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The spatial economy of North American trade fairs

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The Spatial Economy of North American Trade Fairs

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Through a study of trade fairs, this paper illustrates that relational approaches to economic geography are not limited to the sphere of economic and social relationships. These relationships are influenced by and, in turn, shape material realities, such as specific infrastructure and the labor market, in a reflexive manner. Trade fairs are "relational events" that bring together regional, national and often international producers, users, suppliers, and other agents of a value chain or technology field for the purpose of exchanging knowledge about technological and market developments, building partnerships, and maintaining existing networks through learning by interaction and observation. However, these events are also situated in space and time, grounded in the contexts of particular industries, trajectories of industrial marketing and trade patterns, as well as the economic geographies of places. Focusing on North America, this paper presents and analyses data on the economic geography of trade fairs and their regional economic impact. It explores regional trade fair patterns and dynamic changes in major trade-fair cities by emphasizing the role of history and economic context. **Keywords:** North America, relational economic geography, trade fairs, regional economic impact

Introduction

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European trade fairs have long been the center of economic and cultural exchange - places where products were traditionally traded between national or international traders and local consumers. They developed as a consequence of highly regulated and segmented territories that had established rigid trade restrictions (Allix, 1922; Fuchslocher and Hochheimer, 2003; Rodekamp, 2003). Only during certain days of the year, often related to Christian holidays, non-local traders were permitted to sell their products to the population of the respective urban areas. These temporary markets (Golfetto and Rinallo, 2011) later developed into events through which market and technology trends, as well as information about economic and political regulations, were discussed and disseminated. By the medieval period, trade fairs were already much more than just marketplaces. Two criteria particularly influenced the geographical distribution of European trade fairs: (a) the existence of a production core in the surrounding region and (b) proximity to intersecting trade routes. Despite this, the geography of trade fair activities did not remain static, but underwent significant changes over time. To understand these geographical shifts, we must keep in mind that most such events were normally not deeply embedded in the urban fabrics that hosted them (Allix, 1922). Shifts in trade fair locations were influenced by political hegemonies, disparities in economic development, innovation cycles, and shifting markets. In the twentieth century, trade fairs increasingly shifted their focus from places for finalizing contracts and sales to those where important information and knowledge about product characteristics, innovations, and market trends were exchanged (Borghini et al., 2004; Maskell et al., 2006).

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While substantial information about the history and geography of European trade fairs exists (Allix, 1922; Fuchslocher and Hochheimer, 2003; Rodekamp, 2003), North American fairs developed much later and have not been studied as extensively as their European counterparts. Consequently, less is known about the geography of trade fair activity in the U.S. and Canada, the attendance of such events by exhibitors and visitors, and the dynamic changes in the trade fair business (for an exception, see Zelinsky, 1994). To address this research gap, this article has two goals: First, we aim to investigate the economic geography of North American trade fairs by studying characteristics such as the number and size of trade fairs in terms of attendance and exhibition space in U.S. and Canadian cities. Second, we aim to explore and quantify changes in the North American trade fair industry. This is particularly important as these events are not only "relational places" where information and knowledge are circulated and disseminated through intensive inter-firm communication; they are also associated with physical places and materialize in the form of a local support industry that provides local jobs and incomes. Our research contextualizes the changes in the geography of trade fairs over the past forty years and identifies the connections between these events and North America's broader economic geography. Using this as a starting point, our argument is structured as follows: The next section provides a conceptual discussion about the role of trade fairs in the global knowledge economy and their relational geographies. Here, we also discuss the research methodology and point at the limited availability of reliable data on North American trade fairs. The paper then discusses growth of trade fairs in North America in the post-

World War II more broadly. The section that follows focuses on recent structures and

trends since the turn of the millennium, before the rise of trade fairs in Chicago, Las

Vegas, and Toronto is investigated to explore important trajectories in the development of major trade fair centers. This allows us to demonstrate how different trade fairs trajectories of major trade fair centers have become established over time in a relational manner through reflexive interrelationships between trade fair development, historical structures, and infrastructure investments. Finally, the paper draws some conclusions about the future of trade fairs in an increasingly volatile economy.

Relational Geographies of Trade Fairs

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Recent work argues that trade fairs – especially international ones – have become a core element of new relational geographies (Bathelt and Schuldt, 2010). Trade fairs no longer focus on the exchange of goods and the signing of sales contracts (although still important), but instead are catalysts of knowledge circulation through which knowledge and understanding about industries and technologies is created and disseminated over distance. Trade fairs can be viewed as "relational places" that emphasize the role of economic action and interaction in understanding and explaining economic structures. This fits well into the context of recent work on relational economic geography which is generally characterized by a number of commonalities, including (a) its focus on economic agency in space instead of spatial representations, (b) micro-level reasoning, (c) an institutional focus in analyzing stabilizations of economic practices, and (d) analysis of the effects of globalization on economic organization and the resulting globallocal tensions (Yeung, 2005; Bathelt, 2006). Trade fairs specifically focus on bringing together members of a particular value chain or industry to display new products to potential suppliers and customers, as opposed to conventions and congresses where the emphasis is placed on knowledge acquisition at seminars and lectures.²

The relational character of trade fairs has been acknowledged in studies that characterize trade fairs as temporary assemblages of human beings (Zelinsky 1994), periodic events in the social economy (Norcliffe and Rendace, 2003), temporary clusters (Maskell et al., 2004), cyclical clusters (Power and Jansson, 2008), or temporary markets (Golfetto and Rinallo, 2011), with organized proximity for interaction (Rallet and Torre, 2009). Trade fairs provide information about global developments in markets and technologies and are key for making personal contact with potential customers and suppliers. As opposed to earlier work, recent studies emphasize the knowledge-based character of these events (Borghini et al., 2006; Maskell et al., 2006; Bathelt and Schuldt 2008; 2010) and describe how certain international trade fairs have become central nodes that connect the global political economy (Bathelt, 2011), creating a microcosm of an industry for a limited period of a few days (Rosson and Seringhaus, 1995).

Trade fairs generate opportunities for knowledge creation, networking, product branding and market development beyond the local scale. Face-to-face (F2F) meetings with other participants enable firms to systematically acquire information and knowledge about the technological and strategic choices of competitors, suppliers, and customers (Borghini et al., 2004). During trade fairs, information concerning industry-wide trends and ideas – as well as all sorts of news and gossip – flow between spatially and temporally clustered participants (Maskell et al., 2006). Agents benefit from integrational and informational cues developed through repeated, intensive, and often short F2F encounters which lead to a specific communication and information ecology, referred to as "global buzz" (Bathelt and Schuldt, 2010). Global buzz involves unique processes of knowledge dissemination and creation through interactive learning and learning by observation (Maskell et al., 2006). It is related to the dedicated co-presence of global

supply and demand; intensive, temporary F2F interaction; a variety of possibilities for observation; intersecting interpretative communities; and the formation of multiplex relationships (see also, Borghini et al., 2006). For many participants, the value of the trade fair is in this buzz-based learning rather than the actual sales or purchases made.

International fairs bring together leading and less well-known agents from an entire industry or technology field for the primary purpose of exchanging knowledge regarding present and future developments of their industry, centered around displays of products, prototypes and innovations. This allows actors to develop an overview of market trends and provides a myriad of opportunities to make contact, ask questions, and engage in F2F communication with other agents in the same value chain or industry (Rosson and Seringhaus, 1995; Sharland and Balogh, 1996; Godar and O'Connor, 2001; Prüser, 2003). Firms that regularly attend these fairs are able to find suitable partners to complement their needs, establish trust with distant partners, and undertake the first steps toward the development of durable inter-firm networks in research, production, and marketing. Exhibitors and visitors benefit enormously from the variety of formal and informal meetings held with a diverse array of agents (Borghini et al., 2006; Entwistle and Rocamora, 2006).

