between cities taking place in a field in which only limited aspects can be controlled by the city governments themselves. We may perceive this setting as a struggle between the city government's desired brand and externally imposed images disseminated in the media, which diverts attention from locally constructed brand identity to the relational aspects of a city brand (cf. Nyseth & Viken, 2009). Such symbolic battles are indicative of a transformation in public administration in general. To be able to meet such a challenge, public managers and administrators need to reassess their working methods. Command-and-control style management has largely been superseded by network governance, which needs to be developed further towards branding and imagineering. In other words, public administration needs to sensitise itself to its symbolic and mediatised environment in order to learn about its own mode of existence as much as about its stakeholder and target group perceptions and aggregate images created in the media. The latter aspect will be elaborated in this article with a special reference to the aggregate images built by city rankings.

The objective of this article is to provide an overview of the images of four Nordic capitals – Stockholm, Copenhagen, Oslo and Helsinki – on the basis of international city rankings. The focus is on broadly defined economic development brand (Baker, 2012, 29), which takes branding into the context of urban economic development policy. The key question is what kind of economic profiles can be constructed for four Nordic capitals in light of international sector-specific city rankings and how this relates to their branding efforts. The emphasis on economy directs attention to local value-generating activities and among them especially to post-industrial activities, such as high-tech and services, which are needed to compensate for job losses in manufacturing (Anttiroiko, 2014; 2015). This is the policy context for the analysis presented in this article.

Concerning methodology, the discussion relies on international city rankings structured according to the model of eight post-industrial economic activity areas. Within each category thematically relevant global city rankings were systematically searched on the Internet in 2013-2014. As the quality of rankings is not as such the measure of their practical relevance for city branding, all thematically relevant rankings were included in the empirical analysis, if only one or more Nordic capitals were ranked high in them. Within each of the eight post-industrial categories, the positions of the four capital cities were registered and on that basis they were roughly put into a rank order using an ordinal scale. The result is an indicative picture of the relative strength of each city, a snapshot of

their economic profiles, and, as a whole, a rationally constructed rankings-based image of the post-industrial economies of the Nordic capitals. This discussion is supplemented by critical remarks on how rankings and mediatisation in general condition city branding and local brand politics.

### Economic profiles of cities

The first question that deserves attention from a theoretical point of view is simply why in the first place cities should choose to involve themselves in international city branding. From a macro-theoretical point of view we may trace such a need to the global imperative (Newman & Thornley, 2005; Anttiroiko, 2014). As cities have a tendency to guarantee the long-term prosperity of their communities, they need to increase and utilise their attractiveness vis-à-vis global flows of values. Such competition revolves around economic values which can be broken down into industries and clusters that make up the city's industrial composition and ultimately its economic identity.

A generic economic city profile typology can be based on the main economic sectors, industry classification systems or cluster classifications (e.g. Kelton et al., 2008). Another way is to build economic activity typologies or models on the basis of selected criteria. These can be built, for example, on the fact that cities may profile themselves utilising either production or consumption and, concerning the former, rely on hard and/or soft productive inputs. At the core of hard factors are corporate power and capital, on the one hand, and knowledge and technology, on the other. Soft factors are about business and professional services or individual consumption of cultural or entertainment services. On this basis we may divide city profiles into four broad categories: capital, know-how, mobility and pleasure (Anttiroiko, 2014). These form a field of high-value adding clusters, of which each can be further split into two, which make up eight city concepts, as illustrated in Figure 1.

Figure 1 illustrates distinguished economic clusters that can be exploited to sketch out cities' economic profiles. This model is not designed to reveal the great variety of economic activities as such, as for example are industry and cluster classifications coupled with occupational structures (Beyers, 2010). Rather, it serves to identify major differences in the productive inputs and types of consumption underlying urban economies, thus making it useful for pinpointing major differences in cities' economic profiles. These profiles are used in this article as the analytical template to structure the discussion of the post-industrial economic profiles of four Nordic capitals.

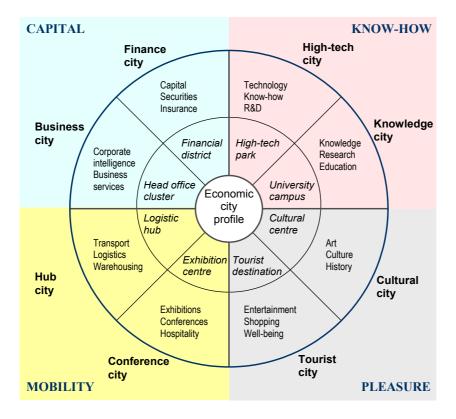


Figure 1. Post-industrial economic city profiles. (Adopted from Anttiroiko 2014, 108).

# City rankings in a mediatised economy

Rankings have quite a long history in higher education and other professional fields in which quality assurance and reputation are crucial. To generalise, it seems that the history of rankings started from academic and professional measuring of effectiveness, which since the 1980s started to move from the academic setting into media. In fact, increased competition between newspapers and magazines was the primary trigger in the process, as rankings appeared to be good way of attracting readers. Soon consultancies followed suit as rankings served to both enhance their own reputations and attract the attention of existing and potential customers. The information provided by such rankers was used by service users, visitors, purchasers and investors, which introduced a demand side of the rankings into the picture (Shin et al., 2011; Wedlin, 2006).

Another decisive factor that contributed to the proliferation of rankings was the change of the ranking objects themselves and, more than anything, the internationalisation of institutional players and more generally the globalisation of the economy. In the case of cities, for example, rankings reinforced the tendency among entrepreneurial city governments to compare their performance and repu-

tation with those of their competitors. The emergence of rankings not only undermined the identities of ranked institutions but started to form fundamental classifications of entire organisational fields (Wedlin, 2006; Shin et al., 2011; Giffinger et al., 2010).

City rankings emerged in the 1990s but have proliferated since the latter half of 2000s, being currently dominated by rankings organised and publicised by newspapers, magazines and consultancies. *City rankings* are lists of cities that are evaluated and ranked with regard to different economic, social and geographical characteristics in order to reveal the position of each ranked city as ordered according to given criteria. What is interesting in such rankings is that they provide a shortcut to the symbolic battlefield of cities (Giffinger et al., 2010: 300). Put simply, being high in the relevant city ranking enhances the image of success in the given industry or activity.

