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## Eurocities and their 'sisters': How are they close to each other?

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#### Abstract

The present paper investigates city-to-city linkages and the role of urban networks in socioeconomic development of cities. The paper addresses the relationships of 'Eurocities' with their 'Sister Cities' to highlight the contributions of the mutual relationship to trade, tourism, cultural activities and investment. How do the networks of cities increase the interaction between cities and contribute to their socio-economic development? In order to answer this question the present study evaluates the sister city experiences of 29 Eurocities from 16 European countries. The results of our study show that the contributions of sister city relations depend on former relations, quality and quantity of current joint activities, reciprocal visits and benchmarking. The results of our study show also that after signing the sister city agreements, the number of visitors, students, cultural activities and economic cooperation with entrepreneurs have increased in 50% of both Eurocities and their sister cities. Sister city relationship has had also a positive impact on the number of investments in both cities. However, the most important contribution of sister city relationship is the increasing number of tourism and cultural activities, joint projects and benchmarking, therefore, the increasing cultural dialogue and common values which will make a great contribution to the construction of global urban culture.

#### 1. Introduction

The globalization involves an increase in social and geographical interconnectivity and an accelerated circulation of people, capital, information and cultural symbols on the entire world (Gotham, 2005). Furthermore, the globalization process has led to an increased interaction between cities and to a new urban system/network in which they need to be competitive and complementary at the same time. In order to understand the contemporary world system, the assessment of network of cities is fundamental (Gottman, 1984).

The term network is widely used in literature by different disciplines and contexts such as transportation, telecommunication, infrastructure and politics (Camagni and Salone, 1993; Sassen, 2001; Taylor, 2004; Trullén and Boix, 2003; Ward and Williams, 1997). As a basic definition, a network consists of nodes and links which display a pattern of connectivity (Taylor, 2004). From the perspective of urban planning, network of cities can be defined according to (i) their structure such as horizontal, vertical and polycentric (Dematteis 1990; 1991a-b), (ii) their nature such as synergy creator and complementary (Camagni and Salone, 1993) and (iii) their function such as generator and transmitter of knowledge (Trullén and Boix, 2003). The theory of the city network paradigm claims that through participation in the network, cities exploit scale economies in complementary relationships and synergies in cooperation (Capello, 2000).

The concept of network is not an invention of 20<sup>th</sup> century. Since 16<sup>th</sup> century, cities are the keystones of such organization of spaces including the organization of trade and the execution of colonial imperial and geopolitical strategies (Knox, 2002, Short et al. 2000). In other words, these activities and relations can be grouped as cultural-religious, political-military and economic-mercantile activities which have led to emerge religious places, strategic places and market places respectively (Taylor, 2004). The difference between these activities is about how they organize spaces; while non-economic activities organize the space hierarchically economic activities create networks (Jacobs, 1984).

The cities of different regions and countries tend to share their experiences and their cultures within these networks in order to develop some common spatial or social strategies and further cooperation. "Best practices" or "benchmarking" are the most important issues of the interaction between cities. While benchmarking facilitates the cultural dialogue between different cities, the common values developed in this process make a great contribution to the construction of global urban culture (Baycan-Levent et al., 2004). The improvement in interaction between cities contributes also to the social and economic development of cities, in particular, to the development of tourism and cultural activities. Networks are mechanisms for heritage conservation, cultural preservation, tourism and additional objectives of socio-economic development while aiming to increase tourist numbers, the quality of cultural services and to bring quality training to hospitality and development staff (Moulin and Boniface, 2001). They also play a crucial role in the representation of the 'local' in the 'global' scene in terms of cultural dialogue, educational exchange and economic shifts like global tourism and culture (Gotham, 2005).

In terms of interaction and integration of cities, European cities are among the very successful ones. The networks in Europe are privileged sites for obtaining information, exchanging experiences, ideas and knowledge and challenging European programmes or states: therefore, they are also places for learning policy norms and styles (Le Galés, 2002). 'Eurocities' is the well-known example of such networks. As a specific urban network to represent its own

collective interests, it is also, the most influential one over the last decade (Griffiths, 1995; Le Galés, 2002). Beside its pioneering task in gathering cities to create common cultural values, to discuss common problems and to share knowledge and ideas, Eurocities successfully represents the interest of major cities towards the European Commission and the other EU institutions. Moreover, it serves expertise on urban policies, and makes positive contributions to the development and implementation of European policies and programs in various policy fields (Eurocities, 2006).

The Eurocities network was founded in 1986 by the Mayors of six large cities (Barcelona, Birmingham, Frankfurt, Lyon, Milan and Rotterdam) which aimed to form a network bringing together the local governments of large cities in European countries. During the first 5 years, the number of members of Eurocities grew from 6 to 42 cities. In the late 1990s and the beginning of 2000s, some great shifts occurred in both the number of member cities of the network and the basic structure of Eurocities with the integration of different stakeholders such as businesses and other organizations as permanent partners. Today, Eurocities enfolds more than 150 European cities from more than 30 countries.

The membership procedure of Eurocities is classified into four categories such as (i) full membership, (ii) associated membership, (iii) associated partnership and (iv) associated business partnership. The full membership refers to the participation of major cities of the European Union and the European Economic Area with a population over 250.000 inhabitants. The associated membership covers the participation of major cities of Europe from outside the European Union and the European Economic Area with a population over 250.000 inhabitants. Cities and/or associations which are not eligible for Eurocities membership in terms of their population can become Eurocities associated partners.

