ECONOMIC CRISIS & SHRINKING CITIES.
Searching a path for addressing shrinkage in Greek cities.

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Abstract

Urban shrinkage involves cities and urban areas exhibiting a significant deterioration in economic, social and demographical terms. The causes of of urban shrinkage may be rooted in suburbanization, economic shifts from traditional industrial-based economies to post-industrial new urban economies; economic restructuring from state economies to market economies; economic crisis due to forces of globalization. Under the conditions of the current economic crisis of public depth in Eurozone, and especially in Greece, there are strong indicators that Greek cities are gradually converted into a new group of shrinking cities. This paper *(a)* reviews the driving forces of urban shrinkage in Europe and worldwide, *(b)* investigates and documents the aspects of shrinkage in Greek cities, and *(c)* proposes *strategies of urban regeneration* for the shrinking Greek cities. As case studies are presented Thessaloniki, the second larger Greek city; and Larissa and Volos, two typical medium-sized cities located in central Greece.

Key words: *urban shrinkage, Greek cities, economic crisis, strategies of urban regeneration*

1. Introduction. The phenomenon of urban shrinkage in Europe and worldwide.

Attempting to define the concept of *'shrinking city',* the Shrinking Cities International Research Network (SCIRN) describes a shrinking city as "a densely populated urban area with a minimum population of 10,000 residents that has faced population losses in large parts for more than two years and is undergoing economic transformations with some symptoms of a structural crisis" [see http://www.shrinkingcities.eu/]. In studies by Pallagst [see Pallagst and Wiechmann, 2005; Palagst 2007a, 2007b, 2008; Palagst et. al 2009], *urban shrinkage* is conceived as a multidimensional phenomenon encompassing regions, metropolitan areas, cities, and parts of cities that are experiencing a dramatic decline in their economic and social bases. The causes of this urban decline are considered as many and complex and a key common parameter for shrinking cities in the last decades is the significant impact of the forces of globalization [Palagst 2007a]. Regarding shrinking cities on a global level, five main causes of shrinkage may be distinguished [see Palagst et. al 2009]:

- <u>Suburbanization</u> leading to the depression of the city centres and inner city areas by means of flight of people and jobs from the inner city areas towards urban periphery and exurban space – as for example, in many North American cities and northwest European cities in the second half of the 20th century.

- <u>Economic transformations</u> such as de-industrialization - the shift from traditional industrial-based economy towards new urban economies (e.g. culture and leisure economic activities, technology-intensive and knowledge-rich firms) which has being experienced by many northwest European cities in the last three decades or so.
- <u>Economic restructuring</u> like the shift from state economy to market economy that occurred in the cities of the former socialist East European countries in the 90s.
- <u>Economic crisis</u> due to forces of economic globalisation and other structural global conditions such as the ongoing economic crisis of public depth in the Eurozone, and particularly in Greece, Ireland, Portugal, Spain and Italy.
- <u>Demographics as well as immigrant settlement-patterns</u> such as low birth rates of inhabitants; flows of economic or/and political immigrants from regions with political uncertainty or/and weak economy (e.g. Africa, Asia, the Balkans) towards regions with political stability and mature economy.

Regarding urban history, it may be said that urban shrinkage in Europe is not a new phenomenon. It has taken place several times in history. For instance, in the 4th, 5th and 6th centuries AD following the collapse of the Roman Empire; during the Middle Ages as a result of plagues, especially the black death in the 14th century AD; in the 19th century during the Industrial Revolutions which asymmetrically entailed on the one hand a strong shrinkage of agricultural towns and settlements while on the other hand, they generated large urban agglomerations on the basis of manufacturing economy [see Mumford 1984, Morris 1984]. However, urban history shows that most of the shrunk European cities had never been completely abandoned - but usually they have been regenerated.

In contemporary Europe, urban shrinkage is mainly associated to economic restructuring (Eastern Europe and the Balkans); low birth rates and ageing population, de-industrialisation and suburbanisation (northwest European cities); and forces of globalisation (south Europe). The main clusters of shrinking cities appear to correspond to regions of (a) the post-socialist countries – and especially Latvia, Bulgaria, Romania, Hungary, Slovakia, and the eastern part of Germany; (b) the northern countries – and especially Finland and Sweden; and (c) the southern countries – and in particular, Greece, Italy, Spain and Portugal (Balagst 2008, Wolff 2010) [see also the map in Fig 1].

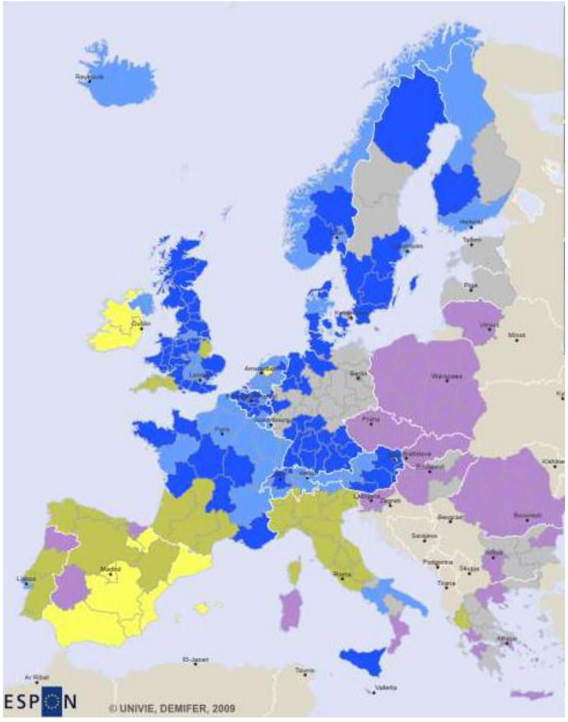

Fig.1 Demographic development of European regions 2005 [data source: Espon, EU, Bauer & Fassmann 2010].
Map index:
a. Population Increase
Yellow colour: Young age structure; positive natural growth & strong net migration
light blue colour: Slightly younger than average; positive natural growth & positive net migration
dark blue colour: Euro standard: close to overall average; positive migratory balance and positive natural balance

b. Population decrease
Green colour: Older populations; natural decrease, but strong net migration
Purple colour: High share in young working ages; slight population decline
Grey colour: Depopulation & ageing; natural decrease & negative net migration

2. Portraying and classifying the different trajectories of shrinking cities.

2.1. Urban shrinkage as an outcome of de-industrialisation, suburbanization and urban sprawl.

North-American cities.

In the second half of the 20th century, older industrial cities in the United States, like Detroit, Pittsburgh, Cleveland and others, witnessed de-industrialisation and economic recession that entailed outgoing population from the northeast and Midwest cities towards the south and West cities. Parallel to this, the phenomenon of increasing mass car ownership and extensive easy access to affordable mortgages had encouraged suburbanisation. Thus, in the 60s and 70s, the shrinkage of many older industrial cities was clearly visible. As reported in many studies (see Rybczynski and Linneman 1999; Mallach 2010; Hollander, 2010; Stansel 2011), between 1960 and 1980, for instance Detroit inner city had lost nearly half a million people; inner city areas of Cleveland, Philadelphia and St. Louis each had lost about three hundred thousands people. Following this shrinkage of both industrial plants and population in inner city areas, the lack of demand for land and buildings created a new urban landscape dominated by vacant lots and abandoned buildings. Besides, the social identity of inner city areas has changed; the remaining population has become poorer, also lacking the necessary skills to compete in the labour market on regional or national level (see Mallach 2010). For the Canadian cities, Leadbeater (2007) documents parallel trajectories of urban shrinkage.

Since the 80's, the concept of *gentrification* has become central and there have been great efforts of North-American cities in urban regeneration and renewal projects. These efforts may be considered as responses to urban shrinkage of inner city areas. In some cases, efforts have been fruitful and the central areas began to rebound in the 90's with population and economic growth. However, in many cases - including both large cities like Detroit, Cleveland, and St. Louis as well as small cities – efforts have not been successful, and inner city areas have continued to shrink[1] (Pallagst (2007b).

Northwest-European cities

The phenomenon of urban shrinkage in Northwest-European cities is also closely associated to both (a) de-industrialisation of old industrialized cities in the 70s and 80s such as Glasgow, Liverpool and Manchester, St. Etienne, Gelsenkirchen, as well as (b) suburbanisation and urban sprawl in the last decades of the 20th century.