As noted, rankings can be produced by any party – academics, consultancies, media houses, professional associations, international organisations, government agencies or individual bloggers – but they break away from their creators and emerge as representations of externally influenced communication in the mediatised discursive fields in which information on cities' features, capabilities and relative positions are discussed, analysed and compared by interested parties. Rankings actually work in a similar way to the intermediary organisations that affect the reputation of firms through criteria-based evaluations (Rindova & Martins, 2012). As special instances of institutional intermediation city rankings represent informative presentations in the media that serve primarily the instrumental needs of three institutional players: *media* to create interesting content and thus attract readers and generate income; *city governments* for promotional purposes (if the result of ranking is good for the city); and *entrepreneurs*, *investors* and *business managers*, who use rankings as a source of information for their business-related decision-making processes.

As rankings are not guided by any quality assurance system, they may be based on reliable analyses of several relevant indicators or rules of thumb or even personal views and anything in between. The status of institutions or individuals behind the ranking, methodological sophistication and publication venue undoubtedly affect the publicity and credibility of rankings. On the basis of methodological competence and institutional reputation, we may hypothesise that by and large higher education institutions create the most sophisticated (e.g. GaWC, 2014), high-profile consultancies, professional associations and public organisations, fairly reliable though potentially tendentious (e.g. PwC, 2012 or WEF, 2013), media more popularity-seeking (e.g. Monocle, 2014 or Wired, 2013) and individual bloggers the most biased rankings. However, all rankings, in one way or another, affect the flow of global information concerning cities and their positions in regional and global urban hierarchies, which is of strategic importance to cities irrespective of the factual quality of each ranking. Thus, whenever rankings are published in magazines, newspapers, websites or reports, they add new elements into the economic profile of the cities included in rankings and thus have a piecemeal impact on their global image. As described by Ooi (2011: 58):

[m]any city branding authorities refer to selected indexes, pointing out their cities' high rankings. Just as importantly, these surveys have also become frameworks for authorities to organize and manage their cities.

Rankings are thus tools for cities to learn from one another and even to justify their economic development policies (Ooi, 2011: 57-58; see also Giffinger et al., 2010; Chapman & Pike, 1992). The conditions of the mediatised political economy increase the complexity of knowledge processes in which businesses, media, public managers, politicians and consumers interact. To get an idea of the impact of news and rankings, we need only consider such headlines as 'Copenhagen named world's best city for quality of life by Monocle magazine' (The Telegraph, June 2008), 'Osaka – world's greatest food city' (The Guardian, Word of Mouth blog, July 2009), 'Detroit tops 2013 list of America's most miserable cities' (Forbes, February 2013) or 'New York ousts London as top financial centre' (Financial Times, March 2014). No wonder why many large cities have started to follow rankings and even publicise them selectively in their websites to substantiate the facts about their assets and performance. The implication for urban managers is obvious: in an increasingly mediatised world cities are under considerable pressure to move up the league tables and rankings and to establish themselves as regional or global hubs (Kornberger, 2010: 89).

## Aggregate images

Branding has become a major issue in urban development discourse, not least because it seems to provide at least some answers to many of the questions that relate to the need to reap benefits from global flows of economic values. It is, however, an extremely challenging concept when applied to urban economic development. Applying Dinnie's (2008) definition of nation brand, we may define city brand as the unique, multi-dimensional blend of elements that provides the city with locally grounded differentiation and relevance for all its target audiences. Branding is thus about conveying a brand or symbolic essence of a city to target audiences for strategic gain (see Allen, 2007; Zhang & Zhao, 2009: 246; Jansson & Power, 2006: 14; Kapferer, 2008: 127).

Branding is rooted in identity but extends to the world of images beyond the control of the city government. While identity is essentially built by the brand creator as a crystallisation of its self-understanding and key attributes, the image is how others perceive the branded entity. The interest in brand image has long roots (e.g. Gardner & Levy, 1955). Definitions vary, but probably the most wide-

ly cited one is that based on perceptions of a brand as reflected by the brand associations retained in consumer memory (Keller, 1993). In the mediatised context, however, the perspective should be broadened beyond the conventional view of brand associations among target groups. A theoretical category halfway along the identity-image continuum can be called 'aggregate image'. The terminological choice implies that this middle-range category is approached from the receivers' perspective, forming either a constellation of images within the given audience or a theoretical or empirical aggregate image constructed by third party, which affects the branding of a city (for an analogical view of the aggregate image for products, see Narayana, 1981; Diamantopoulos et al., 2011). Aggregate image is thus a rational construction, which revolves around intermediary and stakeholder involvement in city branding in a mediatised environment with constantly changing asymmetries of creator and receiver control. As willing as city governments may be to control their city brands, there is always a power struggle between brand creator and brand receiver, and in the case of city rankings the power is on the side of intermediaries as it is they who determine which cities are included and what criteria are applied in each ranking (Anholt, 2007; 2010).

A major conceptual distinction that reflects the above setting can be made between *desired image* and *registered image*, both of which are diffuse in the case of urban communities. The idea of the latter includes not only what the city government wants or the perceptions of narrowly defined target groups but also inputs from other actors beyond the city governments' control, such as media, which disseminate the image of the city to various publics. Such an image is thus a result of a complex set of intersecting elements (Graby, 1993; cf. Askegaard & Ger, 1998).

An idea that takes into account the branding challenge in a mediatised world is Kavaratzis' (2004) three-fold scheme of brand communication with three distinct modes: primary (physical features and actions of the city), secondary (brand communication of the city) and tertiary (uncontrolled communication of media, competitors and word-of-mouth). What is essential here is his idea of synthesis in which the city's controllable modes of communication – physical and action-based elements together with brand communication – are supposed to evoke and reinforce a positive image at the level of tertiary communication, which feeds back the city brand directed to internal and external target markets of the city.

To sum up, in this article we do not focus on city branding or brand creators' views of the desired city brand *per se*, but on an aggregate image that is rationally constructed by a range of actors through media, which, when formalised and communicated to a wider audience, sets it into a dialectic relationship with the identity-based city branding and the related desired image.

## Nordic capitals in a global perspective

In this section we discuss the positions of four Nordic capital cities, Stockholm, Copenhagen, Oslo and Helsinki, as portrayed in global city rankings. The discussion is structured into four thematic clusters (see Figure 1). It is worth noting that the rankings presented are mainly global rankings, which means that all the Nordic cities are pictured here in terms of how they can be seen as players on the scene of global intercity competition.

As a brief introduction to the four Nordic countries and their capitals, suffice it to say all the Nordic countries are welfare societies, open economies, small in population, challenging in terms of climate, and somewhat remote from the epicentres of the world economy. They are countries of high economic performance, innovativeness, high level of education, strong democratic sentiment and respect for civic rights.

