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Master of Geography**

**Intersections between high-end art and finance
in the global city**

A comparative analysis

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PREFACE

As a human geography student with a high affinity for the areas of globalization and urbanization, the choice to write a thesis within the field of the global city discourse was easily made. When browsing through possible subjects and approaches related to this topic, the perspective wherein the conventional way in which global cities have generally been approached (as key sites of capital transaction and accumulation) is combined with the role of these nodes as centers for the arts, seemed refreshing and welcome, given the scarce amount of similar empirical studies on a city-scale and the growing recognition of urban cultural policy frameworks based on the arts within global cities and cities aiming at global city status.

Along the line, many people gave me inspiring ideas, encouragement and much needed practical advice. Therefore my gratitude goes out to professor Ben Derudder for all of the above reasons and for providing me with the highly inspiring book *Arts, Culture and the Making of Global Cities* by Kong *et al.* (2015). Similar words of thank go out to Lizzy for making the time to discuss some of my statistical queries, to Laura for the critical feedback and diverting company in between, to Jeroen and Nicolas for the comprehensive reviews and to my ever-helpful father.

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1. INTRODUCTION

1.1. Background and problem definition

“While global cities have most commonly been characterized as key sites of capital transactions and accumulation, as command centers of intensive and extensive economic activity and as networked nodes, with multiple and recurrent global flows of people, goods, services, ideas and images, the quest for global city status also increasingly rests on the production and consumption of culture and the arts, so that global cities might well be characterized as ‘global cultural cities’” (Kong et al., 2015, p. 1)

Kong et al. (2015) speak of an economic bias in global cities research by arguing that global cities have usually been approached in terms of the nature and level of their *economic* activities (i.e. by focusing on the number of advanced producer services, the number of headquarters, etc.). Pratt (2012) as well draws attention to this concern when arguing that there has been an “empirical focus on the ‘power of finance’ that characterizes much work on the global city” and which has tended “to render culture (in its broadest sense) either invisible to analysis, or positioned it in a dualistic relation to the ‘real deal’: the economic” (p. 265). While such early studies systematically neglected cultural aspects, a new body of literature emerged since the 1990s as the result of an increased policy and academic attention for the possibilities of cultural development strategies for cities. Nowadays, “cultural development has become indispensable to any strategy of global city building [...], and cities striving for global city status do so on the basis of integrating cultural and economic activity. [...] Increasingly, cities hoping to become global cities recognize that they cannot rely on economics alone, but must also become global cultural cities” (Kong et al., p. 6).

This recognition is based on the potential of the arts, and culture in general, to catalyze economic development. By attracting tourism, high-skilled workers and inward investment in general, the arts can play a highly important role in upgrading the financial and innovative prowess of cities. On the other hand, the arts are also directly dependent on the financial strength of local governments and businesses in a city in multiple ways. After all, without a sound economic base, high-end types of art cannot flourish. These financial sources range from national and local governments to private and specialized financial and banking services. A ‘symbiotic relationship’ (Kloosterman and Skórska, 2012) between art and finance in global

cities can thus be expected. Furthermore, the arts and financial services also highly co-locate in large agglomerations because of the benefits both fields accrue from urbanization economies, (i.e. direct access to high-skilled labour, well-developed infrastructure for transport and communication, a typical openness to creativity and newcomers (Florida, 2002), etc.) and because of their inherent need for face-to-face contact and a selected number of basing points in a widely decentralized business. For all of these reasons, worldwide, a high correlation between global arts centers (GACs) and global financial centers (GFCs, or conventionally referred to as *global cities*) is to be expected. The cities in which both fields most strongly intersect will henceforth be labeled *global cultural cities* (GCCs), after Yeoh (2005) and Kong *et al.* (2015).

The relationship between global financial and global arts centers has been frequently observed (e.g. Kavolis, 1964), yet actual empirical analyses remain scarce. The few studies that do investigate this matter only focus on top-tier cities (e.g. Coslor and Ren, 2009), use little indicators (e.g. Kloosterman and Skórska, 2012) or are based on single cases (e.g. Chang, 2000). There has consequently been little systematic empirical research on the connection between finance and the arts across global cities, which leaves the overall geography of global cultural cities largely unexamined. Therefore, this research is intended as a contribution to a geographically broad, yet fine-tuned and comprehensive comparative analysis. The lack of similar studies is all the more notable since global cities and cities aiming at global city status have increasingly acknowledged the importance of policy frameworks based on the arts to increase their financial prowess, hence centrality in the global city network (Scott, 2000; Bryan *et al.*, 2000; Yeoh, 2005; Kong *et al.*, 2015).

1.2. Objectives, research questions and hypotheses

Within the scope of this research, the emphasis regarding the conceptualization of the arts is placed on the *high-end* types of art. This highly globalized section of the arts field is to be understood as the art that makes its way into art galleries, museums, arthouse cinemas, art fairs, auctions and biennials (in the case of the visual arts) and into renowned theaters, opera houses and international performance festivals (in the case of the performing arts). A similar approach holds for the financial activities considered, as this research is not oriented towards the average consumer services delivering microcredits (i.e. the local bank around the corner), but towards the globally operating decision-, innovation- and investment centers. The overall objective of

this thesis is therefore to examine how, why and where the mutual relationship between these high-end fields takes place. To this end, the research is centered around two main research questions:

- Is there a statistically significant and positive association between the high-end arts and finance in the most important global cities today?
- If so, which are the most important global cultural cities and where are they located?

Drawing upon literature on global cities, arts and culture clustering, urbanization economies, cultural economics, city marketing and urban politics, the hypothesis resulting from the first research question implies that this positive association should be observed. The assumption resulting from the second research question implies that the bulk of the global cultural cities should be located in i) globalized and advanced¹ economies and ii) culturally rich and politically stable world regions. Therefore, the geographical distribution of global cultural cities is expected to be mainly concentrated in the longstanding globalization arenas of Europe and Northern America. However, given the often cited geographical shift in the global economy from the ‘West’ to the ‘East’ (e.g. Arrighi, 1994; Frank, 1998; Derudder *et al.*, 2010; Taylor *et al.*, 2011), it should not surprise if the recently established GFCs in Pacific Asia (Ng and Hills, 2003; Yusuf and Wu, 2000; Jacques, 2012) and the Middle East (Taylor *et al.*, 2011) have also become global hubs for the high-end arts. It is therefore hypothesized that Pacific Asia and the Middle East will also host a significant number of global cultural cities, albeit to a lesser extent than Europe and Northern America. Of the remaining world regions, Sub-Saharan Africa is expected to host the least GFCs and GACs since it is the world’s poorest and least globalized region and political instability and corruption remain serious problems (Taylor *et al.*, 2011).

1.3. Structure and main findings

This master’s thesis is structured around five chapters, with the first being the introduction. Chapter 2 treats the underpinnings of the co-location of the high-end arts and finance in the global city (section 2.1) and the mutual interdependency of both fields (section 2.2). The overall

¹ as defined by the International Monetary Fund. The IMF divides the countries in its reports into advanced economies, emerging markets, and developing economies according to their gross domestic product (GDP) per capita, diversification of exports, and integration with the global financial system. (imf.org)

conclusions of the examined literature imply that on the one hand, the arts and financial services highly co-locate in large agglomerations because of their need for i) face-to-face contact, ii) a selected number of control points in geographically dispersed industries and iii) the benefits both fields accrue from urbanization economies. On the other hand, ‘multifaceted causal relationships’ (Kloosterman and Skórska, 2012) between both fields are expected to be the case. These causal linkages can however be complex and manifold, making the exact causal relationship difficult to determine in advance (Pratt, 2012, cited in Kloosterman and Skórska, 2012).

Chapter 3 deals with the preparatory steps for the actual comparative analysis. To this purpose, a GAC ranking (see 3.1) had to be put together specifically for the objectives of this research since no such rankings on a city-scale exist. To this end, the definition of the fuzzy concept ‘art’ is fundamental, hence it is treated first (see 3.1.1). Based on this framework, a preselection of cities is made on the basis of the number of major international art events (fairs, festivals and biennials) that have been hosted in cities worldwide (see 3.1.2). The rationale behind this is the recently increased importance of competitive ‘field-configuring events’ in the globalized art world (Montero, 2012; Basualdo, 2003; Bydler, 2004; Yeoman *et al.*, 2004; Frey, 2000). These ‘tournaments of value’ (Moeran and Strandgaard Pedersen, 2011) increasingly fulfill gatekeeper functions in transmitting norms and values and they “prove to be the medium through which most art comes to be known” (Filipovic *et al.*, 2010, p. 15). The 130 cities that scored the highest on two competitive indicators (daily attendance and the number of previous editions) were selected as the input for the eventual arts ranking. The actual GAC ranking is established in section 3.1.3. and is composed of four areas of competitiveness in which different aspects of the high-end art market are gauged, i.e. infrastructure factors, human capital, fine arts sector development and reputational factors. To this end, much of the collected data draws from online sources containing relevant information (i.e. official websites of municipalities, media reports and websites of statistical instances). After totalling and averaging scores across these four areas, the global arts ranking has been established. In section 3.2 the various financial city rankings that exist up to date are described and the most appropriate ranking within the scope of this research (the Global Financial Centers Index by the Z/Y en Group) is selected.

The first hypothesis is put to the test in chapter 4. When the GAC ranking is compared to the list of GFCs, 50 global cultural cities feature in both lists. These GCCs are mainly concentrated at the top-tier positions of both rankings. The most important GACs thus indeed strongly

overlap with the economically most powerful cities as was expected from the literature discussed in chapter 2. There are however a number of highly ranked GACs and GFCs that fall off the global cultural city map when both lists are combined. Possible explanations and illustrations hereof are given in section 4.1. The remainder of the chapter deals with the 50 GCCs. In section 4.2, the actual rank correlation analysis between the GCCs is conducted. The analysis returns a significant and moderately strong correlation. These findings are further examined by dissecting the aggregation level of the correlation test and by conducting multiple correlation analyses on a more detailed level to comprehend which indicators contribute most to the overall association. Given the moderately strong correlation, a significant part of the variance remains unexplained. It is therefore not necessarily the case that a thriving arts scene simply follows from the degree of financial prowess or that the economic development of cities is the result of the presence of a well-established arts and cultural scene. External and path-dependent processes can be of similar importance. The third section of chapter 4 examines the functional nature of the relationship (e.g. linear, quadratic, etc.) in order to provide some additional information on the GFC and GAC profiles of each specific city with respect to this functional relationship.

Chapter 5 examines the geography of the global cultural cities by world region. As was hypothesized, Europe and Northern America indeed constitute true epicenters of GCCs, with Europe clearly taking the lead. A third epicenter should however be added, as Pacific Asia performs remarkably well. Therefore, it can be concluded that the three arenas of globalization today notably Europe, Northern America and Pacific Asia (Taylor *et al.*, 2011) also constitute true arenas of global cultural cities. They leave the remainder of the world regions far behind. Apart from the geographical distribution of the GCCs, most examined cities (and their countries and/or unions) share a common, recent and increasing interest in the pervasive role that the arts can fulfill in upgrading the economy by luring foreign talent and expatriates and attracting inward investment, tourism and advanced services firms. The inherent risk connected with the implementation of these cultural economic policies is however the prioritizing of the functional value of the arts over its esthetic, social and philosophical values.

The main findings are summarized in chapter 6, along with some reflections on future research perspectives and the significance of the arts, and culture in general, for the global city discourse today.

2. GLOBAL CULTURAL CITIES: WHERE ART AND FINANCE MEET

In order to fully capture the ways in which finance and art are intrinsically intertwined in global cities, it is necessary to first comprehend why dense agglomerations (and not their surrounding country sides) constitute the geographical reality in which both high-end worlds most frequently cluster (see section 2.1). The ‘multifaceted causal relationships’ (Kloosterman and Skórska, 2012) between both fields are thoroughly dealt with in the second part of this chapter (2.2).

2.1. Arguments for the clustering of high-end art and finance in the global city

Location still matters. Sassen (2002, p. 14) states that “even as digitalization, decentralization, and denationalization radically change the way business is done, one still needs a central base, not just an address, to run financial operations. Both markets and firms need massive human resources and highly concentrated advanced technology to function – two factors that favor a geographical center.” In the global city paradigm, these geographical centres are referred to as *global cities*. The global city concept has been introduced by Saskia Sassen in her prominent book *The global city* (1991) in which a global city is described as “a city that contains large clusters of internationally orientated producer services firms” (Derudder, 2009, p. 262). The emergence of this new type of urban functionality can be traced back to the late 1970s, when two major processes became apparent: “The first is the sharp growth in the globalization of economic activity, which has raised the scale and complexity of transactions, thereby feeding the growth of top-level multinational headquarter functions and the growth of advanced corporate services [...] The second process we need to consider is the growing service intensity in the organization of all industries. This has contributed to a massive growth in the demand for services by firms in all industries” (Sassen, 2002, pp. 21-22).

As a result of this increased geographical complexity and service intensity, a selected number of control points seemed very welcome in ensuring the smooth functioning of the global economy (Derudder, 2009). Indeed, “the more a firm disperses operations, the more complex and centralized its top-level management operations become” (Sassen, 1999, p. 77). Many markets thus need a basing-point for their operations and coordination, given the difficulties of operating in a widely decentralized business. Global cities in that way became “highly concentrated command points in the organization of the world economy” (Sassen, 1991, p. 3); they are the “sites for (1) the production of specialized services needed by complex organizations for running a spatially dispersed network of factories, offices and service outlets;

and (2) the production of financial innovations and the making of markets, both central to the internalization and expansion of the financial industry” (Sassen, 2001, p. 3). The importance of a city in the global economy can then be deduced from the role of its financial services on a global scale (Kloosterman and Skórska, 2012). Urbanization economies (due to proximity to customers, the physical infrastructure necessary to reach these customers over a worldwide radius through airports, seaports and train station; see also further) and favorable tax and other financial incentives, are obviously other arguments for the clustering in large cities.

Besides the necessity of control points in a largely decentralized business, immediate contact with top talent and specialized services is another major reason for the clustering of financial businesses in cities. After all, the complex and tacit nature of the information and the execution of deals requires “strategic combinations of top skilled personnel in finance, law, accounting and forecasting” (Sassen, 1991, p. 3). So when e.g. “investors cannot find more complex forms of information for major international deals in their existing databases, they can get it by exchanging data and ideas among talented, informed people” (Sassen, 2002, p. 26). Location also counts for risk management; “given that many major trading losses over the last decade have involved human error or fraud, the quality of risk management depends heavily on a firm's top people rather than on mere technology, like electronic surveillance” (Sassen, 1999, p. 77). The valuable human capital so necessary for these operations, can only be found in large cities, where immediate face-to-face contacts with one another also strengthen the mutual trust and enhance the information transactions (Sassen, 1991). The fact that “even global electronic markets such as NASDAQ and E*Trade rely on traders and banks that are located in major cities like New York” (Sassen, 1999, p. 26), nicely illustrates this. Consequently, “cities rather than computers will still coordinate business and finance” (Sassen, 1999, p. 77).

A very similar conclusion can be drawn for the world of the high-end arts. As Carrier (2003, p. 99) argues: “Nowadays, information is disseminated quickly, but the role of centers as places where new art is *made, seen, and discussed* remains essential. Our novel electronic technologies have not changed this situation”. This quote implies that the main two arguments for the clustering of financial activities in the global city (the need for fixating control points in a decentralized and globalized business and the requisite of face-to-face contact) are also highly applicable to the field of the high-end arts (While, 2003; Currid and Connolly, 2008). In fact, global cities (as defined by Sassen, 1991) and international art centers share much common characteristics (see Table 1, adapted from While, 2003, p. 254) whereby much clustering arguments for financial services can be paralleled by equivalents for the arts.

Selected global city characteristics	International art center characteristics
Disproportionate number of headquarters functions of world's largest 500 TNCs (transnational corporations)	Home of a large number of the major transnational dealer-galleries, auction houses, art critics, art journals and contemporary art galleries
Growth of a high-paid international elite, including a producer service class engaged in the production and export of services from world cities	Concentration of an influential international art elite engaged in the display, marketing, sale of art and the creation of value for contemporary art
Important ideological and control functions – centers of transport, communications, production and transmission of norms, information and culture	Centers for the making of artistic reputation in terms of art criticism and the transmission of norms and values
Centers for international investment	Loci for the majority of international investment in old and contemporary art
Research and education centers for the financial services sector	Centers for artistic training; connections with other cultural industries offer potential for new visual techniques
Change in the built environment – rising property values lead to a search for non-traditional office and residential spaces; loft-living, gentrification and the re-use of undervalued districts	Conversion of industrial areas into centers of artistic production and consumption; loft-living and gentrification of artist quarters; artists increasingly pushed out of traditional urban production spaces

Table 1: Comparison of the main characteristics of global cities and international art centres (adapted from While, 2003, p. 254)

The control function exercised by international art centers is mainly expressed through the transmission and discussion of norms and values (see Table 1), the “creation of ‘taste’” (Harvey, 1989 p. 11), and the attribution of symbolic value to certain players in the field (Bourdieu, 1993). The need for such gatekeeper functions is mostly due to the high levels of uncertainty in the contemporary art market in which “there are no precise or objective measures that determine what makes a high-quality product” (Yogev and Grund, 2012, p. 23). To make this transmission of norms and values successful, there is a high need for face-to-face contact within these control points as well: “In essence the dense agglomeration patterns we observe within the cultural economy are such because they need to be. The cultural economy operates in a “hypersocialized”, disintegrated production system and all stages along the process locate in the same place because they are inherently dependent on the social milieu for more than just informal trading of ideas, but actually as a center for exchanging resources, skill sets, and the evaluation of goods and services. In other words: it is not just that galleries locate in one place, but also the art schools, auction houses, art dealers, museums, curators and media that report on shows and openings and critique artists, as well. Of course, the artists must also reside there to actually be in touch with these cultural gatekeepers (e.g., editors, curators, and gallery owners), as it is in the spontaneity and informal social dynamics that much of their initial business appears to be catalyzed” (Currid and Connolly, 2008, pp. 427-428). This reasoning is consistent with Table 1 through the observation that international art centers seem to have large

concentrations of “major transnational dealer-galleries, auction houses, art critics, art journals and contemporary art galleries”. The highly informal and tacit nature of communication between cultural producers and the social milieu has also been advocated by Kleiman *et al.* (2002): “This [the unique kinds of social interaction, from gallery openings to industry parties and informal run-ins] is more than just fun and games. It is critical to the operation of this economic sector” (p. 4). Since the arts and cultural field thus appears to be strongly clustered, cultural workers have to infiltrate inside the circuit to be competitive. As one musician explains: “[you] run into them [people who provide economic opportunity] anywhere: record labels, shopping, studio recordings ... to get projects that turn into money” (Currid and Connolly, 2008, p. 427). The conclusion is therefore that “although art can in theory be made anywhere, the social production of art is a collective practice that depends on complex interactions between artists and a range of ‘art world’ actors – or art makers – such as patrons, dealers, critics, gallery owners and collectors” (While, 2003, p. 252).

Some cities actively search for ways to stimulate these interactions between ‘art world’ actors by developing cultural cluster strategies (Mommaas, 2004). One of the first examples of a city that consciously developed its own cultural cluster is Rotterdam. The project commenced during the 1990s and nowadays “the museum quarter (master-planned by Rem Koolhaas) contains a museum for classical and modern art [...], a new architectural institute (the ‘Nederlands Architectuur Instituut’, designed by Jo Coenen, a clear expression of the position of Rotterdam as a pioneering city in contemporary Dutch architecture), a Hall of Arts (the ‘Kunsthal’, the first world-famous example of Rem Koolhaas’ innovative programming of spatial forms) and the recently renovated and extended Nature Museum [...] In the summer, the park in which the museums are situated is used for a variety of open-air theatre programmes” (Mommaas, 2004, p. 510). Similar to this example, many cities increasingly attempt to create their own network of influential international art elites by creating an attractive framework that is linked to state-of-the-art cultural producers (such as the famous architects Koolhaas and Coenen in the case of Rotterdam). Cultural clustering can however occur organically as well, as was the case for lower Manhattan in the 1960s, when much artists (later followed by art dealers, museum curators and collectors) began to move into abandoned manufacturing buildings and converted them into lofts and studios for artists, musicians and designers (Zukin, 1989). A very similar case is the 798 Art Zone in the northeast of Beijing (Kong *et al.*, 2015). This area used to be part of an industrial area where the manufacturing of atomic bomb components took place. Yet since the 2000s, the old factory buildings increasingly attracted Chinese and overseas artists who became enchanted by its unique architectural Bauhaus style

and low rents and set up their studios there. Table 1 refers to these urban landscape conversions which eventually might threaten to undermine the artists' local production capacities by pricing them out due to gentrification processes (While, 2003).

While the arguments of face-to-face contact and the need for basing points in a globalized art field with high levels of uncertainty, appear to be the most decisive for the cultural clustering in global cities (While, 2003), there are some additional reasons as well. Markusen and Schrock (2006, p.6) for instance state that "residents who love big cities may display a higher penchant for arts consumption, hence producers may enjoy increasing returns to scale, especially in art forms such as the opera". Klammer (1996) adds to this that high-end types of art occupations such as theatre, opera, museums and galleries are more sensitive to size of place than the more average types of art. On a more practical scale, cultural producers also require a basic level of facilities (e.g. ateliers and exposition spaces) and services (e.g. equipment suppliers); assets which are highly abundant in cities. Some of these city centric services, such as advertising and media, form a significant source of demand and income for artists as e.g. about 10 percent of the employees in the advertising industry are also working in the arts sector (Markusen and Schrock, 2006). These agglomerative tendencies also express themselves through synergies *within* the art field itself and may create analogous benefits (Markusen and Schrock, 2006). Blau (1989) for instance found evidence of such interrelationships between theatre and dance activities, and between opera and chamber music ensembles. Through these synergies between more or less related cultural fields, it is often the case that new artistic styles emerge (While, 2003). For these developments to be successful, they are dependent on a critical mass of group activities (While, 2003), only to be found in big cities.

The arts sector thus also clusters in big cities because of the benefits of urbanization economies (agglomeration economies related to city size and pertaining to all economic activities), such as synergies with other city-centric industries, concentrations of residents with a high penchant for arts consumption, a basic level of cultural facilities, a typical openness to creativity and newcomers (Florida, 2002) etc. Urbanization economies are also crucial for financial services as this field highly depends on state-of-the-art ICT infrastructure and transport facilities (e.g. well-connected airports) and an instantaneous access to "dense agglomerations of labour pools and industries that occur by co-location in the same place" (Currid and Connolly, 2008, p. 426). For all of the reasons discussed within this section, the high-end finance and art fields not only cluster in cities, but most frequently in a relatively small amount of large and important cities: global cities.

2.2. A close look at the mutual relationships between art and finance in the global city

The observation that cities tend to attract both high-end art and finance, is nothing novel according to While (2003, p. 252): “From Florence in the fifteenth century, through Dutch and Flemish cities in the seventeenth century, to post-war New York, the major artistic centres have also tended to represent major concentrations of disposable wealth”. Or, as Arrighi (1994, cited in Kloosterman and Skórska, 2012) argues; in their golden ages, “cities such as Florence, Antwerp, Genoa and Amsterdam were at the same time important locations for internationally operating banks as well as centres of art and culture”. This phenomenon seems to become more manifest. The United Nations (2013) speak of “an ever-deepening mutual relationship between cities as centres of business, finance, professional services and government on the one hand, and as centres of arts, culture and entertainment on the other” (p. 34). This close relationship between art and finance in cities (Kloosterman and Skórska, 2012; Frey, 2000; Kleiman *et al.*, 2002; Currid and Connolly, 2008; While, 2003; Arrighi, 1994; Hall, 1998) can be explained in multiple ways. There is however much uncertainty about the nature of this relationship. The causal relationships between finance and the arts in cities can be complex and manifold, making the direction of causality difficult to determine in advance (Pratt, 2012, cited in Kloosterman and Skórska, 2012).

2.2.1. The arts as catalysts of economic development

A first causal relationship to consider is the one in which the arts function as catalysts for economic development. While the arts have only recently become an important part of economic development strategies (Currid; 2007; Kong *et al.*, 2015; Kim, 2001), creative people and their innovations have long been thought to be generators of urban vitality (Jacobs, 1961). Harvey (1990, p. 25) points out that “cultural modernism has since the middle 19th century been very much an urban affair phenomenon, that existed in restless but intricate relationship with explosive urban growth”. Urban elites already recognized the importance of the arts to increase their urban centrality (e.g. the international and large-scale world exhibitions held in many capital cities, beginning with the Great Exhibition in 1851 in London) even during the past periods of international economic growth (Harvey, 1990).

The arts function as catalysts of economic development in multiple ways. Direct and indirect job creation and employment in the cultural sector constitute a first argument. The European

Commission (2006, p. 1) argues that “this sector [the cultural and creative sector] provides many different and often highly skilled possibilities, and the sector’s growth in terms of jobs out-performs the rest of the economy”.

Besides the provision of more employment, a second argument implies the link between the arts and its revenues through tourism. After all, by attracting visitors from nearby and afar, the inward investment to the city becomes larger and provides the local economy of financial injections. According to the multiplier method, every coin spent on an artist creates additional spending of the people or services receiving that coin from the artist and so on (Klamer, 1996). Of course this reasoning holds some important assumptions. E.g. the people investing in the cultural industry of a city should be foreigners who would not have spent their money in the local economy otherwise (if not there is a negative multiplier process as well, which leaves the total effect undetermined; Klamer, 1996). In the case of international tourism flows, typical to the high-end arts, this assumption should however be met. Furthermore, Markusen and Schrock (2006) argue that this multiplier effect may be higher than generally estimated and they refer to it by ‘the artistic dividend’: the additional economic impact that would not occur without the presence of artists. Indecon² (2009) has put this reasoning to the test for the case of Ireland by calculating the economic impact of the expenditures of supported (by the Arts Council, the Irish government agency for the development of the arts) organisations and individuals in the arts sector on the one hand and audience expenditure by cultural tourists on the other hand. The research findings indicate that the expenditure of supported arts organisations and artists impacts on overall economic activity through direct (i.e. the purchases of other goods and services and expenditure on wages and salaries) and indirect (i.e. the spending of household income that comes about as a response of wages and salaries earned from the initial expenditure) effects by a multiplier value of 1,28 (during the period 2006-2007). The authors indicate that this number is a very prudent one and state that in similar studies, a multiplier value of 1,5 or higher is adopted (this is for instance the case for the assessment of the Conference Board of Canada (2008) in which a multiplier of 1,84 is found for the period 2003-2007). The economic turnover of cultural tourism (such as the attendance of festivals and events or the visiting of museums and art galleries) also appears to be significant. Indecon (2009, p. 4) concludes by stating that the “arts are a significant economic sector and their economic impact may be larger than generally perceived by economists and policymakers”. The European Commission study

² International Economic Consultants.

“The Economy of Culture in Europe” seems to support the importance of the cultural industry (in Europe) by arguing that the cultural and creative sectors generated a turnover of more than € 654 billion, contributed 2,6 % to the overall European GDP and grew at a faster pace than the overall European economy (at least between 1999 and 2003)³ (European Commission, 2006). A frequently applied strategy to attract international flows of tourists and kick-off this multiplier process is referred to by the popular term ‘city-branding’: “Increasingly, cultural activities have played a role in place marketing and place branding for both tourist purposes and those of attracting FDI” (Pratt, 2012, p. 267). Besides the hosting of cultural mega-events such as art fairs, art biennials and festivals (see section 3.1.2) another increasingly applied city-branding method implies the establishment of cultural mega-projects, a trend that began with the emergence of cultural policy as an urban regeneration strategy and had its first explorations in US cities since the 1970s (Garcia, 2004). The concept was implemented in Western European cities since the late 1980s (Kong *et al.*, 2015): “During this period, declining cities such as Glasgow and Sheffield – which were struggling to find sources of economic growth as the sectors they had formerly relied on were becoming obsolete – turned to developing large-scale cultural projects to serve as ‘symbols of rebirth, renewed confidence and dynamism’ [...] Frankfurt in Germany pursued its global city aspirations by launching a major project to enhance the city’s cultural status. It pumped approximately one billion *deutsch marks* into constructing high-quality cultural buildings, developing 13 new museums along the River Main and transforming a run-down opera house into a concert hall” (Kong *et al.*, 2015, p. 7). Some other Western examples include Paris, Birmingham and the museum quarter in Rotterdam discussed in the previous section. The so called ‘Guggenheim effect’ is also often cited and it is argued that the advent of the popular art gallery to the Basque country exerted “an important effect on attracting tourists” (Plaza, 2000, p. 1056). The European Commission Study (2006) in this case states that the museum “has helped to convert Bilbao into a top cultural destination as well as to boost local activity. Cultural tourism has increased significantly”. This precedent in particular has set the tone for the widespread believe among cities that “creating a new urban image requires culture as the ‘magic’ ingredient that boosts the attractiveness of a city to mobile capital and mobile professional workers” (Kong *et al.*, 2015, p. 6).

³ While the arts make up a significant part of the cultural industries, these numbers should however be regarded critically as the cultural industries embody some other fields as well (i.e. advertising, publishing, design and fashion).

Indeed, besides attracting tourists, a second way in which the arts can foster economic development is by captivating knowledge workers who are active in industries such as banking, accounting, insurance etc. (Kloosterman and Skórska, 2012; Florida, 2002; Currid and Connolly, 2008; Currid, 2007; Kleiman *et al.*, 2002). For this influential group of high human capital, quality of place is a highly valued amenity that is mainly created through cultural and artistic activity. Florida (2002, p. 56) explains: “the presence and concentration of bohemians [defined as artists plus designers] in an area creates an environment or milieu that attracts other types of talented or high human capital individuals. The presence of such human capital [knowledge workers; an influential group that runs from playwrights and museum curators to software designers and financial analysts] in turn attracts and generates innovative, technology-based industries”. Currid and Connolly (2008, p. 422) confirm this by arguing that “the presence of art and culture may actually draw or encourage the central-city formation of other advanced industries, as cultural industries are often viewed as an amenity that other high-human-capital employees seek out” and that “art and culture and media serve as the glue of established central cities that, in turn, may enable places to draw the more dispersed advanced industries, like the financial industry, to central cities rich in cultural amenities”. Kleiman *et al.* (2002, p. 4) boldly summarize: “Look at any trend analysis and data. Investment follows human capital... and human capital, to a surprisingly large extent, follows the arts”.

2.2.2. *Financial incentives propelling the high-end arts*

The second way to approach the relationship art-finance (or should I say finance-art), is by reversing the above causality and analysing how the arts are also directly dependent on the economic strength of the governments and businesses in cities. After all, “without a sound economic base, art cannot exist” (Frey, 2000, preface). One of the main sources of economic support is provided by the local municipal governments through indirect and direct subsidies. The first group of measures include for instance tax exemptions for private individuals or companies in return for donations of money and materials to artists and arts institutions (usually non-profit) (Reid, 2013; Frey, 2000). For instance in Brazil, legislation affords 100 per cent tax deductions for investors (such as the Brazilian Development Bank) in the cultural sector (United Nations, 2013). Though the effects of such indirect incentives are generally hard to measure, Feld *et al.* (1983) argue that in 1973, the indirect art contributions within the United States accounted for more than one third of total government expenditures on the arts and culture. However, the most radical interventions result from direct government support. A good case in

point is Shanghai, which has increased its economic affluence within post-reform China significantly (since the late 1970s, the city's economy has increased with 20 per cent per year for a considerable time, Kong *et al.*, 2015). Only due to the building up of such economic muscle has the city been able to support the development of its cultural industries in a highly intensive way: "Large-scale investment in cultural mega-infrastructure has taken place, made possible only with economic growth and willingness to effect urban change. To an extent, Shanghai residents have responded: the city has a higher per capita cultural consumption than other Chinese cities" (Kong *et al.*, 2015, p. 140). Since cultural consumption in Shanghai has increased, this large-scale operation seems to have been successful. This quote thus illustrates how the fostering of the arts sector within cities can be highly dependent on primary financial incentives.