Looking at characteristic examples, Liverpool and Manchester are typical cases of extreme importance among British cities. As presented by Ferrari and Roberts (2004a and 2004b), both cities have undergone depopulation, declined inner city neighbourhoods, vacant land and derelict buildings since the economic crisis of the 70's and the entailed de-industrialisation. Despite efforts of urban regeneration in the last two decades, Liverpool continues to shrink in favour of other cities in the midlands exposing the net loss of 2,364 persons annually (Ferrari and Roberts 2004a) whereas Manchester's story is more of a success in terms of out-migration, unemployment rates and real estate prices (see Ferrari and Roberts 2004b).

In the case of French cities, Cunningham-Sabot and Fol (2007) distinguish three types of shrinking cities. The first type is related to de-industrialisation as in the declining industrial regions of Lorraine, Nord-Pas-de-Calais and Haute-Normandie. The second type of shrinking cities concerns small towns away from major road and railways infrastructures like those in the regions of Champagne-Ardennes, Midi-Pyrénées, Limousin, and Bourgogne. The third type concerns city centres and inner city areas shrinking due to suburbanisation and urban sprawl particularly observable in fast growing regions such as in the South of France (e.g. Marseille, Avignon, Toulon, Perpignan) (Cunningham-Sabot and Fol 2007).

2.2 Urban shrinkage as a consequence of political/economic restructuring.

Eastern Germany

In 1990, the first year of economic restructuring, the former GDR was abandoned by almost 400,000 citizens. As described in studies (see Lotscher, 2005, Ciesla 2007), between 1990 and 2005 almost 1.5 million people (i.e. 8% of the population) left the

[1] As presented by Pallagst (2007b), urban shrinkage in the United States during the period 2000-2004 is indicated by the following percentages of population loss: 1. Detroit (-5.1%), 2. Cincinnati (-5.1%), 3. New Orleans (-4.6%), 4. San Francisco (-4.3%), 5. Flint (-4.2%), 6. Birmingham (-3.9%), 7. Cleveland (-3.9%), 8. Evansville (-3.9%), 9. Pittsburgh (-3.9%), 10. Dayton (-3.5%), 11 St. Paul (-3.5%), 12. Boston (-3.4%), 13. Buffalo (-3.2%), 14. Rochester (-2.9%), 15. Washington (-2.9%), 16. Mobile (-2.9%), 17. Wichita Falls (-2.8%), 18. Philadelphia (-2.8%), 19. Sunnyvale (-2.8%), 20. Daly City (-2.8%).

area of former GDR. The regions of Thuringia, Leipzig and Dresden are typical and somehow contradicting cases of urban shrinkage.

Thuringia, a geographically central region of Eastern Germany, lost about 330,000 people (i.e.12.2% of its population) in the period between the fall of Berlin's wall in 1989 and 2004 (Genske & Ruff 2006). Outgoing population mainly to the former West Germany has been in search of better working conditions and income. In addition, the birth rate has been declining while the average age has been increasing continuously. According to the latest prognoses (see Genske & Ruff 2006), another 217,000 people may leave the Bundesland within the next 15 years, that is, another 8.1 percent of the total population. Thus, from 1989 to 2020, within 30 years, Thuringia may lose about 20% of its population. Regarding the impacts on the built environment of cities, a major consequence is the amount of land and buildings lying derelict in cities. It is estimated that Thuringia exhibits about 12,000 hectares of derelict urban sites (Juckenack & Wittemann 2006), and this number increases.

In *Leipzig,* the population density dramatically decreased from 3.5 inh./m2 in 1990 to 1.6 inh./m2 in 2008. Economic resurgence of the city after 1998 and a new wave of re-urbanization allowed net migration to increase and turned the balance of population to slightly positive (Dagmar et al 2010).

The city of Dresden - located in the southern part of the former East Germany - has undergone a system shock and shrinkage following the German reunification. The abrupt collapse of the East German economic and social order led to escalating unemployment rates, accompanied by a dynamic out-migration to the western parts of Germany and a dramatic drop in birth rates. In the first half of the 1990s, Dresden faced residential decrease particularly in its historic neighbourhoods around the historic centre, where the housing policies of the GDR had left behind very bad housing conditions (Wiechmann 2009). However, in contrast to the case of Thuringia, Dresden seems to get quickly recovering during the last years. According to Wiechmann (2009), a major turning point has been the year 2000 when most East German municipalities, encouraged by national government funding programs, established urban restructuring strategies. In the case of Dresden, the federal program *'City Restructuring East'* had an eight-year budget of 2.7 billion Euros; it was intended to stabilize the housing market by tearing down abandoned or underused buildings and improving more stable housing quarters. As a prerequisite for absorbing funds of this program, municipalities had to prepare and specify integrated development concepts for their territories. The idea was that local strategies of urban restructuring should contribute in adapting the city to the consequences of urban shrinkage and should offer favourable conditions for new development opportunities. The program had successful results; and in contrast to other cities in Eastern Germany, such as Chemnitz, Görlitz and Halberstadt, Dresden started showing a significant population development.

Poland

As described by Stryjakiewicz et al. (2011), over the years 1995-2009, a substantial population drop was recorded in 12 out of the 39 Polish cities - mostly industrial and with more than 100,000 inhabitants. Five cities, former mining centres, lost more than 10% of their residents. Among them, Wałbrzych was the city with the highest population loss. Apart from this, other manifestations of urban shrinkage have been the high unemployment rates, industrial decline, and the degradation of the built environment. According to Stryjakiewicz et al. (2011), urban shrinkage was rooted in certain consequences of the Polish post-socialist transformation: The spatial polarisation of development entailed (a) the concentration of the population in particular metropolitan areas – exhibiting diversified economic profile, and b) the economic collapse and the depopulation of other peripheral cities and areas – mostly with monofunctional economic base. In order to address shrinkage in Polish cities, Parysek (2005) argues that selected policies were focused on the use of EU initiatives and programs supporting urban development and regeneration, and in particular promoting a) the renewal of degraded housing quarters, b) the renewal and re-use of post-industrial and post-military areas in cities, c) the revitalisation of elements of the cultural heritage intended for tourism, d) the development/redevelopment of office space for small and medium-sized enterprises, and IT services e) the construction and expansion of university facilities, and f) investments on renewable energy sources (Parysek 2005). Implementing EU programs in the period 2004-07, 178 projects were curried out in 113 Polish cities with a total funding of 95,5 milion € whereas in the period 2007-13, the funding had reached 1.436,8 milion € in 2011(Stryjakiewicz et al. 2011).

Slovak Republic

Among Slovak cities, *Bratislava* underwent substantial changes in its demographic profile after 1989 and the political and economic changes. As documented by Bleha and Bucek (2010), the demographic shift was the outcome of different factors simultaneously acting together: Among them, the most important has been the start of a new type of suburbanization and out-migration: Many rural settlements located in the hinterland were sharply gaining from migration outflows from Bratislava since more and more luxurious housing projects and exurban commercial centres were developed in the periphery of Bratislava. The second important factor has been fertility rates. Due to the end of the social benefits system as experienced under the communist regime, the total fertility rate has since 1989 been declining quickly and dramatically to reach a value below one child per one woman; and the number of newly born children has been decreasing every year. Yet another factor has been de-industrialisation and the entailing out-migration. Since 2005, stabilisation and a positive turn in the trend of shrinkage have been observed due to regeneration processes in inner city areas (Bleha and Bucek 2010).

2.3 Urban shrinkage as a result of globalisation and international economic crisis.

Since the '90s, under the conditions of economic globalisation, European integration, and intercity competition, the weak and vulnerable local economies of cities in the geographical and economic periphery of Europe such as those in South-east Europe, the Balkans and the Mediterranean, were expected to be hit harder (CEC 1992). As Kantor (1987) had first stated as early as in 1987, and followed since then by many other researchers, cities in the post-industrial era have become 'captives' of a highly competitive economic environment in which traditional factors (e.g. geography, physical infrastructure) that once affected the location of new business to a specific place, matter less than ever. Due to the capacity of capital to switch locations, all cities - with the exception of 'global cities' (Sassen, 2001) having sufficient power to mastermind volatility of capital - have become interchangeable entities to be played off one against another, forced to compete from positions of comparative weakness for the capital investment (Kantor, 1987).

In this broad framework, the group of peripheral European cities, like for instance Greek cities, south Italian cities, characterised by relatively unstable and weak economies as well as by spatial planning disadvantages due to rapid and unregulated economic and physical growth in the 2nd half of the 20th century, are in comparison to other groups of European cities more vulnerable to forces of economic globalisation and other global structural economic conditions such as the international economic crisis and the public depth crisis in Eurozone since 2008. Typical such group of cities are Greek cities.