Concerning the four cities, *Stockholm*, the capital of Sweden, is the largest municipality in the Nordic region with a population of almost 900,000. It has a reputation as a major Nordic business city and the Mecca of high-tech. *Copenhagen* has some 570,000 inhabitants. It is one of the major logistics and business centres of the entire Scandinavian-Baltic region. *Oslo* has some 640,000 inhabitants. It has a unique profile as the capital of the country of fjords and mountains, which has a special situation due to its oil wealth. *Helsinki*, with a population of 600,000 in the municipality, has historical associations and encounters with both East and West. It is known for its cultural peculiarities as well as for advancements in design and high technology.

#### Business city profile: competitiveness, business services and finance

Concentration of corporate power, intelligence and capital generate attractiveness, high added value and exceptional multiplying effects. One of the first comprehensive rankings of global cities was made by the Globalization and World Cities (GaWC) research network in the late 1990s (Beaverstock et al., 1999). GaWC conducted many global rankings since then. In the last one, GaWC 2012, which used the office networks of 175 advanced producer service firms as the ranking criteria, Stockholm was Alpha-, Copenhagen Beta+ and Oslo and Helsinki Beta level global cities (GaWC, 2014).

Another academic ranking was conducted by the team led by Ni Pengfei and Peter Karl Kresl. In *The Global Urban Competitiveness Report* (2007–8) they analysed 500 cities around the world using nine conventional indicators from GDP per unit area to economic growth rate. The top 20 most competitive cities identified by the report included two Nordic cities, Stockholm (ranked 7) and Helsinki (ranked 16). (Global Urban Competitiveness Project, 2008).

Unlike the reports referred to above, most rankings are prepared by consultancies or media houses. An example of such a ranking is published in PricewaterhouseCoopers' *Cities of Opportunity* (PwC, 2012). It analyses 27 prominent cities for purposes of highlighting the global view of success not only in economic terms but also by their performance in human capital, social innovative-

ness, health issues and sustainability. In the overall opportunity ranking Stockholm achieved a high position for a Nordic city, as global number five, close behind the well-known highest ranking global cities of New York, London, Toronto and Paris (PwC, 2012; Florida, 2012).

In the benchmarking study of competitiveness of sixty cities of The Economist Intelligent Unit, there are two categories in which Scandinavian capitals showed a special strength. In physical capital Stockholm was included in the group of top performers, and in human capital Copenhagen was number three and Oslo number six (The Economist Intelligence Unit, 2012a; cf. Florida, 2011). Overall, the exceptionally strong position of the regions of Stockholm and to a lesser extent Copenhagen can be found from many rankings of regional competitiveness (Clark & Moonen, 2013; Annoni & Dijkstra, 2013; The Economist Intelligence Unit, 2013; Site Selection, 2013; Huggins et al., 2014).

In the ranking of *European Cities and Regions of the Future* published by fDi Magazine, Helsinki was ranked second in Europe, after London, and was included as the only Nordic capital in the list of Top 25 European Cities (fDi, 2014). Helsinki had special strength in FDI strategy within "major European cities", being the only Nordic city in the Top 10. In the list of top 10 cities in another evaluation sub-category, economic potential, Helsinki (5) was accompanied by Stockholm (6) and Copenhagen (9) (note: in this report Oslo was discussed in another category of cities). (fDi, 2014).

In the *European Cities Monitor 2010* the ranking of best cities to locate business showed that Nordic capitals have problems with visibility when compared with their British and continental European rivals. They were ranked as follows: Stockholm (16), Copenhagen (25), Helsinki (31) and Oslo (34) (Cushman & Wakefield, 2010; cf. Clark & Moonen, 2013: 14). Concerning start-ups and entrepreneurship, Stockholm and Helsinki have regularly attracted positive attention in rankings and league tables (Wired, 2013; Foundum, 2013).

Lastly, the Nordic capitals are not well positioned in the rankings of global financial centres. They are usually not included in Top 20 ranks in any relevant ranking (e.g. Yeandle, 2011; Burggraf, 2011). According to the Global Financial Centre Index 15, the Nordic capitals were among the middle-rank centres, Stockholm having the highest rank as an established player (ranked 30), followed by Oslo as a local specialist (33) with Copenhagen far behind as a transnational specialist (61) and Helsinki as a local specialist (72) (Yeandle & Daney, 2014).

#### Knowledge city profile: high-tech, innovation and human capital

Knowledge cities are urban concentrations with strengths in education, innovation and high-tech, and with a high level of connectedness and human and social capital (See e.g. Ergazakis et al., 2006). The Nordic capitals have varying strengths in this activity area. For example, in the *World Knowledge Competitiveness Index 2008*, the region of Stockholm was among the global Top 10 (Centre for International Competitiveness, 2014). In the ranking of cities with high intellectual capital and innovation by PricewaterhouseCoopers, which 105

measured indicators from public libraries to the performance of universities, Stockholm was number one in the world, followed by Toronto, Paris, San Francisco, New York and London (PwC, 2012: 42-43; on rankings of higher education systems, see Williams et al., 2013).

There are many global innovation rankings that put the weight on Stockholm and occasionally also on Copenhagen. For example, in the city innovation ranking based on 2thinknow Innovation Cities Index 2012-2013, there were two Nordic capitals in the Top 20 cities, those of Copenhagen (rank 8) and Stockholm (rank 16). Helsinki's rank was 36 and Oslo's 38 (2thinknow, 2013). In the list of the world's 15 most inventive cities, when measured by patent intensity, Stockholm was global number 8 and Copenhagen number 14 (Pentland, 2013; cf. Cohen, 2012; McKendrick, 2013).

Concerning high technology, Stockholm is usually highest ranked Nordic hub in relevant rankings (see Anttiroiko, 2004; Icon, 2007; Buck & Draisma, 2008; Belisle, 2009; Ericsson, 2012). Among large European regions the capital regions of Sweden and Finland have exceptionally high share of high-tech employment (Goos et al., 2013), and they score high also in many country-level high-tech and innovation rankings (Kao, 2009; WEF, 2013; Cornell University et al., 2013). It seems that especially Greater Helsinki has been able to capitalise some of this glory by occasional mention in more or less impressionist high-tech league tables (Artsonearth, 2009; eGuide Travel, 2012; Johnson, 2012).

#### Hub city profile: logistics, facilities and hospitality

Hub cities may be primarily either logistics cities through which goods and materials are transported, or they may be hubs for meetings and conferences where business people, professionals and creatives meet each other. The positions of the Nordic capitals show mixed results depending on the criteria used. In the aggregate results of global ranking of infrastructure and transportation, Copenhagen is the leading city in Europe (Clark & Moonen, 2013: 13-14). On the other hand, in terms of logistics, at least country-wise, Sweden and Norway are among the high performers in Europe (Arvis et al., 2010). Helsinki in turn has the busiest port among the Nordic capitals (Iglebaek, 2008). Yet in transportation of goods or container logistics the Nordic capitals are not even included in the global Top 50 port cities. (World Shipping Council, 2013).