A relational interpretation of trade fairs, however, needs to go beyond a discussion of flows and networks. It suggests that economic action is not only shaped by socio-institutional relationships but also influenced by outcomes and structures related to former decision-making and interaction, albeit not in a deterministic manner (Bathelt and Glückler, 2011). Therefore, a relational analysis clearly builds on evolutionary perspectives. This allows us to take into consideration how material geographies of buildings and infrastructure affect economic action and interaction, and how the results of

this interaction (for instance, investments into new trade fairs centers), in turn, impact the use and further development of material geographies in a relational manner. The final use of a new exhibition space is, for instance, not *a priori* determined. Whether it will become a conference or convention center, a place for local or international exhibitions and trade fairs, a shopping mall, or a place for sports and recreational activities in the end depends on the revenue flows this produces, on the way how potential users and their clients use this space and what other options they have, and how investors react to their decisions. As such, there is a connection between traditional analyses of sites and locations and recent investigations of knowledge flows in economic geography.

From this it becomes clear that trade fairs are not only places where information and knowledge are circulated through intensive inter-firm communication. They also materialize in place and are associated with these places in grounded ways through money flows, jobs in services and catering, and they establish a trade-fair support economy within the urban fabric. The additional income and employment this produces can make a substantial contribution to the overall economy (Schätzl et al., 1993). In the case of Germany – a leading country in the international trade fair industry – trade fairs attracted an average of 26.6 million visitors and 331,000 exhibitors per year between 2005 and 2008. They generated €12.1 billion in direct economic effects (including investments of the trade fair organizers), plus an additional €11.4 billion of indirect effects. In terms of the labor market, these events created a total 226,300 jobs in Germany (AUMA, 2009c).

At the urban level, these events provide a substantial economic stimulus. In Munich, for instance, trade fair exhibitors and visitors produced direct and indirect economic effects of €2.2 billion per year between 2004 and 2007, creating almost 22,000

jobs in the city-region (Penzkofer, 2008). Vancouver authorities estimated that, in 2007, trade fair attendees and convention visitors generated a combined \$584 million (CAD) in direct spending, leading to over \$1.0 billion (CAD) of secondary economic output and generating more than 13,000 jobs (Tourism Vancouver, 2007). In general, these events support the local hotel, leisure, and entertainment sector and generate important multiplier effects for cities. Moreover, trade fairs connect urban economies with wider national or international industries and production chains, helping to establish, maintain, and extend strategic knowledge pipelines that both originate from and are directed to these places (e.g. Malecki and Poehling, 1999; Bathelt, 2011).

Trade fairs clearly demonstrate the reflexive relationship between non-material and material geographies. They are manifestations of the continued need for temporary proximity and face-to-face contact even within a globalized economy. At the same time, they have localized material outcomes in the real geographies of places. This demonstrates the continued need to study relational phenomena not only in the context of dense networks of socialized relationships, but also how these phenomena touch down in particular places and create or alter material social and economic geographies. While recent studies have emphasized the relational character of trade fairs in the knowledge economy (Borghini et al., 2004; Maskell et al., 2006; Bathelt and Schuldt, 2010), this paper focuses on their material base in terms of the geographical distribution and size of these events, and their underlying investment geographies.

Given the substantial importance of these trade fairs for knowledge flows and network building as well as local economic development and job creation, it is surprising how little is known about the size, structure, and development of these events in North America. In our attempt to fill this knowledge gap, we study the structure of these events

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in the most important North American trade fair cities and characteristic trajectories in the development of these events in leading trade fair cities. In drawing on the cases of Chicago, Las Vegas, and Toronto, we demonstrate how historical structures, investment decisions, and economic relationships have triggered different paths of trade fair development and how this has, in turn, impacted further investment decisions.

The major problem of such an analysis is the lack of robust and reliable data on North American trade fairs. This paper presents a major effort to collect, check, and cross-examine existing data, and present it in a careful analysis that is – necessarily – descriptive in character. We use a variety of methods to characterize the structure and changes of the industry. The experiences of Chicago, Las Vegas, and Toronto are examined through both historical documents and interviews with key informants.⁶ Developments in the industry from 1960 to 1990 are examined based on Zelinsky's (1994) study of trade fairs in the U.S. To study the current state of the trade fair economy in the U.S. and Canada, we employed different datasets from the Center for Exhibition Industry Research (CEIR) – a U.S.-based industry group that monitors North America's trade fair industry. To analyze recent trends, we use two main sources of trade fair data: The first is the so-called CEIR Index (CEIR, 2005; 2009) which provides information about trends in the number, attendance, size, and revenues of North American trade fairs. This dataset presents estimates from a representiive sample of trade fairs – the so-called CEIR Index Events – consisting of 219 events in 2001 and 436 events in 2007. The second data source records events in the twenty-five largest North American trade-fair cities, broken down by industry sector, size of trade fair, and location. The detailed data from 2005, which is based on a census of the population of trade fairs that year, is used here in conjunction with data from the CEIR Index Events from 2001 to 2007 to project

the total number of fairs each year by industrial sector (TSW and CEIR, 2005; CEIR, 2009). These datasets represent the most detailed and comprehensive information about trade fairs available in the U.S. and Canada and allow for an analysis of the structures and trends of such events in North America.

Post-World War II Trade Fair Growth

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Zelinsky's (1994) article "Conventionland USA" remains the foremost work on the spatial distribution of trade fairs in the U.S., showing that the simultaneous diversification and specialization of the post-World War II economy, combined with advances in transportation technologies, dramatically increased the importance of trade fairs since the 1960s, moving them from simple venues for product demonstration to their current role as critical nodes in global economic processes (Rosson and Seringhaus, 1995; Bathelt, 2011). Shifts in the geography of North American trade fairs are primarily driven by changes in the economy, rather than by changes in transportation or the exhibition centers themselves. In 1960, trade fairs were heavily clustered in the Manufacturing Belt (Figure 1(a)). The largest trade fair cities at this point in time – as measured by attendance – were embedded in the road, rail, and air networks of the time, and had large numbers of local industrial firms looking for opportunities to demonstrate their products. Thus, trade fairs were clustered in cities like Chicago, New York, or Philadelphia. Other important trade fair cities included Washington, DC and Miami where capitol attractions and leisure activities attracted fairs and attendees (Zelinsky, 1994). By 1990, these patterns shifted substantially in response to changes in the

American economic geography (Figure 1(b)). These dynamics reflect a dramatic shakeup

resulting from the decline of the Fordist economy in traditional industrial centers and the rise of the Sunbelt (e.g. Perry and Watkins, 1977). The most prominent change between the 1960s and 1990s was the movement of trade fairs away from the industrial Northeast and towards Sunbelt and Southwest cities like Las Vegas (which jumped from rank twenty to rank four) and New Orleans (which moved from rank sixteen to rank two).

Older industrial cities with aging, first generation trade fair centers lost ground to newer destinations in the Sunbelt (Zelinsky, 1994). Nonetheless, this did not have the character of a complete shift to the South. Northeastern and Mid-Atlantic cities like Boston (rank ten in 1990) and New York City (rank eleven) remained important nodes in the trade fair economy (Zelinsky, 1994).

The mobile nature of trade fairs helps explain this trend: Small trade fairs can choose between hundreds of different urban locations. The choice may depend on the participants' access to a city or the potential for leisure pursuits (Law, 1987). Only the largest trade fairs are restricted to large urban areas with major facilities that can accommodate them. The mobility of trade fairs allows for gradual shifts in the spatial distribution: events gravitate towards regions and cities that are growing, away from those that are shrinking.