Greek cities.

Since the early 90's, and the opening of the economy in the Balkan post-socialist countries, Greece has been the main investor in the form of both *(a) large Greek businesses* (e.g. banks, supermarkets, engineering and construction companies) expanding their network and interests and *(b) small to medium Greek enterprises (SMEs)* in textiles, clothing, footwear and furniture, relocating or expanding in these countries (mainly Bulgaria, FYROM, Albania, Romania and Turkey) due to the attractiveness of the relatively very low labour wages and taxation of enterprises (see for instance, Petrakos 2002, Labrianidis 2001, Labrianidis et al. 2003, Hatziprokopiou 2006, Labrianidis 2008, Ticos 2008). Besides, for the same reasons, multinational big firms (e.g. Goodyear, Nissan) started moving from Greece to these countries. As a result, Greek cities, and indeed those closer to the northern borders, started having lose of jobs, unemployment rates as well as vacant industrial, commercial and office buildings (see Triantafyllopoulos 2005) and population decrease in inner city areas.

The decline of particular inner city areas and the centre of cities in both spatial and demographic terms have furthermore been reinforced by *urban sprawl* and *suburbanisation* in the periphery of large cities – mainly of Athens and Thessaloniki (see Gospodini 2006; Gospodini and Beriatos 2006). However, the first wave of negative economic, social and spatial effects of globalisation forces on Greek cities has been partly counteracted by the following parallel processes:

(a) <u>the rapid economic growth</u> of Greece in terms of GDP in the 90's and the dawn of the new century, with a mean of 4.5% annually, that was creating new demand in the labour market.;
(b) <u>high public investments</u> in large urban development/redevelopment schemes and transportation projects in Athens and other selected cities during the preparation period before hosting the 2004 Olympics (1998-2004) (see Beriatos and Gospodini 2004; Gospodini 2009) that also created thousands new jobs;
(c) <u>the immigration flows</u> from the Balkan countries – mainly from Albania, Bulgaria and Romania but also from the former Soviet Union Republics – to the Greek cities, that have been providing on the one hand cheap labour force which fueled businesses to rise their turn over, and on the other hand, new incomers in the declined inner city areas and the city centre (see Kotzamanis et al 1998, Kotzamanis 2000a, Kotzamanis. 2000b)

Since 2008, the international economic crisis and the ongoing crisis of public depth in the Eurozone, have created a second wave of negative impacts on Greek cities. The hit on local urban economies, societies and space is widespread and clearly visible whereas there are strong indications for Greek cities to have entered a phase of serious shrinkage. More specifically, the closing down of small to medium sized enterprises (SMEs), mainly in the commercial and service sectors appears to rapidly spread in all categories of Greek cities. <u>This negative impact appears to be more intense in metropolitan and large cities than in medium sized cities and small towns</u>. For instance in Thessaloniki, the second largest city in Greece, according to data provided by the Chamber of Commerce and Industry, a total of 16,990 businesses have closed down during the first two years of the economic crisis (see Tables 1 and 2). In inner city areas, and yet in the city's centre, a chain of vacant shops, offices and houses are recorded in former lively commercial streets (see table 1). Research[2] which had been carried out in the city centre of Thessaloniki in 2012, had surveyed all vacant commercial shops in the city centre (see map in Fig. 2).

Table 1: Thessaloniki. The balance of registered new businesses and closing businesses.
[Data source: Chamber of Commerce and Industry].

Thessaloniki years	**Registered new businesses**	**Closing businesses**	**Total balance**
2009	5,125	4,924	+ 201
2010	4,858	6,712	- 1,854
2011	3,976	5,354	-1,378
total	13,959	16,990	- 3,031

Table 2. Thessaloniki. The percentages of vacant shops in the main commercial streets.
[Data source: *Ageliof oros,* newspaper , 10-08-2011,
http://www.ageliof oros.gr/default.asp?pid=7&ct=1&artid=106118]

Thessaloniki: main commercial streets	**Percentage of closed commercial shops** (August 2011)
Tsimiski Str.	11%
Mitropoleos Str.	9%
Aghias Sofias Str.	8%
Egnatia Av.	19%
Venizelou Str.	18%
Vasilissis Olgas Av.	18.5%
city centre as a whole	20%

[2] This research has been carried out by postgraduate students of the MSc Course in Urban and Regional Planning, University of Thessaly, under the supervision of Prof. Aspa Gospodini. These students are Th. Goufis, H. Goltsiou, Y. Kleovoulou,., P Ntaflouka,., S. Pravioti., and Y Skoularidis,.

Fig.2 Thessaloniki. A map of the city centre showing **(a) the vacant commercial shops** marked in black;
(b) streets with relatively high percentages of vacant commercial shops marked in red;
(c) streets with relatively average percentages of vacant commercial shops marked in orange;
(d) streets with relative lower percentages of vacant commercial shops marked in yellow.

The situation has been similar in Athens and Attica in the first years of the economic crisis (see Table 3). In the city centre (CBD) about one third of the commercial shops had closed while in residential areas of the greater metropolitan area of Attica, the percentages of vacant shops in the local centres varied from 17% to 28.1%. Moreover, riots against austerity measures in 2011 and 2012 put in fire and ruined shops and entire buildings and thus, worsening the fiscal situation of commercial businesses. In Athens' centre, large commercial avenues such as for instance Stadiou Street, the percentage of vacant shops had been unprecedented - risen to 42% in March 2012 (*Kathimerini* Newspaper, 08-03-2012).

Table 3: Athens and Attica. Percentages of vacant commercial shops.
[Data source: *Kathimerini* Newspaper, 08-03-2012, and http://www.newsbomb.gr]

Areas in Athens & Attica	Percentages of closed commercial shops				
	August 2010	**March 2011**	**August 2011**	**March 2012**	**Change rate** March 2011/ March 2012
Athens city centre	18%	23%	24%	**30%**	+27%
Kolonaki	12%	19%	24%	**20%**	+6.0%
Kallithea	13%	17%	20%	**23%**	+35%
Marrousi	16%	17%	20%	**17%**	0%
Nea Ionia	15%	18%	21%	**28,1%**	+58%
Chalandri	17%	22%	21%	**20%**	-10%
Pireaus	11%	21%	27%	**28%**	+13%
Kifissia	12%	21%	24%	**24%**	+55%

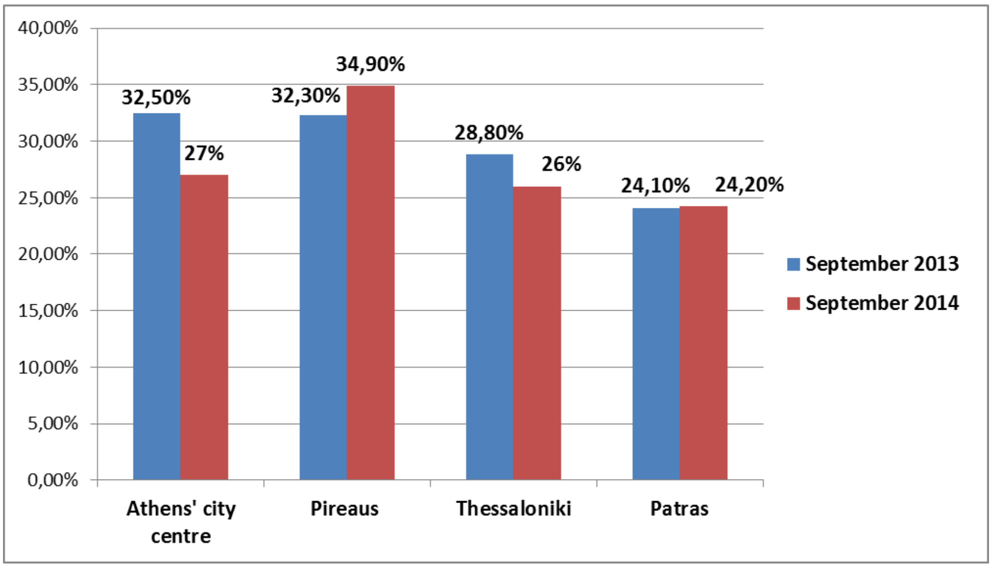

Fig.3.The four large Greek cities: Percentages of vacant spaces in commercial streets in the city centre [authors graph based on data source: www.tovima.gr/files/1/2015/01/16/pinakeslouketa.pdf]

This situation in metropolitan and large cities started to comparatively improve in 2014 as shown by the graph in Fig.3. However, according to research[3] by HCCE (2014), from the total number of 6,126 appropriate spaces to host commercial and service businesses, 1,657 are vacant. The recording of the spatial clustering of such vacant spaces in November 2014 was negatively impressive, as shown in the thematic map of Athens' city centre (see Fig.4).