Concerning airports, according to passenger traffic globally, the largest airports serve large metropolitan areas and tourist attractions (World Airport Codes, 2014). In a survey of 11 million travellers published by Skytrax in 2011, Copenhagen was ranked number 10 (Goldman & Lubin, 2011). Copenhagen gained special recognition for its world-class baggage delivery and quality airport staff. Yet, due to severe competition, in later years Copenhagen dropped from the Top 10 (Skytrax, 2014). In any case, Copenhagen is the busiest airport in the Nordic region, followed by Oslo, Stockholm (Arlanda) and Helsinki.

All the Nordic capitals present themselves as meeting cities, but it seems that mainly Copenhagen and Stockholm stand out as major internationally recognised MICE cities (MICE is abbreviated from Meeting, Incentive, Convention 106

and Exhibition). The statistics of the Union of International Associations show that Copenhagen is the number one destination for international meetings in the Nordic region and number eight in global comparison with some 150 international meetings in 2012. Stockholm as global number twelve is fairly well positioned in the same ranking, while the performances of Oslo (22) and Helsinki (25) were more modest (UIA, 2013; cf. ICCA, 2010; Clark & Moonen, 2013: 17).

#### Consumer city profile: entertainment, cultural services and welfare

Cities of consumption and urban tourism vary tremendously, ranging from beach cities and resort towns to cities of sports, fashion and entertainment. Major tourist cities are well-known global cities and metropolitan areas (Bremner, 2007; cf. WEF, 2011). However, in general, the Nordic capital cities are not among the leading urban tourism destinations (Heeley, 2011; Euromonitor International, 2014).

Tourism can be divided into various sub-categories, of which shopping has become increasingly important. The major shopping destinations of the world are as a rule the largest metropolises of wealthy countries and also a limited number of cities that have become international shopping destinations, such as Dubai. According to sales, in the global Top 20 list there are three Nordic capitals, Copenhagen, Oslo and Stockholm (Centre for Retail Research, 2011).

If we take the service city dimension further, we may consider liveability as a generic indicative ranking category. On the liveability dimension of the ranking of the Worldwide Centres of Commerce, which was based on 25 indicators measuring various aspects of quality of life, the Top 10 cities included Copenhagen (MasterCard Worldwide, 2008: 15). In a somewhat similar ranking by The Economist Intelligence Unit (2012b), the group of leading cities included Stockholm. Helsinki claimed the number 1 spot in Monocle's 2011 Quality of Life survey, which ranks the top 25 cities in the world. In the same ranking Copenhagen was number three. Two years later they had changed places, however, Copenhagen being number one and Helsinki number three (Monocle, 2014).

Cities may build on history and culture, in which all Nordic capitals have plenty to offer. Copenhagen, Stockholm and Helsinki were all European Capitals of Culture in the 1990s. Another snapshot can be taken from the Urban Audit, which shows that satisfaction with cultural facilities was highest in Helsinki (Eurostat, 2014). In European comparison, Oslo, Copenhagen and Stockholm were also well positioned in the same study. All in all, Nordic cities do not hold top positions in the global rankings of cities of culture.

Lastly, another aspect of the creative city profile is based on creative industries. This is the area in which all the Nordic capitals have started to brand themselves. A notable feature of all four Nordic capitals is their interest in promoting design. Stockholm, Copenhagen and Helsinki have world-class design companies, design houses and design centres. The Copenhagen Institute of Interaction Design and Aalto University's School of Design, Arts and Architecture in Helsinki have been included in The World's 25 Best Design Schools listing of Busi-

ness Insider (Dickey, 2012). In the country-level World Design Ranking 2010-2014, which aggregates design awards, Denmark ranks highest among the Nordic countries (26), followed by Sweden (32) and Finland (58) (World Design Rankings, 2014). In fashion, according to The Top Global Fashion Capital Rankings, Stockholm is the Nordic capital of fashion, ranked as number 36 globally, though with Copenhagen quite close behind (43) (GLM, 2014).

## Rankings-based images of Nordic capitals

Rankings are manifestations of mediatised industrial competition (see Giffinger et al., 2010; Schultz, 2004). In many multi-criteria rankings the top cities are more or less the same, including cities like New York, London and Tokyo. In such comparisons it is indeed difficult for the Nordic capitals to stand out. However good the performance is, location outside the epicentres of economic power, high latitude with all its consequences, and limited size of markets and production capacity have their undeniable impact. If we look at the sub-categories of the multi-criteria rankings, there is remarkable diversity among the top cities, which occasionally lifts the Nordic capitals to the global limelight (see e.g. The Economist Intelligence Unit, 2012a).

Let us build an indicative picture of the Nordic capitals' competitive positions on the basis of global rankings, benchmarking studies and statistical data published in the media. It shows that Stockholm can claim to be the major Scandinavian city with high rankings and wide scope in business, finance, high-tech and knowledge, also showing strengths in culture, tourism and MICE services. Copenhagen, in turn, dominates the categories of culture, tourism, conferences and logistics, also having a high profile as a knowledge and business hub. In this sense the eight facets of the 'Scandinavian diamond' built on the profiles of the Nordic capital cities using an ordinal scale, as illustrated in Figure 2, are divided into two distinct sides: Stockholm is number one in hard factors of production, whereas Copenhagen is number one in the soft development factors, though only marginally ahead of Stockholm. As for the other two capital cities, Oslo has strengths in finance and logistics, and also good performance in tourism and MICE services, whereas Helsinki has strengths in high-tech and to a lesser extent in business, knowledge and cultural services (See Figure 2). There is clear resemblance to the typology presented in Clark and Moonen's (2013, 8) report Europe's Cities in a Global Economy, in which the Nordic capitals are used to exemplify different types of city strategies: Stockholm as an established regional leader; Copenhagen as a green city; Oslo as an institutional centre; and Helsinki as a technopole. These findings also concur to some extent with the findings of Rainisto (2003).

The Nordic capitals have their greatest strengths in global comparison in high-tech, innovation and knowledge and to a lesser extent in business services, which can be seen as the major strength of the entire region. In this respect, the metropolitan leadership of the region goes inherently to Stockholm.

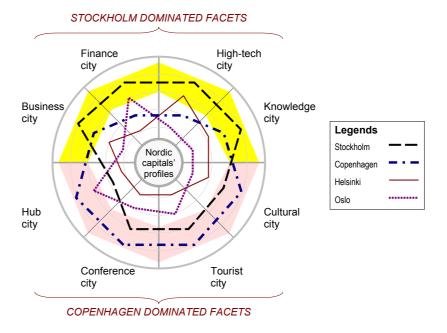


Figure 2. Snapshot of rankings-based economic profiles of Nordic capitals.