Eurocities, basically, aims to reach "the European context where cities can be inclusive, prosperous, creative, and sustainable, with democratic and effective governance, and where all citizens can be provided with opportunities for participation in all aspects of urban life - including political, cultural, social and economic aspects" (Eurocities, 2006). Therefore, the network of Eurocities provides a platform for its member cities to share knowledge and ideas, to exchange experiences, to analyze common problems and to develop innovative solutions, through a wide range of Forums, Working Groups, Projects, activities and events.

European cities are also in close dialogue with US cities in which they involved before and after the Second World War as a consequence of municipal reform movements (Saunier, 2001). The obvious result of this integration of European and US cities is the spread of Sister City movement around Europe.

The aim of this paper is to investigate city-to-city linkages and the role of urban networks in socio-economic development of cities. The paper addresses the relationships of 'Eurocities' with their 'Sister Cities' to highlight the contributions of the mutual relationship, in particular, to trade, tourism, cultural activities and investment. How do the networks of cities increase the interaction between cities and contribute to their socio-economic development? In order to answer this question the present study evaluates the experiences of 29 Eurocities with their Sister Cities. The next section, Section 2, investigates the 'Sister City Movement' as a network of cities and examines the mechanisms of the phenomenon while addressing the phases of sister city movement. This section discusses also the tangible benefits of sister city relationships. The following section, Section 3, evaluates the contributions of sister city relationships to socio-economic development of cities on the basis of sister city relationships

of Eurocities. This section introduces the data and information derived from the extensive survey questionnaires filled out by relevant departments or experts of municipalities in Eurocities, examines the sister city relationships of Eurocities in its historical and geographical context and evaluates sister city activities and the contributions of sister city relationships. The last section concludes with a discussion on critical factors in contribution of network of cities.

#### 2. Sister Cities

'Sister City' relationship can be defined as a partnership of two cities from different countries that is based on cultural and social understanding to achieve cultural dialogue. This relationship provides international trade and economic development between two countries at the local level. Cultural understanding and friendship between cities are the prime motivations to sustain sister city relationship and to develop economic activities in terms of trade, tourism and investment.

'Sister City Movement' can be seen as the first step taken by municipalities to define their interests at the international level (Vion, 2002). The roots of the sister-city phenomenon can be traced back to the aftermath of the Second World War. In this period, cities formed links to each other to share experiences of destructive war. Until to the declaration of the US President Eisenhower at the White House Conference in 1956, this city-to-city relationship just covered Europe by the personal initiatives of mayors or communication and exchange at a person-to-person level. President Eisenhower insisted that the development of international relationships should be drawn in local level with the involvement of individuals which will be fostered by sister city, county and state affiliations that would lessen the chance of future world conflicts (SCI, 2004). Subsequently, originally part of the National League of Cities (NLC), Sister City International (SCI) became an independent non-profit organization in 1967. Actually, SCI represents international communities that have a sister city partnership with the US communities. Sister cities foster significant economic alliances in the U.S. taking 150.000 Americans to foreign countries each year, and bringing a comparable number of foreign visitors to the US (Zelinsky, 1990).

Sister City movement in Europe, actually it is called "town twinning" or "jumelages", has accelerated during the period of European Union (EU). With the idea of twinning it is aimed "to provide the opportunity to find out more about the daily lives of citizens in other European countries, to talk to them and exchange experiences, and to develop joint projects on issues of common interest, such as local integration, the environment, economic development, and cultural differences" (EU, 2004). Beside the similar approach of the US equivalent, EU Town Twinning aims pioneering the development of European Citizenship as well. In order to encourage city-to-city relationships, which would provide common values among the European countries, EU supports or awards various projects that would contribute successfully to European integration.

In Asia-Pacific region, cities tend to strengthen their international neighbours relationships beside their worldwide sister city affiliations. Within the key objective of sister city movement, these affiliations aim to promote the growth and enhance of regional economic development (APCS, 2004).

According to the study of Zelinsky (1991), over the past forty years, more than 11.000 twinnings have been formalized among a wide range of communities in at least 159 countries. Zelinsky also denoted that since the beginning of sister city movement in 1950's, the number of sportive and cultural activities has dramatically increased and international tourism has been developed within new destinations.

The background and the development of sister city relationships traced above, have revealed some common points and the mechanisms of the phenomenon. Sister city selection, affiliation process and agreements are the key features of sister city relationship. The basic rule of this relationship, according to SCI, is to have only one sister city in a country (SCI, 2004). However, the unwritten rule is that the two places should be roughly comparable in size and that they have the wherewithal for becoming compatible partners. Compatibility, in turn, implies some sharing of economic, cultural, ideological, historical, recreational, or other type of concern or perhaps some beneficial complementarities of interest (Zelinsky, 1991).

Zelinsky claims that the choice of a sister city is not a random process but is based on a number of criteria including "historical connections, shared economic, cultural, recreational and ideological concerns, similar or identical place names, and, to a certain extent, the friction of distance" (Zelinsky, 1991, pp. 1). Moreover, the individual contacts and private initiatives also help establishing and sustaining city-to-city relationships.