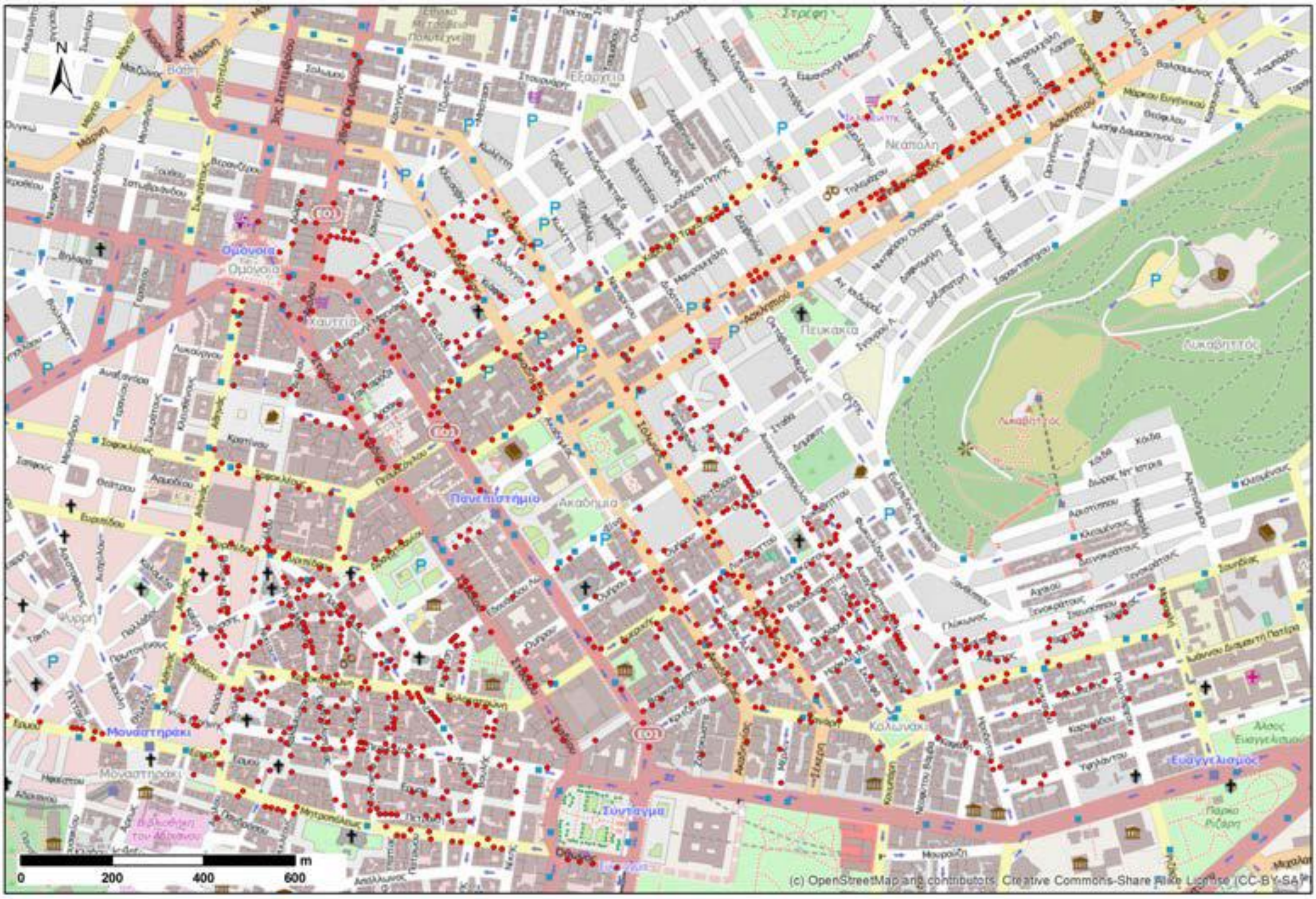

Fig4. Athens' commercial centre. Thematic map showing in red the vacant ground spaces [source: HCCE (Hellenic Confederation of Commerce & Entrepreneurship) (2014), p. 17].

[3] HCCE (Hellenic Confederation of Commerce & Entrepreneurship) (2014), *Spatial Clusters of Commercial Enterprises: Mapping of commercial centre and vacant shops,* Available online 31Oct 2015 http://docplayer.gr/4415848-Horikes-sygkentroseis-emporikon-epiheiriseon-hartografisi-emporikon-kentron-katagrafi-ton-loyketon.html

In middle-sized Greek cities, the emerging landscape of businesses' shrinkage has similar characteristics. The mean percentage of vacant shops is 14.7% in the case of Kavala, 18.8% in the case of Kozani, 18% in Edessa, 12.4% in Veria, 15% Heraklion, and 20% in Tripoli (Data source: HCCE (Hellenic Confederation of Commerce & Entrepreneurship) http://www.esee.gr and http://www.enet.gr 09-08-2011). Our research which was sequentially conducted[4] in 2011 and 2012 for the cities of Larisa and Volos surveyed the vacant commercial shops in the city centre and revealed the degree of shrinkage of each the street in the city centre (see maps in Figs. 4, 5, and 6). In Larissa, the percentages vary from 4% in the best case (Ermou Str.) to 42% in the worse case (Patroklou Str.). In Volos, percentages vary from 10.3% in the best case (Venizelou Str.) to 23.3% in the worse case (Analipseos Str.).

The mapping of sequential data collected in 2011 and 2012, shows an emerging spatial relationship among the constant flows of *(a) closing (b) opening* and *(c) relocating* commercial/service enterprises; and this spatial relationship is important because it shows the progressive steps in the shrinking process of the city centre in Greek cities. In the first stage, the economic crisis tends to hit harder those enterprises located in major commercial streets with high rents. The closing down of these enterprises and the emergence of vacant shops/offices in major streets of the city centre push down the rent prices. In a second phase, start-up enterprises are attracted by low rent prices in major streets and decide to settle there. Following this kind of 'revitalisation' trend, in the next phase, enterprises which are fiscally stable and located in secondary streets tend to relocate in the remaining vacancies of the major streets. In this process, the shrinkage of the major streets is gradually absorbed leaving vacancies in the secondary streets of the city centre. This trend is of major importance for the economic identity of Greek cities. It is important to note that for over a century, a key characteristic of Greek cities - distinguishing them from other groups of European cities - has been the lively small streets in the city centre generated by the mixed land-use pattern and the existence of small commercial shops. Research so far points that urban shrinkage may gradually fade away this positive key characteristic of Greek cities.

[4] This research has been carried out by postgraduate students of the MSc Course in Urban and Regional Planning, University of Thessaly, under the supervision of Prof. Aspa Gospodini. In the case of Larissa, students participating in the research are I. Giannakopoulou, V. Gota, Th. Goutsabasouli, G. Thomos. In the case of Volos, students participating in the research are P. Daflouka, Ch. Karoula, Ch. Tasolabrou, and E. Tzavela.

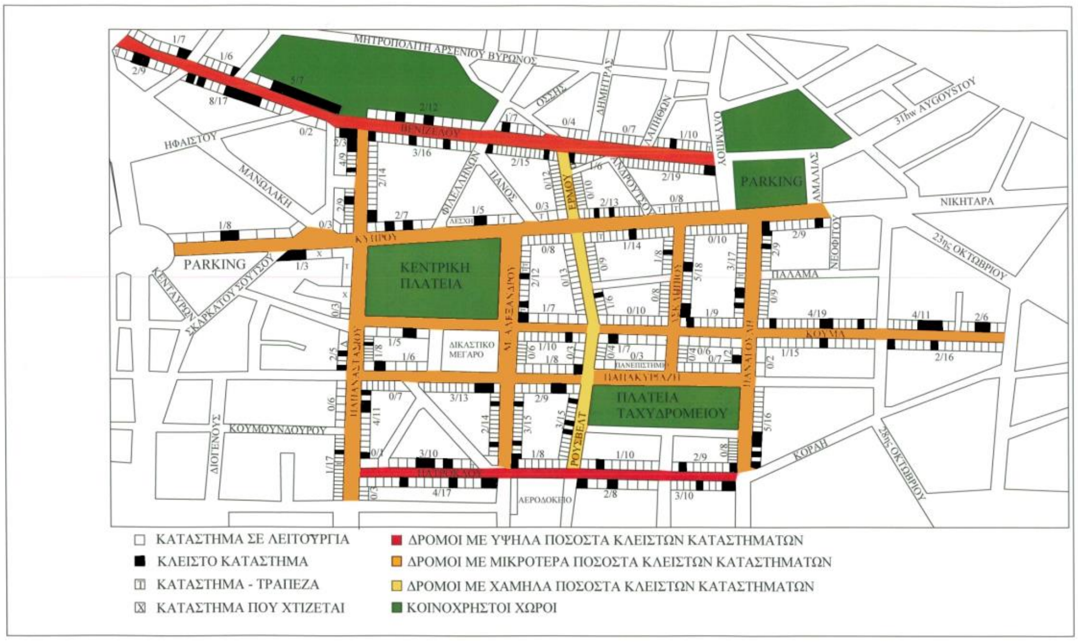

Fig.4 The city centre of Larissa, Greece: Vacant shops and declined commercial streets in the heart of the city [data recorded in November 2011].