Figure 1(c) completes this trend over the study period. Although the shift from the Northeastern to Southern and Western cities was most prominent between 1964 and 1990 with a southwestern shift of the mean center of trade fairs by about 540 kilometers (Figure 1(a) to 1(b)), further significant changes occurred after this period. The shift between 1990 and 2005 was not quite as strong, with a movement of the mean center by about fifty kilometers to the South, as the substantial gains of states like California and Texas balanced out the remarkable rise of Toronto, Ottawa, Montreal, and Vancouver in

Canada (Figure 1(b) to 1(c)). This clearly shows that the concentration of trade fair activity in the U.S. Manufacturing Belt dissipated by 2005, while prominent new clusters of trade fair activity developed in the California/Nevada and Texas/Louisiana corridors, as well as in major Canadian cities.

The continued shifts in the top twenty-five trade fair cities suggest that trade fair activities are not locked into static geographies. While several large cities like New York City and Chicago consistently retained their position in the rankings, the correlation between population and number of trade fairs declined from 0.76 in 1960 to .12 in 2005. This demonstrates the success that smaller cities like Orlando and Las Vegas have had in attracting a substantial number of trade fairs through large investments in their infrastructure. The geography of trade fairs is not merely a function of city size.

[Insert Figure 1 about here]

Overall, the U.S. overshadows the Canadian trade fair industry despite the emergence of Toronto and Montreal as important trade fair cites in the 1970s and 1980s (AUMA, 2002). Canadian cities are disadvantaged when competeing for international trade fairs because of the comparative smallness of the Canadian market. Most international exhibitors focus on U.S. trade fairs, knowing that their Canadian clientele will likely attend these fairs. The same cannot be said for American firms participating in Canadian fairs. As a consequence, most Canadian fairs have a primary regional/national focus, with few exceptions such as Calgary's Global Petroleum Show or Fort McMurray's Oil Sands Trade Show, which are global in character. 8

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The post-World War II shifts in the North American economy and increased competition between North American cities contributed to trends towards image-making in urban centers. Selling the city as a trade fair destination has become a significant element of city branding and economic development (Bradley et al., 2002). Trade fairs are valuable both for the direct revenue and employment that they generate — trade fair attendees spend two to three times more than leisure tourists (Law, 1987) — but also because cities use trade fairs to construct images that encourage future visits and investment (Opperman, 1996; Opperman and Chon, 1997). Although the actual economic impact of trade fairs is frequently pointed out as a rationale to host such events, the supposed benefits of business tourism appear to be sometimes overestimated and the costs underestimated (Sanders, 1992; 2002). While the immediate economic benefits of trade fairs, such as direct and indirect job creation, are localized, other benefits, especially the resulting knowledge flows and circulation, are broad and have a national and global component. Major trade fairs are important because they connect small regional firms with national or international markets (Wilkinson and Brouthers, 2006; Ramirez-Pasillas, 2008). Both large and small firms benefit from being part of the localized microcosm of their industry during major fairs (Kijewski et al., 1993; Rosson and Seringhaus, 1995; Power and Jansson, 2008). In the next section, recent structures and trends of the North

American trade fair business are presented and interpreted. These patterns provide

evidence of continued growth, rather than stagnation or decline.

Distribution and Trends of North American Trade Fairs

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Although recent reports have questioned the importance of trade fairs in the Internet Age (Backhaus and Zydorek, 1997; Moellenberg and Teichmann, 2000), this section presents evidence of the continued growth of trade fairs in major urban centers in the U.S. and Canada – contrary to what is sometimes assumed. Despite the development of real time video conference systems and other telecommunications technologies, the continued growth of trade fairs over the past decade demonstrates the continued need for periods of intense face-to-face interaction in the business cycle. The value of the buzz at trade fairs outweighs the substantial costs and inconvenience of attending them. Overall, the number of events in the top twenty-five North American trade fair cities has increased from 4,521 in 2001 to 7,753 in 2007. In the same time period, the average number of exhibitors and attendees per event also increased by 31% and 25%, respectively (CEIR, 2005; 2009). While this suggests that trade fairs continue to increase in importance in North America, we should be cautious in drawing conclusions about this growth. The entire industry experienced a decline in the wake of both the post dot-com recession and the 9/11 shock, resulting in a downturn that lasted at least until late 2002. Moreover, the number of trade fairs in 2001 was already depressed due to the collapse of the "new economy" bubble and the IT fairs associated with it (Breiter and Hahm, 2006). The subsequent increase was due to both strong economic growth and a recovery from previous crises. Although some observers expected longer-term stagnation of trade fair activities (AUMA, 2004a; 2009a), many events and most sectors experienced substantial growth in the first decade of the new millennium as discussed below. 10

Depending upon which definition is used, the U.S and Canada host between 5,000 and 13,000 trade fairs per year (AUMA, 2009a). CEIR (2005) estimates that approximately 10,000 events in the mid 2000s were business-to-business fairs, which attracted about 60 million attendees and 1.5 million exhibitors, generating direct revenues of \$10.3 billion. This indicates that trade fairs are a significant element in the overall North American economy and of specific importance to the large urban trade fair centers. The economic impact of trade fairs, derived from payments to direct and secondary employment and the local expenditures of delegates and exhibitors, was estimated to be as high as \$140 billion in 2003 (Lee and Back, 2005). Figure 2 illustrates the growth in the number and average size of trade fairs between 2001 and 2007. The data suggest a strong increase in both the number and size of the events, with temporary interruptions in 2002 and 2005. Overall, the average size of a trade fair increased by 47%, from 115,000 square feet in 2004 to over 165,000 square feet in 2007. Although major U.S. trade fairs had, on average, a similar number of exhibitors than their European counterparts, they fell far behind in terms of attendance. The 200 largest trade fairs and exhibitions in the U.S. had about 975 exhibitors per event in 2002, compared to about 1,130 and 610 exhibitors per international fair in Germany and Italy, respectively (2002 to 2005). Similarly, the 200 largest trade fairs in the U.S. had on average about 21,000 visitors, while international trade fairs in Germany and Italy averaged at about 65,000 to 70,000 visitors per event (Kresse, 2003; Maskell et al., 2004; CERMES, 2005).

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[Figure 2 about here]

The CEIR Index breaks trade fairs into twelve industrial sectors. Figure 3 tracks the growth and decline of the number of trade fairs (a), exhibitors (b) and attendees (c) in a selected number of characteristic sectors. The data shows steady growth in terms of fairs, exhibitors, and attendees across most sectors. Trade fairs focusing on fields such as government, public service and non-profit; professional business services; or construction, building, home and repair saw consistent growth in all metrics over the time period. Noticeable was the decline in the number of information technology and communication fairs, from 929 fairs in 2001 to 842 in 2007. This sector was the only one with a decline in the number of events, which appears to be related to the earlier dot-com boom-and-bust period. The strongest growth in the number of fairs can be found in industrial/heavy machinery and finished business inputs (from 122 to 355) and in the professional business services industry (from 596 to 1,254). While exhibitor growth was gradual and consistent across all sectors, with the exception of the food and raw materials and science sectors, which experienced very strong increases since 2005 (Figure 3b), attendance levels grew in a relatively unequal manner across different sectors (Figure 3c). From a knowledge-circulation perspective, the overall intensification of trade fairs is a desirable development as larger fairs attract more exhibitors and attendees and provide a better environment for interaction among diverse participants, supporting the creation and dissemination of new knowledge and innovation (Borghini et al., 2006; Maskell et al., 2006).