O'Toole (1999; 2000) defines in his studies on sister cities the "phases of sister city movement". His approach consists of three phases. Once two cities sign an agreement declaring their sister city relationship, their primary aim is to set up an international friendship through the understanding of the culture of each other. O'Toole defines this phase as "the associative phase" where the primary objectives of these types of twinning relations are based on notions of international friendship, cultural exchange and a general international awareness. The second phase described by O'Toole is "the reciprocative phase". This phase is characterized by the growth of educational exchange systems that provide a safe and relatively cheap way of running an exchange program, especially with home stay arrangements keeping costs to a minimum. More recently, the networks and relationships among cities and countries have driven city-to-city affiliations through economic scenes. It is argued that municipalities should handle the role of entrepreneurship in order to "seize the new opportunities offered by globalization and localization and to cope with the attendant challenges" (World Bank, 2000). O'Toole calls this development as "the commercial phase". This phase does not ignore or abandon the earlier phases, but rather it is an attempt to take the advantage of the relationship to further local economic aims. Zelinsky (1990) has also argued that the further step of "cross-cultural friendship" of sister city affiliations tends to create business opportunities.

Cremer et al. (1996) and Ramasamy and Cremer (1998) have developed an integrated approach to analyze sister city relationships in the context of cultural, political, social, and economic development and thus, to reveal tangible results of these linkages on both stakeholders. They claim that cultural understanding and friendship between cities are the prime motivations to sustain sister city relationship and to develop economic activities in terms of trade, tourism and investment. This feature drives municipalities or local authorities to act as entrepreneurs in order to contribute to the economic and social dynamisms of cities. Cremer et al (2001), referring to their integrated approach, have discussed tangible and intangible benefits of sister city relationships in the case of New Zealand. The results of their study show that while in the past the cities of New Zealand had established their sister city

relationships with neighbour country, Australia, recently the country has been driven to China for new relationships where the economic exchanges between two countries have increased much more than before.

Ferguson (2003) evaluates the theoretical and practical information on city-to-city linkages and points out some remarkable issues on the reasons and benefits of sister city arrangements. Sister city linkages help to improve trade, business connections, investments, tourism activities and personal contacts. The connections developed with less developed cities in this system consider the adoption of a poorer or struggling city as a humanitarian gesture (Zelinsky, 1990) and direct technical and financial aid flows between sister cities. Mutual exchanges between sister cities can be defined as both the reasons and the benefits of these connections. Nevertheless, historical and ethnic connections of cities can be evaluated as one of the main reasons in establishing city-to-city connections.

The key features of sister city movement described above demonstrate that this phenomenon is beyond the limits of a simple friendship agreement. On the basis of cultural exchange, cities can have the chance to understand each other that would provide a reciprocal confidence and, therefore, that would lead new economic bonds. In this context, the success of a sister city linkage can be measured by the quality and the quantity of shared activities including best practices in urban planning and management and sportive or cultural events.

#### 3. Contributions of sister city relationships to socio-economic development of cities

## 3.1. Prefatory remarks

The present paper investigates the contributions of sister city relationships to socio-economic development of cities. In order to highlight the contributions of the mutual relationship to trade, tourism, cultural activities and investment the paper evaluates the sister city experiences of 29 Eurocities from 16 European countries. The data and information used for evaluation are based on the extensive survey questionnaires filled out by relevant departments or experts of municipalities in Eurocities. The survey was conducted in the second part of 2005 and the questionnaire was sent to 161 members of Eurocities that consist of 106 full members, 13 associated members and 42 associated partners. Totally 29 questionnaires returned from 25 full members, 2 associated members and 2 associated partners which have sister cities were taken into consideration, whereas, 9 Eurocities excluded from the sample as they do not have sister cities. Table 1 shows Eurocities in our sample. The cities in the sample are grouped as Southwestern European Cities (Western European Cities and Southern European Cities), Northern European Cities and Eastern European Cities according to the United Nations' category of the regions of the world (UN, 2006). Southwestern European Cities consist of 17 cities, whereas Northern European Cities and Eastern European Cities consist of 8 and 4 cities respectively. According to city size, the sample includes 4 metropolises, 5 big cities, 15 medium-size cities and 5 small cities. Although the categories of membership are based on population size, it seems there can be some exceptional cities like Eindhoven, Klaipeda and Tampere. These cities are accepted as full members with their populations less than 250.000. However, the other small cities like Lund and Naestved are integrated to the Eurocities system as associated partner.

According to the survey results, 29 Eurocities in the sample have totally 293 sister city relationships in all around the world. While 17 cities from 7 countries of Southwestern

European Zone have totally 164 sister city alliances, 8 cities from 6 countries of Northern European Zone have 89 and 4 cities from 3 countries of Eastern European Zone have 40 sister city alliances. The majority of the cities, 15 cities, have more than 10 sister city alliances which means more than fifty per cent of the total sample as well as more than fifty per cent of each zone have more than 10 sister city alliances (Table 1).

	City (Country)	City Size*	Number of Sister Cities	Membership Type in Eurocities
	Southwestern European Cities			
1	Antwerp (Belgium)	Medium	4	Full Member
2	Berlin (Germany)	Metropolis	16	Full Member
3	Bologna (Italy)	Medium	13	Full Member
4	Cologne (Germany)	Metropolis	21	Full Member
5	Dusseldorf (Germany)	Big	5	Full Member
6	Eindhoven (Netherlands)	Small	9	Full Member
7	Frankfurt (Germany)	Big	12	Full Member
8	Gijon (Spain)	Medium	5	Full Member
9	Leipzig (Germany)	Medium	11	Full Member
10	Lille (France)	Metropolis	1	Full Member
11	Munich (Germany)	Metropolis	7	Full Member
12	Munster (Germany)	Medium	10	Full Member
13	Nis (Serbia and Mont.)	Medium	11	Associated Member
14	Toulouse (France)	Medium	10	Full Member
15	Turin (Italy)	Big	15	Full Member
16	Venice (Italy)	Medium	7	Full Member
17	Zaragoza (Spain)	Big	7	Full Member
	Total	-	164	
	Northern European Cities			
18	Bristol (UK)	Medium	7	Full Member
19	Klaipeda (Lithuania)	Small	19	Full Member
20	Lund (Sweden)	Small	8	Associated Partner
21	Malmo (Sweden)	Medium	11	Full Member
22	Naestved (Denmark)	Small	9	Associated Partner
23	Newcastle (UK)	Medium	14	Full Member
24	Oslo (Norway)	Big	5	Full Member
25	Tampere (Finland)	Small	16	Full Member
	Total		89	
	Eastern European Cities			
26	Brno (Czech Rep.)	Medium	10	Full Member
27	Gdansk (Poland)	Medium	16	Full Member
28	Katowice (Poland)	Medium	5	Full Member
29	Timisoara (Romania)	Medium	9	Associated Member
	Total		40	