High-end financial and business services constitute another high-capital source as they frequently act as patrons for the arts and frequently sponsor art events (Kloosterman and Skórska, 2012). In this respect, private banks providing wealth management, art advisory and other related services are among the largest investors in the arts sector. Deloitte's Art and Finance Report (2014) for instance states that the unprecedented development of the art market over the past few years (it has worldwide more than doubled in size since 2002) has resulted in the 'financialization' of the art market. Within this approach – mainly advocated by the interdisciplinary field of the cultural economics – art is no longer seen as an object of pleasure or aesthetic value, but plays an important role in the diversification and protection of capital. Coslor and Velthuis (2012, p. 471) argue that "in the last 40 years art has evolved into a recognizable financial asset category that today is implicated in a wide range of financial transactions. Works of art are used as collateral in order to secure multimillion-dollar bank loans, they are or have been part of the portfolios of pension funds, and since the late 1960s various attempts have been made to establish investment funds that focus on art". Such high-end financial services rely on the artistic judgement of high-human-capital in the arts sector (usually museum directors and art critics) to rate the pieces of art and hence determine their economic value (Coslor and Velthuis, 2012). According to Taylor (2011), the injection of a rational choice approach that is so inherent to the economic way of thinking into the field of the arts, should be considered as a consequence of the endless proliferation of capitalism: "When the art of finance becomes the finance of art, art is no longer merely a commodity to be bought and sold, but becomes the currency of exchange fabricated for hedge funds and private equity funds, where it is traded like any other financial asset". Illustrative of this trend are the

skyrocketing auction prices of fine and contemporary art (Deloitte's Art and Finance Report, 2014). Only recently⁴, two world records have been broken at Christie's in New York. Picasso's 'Women of Algiers' has now become the world's most expensive painting to sell at auction, going for over € 160 million, and Giacometti's 'Man Pointing' is now to be considered the most expensive sculpture sold at auction for over € 126 million. According to Philip Hoffman, founder and CEO of the Fine Art Fund Group, there has not been a sale as important as these two in his 25 years of working in the art world⁵.

It is clear that these capitalist approaches towards the value of art take us a long way from the *art for art's sake* attitude of most cultural producers in the field. Frey (2000, preface) in this respect poses some meaningful questions when reasoning about the recent and increasing financial interference within the high-end world of the arts: "Must not creative art be free of economic constraints, must it not lead a life of its own? And is economics not the realm of mean commercial dealings?". Whatever one's opinion concerning this normative debate may be, it should be clear that the increasing financialization of the arts sector creates a ditto need for banking services to protect, enhance and monetize this value. Since these financial management services are highly present in global cities, this should as well be considered an important argument for the clustering of the high-end arts field nearby places where these financial services are provided.

Besides the financial support and sponsoring of high-end financial and business services, there is also a sociological argument regarding the dependency of the arts on financial prowess, advocated by Kavolis (1964, p. 334). He argues that "people desperately concerned with getting a living cannot develop a rich moral or aesthetic life" and "artistic creativity seems to be stimulated by recently attained prosperity". Kavolis (1964, pp. 334 – 335) finds evidence for this effect of economic advancement in historical happenings across the globe: "The accumulation of urban wealth in Europe, beginning in the eleventh century, is followed in the twelfth and thirteenth centuries – an age of "magnificent prosperity" – by the period of Gothic cathedral-building. The creation of the great fortunes in America during the nineteenth century is succeeded in the twentieth by the first original American contributors to visual art [...] One

⁴ on the 12th of May, 2015, <http://www.christies.com/auctions/looking-forward-to-the-past-new-york-2015#overview-section>, 14/5/15.

⁵ <http://www.bbc.com/news/entertainment-arts-32700575>, 14/5/15.

linkage between the recent achievement of prosperity and artistic creativity is the leisure which the former makes possible, as in Athens in the classic period and Florence during the Renaissance”. Within this context, artistic creativity is considered as a “product of recommitment of resources from instrumental to expressive activity” (Kavolis, 1964, p. 335). The United Nations (2013) support this reasoning by stating that “The ever-increasing number of middle-class consumers is expected to place increasing demands on the symbolic, as opposed to the industrial economy [...] The more affluent people become the more attention they pay to emotive considerations behind their leisure, entertainment, cultural and health activities” (p. 36).

Whatever the causal relationship may be, judging from the above arguments we would expect a positive association between art and finance, hence a strong overlap between any rankings that compare the monetary and artistic realms in global cities.

3. METHODOLOGY: RANKING GLOBAL ARTS AND FINANCE CENTERS

This chapter deals with the preparatory methodological steps for the actual comparative analysis (chapter 4) and is divided into two main sections, with the first focusing on the arts ranking and the second on the financial ranking. While the urban geography literature abounds with notions such as ‘renaissance cities’, ‘global cultural cities’, ‘arts cities’, ‘European City of Culture’ and ‘cultural capitals’ (Chang, 2000), empirical and systematic research on the geography of the contemporary global art market on the scale of cities and metropolitan regions remains scarce (Kloosterman and Skórska, 2012; Coslor and Ren, 2009). Therefore, most emphasis within this chapter will be put on the composition of a novel global arts centre ranking (see section 3.1). After delineating the fuzzy concept ‘art’ (see 3.1.1), a preselection of cities is worked out according to the hosting of international art events (see 3.1.2). The 130 cities that score highest on two competitive indicators are retained and used as the input for the actual GAC ranking, in which nine indicators are distributed among four competitive domains (see 3.1.3). In section 3.2 the various financial rankings that exist up to date are described and the most appropriate one within the scope of this research, notably the Global Financial Centers Index (GFCI) by the Z/Y en Group, is discussed. This GFCI includes 83 cities and is composed of 105 indicators spread over five competitive domains. As this chapter involves a number of successive steps with different data, cities and indicators, a summary scheme is provided below to keep an overview (see Figure 1).

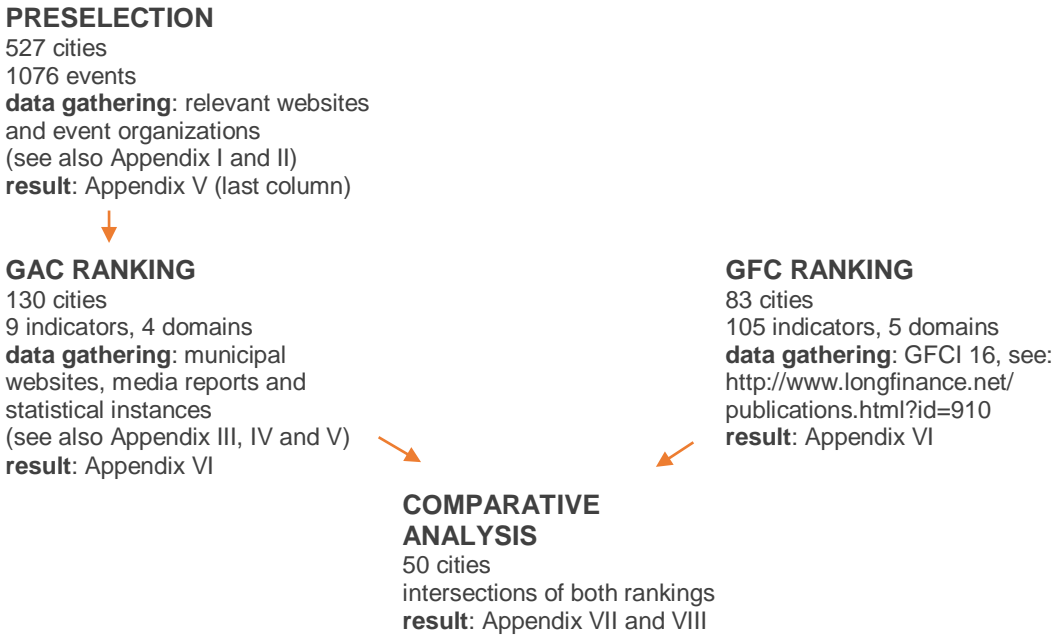


Figure 1: Overview of the main methodological steps

3.1. Conceptualizing a global arts centres ranking

3.1.1. 'Art' as fuzzy concept

Art is an abstract concept and there exist multiple opinions on how it should be defined. On the one hand, these differences in perception stem from cultural distinctions. As each country is different, each market is unique and each cultural product has its specific characteristics; whereas Buenos Aires is well-known for its tango dance scene and Senegal for the export of ethnographic music recordings, Mumbai is characterized by the Bollywood movie industry while Abu Dhabi embraces the art and culture of the West by introducing the Louvre Abu Dhabi and its very own Guggenheim museum (United Nations, 2010). On the other hand, with the everlasting evolutions within the art field and in domains more or less related to conventional art fields such as painting, sculpture, architecture, music, poetry, theatre and dance, the distinction between *art* and *not art* can be blurry. E.g. what to do with applied creative industries such as design and fashion? And how about the recent new media arts wave that includes branches such as digital painting and printing, game design, algorithmic and network-based art etc.?

In this research, emphasis will be put on the most conventional categories of art, as defined by the United Nations (United Nations, 2010). According to this definition, the arts are classified as one of the four groups (besides heritage, media and functional creations) that compose the *creative industries*⁶. These four groups are in turn divided into nine subgroups as presented in Figure 2. (More or less) recently evolved fields such as design, fashion and new media arts are thus categorized as *functional creations* whereas the arts *in se* are tightly reduced to visual arts (painting, sculpture, photography and antiques) and performing arts (live music, theatre, dance, opera, circus, puppetry, etc.). According to this definition, architectural services are placed within the functional creations group. This is slightly surprising as contemporary architecture can often be considered as a work of art in its own right and such creations can play an important

⁶ “The creative industries are the cycles of creation, production and distribution of goods and services that use creativity and intellectual capital as primary inputs; [they] constitute a set of knowledge-based activities, focused on but not limited to arts, potentially generating revenues from trade and intellectual property rights; [they] comprise tangible products and intangible intellectual or artistic services with creative content, economic value and market objectives; [they] stand at the crossroads of the artisan, services and industrial sectors; and [they] constitute a new dynamic sector in world trade” (United Nations, 2010, p. 8)

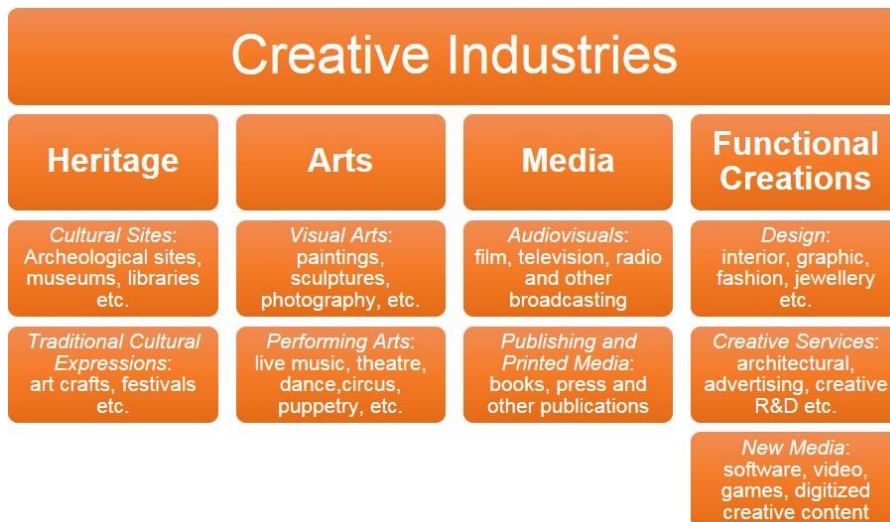


Figure 2: United Nations classification of the creative industries (Adapted from United Nations, 2010, p. 8)

role in upgrading and branding the artistic charisma of cities through for instance the creation of emblematic designs, generally from the hand of so called *starchitects* (Evans, 2003; Baniotopoulou, 2001; Frey, 2000). Kong *et al.* (2015) explain: “As competition among cities for global city status intensifies, more and more cities are turning to the accumulation of cultural capital as an essential part of their strategy. Such cultural assets take the form of cultural facilities and cultural spaces, leading to a new wave of cultural space construction, resulting in new urban landscapes” (p. 6). Yeoh (2005, p. 945) even speaks of “place-wars among cities to attract investors around the production and consumption of culture and the arts”, often through investments in mega cultural facilities. While these cultural spaces are frequently housed in former industrial complexes (Mommaas, 2004) such as the Northern Quarter in Manchester, the Westergasfabriek in Amsterdam or the 798 Art Zone in Beijing, new iconic flagship projects constitute the main elements of these urban regeneration strategies. Some fine examples include: the Centre Pompidou by Rogers, the Guggenheims, Disney Museum and EMP Seattle by Gehry, the Getty and MACBA by Meier, the V&A, Imperial War Museum and Jewish Museum Berlin by Libeskind, the MoMA and Guggenheim New York by Koolhaas, and the Louvre by I.M. Pei (Evans, 2003). According to Bianchini (1993), such cultural flagship projects can help putting the cultural identity of the city on the map and enhance its competitiveness. After all: “Building top-quality facilities enables cities to host world-class cultural activities or performances, and is regarded as an essential element of the strategy to attract high-end artists/performers and cultural elites from around the globe as a means for the city to develop and maintain its competitive advantage” (Kong *et al.*, 2015, p. 7 – 8). Museum

buildings that impersonate such architectural statements will consequently be incorporated in the further analysis (see 3.1.3).

A second adjustment to the United Nations definition is made for the film category since the bulk of this group consists of independently produced (usually arthouse) films that frequently share higher affinities to the visual arts group than to audiovisual media categories. After all, international art festivals can assist in creating a distinctive artistic identity for the cities that host them (Fjell, 2007): “The publicity that festivals and events can generate for a community does not only have a cumulative impact on the destination, but also feeds into the image and identity of the community and assists with creating an appealing authenticity” (p. 131). When considering for instance a high-end film festival like the Berlinale in Berlin or the Sundance Film Festival in Park City (Utah), it is clear that these events generally have more in common with conventional art fields such as photography than with television, radio or broadcasting (the audiovisual media fields).

Thirdly, since the scope of this research is mainly oriented towards the conventional fine arts categories, commercial popular music is not included in the live music group of the performing arts. Only classical music, jazz and opera events will be incorporated in the following analysis.

Besides these content-based considerations, it should be clear that this study is focusing on the *high-end* types of art: the art that makes its way into art galleries, museums, arthouse cinemas, art fairs, auctions and biennials (in the case of the visual arts) and into renowned theaters, opera houses and international performance festivals (in the case of the performing arts).

In summary, art as defined within the scope of this research implies the following domains:

- the visual arts: painting, sculpture, antiques, photography, film and architecture;
- the performing arts: live music (classical/jazz/opera), theatre, dance, circus, puppetry, performance, etc.

3.1.2. *A preselection of cities based on the frequency of major international art events*

Having demarcated an art definition, it is now possible to make a preselection of cities that will ultimately feature in the global arts centre ranking. In general, this preselection criterion is based on the number of art festivals, fairs and biennials that have been held in cities worldwide. More specifically, two competitive indicators are used to distinguish between the importance of the different events: daily attendance and the number of editions there have been so far (within the same city). By combining both indicators for all the events that are hosted for each city, the most competitive cities can be distinguished and selected as input for the GAC ranking. Before executing this preselection (see 3.1.2.2), the rationale behind the methodological decision of using art events as preselection criterion is motivated (see 3.1.2.1).

3.1.2.1 Globalization and the rise of field-configuring events: art fairs, festivals and biennials

During the last two decades, the contemporary art world has undergone some fundamental changes as an extraordinary proliferation of major international competitive events such as biennials, fairs and festivals has manifested itself (e.g. Montero, 2012; Basualdo, 2003; Bydler, 2004; Yeoman *et al.*, 2004; Frey, 2000). Filipovic *et al.* (2010, p. 15) for instance argue that “If it can be said that for more than a century museum and gallery exhibitions have largely been “the medium through which most art becomes known” [...], then it is the biennial exhibition that has arguably since proved to be the medium through which most contemporary art comes to be known. And this is the case, no matter what one’s position on or opinion about may be.” While this quote regards biennials, similar trends have been observed for art fairs and festivals. In the following, these three different types of art events are discussed.

Biennials (characteristically major recurrent, international and spectacular types of art exhibitions), have conquered such a central role in the functioning of the art market that they have turned into highly developed, independent industries on their own (Delacour and Leca, 2011). While most biennials can be found in Europe, it is generally a global phenomenon with the Americas and Asia being well represented too (Montero, 2012). As regards the East: “Asia is the region of greatest growth, and also investment, with numerous examples of high-profile new biennials created since the mid-1990s (Gwangju, Shanghai, Busan, Guangzhou, Beijing, Singapore), following wider economic and political changes” (Montero, 2012, p. 14). Biennials have mushroomed internationally since the 1980s and 1990s. As Tang (2011, p. 74) argues, this

evolution is closely related to the process of globalization that emerged within the same timeframe: “From the early 1990s onwards, the ‘biennialization’ of the art world progressed [...] alongside the push towards the creative industries by governments worldwide, and coinciding with the rise of economic neo-liberalism. [...] While biennales have existed since the beginning of the twentieth century, figures demonstrate that they mushroomed during the 1990s, a phenomenon that historians often correlate to the intensification of capital’s globalization after the fall of the Berlin wall and the decline of communism”. Tang (2011, p. 83) continues: “deregulation and the unblocking of trade barriers for the ease and speed of finance’s flows are the mainstays of neo-liberalism. These coincide with ideals championed for contemporary art, particularly the positioning of the art world as a ‘zone of freedom’ as described by Stallabrass (2004: 6)”. Biennials should thus be considered as spatially bounded products of the age of capital’s globalization. They have become gatekeepers of the international art industry and they share a common transnational rhetoric in their (general) attempt to “stage the global” and “curate the world” (Tang, 2012, p. 88). These findings parallel the way in which Sassen (1991) articulates global cities as new forms of centralization and power within a globalized world of transnational capital.

Besides biennials, *art fairs* have also proliferated during the last decades. These events are temporary meeting points for various stakeholders in the high-end art market (artists, curators, galleries, art critics, museum representatives, etc.) and they have the power “to bring the art to regions without an established [art] center” (Coslor and Ren, 2009, p. 8). Since art fairs worldwide are held in every period of the year, there exists a network of fairs (Thompson, 2011) with a highly pronounced hierarchy. Today there are four international art fairs that are clearly at the high-end spectrum of this hierarchy and “whose branding is such that they add provenance and value to works of modern and contemporary art sold there. They are to art what Cannes is to movie festivals” (Thompson, 2011, p. 60). These fairs are the European Fine Art Foundation (TEFAF) fair, Art Basel, an Art Basel spin-off called Miami Basel and London’s Frieze. Yogev and Grund (2012, p. 24) state that such major art fairs now “play a major part in the market for contemporary art” with Thompson (2011) even arguing that art fairs have become more important venues than auction houses for buyers at the high-end spectrum of the art market. The highly praised yearly TEFAF Art Market Report (2014) in this regard states that, in 2013, dealers reported making 33 percent of their sales at fairs. Thompson (2011) further speaks of an *epidemic of fairs* and claims that “the start of the twenty-first century was the decade of the art fair, of the market being the medium” (p. 59).

Finally, *art festivals* (e.g. the International Festival of Dance Theatre in Moscow and the Yerevan Perspectives International Music Festival) are in a similar phase of expansion and professionalization: “In the last 50-60 years the number of festivals in Europe has escalated from about 400 to approx. 30000, and since the early 1990s, an entire global industry of festivals and events has evolved and developed” (Fjell, 2007, p. 130).

One of the main reasons for the existence of these temporary, recurrent social organizations is to be found in the high level of uncertainty in the contemporary art market in which “there are no precise or objective measures that determine what makes a high-quality product” (Yogev and Grund, 2012, p. 23). Therefore, events such as fairs, biennials and festivals are increasingly regarded (Anand and Jones, 2008; Entwistle and Rocamora, 2011; Tang, 2011; Delacour and Leca, 2011) as competitive *field-configuring events* (FCEs) since they evaluate what should be considered art and promote “ideas about the way work in the field ought to be done” (Oliver and Montgomery, 2008, p. 1048, cited in Delacour and Leca, 2011, p. 38). In this way, they wield symbolic power (Anand and Watson, 2004) by distinguishing “between ‘insiders’ and ‘outsiders’, between the more and less privileged” (Moeran and Strandgaard Pedersen, 2011, p. 6). These gatekeepers “thus have the power to impose their view on what art should be in this field” and “it is likely that actors who do not share the aesthetic view (or appreciative value’) of those in charge of the FCE will be rejected and marginalized.” (Delacour and Leca, 2011, p. 38).

In this way, international competitive art events share much of the same characteristics as other international trade fairs which are, according to Bathelt and Schuldt (2008, p. 4) “characterized by a unique information and communication ecology based on physical co-presence between agents of an industry, technology or value chain from all parts of the world”. These fairs are viewed as ‘temporary clusters’ and they are “important events that support economic processes of interactive learning and knowledge creation. In such settings, geographical proximity and face-to-face contact enable actors from different countries to exchange information about markets, products and innovations” that are not readily available to outsiders (Bathelt and Schuldt, 2005, p. 853). The concept of ‘global buzz’ (Bathelt and Schuldt, 2008) is all about this internetwork and highly dynamic information exchange in the form of “rumours, recommendations, and speculations” and “strategic information” (Bathelt and Schuldt, 2008, p. 5). The idea of a ‘local buzz’ (Bathelt *et al.*, 2004) is similar and captures the locally concentrated tacit knowledge. ‘Buzz cities’ are therefore influential places in the sense that they

are the places “where, more than ever, critical problems of coordination in the modern economy are resolved through face-to-face contact” (Storper, 2013, p. 181). Along these lines it can be reasoned that places that frequently host major international (art) fairs and festivals evoke a very similar temporary buzz in which “specific advantages of unplanned and haphazard internetwork contact” (Storper, 2013, p. 181) are manifest. According to Entwistle and Rocamora (2011) who have examined the FCE ‘London Fashion Week’, both the local and global concept of ‘buzz’ are essential to understand competitive art events. They argue that “fashion information/buzz is a very complex mix of both globally circulating information, in the form of media and press, tacit knowledge worn on the bodies of these globally circulating workers, and very much located in the particular fashion cities. Fashion week, as a major industry event, locates and facilitates the circulation of global and local buzz”. According to these scholars, these findings can be extrapolated to the greater part of the FCEs within the arts field, which all the more demonstrates the importance of these international events within the contemporary art world.

3.1.2.2 Establishing a database of major international art events

Due to the importance of these FCEs, the frequency by which they are hosted in cities worldwide is used as a preselection criterion to come to an ultimate set of cities that will be used to establish the global arts ranking. The main assumption being made here is that the frequency of these events is a reliable proxy for the importance of these cities in the global art hierarchy. Judging from the above, this assumption should be valid.

Three types of art events are recorded: art fairs, art festivals and biennials (and other *-ennials*). They are collected by consulting online summary lists (see Appendix I) that comply with two main criteria:

- every list has to contain enough geographical diversity, which implies that only those lists are used that do not focus on one world region in particular;
- the events in the lists have to be internationally performant (in the sense that a significant amount of international plays and/or artists are programmed).

Furthermore, the following methodological decisions are made when recording the events:

- the events have to take place in a two year time span ranging from the 1st of January 2014 to the 31st of December 2015. As regards the *-ennials*, it is possible that events

that took place in 2011, 2012 and 2013, are recorded as well (since their last edition goes back further in time);

- future events are also considered, since such forward-looking ambitions are also illustrative of the *current* artistic prowess of the city;
- in case an event is spread over multiple cities, all of the cities are incorporated in the dataset;
- in case an event is held in city X in 2014 and city Y in 2015, both X and Y are implemented in the dataset;
- as has been decided before (see 3.1.1), design and fashion are not considered to be *art* within the scope of this research hence design and fashion events are excluded from the dataset.

On the basis of these criterions, 1076 events over 527 different cities have been selected. The events, sorted by city, can be found in Appendix II. Of these events, 20 percent include biennials, 21 percent are art fairs and the greater part, 59 percent, consists of art festivals. Figure 3 gives more information on the geographical spreading of these cities.

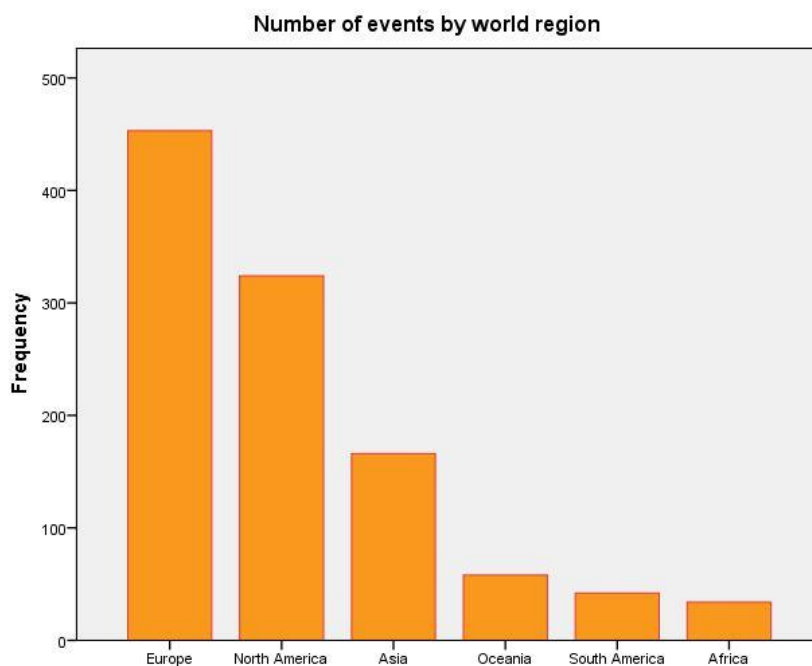


Figure 3: Number of events by world region

It is clear from the graph that the hosting cities are mainly located in Western countries. This can be explained by the fact that the recent growing number of festivals is mainly “a Western phenomenon that follows Western economic trends” (Fjell, 2007, p. 130). Since

festivals make up the greater part of the dataset, this strong European and North American representation should not surprise. The same Western dominance also holds for biennials (Montero, 2012). Despite this seeming Eurocentric approach, this preselection criterion is still valid given the importance and dominance of these events to the contemporary high-end art market as discussed in section 3.1.2.1.

When the event frequencies are calculated on the scale of cities, New York City stands out as the city with the highest numbers of major art events in the selected time frame, followed by London, Los Angeles, Berlin and Miami (see Figure 4). The first ten cities together host over 19 percent of all the events so the data distribution is highly positively skewed.

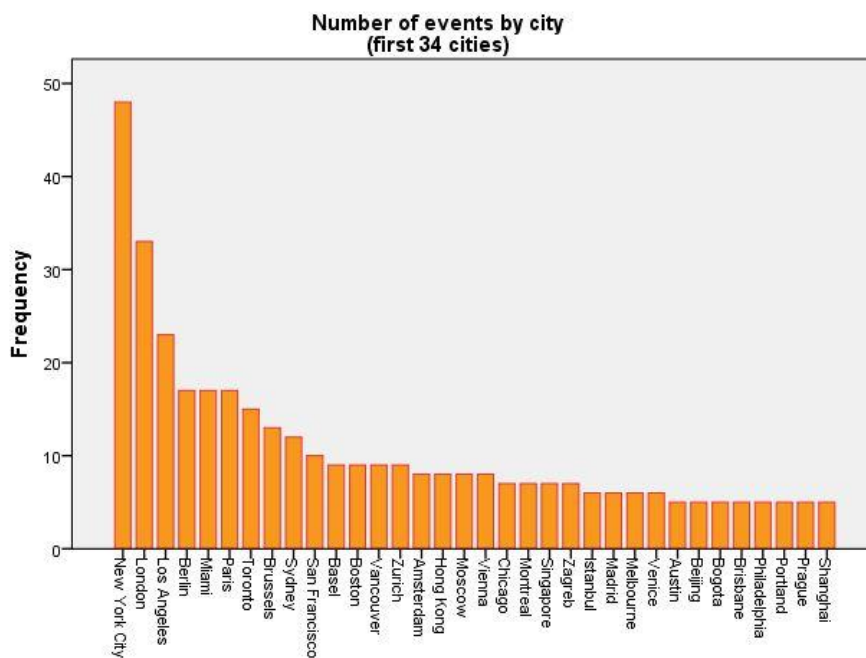


Figure 4: Number of events by city for the first 34 cities

For every event, some important items are recorded in the database:

- the *total attendance number* (to avoid redundancy the number of unique visitors and not the total number of sold tickets is aimed at);
- the *duration of the event* in days;
- the *number of editions* of the event there have been so far in the *same* city
- the *type* of event (film, performance, contemporary art, fine arts or photography)

The first three indicators are used to sort the less important festivals from the more important ones, with *important* meaning: causing a greater effect on the overall reputation of the particular

festival and city (hence increasing the centrality of the hosting city within the global arts center hierarchy). After all, the more people visiting the event, the greater the influence sphere of the festival and the greater the artistic image of the hosting city will be. The attendance number is calculated on a daily basis since festivals and fairs with a long duration and consequently high attendance are not always as competitive as more popular events with a shorter duration. For instance, the SeMA Biennial in Seoul in 2014 saw a total attendance number of 130 944 people over 81 days. The Vancouver Biennial in 2013 lasted for a period that is six times longer (480 days) but attracted only twice as much visitors (295 800). Thus, while the attendance on a daily base in Vancouver was around 616 people, the daily turnout in Seoul was much higher (1616) despite the shorter period. The data on the unique visitors was acquired by contacting the festival organizations and by searching the Internet for relevant information. For some events no useful data could be gathered so that estimates had to be made for these attendance numbers (see the attendance numbers written in italics in Appendix II). For each missing value, the attendance at the previous edition of the festival was used as a proxy. In the cases where this information was lacking as well, the average daily attendance number of other recorded events within the same city was used. On a total of 1076 events, 33 percent are estimates.

A second way to distinguish between the importance of the events is by comparing the number of editions there have been so far. After all, the more an event has been held in a particular city, the more renowned the event (hence the city) has become in the international arts scene. For instance, there is no doubt that the international brand recognition of the Edinburgh Fringe Festival (which has been held over 67 editions so far) is significantly bigger than that of a newly established festival such as the Tropfest in London with merely three editions so far. An important condition hereby implies that the editions have to have been held in the *same* city. While for instance Manifesta is a European nomadic festival and has already been held for several editions, the 2014 host, Saint-Petersburg, only receives a score of *1* in the column *edition* since it is the first time the festival takes place in this city.

Both indicators (daily visitors and edition numbers) are standardized. Since it is not very meaningful to determine which of both has the largest impact on the overall importance, they are given the same weightings. An ultimate ranking is calculated in which every city receives an *index score* I_i according to the following equation:

$$I_i = \left(\frac{\sum q_i - Q_{min}}{Q_{max} - Q_{min}} \right) \times \left(\frac{\sum e_i - E_{min}}{E_{max} - E_{min}} \right)$$

Where: I_i is the index score for city i ;
 $\sum q_i$ is the sum of all daily attendance numbers for all the events hosted in city i (analogous for the editions e_i);
 Q_{min} and Q_{max} are respectively the lowest and the highest summarized daily attendance numbers when compared over all the different cities (analogous for the editions E_{min} and E_{max}).

Since the financial ranking that will be used (see 3.2) only contains 83 cities, it is not necessary to retain all 527 cities for the resulting GAC ranking. However, in order to have enough data, not 83 but the first 130 cities in the art list will be selected to compose the final arts ranking. This specific number is arbitrary yet it is considered to be large enough to include a satisfying amount of data and small enough to be able to perform the extensive and time-consuming operationalization of the indicators within the GAC ranking. An overview of these 130 cities (by descending hierarchy according to their index scores) can be consulted in Appendix V. The scores can be found in the last column of the table under the heading *reputational factors* and then subsequently under *major art events*. The remaining 130 cities are located in 53 different countries with cities in the United States being the most represented (more than 20 percent), respectively followed by Spain, Australia, Canada, Germany, Italy and Switzerland.