## Remarks on city branding of Nordic capitals

How do these rankings and the aggregate image they build relate to the branding efforts of the Nordic capitals? It would appear that all four Nordic capitals follow the rankings, publicise them if they are favourable, and invoke them on various occasions to benefit from them, as at fairs, in brochures, websites and public presentations. Yet branding-wise the most professional and systematic brand – and since its proclamation of being 'The Capital of Scandinavia' also the most controversial - among the four capital cities is certainly Stockholm. Stockholm started to organise its place branding in the late 1990s. It became a 'Region of Excellence' in the 2000s, which was supplemented by cluster-specific slogans in mobile technology, biotechnology, environmental technology and finance. Around the same time the city adopted a new slogan applied both in tourism and business, "Inspired in Stockholm". Since the mid-2000s the city's global orientation has become more pronounced, culminating in the idea of a world-class city in its Vision 2030. The most important turn in branding to date was the launch of the slogan 'Stockholm, The Capital of Scandinavia' in 2006, a shared brand for the whole region of Stockholm (Paschou & Metaxas, 2013; Jansson & Power, 2006: 33-34; Fouché, 2006). Around that time the Internet also became an important part of Stockholm's brand communication (Dobers & Hallin, 2009).

The situation is very different in the other Nordic capitals. Copenhagen has had a low profile in branding, even if 'Copenhagen, Open for you' or 'OPEN Copenhagen' launched in 2009 as a tourism campaign was a turning point in this respect. Copenhagen has for a long time also had cluster-specific sub-brands in biotechnology, distribution and business (Rainisto, 2003). However, it has not been able to crystallise and communicate its brand clearly, and its online branding suffers from inconsistencies. Oslo and Helsinki are among the four Nordic capitals the least visible in terms of branding (Jansson & Power, 2006: 29-31). In brief, all four Nordic capitals utilise rankings in their branding, which is most apparent in their Internet-based communication, but Stockholm stands out with the most consistent and regionally co-ordinated branding efforts.

#### Conclusion

International city rankings have been used as reflections of cities' positions on a symbolic battlefield. Rankings, when shared and discussed widely in the media, tend to intensify intercity competition and city boosterism (Harvey, 2012; Colomb, 2012). Cities become involved in such branding games whether they want to or not, for rankings affect the views of their customers and stakeholders, including potential visitors and investors. Intermediary-generated aggregate images, such as diffuse 'social imaging' through city rankings and similar media content, cannot be ignored if the city wants to increase its symbolic capital and benefit from it in its economic development policy.

Previously presented empirical analysis focuses on the capital cities of Sweden, Denmark, Norway and Finland. In terms of local economic development, they have their undeniable strengths, especially in strategically important post-industrial fields of activity, which have also become recognised in global city rankings. They have special strengths in competitiveness, business opportunities, innovativeness, high-tech development, liveability and infrastructure. Nordic capitals are generally strong in assets but somewhat weaker in "buzz", the latter measured by involvement in social media and more conventionally by media coverage (cf. The Guardian, 2014). Such deficiencies imply that the four capitals need to pay greater attention to tertiary communication (see Kavaratzis, 2004). It appears that only Stockholm has addressed this matter properly.

In terms of their current brands, either Stockholm or Copenhagen is regularly the number one Nordic city, if measured by city brand indices and rankings (see e.g. City-Data, 2007; Hildreth, 2008). What is particularly interesting in the Saffron European City Brand Barometer, which used both available data and an internal expert panel to evaluate the brand and asset strengths of the 72 largest European cities, is that brand strength does not necessarily match with a city's objective assets, such as attractions, cuisine, compactness, cost level and weather conditions. When brands and assets were compared, cities with high brand-asset ratios included Stockholm (brand-asset ratio 118%), which suggests that Stockholm has done something right in its branding (Hildreth, 2008). The empirical evidence suggests that among the four Nordic capitals Stockholm has been most successful in its branding and can thus be assumed to have been able to reap the greatest benefits from brand-related symbolic capital in its economic development policy.

### References

- Allen, George (2007) Place Branding: New Tools for Economic Development, Design Management Review, 18 (2): 60-68.
- Anholt, Simon (2007) Competitive Identity: The New Brand Management of Nations, Cities and Regions, Palgrave Macmillan, Basingstoke.
- Anholt, Simon (2010) *Places: Identity, Image and Reputation*, Palgrave Macmillan, Basingstoke.
- Anttiroiko, Ari-Veikko (2014) *The Political Economy of City Branding*, Routledge, London and New York.
- Anttiroiko, Ari-Veikko (2015) *New Urban Management: Attracting Value Flows to Branded Hubs*, Palgrave Macmillan, Basingstoke.
- Askegaard, Soren & Guliz Ger (1998) 'Product-Country Images: Towards a Contextualized Approach' in Basil G. Englis & Anna Olofsson (eds), *European Advances in Consumer Research*, Volume 3, Association for Consumer Research, Provo, UT, pp. 50-58.
- Baker, Bill (2012) Destination Branding for Small Cities. The Essentials for Successful Place Branding, Second Edition, Creative Leap Books, Portland.
- Beyers, William (2010) Determinants of change in service employment in the United States 1998-2005: findings based on a new classification of industries, *The Service Industries Journal*, 30 (4): 531-547.
- Chapman, Karen & Lee E. Pike (1992) Sources of City Rankings, *Behavioral & Social Sciences Librarian*, 11 (1): 1-11.
- Clark, Greg & Tim Moonen (2013) Europe's Cities in a Global Economy: Trends, Challenges and Opportunities, London Conference, October 29th, 2013, viewed 27 March 2014, <a href="http://centreforlondon.org/wp-content/uploads/2013/10/Europes-Cities-in-a-Global-Economy-Clark-Moonen-Oct-2013.pdf">http://centreforlondon.org/wp-content/uploads/2013/10/Europes-Cities-in-a-Global-Economy-Clark-Moonen-Oct-2013.pdf</a>>.
- Colomb, Claire (2012) Staging the New Berlin: Place Marketing and the Politics of Urban Reinvention Post-1989, Routledge, London and New York.
- Dinnie, Keith (2008) Nation Branding. Concepts, Issues, Practice, Elsevier, Amsterdam.
- Dinnie, Keith (ed) (2011) *City Branding: Theory and Cases*, Palgrave Macmillan, Basingstoke.
- Diamantopoulos, Adamantios, Bodo Schlegelmilch & Dayananda Palihawadana (2011) The relationship between country-of-origin image and brand image as drivers of purchase intentions: A test of alternative perspectives, *International Marketing Review*, 28 (5): 508–524.
- Dobers, P. & A. Hallin (2009) 'The Use of Internet in Building the Brand of "Stockholm: The Capital of Scandinavia" in M. Gascó-Hernandez & T. Torres-Coronas (eds), *Information Communication Technologies and City Marketing: Digital Opportunities for Cities Around the World*, Information Science Reference, Hershey, pp. 265-294.