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[Figure 3 about here]

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Table 1 supports the finding that trade fair activities experienced substantial growth between 2001 and 2007 overall, but not all sectors saw the same development. Whereas average attendance per event increased by 39% in the construction, building, home, and repair sector, it decreased both in terms of exhibitors per event and average exhibition space. This meant fewer opportunities for firms to observe the market and their competitors. We can also see the effects of industry downturns on trade fairs, for instance a 12% decrease in the size of the average information technology and communications fair between 2001 and 2004, as the industry bottomed out. Both new sectors, such as professional business services, but also traditional segments, such as raw materials and science, experienced strong growth in all indicators, suggesting a rising importance of trade fairs across the North American economy.

[Table 1 about here]

While the forgoing data give an overview of changes in the trade fair economy overall, the regional distribution of trade fairs in 2005 identifies the cities that benefited most. Table 2 lists the top trade fair cities in North America in 2005. It distinguishes two types of fairs by business focus: Business-to-Business (B2B) and Business-to-Consumer fairs (B2C). B2B fairs are the usual type of trade fairs studied by researchers (with the notable exception of Penaloza, 2001), since these are the events where value—chain-based learning processes take place. B2B fairs feature businesses interacting with and selling to other businesses. Participation is limited to a specialized subset of firms arranged in a value chain or technology field through high attendance fees or invitations. B2C fairs are based around advertising and selling goods to the general public. Consumer products,

from mops to motorboats, are exhibited to the public in the hope of making direct sales on the exhibition floor. The primary goals of B2C fairs are immediate sales and market penetration, unlike B2B fairs where indirect sales, lead generation, and knowledge gathering are more important activities (Godar and O'Connor, 2000).

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[Table 2 about here]

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Tables 2 and 3 suggest that major North American trade fair centers/cities have diverse sectoral specializations. The data indicates few connections between the sectoral patterns of trade fairs and the cities' industrial specializations. This can be explained by two tendencies: First, trade fairs have, over time, displayed a strong mobile dynamic. Second, North American trade fairs are even less place-bound than European fairs. Many European trade fair centers historically developed around specialized manufacturing regions and although changes in markets, technologies, and regulations led to relocations, these events had often stable locations for a certain time period. As will be shown below, the development of trade fairs in North America was different. Due to the importance of traveling salesmen in the industrial distribution system, and the importance of mobile conventions of technical communities that later attracted exhibits of products and technologies, national and international trade fairs in North America more often change their location from year to year (AUMA, 2004a; 2009a). Despite these general trends, however, we can identify some specialization trends in trade fair structures that can be linked to a city's economic strength or industrial history.

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With 780 fairs in 2005, Las Vegas stands out as North America's dominant trade fair city (Tables 2 and 3). Its large-scale trade fair infrastructure, based around large publicly-owned convention centers and exhibition spaces, as well as hotel rooms and exhibition space in all the major casinos, gives the city the capacity needed to host several major events simultaneously (Jones, 2006; Yang, 2008). This developed infrastructure generates a competitive advantage in competing for large international trade shows and is a major part of the city's overall tourism revenue. Toronto, North America's second largest trade fair city, also stands out not just for the number of events it holds every year but for the high proportion of B2C fairs (63% of all fairs). This is indicative of a structural difference between trade fairs in U.S. and Canadian cities. All Canadian cities exhibit a high proportion of B2C fairs (Table 2): 44% in Vancouver, 43% in Ottawa, and 39% in Montreal. In contrast, the average proportion of B2C fairs in U.S. cities was 15%. We have to exercise care in interpreting these numbers in terms of different demand- and supply-side patterns. On the one hand, the large number of consumer-oriented fairs in Canada is a reflection of the fact that it is more difficult to attract international businesses to the relatively small Canadian market. Therefore, a stronger focus on consumer-oriented fairs is almost a natural consequence. At the same time, this may also be a reflection of trade fair center capacity exceeding demand for B2B fairs, a gap filled in by a large number of B2C fairs (Interview with Direct Energy Centre Official, December 2009). The different structure of trade fair activities has substantial consequences on the national geographies of cities. The large

proportions of B2C fairs suggest that Canadian cities derive fewer economic benefits

from trade fairs compared to U.S. cities, both in terms of direct trade-fair-related revenue, as well as placing the city within global flows of industrial and commercial knowledge.

Of the twenty-one top U.S. cities, thirteen were located in the Southern and Western regions of the Sunbelt (e.g. Atlanta, Dallas and Phoenix) and four cities are in or close to the Manufacturing Belt (New York, Chicago, Boston, and Minneapolis) (Figure 1). Following Zelinsky's (1994) analysis, this shows a continuation of the movement away from manufacturing-dependent regions. The rise of Southern and Western cities as major trade fair destinations is linked to their rise as industrial and commercial hubs throughout the 1970s and 1980s. As the cities' economies and population grew and became better integrated into national and international transportation networks, they developed into more popular destinations for trade fairs. Because Sunbelt and Western cities are less densely built, it is easier for them to build or expand trade fair centers and hotel capacity, as opposed to older Northeastern and Rustbelt cities, where the space for larger-scale trade fair center development and expansion is sometimes harder to find.

Figure 4 breaks down trade fair cities by the size of events revealing interesting geographical patterns. Except for cities like Toronto, Vancouver, New York City, and Minneapolis, the majority of fairs in all cities are smaller than 25,000 square feet (Figure 4). These smaller trade fairs are often regional events that do not attract a geographically diverse pool of attendees. Some cities, like Orlando, Ottawa, and Boston, specialize in these smaller fairs. This has implications for the ability of trade fairs in these cities to serve as effective sites of knowledge sharing and circulation for local firms, since smaller fairs primarily attract a local audience with few participants from outside the region or nation. This also means that smaller fairs generate less hotel, restaurant and entertainment revenues, reducing their overall value to the city.

[Figure 4 about here]

Extra-local participation is vital for trade fairs to serve as sites of global buzz (Bathelt and Schuldt, 2008), and as "pipeline catalysts". Though there is no data on the distribution of international trade fairs in North America, large B2B fairs typically attract a substantial international audience, bringing in both increased tourism revenues and novel knowledge that is circulated throughout the event. Hosting large trade fairs requires that the trade fairs center, the local airport and hotels all have sufficient capacity to handle a substantial international audience.

Table 3 reports the number of events in each city by sector and indicates the corresponding Trade Fair Location Quotient (TFLQ). 12 A TFLQ above 1.20 means that the respective city hosts over 20% more trade fairs in a sector than the average city in our dataset. We use TFLQs of 1.20 and higher as an indicator of sectoral specialization patterns in North American trade fairs cities. Although specialization patterns observed through this method are not overly prominent and cannot easily be explained by urban economic production specializations, some exceptions exist. San Francisco, for instance, adjacent to Silicon Valley and home of many high-technology, telecommunications, and Internet firms – has a high TFLQ of 2.2 for information technology and communications trade fairs. Chicago and Minneapolis – two Rustbelt cities – have above average representations of industrial trade fairs, and all Texan cities in the dataset (Houston, Austin, and San Antonio) have TFLQs between 1.6 and 2.2 in raw materials and science trade fairs. This suggests that trade fair organizers – at least in these prominent cases – attempt to locate events in cities with a heavy concentration of their target industry.