Besides competitive indicators (daily visitors and number of editions), it is also useful to have a clearer view as to which art *branches* (film, performance, fine art, photography, ...) are most frequently represented on international festivals and fairs in which cities. After all: “art and culture often attain their cachet or value from the place in which they are produced” (Currid and Connolly, 2008, p. 428). So, if a city is well-known for its international performing arts scene, then it is very likely that actors, dancers, musicians and directors will come to this specific city to be evaluated in its thriving performing arts scene (Currid, 2007) since cultural value is intrinsically linked to where that culture is produced (Scott, 2000; Molotch, 1996). For the four cities with the highest index scores (New York, London, Paris and Berlin), the specificity and unique profile of their art scenes is examined. Figure 5 gives an overview of which type of event (fair, festival or biennial) is most frequently held in these four cities. While the greater part of the total dataset exists of festivals (59 percent), the figure indicates

that all of these top-tier cities host more fairs than festivals, except for Berlin, whose distinctive profile is striking when compared to the other three. Whereas London and New York in particular and, to a lesser extent also Paris, seem to perform in similar ways by most frequently hosting fairs, followed by festivals and finally biennials, Berlin shows a distinct profile since the city only hosted 2 fairs, 1 biennial but 14 festivals within the gauged period. Judging from Figure 6, which further dissects this aggregation level by showing the frequencies of the events by their art *branches*, the Berlin festivals are mainly performing festivals (with a similar ratio of dance, theatre and music festivals), followed by film festivals.

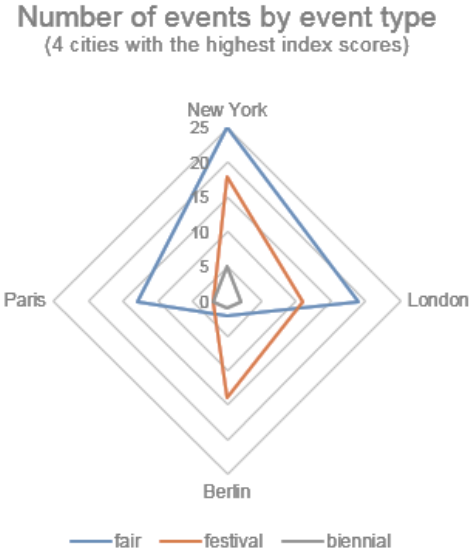


Figure 5: Number of events by type (4 cities with the highest index scores)

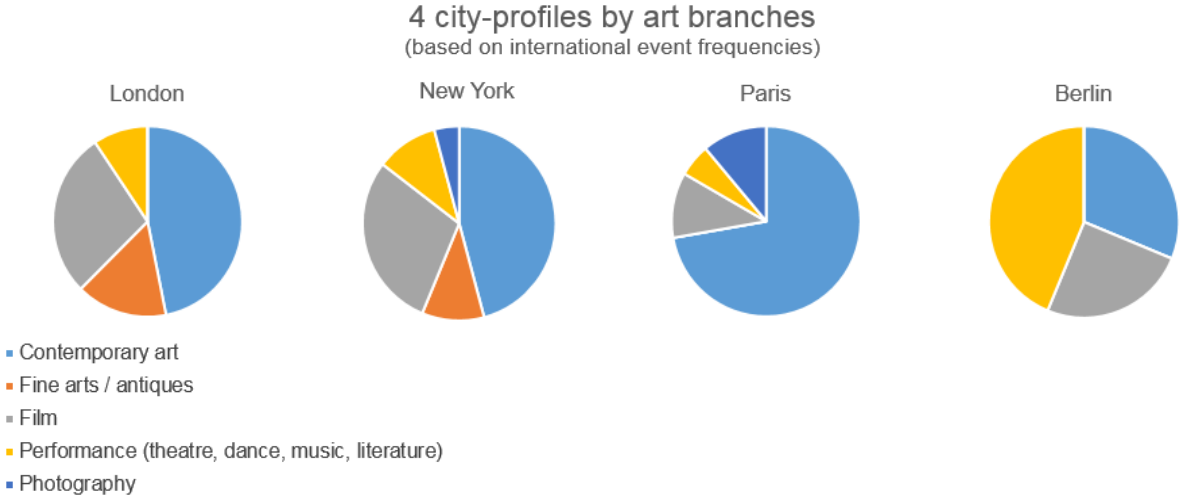


Figure 6: City-profiles by art branches (4 cities with the highest index scores)

These findings are supported by the empirical research of Kloosterman and Skórska (2012) in which Berlin ranks first on international visual art events and third (before London and Paris) on international performing art events. Berlin’s distinctive profile could be explained by its often claimed underground arts scene and the attraction of young, raw talents (Kloosterman and Skórska, 2012). This particular alternative *freie Szene* (see also 4.1) mainly constitutes expositions and festivals instead of (the more commercial and elite) fairs and biennials. As for the other cities, New York and London perform in a remarkably similar way and they are the only cities for which international fine arts / antiques events were recorded. Paris, finally, distinguishes itself by hosting almost exclusively contemporary art fairs.

3.1.3. *Ranking global art centres according to four areas of competitiveness*

The 130 cities that have been selected will now undergo a more elaborate analysis. The aim is to create a representative ranking of global art centres that will ultimately be compared to the financial centres index (chapter 4). The structure of this GAC ranking is based on four different *areas of competitiveness* as is shown in Figure 7.



Figure 7: Composition of the art ranking

The key assumption hereby implies that these four domains cover the most important aspects that determine the competitiveness of a city as a GAC. These domains have been largely chosen in accordance with the structure of the GFCI by the Z/Y en Group (see section 3.2) since these domains are equally applicable to the field of the high-end arts. After all, it seems very plausible that a city positions itself in a more pivotal function in the globalized art world when there is more *cultural infrastructure* (the first area): more venues where the arts can be performed (theatres and operas) and more venues where art is being shown to a large and international audience (art museums, galleries and cinemas). Kong *et al.* (2015, p. 8) confirm this reasoning

by stating that “the development of creative industries – such as music, film, visual arts and fashion design – is promoted through the availability of cultural infrastructure [...] and it is through all these connections that the city can offer its citizens a more diversified and richer cultural life, and thus solidify its cultural development and identity”.

The importance of *human capital* (the second area of competitiveness in Figure 7) as a binding agent in the arts field has already been theorized in section 2.1.

A third domain gauges the *fine arts sector development* by recording the number of auctions that have been held by Christie’s and by Sotheby’s during a time span of three years (2012-2014). Both are high-end fine art auction houses that make up around 95 percent of the global fine art auction market (Economist, 2008; In: Coslor and Ren, 2009). Their dominance in the auction circuit of the contemporary art market makes them appropriate for gauging the overall geography of these high-end art sales.

Among the *reputational factors* are emblematic architectural constructions that often can be considered works of art in their own right. As argued in section 3.1.1, sometime in the last two decades, the architecture of museums around the world became nearly as important as the art and history they contain. The trend is said to have begun with Frank Gehry’s Guggenheim Bilbao (Baniotopoulou, 2001) and has appeared around the world in an astonishing variety of architectural forms. These buildings can play a major role in upgrading the centrality of the city in the global arts world. UNStudio (the architecture firm that designed the forthcoming Museum of Middle East Modern Art in Dubai) nicely illustrates this by stating that “The Museum of Middle East Modern Art [...] will be a celebration of the importance of Dubai Creek as a new cultural hub within Dubai as a global city.”⁷ Another reputational indicator is the frequency of major art events as already discussed in section 3.1.2. The hosting of such hallmark events is part of a city’s “consumption-based strategies that take the form of urban imaging and place marketing, building a global image and attracting flows of global elites and tourists” (Kong *et al.*, 2015, p. 10). This factor is thus again incorporated in the ranking as one of the 9 indicators. In Table 2, the operationalization of the indicators is explained in detail.

⁷ <http://www.unstudio.com/projects/the-museum-of-middle-eastern-modern-art-momema> (accessed on 12/3/15)

INDICATOR	OPERATIONALIZATION
Number of art museums	The museum numbers are manually collected by consulting the official city websites. According to 3.1.1, design and fashion museums are not included. To account for local art expressions, ethnographic and folklore museums are included, as well as memorial museums of well-known local artists. Museums that are planned to be built in the nearby future are also incorporated (e.g. the Louvre Abu Dhabi).
Number of private art galleries	The recently published (2013) World Cities Culture Report (WCCR) ⁸ provides these numbers for 16 cities that are on the list. The remaining numbers are also collected by consulting relevant websites (e.g. official city websites, yelp.com, artforum.com, etc.)
Number of theaters, operas and concert halls	According to 3.1.1, only concert halls destined for the hosting of classical and jazz music concerts are considered. Some data is obtained from the WCCR and Eurostat. The remaining gaps are filled in by consulting official city websites.
Number of cinema venues	In case there are cinema chains that hold multiple venues in the same city (e.g. UCI Cinemas), all these venues are taken into account. Some numbers could be obtained from the WCCR while others are collected via online sources.
Number of prestigious art educational institutes according to Saatchi Gallery	Since the Saatchi Gallery is a hallmark art gallery and a frequently recurring name in much literature on the contemporary art market, their publication ⁹ of “the largest and most prestigious art colleges, universities, visual arts, fashion and design institutions from all over the world” is an appropriate tool for gauging the high-end educational art institutions in the listed cities. According to 3.1.1, institutions that mainly cover the fields of design and fashion are not included.
Share of cultural employment	This is the only indicator where, because of time budget restrictions, the tight art definition discussed in 3.1.1 has to be broadened. Due to two recent publications (the WCCR and the ‘Americans for the Arts’ report from 2015 ¹⁰), more than 40 cities could be provided of trustworthy data on the employment in the <i>creative industries</i> . A large share of this group consists of occupations in the art fields considered in this research, yet other occupations (e.g. publishing, advertising and design activities) also belong to this broad

⁸ to be consulted on (accessed on 12/3/15):

http://www.worldcitiescultureforum.com/sites/all/themes/wccr/assets/pdfs/WCCR2013_low.pdf

⁹ to be consulted on (accessed on 12/3/15): <http://www.saatchigallery.com/artcolleges/>

¹⁰ to be consulted on (accessed on 21/3/15): <http://www.americansforthearts.org/by-program/reports-and-data/research-studies-publications/creative-industries/view-the-reports>

	category. An overview of the exact types of occupations that are considered, is given in Appendix III.
Number of Christie's and Sotheby's auctions	The locations of every auction held by Christie's ¹¹ and by Sotheby's ¹² during the period of the 1 st of January 2012 to the 31 st of December 2014 are recorded. For every auction being hosted, the city gets an extra point.
Number of city-branding museum edifices	<p>Only museums (and no other cultural institutions) are considered. Since museum architecture can often be considered as a work of art in its own right, museums that hold other collections than art are also taken into account (e.g. science and technology museums). The Royal Ontario museum (focusing on natural history and world cultures) in Toronto nicely illustrates this.</p> <p>The data was gathered in two ways. On the one hand, 13 online lists that summarize such extravagant museum architecture are consulted. Every time a new museum is denominated, the city gets an extra point for this indicator. An overview of the consulted lists can be found in Appendix IV. On the other hand, Google Images is consulted using three search queries: <i>museum architecture world</i>, <i>art museum architecture</i> and <i>contemporary museum architecture</i>. For each of these queries, the first 400 results are regarded and every time a new museum is shown, an extra point is added to the indicator for that city.</p> <p>Designs that are planned for the nearby feature (e.g. the Guggenheim Abu Dhabi for 2017, the Louvre Abu Dhabi for 2015 and the Contemporary Art Museum in Buenos Aires) are also incorporated in this indicator.</p> <p>Finally, while the Guggenheim buildings in Venice and Berlin do not have an extravagant architectural look, they are still taken into account since the reputation of this chain of museums is extraordinary. A list of the buildings included for every city can be found in Appendix IV.</p>
Frequency of major art events	The index scores established in the preselection (3.1.2.2) are recycled.

Table 2: Operationalization of the indicators

When considering the operationalization of this art ranking, one should keep in mind some methodological drawbacks. Despite the use of an art definition that includes multiple different cultures with ditto art perceptions, some of these art types are kept off the radar by the operationalization. A good case in point is Marrakech, with its little amount of theatre venues

¹¹ to be consulted on: <http://www.christies.com/results>

¹² to be consulted on: <http://www.sothebys.com/en/auctions/results>

and operas and yet very lively multicultural music scene (among others, the *Gnaoua* music tradition) which is characterized by informal performances done in *town squares* and on *sidewalks*. Secondly, most of the employment statistics are rough underestimations of the total number of people employed in the creative industries since only employees covered by social security are included in the data provided by official statistical instances (hence self-employment and freelancers are left out). Thirdly, indicators focusing on the *software* of the arts sector (such as cultural employment) are not commensurately represented in this operationalization when compared to *hardware* indicators (arts infrastructure, international events, city-branding museums and the number of art schools). Some future ideas along this line include gauging the cultural spending on goods and services, the degree of activity of non-profit groups, the level of structural municipal policy attention towards the arts field, the amount of public art etc.

The dataset with the above indicators and their values can be found in Appendix V. Since the data contains missing values (with 27 percent missing in the case of the employment indicator), these numbers are estimated by statistical algorithms. Three of the four infrastructural indicators are lacking data as well as the employment indicator of the *human capital* domain. The most common method to estimate missing values is to do so separately for every subscale in the dataset. However, as employment in the creative industries is not only considered to be correlated to the amount of art schools (the more art schools, the more graduates hence the more people employed) but also to the infrastructural indicators (the more infrastructure, the more people can *be* employed), I let the expectation maximization algorithm deal with all of the first six indicators. As expected, the correlations between the indicators are high (see Table 3) with particularly high and consistent coefficients between *art galleries* and *theatres / cinemas* and *theatres* and *cinemas*.

	Museums	Galleries	Theatres	Cinemas	Schools	Employment
Museums	1					
Galleries	,565	1				
Theatres	,539	,790	1			
Cinemas	,494	,779	,752	1		
Schools	,359	,640	,661	,458	1	
Employment	,477	,410	,429	,381	,333	1

Table 3: Expectation maximization correlation coefficients

Now that the missing data gaps are filled in, the actual ranking can start. As it is hard to determine which of the areas of competitiveness have the biggest influence on the overall artistic affluence of cities, these domains are considered equally important and thus receive the same weightings. The ranking is constructed according to the equation below and can be found in Appendix VI.

$$R_i = \text{mean} \left[S \left(\sum v_{1,i}; v_{2,i}; v_{3,i}; v_{4,i} \right); S \left(\sum v_{5,i}; v_{6,i} \right); S \left(\sum v_{7,i} \right); S \left(\sum v_{8,i}; v_{9,i} \right) \right]$$

Where: R_i is the rating score for city i
 $v_{1,i}$ is the value of indicator 1 for city i
 S signifies *standardized*

3.2. Hierarchies of global cities by financial prowess

Numerous indices have been developed to gauge the relative economic competitiveness of cities with Friedmann (1986) playing a pioneering role by establishing the notion of “a hierarchy of spatial articulations” (Friedmann, 1995, p. 23) in which he ranks major cities into two categories (*core* countries and *semi-peripheral* countries) and two subcategories (*primary* and *secondary*) based on the economic power they command. More specifically, the selection criteria include “whether the city serves as a major financial center, key manufacturing center and major transportation hub; whether it houses headquarters for transnational corporations and international institutions, with consideration also paid to population size and whether the city’s business services sector was growing quickly” (Kong *et al.*, 2015). Cities with a *primary core* rank included London, Paris, New York, Frankfurt, Zürich, Tokyo, Chicago, Los Angeles and Rotterdam, whereas São Paulo and Singapore were considered primary cities in the *semi-periphery*. Cities in China and India were not considered in the hierarchy since their economic affluence was still very moderate at that time.

Likewise, Reed (1981), Sassen (1999) and Beaverstock *et al.* (1999) also greatly contributed to the early development of this field. Whereas Reed (1981) used five banking sector variables (local bank headquarters, local bank direct links, private banks, foreign bank offices and foreign bank direct links), Sassen (1999) adopted a somewhat broader approach by also focusing on other highly specialized services such as accounting, legal, public relations, programming and

telecommunications. She “outlines a process of city development (global city formation) with detailed consideration of the agents (firms in particular sectors) who create global cities through their work” (Taylor, 2013). Beaverstock *et al.* (1999) devised a categorical economic ranking (similar to Friedmann’s world-city concept) of global cities into alpha (the highest), beta and gamma classes based on their *world city-ness value*. This value is determined by gauging the city’s activity in service sectors like the ones Sassen (1999) discussed: banking and finance, advertising, law and accountancy. The alpha cities strongly resemble Friedmann’s primary core cities; London, Paris, New York, Tokyo, Frankfurt, Chicago and Los Angeles all reappear at the top of Beaverstock’s ranking.

International consultancies and think-tanks have as well commenced making up similar rankings of the relative economic strength of global cities and metropolitan areas. Although many such rankings now exist, only few of them exclusively focus on *financial* indicators. Table 4 gives an overview of the ten highest ranked cities within the most recent publications of four of these institutes.

RANK	<i>Global Financial Centres Index (Z/Y en Group) September 2014</i> ¹³	<i>Global Economic Power Index (Martin Prosperity Institute) March 2015</i> ¹⁴	<i>Global Cities Index (AT Kearney) 2014</i> ¹⁵	<i>Global City Competitiveness Index (Economist Intelligence Group) 2012</i> ¹⁶
1	New York	New York	New York	London
2	London	London	London	New York
3	Hong Kong	Tokyo	Paris	Paris
4	Singapore	Hong Kong	Tokyo	Tokyo
5	San Francisco	Paris	Hong Kong	Singapore
6	Tokyo	Singapore	Los Angeles	Seoul
7	Zurich	Los Angeles	Chicago	Amsterdam
8	Seoul	Seoul	Beijing	Berlin
9	Boston	Vienna	Singapore	Vienna
10	Washington DC	Boston	Washington DC	Frankfurt

Table 4: Top ten cities of 4 finance related city-rankings

¹³ to be consulted here: <http://www.zyen.com/research/gfci.html> (accessed on 13/3/15)

¹⁴ to be consulted here: <http://www.citylab.com/work/2015/03/sorry-london-new-york-is-the-worlds-most-economically-powerful-city/386315/> (accessed on 13/3/15)

¹⁵ to be consulted here: <http://www.atkearney.com/research-studies/global-cities-index/full-report> (accessed on 13/3/15)

¹⁶ to be consulted here: http://www.citigroup.com/citi/citiforcities/pdfs/eiu_hotspots_2012.pdf (accessed on 13/3/15)

The Global Financial Centres Index (GFCI) is produced twice yearly by the London based consultancy Z/Y en Group in association with the City of London Corporation and measures the strength of a city's finance and banking industries in terms of 'competitiveness'. The index was first published in 2007 and draws on two separate sources of data: instrumental factors (business environment, financial sector development, infrastructure, human capital and reputational and general factors) and responses to an online survey. The Global Cities Index by consultancy A.T. Kearney employs a broader scope in also gauging political engagement and cultural experience. The Global City Competitiveness Index, developed by the Economist Intelligence Group, adds an extra topic to this list with the theme of environmental and natural hazards. Finally, Richard Florida combines elements of the above rankings in his Global Economic Power Index (GEPI), which reflects three key dimensions of economic power: economic output, innovation (patents) and finance.

Within the scope of this analysis, the GFCI ranking is the most appropriate since:

- it has a very narrow focus on finance and banking;
- of the 105 factors used in this ranking, there are hardly any that can correlate with indicators used in the global arts ranking (except for: *number of international fairs and exhibitions, city global appeal, city global image, city infrastructure and world's top tourism destinations*);
- it contains 83 cities which is a satisfying amount for the purpose of this research;
- the list is updated every six months so it is kept very up to date (with the most recent version to date published in March 2015).

For this research, the GFCI 16 (September 2014) was used. The full ranking can be found in Appendix VI and further details on its methodology can be found on *longfinance.net*.

4. A COMPARATIVE ANALYSIS OF ART AND FINANCE IN THE GLOBAL CITY

Having established a GAC ranking and having selected a GFC ranking, the intersections between both lists can now be examined and interpreted. There are 50 cities featuring in both rankings. These constitute the true global cultural cities. The remainder of the cities however fall off the map by combining both lists. Some of these cities and the plausible reasons behind their GAC/GFC mismatch are treated in section 4.1. Afterwards, the analysis continues with the 50 global cultural cities by means of a correlation analysis (section 4.2). Since the analysis returns a significant correlation between both rankings, it is useful to understand which domains and indicators contribute most to the overall correlation and why. The functional nature (linear, quadratic, etc.) of the GAC/GFC relationship is treated in section 4.3 since a curve estimation might provide additional information on the relative GFC and GAC positions of each specific city with respect to the functional relationship. In this way, different global cultural city profiles can be distinguished. The findings of this last section can then be used as an input for chapter 5, in which the geography of the global cultural cities is discussed.

4.1. Why some places fall off the global cultural cities map

The 50 global cultural cities are listed in Appendix VII together with their rating scores. A geographical rendering of the GCCs (and the GACs and GFCs) can be found in Appendix VIII. The observation that 60 percent of the GFCs also feature in the GAC ranking, might already point towards a positive association. It furthermore appears to be the case that the connection mainly exists between the top-tier cities of each ranking; e.g. in the case of the GFC ranking, 52 percent of the common 50 cities are located within the first 35 rank numbers on a total of 83. For the GAC ranking, this concentration of global cultural cities at the highest rank numbers is even more apparent as 50 percent of the common 50 cities are located within the first 35 rank numbers on a total of 130 cities. Since urbanization economies constitute a significant motive for the clustering of finance and art in large and dense agglomerations (see section 2.1), it should not surprise that the connection is strongest in the top-tier cities of both rankings.

Although both worlds thus clearly overlap in the world's most economically powerful cities, this observation does not hold for all of the included cities. Berlin (ranked 7th on the GAC list), Los Angeles (8th), Porto (19th) and Barcelona (22nd) for instance fall off the map when their

pivotal roles as GACs are compared to their absence on the GFCI list. These GACs are apparently exploiting other sources to thrive as global art hubs that are not directly related to financial services and flows. The opposite is true for the GAC mismatch of financial powerhouses such as Geneva (ranked 13th on the GFCI), Luxembourg (15th), Riyadh (21st) or Qatar (22nd). It is therefore not necessarily the case that a thriving arts scene simply follows from the degree of economic development or that the financial prowess of cities is the result of the presence of a well-established arts and cultural scene. External and often path-dependent influences can be of similar importance. It may for instance be the case that “the arts can be crowded out as an expansion of financial services might drive up rents and drive out arts and cultural activities [...] It may also be the case that certain cities either specialize in arts or in financial activities and which are, then, to a high extent independent of each other. Arts may be more or less autonomous vis-à-vis financial services and other advanced services determining the relative economic position of a city in the global urban system. They may be rooted in local educational institutions (cf. art schools), dedicated infrastructures (venues, art fairs), localized consumer cultures anchored in local traditions which are reproduced over time along path-dependent lines (e.g. local festivals), or (national or local) public policies targeted at arts” (Kloosterman and Skórska, 2012). Berlin is a good illustration of an international arts hub that is thriving well without a sound financial base. A decade ago, Berlin's mayor Klaus Wowereit declared that "*Berlin ist arm, aber sexy*" (The Guardian, 2014). The city is host to an incredibly dynamic, innovative and independent arts scene, the so-called *freie Szene*, that is largely independent of financial incentives. Instead, Berlin's art scene is based on an alternative economy that is not powered by government support or subsidies but by social capital, solidarity and enthusiasm. As cultural journalist Andreas Koch phrased it: “You get paid by attention” (De Bont, 2014). The basic ingredients for Berlin's flourishing arts scene are its low rents, high amount of infrastructure and space, lack of strict regulations, and of course the resonances of the creative energy that was released after the fall of the Berlin wall (De Bont, 2014).

Other arguments can be put forward for well-developed GFCs with lacking international art scenes. The presence of financial services and large monetary flows within such cities can for instance be largely driven by world-class infrastructure and sound economic policies that are largely independent of a flourishing arts scene. Off-shore financial centres¹⁷ such as the British

¹⁷ “Offshore finance is, at its simplest, the provision of financial services by banks and other agents to non-residents. These services include the borrowing of money from non-residents and lending to non-residents. This can take the form of lending to corporates and other financial institutions, funded by liabilities to offices of the

Virgin Islands (ranked 47th on the GFCI), the Cayman Islands (ranked 54th) and Jersey (ranked 62nd) are good illustrations of GFCs that merely rely on convenient economic policies (for instance “low or zero taxation, moderate or light financial regulation and banking secrecy and anonymity”; International Monetary Fund, 2000).

4.2. Global cultural cities: correlations and interpretations

For the remainder of the comparative analysis, only the 50 global cultural cities will be considered. An initial, descriptive statistic that takes a closer look at the presumed relationship between the art and finance scores, is given by means of a scatterplot of the rating scores of both rankings (see Figure 8). In this case, Art has been placed on the x-axis (as an independent variable), yet there is no reason why roles could not be switched, given the mutual relationship between art and finance (as discussed in section 2.2). The spreading of the data may already point towards a positive relationship whereby a higher art score accompanies a higher finance rating (and vice versa). Judging from the particular shape of the scatterplot, a curvilinear fit (e.g. a quadratic, logarithmic or other function) could turn out to be the most valid one.

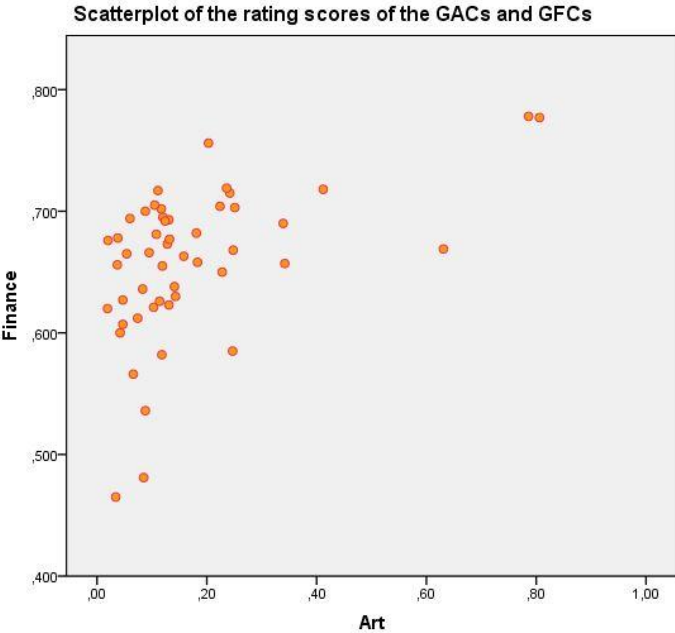


Figure 8: Scatterplot of the rating scores of art and finance with Art as independent variable

lending bank elsewhere, or to market participants. It can also take the form of the taking of deposits from individuals, and investing the proceeds in financial markets elsewhere.” (www.imf.org, 8/5/2015)

Before investigating the nature of the relationship (linear, quadratic, etc.), it is necessary to examine whether there is a statistically significant correlation between both rankings. As we are dealing with two *rankings*, the nonparametric Spearman's rho correlation test is the most appropriate way to gauge this association strength. This test only compares the rank of the cities (not their values). Therefore the presence of possible 'outliers' (as might be the case judging from Figure 8) does not pose any problems for this test. Furthermore, as the scatterplot might indicate a curvilinear relationship, the Spearman's rho test is all the more suitable since it does not assume linearity (in contrast with e.g. Pearson's test). The Spearman's rho analysis is carried out by the statistical program SPSS (as all statistical analyses in this research) on a one-tailed basis, since the literature of chapter 2 points towards a straightforward and positive relationship between art and finance. The hypotheses are therefore the following:

- H_0 : there is no statistically significant correlation between the rating scores of Art and Finance
- H_A : there is a statistically significant and positive correlation between the rating scores of Art and Finance

Since the output (see Table 5) is significant ($p \approx 0,000$), the null hypothesis can be dismissed which implies that there is a significant and positive relationship between the rank numbers of the GACs and the GFCs. This relationship is however rather moderate given the value of the correlation coefficient.

Correlations

Spearman's rho correlation coefficient	0,487 **
Sig. (2-tailed)	0,000
N	50

** Correlation is significant at the 0,01 level (1-tailed).

Table 5: Output of the Spearman's rho correlation analysis

It appears to be the case that the GACs that have passed the two selection procedures (i.e. the preselection based on the number of FCEs and the selection of the first 130 cities) are generally congruent with the GFCs since there is a strong overlap between both rankings. However, when examining their mutual relationships on the basis of their ranks, the resemblances between *Art* and *Finance* within this small group of cities seem a little lost. While the Spearman's rho test shows a significant positive relationship and the scatterplot clearly

points towards a positive relationship as well, there is not enough proof to statistically realize a strong correlation, despite the claims made by the literature discussed. Besides the explanations discussed in 4.1, this finding could as well be explained by the fact that the final output of the global arts ranking gives a very generalized figure (the mean of the four areas of competitiveness which in their turn have been standardized, see 3.1.3). It is therefore useful to examine which domains and/or indicators contribute most to the overall correlation. This is verified by executing two other Spearman’s rho tests with all of the areas of competitiveness included (Table 6) and all of the nine indicators included (Table 7).

Correlations	Finance	Auctions	Infrastructure	Human Capital	Reputational
Finance	1				
Auctions	,381**	1			
Infrastructure	,391**	,426**	1		
Human Capital	,234	,208	,536**	1	
Reputational	,548**	,351*	,533**	,526**	1

** Correlation is significant at the 0,01 level (1-tailed).
 * Correlation is significant at the 0,05 level (1-tailed).

Table 6: Output of the Spearman’s rho correlation analysis, all 4 areas of competitiveness included

The output indicates that *Finance* is significantly correlated with all of the variables except for *Human Capital*. This may be explained by the large number of missing values (hence large uncertainty and variance) in these data, despite the fact that these values have been estimated by expectation maximization algorithms. Another cause may lie in the fact that the *Employment* indicator not only measures occupations in the arts sector *sensu stricto*. Activities such as publishing, advertising and design are also included and may perform a less straightforward relationship with the high-end financial activities than does art. However, the main reason for the non-significant relationship between both indicators is most probably the fact that there are much different actors (hence much uncertainty) involved in gathering data on employment on cities worldwide. Furthermore, some twenty cities in the arts ranking have been provided by data gathered by the WCCR study (2013), as employment in the creative industries is one of their indicators. Yet, the figures for this indicator are based on the respective methodologies of each city so that they cannot be *entirely* compared to each other. Although as much consistency as possible has been aimed for concerning the operationalization of this indicator (see Appendix

III), these comparability issues will therefore also be the case for much of the cities in the remainder of the dataset (as regards the *Employment* indicator).

The second *Human Capital* indicator, notably *Schools*, is also not significantly correlated with *Finance* (see Table 7). *Schools* is furthermore not significantly correlated with *Employment* as well, which is rather surprising as one would expect the cultural employment to increase with the number of arts educational institutions. The comparability issues discussed above might explain part of the mismatch between *Employment* and *Schools*. An additional reason might imply that the list of “the largest and most prestigious art colleges and universities from all over the world” is somewhat biased by the institutions that are associated through professional connections with the Saatchi Gallery. After all it is rather surprising that, according to the Saatchi list, Toronto, Shanghai and Berlin (three top ten GACs) respectively host only 3, 1 and 2 elite art institutions, knowing that for instance London (the home base of the Saatchi Gallery) is hosting 36 such institutions. For this same reason, the correlation between *Schools* and *Finance* might also be somewhat lost.