- Ergazakis, K., K. Metaxiotis & J. Psarras (2006) 'An Emerging Pattern of Successful Knowledge Cities' Main Features' in F.J. Carrillo (ed), *Knowledge Cities: Approaches, Experiences and Perspectives*, Elsevier/Butterworth-Heinemann, Burlington, pp. 3-15.
- Eshuis, Jasper & Erik-Hans Klijn (2012) *Branding in Governance and Public Management*, Routledge, New York.
- Fouché, Gwladys (2006) *Stockholm capitalises on confidence*, The Guardian, Travel blog, 25 April 2006, viewed 30 March 2014, <a href="http://www.theguardian.com/travel/blog/2006/apr/25/thecapitalisationofstockhol">http://www.theguardian.com/travel/blog/2006/apr/25/thecapitalisationofstockhol</a>.
- Gardner, B.B. & S.J. Levy (1955) The Product and the Brand, *Harvard Business Review*, 33 (2): 33-39.
- Giffinger, Rudolf, Gudrun Haindlmaier & Hans Kramar (2010) The role of rankings in growing city competition, *Urban Research & Practice*, 3 (3): 299-312
- Graby, F. (1993) 'Countries as Corporate Entities in International Markets' in N. Papadopoulos & L. Heslop (eds), *Product-Country-Images. Impact and Role in International Marketing*, International Business Press, New York, pp. 257-283.
- Harvey, David (2012) Rebel Cities: From the Right to the City to the Urban Revolution, Verso, London and New York.
- Jansson, Johan & Dominic Power (eds) (2006) *Image of the City. Urban Branding as Constructed Capabilities in Nordic City Regions*, Nordic Innovation Centre project number 05009, Norden Nordic Innovation Centre, Oslo.
- Kapferer, Jean-Noël (2008) *The New Strategic Brand Management. Creating and Sustaining Brand Equity Long Term*, Fourth Edition, Kogan Page, London and Philadelphia.
- Kavaratzis, M. (2004) From city marketing to city branding: Towards a theoretical framework for developing city brands, *Place Branding*, 1 (1): 58-73.
- Keller, K.L. (1993) Conceptualizing, Measuring, and Managing Customer-Based Brand Equity, *Journal of Marketing*, 57 (1): 1-22.
- Kelton, Christina M.L., Margaret K. Pasquale & Robert P. Rebelein (2008) Using the North American Industry Classification System (NAICS) to Identify National Industry Cluster Templates for Applied Regional Analysis, *Regional Studies*, 42 (3): 305-321.
- Kornberger, Martin (2010) Brand Society. How Brands Transform Management and Lifestyle, Cambridge University Press, Cambridge, UK.
- Narayana, C.L. (1981) Aggregate images of American and Japanese products: implications on international marketing, *Columbia Journal of World Business*, 16 (3): 31-35.
- Newman, Peter & Andy Thornley (2005) *Planning World Cities. Globalization and Urban Politics*, Palgrave Macmillan, Houndmills, UK.
- Nyseth, Torill & Arvid Viken (eds) (2009) *Place Reinvention. Northern Perspectives*, Ashgate, Farnham.

- Ooi, Can-Seng (2011) 'Paradoxes of City Branding and Societal Changes' in Keith Dinnie (ed), *City Branding: Theory and Cases*, Palgrave Macmillan, Basingstoke, pp. 54-61.
- Paschou, Eleni & Theodore Metaxas (2013) *Branding Stockholm*, MPRA Paper No. 48118, June 2013, Posted 8 July 2013, viewed 30 March 2014, http://mpra.ub.uni-muenchen.de/48118/.
- Rainisto, Seppo K. (2003) Success factors of place marketing: A study of place marketing practices in Northern Europe and the United States, Helsinki University of Technology, Institute of Strategy and International Business, Doctoral Dissertations 2003/4, Helsinki University of Technology, Espoo, viewed 30 March 2014,
  - https://aaltodoc.aalto.fi/bitstream/handle/123456789/2106/isbn9512266849.pdf.
- Rawolle, S. & R. Lingard (2010) The mediatization of the knowledge based economy: an Australian field based account, *Communications: the European journal of communication research*, 35 (3): 269-286.
- Rindova, Violina P. & Luis L. Martins (2012) 'Show Me the Money: A Multi-dimensional Perspective on Reputation as an Intangible Asset' in Timothy G. Pollock and Michael L. Barnett (eds), *The Oxford Handbook of Corporate Reputation*, Oxford University Press, Oxford, pp. 16-33.
- Shin, Jung Cheol, Robert K. Toutkoushian & Ulrich Teichler (eds) (2011) *University rankings: theoretical basis, methodology and impacts on global higher education*, Springer, Dordrecht and London.
- Schulz, Winfried (2004) Reconstructing Mediatization as an Analytical Concept, *European Journal of Communication*, 19: 87-101.
- Wedlin, Linda (2006) Ranking Business Schools: Forming Fields, Identities and Boundaries in International Management Education, Edward Elgar, Cheltenham.
- Zavattaro, Staci M. (2013) Cities for sale: Municipalities as public relations and marketing firms, SUNY Press, Albany, NY.
- Zavattaro, Staci M. (2014) *Place Branding through Phases of the Image: Balancing Image and Substance*, Palgrave Macmillan, Basingstoke.
- Zhang, Li & Simon Xiaobin Zhao (2009) City branding and the Olympic effect: A case study of Beijing, *Cities*, 26: 245-254.

### Reviewed documents and online sources on city ranking

- 2thinknow (2013) *Innovation Cities Global Index 2012-2013*, 2thinknow, Melbourne, viewed 13 May 2013, http://www.innovation-cities.com/innovation-cities-global-index-2012/7237.
- Annoni, Paola & Lewis Dijkstra (2013) *EU Regional Competitiveness Index: RCI 2013*, JRC Scientific and Policy Reports, EUR 26060 EN, Publications Office of the European Union, Luxembourg, viewed 21 March 2014, <a href="http://ec.europa.eu/regional\_policy/sources/docgener/studies/pdf/6th\_report/rci 2013">http://ec.europa.eu/regional\_policy/sources/docgener/studies/pdf/6th\_report/rci 2013</a> report final.pdf>.