Washington, DC has a similarly high TFLQ for government and public sector oriented trade fairs. In contrast to Washington, DC, Ottawa has a relatively low proportion of government-related trade fairs. This is, in part, due to the substantially lower aggregate number of government-oriented trade fairs in Canada compared to the U.S. When recalculated only for Canadian cities, the TFLQ of government-related fairs in Ottawa is 2.0, similar to that of Washington, DC. In sum, the TFLQs clearly reflect the importance of B2C fairs in the Canadian trade fair economy (Table 2). Montreal, Vancouver, and Ottawa have TFLQs of 2.0 to 2.2 in the consumer services, sports, travel, entertainment, and arts sector, which represent goods marketed directly to consumers at trade fairs. ¹³

Development Paths of Trade Fairs in North America

Both the data examined above and a historical analysis suggests that the relational and material geographies of North American trade fairs differ substantially from their European counterparts. Trade fairs in Europe developed much earlier than in North America and reflect to a larger degree traditional trade and industry patterns, major trade routes, as well as governmental regulations, social struggles, and wars. This resulted in segmented market patterns in Europe that only gradually changed over time (Allix, 1922; Boggs, 2005). Shifts in trade fair locations were influenced by political power, disparities in economic development, innovation cycles, and shifting markets.

North American trade fairs emerged out the tradition of industrial exhibitions and conventions and agricultural fairs. One-time events, like the 1893 World's Columbian Exhibition in Chicago or the St. Louis World's Fair in 1904, and annual events, like Toronto's Royal Agricultural Winter Fair, bring together buyers and sellers as well as serve as a platform for the demonstration of new inventions and products. The largest of

these events helped local producers tap into global market places, even before improvements in communications and shipping technologies spurred globalized commerce. While these events were popular and important events in the development of the modern, global economy, they were not trade fairs as we understand them today. The historical world exhibitions were singular events designed to show off the achievements of industrial capitalism to the public without offering a formal venue for industrial suppliers and customers to meet and conduct business. Modern trade fairs are events that serve as regular meeting places for commercial buyers, users, suppliers, and related multipliers to present new products and processes, make deals, and observe the changing nature of the industry.

The development of major urban trade fair centers in North America shows different patterns than those in Europe, starting later and taking place in a largely homogenous market. The following subsections illustrate three different growth trajectories that resulted in Chicago, Las Vegas, and Toronto. These cases illustrate how reflexive relationships between urban planning, industry needs, investment activities and strategies, and economic development gave rise to specific trajectories with varying material and relational geographies. Chicago's trade fair economy emerged in the 1950s out of its pre-existing industrial economy, while Las Vegas's trade fair infrastructure emerged at the same time, but based on a tourism strategy. Toronto's trade fair economy, however, emerged in the 1970s through more explicit public-sector-controlled initiatives. The different paths of trade fair developments demonstrate that trade fairs have become deeply embedded in both ongoing global economic processes and local politics.

Chicago: From World Exhibitions to International Trade Fairs

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Like many other major industrial cities, Chicago has a long history of industrial exhibitions and trade fairs, starting in 1893 with the World's Columbian Exhibition: an international exhibition with over 28 million visitors and 65,000 exhibits. The Century of Progress International Exhibition in 1933-1934 similarly showcased major scientific, industrial, commercial, and cultural advances of the day (Findling and Pelle, 2008). The city's substantial industrial base was able to use these exhibitions to demonstrate their products to the general public. Although related to these early exhibition successes, Chicago's role as a major trade fair destination did not begin until 1958 with the construction of McCormick Place (Metropolitan Pier and Exposition Authority, 2011). Like most major trade fair centers in North America, McCormick Place was built with government funds and managed by a public corporation. Since its construction, McCormick Place underwent several stages of restructuring and expansion: the first in 1967 due to a fire that destroyed much of the original building and required an almost complete re-build, and several other massive expansions in 1977, 1984, 1991, and 2001. In 2008, McCormick Place had over 2.6 million square feet of exhibition space, making it the largest such space in North America, and one of the ten largest in the world (AUMA, 2004a; 2009b). Several other cities close to the Manufacturing Belt, which opened major trade fair, convention, or exhibition centers in the 1960s, such as Boston and New York, experienced patterns of infrastructure modernization similar to Chicago. Many convention centers that were built in the 1960s were torn down in the late 1980s and early 1990s and replaced with newer, larger, and more technologically advanced facilities.

While Chicago has not fully replaced McCormick Place, it built a new dedicated bus-only

road linking the facilities with downtown Chicago to cut the commute time for attendees staying in the city's core.

Despite ongoing investments, the large size of McCormick Place has not prevented Chicago's loss of overall market share in the trade fair business since the 1970s. Chicago's position in Zelinsky's (1994) rankings of trade fair cities dropped from first in the U.S. in 1964 to third in 1990, and it has since fallen to fifth (TSW and CEIR, 2005). This is, in part, due to the growth of other trade fair cities and increasing competition between trade fair cities, a process also seen in Europe (Golfetto and Rinallo, 2011). Undoubtedly, Chicago's standing in the North American trade fair economy would have likely fallen even further if it had not expanded and modernized its trade fair center to compete with newer facilities elsewhere (Holten and Draeger, 1991).

Chicago is an example of a major traditional center of industrial showcasing originally linked to its strong manufacturing tradition. It hosts important national and international B2B fairs that induce important knowledge flows. Due to the transformation of the Manufacturing Belt and the rise of new trade fair centers elsewhere in the U.S., it has lost some of its former significance – although it is still an important trade fair center today. Chicago's experience illustrates the challenges that many Rust Belt cities faced in maintaining their place as key nodes in the global trade fair economy.

Las Vegas: From Leisure Capital to Trade Fair Leader

Las Vegas is almost synonymous with the North American trade fair industry today. The city hosts one-third more trade fairs than its nearest competitor, including six out of the ten largest trade fairs in North America (Fenich and Hashimoto, 2004). The city's infrastructure is made up of trade fair venues in the large hotel/casinos of the city

and the Las Vegas Convention Center (LVCC), a large exhibition hall established in 1959 by the Las Vegas Convention and Visitors Authority (LVCVA) – a public organization funded through a hotel room tax (LVCVA, 2011).

The city's excellent trade fair infrastructure is marked by its huge capacity and resources (Velotta, 1999; Jones, 2006). Las Vegas has more than 140,000 hotel rooms and over 43 million square feet of exhibition space (LVCVA, 2009). The LVCC is not only the third largest trade fair center in North America (AUMA, 2009a); it also has the largest amount of surface parking of any center. This gives it the capacity to host trade fairs that no other city in North America can. World of Concrete, for instance, an annual trade fair for the masonry and construction industries and one of the largest trade fairs in the world, can only exhibit in the LVCC due to the large surface parking space that is used for demonstrations of cranes and other construction equipment, along with its large hotel capacity that can house the more than 80,000 attendees.

Originally, trade fairs were seen as a way to increase casino revenue by funneling business visitors into the city's gambling halls (Bergen, 2003; Fenich and Hashimoto, 2004). This was at a time when participation in trade fairs was sometimes regarded as a reward for successful employees rather than a critical business function (Tanner, 2002). Other cities, like Orlando and New Orleans, have also pursued this strategy with success. Their cultural and leisure activities help attract participants to not only attend the trade fair, but also to engage in the broader tourism economy.

Las Vegas' business tourism began in earnest in 1959 with the establishment of the LVCVA, whose express purpose was to build the LVCC and promote trade fair and convention tourism. ¹⁴ Until the early 1990s, the LVCC was the city's dominant trade fair space. With the opening of the MGM Grand in 1993, the first hotel/casino to include

substantial exhibition space, the LVCC began to compete with the local casinos for trade fairs (Interview with LVCVA official, March 2009). Since then, multiple hotels/casinos have been built with extensive exhibition space, such as the Sands Expo and Convention Center and the Mandalay Bay Convention Center (Yang, 2008; AUMA, 2009a).