Finance is significantly correlated with the other competitive domains and with *Reputational* in particular (with a correlation $\approx 0,55$ on a 0,01 significance level). Judging from Table 7, the moderately high correlation between *Finance* and *Reputational* is mostly due to the *City-Branding* indicator (since its correlation $\approx 0,54$ on a 0,01 level). At the same time, this indicator shows the highest correlation (closely followed by *Galleries*) of all nine indicators. One of the plausible reasons for this quite strong association may imply that the construction of these large and expensive constructions (and perhaps more importantly, the rewarding of their famous architects), demands a strong capital foundation; capital that for a large part must be provided by municipal governments. *Events* is significantly correlated with *Finance* as well but the relationship is less strong. This should not surprise since major art fairs and festivals induce more mobility to the contemporary art market hence they easily put marginal cities on the art map as well (Coslor and Ren, 2009) which makes the correlation with GFCs less strong. This is actually the case for much of the cities in the GAC ranking (e.g. Basel and Miami, but also for small cities such as Haifa and Gramado that only passed the selection criterion because the attendance was very high at the gauged events or because there have been much editions so far).

Correlations	Finance	Museums	Galleries	Theatres	Cinemas	Schools	Employment	Auctions	City-Branding	Events
Finance	1									
Museums	,046	1								
Galleries	,522**	,216	1							
Theatres	,206	,406**	,490**	1						
Cinemas	,282*	,340*	,698**	,770**	1					
Schools	,149	,246	,349*	,553**	,411**	1				
Employment	,098	,343*	,202	,476**	,345*	,177	1			
Auctions	,381**	,266	,484**	,246	,410**	,053	,333*	1		
City-Branding	,543**	,297*	,499**	,343*	,400**	,335*	,326*	,351*	1	
Events	,329*	,036	,391**	,533**	,488**	,488**	,375**	,389**	,381**	1

** Correlation is significant at the 0,01 level (1-tailed).

* Correlation is significant at the 0,05 level (1-tailed).

Table 7: Output of the Spearman's rho correlation analysis, all 9 indicators included

Judging from Table 6, *Auctions* and *Infrastructure* are more or less equally correlated with *Finance* (with a coefficient $\approx 0,39$). Despite the fact that Christie's and Sotheby's take 95 percent of the fine art auction market (Economist, 2008; cited in Coslor and Ren, 2009), there would probably be a bigger correlation between *Auctions* and *Finance* if more auction houses would be taken into account. After all, the number of locations where the Christie's and Sotheby's auctions take place are very limited. The cities that *do* host these sales, must however be strongly correlated with the financial strength of the city when considering the significant and meaningful correlation coefficient of 0,38. This strong intertwining is more than logic given the capital intensive nature of the activity of selling these high-end types of art.

As regards the *Infrastructure* domain, *Museums* and *Theatres* stand out for the fact that they are not significantly correlated with *Finance*. *Galleries* on the other hand is quite strongly associated with *Finance*. The difference between both types of infrastructure lies in the fact that *Museums*, *Theatres* and *Cinemas* for a great deal represent the amount of *public* art, whereas *Galleries* is an indicator gauging *private* art companies. Despite processes of globalization, countries and cities worldwide are increasingly attempting to reinforce their local identity and turn towards image (re)construction (Harvey, 1993) by displaying their unique history and heritage, art and local artists in the format of museums, public statues, state theatres, etc. This tendency is universal and is not merely limited to global cities. Therefore, there could be a less

straightforward relationship between this type of infrastructure and *Finance*. The presence of art galleries on the other hand, is a less obvious phenomenon for cities since this type of firms is closely related to contemporary art markets and there thus has to be a minimum of activity in this field to be successful. This activity is usually closely linked with assets such as expensive art, fancy neighborhoods and the presence of art dealers and investors: factors that are all associated with capital intensive sources not readily available for every city.

Summarized, the overall correlation between the GACs and GFCs is significant and positive. The strength of the overall relationship is however rather moderate. Some underlying indicators prove to be more correlated to *Finance* than some others that were not or hardly correlated at all. According to the analysis, the competitive area *Reputational* explains most of the variance, with its indicator *City-Branding* scoring the highest of all indicators, followed by *Galleries*, *Auctions* and *Events*. These indicators not surprisingly all depend on sound capital bases. However, as the overall correlation coefficient is of moderate strength, it is therefore not necessarily the case that a thriving arts scene simply follows from the degree of financial prowess or that the economic development of cities is the result of the presence of a well-established arts and cultural scene. Similar arguments as the ones discussed in section 4.1 can be put forward in explaining the moderately strong correlation between the global cultural cities.

4.3. Determining the best fit in order to establish global cultural city profiles

An examination of the functional nature of the overall relationship between the rating scores could provide some additional information on the GFC and GAC profiles of each specific city with respect to the overall relationship. Judging from the scatterplot in Figure 8, *Art* seems to increase much faster at high values than does *Finance*, which shows a more saturated curve towards the high values. The data points are thus skewed towards the upper left quadrant of the scatterplot. Therefore, a quadratic or logarithmic function is most probably a better fit for these data than a linear one. Figure 9 shows the curve estimations performed by SPSS for these three functions. The coefficients of determination are all rather low with one of the curvilinear functions delivering the best fit (quadratic with an $Rsq \approx 0,26$), as was expected from the above conceptual reasoning. The linear fit returns a second-best Rsq , closely followed by the logarithmic function. Once again, there is no reason why *Art* should take the role of independent

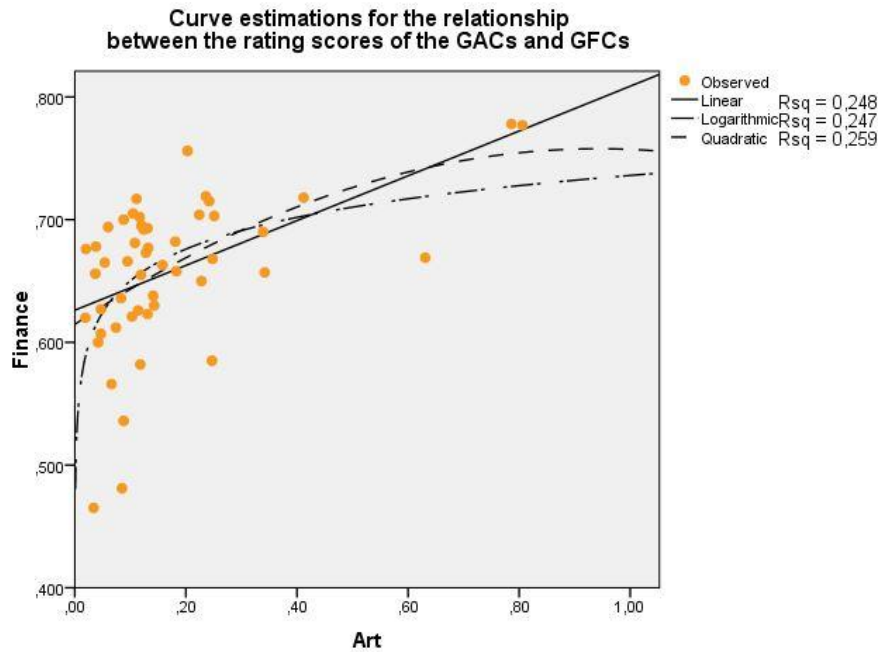


Figure 9: Curve estimates and their coefficients of determination (Rsquared)

variable instead of *Finance*. When roles are switched and *Finance* takes the role of independent variable, the program all the more indicates that a quadratic function delivers the best fit as the Rsquared in this case $\approx 0,42$.

Having determined the best fit for the data (a quadratic one), possible ‘outliers’ can be detected. These values should however not be considered *false observations* as this is not the case in this situation. They are merely showing a *distinct* profile with respect to the average observation. Judging from Figure 9, the two dots in the lower left quadrant (Athens and Reykjavik) appear to behave in a deviant way when compared to the other dots which are more aligned around the quadratic fit line. Both cities will probably be categorized as outliers by the statistics program. Since *Art* and *Finance* can both interchangeably be placed on the x-axis as independent variables, the same analysis has to be made for the situation with *Finance* on the x-axis (which will generate different outliers). A frequently applied method to statistically check for outliers is to plot the standardized residuals against the (squared) independent variable in question. Wherever $|\text{standardized residual}| \geq 3$, the data points are labeled as outliers. As stated above, this must be performed twice as different outliers will be generated. The results can be found in Figure 10a (with *Art* as independent variable) and b (with *Finance* as independent variable). Judging from Figure 10a, Athens and Reykjavik should indeed be considered as outliers. The situation with *Finance* as independent variable (Figure 10b) returns different outliers, i.e. Paris, New York and London. The reason why these cities show such

erratic behavior is because they either have a disproportionate *Art* score when compared to most of the cities (this is the case for Paris, New York and London) or their *Finance* score is very low (Athens and Reykjavik) when compared to the other finance scores. In chapter 5, the geography of the global cultural cities will be analyzed and these deviant cities will be discussed as well. The presence of these deviant observations is also the result of the much smaller variance in the rating scores of *Art* (with most of the scores being smaller than 0,30) than is the case in *Finance* (with a much more consistent distribution). Consequently, most cities tend to score higher on *Finance* than on *Art*, which causes the scatterplot to be skewed towards the upper left quadrant. It should however be clear that this observation is not to be generalized by arguing that for instance “*there has to be more capital in order to trigger some artistic activity in the global city*” or “*a small development in the arts sector can induce big economic returns*” since this dataset only includes 50 cities and the found relationship strongly depends on the specific rankings that are considered and more importantly, the way in which the scores have been calculated. E.g. the financial scores should be considered as *direct scores* in the sense that statements can be made such as *New York is 313 points above Reykjavik on a scale of 1 to 1000*, but it is not really true to state that e.g. *New York is 1,67 times more financially competitive than Reykjavik*. The rating scores of the GAC have been calculated in a different way (by totaling and averaging scores across the areas of competitiveness, see 3.1.3), so that they cannot be interpreted in the exact same way as the GFC scores. For these reasons it is not meaningful to postulate generalizing trends about the precise nature of the relationship based on these data.

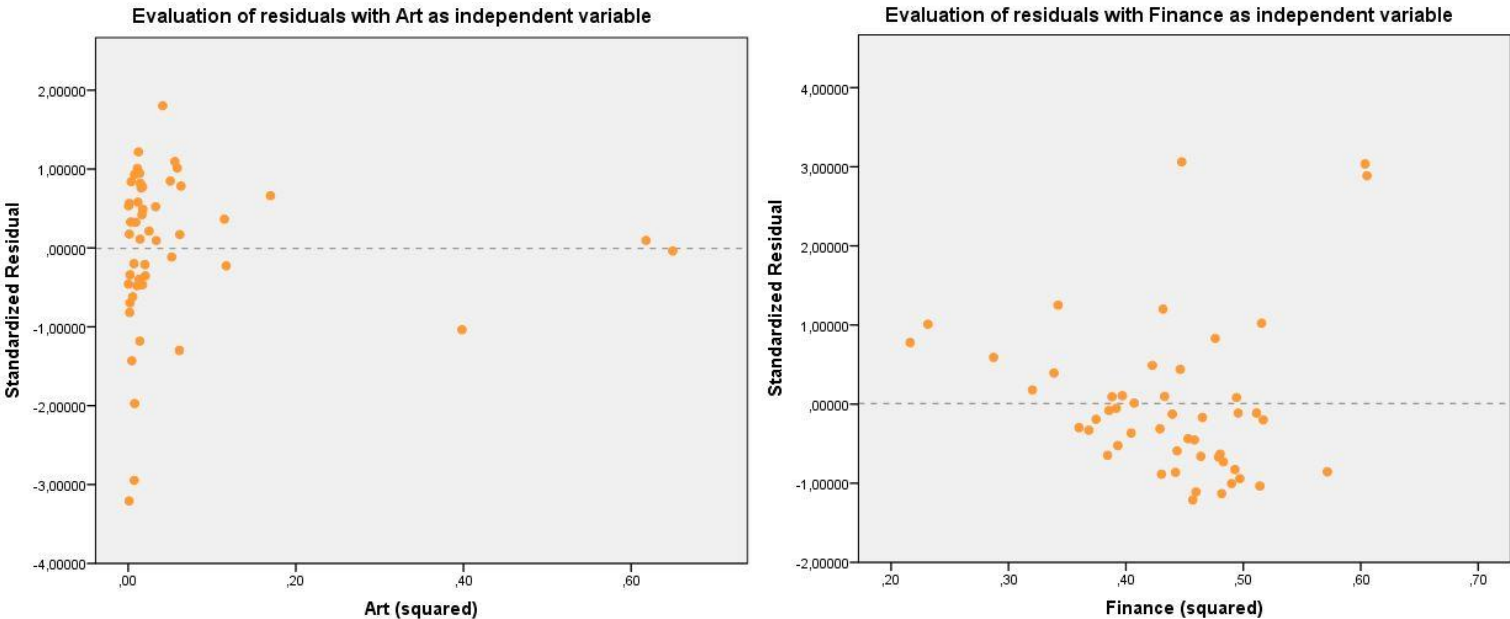


Figure 10: a) Evaluation of the residuals with Art as independent variable, b) Evaluation of the residuals with Finance as independent variable

5. THE GEOGRAPHY OF GLOBAL CULTURAL CITIES

Having established a significant positive correlation between art and finance for the 50 cities featuring in both rankings, a next step implies the examination of the mechanisms behind the observed geographical intersections between the GACs and GFCs. To this purpose, the most prominent global cultural cities will be discussed by world region. There is always a certain arbitrariness involved in classifying the world into vast areas. However, within the scope of this research, the regionalization that is used in the large-scale survey established by Taylor *et al.* (2011) is found appropriate for this analysis. The editors of this reference work have the “experience in researching globalization for over a decade through the world city network” and have “developed a good grasp of this ‘regionality’” (Taylor *et al.*, 2011, p. 59). In their survey on the ‘global network connectivity of cities’¹⁸, nine world regions are distinguished, notably Europe, Northern America, Pacific Asia¹⁹, Australasia²⁰, Eurasia²¹, Latin America, the Middle East / Northern Africa (MENA), Sub-Saharan Africa and South Asia²². An additional guideline implies that state boundaries are preserved. So, whereas for instance Istanbul is more related to Europe on an economic-political base, the city is discussed within the section concerning the MENA region. Besides providing explanatory arguments for the observations, particular attention within this chapter will be given to the policy frameworks of each city, country and/or region, as policy guidelines constitute the nexus between the economy and the arts and reveal a relevant amount of information about the specific character of the mutual relationship between both.

The main figure that will be referred to throughout this chapter is Figure 11 as it gives an overview of the labeled cities by world region and by their art and financial rating scores together with the quadratic fit established in the previous chapter. Judging from this figure, two world regions, notably Sub-Saharan Africa and South Asia, are lacking global cultural cities. There are several broad historical reasons for these findings. As regards Sub-Saharan Africa,

¹⁸ This is “an indicator of the degree of integration of a given city into the world city network” (Taylor *et al.*, 2011, p. 5) that is based on the importance of offices of advanced producer service firms. After all: “the larger and more important an office is, the more flows of information and knowledge it will generate” hence the larger the connectivity within the world city network (p. 5).

¹⁹ “all Asian countries with a Pacific littoral (except Russia)” (p. 59)

²⁰ Australia, New Zealand, Papua/New Guinea, and Fiji.

²¹ “ex-Soviet states in Europe and Asia (excluding Baltic states) plus Mongolia” (p. 59)

²² India, Pakistan, Bangladesh, Sri Lanka, Afghanistan, Burma, Nepal, and Bhutan.

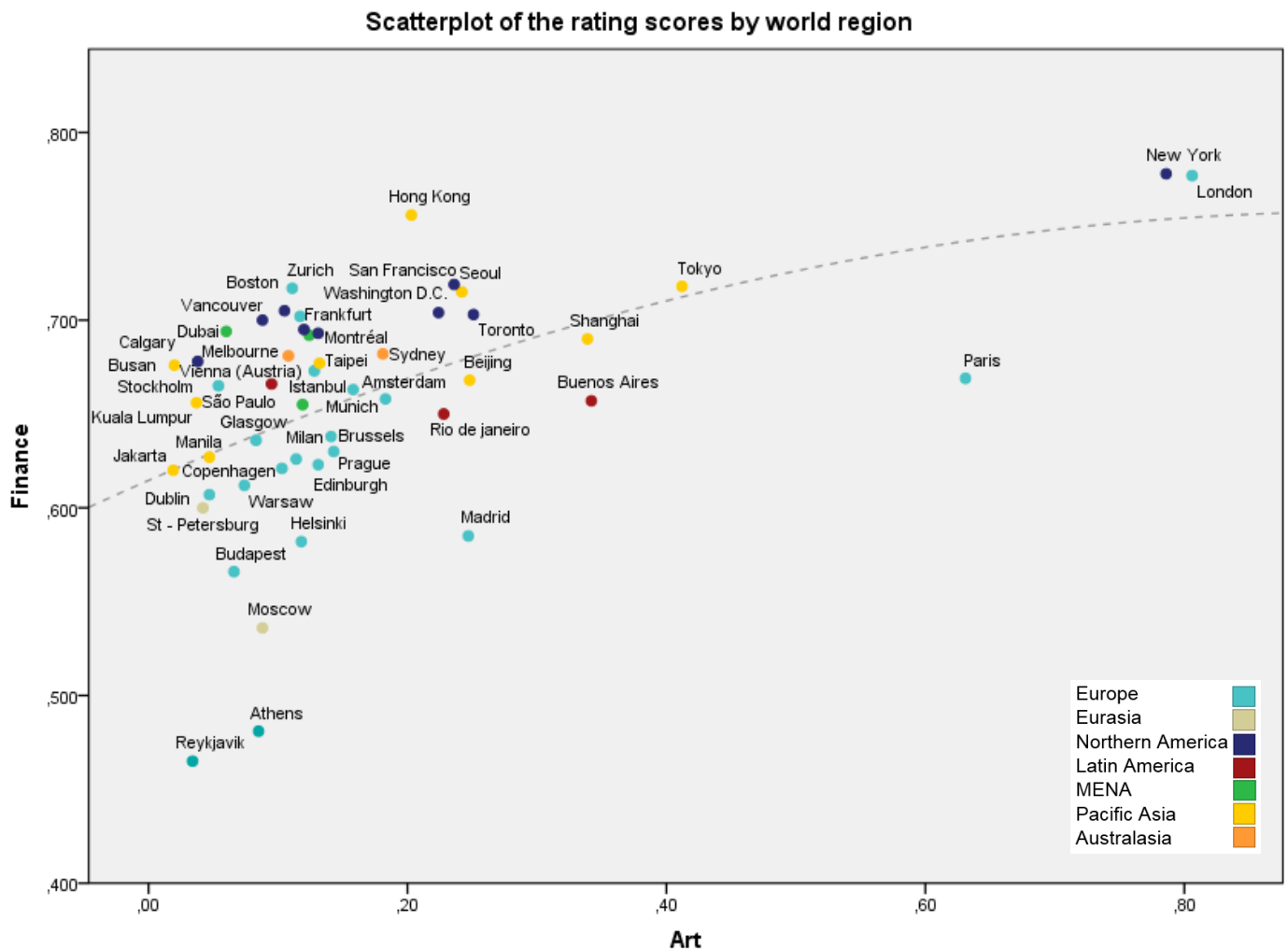


Figure 11: Scatterplot of the rating scores by world region

it is the world’s least wealthy region (Taylor *et al.*, 2011), the region has only known a very recent history of nation building and modern city development (Chandler, 1987) and the political instability and corruption in many African countries are highly inconvenient for Africa’s overall development into a globalized world region (Kaufmann *et al.*, 2005). Therefore, it should not surprise that the GFCI only lists one city within this region, notably Johannesburg. As a consequence of the above reasons, the overall cultural heritage within this region is rather low (when compared to other world regions) and a high-end globalized arts scene has not been able to develop (only three cities appear on the GAC list, notably Harare, Grahamstown and Cape Town). As regards the economic development of South Asia, similar arguments can be put forward: “Economies of the South Asian region have been late entrants into the contemporary global economy [...] The region is still characterized as having undergone ‘fractured and fragmented globalization’, where trade, finance and international investment is restricted, and foreign investment is limited to selected sectors only” [...] Another aspect of the region’s limited global economic integration is the failure to establish a strong regional trade

agreement [...] Structural weaknesses, institutional bottlenecks, political movements, narrow nationalism and mutual mistrust are cited as some of the reasons for this lack of [regional] integration” (Taylor *et al.*, 2011, p. 93-94). Europe on the other hand, is the most represented world region and clearly stands out when compared to the others, as 42 percent of all global cultural cities are located in this region. Pacific Asia (20 percent) is the runner-up, closely followed by Northern America (18 percent). Latin America (6 percent), the MENA region (6 percent), Australasia (4 percent) and Eurasia (4 percent) somewhat lag behind. In the following sections, explanatory arguments for the observations within each world region will be discussed. The last section (4.8), finally, synthesizes the overall trends.

5.1. Europe

Europe’s high number of GCCs should not surprise as the region is a well-established arena of globalization and would probably rank high on every ranking that considers aspects of global cities. The region’s high performance on the arts ranking is likely to be the result of the continent’s rich and long cultural history as “Europe enjoys an unrivalled position in relation to its art market, because of the richness of its heritage and creativity, and the multiple actors operating on its territory: from art dealers to galleries, shops, auction houses, as well as a centenary know-how in ancillary services (craftsmanship)” (European Commission, 2006, p. 150). This is consistent with Hall (2001) when it is argued that the political fragmentation of Europe in many small nation-states with long cultural histories, has boosted the cultural scene of many cities “quite disproportionate to their size” (p. 62). Kloosterman and Skórska (2012) add to this that this “cultural richness had been long underpinned by discerning aristocratic and bourgeois elites interested in arts. In many cities, a thick institutional fabric with educational institutions, fairs, venues and theatres could develop and thereby generating more narrow forms of agglomeration economies directly benefiting arts”. The strong artistic character of European cities seems to coincide with a ditto financial prowess as Europe also has the most GFCs (40 percent of the 83 cities) appearing in the 2014 ranking of the Z/Y en Group (see Appendix VI). This is clearly visible in map two of Appendix VIII in which Europe constitutes a hotspot of GFCs. There are some broad historical reasons for this: “Western Europe was the cradle of the modern world-system and has continued to be one of the most important regions (in the ‘core’) of the world economy over several centuries [...] Hence the region and its cities have been at the forefront of the processes creating contemporary globalization, the latest phase of the world-economy development” (Taylor *et al.*, 2011, p. 114). Furthermore, with the demise of the

Communist states in East Europe in the 1990s, the conversion to neo-liberal economies took off: “Foreign banks, law firms, accountancy firms and management consultancies rushed to set up offices in the major cities in this new capitalist world to take advantage of the unique circumstances” (Taylor *et al.*, 2011, p. 114).

Europe’s vision towards the arts and culture is increasingly embedded within an economic strategy to boost its knowledge-based industries. In 2000, the European Council in Lisbon spread an ambitious objective, i.e. making the EU “the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion” (European Commission, 2006, p. 1). The meaningful catalyzing role that culture and the arts can fulfill in realizing these goals has increasingly been recognized by policy makers. The Economy of Culture Report by the European Commission (2006, p. 8) argues that “culture and innovation play a crucial role in helping regions attract investment, creative talents and tourism. Paradoxically, whereas we are living at a time where information technologies have abolished distance and time constraints, physical location and the socialization factor remain decisive for economic success. The location market is a reality. Cities and regions are competing to attract foreign direct investment and creative talents. In order to succeed they need to attach several new strings to their bows: diversified cultural offerings, quality of life and life style. Culture has become an important soft location factor and a key factor for boosting local and regional attractiveness”. While this principle of arts-led regeneration has been around for some time (with the first explorations of the concept in US cities in the 1970s and early 1980s), the actual development of urban cultural policies as an element of city governance has only been established in Europe since the early 1990s (Garcia, 2004). Prior to this, “the prevailing attitude among politicians and policy-makers was to ‘define culture as a realm separate from, and actively opposed to, the realm of material production and economic activity’” (Garcia, 2004, p. 315). Kong (2000, p. 387) argues that the shift towards an emphasis on the economic potential rather than the social or political role of cultural politics resulted from two main developments which are consumption and production related: “changes in cultural consumption and social class led to a general rise in the consumption of cultural products. This, in turn, was related to a decline in working time and an increase in the proportion of disposable income spent on leisure activities [...] Second, the loss of jobs in traditional industrial sectors with the collapse of the industrial base in many cities, the need to adapt to the processes of economic restructuring of the 1970s and early 1980s, and growing competition in the new post-industrial service economy prompted governments to

reexamine their cultural policies and mine the potential role of cultures for economic gain.” In this way, place-marketing “has become increasingly important and necessary to construct images of new post-Fordist, consumption-oriented cities to attract investors, promising a good quality of life for executives and other mobile skilled international personnel [...] In this sense then, cultural policy of the 1980s and 1990s has become a response to the globalization of capital” (Kong, 2000, p. 387).

Today, the European cultural policy paradigm is thus strongly oriented towards increasing its service- and knowledge-based economies through the maintenance and further enrichment of its well-established arts scene. When evaluating the research of Kloosterman and Skórska (2012), Florida (2012) in this respect argues that “European cities in particular seem to have higher levels of artistic excellence above and beyond their global economic and financial prowess”. Figure 11 is consistent with this observation since, according to the quadratic fit, cities such as Helsinki, Prague, Edinburgh, Copenhagen, Dublin, Budapest, Amsterdam, Warsaw and Paris and Madrid in particular, should be located more to the left hand side of the graph judging by their financial scores. The few ‘oppositely’ performing European cities that are hence greater centers of finance than of art are Zurich, Munich and Vienna (renowned for their high concentration of banking services and insurance companies), Frankfurt (home to the European Central Bank) and Stockholm (the financial center of Northern Europe). It therefore seems to be the case that most European cities have a more thriving artistic scene than they are financial powerhouses, a valuable asset that is highly played off given the increasing policy attention for the catalyzing potential of the arts and cultural sector.

Judging from Figure 11, two of these European global art centers, notably London and Paris, clearly stand out because of their high art rating scores, leaving the rest of the cities far behind. This was already concluded in section 4.3 when both cities were categorized as ‘outliers’. As 94 percent of all the GCCs have a rating score below 0,60, these cities definitely tower above the rest (except for New York). Their art scores are respectively 15 and 11 times higher than the median result of the total arts ranking. These remarkable findings ask for some clarification. As regards London, the city is praised as being exceptional in terms of local performing art events as the city “hosts more theatre, dance, live music, opera, circus etc. performances on an average week than any other city in our ranking” (Kloosterman and Skórska, 2012). The WCCR (2013, p. 14) also argues that “London’s position is strong in almost every category, with a great stock of cultural infrastructure, and high participation and attendance rates”. London is

further praised as “one of the world’s major international art centres” (While, 2003, p. 251) and appears at the top of most lists²³ in Coslor and Ren’s preliminary research (2009) on the mapping of the geography of the global art market. Paris is never far behind in these lists and its international artistic affluence is also widely recognized. Kloosterman and Skórska (2012) for instance praise Paris for its strong reputation in the performing arts and visual arts scene which proves “that the city’s reputation for a thriving, enchanting arts scene is perfectly deserved”. WCCR (2013) furthermore argues that the city is strongly investing in new arts facilities in peripheral districts and is embracing the new *fringe* art forms²⁴ in an effort to keep the city’s culture vibrant and modern.

Besides the undisputed prominence of both centers as global art hubs, it should however be noted that the extreme art rating scores of these cities (as well as that of New York) are mainly the result of the indicator measuring the amount of Christie’s and Sotheby’s auction sales. Although this is an important indicator for the gauging of the high-end global arts scene and both auction houses constitute the bulk of the high-end auction sales worldwide (see also section 3.1.3), these observations might give a somewhat overstated view of reality.

Similar to its GAC rank, London is at the very top of the financial centre hierarchy as well. After all, the city possesses “top-notch financial executives, some of the best business education in the world, a flexible labour market, economic freedom, excellent legal, banking and financial institutions and favourable tax and regulatory environments” and it carries “the highest volume and value of financial transactions in the world” (Kloosterman and Skórska, 2012). Paris is a less powerful GFC as it only appears 31st on the GFCI. Given its remarkable art score, the city’s thriving arts scene must therefore be driven by other factors not directly related to its financial services. Paris’ longstanding image as a bohemian city of the arts (Lloyd, 2006) is definitely one of the propellers of Paris’ contemporary flourishing arts scene. This image is mainly inscribed upon the exemplary works of art that have been produced in Paris’ age of modernist innovation (the 19th century): “the mapping of class and spatial relations in the writing of Balzac and Flaubert, Baudelaire’s urban pastoral, the spectacular street scenes of the Impressionist painters, and the influence of the 1848 revolution on the art of Daumier, Delacroix, and others. Paris was an object of artistic representation” (Lloyd, 2006, p. 46). Furthermore, Paris’ pivotal

²³ Coslor and Ren (2009) established top ten rankings of cities for six indicators: the hosting of art fairs and international exhibitions, the number of top art collectors, the number of art world magazines, the number of galleries advertising in *ArtForum*, the number of auction houses and the number of Christie’s sales.

²⁴ An experimental art movement that is focused on the performing arts (fringefestivals.us, 5/5/15).

role in the evolution of some of the most important art movements (Romanticism, Impressionism, Symbolism, Art Nouveau, Fauvism, Cubism, etc.), its frequently held salons (e.g. the *Salon d'Automne*) and high number of art schools (*académies*) with associated artists such as Vincent van Gogh, Henri Matisse, Fernand Léger, Pablo Picasso etc., also assisted in creating an appealing and dynamic image of Paris as a bohemian city of the arts (Lloyd, 2006) that manifested itself in a path-dependent way, largely independent of financial incentives.

5.2. Northern America

The United States and Canada adopt similar cultural policy strategies as Europe. As regards the United States, the Arts and the Economy Report by the NGA (National Governor's Association, 2009) with the highly revealing subtitle "Using Arts and Culture to Stimulate State Economic Development" states that "Governors increasingly recognize the importance of the creative sector to their states' economy and ability to compete in the global marketplace. Arts and culture-related industries, also known as "creative industries," provide direct economic benefits to states and communities: they create jobs, attract investments, generate tax revenues, and stimulate local economies through tourism and consumer purchases. These industries also provide an array of other benefits, such as infusing other industries with creative insight for their products and services and preparing workers to participate in the contemporary workforce. In addition, because they enhance quality of life, the arts and culture are an important complement to community development, enriching local amenities and attracting young professionals to an area" (p. 4). This quote is a good summary of the first causal relationship discussed in section 2.2 in which the arts trigger economic growth.

Canada also underscores the importance of the arts for the preservation and upgrading of the competitiveness of its knowledge-based economy: "In Canada, the culture sector plays a critical role in attracting people, business, and investment, and in distinguishing our country as a dynamic and exciting place to live and work. Clearly, a growing, dynamic culture sector is central to Canada's success as a creative, knowledge-based economy" (Conference Board of Canada, 2008, p. 1).

Judging from Figure 11, Northern America hosts five United States cities (San Francisco, Washington D.C., Boston, New York and Chicago) with New York positioning itself way ahead of the others on both the arts and finance scale. There are some important reasons for this. As regards New York's pivotal role as GAC, Currid and Connolly (2008, p. 427) argue that "New

York City has something to offer the cultural economy that uniquely satisfies creative firms and people, thus further solidifying the city's position as a global center of cultural production.” This is consistent with Kleiman's *et al.* (2002) nomination of New York as “the arts capital of the world”. Kloosterman and Skórska's research (2012) as well points towards the prominence of New York as the city appears first on their ranking of global arts centers. New York further features at the top of all lists in Coslor and Ren's preliminary research (2009) on the mapping of the geography of the global art market. Similar to its GAC rank, New York is at the very top of the financial centre hierarchy as well due to very similar reasons as the ones discussed for London. Judging from Appendix V, New York scores very high on each of the indicators, but the city really stands out in comparison with the average city in the database due to the high number of elite arts sales and the amount of international events it hosts; two indicators that heavily rely on financial incentives and sponsoring from banking and financial services.