Map Index:

a. vacant shops are marked in black.

b. Streets in red colour indicate relatively high percentages of shop vacancies and strong decline

c.. Streets in orange colour indicate relatively moderate percentages of shop vacancies and moderate decline.

d. Streets in yellow colour indicate relatively low percentages of shop vacancies and minor decline.

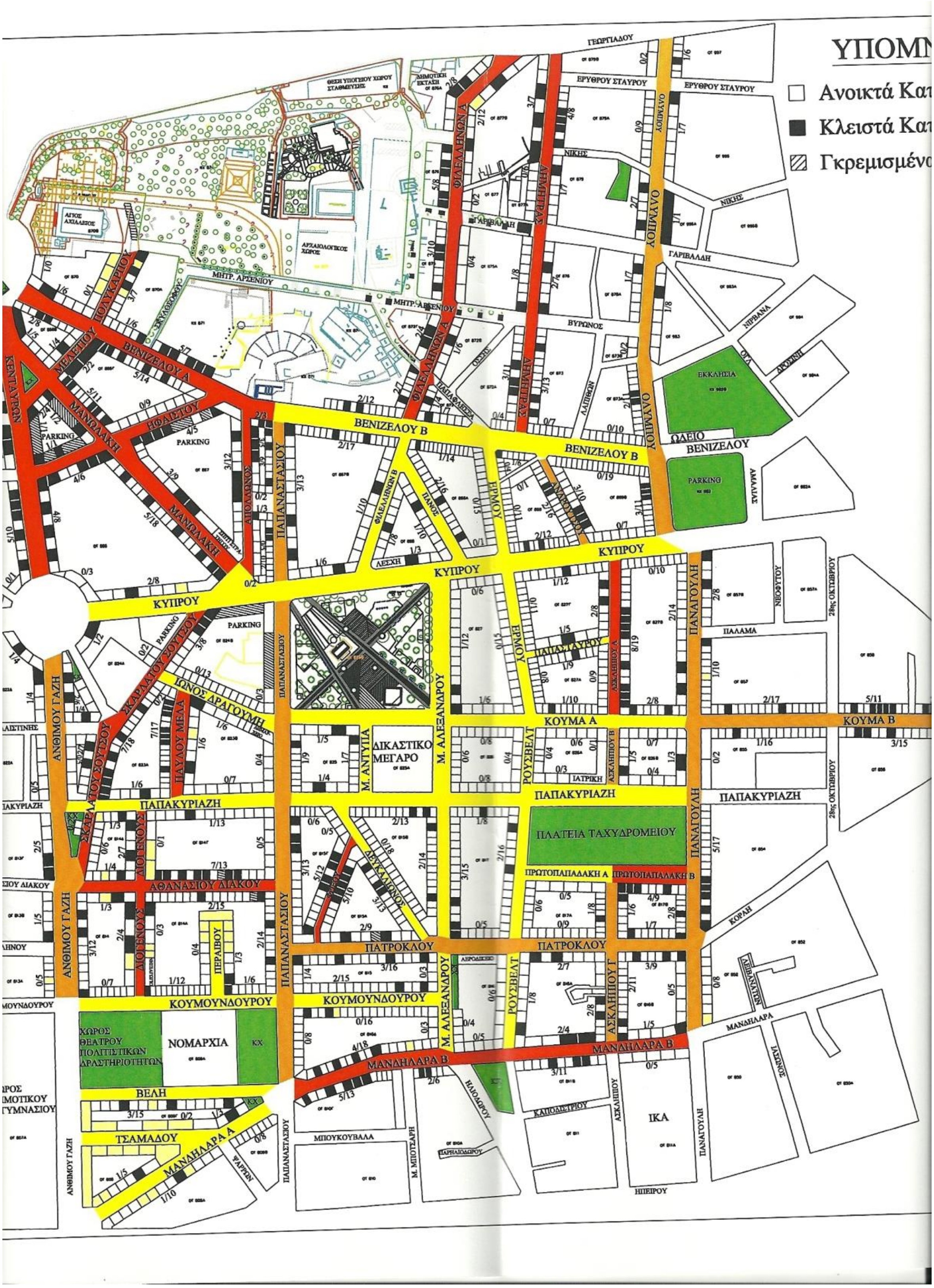

Fig.5 The city centre of Larissa, Greece: Vacant shops and declined commercial streets in the heart of the city [data recorded in May 2012].

Map Index:

a. vacant shops are marked in black.

b. Streets in red colour indicate relatively high percentages of shop vacancies and strong decline

c.. Streets in orange colour indicate relatively moderate percentages of shop vacancies and moderate decline.

d. Streets in yellow colour indicate relatively low percentages of shop vacancies and minor decline.

Fig. 6 The city centre of Volos, Greece: Vacant shops and declined commercial streets in the heart of the city. In the left, the map has been set up by data recorded in November 2011, while the map on the right is based on data recorded in May 2012].

Map Index:
a. vacant shops are marked in black.
b. Streets in red colour indicate relatively high percentages of shop vacancies and strong decline
c.. Streets in orange colour indicate relatively moderate percentages of shop vacancies and moderate decline.
d. Streets in yellow colour indicate relatively low percentages of shop vacancies and minor decline.

As a consequence of the massive closing of small businesses in the commercial and service sectors, unemployment has been radically increasing from 7% in 2008 to 21.5% in the first quarter of 2012 and 25.1% in the second quarter of 2012, corresponding to 1.261.000 unemployed people (see Fig.7) [data source: Hellenic Statistical Authority (www.statistics.gr)]. In the following years, unemployment has risen even more reaching a peak of 27.5% in 2013, and a total number of 1,309.071 unemployed people. In 2014, it slightly dropped to 25.9%. Recent data for June 2015 show 25.2% unemployment rate while unemployment of young people reaches 48.3%. In comparison to other European countries facing recession, Greece has been hit harder since unemployment for instance in Spain is 22.2% and in Cyprus 15.3%. The mean for the 28 countries of EU is about 11%.

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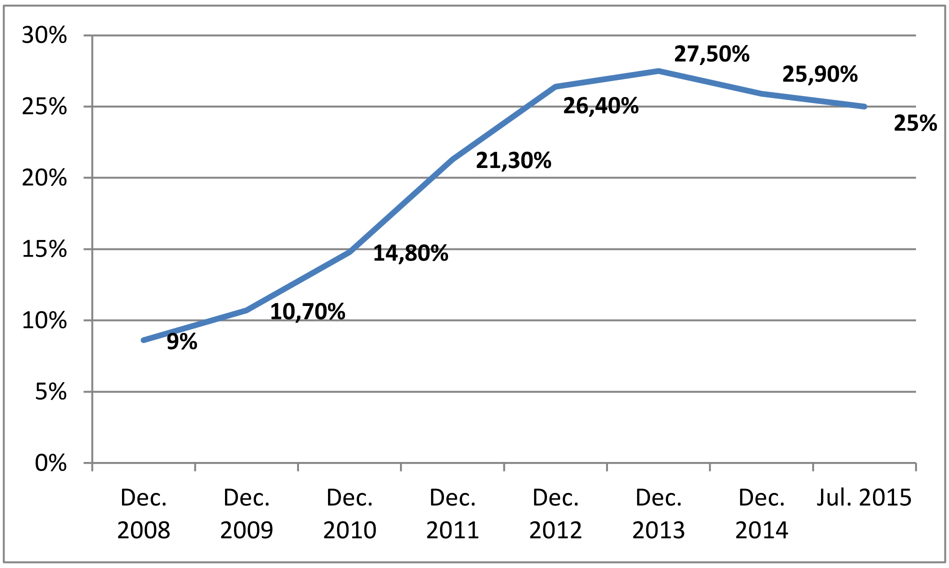

Fig.7 Greece: Unemployment rates during the years of economic crisis (Dec 2009- July 2015). [Author's graph. Data source: Hellenic Statistical Authority (www.statistics.gr)].