Table 1 Eurocities in the sample

\* City size is defined on the basis of population: Metropolis (+1.000.000), Big Cities (500.000-1.000.000), Medium-size Cities (250.000-500.000), Small Cities (-250.000)

The next sub-section evaluates the sister city relationships of Eurocities in its historical and geographical context. The evaluation is based on three European zones described above and includes the period from the end of the Second World War to 2005. As mentioned before Eurocities in our sample have totally 293 sister city alliances, however, in our evaluation in the next sub-section 29 of these relationships out of 293 are excluded because of the missing values. Therefore, our evaluation in the next sub-section which refers to historical and

geographical perspectives of sister city relationships of Eurocities includes 264 sister city alliances.

#### 3.2. Sister City relationships of Eurocities: Historical and geographical perspectives

The first sister city experiences took place in Europe after the Second World War in order to remove the negative impacts of the last dark years. In that period, European cities formed strong bounds to each other and shared their experiences, their knowledge and their power to construct better cities for the future.

The results of our study show that the number of sister city agreements in Europe grew fast between the end of the war and 1970. Nevertheless, the foundation of the European Union improved the rise of these alliances as a catalyst. As can be seen in Table 2, the new agreements signed in this period were among European cities. Between the years 1970 and 1980, the acceleration of the sister city movement slowed down and only 14 new agreements were signed. This situation can be explained by the vast economic crisis as well as different priorities of cities in that period. Despite the slowing down effects, this was the period where European cities tried to form new relations beyond Europe, through America, Asia and Africa. 1980s brought a new shift for sister city movement in parallel to the new world system. Several sister city relationships were established with both European and non-European cities in this period. However, the orientation to Asia, East Asia, Northern and Southern America after 1980s draws attention. 1990s is the peak period in sister city movement (Figure 1). In this period 97 new agreements were signed (Table 2). The most important feature of this period is the increasing number of sister city relationships between European cities. Beside the increasing number of sister city relationships in Southwestern Europe, an enormous growth in the number of sister cities in Eastern Europe is clearly seen. 1990s was the period of close relationships in Europe. As an overall evaluation it can be said that sister city movement reflects the socio-economic and political milestones. The increasing trend in sister city movement can be explained by increasing urban networking activities. In the last 25 years, from 1980 to 2005, 187 sister city agreements were signed by Eurocities in our sample (Table 2).

	Before 1950	1950- 1960	1960- 1970	1970- 1980	1980- 1990	1990- 2000	2000- 2005	TOTAL
SW Europe	6	13	13	5	12	23	8	80
N Europe	8	4	7		7	17	6	49
E Europe		4	5	3	6	26	9	53
Asia			1	1	5	7	3	17
E Asia			1	1	8	6	8	24
Africa			1	1	2	3	2	9
N America				2	6	6	1	15
S America				1	4	8	3	16
Oceania						1		1
TOTAL	14	21	28	14	50	97	40	264

Table 2 Distribution of sister city relationships of Eurocities by zones and years

When the distribution of sister city relationships of Eurocities by zones is examined, some differences in evolution and the choice of sister cities among the zones in Europe is observed. In the literature, several authors point out that the choice of a sister city is not a random process but is based on a number of criteria. Geographical location is one of these criteria in sister city choice. In our sample, the distribution of sister cities by zones supports this claim for Southwestern and Northern European cities.

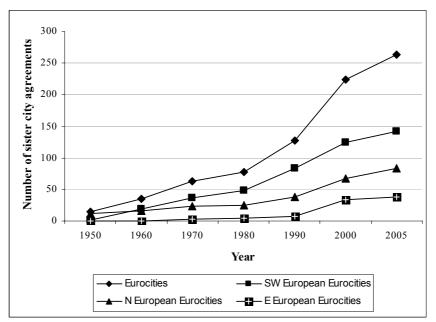


Figure 1 Evolution of sister city relationships of Eurocities

Southwestern and Northern European cities have signed their first sister city agreements with the cities from their zones (Table 3). Actually, the number of alliances of those cities is higher in both the same zones and neighbour zones. The number of city-to-city relations of Southwestern European cities grew homogenously with the other Southwestern and Northern European cities. The affiliation with Eastern European cities improved after 1990s. Sister city relationships of Southwestern European cities with non-European cities started with a small attempt in 1970s and increased after 1980s, but never reached to the quantity of relations with other European cities. The relations of Southwestern European cities with non-European cities show that there are several city-to-city affiliations developed with Asian, Eastern Asian and Southern American cities. Some additional remarks may help to explain the essence of these relationships. First, the majority of the sister city agreements signed with Asian cities are between German-Italian-French cities and cities from Israel. Second, 12 out of 15 agreements signed with Eastern Asian cities are the cities of China. Third, half of the agreements with Southern American cities were signed by Spanish cities.