Despite the large-scale shift since the 1970s of manufacturing to the Sunbelt states and services to coastal California in particular (Taylor *et al.*, 2011; Storper, 2013), all global cultural US cities except for San Francisco appear to be located in the North-East of the US (see Appendix VIII, map 3). This is because the GFCI only has one Sunbelt city on its list, notably San Francisco. Apparently, due to their “historic importance as strategic locations, cities such as New York, Chicago, Boston and Philadelphia remained important economic centres and international hubs for service industries” (Taylor *et al.*, 2011, p. 148). The geography of the GACs on the other hand is more spread out as multiple cities, notably Los Angeles, San Diego, San Jose, Santa Barbara, Austin, Houston, Palm Springs, Sonoma, Miami, Palm Beach and Charleston are also located in Sunbelt states (see Appendix VIII, map 1).

As regards Canada, four global cultural cities appear from this research: Toronto, Montréal, Vancouver and Calgary. The first three cities are Canada's largest census metropolitan areas and are generally considered to be the nation's cultural capitals (Conference Board of Canada, 2008). This is consistent with the findings in Figure 11. Judging from Appendix V, these cities mainly distinguish themselves because of their high creative employment rate (with Montréal having the highest creative employment, 13 percent, of all cities in the database). According to the Conference Board of Canada (2008), this should not surprise as the Canadian culture sector labor force is predominantly located in large cities as Toronto, Montréal and Vancouver: “Together, these three cities account for 64 percent of Canadian culture industry workers” (p. 8). When considering their positions as GFCs, one could conclude that the four Canadian

cities (as well as the US cities) have very consistent finance rating scores, with Toronto ranked highest. This city has after all “changed from a national trading centre to a prominent world city, linking the Canadian economy with the global economy” (Taylor *et al.*, 2011, p. 149).

5.3. Australasia

Only two global cultural cities, notably Sydney and Melbourne, appear in this region. While, together with Wellington, these are the only Australasian cities in the GFCI, the GAC list once again has a more spread geographical distribution as it also includes Perth, Adelaide, Brisbane and Christchurch. Apart from that, the small number of GACs and GFCs within this world region is likely to be due to the lack of ‘mid-sized’ cities: “The urban system in Australia, the largest country in the region, is somewhat truncated, with the state capitals the largest cities in the country, but with very few other cities or even settlements with over 100,000 population [...] This is in stark contrast to other regional urban hierarchies (Europe and North America for example) which have large numbers of ‘mid-sized’ cities, as well as the larger world and global cities [...] This phenomenon is mirrored in New Zealand” (Taylor *et al.*, 2011, p. 63). Overall, though, Australian cities “continue to integrate globally, despite their relative geographical remoteness from other key global and world cities. However, the dominant primacy of Sydney in Australia and the Australasian region also continues to grow” (Taylor *et al.*, 2011, p. 201).

Judging from Figure 11, Sydney’s alleged primacy is not very clear as Melbourne closely follows Sydney as a financial centre, yet Sydney does appear to have a more marked arts scene. The data from Appendix V indicate that Australia’s capital distinguishes itself from Melbourne due to its larger amount of cultural infrastructure, international events and higher creative employment. Gibson *et al.* (2001, p. 160) also confirm Sydney’s prominence as a GAC by stating that “In a total sense, Sydney remains the primary city of cultural industry activities across Australia [with] high rates of concentration in ‘core’ creative pursuits such as music, publishing, film and television services”. Furthermore, these cultural industries seem to be located within a limited set of locations where “information industries, including software and high technology, telecommunications and finance activities” are also highly present (Gibson *et al.*, 2001, p. 162). These findings are consistent with the reasoning behind the agglomeration economies of the financial and arts industries discussed in section 2.2. In the coming years, these inner-city regions will be further enriched with cultural infrastructure as significant large-scale urban development sites (e.g. Barangaroo, Darling Harbour, Walsh Bay, Green Square

and the Blue Mountains) will become the host of world-class arts and cultural facilities with the aim of “giving rise to opportunities for the city to embed cultural infrastructure and activity into its design” (WCCR, 2013, p. 135).

5.4. Pacific Asia

The vast world region of Pacific Asia (that comprises East and South East Asia) is strongly represented in Figure 11. Ten global cultural cities are located in this region, of which three in China, two in South Korea, one in Japan, one in Taiwan, one in Malaysia, one in the Philippines and one in Indonesia. This fairly strong representation is remarkable given the short pace of time in which most Pacific Asian countries have developed economically. From the late 1950s onwards, the economic upsurge of the first group of Asian tigers – South Korea, Taiwan, Singapore and Hong Kong – became apparent: “They had, in varying degrees, been debilitated by the war, in Korea’s case also by the Korean War, and were bereft of natural resources, but they began to grow at breakneck speed. Some of the later Asian tigers – China being the outstanding example – achieved, if anything, even faster rates of growth than the early ones. The world had never before witnessed such rapid growth” (Jacques, 2012, p. 120). Whereas these East Asian countries were still overwhelmingly agrarian in the 1950s and had barely started the process of industrialization, they have incredibly quickly “increased their centrality and density of connectedness in the flows of trade, people and information, forming a discernible regional city system” (Shin, 2012, p. 258). An Investment Bank director in New York illustrates this when stating that it is “Great to see New York and London retaining their places as global leaders but [East] Asia seems to continue to challenge” (Z/Y en Group, 2014, p. 11). Given the fast and significant economic upsurge of these regions, the central question implies whether their high-end art scene has evolved along the same highway. Since Pacific Asia covers a vast area, this question is dealt with on a national scale, starting off with China.

In general, the economic rise of China (and of Chinese communities around the world) is changing the face of the market for Chinese art: “Chinese buyers are now at least as numerous as Western ones at the growing number of New York and London auctions of Chinese art, a genre which, until a few years ago, was largely neglected by the international art market. In 2006 Sotheby’s and Christie’s, the world’s biggest auction houses, sold \$ 190 million worth of contemporary Asian art, most of it Chinese, in a series of record-breaking auctions in New York, London and Hong Kong. At the end of that year a painting by contemporary artist Liu

Xiaodong was sold to a Chinese entrepreneur for \$ 2.7 million at a Beijing auction, the highest price ever paid at that time for a piece by a Chinese artist. [...] altogether there were twenty-four Chinese artists in the list, up from barely any five years before. In 2010, Sotheby's international head of Chinese ceramics and works of art said that in the previous five years the number of mainland clients had increased at least threefold and prices had tripled or quadrupled. These changes reflect the growing global influence of Chinese art and artists" (Jacques, 2012, p. 550). The art market has thus undergone an intense period of globalization since the turn of this century with distribution of sales changing dramatically over the last decade. The TEFAF Art Market Report (2014) also emphasizes China's growing pivotal role in the globalized art market by stating that "China overtook France to become the third largest market worldwide in 2007 and in 2010 becoming the second largest, overtaking the UK which had until then maintained a substantial margin ahead of other markets". It is also noteworthy to indicate that in 2013, the third and fourth largest fine art auction houses were both Chinese and that, according to the Deloitte Art & Finance Report (2014, p. 15), "the Art & Finance industry in China is likely to grow as the Chinese government has adopted a proactive role in creating closer cooperation between the financial and cultural sectors".

Supporting the Renaissance in Chinese art are huge investments in mega-events and in cultural hardware, notably new cultural mega-facilities, hundreds of which are being built across the country (e.g. the nationwide goal was to add one thousand new museums by 2015; European Commission, 2006). Influenced by Western urban cultural policy strategies, cities in Asia have also come to recognize what such consumption-based strategies can add to their project of going global (Stevenson, 2014) and have, in recent years, increasingly invested in upgrading their urban imaging and place marketing by constructing such flagship cultural facilities and events (Kong *et al.*, 2015). The construction of the National Grand Theatre in Beijing (completed in 2007) is a good case in point. Beijing (and other Chinese cities) have in fact only recently, since the economic reform and opening up of China, been able to adopt such cultural development policies. The ideological reorientation that triggered China's reform "marked a radical departure from the party's previous emphasis under Mao on class struggle and self-reliance, which had a far-reaching impact on the development of cultural space in Beijing" (Kong *et al.*, 2015, p. 34). Only since 2001 (under the tenth Five-Year Plan), the year in which China became a member of the World Trade Organization, a cultural industries strategy was formulated in which the Chinese government "took active steps to integrate cultural development with the development of the urban economy" (Kong *et al.*, 2015, p. 34). The cultural industries concept has since then generated much interest on the domestic policy circuit (Ren and Sun, 2012).

Apart from the production of cultural mega-structures and the hosting of mega-events to increase China's visibility in the global city hierarchy, there are also two endogenous arguments for the widespread adoption of the cultural industries idea: "firstly the desire of the national government to promote Chinese culture and to build 'soft power', and secondly the attempts of both the national and local governments to upgrade labor-intensive manufacturing to knowledge-based industries" (Ren and Sun, 2012, p. 507). For many Chinese cities striving to attain higher positions on the urban value chain, "developing cultural industries is viewed as the solution to make the leap from 'Made in China' to 'Created in China' and to simultaneously achieve many goals, such as wealth creation, the reuse of traditional resources, green production, talent renewal and industrial upgrading" (Ren and Sun, 2012, p. 507). In 2004, under the eleventh Five-Year Plan, the policy concept of "creative industries" was introduced in cities such as Beijing, Shanghai, Shenzhen and Guangzhou. Under the country's twelfth Five-Year Plan (2011-2015), "revenue from cultural and creative industries is targeted to double and is expected to triple by 2020" (United Nations, 2013, p. 69). Beijing underscores these policy strategies as the city "has entered a new era of development that emphasizes the industrialization of culture as well as the construction of cultural space; this emphasis is central to the strategy of building Beijing into a global city" (Kong *et al.*, 2015, p. 34).

According to Castells (1989, 1996, cited in Garcia, 2004, p. 317) this process of arts-led regeneration is typical for "capital cities and regional capitals that aim to establish their own international identity without depending on the center – nation state – in order to compete in the global economy. Indeed, this is even more the case in former industrial cities that have needed an 'aggressive redefinition of city identities and images' [...] to attract private sector and tourist investment. The most sought after formula is that which allows reinvention into creative and knowledge economies".

Beijing is not the sole advocate of such arts-led strategies as Shanghai has adopted similar ways to restore its past character and reputation as 'Paris of the East'²⁵. Stevenson (2014) states that "In recent years both Beijing and Shanghai have hosted mega-events as an aspect of a broader urban transformation strategy and as a way of announcing to the world the nation's emergence

²⁵ "During its golden age in the 1920s, with a population over 2 million, Shanghai was a 'meeting ground for people from all countries, a great and unique city, one of the most remarkable in the world' (Pott 1928, p. 1). The incursion of western mercantilism into this semi-colonial city and the establishment of China's first modern institutions of higher learning made it the financial and cultural center of the Orient or the 'Paris of the East'" (Wu, 2001, p. 89).

as a global power” (p. 103). Besides hall-mark events, Shanghai has highly invested in cultural infrastructure as well: “The construction of cultural facilities has been regarded as one of the main means for Shanghai to contest the status of global cultural hub. In the pursuit of such recognition, these mega-projects have also been expected to play multiple roles, including supporting the development of cultural industry; promoting the city’s image and attractiveness; developing abilities for arts appreciation; enriching citizen’s cultural lives; strengthening global linkages; and facilitating cultural exchange” (Kong *et al.*, 2015, p. 62). The data on both cities in Appendix V seem to support these findings as the city-branding and cultural infrastructure indicators are the domains in which both cities score very high. Figure 11 indicates that both cities are more or less aligned around the fit line, which indicates a balanced GAC/GFC profile. The figure furthermore indicates that Beijing and Shanghai are China’s largest GACs, an observation supported by Kong *et al.* (2015) when it is argued that on multiple bases, “Shanghai along with Beijing, emerged as a frontrunner in the race to become China’s showpiece cultural destination and the base for the country’s creative industries” (p. 140).

Hong Kong is located high above the fit line of Figure 11, indicating that its prominence as a GFC is clearly outweighing its GAC performance. Hong Kong is in fact “not usually associated with thriving arts and cultural activities, and is better known instead as a place of commerce, finance and economic bustle” (Kong *et al.*, 2015, p. 160). Hong Kong joins New York and London as dominating leaders in the financial hierarchy and its high performance as a financial center is widely recognized. Storper (2013) for instance mentions the city in one breath with New York and London when speaking about the iconic industries (finance in this case) of city-regions. According to Kloosterman and Skórska (2012), its “special administrative status, low taxes, historical affiliation with the western world as well as expertise and proximity to Asian markets” are the key drivers behind Hong Kong’s central position in the financial hierarchy. This Special Administrative Region of China has thus developed into a cosmopolitan centre that is highly integrated into the world economy yet relatively lacks a thriving arts scene (Kong *et al.*, 2015). Stevenson (2014, p. 107) argues that “The colonial history of Hong Kong shaped a very distinctive approach to cultural policy and the arts”. It was not until 1997, with the transfer of sovereignty of the city to China, that cultural policy frameworks started to develop. Since 1997, there was growing recognition of the fact that the arts and culture could have the potential to catalyse the ‘new post-industrial image for Hong Kong that, in turn, would help to generate new forms of economic growth and, potentially, new forms of cultural identity and social cohesion” (Raco and Gilliam, 2012, p. 1431, cited in Stevenson, 2014). This is consistent

with Cartier (2008, p. 69, cited in Stevenson, 2014) when it is argued that “In the first decade of the SAR (Special Administrative Region) era, the municipal state of Hong Kong effectively discovered the cultural sector, and now seeks to shape it in the interests of economic development”. Also on the agenda was “the aim to transform the city’s image and reputation from ‘cultural wasteland’ to ‘cultural capital’. Building cultural infrastructure has been central to both these goals and the city’s broader reimagining agenda” (Stevenson, 2014, p. 107). Perhaps the most ambitious effort in this respect has been the West Kowloon Cultural District (WKCD): a ‘world-class cultural infrastructure’ on a 40-hectare piece of land of which the blueprint was established in 2001 (Kong *et al.*, 2015) by British *starchitect* Norman Foster. The aims are high: WKCD is to “enrich cultural life by attracting internationally acclaimed performances and exhibitions; nurture local arts talent and create more opportunities for arts groups; enhance international cultural exchange; put Hong Kong on the world arts and culture map; provide state-of-the-art performance venues and museums; offer more choices to arts patrons; encourage creativity; enhance the harbour front; attract overseas visitors; and create jobs” (Tsang, 2003, cited in Kong *et al.* 2015). However, due to everlasting impasses and delays, the WKCD has done little to improve Hong Kong’s arts scene. Furthermore, the WKCD is one of those examples of city-branding without content, since Hong Kong’s motivation in developing WKCD is “clearly and largely economic in nature. The project is part of an aggressive cultural economic policy [...] that aims to stimulate the Hong Kong economy, which has somewhat lost its lustre in the twenty-first century, and to assure Hong Kong’s position as a global city. This is part of the global neoliberal agenda and logic that other cities examined in this book [Shanghai and Beijing] also manifest” (Kong *et al.*, 2015, p. 79). These strategies tend to foster a tendency “for selective support to those assets of local culture that are considered marketable. Such selective patronage might contribute to the demise of more esoteric forms of artistic and cultural expression along with those forms that are deemed too local to have any demand in other markets” (Kong *et al.*, 2015, p. 63). Investments in the state-of-the-art *hardware* of the arts (e.g. museum buildings and theatres) therefore need to be commensurately supported by incentives in its *software* (social institutions that support the arts and artistic expression and production) which is often less frequently the case.

As for the other cities in the Pacific Asian region, a very similar conclusion can be drawn for Tokyo. This Japanese city stands out as a very strong and balanced global cultural city. Sasaki (2001, p. 114) argues: “Together with the unipolar concentration of large corporate headquarters and the financial institutions, cultural concentration in Tokyo also became

remarkably intense, and the strong magnet which attracts young people to Tokyo from the rest of Japan was formed. [...] When we examine the conditions of the cultural facilities, we see that the construction of theatres, and other halls has been progressing at an urgent pace nationally from the late 1980s until the mid 90s. A new facility opens at the pace of 1 every 4 or 5 days. Thus we can point out that the construction boom of theatres and other halls progresses". Some huge facilities were erected one after the other, such as the Tokyo Art Theatre (established in 1990), Tokyo Metropolitan Contemporary Art Museum (1995), Edo Tokyo museum (1996) and the Tokyo International Forum (1996). Once again however, "the construction of the *hardware* took the highest precedence in the cultural expenses and the percentage of the art and cultural promotion expenses, that is to say, the *software*, lessens all the more" (Sasaki, 2001, p. 122). When considering the data in Appendix V, Tokyo indeed scores very high on its cultural infrastructure and city-branding domains, as well on the creative employment indicator (only Montréal, Prague and New York do better). Sasaki (2001) in this respect argues that the amount of artists in the Tokyo Metropolis has increased significantly since the 1960s and that the same is true for art institutions as well.

Finally, Seoul, the 'miracle of the Han River' (WCCR, 2013), is a city that economically functions as a "crucial intermediary through which manufacturing orders of electronics and clothing from the United States and Japan flow to the low-wage manufacturing sites in free trade zones of Indonesia and China" (Shin, 2012, p. 258). The city "has risen astonishingly fast from the ashes of the Korean war to become one of East Asia's largest and most dynamic cities, with a growing reputation as a creative powerhouse. Cultural participation levels are high, and the city has built several major venues, from concert halls to museums, to house its artistic talent [...] The city's residents are making a splash in many artistic fields, from visual art to film and music (both classical and pop), and have been responsible for the globally recognised Korean Wave²⁶" (WCCR, 2013, p. 125). Besides the creation of high-profile cultural buildings (e.g. the Sejong Center for the Performing Arts, the Seoul Museum of Art, etc.), the city also highly invests in the social capital of its art community through different programmes such as the Art Spaces Project (in which facilities are reverted into cultural spaces to provide support for artists, WCCR, 2013).

²⁶ The increase in the popularity of South Korean pop music and melodramas since the late 1990s (Hae-Joang, 2005).

5.5. Middle East / North Africa (MENA)

While “there has been a long history of art in this region, stretching for more than a hundred years, from Persia to the Levant countries, Egypt and North Africa and more recently the Gulf region” (Deloitte Art and Finance Report, 2014, p. 52), only three global cultural cities appear on the scatterplot of Figure 11 (notably Abu Dhabi, Dubai and Istanbul). This is to be explained by the fact that “During colonial occupation (up to the 1970s in the Gulf region), the region was largely peripheral to the world economy and predominantly connected to its core regions (especially Europe) through colonial dependency linkages [...] From this historical perspective, the MENA region has only a limited number of world cities” (Taylor *et al.*, 2011, p. 102).

Few countries within this region have clearly defined public policies for the arts and culture in general and private initiatives in this domain are limited as well (United Nations, 2013). The oil-rich monarchies of the Gulf, such as the United Arab Emirates (with the cities of Abu Dhabi and Dubai in particular) and Qatar are the exceptions, with “considerable investment in both culture-linked urban development and spectacular infrastructure in the form of museums and galleries, notable for the contemporary arts” (United Nations, 2013, p. 60). This spectacular infrastructure is most manifest in Abu Dhabi, with landmark structures such as the new Guggenheim museum (to be completed in 2017), the Louvre Abu Dhabi (2015), the Performing Arts Center (2015) and the Zayed National Museum (2016), all designed by famous Pritzker Prize winning architects. These flagship buildings are all mushrooming within a stone’s throw of each other at the Saadiyat island, Abu Dhabi’s first cultural district. The Deloitte Art and Finance Report (2014) argues that such an expansion of museum infrastructure, together with the highly improved curatorial level which now makes possible large-scale exhibitions from high-profile Western artists, and the establishment of high-profile art fairs (e.g. the Abu Dhabi Art Fair and Art Dubai), have made the Gulf region increasingly attractive to UHNWIs (Ultra High Net Worth Individuals) with high investable assets. For these reasons, the Gulf region will very likely play an increasingly significant role in the global and regional high-end art market in the future (ArtTactic, 2014; Deloitte Art and Finance Report, 2014). However, similar to some cities already discussed, the place-oriented strategies adopted by Abu Dhabi and Dubai tend to prioritize hardware development (arts infrastructure) over software enhancement (local human talent and bottom-up initiatives) (Ponzini, 2011). As for Abu Dhabi, the city “is certainly a peculiar case of a capital city using megaprojects and spectacular architecture on a massive scale for global marketing purposes [...] Huge capitals are available and concentrated in

extremely small and cohesive networks. The analysis of emblematic projects in Abu Dhabi's accelerated economic and urban development shows the critical limits of coupling megaprojects with spectacularized architecture in a democratic vacuum" (Ponzini, 2011, p. 252). Similar conclusions hold for Dubai.

As phrased in the above quote by Ponzini, the establishment of flagship cultural facilities or the hosting of high profile art fairs and exhibitions depend on large-scale financial sources. Judging from Figure 11, Dubai and Abu Dhabi are in a strong position when it comes to their financial prowess. They have very similar and high financial rating scores and they are furthermore clearly located above the fit line which indicates that their increasing roles as GACs have not yet levelled their current roles as established GFCs. The GFCI ranking only includes six Middle Eastern cities, of which Dubai and Abu Dhabi rank the highest. The main argument for the high financial growth rates of both cities are the surging oil incomes they experienced since the 1970s: "Abu Dhabi powered into the twenty-first century on the back of ever-increasing oil revenues, well established petrochemical industries, and massive oil-financed overseas investments" (Davidson, 2009, p. 69). Dubai however, has been forced to diversify its economy away from oil and upgrade its foreign direct investments (FDI) (Davidson, 2007; Taylor *et al.*, 2011). Dubai is highly enticing for FDI because of its "attractive legal and fiscal environment, the importance of the Dubai International Financial Centre as a hub between London and Hong Kong, and other forms of global integration (e.g. the growing stake of Borse Dubai in the Nasdaq and London Stock Exchange)" (Taylor *et al.*, 2011, p. 105).

Istanbul, the other global cultural city of the MENA region at the margins of Europe, has a "historical legacy as a 'world city' during both the Byzantine and Ottoman empires". (Taylor *et al.*, 2011, p. 104). The city has an art score that is comparable to Abu Dhabi, yet its role as GFC appears less strong. Among the other MENA financial centres on the GFCI, Istanbul ranks only sixth, after Dubai, Abu Dhabi, Riyadh, Qatar and Tel Aviv. The city is however located along the quadratic fit line which assumes a rather balanced GAC/GFC profile. As regards its cultural policy, the city's approach is similar to the European cities (see 5.1). In 2010, Istanbul was rewarded the tenure of European Capital of Culture. Like the member states of the EU, "Turkey in general, and Istanbul in particular, has undergone a 'cultural turn in public policy', meaning that, like the EU (and UNESCO), Turkish state policies have increasingly recognised culture as a vehicle to trigger economic development, not least in the conceptualisation and realisation of large-scale urban regeneration projects" (Patel, 2013, p. 167).

The observations of the MENA region can be concluded by arguing that, although the number of global (cultural) cities is rather small, “the MENA region is in fact becoming increasingly integrated into the world economy [...]. This integration is a result of the changing role of the region (and particularly the Gulf) in a world economy that is shifting towards the East [...] the MENA region’s newly critical position between Europe and the Asia Pacific proves to be an engine for service-based urban economies and further integration into the world economy” (Taylor *et al.*, 2011, p. 113). Judging from the policy frameworks of the three investigated cities, the adoption of place-oriented and arts-led regeneration strategies (such as the construction of landmark cultural facilities and the hosting of high-profile fairs and festivals) serve to catalyse this economic integration and proclaim global city status.

5.6. Latin America

The cultural policies in the vast Latin American and Caribbean region are highly diverse: “Argentina, Brazil, Chile, Colombia and Cuba already have a creative economy framework in place, while Mexico, Peru and Uruguay are beginning to recognize the potential of the sector. Bolivia, Ecuador, Paraguay, Venezuela and the Central American States have yet to do so. These differences are explained by the legacy of a continental tradition of linking culture to social rights and quality of life issues that have been arrived at independently of the economic calculus” (United Nations, 2013, p. 79). When considering Figure 11, the region includes three global cultural cities, i.e. two Brazilian cities Rio de Janeiro and São Paulo and Argentinian capital Buenos Aires. Their GFC scores are approximately equal yet Buenos Aires stands out as GAC. The Argentinian capital scores very strong on almost all indicators (see Appendix V); it has a very high creative employment, has much cultural infrastructure and high-profile art schools and houses a lot of international art events. According to the WCCR (2013), this well-developed arts scene belongs to the remnants of the city’s rich legacy: “A hundred years ago Buenos Aires was the richest city in one of the world’s richest countries. Its French-style architecture and wide avenues, bohemian literary scene, open spaces and cafés earned it the nickname of ‘the Paris of South America’, and European immigrants poured into the city. Culturally too Buenos Aires was making its mark, in both high and popular culture: its celebrated opera house, the Teatro Colón, attracted the world’s leading singers to its stage, while a new dance, the tango, emerged from the poor district of La Boca” (p. 81). From a policy-making perspective, the city considers culture and the arts as a key resource for economic growth. The city has even become a global reference point for its creative industries strategy

(e.g. by implementing a ten year strategic cultural plan and establishing a Creative Industries General Direction) and saw the added value generated by the creative industries to grow at no less than 5 per cent per year (totalling 73,1 per cent in 2004-2010 at constant prices) while its GDP only increased by 49,2 per cent over the same period (United Nations, 2013).

In Brazil, formal recognition of the arts and culture as catalysts of economic development began in 2004, at the 11th United Nations Conference on Trade and Development meeting in São Paulo, followed by the International Forum on Shaping an International Centre on Creative Industries in 2005. “Momentum was generated in São Paulo, Espírito Santo, Rio de Janeiro and Ceará” and “In 2009, the creative economy became one of the five axes underpinning the city and state conferences on culture, which converged at the National Conference on Culture in 2010” (United Nations, 2013, p. 80).

5.7. Eurasia

This vast region comprising ex-Soviet states in Europe and Asia plus Mongolia, only appears to host two global cultural cities, both located in Western Russia, notably Saint Petersburg and Moscow. This should not surprise as cities within the Eurasian region have only recently integrated into the capitalist world economy: “With the dissolution of the USSR, the Union Republics have shaken off Soviet rule and regained their independence [...] This changing of status immensely accelerated their integration into the world city network and is also associated with the conversion to market economic regimes, with cities at the forefront of economic opening and integration into the capitalist system” (Taylor *et al.*, 2011, p. 85). It was only after the demise of the USSR that offices of globalizing companies in the financial sector started to establish themselves in these cities. However, the detachment from the former system took some time, new regulatory environments had to be established and political instability in some countries persisted (Taylor *et al.*, 2011). For these reasons, global cities are not abundant within the Eurasian region today and they have not attained the same financial prowess as most global cities in Europe, Northern America or Pacific Asia. It should therefore not surprise that, in Figure 11, Moscow and Saint Petersburg are located in the lower left quadrant of the plot, indicating a rather low finance rating score when compared to the bulk of the other global cities. Their location also reveals a rather low art rating score. Judging from Appendix V, this is mainly due to their moderate performance on the four infrastructure indicators (when compared to other cities with similar populations) and their lack of city-branding museums.

In contrast with the other world regions, the creative industries concept “has not received a great deal of support or understanding from the government of the Russian Federation or the city governments of Moscow and St. Petersburg. The whole creative ideology is quite new and not very familiar to Russians. Unlike many other governments and cities, which have recently been active in developing the creative industries and adopted governmental and municipal programs in creative industries, Russian federal or regional governments have not yet shown any great interest in the sector, despite a certain interest in the tourism sector. The idea that culture could be profitable and generate economic value is a new one in Russia and needs time to be adopted, although according to the statistics, the creative industries in Russia have shown growth in recent years” (Ruutu, 2010, p. 7). One of the plausible explanations for the poor representation of the creative industries concept in the Russian state discourse might be found in the communist history of the region: “In the Soviet Union, the collective was valued over the individual. This is still seen and the values of the creative economy, such as individuality, diversity and openness still need time to fully develop” (Ruutu, 2012, p. 8).

5.8. Conclusions: overall trends

As was hypothesized in chapter 1, Europe and Northern America indeed constitute true epicenters of GACs and GFCs, with Europe clearly taking the lead by hosting 42 percent of all global cultural cities in the dataset. A third epicenter should however be added, as Pacific Asia performs remarkably well by having 20 percent of all global cultural cities located on its territory (which is even slightly more than Northern America). Such observation is clearly in line with the often cited geographical shift in the world economy from the ‘West’ to the ‘East’ (e.g. Arrighi 1994; Frank 1998; Derudder *et al.*, 2010; Taylor *et al.*, 2011). While the Middle East region increasingly constitutes a part of this geographical shift (Taylor *et al.*, 2011) and hosts a significant amount of GFCs, the region lacks established global art hubs despite the fact that much cities are adopting place-oriented strategies focused on the high-end arts (e.g. the building of flagship cultural infrastructure and the hosting of high-profile exhibitions). This might point towards a certain time lag between the emergence as a GFC and the establishment of a thriving arts scene in which there is high cultural employment and renowned art schools, institutions etc. The remaining world regions host a low amount of global cultural cities and Sub-Saharan Africa, together with South Asia, does not even appear on the global cultural city map of Appendix VIII. Therefore, it can be concluded that the three arenas of globalization

today, notably Europe, Northern America and Pacific Asia (Taylor *et al.*, 2011) leave the rest of the world regions far behind.

Apart from the geographical distribution of the global cultural cities, most examined cities (and their countries and/or unions) share a common, recent and increasing interest in the pervasive role that the arts, and culture in general, can fulfill in upgrading the economy by luring foreign talent and expatriates and attracting inward investment, tourism and advanced services firms. While there are much possible connections between the arts and finance in cities (see section 2.2), the causal relationship in which the arts function as catalysts for economic prosperity thus seems to be the most frequently and formally advocated one within policy frameworks today. This should not surprise as these strategies constitute an inherent part of the overall transformation of advanced industrial nations into knowledge-based, service-oriented and creative economies (Conference Board of Canada, 2008). After all, whereas competitiveness in the industrial economy was largely driven by physical resources such as coal, wood or oil and by commodities such as steel, automobiles and machinery, competitiveness in the knowledge economy is mainly driven by human capital (Conference Board of Canada, 2008). Kleiman *et al.*, (2002, p.4) make the circle complete by stating that “Investment follows human capital... and human capital, to a surprisingly large extent, follows the arts”.

The motives for adopting these strategies are however somewhat different among the various world regions. Whereas recently globalized, developing or post-colonial cities in the Middle East and Pacific Asia are implementing these place-oriented strategies with the aim of ‘going global’ and to catalyze the shift from manufacturing to knowledge- and service-based economies (Kong *et al.*, 2015), advanced economies in Western regions (Europe, Northern America and the greater part of Australasia) adopt these urban cultural policies to preserve and upgrade their longstanding reputation as the most competitive and dynamic knowledge-based economies of the world (European Commission, 2006; National Governor’s Association, 2009).

The inherent risk connected with the implementation of these cultural economic policies is the “overemphasizing of the economic/global-city perspective” (Chang, 2000, p. 823). Within the above analysis, this has been mainly observed for cities in the Pacific East and the Middle East (with Tokyo, Hong Kong, Abu Dhabi and Dubai being some prominent examples). These cities and countries are proclaiming global city status by means of policies that are prioritizing

hardware development (arts infrastructure) over software enhancement (human capital and local bottom-up initiatives). Chang (2000) in this respect argues that “Developing a GCA [Global City for the Arts] entails striking a balance between developing a world-class venue for global arts and cultural events, while ensuring that local communal needs and cultural values are not compromised (p. 818). Or, as Ponzini (2011) argues “Globally, cities apparently compete to collect new pieces of architecture as if they were pieces of art, sometimes without taking into account their urban meaning and contextual functions” (p. 252). Therefore, going-global and staying-local is a delicate, not easily harmonized challenge “for all cities in an era of globalization. [...] How well cities attract investors, foreign talents and tourists, and how ably they retain residents and aid in civic enrichment depend on their ability to harmonize globalization forces with localization pressures. It is this challenge which decides which cities truly achieve Renaissance, and which merely attempt to do so, generating lots of sound and fury in the process but ultimately signifying nothing” (Chang, 2000, p. 830). To this purpose, Sykora (1994, cited in Chang, 2000) emphasizes the importance of urban ‘glocalization’, a process wherein “global sensibilities are harmonized with local philosophies in the planning and development of cities” (Chang, 2000, p. 820).