Las Vegas' trade fair industry is unique in North America because of the simultaneous cooperation and competition between the public LVCVA and the privately run exhibition halls of the major hotels/casinos. The LVCVA is the main body responsible for promoting the city as both a tourist and trade fair destination. Its work in selling and branding Las Vegas as a trade fair destination (such as the famous slogan "What happens in Vegas, stays in Vegas") supports the city's hospitality industry But the LVCVA also operates the LVCC, putting it in direct competition with the large hotels/casinos for trade fairs and exhibitions. While many other cities have a quasipublicly operated trade fair center, no other city in North America has a similarly large concentration of major privately-run trade fair centers.

Toronto: From Agricultural Market Place to Trade Fair Center

Toronto is a more recent addition to the list of top North American trade fair cities. Similar to other Canadian and U.S. cities, it experienced a traditional path in the development of its trade fair infrastructure, starting out as a temporary regional market in the area of agriculture and manufacturing dating back to the 19th century with events like the Canadian National Exhibition and the Royal Agricultural Winter Fair (Walden, 1997). The transformation into a modern trade fair city did not begin until the mid 1970s. The Metro Toronto Convention Centre (MTCC), the city's major downtown trade fair facility was created in 1984 as part of a partnership between the city, province, and

federal government to boost tourism. Though funded as a partnership between all three levels of government, it is owned and managed by a provincial crown corporation (MTCC, 2011). The MTCC is particularly oriented towards scientific and medical conferences. Organizers expressly see this as a way to tie into the city's strengths in biotechnological and medical research both at local universities and firms. ¹⁵

In addition, the city of Toronto owns and operates the Direct Energy Centre, a trade fair facility built on exhibition grounds a few kilometers west of the MTCC. Due to its three large interconnected exhibition halls and its tradition, this facility was primarily used for larger business-to-consumer (B2C) fairs. In recent years, the facilities were expanded and transformed to become more oriented towards business-to-business (B2B) fairs, as well as conventions and meetings (Interview with Direct Energy Center officials, December 2009).

Toronto is unusual in that it has two publicly owned convention centers. While there is competition between the MTCC and the Direct Energy Centre, they have a different focus. The Direct Energy Centre has larger exhibit halls than the MTCC, making it a better venue for consumer-oriented shows, while the MTCC has a large number of smaller meeting rooms for conferences and trade fairs with a strong educational or instructional component. Thus the two facilities usually do not compete directly for an event. Rather, they compete against other cities to attract particular events (Interviews with MTCC officials, July 2009 and with Direct Energy Centre officials, December 2009). Moreover, Toronto has two privately run exhibition halls. The International Centre (International Centre, 2011) and Toronto Congress Centre were built in 1972 and 1995, respectively (Toronto Congress Centre, 2011). Both are located close to Pearson International Airport, about 30 kilometers west of downtown Toronto. As

these trade fair centers are smaller than their publically financed counterparts, they focus more on local and regional trade fairs compared to the large, more national and international trade fairs in downtown venues.

Overall, the trade fair business in Toronto tends not to be strongly linked to the regional industry base, although its events do have a substantial proportion of regional exhibitors and visitors. Toronto's trade fair economy is marked by competition between the two public conference centers close to the downtown core and the two privately-run centers in the suburbs. A similar structure of core—periphery competition can also be found in other North American trade fair cities like Atlanta (Newman, 2002).

The size of the suburban exhibition halls – altogether over one million square feet – contributes to Toronto's high rate of consumer-oriented fairs. While these are primarily regional events that do not generate substantial tourism revenue, they are viewed as an important way to advertise the trade fair center and to generate interest in future events (Interview with MTCC officials, July 2009). Such consumer fairs are less important to the wider regional economy, since fewer people come from outside the city and do not consume as many local services ,but they still generate sizable revenues for the trade fair center.

Conclusions: Dynamic Trade Fair Geographies

Global buzz at trade fairs enables firms to systematically acquire knowledge about competitors, suppliers, and customers, as well as undertake first steps toward the development of durable inter-firm knowledge pipelines in research, production, and/or marketing (Bathelt and Schuldt, 2008). These pipelines are critical to help firms

continuously monitor new developments and trends within their industry. In this sense, trade fairs are key relational events in the global economy. But trade fairs also materialize in place and produce substantial regional support economies. They generate jobs and incomes, particularly in the urban centers that host them. The core idea of a relational perspective in economic geography is that these two perspectives are not independent. Material and non-material geographies are bound together in reflexive processes as historical structures, investment decisions, and urban development strategies that have generated particular patterns of knowledge flows and communication during local trade fairs that, in turn, impact the regional economy and lead to further investments. In this vein, this article focuses on the material aspects of North American trade fair geographies, the different structure that have emerged, and their dynamic development.

This research provides evidence of the continued growth of North American trade fairs despite changes in the capitalist system and various crises that have occurred over the past decade. We can witness a shift from traditional manufacturing cities to new trade fairs locations in the West and South of the U.S., the rise of Canadian cities as important trade fair locations, the continued importance of large international metropolitan regions, as well as the impact of local and regional policies on the trade fair business through investments into new or modernized world-scale facilities. In terms of the latter form of investment, Las Vegas was a first mover in North America's growing trade fair economy, but other cities soon followed. Major industrial cities, like New York, Chicago, Boston, and Detroit, also began extending and modernizing exhibition halls later on. These are the cities that dominated Zelinsky's (1994) account of the trade fair economy during the 1960s. A second major wave of construction began in the late 1970s, often as part of an urban revitalization campaign designed to attract jobs and tourists to the declining

downtown areas of major cities. Other cities which developed their trade fair infrastructure in the mid 1990s, like Hartford, Connecticut, and Columbus, Ohio, do not yet appear among the top twenty-five trade fair cities, but have certainly gained in importance. It is difficult to predict whether these or other cities will become dominant players in the trade fair business in the future as there are no linear developments or simple trends. While these cities have new state-of-the-art facilities, they are still somewhat peripheral in the urban hierarchy and not well integrated into international transportation systems.

If we assume that contemporary shifts in the geography of trade fairs are driven by a high degree of competition between cities and by a need to gain accessibility and visibility in relation to global markets (Golfetto and Rinallo, 2011), the leading metropolitan areas and transportations hubs with large international airports will likely become even more dominant trade fair centers in the future. Following this line of argument, we would expect that these centers attract trade fairs from other cities, thus moving up in the hierarchy of trade fair places. This would also strengthen their position at the top of the urban hierarchy, while smaller and more remote cities would fall behind.

Such trends are further supported by mergers of trade fairs. Driven, in part, by the significant temporary cutbacks in trade fair activity and attendance due to the 2008 global financial crisis, individual trade fairs increasingly merge with similar events in related industries or the same industries in other places to increase their size and attractiveness (RolandBerger, 2009). These larger shows can attract an international audience and are key sites for knowledge exchange and circulation. However, these merged fairs can only be held in cities with substantial trade fair infrastructure and international air connections. While trade fair activity will eventually recover from the decline due to the financial

crisis and the ensuing global recession, it will likely re-emerge as a more concentrated industry, with a smaller number of substantially larger fairs. This puts smaller trade fair cities at a substantial disadvantage, requiring them to either significantly expand the size of their infrastructure or target a reduced market for more local shows.