- Artsonearth (2009) *Top 10 Tech Cities*. Artsonearth, June 3, 2009, viewed 27 March 2014, <a href="http://artsonearth.com/2009/06/top-10-tech-cities.html">http://artsonearth.com/2009/06/top-10-tech-cities.html</a>>.
- Arvis, J.-F. & M.A. Mustra, L. Ojala, B. Shepherd & D. Saslavsky (2010) Connecting to Compete. Trade Logistics in the Global Economy. The Logistics Performance Index and Its Indicators, The World Bank, Washington DC, viewed 25 July 2011, http://siteresources.worldbank.org/INTTLF/Resources/LPI2010 for web.pd
- Beaverstock, J. V., R. G. Smith & P. J. Taylor (1999) A Roster of World Cities, *Cities*, 16 (6): 445-458.
- Belisle, J.-F. (2009) *The 10 Most Hi-Tech Cities in the World*, April 21, 2009, viewed 25 July 2011, http://jfbelisle.com/2009/04/the-10-most-hi-tech-cities-in-the-world/.
- Bremner, C. (2007) *Top 150 City Destinations: London Leads the Way*, Euromonitor International, Analyst Insight, Oct 2007, viewed 27 July 2011, http://www.euromonitor.com/top-150-city-destinations-london-leads-theway/article.
- Buck, René & Nynke Draisma (2008) *Index Measures Metros' 'Tech-nicity'*, from Site Selection magazine, July 2008, Site Selection online, viewed 24 July 2013, <a href="http://www.siteselection.com/features/2008/jul/euro-rd-hubs/">http://www.siteselection.com/features/2008/jul/euro-rd-hubs/</a>>.
- Centre for International Competitiveness (2014) The World Knowledge Competitiveness Index. Centre for International Competitiveness, viewed 16 August 2014, http://www.cforic.org/pages/wkci.php.
- Centre for Retail Research (2011) *World Shopping Capitals 2011 Survey Which City is the Biggest Shopper?* Centre for Retail Research, viewed 23 July 2011, http://www.retailresearch.org/worldshoppingcapitals.php.
- City-Data (2007) 60 World Cities ranked according to Anholt City Brands Index, City-Data.com, 08-06-2007, viewed 26 March 2014, http://www.city-data.com/forum/general-u-s/130560-60-world-cities-ranked-according-anholt.html.
- Cohen, Boyd (2012) *The Top 10 Smart Cities On The Planet*, Fast Company, viewed 27 March 2014, http://www.fastcoexist.com/1679127/the-top-10-smart-cities-on-the-planet.
- Cornell University, INSEAD & WIPO (2013) *The Global Innovation Index* 2013: *The Local Dynamics of Innovation*, Geneva, Ithaca, and Fontainebleau, viewed 30 March 2014, http://www.globalinnovationindex.org/content.aspx?page=gii-full-report-2013.
- Cushman & Wakefield (2010) *European Cities Monitor 2010*, Cushman & Wakefield, London, European Research Group, viewed 30 March 2014, http://www.europeancitiesmonitor.eu/wp-content/uploads/2010/10/ECM-2010-Full-Version.pdf.

- Dickey, Megan Rose (2012) *The World's 25 Best Design Schools*, Business Insider, Tech, viewed 27 March 2014, http://www.businessinsider.com/the-worlds-25-best-design-schools-2012-11.
- eGuide Travel (2012) *Worlds Top 10 Most Modern Cities*, eGuide Travel, Articles, 16th January, 2012, viewed 29 March 2014, http://www.eguidetravel.com/articles/worlds-top-10-most-modern-cities/.
- Ericsson (2012) *Networked Society City Index 2013*, Ericsson, Stockholm, viewed 10 April 2014, http://www.ericsson.com/res/docs/2013/ns-city-index-report-2013.pdf
- Euromonitor International (2014) *Top 100 City Destinations Rankings*, Euromonitor International, January 27, 2014, viewed 10 April 2014, http://blog.euromonitor.com/2014/01/euromonitor-internationals-top-city-destinations-ranking.html.
- Eurostat (2014) *Statistics on European Cities*, Website last modified on 20 February 2014, Eurostat, viewed 25 March 2014, http://epp.eurostat.ec.europa.eu/statistics\_explained/index.php/Statistics\_on\_European\_cities.
- fDi (2014) European Cities and Regions of the Future 2014/15, fDi Magazine, February/March 2014, viewed 27 March 2014, http://static.tijd.be/upload/European\_Cities\_and\_Regions\_of\_the\_Future\_20 1415 4687454-10313872.pdf.
- Florida, Richard (2011) *The 25 Most Economically Powerful Cities in the World*, The Atlantic Cities, September 15, 2011, viewed 20 March 2014, http://www.theatlanticcities.com/jobs-and-economy/2011/09/25-most-economically-powerful-cities-world/109/.
- Florida, Richard (2012) *The Global Cities That Offer the Most Opportunity*, The Atlantic Cities, October 12, 2012, viewed 12 May 2013, http://www.theatlanticcities.com/jobs-and-economy/2012/10/global-cities-offer-most-opportunity/3551/.
- Foundum (2013) *Top 10 Most Vibrant Entrepreneurial Ecosystem Hubs in Europe*, Foundum, June 11th, 2013, viewed 27 March 2014, http://blog.foundum.com/blog/2013/06/11/most-vibrant-entrepreneurial-ecosystem-hubs-in-europe/.
- GaWC (2014) *The World according to GaWC 2012*, the Globalization and World Cities (GaWC) Research Network, 13 January 2014, viewed 30 March 2014, http://www.lboro.ac.uk/gawc/world2012t.html.
- GfK (2013) Nation Brand Index 2013: latest findings. US voted top country for attracting talent and investment but with a reducing lead. Press releases, 14 November 2013, viewed 26 March 2014, http://www.gfk.com/news-andevents/press-room/press-releases/pages/nation-brand-index-2013-latest-findings.aspx.
- GLM (2014) New York Takes Top Global Fashion Capital Title from London, edging past Paris, The Global Language Monitor's 10th Annual Survey, Global Language Monitor, viewed 27 March 2014,