6. CONCLUSIONS AND REFLECTIONS

The worlds of the high-end arts and finance clearly overlap in the world's most economically powerful cities (as 60 percent of the GFCs turn out to be GACs as well) and there is a significant and positive correlation between the rank numbers of the GACs and GFCs, as was hypothesized. According to the literature, this correlation should be explained through the 'multifaceted causal relationships' (Kloosterman and Skórska, 2012) that exist between both fields (the potential of the arts to catalyse economic development in different ways and the dependency of the arts on financial incentives from governments and advanced services) and the fact that both sectors strongly cluster in global cities due to urbanization economies, the need for face-to-face contact and a selected number of control points. Judging from the correlation analyses of chapter 4, the significant correlation is to be mainly explained by the competitive domain *Reputational*, with its indicator *City-Branding* scoring the highest of all indicators, followed by *Galleries*, *Auctions* and *Events*. These indicators not surprisingly all depend on sound capital bases and are, in the case of the reputational domain, frequently implemented in cultural policy frameworks today.

However, i) a relevant number of top-tier GACs such as Berlin, Los Angeles and Barcelona are no part of the GFCI and vice versa, and ii) the overall correlation is rather moderate. While the greater part of the global cultural cities are more or less aligned around the quadratic relationship that was established in chapter 4, some city profiles stand out in the sense that they perform significantly better on the finance than on the arts axis (e.g. Hong Kong and Zurich) or vice versa (e.g. Budapest and Paris). For these reasons, it is not necessarily the case that a thriving arts scene simply follows from the degree of financial prowess or that the economic development of cities is the result of the presence of a well-established arts and cultural scene. External and often path-dependent influences can be of similar importance (e.g. gentrification processes, the presence of world-class infrastructure and convenient economic policies, historic events, local consumer cultures anchored in local traditions, etc.)

The second hypothesis regarding the geography of the global cultural cities proves to be largely correct. Europe and Northern America indeed constitute true epicenters of GACs and GFCs, with Europe clearly taking the lead by hosting 42 percent of all global cultural cities in the dataset. A third epicenter should however be added, as Pacific Asia performs remarkably well by having 20 percent of all global cultural cities located on its territory (which is even slightly more than Northern America). Such observation is clearly in line with the often cited

geographical shift in the world economy from the 'West' to the 'East' (e.g. Arrighi, 1994; Frank, 1998; Derudder *et al.*, 2010; Taylor *et al.*, 2011). While the Middle East region increasingly constitutes a part of this geographical shift (Taylor *et al.*, 2011) and hosts a significant amount of GFCs, the region lacks established global art hubs despite the fact that much cities are adopting place-oriented strategies focused on the high-end arts (e.g. the building of flagship cultural infrastructure and the hosting of high-profile exhibitions). This might point towards a certain time lag between the emergence as a GFC and the establishment of a thriving arts scene in which there is high cultural employment and infrastructure, renowned art schools, institutions etc. The remaining world regions host a low amount of global cultural cities and Sub-Saharan Africa, together with South Asia, do not even appear on the global cultural city map of Appendix VIII. Therefore, it can be concluded that the three arenas of globalization today notably Europe, Northern America and Pacific Asia (Taylor *et al.*, 2011) constitute the bulk of GCCs, leaving the rest of the world regions far behind.

However, the one aspect most world regions have in common, is their recent and increasing interest in the pervasive role that the arts, and culture in general, can fulfill in upgrading the economy. This should not surprise as these strategies i) are expressions of the overall transformation of advanced industrial nations into knowledge-based, service-oriented and creative economies (Conference Board of Canada, 2008) in which human capital, and not physical resources, has become the most valuable asset and ii) are made possible by recent social changes in, mainly Western, societies (more time for leisure, growing expenditure on culture, entertainment and tourism and open and cosmopolitan societies). However, different world regions have particular motives for adopting these cultural economic strategies. Whereas recently globalized, developing or post-colonial cities in the Middle East and Pacific Asia are implementing these place-oriented strategies with the aim of 'going global' and to catalyze the shift from manufacturing to knowledge- and service-based economies (Kong *et al.*, 2015), advanced economies in Western regions (Europe, Northern America and the greater part of Australasia) adopt these policies to preserve and upgrade their longstanding reputation as the most competitive and dynamic knowledge-based economies of the world (European Commission, 2006; National Governor's Association, 2009).

The inherent risk connected with the implementation of these cultural economic policies is the prioritizing of the functional value of high-end art over its esthetic, social and philosophical values. Within this research, this has been mainly observed for cities in the Pacific East and the

Middle East (with Tokyo, Hong Kong, Abu Dhabi and Dubai being the most prominent examples). These cities and countries are proclaiming global city status by means of cultural economic policies that are “largely driven by economic agendas alone, often in the search for a highly elusive ‘quick fix’” (United Nations, 2013, p. 84). It can therefore be concluded that ‘going-global’ and ‘staying-local’ is a delicate challenge “for all cities in an era of globalization. [...] How well cities attract investors, foreign talents and tourists, and how ably they retain residents and aid in civic enrichment depend on their ability to harmonize globalization forces with localization pressures. It is this challenge which decides which cities truly achieve Renaissance, and which merely attempt to do so, generating lots of sound and fury in the process but ultimately signifying nothing” (Chang, 2000, p. 830). Or, as Nigerian novelist Ben Okri boldly summarizes: “There’s always a pressure to place art under the service of function, but the more it is functional, the less it is artistic. The artistic is in excess of the functional”²⁷.

The conclusions of this thesis do not foreclose further research on the intersections between high-end art and finance in the global city. If anything, this research is intended to open up new avenues of research by contributing to a more fine-tuned and comprehensive comparative analysis in a discourse with little precedents. Therefore, it is hoped more empirical research of this nature will be undertaken with a larger database of cities and more and better operationalized arts indicators that commensurately focus on the *software* of the arts sector (which has been somewhat less represented among the indicators in this research). Some ideas in this direction include gauging the cultural spending on goods and services, the degree of activity of non-profit groups, the level of structural municipal policy attention towards the arts field, the amount of public art etc. Furthermore, since this research has discussed the *most prominent* cities by world region, many cities and regions still remain untackled. Systematic comparative analyses like this one are convenient for outlining general tendencies and observations, but case-studies are certainly as crucial since they provide a more nuanced and detailed profile of the exact causal relationships within specific cities.

A final reflection regards the significance of the arts (broadly defined), for the global city discourse. As the quotes by Pratt (2012) and Kong *et al.* (2015) of chapter 1 indicated, global

²⁷ Quote from the debate “Can art save the world: a constant work in progress” at KVS Brussels. To be consulted on: <http://www.11.be/wat-doet-11-11-11/11-debat/item/lezing-ben-okri-kan-kunst-de-wereld-redden>.

cities have usually been approached from an *economic* point of view. However, as the literature on global cities has expanded, focus has also increasingly been directed towards the social and cultural aspects of urban life (among others, the role of immigrants in global cities, the effects of globalization on urban subcultures and cultural industries in urban regions; Chang, 2000). This increased attention for the social aspects (broadly defined) of global cities should not surprise: “Not only do global cities help organize the world economy by directing capital flows, they also shape cultural meanings and social norms in fields as diverse as fashion, media and information. Indeed, global cities are as much centres of capital investments and transactions as they are sites of dynamic social foment and intercultural mixing” (Chang, 2000, p. 819). Different types of art, from low-end to high-end, highly contribute to the quality of this urban social dynamic as they “unite people in democratic ways in public spaces”, “enrich people’s lives and their sense of self-esteem” and “improve urban aesthetics by ‘cleaning up’ zones” (Chang, 2000, p. 820). Global cultural cities therefore serve both global (economic) and local (sociocultural) goals, which makes the examination of their functioning and geography highly relevant today.

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APPENDICES

Appendix I: Summary of consulted lists

- zeroland.co.nz/directory/visual-arts/art-festivals-art-fairs/art-fairs/
- artvista.de
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- art-collecting.com/artfairs.html
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- en.wikipedia.org
- filmfestivallife.com
- efa-aef.eu/en/festivals
- artsalive.ca/en/dan/understand/seedance.asp
- goabroad.com/blog/2013/09/09/five-theatre-festivals-around-world/
- tcg.org/international/events/festivals.cfm
- teatrolinks.com.sapo.pt/theatrefestivals.htm
- universes-in-universe.de/car/e-calendar.htm
- arte-sur.org/biennials
- biennialfoundation.org
- artfacts.net/en/exhibitions/biennials/archive.html

Appendix II : List of the recorded art events by city

CITY	EVENT	DAILY VISITORS	NUMBER OF EDITIONS
Abu Dhabi	Modern contemporary Abu Dhabi Art	4250	6
Abu Dhabi	Abu Dhabi Film Festival	1500*	7
Abu Dhabi	Tropfest	12000	4
Abu Dhabi	Abu Dhabi Festival	1611	11
Adelaide	Adelaide Biennial of Australian art	2643	13
Adelaide	Scandinavian Film Festival	1000	1
Adelaide	Adelaide Festival	22368	50
Adelaide	OzAsia Festival	3018	8
Ahmedabad	Alpavirama	500	3
Aix en Provence	Salon des antiquaires et galeries d'art	1333	1
Alice Springs	Human Rights Arts and Film Festival	714	9
Almaty	Eurasia: International Film Festival	6667	10
Amsterdam	Affordable Art Fair	3500	9
Amsterdam	Kunst Rai Amsterdam	3600	31
Amsterdam	PAN Amsterdam	6438	27
Amsterdam	Cinemasia Film Festival	429	11
Amsterdam	Human Rights Film Festival	1000	13
Amsterdam	Pluk de nacht	514	11
Amsterdam	Holland Festival	3833	68
Amsterdam	Juli-Dans	500	23
Anaheim	Viet Film Fest	1000	8
Ancona	Biennial of young artists from europe and the mediterranean	5484	16
Anglet	Biennale d'art contemporain d'Anglet	200	5
Ankara	Ankara Festival	577	31
Ann Arbor	Ann Arbor Film Festival	1833	53
Antalya	Antalya International Film Festival	1667	51
Antwerp	Meeting Points 7	202	7
Arles	Les rencontres Arles Photographie	1371	44
Arnhem	Pluk de nacht	514	2
Aspen	Aspen Antiques and Fine Arts Fair	714	12
Athens	Documenta 14	1000	14
Athens	AGORA 4th Athens Biennale 2013	1000	4
Athens	Art Athina	8750	11
Athens	Athens International Film Festival	4167	10
Atlanta	Atlanta Film Festival	2500	38
Auckland	Oceanic Performance Biennial	500	1
Auckland	Auckland Triennial	1024	5
Auckland	Documentary Edge Festival	909	10
Auckland	New Zealand International Film Festival	873	44
Aurillac	Festival d'Aurillac	7000	29
Austin	Austin Film Festival	1250	21
Austin	Cine Las Americas International Film Festival	440	17
Austin	Fantastic Fest	1000	10
Austin	South by Southwest	8000	27
Austin	South by Southwest	4667	29
Avignon	Festival d'Avignon	5417	68
Baalbeck	Baalbeck International Festival	800	58
Bacolod	VIVA Excon	500	13
Bad Rothenfelde	Lichtsicht: 4. Projektions-Biennale	1487	4
Balchik	International Short film festival IN THE PALACE	2143	12
Baltimore	Baltimore summer antiques show	1250	35
Baltimore	Maryland Film Festival	5000	15
Bamako	Rencontres de Bamako	100	9
Bangalore	Bangalore Queer Film Fest	125	6
Bangalore	Bangalore international short film festival	175	5
Bangalore	International Film Festival	625	7
Bangkok	World Film Festival of Bangkok	1200	12
Bangkok	Thai Short film and video festival	818	18
Banja Luka	Kratkofil International Film festival	1000	7
Barcelona	Loop Fair	667	11
Barcelona	SWAB International contemporary art fair	3750	9
Barcelona	Grec Festival	4112	38
Barcelona	Barcelona International Auteur Film Festival	1000	5
Basel	Scope Basel	3200	14
Basel	LISTE Art fair Basel	2167	18
Basel	BAAF Basel Ancient Art Fair	833	11
Basel	LISTE Art Fair Basel	2167	18
Basel	the solo project	1000	8
Basel	Rhy Art Fair	500	20
Basel	Art Basel	17500	45
Basel	Human Rights Film Festival	1000	13

Basel	Culturescapes	909	12
Basse-terre	Pool Art Fair	1667	10
Batumi	Batumi International Art-house film festival	250	10
Bayreuth	Bayreuther Festspiele	1772	104
Becket	Jacob's Pillow Dance Festival	2000	81
Beijing	Thingworld- International Triennial of New Media Art	8000	3
Beijing	1st Beijing photo biennial	1000	1
Beijing	BIAB Beijing International Art Biennale	4167	6
Beijing	CAFAM Biennale	1500	2
Beijing	Art Beijing Contemporary Art Fair	10000	10
Beirut	Meeting Points 7	100	7
Beirut	Al Bustan Festival	450	20
Beiteddine	Beiteddine Arts Festival	1186	20
Belfast	Belfast Festival at Queen's	3333	50
Belgrade	FEST International Film Festival Belgrade	9091	43
Belgrade	Festival of Tolerance	740	8
Belgrade	BITEF Teatar	500	47
Belgrade	Belgrade Music Festival	500	46
Bergen	Bergen Assembly 2016	379	1
Bergen	Festspillene I Bergen	5441	61
Berlin	Berlin Biennale for contemporary art	1119	8
Berlin	ABC Art Berlin Contemporary	3750	8
Berlin	Illustrative Berlin	1500	6
Berlin	Berlin Art Week	10000	3
Berlin	Directors Lounge	818	10
Berlin	Berlinale	27273	65
Berlin	Contravision	1000	23
Berlin	Tanz Im August	1133	26
Berlin	Berliner Festspiele: JazzFest Berlin	1750	51
Berlin	Berliner Festspiele MaerzMusik	1330	13
Berlin	Berliner Festspiele Musikfest Berlin	2300	13
Berlin	Berliner Festspiele Theatertreffen	1083	52
Berlin	Berliner Festspiele Foreign Affairs	800	13
Berlin	International LiteraturFestival Berlin	2500	15
Berlin	Achtung Berlin - New Berlin Film Award	1500	11
Berlin	FISDN: Festival International Suignes de Nuit	250	13
Berlin	Positions Berlin	1250	2
Bern	Culturescapes	909	12
Beverly Hills	Independent Filmmakers' Showcase	533	17
Big Bear Lake	Big Bear Lake International Film Festival	1000	15
Birmingham	Antiques for Everyone	5000	1
Birmingham	Sidewalk Moving Picture Festival	1167	17
Birr	OFFline Film Festival	200	5
Bitola	Manaki Brothers Film Festival	2429	35
Blaye	Les Chantiers	2000	2
Bobigny	Rencontres chorégraphiques Seine Saint-Denis	500	12
Bogota	La otra bienal de arte 2013	400	8
Bogota	Fotografica Bogota	13810	5
Bogota	Festival de Cine de Bogotá	1111	31
Bogota	Festival Iberoamericano de Teatro de Bogota	139688	14
Bogota	Feria Internacional de Arte de Bogotá	6500	10
Bol	SUPERTOON International Animation Festival	1000	3
Bologna	Artelibro Festival	8750	11
Bologna	Artefiera Bologna	12500	40
Bologna	Emilia Romagna Festival	185	14
Bonn	Videonale	189	14
Boston	The Boston Print Fair	875	16
Boston	AD 20/21	875	16
Boston	Boston International Fine Art Show	875	18
Boston	Boston Film Festival	1600	30
Boston	The Boston Jewish Film Festival	73	25
Boston	Boston Palestine Film Festival	600	7
Boston	Boston Science Fiction Film Festival	727	38
Boston	Boston Underground Film Festival	1000	17
Boston	Independent Film Festival of Boston	2875	11
Boulder	Boulder International Film Festival BIFF	6250	10
Boulder	Moondance International Film Festival	1000	15
Bratislava	Bienale Forma 2013	150	5
Bratislava	Eko Topfilm	2200	41
Breda	Art Breda	1000	2
Bredelar	Skulptur Bredelar Biennale	200	1
Bregenz	Bregenzer Festspiele	5606	70
Brighton	Brighton Photo Biennial	3571	6
Brisbane	Asia Pacific Film Festival	1000	56
Brisbane	Brisbane Asia Pacific Film Festival	1563	12
Brisbane	Human Rights Arts and Film Festival	1429	9

Brisbane	Scandinavian Film Festival	1000	1
Bristol	Bristol Biennial: Crossing the line	1138	2
Bristol	Affordable Art Fair	2333	11
Brugge	December Dance 2014	727	8
Brugge	Festival van Vlaanderen: Brugge	1700	50
Brussels	Affordable Art Fair	3500	7
Brussels	BRAFA Art Fair	6111	60
Brussels	Eurantica Fine Art Fair	2800	33
Brussels	Art Brussels	9667	32
Brussels	BAAF Brussels Ancient Art Fair	1000	12
Brussels	BRUNEAF Brussels Non European Art Fair	889	21
Brussels	Accessible Art Fair Brussels	1250	8
Brussels	Fotofever : photography art fair	3667	5
Brussels	Brussels short film festival		18
Brussels	BIFFF Brussels International Fantastic Film Festival	4615	31
Brussels	Brussels Film Festival	5000	40
Brussels	Kunstenfestival des arts	1217	20
Brussels	Festival van Vlaanderen: Brussel / Klarafestival	1250	10
Bucharest	Bucharest International Biennial for Contemporary Art	951	6
Bucharest	Biennial Young Artists	150	6
Bucharest	George Enescu Festival	6818	14
Budapest	Café Budapest Contemporary Arts Festival	800	23
Budapest	Budapest Summer Festival	3000	23
Budapest	Budapest Spring Festival	2667	33
Buenos Aires	Buenos Aires photo	7500	10
Buenos Aires	Arte BA Contemporary Art Fair	25000	24
Buenos Aires	Buenos Aires International Festival of Independent Cinema	30833	16
Buenos Aires	Buenos Aires Rojo Sangre	923	14
Buffalo	Echo Art Fair	3750	4
Buffalo	Buffalo dreams fantastic Film Festival	57	10
Buffalo	Buffalo Niagara Film Festival	2778	8
Burbank	Burbank International Film Festival	1000	6
Burlington	Vermont International Film Festival	500	29
Busan	Busan Biennale	984	2
Busan	BUSAN International Film Festival	22647	19
Bydgoszcz	Camerimage	8750	22
Byron Bay	Byron Bay Film Festival	770	9
Byron Bay	Scandinavian Film Festival	1000	1
Cairo	Cairo biennale for international art and culture	100	14
Cairo	Meeting Points 7	300	7
Cairo	Cairo International Film Festival	909	38
Calabar	Africa International Film Festival	1250	5
Calcutta	Kolkata International Film Festival	1875	20
Calgary	Calgary International Film Festival	2273	14
Calgary	Calgary Underground Film Festival	1000	12
Calgary	Marda Loop Justice Film Festival	167	8
Calgary	\$100 Film Festival	167	22
Cali	Biennial of mural and public art	1111	2
Cambridge	Cambridge Film Festival	909	34
Cambridge	Strawberry Shorts (film festival)	700	10
Camden	Camden International Film Festival	1750	10
Çanakkale	Çanakkale Biennial	800	4
Canberra	Canberra International Film Festival	941	18
Canberra	Human Rights Arts and Film Festival	1429	9
Canberra	Scandinavian Film Festival	1000	1
Cannes	Festival de danse Cannes	800	16
Cannes	Festival de Cannes	2613	68
Cape Town	Encounters Documentary Film Festival	727	15
Cape Town	Out in Africa	750	21
Cape Town	Tropfest	9000	1
Caracas	International theatre festival Caracas	6000	41
Carrara	International Sculpture Biennial Carrara 2014	1000	14
Cartagena	Cartagena Film Festival	1000	55
Cartagena	Cartagena Biennial (BIACI)	1803	1
Carthage	Carthage Film Fest	67	25
Cavan	Cavan Theatre Festival	600	1
Cebu	CEBU International Documentary Film Festival	1500	2
Cedar City	Red Rock Film Festival	830	8
Cetinje	Festival of Tolerance	152	8
Champaign	Roger Ebert's Overlooked Film Festival	3600	17
Changchun	Changchun Film Festival	1000	21
Charleroi	ASPHALT 1: Biennale d'art urbain	64	1
Charleston	Charleston International Film Festival	1200	7
Charleston	Spoletto Festival	4375	39
Charlottesville	Virginia Film Festival	7000	25
Chaux-de-fonds	71e Biennale d'art contemporain	53	71

Chemnitz	SCHLINGEL International Film Festival	1286	20
Chengdu	Chengdu Biennale	10417	6
Chennai	CWIFF Chennai Women's International Film Festival	150	1
Chennai	Chennai Film Festival	1000	11
Chicago	Chicago Architecture Biennial	1000	1
Chicago	SOFA Sculpture Objects Functional Art + Design	5333	21
Chicago	Chicago Comedy Film Festival	750	5
Chicago	Chicago International Children's Film Festival	2000	31
Chicago	Chicago International REEL Shorts Festival	250	11
Chicago	Chicago International Film Festival	4667	51
Chicago	Chicago Palestine Film Festival	69	12
Chidambaram	CHIDAMBARAM Natyanjali	300	8
Chilmark	Martha's Vineyard Film Festival	67	15
Christchurch	SCAPE	10319	7
Christchurch	New Zealand International Film Festival	873	44
Chur	Culturescapes	364	12
Cincinnati	Cincinnati Film Festival	1000	4
Civitavecchia	International Tour Film Festival	625	4
Cleveland	Cleveland International Film Festival	8150	39
Cleveland	Indie Gathering International Film Festival	25	20
Cluj-Napoca	Transilvania International Film Festival	6200	13
Cologne	Fine Art and Antiques	2800	45
Cologne	Art.Fair	9000	12
Cologne	ART Cologne Internationaler Kunstmarkt	13750	49
Colombo	Colombo Art Biennale	300	3
Colorado Springs	Rocky Mountain Women's Film Festival	333	27
Columbia	True/False Film Festival	4250	11
Columbus	Columbus International Film & Video Festival	1385	62
Copenhagen	Copenhagen art festival	1563	2
Copenhagen	Art Copenhagen	3407	18
Copenhagen	CPH:PIX	3851	11
Copenhagen	NY Cirkus Festival	313	7
Cordoba	Córdoba International Animation Festival - ANIMA	1667	8
Cork	Cork Film Festival	1850	59
Cuenca	Bienal de Cuenca	400	12
Curitiba	Bienal Internacional de Curitiba	1000	11
Dakar	11ème Biennale de l'Art Africain Contemporain	968	11
Dakhla	Fisahara: Sahara International Film Festival	250	12
Dallas	Dallas biennial	1000	1
Dallas	Dallas Art Fair	1667	6
Dallas	DALLAS International Film Festival	3000	8
Dar Es Salaam	East Africa Art Biennale	14	6
Darwin	Human Rights Arts and Film Festival	1071	9
Den Haag	Festival moderne dans Den Haag	531	17
Denver	Biennial of the Americas	283	3
Denver	Denver Film Festival	3958	37
Denver	Mile High Horror Film Festival	500	4
Detroit	People's Biennial	1000	2
Detroit	Detroit Windsor International Film Festival	2333	6
Dhaka	Asian Art Biennale Bangladesh	1000	16
Dhaka	Dhaka International Film Festival	4608	14
Dharamshala	Dharamshala International Film Festival	625	3
Dornbirn	Art Bodensee	1767	14
Douala	SUD Salon Urbain de Douala	250	3
Dresden	OSTRALE	261	9
Dubai	Art Dubai	6250	9
Dubai	Dubai International Fine Art & Antiques Fair	2500	8
Dubai	Dubai International Film Festival	325	11
Dubai	Children's International Film Festival	1875	2
Dublin	Dublin Biennial for contemporary art	250	2
Dublin	Jameson Dublin International Film Festival	3455	13
Dublin	Dublin Theatre Festival	500	58
Dublin	Dublin International short film and music festival	139	4
Dubrovnik	Dubrovnik Festival	1333	65
Duhok	Duhok International Film Festival	750	3
Dunedin	New Zealand International Film Festival	873	44
Dungog	Dungog Film Festival	5000	7
Durban	Durban International Film Festival	2755	35
Durham	Full Frame Documentary Film Festival	6778	18
Durham	American dance festival	200	82
Dushanbe	DIDOR International Film Festival	1800	6
East Hampton	Hamptons International Film Festival	3600	31
Edinburgh	Africa In Motion	2706	9
Edinburgh	Edinburgh International Film Festival	3750	68
Edinburgh	Edinburgh Fringe Festival	20833	67
Edinburgh	Edinburgh International Festival	16600	60

Edmonton	Edmonton International Film Festival	1556	28
Edmonton	Global Visions Festival	625	33
Eilat	Eilat International Film Festival	1000	11
Eislingen	6. biennale der zeichnung	100	6
Essen	Emscher Kunst Triennale 2013	2452	2
Essen	Media Art Fair	1000	8
Essen	Fair for contemporary art	1333	8
Faenza	Emilia Romagna Festival	185	14
Fellbach	Fellbach Triennial of small-scale sculpture	155	12
Florence	Florence Biennale	1111	9
Folkestone	Folkestone Triennial	500	5
Forli	Emilia Romagna Festival	185	14
Frankfurt	Luminale 2014	48000	7
Fukuoka	The 5th Fukuoka Asian Art Triennale	686	5
Galway	Galway African Film Festival	200	7
Gdynia	International Random Film Festival	100	5
Gelsenkirchen	Ruhrtriennale	1233	4
Geneva	Biennial of Moving Images	200	20
Geneva	Salon d'art Genève	3150	3
Ghent	Art Gent	6250	3
Ghent	Film Fest Gent	11583	41
Ghent	Festival van Vlaanderen: Gent	3667	57
Giffoni Valle Piana	Giffoni Film Festival	21000	44
Gijon	Gijón International Film Festival	8751	52
Glasgow	International Festival of Visual Art	11393	6
Glasgow	Glasgow Film Festival	2857	11
Gore	New Zealand International Film Festival	873	44
Gothenburg	GIBCA	571	7
Gothenburg	Göteborg Film Festival	3182	38
Grahamstown	National Arts Festival	18182	40
Gramado	Gramado Brazilian and Latin American Film Festival	22222	42
Grande Prairie	Reel Shorts Film Festival	550	8
Graz	Diagonale Festival of Austrian Film	4167	13
Großhennersdorf	Neisse Film Festival	713	12
Gstaad	Gstaad Menuhin Festival	400	57
Guadalajara	Guadalajara International Film Festival	15000	30
Guanajuato	Guanajuato International Film Festival	12523	17
Guanajuato	Festival Internacional Cervantino	6579	42
Guangzhou	Guangzhou Triennial	500	5
Guelph	Guelph contemporary dance festival	2500	17
Gunma	Indian Film Festival Japan	1429	2
Gwangju	Gwangju biennale	9688	10
Haifa	Haifa International Film Festival	30000	30
Hamburg	Affordable Art Fair	4125	3
Hamburg	Festival International Cinema Libre	67	2
Hamilton	Bermuda Biennial	57	11
Hamilton	New Zealand International Film Festival	873	44
Harare	Zimbabwe International Film Festival	500	16
Harare	HIFA Harare International Festival of the Arts	10000	15
Harrogate	The Antique Fairs in Harrogate	625	30
Harstad	Festspillene I Nord / North Norway Festival	500	50
Haugesund	Norwegian International Film Festival	3571	41
Havana	Bienal de la Habana	600	11
Havana	Festival Internacional del Nuevo Cine Latinoamericano	45455	36
Hawke's bay	New Zealand International Film Festival	873	44
Healesville	TarraWarra Biennial	400	5
Helsinki	Helsinki Photography Biennial	700	32
Helsinki	ArtHelsinki Contemporary art fair	9243	8
Helsinki	Moving in november	500	25
Herning	Art Herning	4167	18
Hiroshima	Hiroshima International Animation Festival	6943	15
Hong Kong	Meeting Points 7	500	7
Hong Kong	AHAF: Asia Hotel Art Fair	2500	4
Hong Kong	Affordable Art Fair	7250	1
Hong Kong	AAIA Asia International Arts and Antiques Fair	2500	9
Hong Kong	Art Basel	15000	3
Hong Kong	Fine Art Asia	8750	10
Hong Kong	Hong Kong International Film Festival	31579	37
Hong Kong	Hong Kong Arts Festival	3030	43
Honolulu	Honolulu Biennial	600	1
Honolulu	Berlin & Beyond Film Festival	3333	2
Honolulu	Hawaii International Film Festival (HIFF)	17500	33
Houston	Foto Fest 2014	5952	15
Houston	WorldFest-Houston International Film Festival	2250	48
Hyderabad	ICFFI International Children's Film Festival India / The Golden Elephant	14286	19

Imola	Emilia Romagna Festival	185	14
Incheon	Incheon Women Artists' Biennale	500	5
Indianapolis	Heartland Film Festival	2400	23
Indianapolis	Indianapolis International Film Festival	1000	10
Innsbruck	Art Innsbruck	4500	19
Ischia	Ischia Film Festival	500	13
Istanbul	Contemporay Istanbul CI	16250	10
Istanbul	Istanbul Jazz Festival	1176	21
Istanbul	Istanbul Theatre Festival	607	19
Istanbul	Istanbul Film Festival	5600	33
Istanbul	Istanbul Music Festival	1071	42
Istanbul	International Istanbul Biennale	5113	13
Izmir	Izmir Festival	250	28
Jacksonville	Jacksonville Film Festival World Arts Film Fest	500	11
Jafre	VI Bienal de Jafre	250	6
Jakarta	Jakarta Biennale	18272	15
Jakarta	Jakarta International Film Festival	6000	16
Jecheon	Jecheon International Film Festival	1333	10
Jekaterinenburg	3 Ural industrial Biennial of contemporary art	2500	3
Jeonju	Jeonju International Film Festival	186	15
Jerusalem	Jerusalem Film Festival	950	30
Jerusalem	Israel Festival Jerusalem	1000	53
Jerusalem	Jerusalem Biennale for Contemporary Jewish art	109	1
Johannesburg	Tropfest	1000	1
Kampala	KLA ART	600	2
Kampala	Kampala art biennale	345	1
Karlsruhe	Art Karlsruhe	12500	10
Kassel	Documenta 13	7745	13
Kastav	Kastav Film Festival	1000	6
Kaunas	Kaunas International Film Festival	667	7
Kherson	10th Intl. Biennial of contemporary Textile Art	300	10
Kiev	Molodist	14444	44
Kigali	Rwanda Film Festival / Hillywood	1000	10
Kilkenny	Kilkenny Arts Festival	4500	41
Kingston	Jamaica International Reggae Film Festival	1200	6
Knokke	Art Nocturne Knokke	1111	39
Knutsford	Tatton Park Biennial	200	3
Kobe	KOBE Biennale 2015	800	4
Kochi	Kochi-Muziris Biennale 2014	3704	3
Konjic	D-0 ARK	188	2
Kortrijk	Next Festival EU	180	7
Kortrijk	Festival van Vlaanderen: Kortrijk	254	6
Kosice	International Festival of Local Televisions	833	20
Kuala Lumpur	Freedom Film Festival	1111	11
Kuala Lumpur	Kuala Lumpur Eco Film Festival	15333	6
Kuala Lumpur	Malaysia International Film Festival	2500	2
Kuopio	Kuopio Dance Festival	4000	46
Kuta	Balinale: Bali international Film Festival	1000	8
Kyiv (Kiev)	Kiev Biennale of Contemporary Art	1265	9
La Paz	Bienal Internacional de arte	1000	8
Labin	Industrial Art Biennial (IAB)	200	1
Lagorce	Fest'Arts	5000	23
Lagos	AFIRIperforma	1000	1
Landau	Film Festival Landau	250	12
Las Palmas de Gran Canaria	International Music Festival of the canary Islands	308	31
Las Vegas	Nevada International Film Festival	750	35
Lausanne	Lausanne Underground Film & Music Festival	1600	12
Le Havre	Arts Le Havre	600	4
Leeds	Leeds International Film Festival	2333	28
Leiden	Lisfe (Leiden International Short Film Experience)	3300	6
Leipzig	1st NSK Folk Art Biennale	1333	1
Les Peintures	Fest'Arts	5000	23
Libourne	Fest'Arts	3333	23
Liège	La dixième Biennale internationale de Gravure contemporaine de Liège	78	9
Liège	ImagéSanté	1667	11
Lille	Art Up!	7000	7
Lille	Next Festival EU	180	7
Lima	XII Bienal Internacional de Grabado	400	12
Limassol	International short film festival of cyprus	419	6
Limerick City	Biennial of Contemporary Art	738	36
Limerick City	Fresh Film Festival	1157	17
Lisboa	Arte Lisboa	333	16
Lisboa	Queer Film Festival Lisboa	1000	18
Little Rock	Little Rock Film Festival	3571	8