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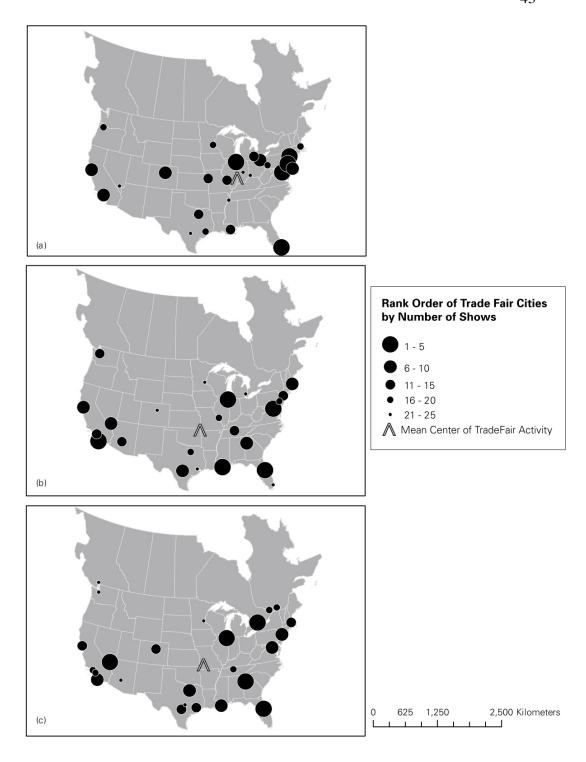


Figure 1: Top 25 North American Trade Fair Cities by Rank (a) 1964, (b) 1990, and (c) 2005 (Source: Zelinsky, 1995; CEIR, 2005)

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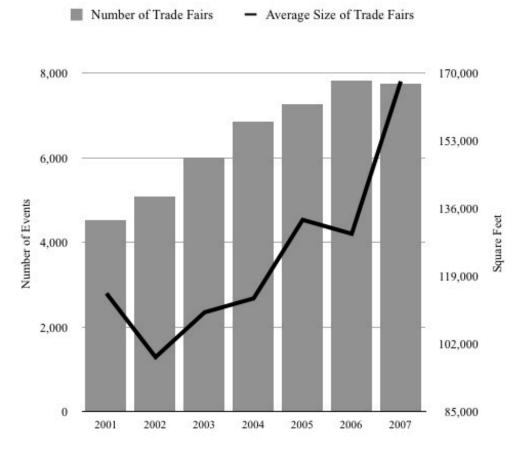


Figure 2: Total Number and Average Square Footage of North American Trade Fairs, 2001-2007 (Source: CEIR, 2005; 2007)

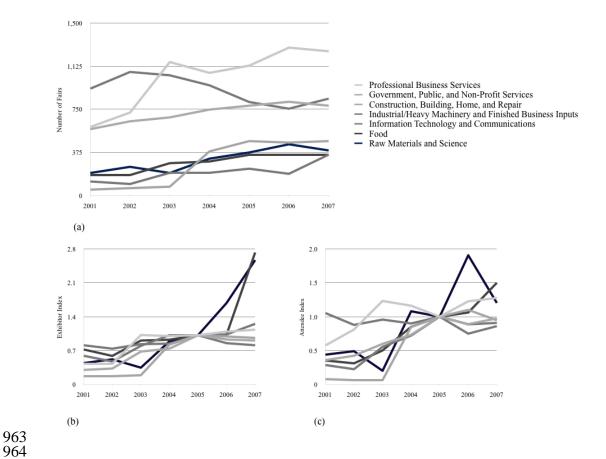


Figure 3: (a) Number of Trade Fairs, (b) Index of Trade Fair Exhibitors (2005=1.0), and (c) Index of Trade Fair Attendees (2005=1.0) in the Top 25 North American Trade Fair Cities by Selected Industrial Sectors, 2001-2007 (Source: CEIR, 2005; 2009)

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Industrial Sector	Exhib	Exhibitors per Event Attendees per Event					Average Size of Event (Square Feet)				
	2001	2004	2007	2001	2004	2007	2001	2004	2007		
Professional Business											
Services (BZ)	308	408	461	5,623	6,350	6,586	61,324	81,761	104,670		
Consumer Goods and											
Retail Trade (CG)	776	706	720	16,156	14,502	15,210	220,531	177,117	355,082		
Consumer Services, Sports,											
Travel, Entertainment, and											
Art (CS)	397	438	520	9,726	11,402	16,171	123,308	131,705	180,620		
Food (FD)	520	399	981	8,965	12,924	19,010	174,853	104,759	150,568		
Government, Public, and											
Non-Profit Services (GV)	113	216	265	2,700	3,767	5,009	15,847	39,428	55,402		
Construction, Building,											
Home, and Repair (HM)	563	374	369	18,665	27,169	25,970	246,055	116,368	107,642		
Industrial/Heavy											
Machinery and Finished											
Business Inputs (ID)	639	712	495	7,837	12,069	8,098	125,393	176,935	165,002		
Information Technology											
and Communications (IT)	189	178	226	6,353	5,259	6,489	61,828	54,308	66,606		
Medical and Health Care											
(MD)	197	219	242	4,776	4,828	5,364	65,987	73,380	78,319		
Raw Materials and Science											
(RM)	267	329	898	7,254	10,909	11,510	65,062	116,139	220,209		
Transportation (TX)	199	234	249	20,714	20,173	16,229	89,239	120,176	104,696		
Unweighted Average	379	383	494	9,888	11,759	12,331	114,755	113,509	167,980		

Table 1: Average Number of Exhibitors, Attendees, and Square Footage of North American Trade Fairs, 2001, 2004, and 2007 (Source: CEIR, 2005; 2007)

Rank	City	Number and Share of Trade Fairs by Business Focus							
		Total		ness-to-	Business-to-				
	, , , , , , , , , , , , , , , , , , ,	700	Busines		Consumer (B2C)				
1	Las Vegas, NV	780	718	92%	62	8%			
2	Toronto, ON	605	224	37%	381	63%			
3	Orlando, FL	582	547	94%	35	6%			
4	Atlanta, GA	478	387	81%	91	19%			
5	Chicago, IL	431	397	92%	34	8%			
6	New York, NY	419	373	89%	46	11%			
7	Dallas, TX	344	261	76%	83	24%			
8	San Diego, CA	338	314	93%	24	7%			
9	New Orleans, LA	333	313	94%	20	6%			
10	Washington, DC	294	273	93%	21	7%			
11	Houston, TX	229	165	72%	64	28%			
12	San Antonio, TX	226	199	88%	27	12%			
13	Denver, CO	222	164	74%	58	26%			
14	San Francisco, CA	222	206	93%	16	7%			
15	Boston, MA	210	176	84%	34	16%			
16	Montreal, QC	198	121	61%	77	39%			
17	Anaheim, CA	193	172	89%	21	11%			
18	Nashville, TN	189	170	90%	19	10%			
19	Los Angeles, CA	181	141	78%	40	22%			
20	Ottawa, ON	179	102	57%	77	43%			
21	Vancouver, BC	177	99	56%	78	44%			
22	Austin, TX	169	134	79%	35	21%			
23	Seattle, WA	152	120	79%	32	21%			
24	Minneapolis, MN	151	119	79%	32	21%			
25	Phoenix, AZ	135	115	85%	20	15%			
Total		7437	6011	81%	1426	19%			

Table 2: Top 25 North American Trade Fair Cities by Business Focus, 2005 (Source: CEIR, 2005)