	Before	1950-	1960-	1970-	1980-	1990-	2000-	
	1950	1960	1970	1980	1990	2000	2005	TOTAL
SW Europe	2	12	8	3	9	5	2	41
N Europe		3	4		4	4		15
E Europe		2	2	3	2	13	4	26
Asia			1	1	3	5	3	13
E Asia			1	1	6	5	2	15
Africa			1	1	2	3	2	9
N America			1	1	5	1	1	9
S America				1	4	6	3	14
Oceania								
TOTAL	2	17	18	11	35	42	17	142

Table 3 Distribution of sister city relationships of Southwestern European cities by zones and years

Comparing with sister city relationships of Southwestern European cities, Northern European cities are more focused on their region by means of establishing new bounds (Table 4). This focus is not limited with the first years of sister city movement, their relationships have remained limited all the time with both Southwestern European cities and non-European cities. It seems Northern European cities are always more closer to the cities of their zone. The exceptional period was 1990s. After 1990 an orientation to Eastern European cities draws attention. It can be said that Northern European cities are much more integrated with Eastern European cities in terms of sister city relationships rather than Southwestern European cities are with the other European cities.

	Before	1950-	1960-	1970-	1980-	1990-	2000-	
	1950	1960	1970	1980	1990	2000	2005	TOTAL
SW Europe	4	1	4		2	5	3	19
N Europe	8	1	3		2	9	4	27
E Europe		2	1		4	9	4	20
Asia					2	1		3
E Asia					2	1	6	9
Africa								
N America				1	1	2		4
S America						1		1
Oceania						1		1
TOTAL	12	4	8	1	13	29	17	84

Table 4 Distribution of sister city relationship of Northern European cities by zones and years

The development of sister city movement in Eastern Europe was quite late when compared with Southwestern and Northern European cities (Table 5). Eastern European cities caught sister city movement after 1960 and their active involvement increased in 1990s. This delay in sister city movement can be explained by political reasons and the cold war. In parallel to the transformation of the region the sister city movement has accelerated. In the last 15 years the number of sister city alliances grew more than 4 times. The dramatic increase is observed in sister city relationships with Southwestern European cities. Eastern European cities are much more connected to Southwestern European cities than Northern European cities. The relationships established between Eastern European cities and Southwestern European cities are based on economic interest.

	Before 1950's	1950- 1960	1960- 1970	1970- 1980	1980- 1990	1990- 2000	2000- 2005	TOTAL
SW Europe			1	2	1	13	3	20
N Europe					1	6		7
E Europe			2			4	1	7
Asia						1		1
E Asia								
Africa								
N America						3		3
S America								
Oceania								
TOTAL			3	2	2	27	4	38

Table 5 Distribution of sister city relationships of Eastern European cities by zone and years

When distribution of sister city relationships of Southwestern, Northern and Eastern European cities together, it can be said that the cities in our sample support the importance of geographical location for Southwestern and Northern European cities (Figure 2). However, Eastern European cities show an opposite trend. While the number of sister cities for both Southwestern and Northern European cities is higher in their zones, the number of sister cities of Eastern European zone has the lowest share for Eastern European cities. The main orientation of Eastern European cities is towards Southwestern and Northern European cities. Instead of to improve trade, business connections and investment, to get direct technical and financial aid can be the main reason of sister city arrangements of Northern European cities.

Another important result of this comparison is the relatively higher share of Southwestern European cities in both the number and the location of sister cities. Southwestern European cities seem more active and aggressive in sister city movement. Except Northern European zone, Southwestern European cities have the highest number of sister cities in every zone.

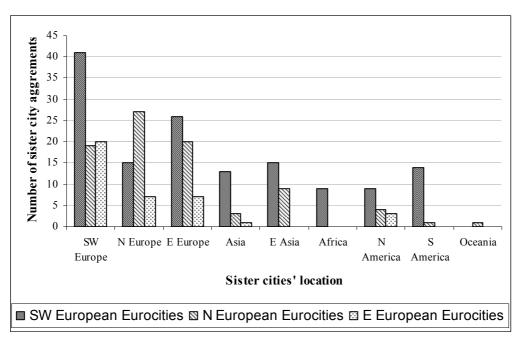


Figure 2 Distribution of sister city relationships of Eurocities by sister cities' location

#### 3.3. Contributions of sister city relationships

The network formed by sister city relations is quite different from the other networks developed among world cities. First, in sister city system, cities do not have to apply to any institutions to be a part of this network. Second, sister city network covers the entire world without regarding any geographical, cultural, economic or political features. Third, the mutual relations developed between two cities concern only these two cities. Briefly, sister city network is an entirely free system without any requirements, where cities are willing to form this network, instead of integrating with it. In such a system, the success and the contributions of sister city relations depend on former relations, quality and quantity of current joint activities and benchmarking between two cities. In this section, the development of sister city relations and the evaluation of tangible and intangible results of these alliances will be introduced on the basis of our survey. In order to avoid from any confusion, we would like to emphasize that the numbers/percentages given in the following sub-sections show the frequencies of respondents' answers to the relevant questions.

#### Former relations and the process of becoming sister cities

Former relations between the cities determine on the one hand the process of becoming sister cities and on the other hand, the criteria in sister city choice. If cities have positive former relationships which match their criteria in cooperation, they would like to become sister cities in order to develop their relationships. Undoubtedly, the upper level of the relationship is economic cooperation between the cities. Former relations affect also the perception of sister city relationships by cities. The perception of sister city movement by cities is crucial to understand the success and failure reasons of sister city relations. In our survey, 90% of Eurocities indicated that they perceive sister city relations as a part of cultural exchange and economic relations, historical relations are in the second rank in their perceptions. 62% of Eurocities denoted that they perceive sister city relationship as an extension of historical bounds with their current sister cities (Table 6).

