Workpackage 5

The Governance of Urban Shrinkage in Timișoara, Romania.

Suburbanization, Economical Regeneration, Brownfield

Research report

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Contents

List of figures .................................................................................................................. 4
List of tables ..................................................................................................................... 4

1. Introduction ................................................................................................................ 5

2. Background – Suburbanisation, Economical Regeneration and Brownfield in Romania ... 7
   2.1. General preview – facts and data ....................................................................... 7
   2.2. Present challenges ............................................................................................... 9

3. Shrinkage in Timisoara ............................................................................................. 10
   3.1. General presentation ........................................................................................... 10
   3.2. Contemporary trends .......................................................................................... 13

4. Suburbanization in Timisoara .................................................................................... 14
   4.1. The impact of shrinkage on the suburbanisation ............................................... 14
   4.2. Governance arrangements in Timișoara for the suburbanization issue .......... 16
   4.3. Governance responses to the problems concerning the suburbanisation caused by shrinkage ................................................................................. 21
   4.4. The outcomes of governance responses to the problems concerning the suburbanisation by shrinkage ................................................................. 25
   4.5. Is the city [after shrinkage] characterised by a lack of capacity (financial, institutional etc.) in this policy area? ................................................................. 26
   4.6. Does the city [after shrinkage] experience a dependence on external resources to enable local actors to cope with the problems concerning the suburbanisation? ................................................................. 26
   4.7. Does the city [after shrinkage] experience dependent, contradicting and instable governance arrangements in which local decisions on this issue are highly dependent on shifts of external frameworks? ..................... 27

5. Economical regeneration in Timisoara ...................................................................... 28
   5.1. The impact of shrinkage on the economical regeneration .................................... 28
   5.2. Governance arrangements in Timișoara for the economical regeneration issue 29
   5.3. Governance responses to the problems in the economical regeneration caused by shrinkage ..................................................................................... 31
   5.4. The outcomes of governance responses to the problems in the selected policy field(s) caused by shrinkage ................................................................. 32
   5.5. Is the city [after shrinkage] characterised by a lack of capacity (financial, institutional etc.) in this policy area? ................................................................. 32
   5.6. Does the city [after shrinkage] experience a dependence on external resources to enable local actors to cope with the problems in this policy area? ..................................................................................... 33
   5.7. Does the city [after shrinkage] experience dependent, contradicting and instable governance arrangements in which local decisions on this issue are highly dependent on shifts of external frameworks? ..................... 34
6. Brownfield in Timisoara ................................................................. 35
   6.1. The impact of shrinkage on the Brownfield .................................. 35
   6.2. Governance arrangements in Timișoara for the Brownfield issue .... 37
   6.3. Governance responses to the problems concerning the Brownfield
        caused by shrinkage .................................................................. 37
   6.4. The outcomes of governance responses to the problems concerning
        the Brownfield by shrinkage ....................................................... 38
   6.5. Is the city [after shrinkage] characterised by a lack of capacity
        (financial, institutional etc.) in this policy area? .............................. 38
   6.6. Does the city [after shrinkage] experience a dependence on external
        resources to enable local actors to cope with the problems concerning
        the Brownfield? ...................................................................... 39
   6.7. Does the city [after shrinkage] experience dependent, contradicting
        and instable governance arrangements in which local decisions on this
        issue are highly dependent on shifts of external frameworks? .......... 39

7. Conclusions ..................................................................................... 40

Bibliography ...................................................................................... 47
List of figures

Figure 1 – Population decline in Timisoara and collateral phenomena ........................................ 10
Figure 2-3 – The chaotic suburbanisation around the Timisoara (the Sag village) ..................... 15
Figure 4 – The map with the first form of the metropolitan area of Timisoara (2008) ............... 20
Figure 5 – The industrial platforms from Timisoara .................................................................. 30
Figure 6 – Actors for Economical Regeneration ........................................................................ 31
Figure 7–8 – The Chemical Factory Solventul in 2000 (left) and their brownfield in 2010 (right) ..................................................................................................................................... 36
Figure 9 – Examples of brownfields on the former industrial facilities from innercity .......... 36

List of tables

Table 1 - The evolution of the population of Timisoara ................................................................. 10
Table 2 - Major institutions, initiatives and conditions involved in Timisoara’s suburbanisation ........................................................................................................................................ 18
Table 3 – The local model of governance concerning the suburbanisation in Timisoara ......... 24
Table 4 – The evolution of the employees, companies and incomes into the IT areas: ............. 30
WP5 REPORT – TIMIȘOARA