City	Number of Trade Fairs by Industrial Sector											
	BZ	CG	CS	FD	GV	HM	ID	IT	MD	RM	TX	Total
Las Vegas, NV	127	114 (1.3)	80	46 (1.2)	42	53	28	111 (1.3)	86	26	51 (1.7)	780
Toronto, ON	80	92 (1.4)	132	36 (1.2)	42	38	16	48	60	28	21	605
Chicago, IL	75	25	37	25 (1.2)	45	20	21 (1.5)	58 (1.2)	81 (1.3)	19	12	431
Dallas, TX	54	66 (1.7)	40	17	24	32 (1.5)	10	22	32	10	20 (1.6)	344
San Diego, CA	61	21	23	11	52 (1.5)	5	7	47 (1.3)	75 (1.6)	19	12	338
Washington, DC	45	9	20	8	68 (2.2)	5	3	36	74 (1.8)	14	9	294
Houston, TX	35	20	34 (1.2)	11	29 (1.2)	24 (1.7)	13 (1.8)	11	15	18 (1.6)	11 (1.3)	229
San Antonio, TX	30	12	21	16 (1.5)	37 (1.6)	16	5	17	31 (2.1)	24	9	226
San Francisco, CA	35	15	16	7	29 (1.2)	6	4	54 (2.2)	38 (1.2)	13 (1.2)	3	222
Montreal, QC	16	24	56 (2.2)	11 (1.2)	7	13	10 (1.6)	15	23	10	9 (1.2)	198
Ottawa, ON	29	12	50 (2.2)	6	14	9	9 (1.6)	13	15	10	9 (1.3)	179
Vancouver, BC	24	26 (1.3)	46 (2.0)	11 (1.3)	6	8	1	17	22	11 (1.2)	5	177
Austin, TX	14	13	22	4	35 (2.0)	13 (1.2)	7 (1.3)	16	21	16 (1.9)	3	169
Minneapolis, MN	23	19	14	3	12	18 (1.9)	8 (1.7)	8	23	14 (1.9)	6 (1.1)	151
Phoenix, AZ	18	12	17	8 (1.2)	17 (1.2	15 (1.7)	5 (1.2)	10	21	9 (1.3)	3	135
Total (top 25 cities)	1129	827	944	355	781	473	233	813	1054	374	281	7437

Notes: (i) Trade Fair Location Quotients $\geq 1.2 (\geq 2.0)$ in parenthesis (≥ 2.0 highlighted).

(iii) Uncategorized fairs removed from table.

Table 3: Number of Trade Fairs by Industrial Sector in Selected North American Trade Fair Cities, 2005 (Source: CEIR, 2005)

⁽ii) Industrial Sector abbreviations: BZ = Professional Business Services; CG = Consumer Goods and Retail Trade; CS = Consumer Services, Sports, Travel, Entertainment, and Art; FD = Food; GV = Government, Public, and Non-Profit Services; HM = Construction, Building, Home, and Repair; ID = Industrial/Heavy Machinery and Finished Business Inputs; IT = Information Technology and Communications; MD = Medical and Health Care; RM = Raw Materials and Science; TX = Transportation.

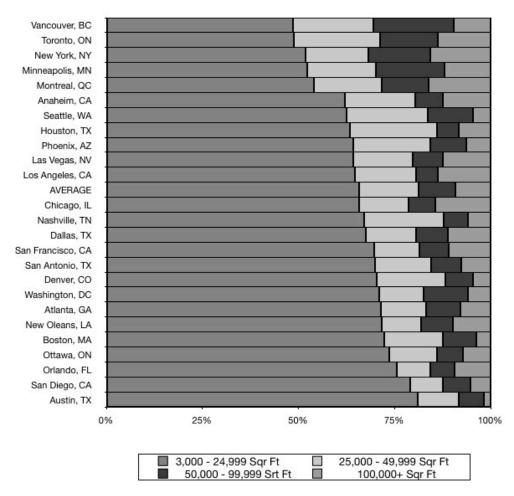


Figure 4: Number of trade Fairs by Size Category in the Top 25 North American Trade Fair Cities, 2005 (Source: CEIR, 2005)

996 **Notes**

- ¹ Our focus is on U.S. and Canadian trade fairs, which are comparable in terms of their development stage.
- ² Both trade fairs and conventions are often held in the same trade fair, convention, conference, or exhibition spaces. Conventions and conferences are regular, highly mobile events that are centered on professional presentations and typically take place in different cities, exhibitions and trade fairs (or trade shows) are focused on the exhibit of products and technology. In contrast to exhibitions, which are singular events, trade fairs are periodic events that provide a regular platform for observation, learning and communication between the firms of technology or value chain.
- ³ The importance of such temporary spaces has also been recognized in studies of periodic markets in the context of less developed economies (McKim, 1972; Udosen and Adams, 2009). Even though medieval trade fairs and 19th century world exhibitions were already more than just events were products were displayed or sold (Piore and Sabel, 1984), the aspect of knowledge creation during such events has only recently become a key aspect of academic debates.
- ⁴ Global buzz differs between different types of trade fairs. It is clearly strongest in international fairs, but is also present to some degree in less wide-ranging events.
- ⁵ In general, it is difficult to study trade fairs because available data is incomplete, definitions differ between countries, or there is no central database (Kresse, 2003; AUMA, 2009a).
- ⁶ We conducted one-hour exploratory interviews with trade fair organizers in Las Vegas and Toronto.
- ⁷ An important factor influencing the location of trade fairs was associated with costs which differ greatly between small and large urban centers, and between places in the Sunbelt and Rustbelt (AUMA, 2009a). In general, unions had and still have a strong impact on trade fair activities as most convention and exhibitions centers have contractual agreements with them. Wages for specialists, which are hired to build the exhibits, also

differ greatly. According to AUMA (2009a), a carpenter in Louisville, KY earned about \$45 per hour while the same rate in New York was almost \$150 (and \$260 on weekends).

⁸ In comparison, the Mexican trade fair industry developed much later than that in the U.S. and Canada, triggered by globalization processes and the opening of the Mexican market since the 1980s. The respective events have remained relatively small with typically less than 5,000 m² (54,000 square feet). According to AUMA (2004b), an average Mexican trade fair had about 100 exhibitors and 7,500 attendees.

⁹ Such misjudgment is even more problematic in the case of singular events such as World Exhibitions, which require huge investments (see Diez and Kramer, 2000; Kaiser, 2002). However, there are also examples of trade fairs serving to alleviate economic downturns associated with deindustrialization. For example, High Point Market – a bi-annual international furniture trade fair that attracts over 85,000 participants – has helped the city of High Point, North Carolina adapt to the decline of the local furniture manufacturing industry (High Point Market, 2010).

¹⁰ It appears that this trend has not been reversed through the 2008 global financial crisis. Although small and medium-sized regional fairs seem to have suffered, the large international fairs have been less affected, as the example of Las Vegas exemplifies (Velotta, 2009).

¹¹ While the building, construction, and home repair sector saw the largest growth, this was also related to a change in the way the CEIR data was collected in 2004.

Trade fair location quotients are defined as ratios of the local importance of a sector relative to its importance in the top 25 North American cities overall. These quotients are calculated as $TFLQ = (e_i/e)/(E_i/E)$ where e_i is a city's representation of trade fairs in sector i; e is the total number of trade fairs in the city; E_i is the total number of trade fairs in sector i; and E the total number of trade fairs in the overall data set. It is important to note that this data set only covers the top 25 trade fair cities in North America, so the TFLQs are measured against those cities, and not the entire set of trade fairs in North America.

- ¹³ The consumer goods sector is made up of fairs where retail products are presented by manufacturers to retail store buyers. In the case of Montreal, the high TFLQ of this sector may also be related to the vibrant cultural economy in the city.
- ¹⁴ Media reports suggest that revenues from trade fair attendees are possibly even larger than those from gambling (Spillman, 2007). Moreover, employment effects of large international trade fairs are substantial, adding some direct 2,000 jobs to the regional economy not including the indirect employment effects.
- ¹⁵ However, trade fair officials at the MTCC raise doubts over how many local firms actually attend larger international events held in the city (Interview with MTCC officials, July 2009).