Sister city perception	#	%
Cultural exchange	26	90
Historical relation	18	62
Economic relation	26	90

Table 6 Sister city perception of Eurocities

The existence of former relations between cities is helpful to develop further relations. In our sample, except Gdansk, Munich and Oslo, the surveyed cities noticed that they had former relations with their current sister cities. 76% of the cities responded that their former relations are based on cultural values and exchanges. They also indicated that their former relations had formed according to the historical bounds and joint economic activities between the cities (52%). The cities of Berlin, Brno, Dusseldorf, Gijon, Katowice, Klaipeda, Newcastle and Nis denoted that their former relations are based on economic, cultural and historical sharing at the same time.

	City		s of Former Relation	onships
	Chy	Economic	Cultural	Historical
1	Antwerp	+	-	-
2	Berlin	+	+	+
3	Bologna	+	+	-
4	Bristol	-	+	-
5	Brno	+	+	+
6	Cologne	+	+	-
7	Dusseldorf	+	+	+
8	Eindhoven	+	-	+
9	Frankfurt	-	+	-
10	Gdansk	-	-	-
11	Gijon	+	+	+
12	Katowice	+	+	+
13	Klaipeda	+	+	+
14	Leipzig	-	+	-
15	Lille	+	-	+
16	Lund	-	-	+
17	Malmo	-	+	+
18	Munich	-	-	-
19	Munster	-	+	+
20	Naestved	-	+	-
21	Newcastle	+	+	+
22	Nis	+	+	+
23	Oslo	-	-	-
24	Tampere	-	+	-
25	Timisoara	-	+	+
26	Toulouse	+	+	-
27	Turin	+	+	-
28	Venice	-	+	+
29	Zaragoza	-	+	-
	Total	15 (52%)	22 (76%)	15 (52%)

Table 7 Former relations of Eurocities with their sister cities

The following tables (Table 8 and Table 9) show the criteria of sister city choice up to now and the success factors in sister city relations denoted by the surveyed cities. Economic relations (83%) and shared cultural concerns (76%) play crucial roles in establishing a new sister city linkage. Historical connections (55%) and ideological interest (34%) are also the issues which promote these relations (Table 8). When questioning the factors of success of sister city relation of surveyed cities, the cultural exchange between cities is revealed as a main factor (Table 9). Another important success factor of these relations is the budget dedicated to sustain sister city alliance. Similarities in urban problems create some common issues to work together and reinforce the relationship. Historical bounds and geographic location have also some effects in the success factors in sister city relations. Whatever the relation type is, national politics and ideological interests are not seen as an important factor to make the relation successful (Table 9).

Table 8 Criteria in sister city choice

Sister city criteria	#	%
Historical connections	16	55
Economic relations	24	83
Shared cultural concerns	22	76
Ideological interest	10	34
Educational exchanges	2	7
Sportive activities	1	3
Geographic location	1	3
Environmental concerns	1	3

#### Table 9 Success factors in sister city alliances

	Not important	Less important	Medium	Important	Very important
Geographic Location (Distance	6	2	9	6	3
Between The Cities)					
Cultural Exchange	1	2	5	9	10
Budget Dedicated To Relationship	3	2	6	8	8
National Politics	4	9	10	3	-
Historical Bounds	-	5	9	10	3
Similarities In Urban Problems	-	3	7	9	7

#### Sister city activities

Before the evaluation of sister city activities, it is important to understand, first, how Eurocities introduce themselves to their sister cities and second, how they improve the mutual relations. The common ways to introduce the city are based on cultural activities (76%) and periodical meetings (76%) held in its sister cities. Advertisements (17%) and investments (10%) are in the second and third rank respectively in introducing the city (Table 10). The results of this question is quite significant considering that the essence of the sister city relations is to comprehend not only city decision makers such as municipalities but also the inhabitants of the cities. Especially cultural activities have a great capacity to draw public attention to a specific point. Periodical meetings placed in the local agenda help to provoke the curiosity of citizens about their 'sisters' as well. Therefore, whatever the methods are, introducing the city is one of the key features to pull tourist interest.

Table 10 Introducing ways of the city

		-
Introducing ways of the city	#	%
Advertisement	5	17
Cultural activities	22	76
Investments	3	10
Periodical meetings	22	76
Other	15	52

It can be argued that besides the efforts to familiarize the city to sister cities, reciprocal visits could play important role to fortify the mutual relations. However, only 28% of the respondents answered that their reciprocal visits occur once a year and 14% answered as twice a year. Nearly half of our surveyed cities noticed that the reciprocal visits and their frequencies depend on city-to-city relations (45%). As mentioned before, the surveyed cities have several sister city relations and their relation types differ from each other by numerous reasons. Therefore, the higher rate in "depending on city" is quite realistic than "once a year".

Despite the reciprocal visits vary according to sister city relations, 41% of the cities in our sample declared that they organize some cultural and/or sportive activities once a year. The rate of "twice a year" is also considerably high with a share of 17% while taking into consideration all the preparation, announcement and realization processes of these activities (Table 11).