- http://www.languagemonitor.com/fashion/sorry-kate-new-york-edges-paris-and-london-in-top-global-fashion-capital-10th-annual-survey/.
- Global Urban Competitiveness Project (2008) *Global Urban Competitiveness Report (2007~2008)*, News Release 2008-11-28, viewed 20 June 2009, http://www.gucp.org/en/news.asp?NewsID=424&BigClassID=2&SmallClas sID=20.
- Goldman, Leadh & Gus Lubin (2011) *The 10 Best Airports In The World*, Business Insider, March 2011, viewed 26 March 2014, http://www.businessinsider.com/best-airports-in-the-world-2011-3?op=1#ixzz2wzZpiy1F.
- Goos, Maarten, Ian Hathaway, Jozef Konings & Marieke Vandeweyer (2013)
- High-Technology Employment in the European Union, Vives Discussion Paper 41, December 2013, Vives, KU Leuven, Leuven, Belgium, viewed 10 April 2014.
  - http://www.econ.kuleuven.be/VIVES/publicaties/discussionpapers/DP/dp20 13/final-20131223-3rd.pdf.
- Heeley, John (2011) *Inside City Tourism: A European Perspective*, Channel View Publications, Bristol.
- Hildreth, Jeremy (2008) *The European City Brand Barometer Revealing which cities get the brands they deserve*, Saffron Brand Consultants, London.
- Huggins, Robert, Hiro Izushi, Daniel Prokop & Piers Thompson (2014) *The Global Competitiveness of Regions*, Routledge, London and New York.
- ICCA (2010) ICCA publishes country and city rankings 2009. U.S.A. and Vienna still most popular association meeting destinations. News & Publications Archives, 18 May 2010, viewed 23 July 2011, http://www.iccaworld.com/newsarchives/archivedetails.cfm?id=2175.
- Icon (2007) *Tech capitals of the world*, The Age, June 18, 2007, viewed 25 July 2011, http://www.theage.com.au/news/technology/tech-capitals-of-the-
- 2011, http://www.theage.com.au/news/technology/tech-capitals-of-the-world/2007/06/16/1181414598292.html.

  Iglebaek, Odd (2008) Containers Challenge Rails and Roads, *Journal of Nor*
  - dregio, 2 (8): 4-7, viewed 26 March 2014, http://www.nordregio.se/Global/JoN/JoN%202008/JoN%202008%202/JoN%202008\_2.pdf.
- Johnson, Bobbie (2012) *A guide to Europe's tech hubs*, Gigaom, Oct. 15, 2012, viewed 27 March 2014, http://gigaom.com/2012/10/15/europetechhubs/.
- Kao, John (2009) Tapping the World's Innovation Hot Spots, Big Picture, *Harvard Business Review*, March 2009, Reprint R0903J.
- MasterCard Worldwide (2008) Worldwide Centers of Commerce Index 2008, Insights, MasterCard Worldwide, viewed 15 May 2013, http://www.mastercard.com/us/company/en/insights/pdfs/2008/MCWW\_W CoC-Report\_2008.pdf.
- McKendrick, Joe (2013) *Top 20 smartest cities in North America and Europe*, Smartplanet, the Bulletin, January 10, 2013, viewed 27 March 2014,

- http://www.smartplanet.com/blog/bulletin/top-20-smartest-cities-in-north-america-and-europe/.
- Monocle (2014) *Quality of Life Survey 2013*, Monocle, 2014, viewed 30 March 2014, http://monocle.com/film/Affairs/quality-of-life-survey-2013/.
- Pentland, William (2013) *World's 15 Most Inventive Cities*, Forbes, Energy, 7/09/2013, viewed 27 March 2013, http://www.forbes.com/sites/williampentland/2013/07/09/worlds-15-most-inventive-cities/.
- PwC (2012) *Cities of Opportunity*, PricewaterhouseCoopers, Partnership for New York City, viewed 12 May 2013, http://www.pwc.com/us/en/cities-of-opportunity/assets/cities-opp-2012.pdf.
- Site Selection (2013) *The World's Most Competitive Cities*, viewed 20 March 2014, http://d27vj430nutdmd.cloudfront.net/20415/188316/fb101e9cc7cd045eb11 ef5c9cb6c08251b859a3e.27.pdf.
- Skytrax (2014) *World Airport Awards 2014*, viewed 26 March 2014, http://www.worldairportawards.com/Awards 2011/Airport2011.htm.
- The Economist Intelligence Unit (2012a) *Hot spots. Benchmarking global city competitiveness*. A report from the Economist Intelligence Unit, January 2012, viewed 20 March 2014, http://www.economistinsights.com/sites/default/files/downloads/Hot%20Sp ots.pdf.
- The Economist Intelligence Unit (2012b) *Best cities ranking and report*. A special report from the Economist Intelligence Unit, The Economist, viewed 28 May 2013, http://pages.eiu.com/rs/eiu2/images/EIU BestCities.pdf.
- The Economist Intelligence Unit (2013) *Hot Spots 2025. Benchmarking the future competitiveness of cities*, viewed 20 March 2014, http://www.citigroup.com/citi/citiforcities/pdfs/hotspots2025.pdf.
- The Guardian (2014) The world cities with the most powerful brands get the data. Posted by Chris Michael and Ami Sedghi, *The Guardian*, Tuesday 6 May 2014, viewed 21 August 2014, http://www.theguardian.com/cities/datablog/2014/may/06/world-cities-most-powerful-brands-get-the-data.
- UIA (2013) *International Meetings Statistics for the Year 2012*, Press Release 4<sup>th</sup> June 2013, by Joel Fischer, Union of International Associations (UIA), viewed 25 March 2014,
  - http://www.uia.org/sites/dev.uia.be/files/misc\_pdfs/UIA\_stats\_PR13.pdf.
- WEF (2011) *The Travel & Tourism Competitiveness Report 2011*, edited by Jennifer Blanke and Thea Chiesa, World Economic Forum, Geneva.
- WEF (2013) *Global Information Technology Report 2013*, World Economic Forum, viewed 30 March 2014, http://www.weforum.org/reports/global-information-technology-report-2013.
- Williams, Ross, Gaetan de Rassenfosse, Paul Jensen & Simon Marginson (2013) *U21 Ranking of National Higher Education System*, University of Mel-

- bourne, Melbourne, viewed 31 March 2014, http://www.universitas21.com/RelatedFile/Download/428.
- Wired (2013) Special feature: Europe's hottest startup capitals, Wired UK Staff, 04 October 13, viewed 27 March 2014, http://www.wired.co.uk/magazine/archive/2013/11/european-startups/welcome.
- World Airport Codes (2014) *World Top 30 Airports*, viewed 20 March 2014, http://www.world-airport-codes.com/world-top-30-airports.html.
- World Design Rankings (2014) *Current Aggregated World Design Rankings:* Years 2010 2014, viewed 27 March 2014, http://www.worlddesignrankings.com/.
- Yeandle, Mark & Nick Danev (2014) The Global Financial Centres Index 15, March 2014, Financial Centre Futures 1-2014, Long Finance, viewed 20 March 2014,
  - http://www.longfinance.net/images/GFCI15 15March2014.pdf.