Liverpool	Independents Liverpool Biennial	8571	6
Liverpool	Liverpool Biennial	5357	8
Liverpool	LITF Liverpool International Theatre Festival	500	22
Liverpool	Page to Stage Festival	200	1
Ljubljana	Biennial of Graphic Arts	423	30
Ljubljana	Exodos Festival of contemporary performing arts	500	19
Ljubljana	Ljubljana Festival	712	62
Lleida (Lerida)	8a Biennial d'art Leandre Cristofol	60	8
Locarno	Festival del Film Locarno	15164	68
Lodz	Triennale Male Formy Grafiki	51	15
London	London Art Biennale 2015	3333	2
London	LIFT London International Festival of Theatre	1407	33
London	The London Open	703	2
London	Art15	15500	3
London	START Art Fair	2750	2
London	1:54 Contemporary African Art Fair	1250	2
London	Kinetica Art Fair	1250	6
London	the new Chelsea art fair	875	3
London	Asian Art in London	5000	17
London	Sunday-Fair	1500	3
London	BADA Antiques & Fine Art Fair	2643	96
London	Untitled Artist Fair	2500	10
London	Olympia international art and antiques fair	2409	42
London	Art Antiques London	1000	6
London	Pinta London : the modern and contemporary latin american show	1250	3
London	British Art Fair / 20/21 International Art Fair	4750	8
London	Affordable Art Fair	5250	17
London	Frieze Art Fair	15000	11
London	Frieze Masters	14000	3
London	London Art Fair	6139	27
London	London original print fair	5000	29
London	Masterpiece	5833	5
London	Brazilian Film Festival of London	2750	6
London	British Urban Film Festival	750	10
London	Human Rights Film Festival	1000	13
London	Let's All Be Free Film Festival	2000	2
London	London Asian Film Festival	1091	17
London	BFI London Film Festival	13583	58
London	London International Documentary Festival	1250	8
London	Raindance Film Festival	1234	11
London	Zero Film Festival	5000	3
London	Greenwich + Docklands International Festival	8889	18
London	Dance Umbrella	556	36
Los Angeles	MexiCali Biennial	41	3
Los Angeles	Made in L.A.	200	2
Los Angeles	World wide Art	3750	10
Los Angeles	LA Art show	12000	20
Los Angeles	Photo LA	2750	24
Los Angeles	Art Los Angeles Contemporary	2000	6
Los Angeles	FIAC : Foire Internationale d'art contemporain	7500	1
Los Angeles	Paris Photo	5333	3
Los Angeles	Photo Independent: the international exposition of contemporary photography	3333	2
Los Angeles	Indonesian Film Festival	500	1
Los Angeles	Human Rights Film Festival	2000	13
Los Angeles	Bel Air Film Festival BAFF	5000	7
Los Angeles	COLCOA	2222	16
Los Angeles	Dances With Films	1091	16
Los Angeles	Hollywood Film Festival	5000	17
Los Angeles	Independent Filmmakers' Showcase	533	17
Los Angeles	Indian Film Festival of Los Angeles	2000	11
Los Angeles	Los Angeles Film Festival	10222	20
Los Angeles	United Film Festival	1429	12
Los Angeles	HollyShorts Film Festival	1000	13
Los Angeles	New Media Film Festival	125	6
Los Angeles	International Family Film Festival	2000	20
Los Angeles	168 Film Festival	750	11
Luanda	Luanda Triennale	200	2
Lübeck	Hanse Art Kunstmesse	2500	14
Lubumbashi	Picha Biennale de Lubumbashi	500	3
Lucerne	Lucerne Festival at the piano	2222	75
Lucerne	Lucerne Festival at easter	2222	75
Lucerne	Lucerne Festival at summer	2667	75
Lugano	Culturescapes	909	12
Lulea	X-Border Art Biennial / Lulea Art Biennial	100	13

Luxembourg	Cineast	382	7
Lyon	La Biennale de Lyon	890	13
Maastricht	Affordable Art Fair	1875	2
Maastricht	European Fine Art Fair (TEFAF)	7400	40
Madison	Wisconsin Triennial	500	13
Madison	Wisconsin Film Festival	5000	15
Madrid	Estampa: contemporary art fair	12500	22
Madrid	Feriarte	3944	38
Madrid	Feria de arte contemporaneo Art Madrid	3333	9
Madrid	Feria de Antigüedades IFEMA ALMONEDA	2100	2
Madrid	SUMMA	2500	2
Madrid	ARCO International Contemporary Art Fair	14286	28
Mainz	Rheingau Music Festival	658	26
Maitland	Florida Film Festival	2500	24
Managua	IX Bienal de artes visuales de nicaragua / Reciclando la memoria: Retomando la Ciudad Perdida	500	9
Manchester	Asia Triennial Manchester	2143	14
Manchester	Insight Film Festival	1000	4
Manchester	247 Theatre Festival	500	10
Manhattan	New Museum Triennial	1000	2
Manila	Cinemanila International Film Festival	2000	16
Manila	Cinemalaya	1000	10
Manila	Metro Manila Film Festival	714	38
Mannheim	Internationales Film Festival Mannheim - Heidelberg	5455	63
Mar del Plata	Mar del Plata Film Festival	16667	29
Marfa	Marfa Film Festival	200	8
Marrakech	Marrakech Biennale	1265	5
Marrakech	Marrakech International Film Festival	27778	14
Marseille	Salon des antiquaires et galleries d'art	1333	2
Marseille	Festival de Marseille	1187	19
Masterton	New Zealand International Film Festival	873	44
Mbabane	Bush Fire	6667	15
Mechelen	Contour: Biënnale voor bewegend beeld	179	6
Melbourne	Indonesian Film Festival	150	9
Melbourne	Human Rights Arts and Film Festival	1429	9
Melbourne	Melbourne International Film Festival	1176	64
Melbourne	Scandinavian Film Festival	1000	1
Melbourne	Melbourne Fringe Festival	13158	32
Melbourne	Melbourne Underground Film Festival	50	17
Mercosul	Bienal do Mercosul	8738	9
Mersin	Mersin International Music Festival	625	13
Mexico city	Material fair	1875	1
Mexico city	Affordable Art Fair	7500	3
Mexico city	Zona Maco	10250	2
Miami	Scope Miami Beach	8000	14
Miami	Select Fair	1667	2
Miami	Spectrum Fair	3600	1
Miami	Art Untitled	1000	3
Miami	Art Wynwood	6500	4
Miami	Art Miami	7667	25
Miami	Red dot art fair miami	929	8
Miami	Aqua Art Miami	1600	10
Miami	INK Miami Art Fair	857	9
Miami	Nada Miami Beach	4500	12
Miami	CONTEXT Art Miami	3600	2
Miami	Art Basel	18750	14
Miami	Pinta Miami: the modern and contemporary latin american art show	3000	8
Miami	Pulse Miami Beach	2500	10
Miami	Miami Project	4167	4
Miami	Miami Short Film Festival	625	12
Miami	Miami International Film Festival	7000	32
Milan	Miart	13373	20
Milan	Affordable Art Fair	3000	7
Milan	Milan Image Art Fair MIA	6667	4
Mill Valley	Mill Valley Film Festival	3636	37
Minneapolis	Minneapolis St. Paul International Film Festival	4412	31
Missoula	Big Sky Documentary Film Festival	1818	12
Monaco	PAM: Point art monaco	1600	10
Monaco	Art Monaco	500	6
Monrovia	Action On Film International Film Festival	556	10
Monterrey	Bienal Monterrey	500	11
Montevideo	Biennal de Montevideo	1000	2
Montevideo	Festival Cinematográfico Intenacional del Uruguay	1667	32
Montpellier	Green Mountain Film Festival	170	17
Montpellier	Montpellier Danse Festival	1786	34

Montreal	La Biennale de Montréal	685	9
Montreal	Biennale International d'art numérique (BIAN)	1000	2
Montreal	Papier 14	5667	5
Montreal	Fantasia Festival	6579	18
Montreal	Festival du Nouveau Cinéma	10000	43
Montreal	Montreal World Film Festival	32500	37
Montreal	The YoungCuts Film Festival	313	13
Monza	Biennale Giovani Monza	130	6
Moscow	Moscow International Biennale for young art	1000	4
Moscow	Meeting Points 7	200	7
Moscow	Moskou biennale of contemporary art	6216	5
Moscow	Russian Antique Salon	2000	37
Moscow	Moscow world fine art	5000	10
Moscow	Moscow International film festival	1500	36
Moscow	International Festival of Dance Theatre	286	13
Moscow	Chekhov International theatre Festival	300	12
Moss	Momentum	300	7
Mostar	Mostar Film Festival	175	1
Motovun	Motovun Film Festival	3200	17
Mumbai	Mumbai Women's International Film Festival	1000	2
Mumbai	Mumbai Film Festival	875	16
Mumbai	Mumbai International Queer Film Festival	1507	5
Munich	HIGHLIGHTS	3333	6
Munich	Kunst und Antiquaeten messe	1000	45
Münster	Skulptur Projekte Münster	5425	5
Nagoya	Aichi Triennale	7848	2
Nairobi	Human Rights Film Festival	1000	13
Namen	Antica Namur	3111	38
Nantes	Three Continents Festival	1000	36
Nantucket	Nantucket Film Festival	1333	20
Naperville	Naperville Independent Film Festival	625	7
Naples	Naples Art, Antique and jewelry show	3200	2
Naples	Festival del Cinema all' Aperto	545	15
Nardo	EIFF Ecologico International Film Festival	250	7
Nashville	Nashville Film Festival	4250	45
Nassau	Bahamas International Film Festival	1000	11
Navi Mumbai	Navi Mumbai International Film Festival	1000	2
Nelson	New Zealand International Film Festival	873	44
Neuchâtel	Neuchâtel International Fantastic Film Festival	3667	14
New Delhi	The Triennale-India	200	12
New Delhi	India Art Fair	5000	6
New Orleans	Prospect New Orleans	322	3
New Orleans	Prospect New Orleans	414	3
New Orleans	New Orleans Film Festival	2750	25
New Plymouth	New Zealand International Film Festival	873	44
New York City	A Different Kind Of Order: The ICP Triennial	200	4
New York City	Performa 12	1250	13
New York City	Whitney Biennial	1686	40
New York City	New York Biennale Art	5000	2
New York City	Scope New York	3750	14
New York City	Salon Zürcher	214	9
New York City	The Fair Outsider Art	1000	2
New York City	Prints Gone Wild	800	8
New York City	Independent	3750	5
New York City	Select Fair	2000	1
New York City	Metro Show NYC	251	3
New York City	Fountain Art Fair	1667	9
New York City	The AIPAD Photography Show	2875	35
New York City	downtown fair	2500	1
New York City	PAPER art fair	1000	1
New York City	Affordable Art Fair	2400	12
New York City	NY Art antiques and jewelry show	1250	1
New York City	Cutlog	4500	7
New York City	The International Fine Art & Antiques Show	2857	26
New York City	The salon Art + Design	1400	2
New York City	The NY Ceramics and Glass fair	1375	9
New York City	Winter Antiques Show	2500	61
New York City	ADAA The Art Show	4000	27
New York City	Artexpo New York	3750	36
New York City	Verge art fair	1375	6
New York City	The armory show	15000	16
New York City	Frieze Art Fair	11250	4
New York City	ifpda / printfair	1750	23
New York City	Art Market Hamptons	6250	4
New York City	Pulse New York	2500	10
New York City	Under the radar festival	1083	10

New York City	Asian American International Film Festival	1500	37
New York City	Human Rights Film Festival	1000	13
New York City	Zero Film Festival	5000	5
New York City	Havana Film Festival in New York	1389	15
New York City	City University Film Festival	200	6
New York City	Margaret Mead Film festival	125	38
New York City	New York Asian Film Festival	1111	13
New York City	New York Film Festival	3750	52
New York City	New York International Children's Film Festival	1087	17
New York City	New York Polish Film Festival	488	10
New York City	Tribeca Film Festival	10000	12
New York City	Zero Film Festival	5000	7
New York City	Tropfest	22000	3
New York City	Dream Up Festival	1667	5
New York City	United Solo Theatre Festival	500	5
New York City	Fall For dance	2045	11
New York City	NYC Independent Film Festival	457	6
Newport Beach	California-Pacific Triennial	4126	1
Newport Beach	Newport Beach Film Festival	6625	15
Niagara-On-the-Lake	Shaw Festival	1406	53
Nicosia	CYIFF Cyprus International Film festival	88	8
Nis	Free Net World Film Fest	500	7
Oaxaca	Oaxaca Film Fest	1778	5
Odense	Odense International Film Festival	2981	39
Odessa	Odessa Biennale of Contemporary Art	300	4
Oldenburg	Oldenburg International Film Festival	3000	21
Oran	Mediterranean Biennale of contemporary Art of Oran	800	3
Orlando	Orlando Film Festival	1500	8
Osaka	Dojima River Biennale: Little Water	150	3
Osaka	Indian Film Festival Japan	3571	2
Osaka	Art Osaka	2000	12
Oslo	Norsk Skulpturbiennale	400	3
Oslo	Norsk Skulpturbiennale	74	8
Ottawa	Inside Out Toronto Lesbian and Gay Film and Video Festival	840	13
Ottawa	Canada Dance Festival	700	27
Ottawa	Mirror Mountain Film Festival	500	1
Ouagadougou	FESPACO Panafrican Film and Television Festival of Ouagadougou	944	24
Oulu	Oulu Theatre Festival for young audiences	1250	34
Palm Beach	American International Fine Art Fair	3333	19
Palm Beach	art palm beach	5600	18
Palm Springs	Palm Springs International Film Festival	13500	26
Palm Springs	American Documentary Film Festival and Film Fund	1500	4
Palmerston North	New Zealand International Film Festival	873	44
Panaji	International Film Festival of India	6000	45
Panama city	Bienal del sur en panama	400	1
Paris	Biennale de Belleville 3	500	3
Paris	La Triennale	3333	3
Paris	Salon Zürcher	1429	8
Paris	(OFF)ICIELLE	1200	1
Paris	The Fair Outsider Art	1500	2
Paris	YIA Young International Artists	5000	4
Paris	Drawing Now	4200	9
Paris	Salon d'Automne	4250	111
Paris	Variation: Paris media art fair	2143	9
Paris	Slick art fair Paris	8300	8
Paris	MACParis	3750	30
Paris	Art Paris Art Fair	12000	16
Paris	Fotofever : photography art fair	4167	3
Paris	FIAC : Foire Internationale d'art contemporain	18386	40
Paris	Paris Photo	13810	18
Paris	Festival du Film Merveilleux et Imaginaire	2000	5
Paris	FISDN: Festival International Suignes de Nuit	250	13
Park City	Slamdance Film Festival	1286	19
Park City	Sundance Film Festival	4545	34
Parma	Gotha Parma	722	21
Perth	Human Rights Arts and Film Festival	1071	9
Perth	Scandinavian Film Festival	1000	1
Perth	Perth International Arts Festival	12000	60
Philadelphia	The Philadelphia Antiques Show	1333	42
Philadelphia	Israeli Film Festival of Philadelphia	455	18
Philadelphia	Philadelphia Film Festival	1500	23
Philadelphia	Philadelphia Asian American Film Festival	900	6
Philadelphia	Project Twenty1 Film Festival	143	8
Phnom Penh	Phnom Penh International Film Festival	800	1
Pilsen	9th International Biennial of Drawing Pilsen	13	9

Pine City	Highway 61 Film Festival	1000	3
Pittsburgh	Pittsburgh Biennial	583	10
Pittsburgh	Carnegie International	1079	40
Pittsburgh	Three Rivers Film Festival	625	32
Ploiesti	Ploiesti International Film Festival	621	4
Plymouth	Plymouth Film Festival	50	2
Ponte San Nicolo	BRIDGE Short Film Festival	500	8
Port Elizabeth	Tropfest	1000	1
Port of Spain	Trinidad and Tobago Film Festival	500	8
Port-au-Prince	Ghetto Biennale	400	3
Portland	KahBang Film Festival	3125	6
Portland	Northwest Film & Video Festival	625	41
Portland	Portland International Film Festival	2375	38
Portland	Portland Jewish Film Festival	179	22
Portland	Portland 2014	47	3
Porto	Douro Film Harvest	909	6
Porto	Fantasporto	5239	35
Pozega	Croatian Minute Movie Cup	200	20
Poznan	Mediations Biennale Poznan	541	4
Prague	Prague Biennale	259	6
Prague	Prague Quadrennial of performance design and space	5000	13
Prague	One World Film Festival	11700	17
Prague	International Festival of Contemporary Dance and Movement	180	26
Prague	Theatre TANEC PRAHA		
Prague	Czech dance platform	500	20
Pretoria	Tropfest	1000	1
Providence	Ivy Film Festival	1000	13
Providence	New England Festival of Ibero American Cinema	167	4
Providence	Rhode Island International Film Festival	4797	17
Provincetown	Provincetown International Film Festival	2000	17
Puerto del Rosario	International Music Festival of the canary Islands	21	31
Pula	Pula Film Festival	3513	61
Punta del Este	Festival Intenacional de Cine de Punta del Este	10000	17
Pyongyang	Pyongyang International Film Festival	875	14
Qalandiya	Qalandiya International	500	2
Québec	Manif d'art: the Québec city Biennial	1629	7
Ramallah	Riwaq Biennial	50	5
Ramsgate	The Whitstable Biennale	2317	7
Rauma	Rauma Biennale Balticum	44	15
Recklinghausen	Ruhrfestspiele	2000	70
Rennes	PLAYTIME Biennale d'art contemporain	836	4
Reykjavik	Reykjavik International Film Festival	2000	10
Reykjavik	Reykjavik arts festival	3464	29
Riga	Sculpture Quadrennial Riga	200	11
Rijeka	Festival of Tolerance	100	8
Rimini	Emilia Romagna Festival	185	14
Rio de Janeiro	ArtRio 2014	13000	4
Rio de Janeiro	Anima Mundi	5411	22
Rio de Janeiro	Rio de Janeiro International Film Festival	16667	16
Rio de Janeiro	Panorama Rio Dança	1176	12
Rochester	High Falls Film Festival	1375	12
Rome	The road to contemporary art	16667	6
Rome (Georgia)	The Rome International Film Festival	1750	11
Rotterdam	RAW Art Fair	3000	2
Rotterdam	Art Rotterdam	5625	16
Rotterdam	International Film Festival Rotterdam	26091	44
Rotterdam	Kunstenfestival Motel Mozaïque	4000	14
Rovaniemi	X-Border Art Biennial / Lulea Art Biennial	100	13
Sacramento	Sacramento Film and Music Festival	1000	15
Saint Louis	Great Rivers Biennial	450	5
Sakhnin	The Mediterranean Biennale in Sakhnin	101	2
Salto	Bienal de Salto	400	10
Salvador	Bienal da Bahia	500	3
Salzburg	Salzburg Festival	3202	94
Salzburg	Whitsun Festival	36028	94
San Antonio	San Antonio Film Festival	1667	20
San Diego	Human Rights Film Festival	1000	13
San Diego	San Diego Film Festival	5000	13
San Diego	San Diego Black Film Festival	8333	12
San Diego	Art San Diego	3000	3
San Francisco	Fine Print Fair	10000	5
San Francisco	Art Market San Francisco	6250	4
San Francisco	Disposable Film Festival	1500	7
San Francisco	Frameline Film Festival	5727	38
San Francisco	San Francisco Frozen Film Festival	300	8
San Francisco	San Francisco Green Film Festival	1333	5

San Francisco	San Francisco International Asian American Film Festival	2500	32
San Francisco	San Francisco International Film Festival	5467	57
San Francisco	San Francisco Jewish Film Festival	1429	34
San Francisco	Superfest International Disability Film Festival	225	44
San Jose	Zero1 Biennial	1932	5
San Jose	Cinequest Film Festival	7143	24
San Juan	Triennial Poli/Grafica	700	3
San Juan	Puerto Rico Horror Film Fest	875	7
San Miguel de Allende	Guanajuato International Film Festival	12523	17
San Sebastian	San Sebastián International Film Festival	16901	62
San Sebastian de la Gomera	International Music Festival of the canary Islands	10	31
Sanford	Love Your Shorts Film Festival	1250	5
Santa Barbara	Santa Barbara International Film Festival	7818	30
Santa Cruz de Tenerife	International Music Festival of the canary Islands	238	31
Santa Fe	Sitelines 2014	11	1
Santa Fe	37th annual antique indian art show	833	34
Santa Fe	Art Santa Fe	1250	15
Santa Monica	Independent Filmmakers' Showcase	533	17
Santarcangelo di Romagna	Santarcangelo Festival Internazionale del teatro in piazza	500	44
Santiago	Bienal de video y artes mediales	1000	11
Santorini	Santorini Biennial	35	2
Sao Paulo	Sao Paulo Biennial	6667	31
Sao Paulo	SP Arte Sao Paulo International Art Fair	1750	9
Sao Paulo	Anima Mundi	5000	22
Sao Paulo	Mostra São Paulo International Film Festival	12857	38
Sao Tomé	7th Biennale of Art and Culture of São Tomé e Príncipe	100	7
Sapporo	Sapporo International Art Festival	400	1
Sarajevo	Sarajevo Film Festival	11111	10
Sarajevo	Festival of Tolerance	397	8
Sarajevo	International Festival Sarajevo Winter	4000	31
Sarasota	Sarasota Film Festival	3000	15
Saugatuk	Waterfront Film Festival	6667	15
Schwerin	filmkunstfest Mecklenburg-Vorpommern	2333	13
Seabrook	Gulf Coast Film and Video Festival	1000	17
Seattle	NFFTY: National Film Festival for Talented Youth	3000	10
Seattle	Maelstrom International Fantastic Film Festival	192	6
Seattle	Science Fiction Fantasy Short Film Festival	800	8
Seattle	Seattle International Film Festival	6250	41
Sedona	ILLUMINATE Film Festival	2250	2
Sedona	Sedona Film Festival	1050	20
Sendai	Lucerne Festival ARK NOVA	500	2
Seoul	SeMA Biennale Mediacity Seoul 2014	1617	8
Seoul	AHAF: Asia Hotel Art Fair	3333	7
Seoul	KIAF Korea International Art Fair	16000	13
Setouchi	Art Setouchi	9911	2
Setubal	Festroia	50	30
Sevastopol	Sevastopol International Film Festival	571	3
Severomorsk	X-Border Art Biennial / Lulea Art Biennial	100	13
Shanghai	Shanghai Biennale	6202	9
Shanghai	Shanghai contemporary	11667	9
Shanghai	Photo Shanghai	8333	2
Shanghai	China Shanghai International Arts Festival	6667	16
Shanghai	Shanghai International Film Festival	33333	17
Sharjah	Sharjah Biennial 12	978	11
Shenzhen	Shenzhen Bi-city Biennale of Urbanism/Architecture	1429	5
Shepherdstown	Contemporary American Theater Festival	609	25
Shiryaevo	VIII Shiryaevo Biennale of contemporary art - Screen: Between Europe and Asia	150	8
Sibiu	Sibiu International Theatre Festival	62000	22
Sierre	LABEL'ART: Triennale Valais Wallis	250	3
Singapore	Singapore Biennale 2013	1633	4
Singapore	Affordable Art Fair	3325	5
Singapore	MIA International photography and design fair	6250	4
Singapore	Art Stage Singapore	11425	4
Singapore	Japanese Film Festival Singapore	1471	30
Singapore	Singapore International Film Festival	1000	25
Singapore	Singapore International Festival of Arts	733	39
Sinop	International Sinop Biennial	600	5
Sitges	Sitges Film Festival	10000	47
Skopje	42nd world gallery of drawing	229	42
Skopje	Skopje Film Festival	2182	13
Skopje	Cinedays	1000	14

Skopje	MakeDox Creative Documentary Film Festival	714	6
Sochi	Winter International Arts Festival	500	15
Sofia	Sofia International Film Festival	1389	18
Sofia	Water Tower Art Fest	300	8
Solothurn	Solothurn Film Festival	7500	50
Sonoma	Sonoma Valley Film Festival	2000	18
St - Petersburg	Manifesta: European Biennial of Contemporary Art	12082	1
St - Petersburg	Message 2 Man	500	25
St - Petersburg	DOCUTAH Southern Utah International Documentary Film Festival	2400	5
St - Petersburg	Sunscreen Film Festival	1500	10
Starkville	Magnolia Independent Film Festival	100	17
Stockholm	Affordable Art Fair	3625	3
Stockholm	Antikmassan	7625	36
Stockholm	MARKET	2000	10
Stockholm	Supermarket Art Fair	438	9
Stockholm	Stockholm International Film Festival	22667	24
St-Paul	Minneapolis St. Paul International Film Festival	4412	31
Strasbourg	ST'ART - Strasbourg	6500	18
Strasbourg	Festival Européen du Film Fantastique de Strasbourg	1300	7
Subotica	International Festival of Children's Theater	3000	21
Svolvaer	Lofoten International Art Festival (LIAF)	158	8
Sydney	19th Biennale of Sydney: you imagine what you desire	31150	19
Sydney	Human Rights Film Festival	1000	13
Sydney	Sydney Contemporary	7203	2
Sydney	Indonesian Film Festival	167	9
Sydney	Adelaide Film Festival	15000	12
Sydney	Human Rights Arts and Film Festival	1429	9
Sydney	Lebanese Film Festival	93	4
Sydney	Mardi Gras Film Festival / Queer Screen	1100	21
Sydney	Sydney Film Festival	12833	60
Sydney	Scandinavian Film Festival	1000	1
Sydney	Sydney Underground Film Festival	1000	7
Sydney	Sydney Festival	6528	38
Sydney	People For Peace Film Festival	200	1
Taichung	Asian Art Biennial: Everyday Life	1908	4
Taipei	Art Taipei	8000	20
Taipei	Golden Horse Film Festival	2273	51
Taipei	Kuandu Biennale	2564	4
Taipei	Taipei Biennial	1452	8
Tallinn	Tallinn Print Triennial	92	16
Tallinn	Tallinn Black Nights Film Festival	25	18
Tamaulipas	Biennial of the Frontiers	400	3
Tampa	Gasparilla International Film Festival	2833	9
Taormina	Taormina Film Fest	750	60
Tárrega	FiraTárrega	36750	34
Tauranga	New Zealand International Film Festival	873	44
Tbilisi	Tbilisi Triennial	300	1
Tbilisi	Tbilisi Interntaional Festival of theatre	306	6
Teaneck	Northeast Film Festival	1500	2
Tegucicalpa	Honduras Biennial	1000	5
Tehran	Fajr International Film Festival	909	32
Tehran	Fadjr International Theater Festival	300	33
Telluride	Mountainfilm in Telluride	1500	35
Telluride	Telluride Film Festival	833	41
Tetovo	WatchOut!	1000	3
Texas	Texas Contemporary	5000	4
Thessaloniki	Thessaloniki biennale of contemporary art	320	4
Thessaloniki	Thessaloniki International Film Festival	3000	55
Thiruvananthapuram	International Film Fest of Kerala	875	19
Thrissur	ViBGYOR International Short and Documentary Film Festival	500	10
Thrissur	International Film Festival of Thrissur	83	9
Thrissur	International Theatre Festival of Kerala	500	7
Timaru	New Zealand International Film Festival	873	44
Tokamachi City	Echigo-Tsumari Art Triennale	4888	5
Tokyo	Art Fair Tokyo	14667	10
Tokyo	FILMeX Tokyo	1111	14
Tokyo	Tokyo International Film Festival	2222	27
Tokyo	Indian Film Festival Japan	3333	2
Torino	Artissima: International Art Fair of contemporary art	15000	21
Torino	Torino film festival	10222	32
Toronto	Art Toronto: International Art Fair	5000	14
Toronto	Feature contemporary art fair	1000	1
Toronto	Toronto Art Expo	1250	13
Toronto	Love Art Fair	1500	1
Toronto	Human Rights Film Festival	200	13

Toronto	CFC Worldwide Short Film Festival	2500	18
Toronto	Hot Docs Canadian International Documentary Festival	17818	21
Toronto	Inside Out Toronto Lesbian and Gay Film and Video Festival	3182	13
Toronto	ReelHeART International Film Festival	6667	10
Toronto	ReelWorld Film Festival	3000	14
Toronto	Toronto After Dark Film Festival	1222	8
Toronto	Toronto International Film Festival	45455	39
Toronto	Toronto Student Film Festival	250	9
Toronto	Toronto Reel Asian International Film Festival	1091	18
Toronto	CanAsian Dance Festival	800	17
Tournai	Next Festival EU	180	7
Traverse City	Traverse City Film Festival	32750	10
Trebon	Anifilm	3667	6
Trento	Trento Film Festival	909	62
Tricase	Salento International Film Festival	1000	13
Trois Rivières	Biennale internationale d'estampe contemporain	200	8
Tsunan Town	Echigo-Tsumari Art Triennale	4888	5
Turgutreis	D-MARIN TURGUTREIS INTERNATIONAL classical music festival	5375	10
Turku	Turku Biennial	162	6
Ulaanbaatar	Land art Mongolia 2014	338	3
Urumqi	1st Xinjiang International Arts Biennale	12000	1
Usedom	Usedomer Musik Festival	400	21
Uster	Culturescapes	364	12
Utrecht	Pluk de nacht	514	1
Utrecht	Springdance	1500	31
Valdivia	Valdivia International Film Festival	1000	21
Valencia	12a Biennal Martinez Guerricabeitia	92	12
Valenciennes	Next Festival EU	180	7
Valetta	The Malta Arts Festival	3889	9
Vancouver	Vancouver Biennale	616	3
Vancouver	Canada International Film Festival	125	8
Vancouver	DOXA Documentary Film Festival	909	16
Vancouver	Vancouver Asian Film Festival	1000	18
Vancouver	Vancouver International Film Festival	9000	33
Vancouver	Vancouver Queer Film Festival	1000	26
Vancouver	Dancing on the Edge	300	26
Vancouver	PuSh international performing festival	1200	10
Vancouver	Vancouver International Dance Festival	500	15
Varna	Varna International Music Festival	50	88
Venice	La Biennale de Venezia: architettura	1349	14
Venice	La Biennale de Venezia: music	909	58
Venice	La Biennale de Venezia: theatre	700	3
Venice	La Biennale de Venezia: art	1523	56
Venice	La Biennale de Venezia: danza	1000	9
Venice	Venice Film Festival	5455	72
Ventura	Ventura film festival	2000	10
Verona	Art Verona: art project fair	4000	10
Vienna	Meeting Points 7	114	7
Vienna	WIKAM	3125	20
Vienna	Art Austria	4000	8
Vienna	Vienna International Art Fair	5750	10
Vienna	Vienna Independent Shorts	1533	12
Vienna	Viennale	6547	54
Vienna	Festival of Tolerance	287	8
Vienna	Impulstanz	3333	30
Vila Nova de Cerveira	Cerveira Bienal	1736	17
Vilnius	Baltic Triennial of International Art	37	12
Vilnius	Art Vilnius	4250	5
Vilnius	Vilnius International Film Festival	7128	20
Vilnius	Vilnius Festival	400	17
Vladivostok	Pacific Meridian	29	12
Völklingen	Urban Art Biennale	556	15
Warsaw	International Film Festival Jewish Motifs	1000	10
Warsaw	Warsaw International Film Festival	7300	30
Washington	BAM Biennial	200	3
Washington	DC Shorts Film Festival and screenplay competition	880	13
Washington	Capital Art Fair	325	35
Washington	DC Palestinian Film and Arts Festival	1000	4
Washington	GI Film Festival	1000	10
Wellington	Documentary Edge Festival	909	10
Wellington	New Zealand International Film Festival	873	44
Westminster	Viet Film Fest	1000	8
Whistler	Whistler Film Festival	2000	15
Wichita	Tallgrass Film Festival	2400	12

Wiesbaden	Rheingau Music Festival	658	26
Windsor	Windsor contemporary art fair	3500	10
Winston-Salem	RiverRun International Film Festival	1636	17
Woodstock	Woodstock Film Festival	3000	15
Wroclaw	WRO Media Art Biennale	1100	15
Wroclaw	New Horizons International Film Festival	60	15
Yamagata	Yamagata International Documentary Festival	88	25
Yangon	Human Rights Human Dignity International Film Festival	1840	3
Yangon	Wathann Film Festival	200	4
Yerevan	Golden Apricot - Yerevan International Film Festival	5000	11
Yerevan	Yerevan Perspectives International Music Festival	95	15
Yinchuan	Western China international Art biennale	1000	2
Yogyakarta	Jogja Biennale	257	12
Yokohama	Yokohama Triennale 2014	2404	5
Yokohama	Tropfest	8000	1
Yorkton	Yorkton Film Festival	10000	68
Zagreb	Music Biennale Zagreb	1000	28
Zagreb	Meeting Points 7	100	7
Zagreb	Subversive Film Festival	1000	7
Zagreb	ZagrebDox	2222	10
Zagreb	Zagreb Film Festival	3750	11
Zagreb	Festival of Tolerance	5000	8
Zagreb	World theater festival Zagreb	500	12
Zanzibar City	Zanzibar International Film festival	11111	17
Zlin	Zlin Film Festival	15833	55
Zurich	Manifesta: European Biennial of Contemporary Art	100	1
Zurich	Kunst Zuerich	6250	20
Zurich	Contemporary art fair Zurich	6000	17
Zurich	Human Rights Film Festival	1000	13
Zurich	Zurich film festival	7182	10
Zurich	International Arab Film Festival	90	2
Zurich	Zürcher Theater spektakel	1389	36
Zurich	Festspiele Zürich	3662	19
Zurich	Culturescapes	909	12

* daily visitor numbers written in italics are estimates.