	Reciprocal	Visits	Cultural Sportive Activities		
	#	%	#	%	
Once a Year	8	28	12	41	
Twice a Year	4	14	5	17	
Three Times a Year	1	3	1	3	
Four Times a Year	1	3	2	7	
Five Times a Year	2	7	-	-	
Depends On City	13	45	8	28	
None	-	-	1	3	

Table 11 Frequency of reciprocal visits and joint cultural and sportive activities

Independently from the frequency of activities, cultural and sportive activities (83%) have a great share as a main activity handled by Eurocities and their sister cities. Considering the biggest activities of the world such as the Olympic Games, FIFA World Championships and music festivals, it is obvious that these kinds of activities pull attention from both sides. Personnel and students exchanges (76%), economic relations (69%) and urban planning issues (69%) are in the agenda of these relations as main activities. These three activities often do not comprehend all inhabitants, however, the effects of these activities can create divers benefits by means of public interest. Organization of scientific meetings (38%) and involvement in EU projects (31%) indicate the perspective of Eurocities and sister cities for the future mutual commitments and signify the strength of their relations. These activities show, on the one hand, that their relations are beyond a simple friendship or reciprocal exchanges and on the other hand, that they are willing to contribute to form a common sense based on scientific and humanitarian projects (Table 12).

Table 12 Main	activities of	of sister	cities
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Main activities	#	%
Cultural or sportive	24	83
Scientific meetings, congress	11	38
Personnel, student exchange	22	76
Economic relationship	20	69
Urban planning issues	20	69
Other (most often EU projects)	9	31

#### Tourism potential and marketing

The services, cultural activities, historical heritage and natural characteristics are the key components of tourism desirability of cities or regions. The average of tourist arrivals to a city does not depend on how big the city is, from a different perspective, it depends on what the city offers. In our sample, most of the cities welcome national and international tourists more than their population. Venice is one of the most well-known cities in the world with its unique urban pattern and historical heritage, therefore, it appeals around 12.000.000 tourists per year. The cities such as Berlin, Bristol, Frankfurt, Gdansk, Malmo, Munich, Oslo, Tampere and Turin, also offer people cultural and sportive activities on the one hand, and spatial and

organizational facilities for conferences and expos on the other hand. 20 out of 29 surveyed cities (69%) have some efforts in advertisement of their cities at the international level. In 13 out of 29 cities, tourism is a main economic activity and 10 of them make advertisements at the international level. In Berlin, Bristol and Gdansk, despite tourism is one of the main economic activities, they do not advertise their cities at the international level. An opposite feature is for Frankfurt, Gijon, Klaipeda, Lund, Malmo, Munster, Oslo, Timisoara, Toulouse and Zaragoza. In these cities tourism is not a main economic activity. However, they advertise their cities at the international level advertise their cities at the international level advertise their cities at the international level. The second second

	City	Demolotion	Tourist	Increase in tourist arrivals from sister	Increase in tourist departures to	Advertisement at the international level (Yes/No)
C:4:	City	Population ism is a main a	arrivals	cities	sister cities	· · ·
		255.000	2.500.000			+
1 2	Antwerp Berlin	3.386.929	11.329.459	-	-	Ŧ
	Bristol			-	-	-
3 4		393.900 370.000	1.484.520 367.948	-+	-	-+
	Brno			+	-	
5	Cologne	1.022.627	2.000.000	-	-	+
6	Gdansk	459.072	1.400.000	-	-	-
7	Leipzig	499.193	955.000	+	+	+
8	Lille	1.200.000	400.000	-	-	+
9	Munich	1.273.186	3.744.929	+	+	+
10	Newcastle	259.600	NA	+	+	+
11	Nis	250.518	NA	+	+	+
12	Turin	898.891	5.130.000	+	+	+
13	Venice	271.251	12.000.000	-	-	+
	Total (perce			6 (46%)	5 (38%)	10 (77%)
Cities where tourism is not a main activity						
14	Bologna	372.505	765.000	+	-	-
15	Düsseldorf	574.541	1.269.053	-	-	-
16	Eindhoven	208.500	NA	-	-	-
17	Frankfurt	657.126	2.500.000	+	+	+
18	Gijon	275.632	266.000	+	+	+
19	Katowice	323.800	103.160	+	+	-
20	Klaipeda	190.000	120.000	+	+	+
21	Lund	100.000	NA	+	+	+
22	Malmo	269.000	1.300.000	+	+	+
23	Munster	280.201	441.662	+	+	+
24	Naestved	47.900	NA	+	-	-
25	Oslo	520.000	2.500.000	-	-	+
26	Tampere	202.394	1.000.000	-	-	-
27	Timisoara	317.615	NA	+	+	+
28	Toulouse	426.700	553.641	-	-	+
29	Zaragoza	650.592	700.000	+	-	+
	Total (percen			11 (69%)	8 (44%)	10 (63%)
	Total (perce	ntage)		17 (59%)	13 (45%)	20 (69%)

Table 13 Tourism potential and marketing

From the perspective of tourism, Eurocities seem to get great opportunities to appeal the people from their sister cities. 59% of the surveyed cities indicated that the number of tourist arrivals from their sister cities has increased and 45% of the cities indicated that the number of tourist from their cities whom visited their sister cities has increased. In 46% of the cities where tourism is a main activity, tourist arrivals from their sister cities have increased after signing sister city agreement. Meanwhile, a reciprocal state is available for sister cities as well. 38% of the surveyed cities indicated that the number of inhabitants who visits their sister cities has increased after the declaration of this linkage. Amazingly, the benefit of tourism is higher for cities where tourism is not the main activity. While 69% of the cities denoted that tourist arrivals from their sister cities have increased after signing sister city agreement, 44% of the cities indicated that the number of inhabitants who visits their sister cities has increased (Table 13).