Long term high unemployment rates have recently given rise to population decrease in large cities and middle-class inner city areas: Although detailed data of the *2011 sensus* in Greek cities is not yet available, a trend of population decrease is recorded in inner city areas and the city centres (see Anastasiou and Manika 2015; Manika and Gospodini 2015) and this is associated (see *To Vima*, Sunday newspaper, 05-02-2012, pp A34-A35) to the following:

- an out-migration towards agrarian small towns and villages in the hope of a less expensive living and possible advantages of the family real estate property,
- the move-out from middle-class neighbourhoods to less expensive residential areas in order to cut down living expenses and
- a significant out-migration of qualified young professionals to cities of mature economies in northwest Europe, USA and Australia - in seek of a better carrier life.

Moreover, birth rates tend to decrease due to both the deteriorated fiscal situation of middle-class and low-class dwellings and the abolition of the social security/benefits system in Greece as part of the EU and IMF austerity measures program. An indication is that, according to the first data of the *2011 sensus*, population on national level has shrunk_between 2001 and 2011 from 10.96 to 10.78 million inhabitants[5], despite the former immigration flows from Balkan countries and Asia to Greece.

Yet another consequence of the population decrease and the closing of small businesses in inner city areas is the radical devaluation of real estate properties. According to interviews with real estate agencies, price comparisons between 2009 and 2015 show that the decrease of rents in housing has been about 30% while the devaluation of real estate prices varies between 40% and 50%. The devaluation has been stronger in office and commercial spaces than in houses and flats; it has also been stronger in large cities than in medium and small cities.

[5] data source: Hellenic Statistical Authority (www.statistics.gr).

3. Urban policies counteracting shrinkage; searching a path for Greek cities.

In counteracting urban shrinkage, best practices and special strategies in North American cities and European cities may offer a valuable guidance in the development of urban policies for Greek cities:

Regarding North-American cities, Mallach and Brachman (2010) argue that in order to address urban shrinkage, planning authorities and the state must adopt a different way of thinking and a different vision of its shrinking cities' future. Mallach and Brachman (2010) propose seven basic visions and strategies that should be implemented in any action plan for improving a shrinking city:

1. The city contains significant assets for future rebuilding.
2. The city will not regain their peak population.
3. The city has a surplus of housing.
4. The city has far more vacant land than can be absorbed by redevelopment.
5. Impoverishment threatens the viability of the city more than population loss.
6. Local resources are severely limited.
7. The fate of the city and its metropolitan area are inextricably inter-connected.

Pallagst (2006) has emphatically noted that addressing shrinkage in North-American cities has been perceived as part of the discourse around <u>suburban space versus the city centre</u>; and as a general trend, planning against shrinkage has been focused on revitalizing city centre and inner city areas while <u>using *'green'* as a model for revitalization</u>. Pallagst (2007b) presents four strategies to counteract urban shrinkage: (a) accept that the shrinking city is a smaller city, (b) define its role under the premises of a new economy, (c) improve the city's image and quality of life, and (d) call for action with an achievable and action-oriented plan.

Looking at the post-socialist European cities and especially successful paradigms like the city of Dresden, Wiechmann (2009) argues that <u>local strategies</u> of urban restructuring were the key factor and catalyst in adapting the city to the consequences of shrinkage and offering quality of urban space and new development opportunities.

Considering Northwest European cities, Aber (2007) points out as key strategy for success, the development of clusters of <u>*'creative industries'*</u> in connection with criteria of sustainable development. Among successful such cases, Glasgow is presented as a typical one; it is now universally recognized as a "creative hub" while creative industries are still the city's fastest growing economic sectors (Aber 2007).

In the above framework, the shrinking Greek cities have to path their own way in developing urban policies to deal with shrinkage. However, on the ground of international experience, certain steps or directions may be proposed:

1. Urban shrinkage has to be recorded, surveyed, understood and interpreted in each Greek city. In virtue of its dynamic character, urban shrinkage has to be recorded constantly by means of an **observatory** recording changes. The research objectives of the observatory will be the following:

- to survey and document the shrinkage of Greek cities,
- to improve the knowledge basis about the phenomenon of shrinking cities in Greece,
- to provide a forum for the discussion of successful regeneration strategies in shrinking Greek cities,

- to establish a frame of common action facing the multiple challenges around shrinking Greek cities.

2. The negative effects of the economic crisis and the urban shrinkage may be considered as **a challenge to remodel urban growth and restructure inner city areas and improve image** in Greek cities. More specifically,

- The centre and inner areas of Greek cities are characterised by perimeter block system with high built densities, shortage of public open spaces and green spaces, and inefficiency of parking spaces (see Fig.8). The current conditions of low real estate prices, offer a chance to the local authorities to expropriate abandoned buildings for public interest. More specifically, in the perimeter blocks system, the expropriation and demolishment of a vacant or underused building could provide the critical spatial link between open space inside the block and the street network surrounding it. Open space within blocks is usually over-fragmented into small private yards - unused and meaningless. Integrating these fragmented private open spaces and connecting them to the surrounding street system, may encourage their transformation into semi-public common gardens or/and parking space (Gospodini et al. 2014) (see Figs.9 and 10). The *'greening'* of inner city areas and the enhancement of the quality and image of urban space may reverse the dramatic decrease of real estate values, encourage urban regeneration in declined inner city areas, and boost the return of middle class strata in the heart of large Greek cities.

Fig.8. Greek cities: Typical landscape in inner city areas.

Fig.9 Typical parameter block. Integrating fragmented private interior open spaces and connecting them to the surrounding street system.