Appendix III: Labor market nomenclature used to calculate creative employment

Two recent publications, the World Cities Culture Report (WCCR, 2013) and the Americans for the Arts Report (2015), provide reliable information on the employment in the creative industries for more than 40 cities in the database. As regards the definition of the creative industries within the WCCR, the respective methodologies of each different city are used. For the remainder of the cities, the occupation types that are considered in the Americans for the Arts report are taken over to calculate the remaining gaps. Since different countries use different nomenclature systems, the most commonly used systems (and the relevant classes within the scope of this research) are summarized below.

ISIC (rev.4)²⁸:

- 5811 - Book publishing
- 5812 - Publishing of directories and mailing lists
- 5813 - Publishing of newspapers, journals and periodicals
- 5819 - Other publishing activities
- 5820 - Software publishing
- 5911 - Motion picture, video and television programme production activities
- 5912 - Motion picture, video and television programme post-production activities
- 5913 - Motion picture, video and television programme distribution activities
- 5914 - Motion picture projection activities
- 5920 - Sound recording and music publishing activities
- 7110 - Architectural and engineering activities and related technical consultancy
- 7310 – Advertising
- 7410 - Specialized design activities
- 7420 - Photographic activities
- 9000 - Creative, arts and entertainment activities
- 9101 - Library and archives activities
- 9102 - Museums activities and operation of historical sites and buildings

ANZSIC²⁹:

Class 5411 Newspaper Publishing

²⁸ to be consulted here: <http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=27> (last checked on 12/3/15)

²⁹ to be consulted here:

[http://www.abs.gov.au/ausstats/abs@.nsf/Previousproducts/1292.0Contents12006%20\(Revision%201.0\)?opendocument&tabname=Summary&prodno=1292.0&issue=2006%20\(Revision%201.0\)&num=&view=](http://www.abs.gov.au/ausstats/abs@.nsf/Previousproducts/1292.0Contents12006%20(Revision%201.0)?opendocument&tabname=Summary&prodno=1292.0&issue=2006%20(Revision%201.0)&num=&view=) (last checked on 12/3/15)

Class 5412 Magazine and Other Periodical Publishing
Class 5413 Book Publishing
Class 5414 Directory and Mailing List Publishing
Class 5419 Other Publishing (except Software, Music and Internet)
Class 5511 Motion Picture and Video Production
Class 5512 Motion Picture and Video Distribution
Class 5513 Motion Picture Exhibition
Class 5514 Post-production Services and Other Motion Picture and Video Activities
Class 5521 Music Publishing
Class 5522 Music and Other Sound Recording Activities
Class 6921 Architectural Services
Class 6940 Advertising Services
Class 6991 Professional Photographic Services
Class 5610 Radio Broadcasting
Class 5621 Free-to-Air Television Broadcasting
Class 5622 Cable and Other Subscription Broadcasting
Class 8910 Museum Operation
Class 9001 Performing Arts Operation
Class 9002 Creative Artists, Musicians, Writers and Performers
Class 9003 Performing Arts Venue Operation

NOC³⁰:

5111 Librarians
5112 Conservators and curators
5113 Archivists
5121 Authors and writers
5122 Editors
5123 Journalists
5131 Producers, directors, choreographers and related occupations
5132 Conductors, composers and arrangers
5133 Musicians and singers
5134 Dancers
5135 Actors and comedians
5136 Painters, sculptors and other visual artists
5211 Library and public archive technicians
5212 Technical occupations related to museums and art galleries

³⁰ to be consulted here: <http://www5.hrsdc.gc.ca/NOC/English/NOC/2011/OccupationIndex.aspx> (last checked on 12/3/15)

5221 Photographers
5222 Film and video camera operators
5223 Graphic arts technicians
5224 Broadcast technicians
5225 Audio and video recording technicians
5226 Other technical and co-ordinating occupations in motion pictures, broadcasting and the performing arts
5227 Support occupations in motion pictures, broadcasting, photography and the performing arts
5231 Announcers and other broadcasters
5232 Other performers, n.e.c.
5241 Graphic designers and illustrators
5242 Interior designers and interior decorators
5243 Theatre, fashion, exhibit and other creative designers
5244 Artisans and craftspersons
5245 Patternmakers - textile, leather and fur products

Appendix IV: City-branding museum architecture: internet lists and summary

<http://blogof.francescomugnai.com/2013/09/architecture-at-its-best-35-of-the-most-wonderful-and-original-museum-designs-of-the-world/>

<http://flavorwire.com/306801/the-20-most-beautiful-museums-in-the-world/3>

http://www.architecturaldigest.com/architecture/2014-02/tallest-best-new-buildings-towers-in-2014-slideshow_slideshow_Shanghai-Tower_5

<http://www.designyourway.net/blog/inspiration/20-museums-that-are-fine-architectural-examples/>

<http://weburbanist.com/2009/01/12/creative-modern-and-postmodern-museum-designs/>

<http://www.wsj.com/articles/five-architects-five-state-of-the-art-museums-1412180218>

<http://www.e-architect.co.uk/museum-buildings>

<http://www.complex.com/style/2011/04/the-10-coolest-museum-buildings/6>

<http://edition.cnn.com/2014/04/29/world/asia/china-museums/>

<http://blog.artsnapper.com/frank-gehry-architectural-structures/>

<http://impressivebuildings.com/most-extravagant-museums-in-the-world/>

<http://www.weekendnotes.com/14-museums-of-the-world-with-extravagant-architecture/>

<http://designlike.com/2012/01/15/10-futuristic-museums-of-contemporary-art-around-the-world/>

CITY	NUMBER	MUSEUMS
New York	6	Solomon R. Guggenheim museum, new art museum, Rose Center for Earth & Space, Whitney Museum of American Art, MoMA, the Queens Museum, American Folk Art Museum
London	3	British Museum's World Conservation and Exhibitions Centre, British Museum, Tate Modern
Paris	5	Arab World Institute, Musée D'Orsay, Louvre, Centre Pompidou, Quai Branly Musée
Berlin	3	German Historical Museum, Jewish Museum, Guggenheim Museum
Toronto	4	Royal Ontario Museum, Art Gallery of Ontario, Aga Khan Museum, Gardiner Museum of Ceramic Art
Los Angeles	2	Getty Center, Los Angeles County Museum of Art
Sydney	2	Museum of Contemporary arts, Australian National Maritime Museum
Miami	2	Pérez Art Museum, Miami Science Museum
Brussels	1	The Atomium
Edinburgh	1	National Museum of Scotland
San Francisco	4	Museum of Performance And Design, M.H. de Young Museum, San Francisco Museum of Modern Art, Contemporary Jewish Museum
Hong Kong	2	Hong Kong Museum of Art, Hong Kong Space Museum
Montréal	1	Montreal Museum of Fine Arts
Basel	2	Museum der Kulturen, Vitra Design Museum
Buenos Aires	1	<i>Contemporary Art Museum*</i>
Madrid	3	Museum ABC, Prado Museum, Thyssen-Bornemisza Museum
Amsterdam	2	Van Gogh Museum, Stedelijk Museum
Vienna	2	Natural History Museum, Contemporary Art Museum
Shanghai	6	Long Museum, Power Station of Art, China Pavilion, Rockbund Museum, Museum of Glass, the Shanghai Museum
Zurich	1	Heidi Weber Museum/Centre le Corbusier
São Paulo	1	MASP
Venice	1	Guggenheim Museum
Vancouver	1	Vancouver Museum
Melbourne	1	Melbourne Museum

Rio de Janeiro	3	Museum of Tomorrow, Niterói Contemporary Art Museum, Museum of Modern Art
Chicago	1	Museum of contemporary art
Boston	1	ICA Institute of Contemporary Art
Belgrade	1	Aviation Museum
Taipei	2	Taipei Fine Arts Museum, <i>New Taipei Museum of Art*</i>
Zagreb	1	Zagreb Museum of Contemporary Art
Tokyo	5	Gotoh Museum, Suntory Museum of Art, National museum of Western Art, National Art Museum, Museum of contemporary Art
San Sebastian	1	San Telmo Museum
Helsinki	2	National Museum of Finland, Kiasma Museum of contemporary art
Cologne	1	Rautenstrauch-Joest Museum
Seattle	1	Experience Music Project
Barcelona	1	Museum of contemporary Art
Athens	1	New Acropolis Museum
Seoul	3	Leeum Samsung museum of art, National Museum of Korean Contemporary History, Dongdaemun Design Plaza
Liverpool	1	Museum of Liverpool
Lucerne	1	Kunstmuseum Luzern
Abu Dhabi	3	<i>Zayed National Museum, Abu Dhabi Louvre Museum, Guggenheim Museum*</i>
Beijing	5	Design Museum, Tree Art Museum, CAFA art museum, Capital Museum, New China Science and technology Museum
Houston	1	Houston Museum of fine arts
Cleveland	3	MOCA Museum of Contemporary Art, Rock and roll hall of fame, The Cleveland Museum of Art
Bregenz	2	Vorarlberg Museum, Kunsthhaus Bregenz
Copenhagen	1	Ordrupgaard Art Museum
Warsaw	1	POLIN Museum of the History of Polish Jews
Dubai	1	<i>Museum of middle east modern art*</i>
Frankfurt	2	Museum für Kunsthandwerk, Städel Museum
Porto	1	Museo Serralves
Glasgow	1	Glasgow museum of transport
Washington D.C.	2	Newseum, National museum of the American Indian
Munich	2	BMW Museum, Jewish Museum
Denver	2	The Denver Art Museum, Denver Museum of Contemporary Art

* Museum names written in italics have not been constructed yet

Appendix V: Dataset global arts ranking

CITY	STATISTICAL AREA	INFRASTRUCTURAL FACTORS				HUMAN CAPITAL		FINE ARTS SECTOR DEVELOPMENT		REPUTATIONAL FACTORS	
		ART MUSEUMS	ART GALLERIES	THEATRES AND OPERAS	CINEMAS	ART SCHOOLS ACCORDING TO SAATCHI GALLERY	EMPLOYMENT IN THE CREATIVE INDUSTRIES	NUMBER OF CHRISTIE'S AND SOTHEBY'S AUCTIONS	CITY- BRANDING MUSEUM ARCHITECTURE	MAJOR ART EVENTS	
New York City	New York City	43	721	420	117	25	8	579	6	0,926	
London	Greater London	30	857	214	108	36	12	809	3	0,669	
Paris	Ile-de-France	36	1046	353	302	17	8,8	196	5	0,231	
Berlin	State of Berlin	28	421	56	94	4	10	0	3	0,187	
Toronto	City of Toronto	9	127	75	56	3	9,7	0	4	0,180	
Los Angeles	Los Angeles County	15	434	330	133	7	5,4	0	2	0,168	
Sydney	Metropolitan Region of Sydney	8	122	73	67	8	5,3	0	2	0,146	
Miami	Miami-Dade County	11	96	30	18	5	4,2	0	2	0,122	
Brussels	Brussels Hoofdstedelijk Gewest	26	361	104	65	3	2,4	0	1	0,106	
Edinburgh	Edinburgh City Region	13	66	25	11	6	4	0	1	0,085	
San Francisco	San Francisco County	18	93	68	26	7	5,2	0	4	0,077	
Hong Kong	Hong Kong Special Administrative Region	7	186	41	59	0	5,4	203	2	0,076	
Salzburg	City of Salzburg	8	44	35	9	0	4,2	0	0	0,070	
Montréal	City of Montréal	8	55	36	20	2	13	0	1	0,068	
Bogotá	Bogotá Capital District	5	57	74	46	14	3,5 (e)	0	0	0,055	
Basel	Basel-Stadt Canton	17	48	26	16	0	5,5	0	2	0,044	
Istanbul	Istanbul Province	4	267	184	118	4	3,7	0	0	0,039	
Buenos Aires	Autonomous City of Buenos Aires	6	331	287	76	30	9,3	0	1	0,039	
Madrid	City of Madrid	12	79	52	31	16	6,2	0	3	0,037	
Amsterdam	Amsterdam metropolitan area	16	182	57	39	3	8,3	41	2	0,036	
Vienna	City of Vienna	21	N/A	33	29	0	6,5	0	2	0,035	
Shanghai	Shanghai Municipal District	25	208	97	230	1	7,4	7	6	0,033	
Zurich	Zürich Municipality	25	144	38	29	0	7,9	10	1	0,033	
Stockholm	Stockholms tätort	20	17	49	9	2	6,5	0	0	0,028	

Rotterdam	Rotterdam Municipality	6	43	13	6	3	3,1	0	0	0,028
Sierre	Sierre Municipality	2	6	2	1	0	N/A	0	0	0,027
São Paulo	Prefecture of São Paulo	21	58	116	46	3	2,5	0	1	0,025
Venice	City of Venice	26	42	24	9	1	N/A	0	1	0,022
Vancouver	City of Vancouver	4	101	15	9	4	3,2	0	1	0,021
Melbourne	City of Melbourne	28	80	15	18	8	2,6	0	1	0,021
Ghent	City of Ghent	2	20	31	7	2	N/A	0	0	0,020
Havana	City of Havana	10	11	21	8	1	N/A	0	0	0,020
Adelaide	City of Adelaide	10	71	12	17	2	3	0	0	0,020
Moscow	City of Moscow	24	75	93	94	5	N/A	0	0	0,019
Rio de Janeiro	Municipality of Rio de Janeiro	11	108	158	42	12	2,8	0	3	0,018
Chicago	Cook County	17	134	31	17	8	2,7	0	1	0,018
Boston	Suffolk County	6	83	23	19	7	3,4	0	1	0,016
Austin	Travis County	6	17	16	17	1	0,7	0	0	0,015
Belgrade	City of Belgrade	10	37	35	10	5	2,5 (e)	0	1	0,015
Prague	City of Prague	24	52	82	15	7	14	0	0	0,014
Bologna	City of Bologna	16	54	20	27	1	6,7	0	0	0,013
Torino	City of Torino	9	38	27	15	3	6,4	0	0	0,012
Sibiu	City of Sibiu	6	3	6	2	0	N/A	0	0	0,012
Tàrrega	City of Tàrrega	1	0	0	1	1	N/A	0	0	0,012
Taipei	Taipei City	10	55	18	18	6	3,5	0	2	0,011
Zagreb	City of Zagreb	12	48	26	9	2	2,2 (e)	0	1	0,011
Tokyo	Tokyo Metropolis	47	688	230	82	5	11	0	5	0,011
Guanajuato	City of Guanajuato	4	5	4	1	1	N/A	0	0	0,011
San Sebastian	City of San Sebastian	4	11	11	3	0	N/A	0	1	0,010
Locarno	City of Locarno	3	21	3	8	0	4	0	0	0,010
Perth	City of Perth	7	44	14	6	1	2,1	0	0	0,009
Gramado	City of Gramado	1	1	4	2	0	N/A	0	0	0,009
Giffoni Valle Piana	City of Giffoni Valle Piana	0	0	0	0	0	6,9	0	0	0,009
Haifa	City of Haifa	9	8	6	6	0	3,3 (e)	0	0	0,008
Zlin	City of Zlin	0	2	3	3	2	1,2	0	0	0,008
Brisbane	City of Brisbane	6	47	15	11	3	3 (e)	0	0	0,008
Honolulu	City of Honolulu	10	51	14	6	0	3	0	0	0,007
Sarajevo	City of Sarajevo	3	25	10	9	1	6,7	0	0	0,007
Jakarta	City of Jakarta	6	28	16	2	0	N/A	0	0	0,007
Grahamstown	City of Grahamstown	2	10	12	5	0	N/A	0	0	0,007
San Diego	San Diego County	6	59	13	11	3	2,4	0	0	0,007
Portland	Multnomah County	3	43	31	25	3	3,4	0	0	0,007
Milan	City of Milan	35	115	30	41	7	7,5	4	1	0,007
Durham	City of Durham	8	12	3	8	4	1,4 (e)	0	0	0,007
Yorkton	City of Yorkton	1	3	2	1	0	1,3	0	0	0,006
Helsinki	City of Helsinki	15	59	11	10	2	5,1	0	2	0,006
Cologne	City of Cologne	14	68	12	15	2	5,4	0	1	0,006

Saint Petersburg	City of St - Petersburg	33	51	62	50	2	3,2 (e)	0	0	0,006
Seattle	King County	6	110	45	21	4	2,4	0	1	0,006
Vilnius	City of Vilnius	6	42	16	5	2	4,1	0	0	0,006
Kiev	City of Kiev	24	82	22	10	0	N/A	0	0	0,006
Barcelona	City of Barcelona	29	41	57	51	13	5,6	0	1	0,006
Athens	City of Athens	16	45	21	23	3	N/A	0	1	0,005
Seoul	Seoul Special City	40	96	229	71	5	9,4	0	3	0,005
Christchurch	City of Christchurch	1	25	22	7	3	1,9	0	0	0,005
Liverpool	City of Liverpool	11	62	22	10	3	2,2 (e)	0	1	0,005
Lucerne	City of Lucerne	5	20	8	8	0	6,5	0	1	0,005
Marrakech	City of Marrakech	13	39	6	4	0	N/A	0	0	0,005
Abu Dhabi	City of Abu Dhabi	9	N/A	6	8	0	2,9 (e)	0	3	0,005
Beijing	City of Beijing	36	N/A	43	120	2	N/A	0	5	0,005
Houston	Harris County	11	146	38	29	4	1,1	0	1	0,005
Budapest	City of Budapest	31	42	101	26	2	6	0	0	0,005
Sonoma	County of Sonoma	9	85	22	14	5	2,4	0	0	0,005
Cleveland	Cuyahoga County	8	146	17	42	4	2	0	3	0,005
Busan	Busan Metropolitan City	7	25	12	N/A	0	N/A	0	0	0,004
Mar del Plata	City of Mar del Plata	2	N/A	15	10	1	N/A	0	0	0,004
Sinop	City of Sinop	2	N/A	1	N/A	0	1,6	0	0	0,004
Gijon	City of Gijon	4	6	6	4	0	1,1	0	0	0,004
Guadalajara	City of Guadalajara	15	N/A	7	23	5	N/A	0	0	0,004
Palm Springs	Riverside County	5	39	16	12	0	1,8	0	0	0,004
Philadelphia	Philadelphia County	12	47	34	21	10	4,8	0	0	0,004
Bregenz	City of Bregenz	4	12	5	9	0	4,4	0	2	0,004
Maastricht	City of Maastricht	4	28	13	2	1	N/A	0	0	0,004
Cape Town	Stad Kaapstad	6	38	11	11	0	N/A	0	0	0,004
Sofia	City of Sofia	9	36	23	6	4	2,6	0	0	0,003
Avignon	City of Avignon	4	23	22	11	1	N/A	0	0	0,003
Bergen	City of Bergen	8	20	3	2	1	5,7	0	0	0,003
Kuala Lumpur	City of Kuala Lumpur	7	89	N/A	36	0	N/A	0	0	0,003
Mannheim	City of Mannheim	4	21	12	12	0	2,3	0	0	0,003
Copenhagen	City of Copenhagen	22	67	116	24	4	N/A	0	1	0,003
Dublin	City of Dublin	11	50	26	18	2	5,1	0	0	0,003
Warsaw	City of Warsaw	16	39	32	17	1	N/A	0	1	0,003
Palm Beach	Palm Beach County	8	123	8	42	2	2,2	0	0	0,003
Dubai	City of Dubai	10	96	11	18	0	1,1	13	1	0,003
Harare	City of Harare	3	N/A	N/A	N/A	0	N/A	0	0	0,003
Baltimore	Baltimore County	9	96	79	12	5	1,6	0	0	0,003
Sitges	City of Sitges	6	12	2	2	0	N/A	0	0	0,003
Park City	Park City Municipality	0	21	6	12	0	2,6	0	0	0,003

Traverse City	Grand Traverse County	3	49	10	8	0	1,7	0	0	0,003
Frankfurt	Frankfurt am Main	15	149	11	21	1	3,8	0	2	0,003
Cannes	City of Cannes	12	21	7	5	0	N/A	0	0	0,003
Panaji	City of Panaji	5	N/A	3	4	0	N/A	0	0	0,003
Hyderabad	City of Hyderabad	8	158	N/A	79	2	N/A	0	0	0,002
San Jose	Santa Clara County	10	91	14	29	4	1,8	0	0	0,002
Charleston	Charleston county	3	95	10	10	3	1,8	0	0	0,002
Porto	City of Porto	10	N/A	15	8	17	N/A	0	1	0,002
Caracas	City of Caracas	9	N/A	N/A	20	16	N/A	0	0	0,002
Manila	City of Manila	11	140	19	20	1	N/A	0	0	0,002
Glasgow	City of Glasgow	6	93	15	14	3	N/A	0	1	0,002
Santa Barbara	Santa Barbara County	4	81	5	9	3	2,5	0	0	0,002
Washington D.C.	City of Washington D.C.	35	365	99	69	13	1,2	0	2	0,002
Munich	City of Munich	20	300	17	33	1	6,2 (e)	0	2	0,002
Pula	City of Pula	7	24	1	2	0	2,3 (e)	0	0	0,002
Reykjavik	City of Reykjavik	22	23	7	7	0	5,9 (e)	0	0	0,002
Denver	Denver County	9	71	6	40	3	3,6	0	2	0,002
San Miguel de Allende	City of San Miguel de Allende	1	12	2	3	1	N/A	0	0	0,002
Calgary	City of Calgary	10	148	23	19	1	1,9	0	0	0,002
Bucharest	City of Bucharest	19	23	37	8	1	1,9	0	0	0,002
Providence	Providence County	6	61	8	17	2	2,6	0	0	0,002
Aurillac	City of Aurillac	1	3	2	3	0	1,1	0	0	0,002

(e) : estimates independently from information of statistics centers (yet on the basis of reliable online information)

Appendix VI: Global arts and finance rankings: ranks and rating scores (R_A and R_F)

RANK	CITY	R _A	CITY	R _F
1	London	0,806	New York	0,778
2	New York	0,786	London	0,777
3	Paris	0,631	Hong Kong	0,756
4	Tokyo	0,412	Singapore	0,746
5	Buenos Aires	0,342	San Francisco	0,719
6	Shanghai	0,339	Tokyo	0,718
7	Berlin	0,270	Zurich	0,717
8	Los Angeles	0,270	Seoul	0,715
9	Toronto	0,251	Boston	0,705
10	Beijing	0,248	Washington	0,704
11	Madrid	0,247	Toronto	0,703
12	Seoul	0,242	Chicago	0,702
13	San Francisco	0,236	Geneva	0,701
14	Rio de Janeiro	0,228	Vancouver	0,700
15	Washington	0,224	Luxembourg	0,697
16	Hong Kong	0,203	Frankfurt	0,695
17	Amsterdam	0,183	Dubai	0,694
18	Sydney	0,181	Montreal	0,693
19	Porto	0,169	Abu Dhabi	0,692
20	Cleveland	0,165	Shanghai	0,690
21	Munich	0,158	Riyadh	0,685
22	Barcelona	0,155	Qatar	0,684
23	Caracas	0,149	Sydney	0,682
24	Brussels	0,143	Melbourne	0,681
25	Miami	0,142	Shenzhen	0,680
26	Milan	0,141	Calgary	0,678
27	Taipei	0,132	Taipei	0,677
28	Prague	0,131	Busan	0,676
29	Montréal	0,131	Monaco	0,674
30	Vienna	0,128	Vienna	0,673
31	Abu Dhabi	0,124	Paris	0,669
32	Frankfurt	0,120	Beijing	0,668
33	Denver	0,120	Osaka	0,667
34	Istanbul	0,119	Sao Paulo	0,666
35	Helsinki	0,118	Stockholm	0,665
36	Chicago	0,117	Tel Aviv	0,664
37	Bogotá	0,116	Munich	0,663
38	Copenhagen	0,114	Johannesburg	0,659
39	Basel	0,113	Amsterdam	0,658
40	Zurich	0,111	Buenos Aires	0,657
41	Melbourne	0,108	Kuala Lumpur	0,656
42	Boston	0,105	Istanbul	0,655
43	Edinburg	0,103	Almaty	0,653
44	São Paulo	0,095	Mexico City	0,652
45	Bregenz	0,094	Rio de Janeiro	0,650
46	Seattle	0,091	Bangkok	0,646
47	Houston	0,090	British Virgin Islands	0,639
48	Philadelphia	0,090	Milan	0,638
49	Moscow	0,088	Panama	0,637
50	Vancouver	0,088	Glasgow	0,636
51	Cologne	0,086	Casablanca	0,635
52	Athens	0,085	Bahrain	0,634
53	Belgrade	0,084	Gibraltar	0,633
54	Glasgow	0,083	Cayman Islands	0,632
55	Venice	0,079	Rome	0,631
56	Warsaw	0,074	Brussels	0,630
57	Hyderabad	0,073	Oslo	0,629
58	Liverpool	0,073	Hamilton	0,628
59	Lucerne	0,071	Manila	0,627
60	Zagreb	0,067	Copenhagen	0,626
61	Budapest	0,066	Mumbai	0,625
62	Guadalajara	0,063	Jersey	0,624
63	Dubai	0,060	Prague	0,623

64	Baltimore	0,058	Isle of Man	0,622
65	Torino	0,058	Edinburgh	0,621
66	Stockholm	0,054	Jakarta	0,620
67	Bologna	0,052	Guernsey	0,619
68	Sonoma	0,052	Warsaw	0,612
69	San Sebastian	0,051	Mauritius	0,608
70	Manila	0,047	Dublin	0,607
71	Dublin	0,047	Bahamas	0,603
72	San Jose	0,046	Saint Petersburg	0,600
73	Portland	0,043	Wellington	0,594
74	Palm Beach	0,043	Madrid	0,585
75	Sarajevo	0,042	Helsinki	0,582
76	St - Petersburg	0,042	Malta	0,581
77	Kiev	0,041	Budapest	0,566
78	Sofia	0,040	Lisbon	0,555
79	Calgary	0,038	Cyprus	0,540
80	Santa Barbara	0,038	Moscow	0,536
81	Brisbane	0,038	Tallinn	0,498
82	Rotterdam	0,037	Athens	0,481
83	Adelaide	0,037	Reykjavik	0,465
84	Vilnius	0,037		
85	Charleston	0,037		
86	Kuala Lumpur	0,037		
87	San Diego	0,036		
88	Bergen	0,035		
89	Reykjavik	0,034		
90	Salzburg	0,033		
91	Providence	0,032		
92	Giffoni Valle Piana	0,031		
93	Ghent	0,030		
94	Christchurch	0,028		
95	Durham	0,028		
96	Havana	0,027		
97	Avignon	0,025		
98	Marrakech	0,024		
99	Maastricht	0,023		
100	Bucharest	0,022		
101	Honolulu	0,022		
102	Mar del Plata	0,021		
103	Perth	0,021		
104	Cape Tow	0,021		
105	Locarno	0,021		
106	Cannes	0,021		
107	Busan	0,020		
108	Jakarta	0,019		
109	Guanajuato	0,018		
110	San Miguel de Allende	0,017		
111	Haifa	0,016		
112	Tàrrega	0,015		
113	Palm Springs	0,014		
114	Sitges	0,014		
115	Sibiu	0,014		
116	Park City	0,014		
117	Grahamstown	0,014		
118	Mannheim	0,014		
119	Traverse	0,013		
120	Zlin	0,013		
121	Panaji	0,012		
122	Austin	0,012		
123	Sierre	0,011		
124	Pula	0,011		
125	Harare	0,010		
126	Gramado	0,010		
127	Sinop	0,004		
128	Gijon	0,003		
129	Yorkton	0,002		
130	Aurillac	0,002		

Appendix VII: The 50 cities both rankings have in common with their respective rating scores (R_A and R_F)

CITY	R_A	R_F
London	0,806	0,777
New York	0,786	0,778
Paris	0,631	0,669
Tokyo	0,412	0,718
Shanghai	0,339	0,690
Buenos Aires	0,342	0,657
Seoul	0,242	0,715
Toronto	0,251	0,703
Beijing	0,248	0,668
Madrid	0,249	0,585
San Francisco	0,236	0,719
Prague	0,131	0,623
Washington	0,222	0,704
Amsterdam	0,183	0,658
Hong Kong	0,187	0,756
Milan	0,141	0,638
Rio de Janeiro	0,228	0,650
Montréal	0,131	0,693
Sydney	0,176	0,682
Munich	0,158	0,663
Zurich	0,106	0,717
Brussels	0,143	0,630
Vienna	0,128	0,673
Copenhagen	0,114	0,626
Moscow	0,088	0,536
Budapest	0,066	0,566
Helsinki	0,120	0,582
Melbourne	0,108	0,681
Istanbul	0,119	0,655
Taipei	0,132	0,677
Edinburgh	0,095	0,621
São Paulo	0,095	0,666
Frankfurt	0,119	0,695
Chicago	0,114	0,702
Stockholm	0,054	0,665
Athens	0,086	0,481
Abu Dhabi	0,123	0,692
Warsaw	0,074	0,612
Saint Petersburg	0,042	0,600
Boston	0,101	0,705
Reykjavik	0,034	0,465
Vancouver	0,088	0,700
Glasgow	0,083	0,636
Dublin	0,047	0,607
Manila	0,047	0,627
Kuala Lumpur	0,037	0,656
Dubai	0,060	0,694
Calgary	0,038	0,678
Busan	0,020	0,676
Jakarta	0,019	0,620

Appendix VIII: Geography of the GACs, GFCs and global cultural cities

1/ Geography of the GACs



2/ Geography of the GFCs



3/ Geography of the GCCs