#### Contributions of sister city relationships

The sister city affiliation brings many benefits for both stakeholders. After signing the necessary agreement to establish this kind of linkage, if both of sides are willing to sustain and improve their relations, the results of this new connection can cause spatial and cultural changes. Benchmarking or best practices bring cities together in a common point to cope with their urban problems or to adjust their economic structure. According to the answers of cities in our sample, 45% of Eurocities contribute in projects handled by sister cities, whereas 55% of sister cities contribute in projects handled by Eurocities (Table 14).

	•	ontribution in ed by Eurocities	Eurocities' contribution in projects handled by Sister Cities		
	#	%	#	%	
Yes	16	55	13	45	
No	13	45	16	55	

#### Table 14 Benchmarking

Another way to measure the tangible benefits or contributions of sister city relations is to evaluate what happens after signing the sister city agreement. The surveyed cities indicated that after signing the sister city agreements, the number of visitors (%59), students (52%), cultural activities like art shows (55%), economic cooperation with entrepreneurs from their sister cities and the number of projects handled by their sister cities in their cities have increased. This increase in the above-mentioned fields has occurred in more than 50% of Eurocities in our sample. Reciprocally, sister cities of Eurocities have also obtained an increase in all these fields. However, the number of visitors (45%), students (45%), art shows (52%), economic cooperation with entrepreneurs (41%) and the number of projects handled by Eurocities (48%) have increased in relatively small number of sister cities. This picture shows that sister cities are more active and entrepreneurial than Eurocities to carry out their relations on economic level. This entrepreneurial behaviour reflects also in the number of investments. While 24% of the Eurocities has an increase in investment by their sister cities, only 14% of sister cities has an increase in investment by Eurocities. This fact may relate to the increase in the number of citizens from sister cities. 34% of the surveyed cities indicated that the number of citizens from their sister cities has increased, whereas the number of citizens from Eurocities has increased in 24% of sister cities. It seems sister city relationship has led to a migratory flow between the cities and Eurocities pull much more people from their sister cities. In particular, the increase in the number of visitors, students and

entrepreneurs is remarkable (Table 15). It is obvious that Eurocities get many benefits from their sister city relationships.

	In Eurocities		In Sister Cities	
	#	%	#	%
The number of investments of Eurocities/Sister	7	24	4	14
Cities has increased				
The number of visitors from Eurocities/Sister	17	59	13	45
Cities has increased				
The number of citizens from Eurocities/Sister	10	34	7	24
Cities has increased				
The number of students from Eurocities/Sister	15	52	13	45
Cities has increased				
The number of restaurants and gift shops of	0	0	1	3
Eurocities/Sister Cities has increased				
The number of art shows Eurocities/Sister Cities	16	55	15	52
has increased				
The economic cooperation with entrepreneurs	15	52	12	41
from Eurocities/Sister Cities has increased				
The number of projects handled by	16	55	14	48
Eurocities/Sister Cities has increased				

Table 15 Contributions of sister city relatio	nships
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#### 4. Concluding remarks

Since the end of World War II, cities around the world have sought to increase their international activities and leverage, to form sister city linkages, and to create associations that bring together city managers to help solve common problems. These trends have given cities a greatly enhanced international profile, with some cities running their own foreign affaires and policies.

Cultural understanding and friendship between cities have been the prime motivations to sustain sister city relationship and to develop economic activities in terms of trade, tourism and investment. In order to understand how network of cities increase the interaction between cities and contribute to their socio-economic development, this study examined the relationships of 'Eurocities' with their 'Sister Cities' to highlight the contributions of the mutual relationship to trade, tourism and cultural activities and investment.

An overall evaluation of sister city relationships of Eurocities in its historical and geographical context shows that sister city movement is very sensitive to general world development system and reflects the socio-economic and political milestones. The big socio-economic and the political events such as the foundation of the European Union, economic crisis in 1970s, globalization phenomenon after 1980s and the expansion of European Union after 1990s, all affects intention and orientation of sister city movement. While in the beginning sister city choice was limited with the cities from the same or neighbour regions, in parallel to globalization the orientation to non-European, in particular, to Asian cities has increased, and then, with the expansion of European Union the orientation has turned to Eastern European cities. This general trend demonstrates that under the 'umbrella' of 'sistership' cities are looking for the opportunities of economic cooperation and investment.

The results of our study show that the contributions of sister city relations depend on former relations, quality and quantity of current joint activities and benchmarking. After signing the

sister city agreements, the number of visitors, students, cultural activities, economic cooperation with entrepreneurs in both Eurocities and their sister cities have increased. This increase in the above-mentioned fields has occurred in more than 50% of Eurocities in our sample and around 50% of their sister cities. Sister city relationship has had also a positive impact on the number of investments in both cities. The number of investments has increased between 15% and 25% of Eurocities and their sister cities. Besides the above-mentioned benefits, may be the most important contribution of sister city relationship is the running joint projects or benchmarking. The results of our study show this kind of active cooperation in terms of contribution to the projects of each other has also increased in 50% of both cities.

All these results clearly demonstrate that sister city affiliations bring many benefits for both of stakeholders and contribute to the socio-economic development of cities. Sharing the experiences and the cultures within these networks may lead to develop some common spatial or social strategies and further cooperation. This complementary relationships and synergies in co-operative activities can cause spatial and cultural changes. While benchmarking facilitates the cultural dialogue between cities, the common values developed in this process make a great contribution to the construction of global urban culture.

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