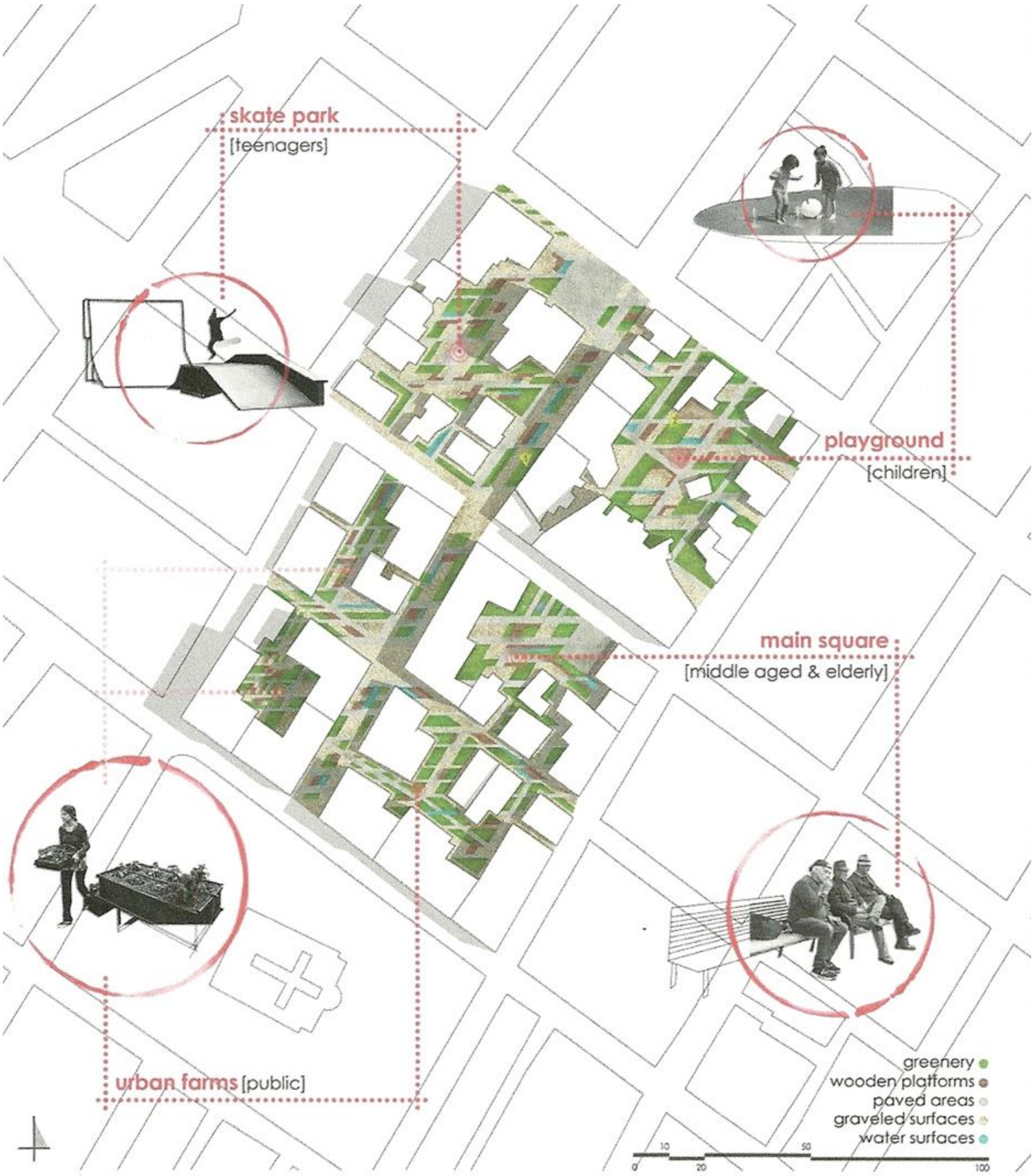

Fig.10. A pilot redesign scheme in Metamophosis - a central residential area of Volos (Gospodini et al 2014).

- In shrinking urban areas with a series of abandoned industrial/commercial blocks, urban renewal and redevelopment processes should be centrally managed by local planning authorities on the basis of a comprehensive master plan - and in line with new European operational initiatives for urban regeneration such as JESSICA, now starting up in Greece (see Triantafyllopoulos 2009; Triantafyllopoulos and Alexandropoulou 2010). As central concern/theme of such master plans has to be the development of clusters of post-industrial flourishing urban economies, such as clusters of cultural and creative industries, clusters of technology-intensive and knowledge-based enterprises in accordance to European best practices as documented in for instance the case of Glasgow, Manchester, and elsewhere. Such clusters can constitute the new epicentres of postindustrial economies in the Greek cities (Gospodini 2006 and 2009); and they can help them to refuel economy and recover from recession and shrinkage.

References

Aber, J. (2007): 'The Creative Imperative in a Post-industrial Economy to Foster a More Sustainable Development in Shrinking Cities' a paper presented at the international Symposium – *The Future of Shrinking Cities - Problems, Patterns and Strategies of Urban Transformation in a Global Context,* organised by the Center for Global Metropolitan Studies, Berkeley University, Berkeley, February 8 - 9, 2007. Proceedings available on line: http://metrostudies.berkeley.edu/pubs/proceedings/Shrinking/14Aber_PA_final.pdf

Anastasiou, E., Manika, S. (2015), 'Urban Shrinkage from Spatial Demography view in Greece', paper presented at the 55th ERSA Conference, 25-28 August 2015, Lisbon, Portugal.

Beriatos, E., Gospodini, A., (2004), 'Glocalising Urban Landscapes: Athens and the 2004 Olympics', *Cities:* 187-202

Bleha, B. a Buček, J. (2010). 'Theoretical issues of local population and social policy in 'shrinking' cities – some findings from Bratislava' in Kovács, Z., (ed.) *Challenges of Ageing in Villages and Cities: The Central European Experience.* Slovak Republic: Szeged University Publications: 110-131.

Bauer, R. & Fassmann, H. (2010), 'Demographic Typology of European Regions: Highlighting the Spatial Implications of Current Population Patterns', a paper presented at the conference *Dealing with Change - Demographic Change and Development Strategies*, Berlin 18/19 November 2010.

CEC (1992) *Urbanisation and the Function of Cities in the European Community*, Regional Development Studies 4 (Brussels, CEC).

Ciesla, A., (2007), 'City shrinking as a challenge for new EU member states – Learning from the Eastern German experience', *EUROPA* XXI (16): 31-38.

Cunningham-Sabot, E., Fol, S., (2007), 'Shrinking Cities in France and Great Britain: A Silent Process?' in *The Future of Shrinking Cities - Problems, Patterns and Strategies of Urban Transformation in a Global Context,* Conference Proceedings, Berkeley, USA: Published by the Center for Global Metropolitan Studies, Institute of Urban and Regional Development and the Shrinking Cities International Research Network, February 2007: 17-27

Dagmar, H, Lautenbach, S., Seppelt, R., (2010), 'Modeling and simulating residential mobility in a shrinking city using an agent-based approach', *Environmental Modelling & Software* 25: 1225-1240.

Ferrari, E., Roberts, J., (2004a), 'Liverpool – Changing Urban Form', Report on *Shrinking Cities:* 130-136. Available on line www.shrinkingcities.com

Ferrari, E., Roberts, J., (2004b), 'Manchester – Regrowth of a shrinking city', Report on *Shrinking Cities:* 40-51. Available on line www.shrinkingcities.com

Genske, D.D., & Ruff, A., (2006), 'Expanding cities, shrinking cities, sustainable cities: challenges, opportunities and examples', a paper presented at the 10th IAEG International Congress, Nottingham, United Kingdom, 6-10 September 2006**.**

Gospodini, A. (2002), "European cities in competition and the new 'uses' of urban design', *Journal of Urban Design*, 7(1): 59-74.

Gospodini, A. (2006), 'Portraying, Classifying and Understanding the emerging landscapes in the Postmodern city'**,** in *Cities* 23(5): 311-331.

Gospodini, A., Beriatos, E., (2006) (eds), *The New Urban Landscapes and the Greek cities,* Athens: Kritiki Publications (in Greek) '

Gospodini, A. (2009), 'Post-industrial trajectories of Mediterranean European cities. The case of post-Olympics Athens, an invited paper to the special theme-issue Trajectories of the New Economy: An international Investigation of Inner City Regeneration and Dislocation', *Urban Studies* 46(5): 1157-1186

Gospodini, A. Klimou, E., Koutsovasili, I., Manika, S., Papachronopoulou, D., (2014), 'Conceptualising 'smart' & 'green' public open spaces; Investigating redesign patterns for Greek cities', paper presented at the 2014 AESOP annual congress *'From Control to Coevolution'*, 9-12 July, Utrecht/Delft, The Netherlands.

Hatziprokopiou, P. A. (2006), *Globalisation, migration and socio-economic change in contemporary Greece: processes of social incorporation of Balkan immigrants in Thessaloniki* Amsterdam: University Press.

HCCE (Hellenic Confederation of Commerce & Entrepreneurship) (2014), *Spatial Clusters of Commercial Enterprises: Mapping of commercial centre and vacant shops*, Available online 31Oct 2015 http://docplayer.gr/4415848-Horikes-sygkentroseis-emporikon-epiheiriseon-hartografisi-emporikon-kentron-katagrafi-ton-loyketon.html

Hollander, J., B., (2010), **'**Moving Toward a Shrinking Cities Metric: Analyzing Land Use Changes Associated With Depopulation in Flint, Michigan' *Cityscape: A Journal of Policy Development and Research* 12 (1): 133-151

Juckenack, C.C., Wittermann, C. (2006), '12000 hectares derelict land in Thuringia'. In: Genske, D.D., Huch, M., Muller, B., *Zukunft-Flache-Raum.* Schriftenreihe der Deutschen Geologischen Gesellschaft DGG

Kantor, P., (1987), 'The dependent city: the changing political economy of urban economic development in the United States', *Urban Affairs Quarterly,* 22:493-520.

Kotzamanis, B. Parant, A., Sardon, J., P., (1998), (eds) *La demographie de Balkans : Sources et donnees demographiques dans les pays balkaniques*, Paris : OUF-AIDELF

Kotzamanis, B., (2000a) (ed) La Demographie des Balkans: composantes de l' evolution demographique, Lab d' Analyses Demographiques et Sociales, Volos, Greece : Presses Universitaires de Thessalie.

Kotzamanis, B., (2000b) (ed) La Demographie des Balkans: mouvements migratoires et repartition spatial de la population, Volos Grece : Presses Universitaires de Thessalie.

Labrianidis, L., (2001), 'Delocalisation Of Labour Intensive Industries. An Argument In Favour Of "Triangular Manufacturing" Between Developed Countries – Greece – Balkans', Proceeding of the International Conference on Restructuring, Stability and Development in Southeastern Europe, SEED centre, Volos (online http://www.seed-center.org/seed2002/papers/papers.cfm , accessed March 2012).

Labrianidis, L., (2008), *The moving frontier: the changing geography of production in labour-intensive industries*, Ashgate Publishing, Ltd.,

Labrianidis, L., Chatzimichalis, K., Chronaki, Z., (1993), "Diffused industrialisation in Thessaloniki. From expansion to crisis, *International Journal of Urban and Regional Research*: 17 (2):178-194.

Leadbeater, D., (2007), 'Single-industry Resource Communities, "Shrinking," and the New Crisis of Hinterland' in *The Future of Shrinking Cities - Problems, Patterns and Strategies of Urban Transformation in a Global Context,* Conference Proceedings, Berkeley, USA: Published by the Center for Global Metropolitan Studies, Institute of Urban and Regional Development and the Shrinking Cities International Research Network, February 2007: 89-100.

Lotscher, L., (2005), 'Shrinking East German Cities?' in E. Nowosielska and J J. Parysek (eds) *Cities in the transforming Post-Communist Countries: Ten Years of Economic, Social and Spatial Experience, special issue of GEOGRAPHIA POLONICA* 78(1): 79-98.

Mallach, A., (2010), *Facing the Urban Challenge. The Federal Government and America's Older Distressed Cities* , USA: Metropolitan Policy Program at Brookings.

Mallach, A., and Brachman, L., (2010), *Ohio's Cities At A Turning Point: Finding The Way Forward* , USA: Metropolitan Policy Program at Brookings.

Manika, S., Gospodini, A. (2015), 'The effects of urban shrinkage in the case of medium-sized cities – Larissa', paper presented at the 55th ERSA Conference, 25-28 August 2015, Lisbon, Portugal.

Morris, A.E.J. (1994), *History of Urban Form. Before the Industrial Revolutions,* Essex UK: Longman Scientific and Technical (3rd edition, first published in 1972).

Mumford, L. (1984), *The City in History*, Harmondsworth, UK: Penguin Books Ltd, (7th edition, first published in 1961).

Nipper,J., Schulz, K., and Wiratanaya, E., (2009), 'Germany's demographic changes and its implications for shrinking cities: disaster or development opportunities' a paper presented at the international conference *The Evolution of Integration in Europe, 20 Years after the fall of the Berlin Wall,* Viessmann Academy in Allendorf a.d. Eder, Hessen , Germany, October 11-14, 2009. Available on line http://www.wlu.ca/viessmann/Integration/Nipper_Schulz_Wiratanaya.pdf

Oguz, S., Velibeyoglu, K., Velibeyoglu, H., (2010), 'Vulnerability of Housing in Shrinking Cities: Case of Izmir', a paper presented at the ENHR 2010 conference, the 22nd international conference on Housing Research and Environment, ISTANBUL, 4-7 July, 2010. Available online http://enhr2010.com/fileadmin/templates/ENHR2010_papers_web/papers_web/WS06/WS06_106_Vermeersch.pdf

Petrakos, G. (2002) *Restructuring and Development in Southeastern Europe* (special edition): Eastern-European Economics.

Philipp, O., Rieniets, T., (2007) 'Global Context. Shrinking Cities." http://www.shrinkingcities.com/globaler_kontext.0.html?&L=1 (accessed January 2010).

Pallagst, K., M., Wiechmann, Th. (2005) Shrinking smart—staedtische Schrumpfungsprozesse in den USA, in Gestring, Norbert et al (ed.) Jahrbuch Stadtregion 2004/05, Schwerpunkt: Schrumpfende Staedte, VS Verlag fuer Sozialwissenschaften, Wiesbaden.

Pallagst, K. (2006) 'The Shrinking Cities Project. Shrinking Cities in the USA' a presentation to the International Symposium *Coping with city shrinkage and demographic change - Lessons from around the globe*, March, 30th to 31st 2006, Dresden, Germany, organised by Leibniz-Institute of Ecological and Regional Development (IOER) Dresden, Schader Foundation, in cooperation with the project group of "Shrinking cities in a global context', Institute of urban and regional development, University of Berkeley. Available online: http://www.schader-stiftung.de/docs/pallagst_presentation.pdf

Pallagst, K., M., (2007a), 'Shrinking Cities in the United States of America: Three Cases, Three Planning Stories' in *The Future of Shrinking Cities - Problems, Patterns and Strategies of Urban Transformation in a Global Context,* Conference Proceedings, Berkeley, USA: Published by the Center for Global Metropolitan Studies, Institute of Urban and Regional Development and the Shrinking Cities International Research Network, February 2007

Pallagst, K., M., (2007b), *Growth management in the US between theory and practice,* Ashgate, Aldershot.

Pallagst, K., M., (2008), *Shrinking Cities. Planning Challenges from an International Perspective,* Cleveland, USA: Kent State University and Cleveland Urban Design Collaborative.

Pallagst, K., M., Aber, J., Audirac, I., Cunningham-Sabot, E., Fol, S., Martinez-Fernandez, C.,Moraes, S., Mulligan, H., Vargas-Hernandez, J., Wiechmann, Th., Wu, T., Rich, J.,

(2009) (eds), *The Future of Shrinking Cities: Problems, Patterns and Strategies of Urban Transformation in a Global Context*, Berkeley: University of California.

Parysek, J. J. (2005), 'Development of Polish Towns and Cities and Factors Affecting This Process at the Turn of the Century' in E. Nowosielska and J J. Parysek (eds) *Cities in the transforming Post-Communist Countries: Ten Years of Economic, Social and Spatial Experience, special issue of GEOGRAPHIA POLONICA* 78(1): 99-116.

Rybczynski, W., Linneman, P. D., (1999), 'How to save our shrinking cities?' *Public Interest* 135, Research Library: 30-44

Sassen, S. (2001), 'Cities in the Global Economy', in Paddison, R. (ed.) *Handbook of Urban Studies*, London: Sage Publications, pp.257-282.

Siedentop, St. / Wiechmann, Th. (2007): Zwischen Schrumpfung und Reurbanisierung - Stadtentwicklung in Dresden seit 1990, in: RAUMPLANUNG 131, April 2007: 57–62

Stansel, D., (2011), 'Why Some Cities Are Growing and Others Shrinking' *Cato Journal*, 31(2) (Spring/Summer 2011): 285-303.

Stryjakiewicz, T., Ciesiółka, P., Jaroszewska, E. (2011), **'**Urban shrinkage and the post-socialist transformation: The case of Poland', paper presented at the conference *Shrinkage in Europe: Causes, effects and policy strategies*, Amsterdam 16-17 Febr. 2011.

Ticos, S. (2008), 'Perceptions of globalisation: attitudes and responses in the EU — Greece', a report submitted to *emcc (European Monitoring Centre on Change),* Available online http://www.eurofound.europa.eu/emcc/erm/studies/tn0708016s/gr0708019q.htm (accessed July 2011).

Triantafyllopoulos, N. (2005) 'The crisis of the office market in Athens. An Interpretative approach', *Aeichoros (Αειχώρος)*, Vol 4(2), pp. 4-33 (in Greek).

Triantafyllopoulos N. (2009) *Possibilities of PPPs in urban regeneration prgrammes in Greece*, Proceedings of the 2nd Hellenic Conference of Plannings and Regional Development, Volos, pp. 641-649.

Triantafyllopoulos N., Alexandropoulou I. (2010) *Land-based financing of the EU JESSICA Initiatives*. 17th Annual European Real Estate Society conference, 23-26 June 2010, Milan, Italy (published as discussion paper Nr 16(8) by the DPRD of the University of Thessaly.

Wiechmann, T., (2008), *Strategic Flexibility beyond Growth and Shrinkage. Lessons from Dresden, Germany*. Cleveland, USA: Kent State University and Cleveland Urban Design Collaborative.

Wiechmann, T., (2009), 'Conversion Strategies under Uncertainty in Post-Socialist Shrinking Cities: The Example of Dresden in Eastern Germany', in Pallagst, K., Aber, J., Audirac, I., Cunningham-Sabot, E., Fol, S., Martinez-Fernandez, C.,Moraes, S., Mulligan, H., Vargas-Hernandez, J., Wiechmann, Th., Wu, T., Rich, J., (2009) (eds), *The Future of Shrinking Cities: Problems, Patterns and Strategies of Urban Transformation in a Global Context*, Berkeley: University of California, p.p 5-17.

Wolff, M., (2010), 'Urban Shrinkage in Europe. Benefits and limits of an indicator-based analysis', *Working Paper Nr. 2010-06*, Institute of Geography Dresden University of Technology. Available online www.cost.esf.org (accessed July 2011)