Suburbanization. Economical Regeneration. Brownfield

Melinda DINCĂ, Delia NADOLU, Dan LUCHEȘ, Bogdan NADOLU

1. Introduction

This paper represents the report of the analysis of governance in Timisoara concerning the issues of suburbanisation, economical regeneration and brownfield. This approach was based on two key questions of the fifth work package: (i). How do shrinkage influence governance arrangements? and (ii). Which impact do existing governance arrangements have on shrinkage? In the case study of Timisoara, these questions where focused on the fields of suburbanization, economical regeneration and brownfield. The analysis of the urban governance concerning these three topics has followed the specific dimensions: (a). actors and their patterns of interaction; (b). structural conditions; (c). normative frameworks.

From methodological point of view, the research structure for the governance analysis was developed on the base of the following criteria: the impact of shrinkage on the policy, governance arrangements, governance responses, outcomes of governance responses to the problems, the capacity of the city in the policy area, the dependence of the city on external resources, and the coherency of local decisions. The data collection has included the analysis of the official statistics, public agenda and public documents of the involved authorities, and also semi-structured interviews with local stakeholders.

After these introductory words, the report will continue with a short presentation of the background of suburbanisation, economical regeneration and brownfields in Romania, just for a general preview of the current situation. The authors have tried to integrate the specific of the city of Timisoara concerning these three policies into the national context, for obtaining of a complete picture on the national-local scale.
The third chapter makes a review of the main aspects concerning the shrinking phenomenon in Timisoara, for obtaining the starting picture for the governance analysis. This synthetical presentation is based on the research data from the second work package and it is designed to assure a connection between the shrinking phenomenon in Timisoara, by one hand and the local governance response concerning the suburbanisation, economical regeneration and brownfield by other hand.

The next three chapters (four, five and six) are dedicated for each specific thematic area (suburbanisation, economical regeneration and brownfield). They have a common structure based on the established criteria for analysis (presented above) but their contents are strictly focused on the specific topic. The final chapter is represented by Conclusions and discussions where the authors have made comparative analysis and interpretations of the main output of the qualitative research.

The views expressed are the authors’ alone and do not necessarily correspond to those of other Shrink Smart partners or the European Commission.
2. Background – Suburbanisation, Economical Regeneration and Brownfield in Romania

2.1. General preview – facts and data

At the national level the suburbanisation, the economical regeneration and the brownfield have started recently to represent discussion topics in public administration discourse. We will make a short review for each of them just to assure a general frame for the analysis dedicated to Timisoara.

The **suburbanisation** process is a phenomenon that can be observed around all medium to large cities in Romania, especially after the 2000 years. In all cases, the facilitation of the mortgage loans, the devaluation of the block flats, the price of the land around the city have represented general condition that encourage the movement of a middle and upper class families towards new formed neighbourhoods around the cities. In almost all cases these have been natural trends, without any preliminary plan for urban development, without any global view on the phenomenon.

On this context, the suburbanisation process was almost everywhere done into a chaotical way. There are only few examples of villages transformed by this process where the local administration does not lose the control on the process. Only recently the municipalities of the main cities from Romania have started to talk about the measures and norms to control the suburbanisation, with a public goal to have a full functionally development around the cities, with urban facilities, with architectural standards, with specific condition for living and so on. It is very difficult now to recover the missing parts from the new neighbourhoods, but their request can not be ignored by the authorities. This topic is present now in the public discourse of the municipalities that try to cover the gap generated of the lack of action by improving the local rule for the building of the house (such the limitation of the maximal high of the new house to the profile of the neighbourhood or to approve the new project for building of house only after the finalisation of the minimal facilities).
On the base of these considerations we can talk now about clear example of unsustainable development concerning the chaotic suburbanisation processes and thus, it can be estimate that their attractivity in time will be limited. After the development of the new suburbs neighbourhoods with all necessary urban, social, cultural and economical facilities, with detailed standards of buildings concerning the qualitative and the aesthetical aspects, it can be expected a devaluation of the present houses from already developed suburbs that does not fit all these aspects.

The economical regeneration is a process with a deep heterogeneous manifestation at the national level. Since the Romania was a political industrialized country, with a forced artificial development of the industrial facilities, the rediscovery of the freedom has generated various manifestations of the economical regenerations. Thus, major changing from the mining areas (such Jiu Valley) has generated almost a collapse of the mono-industrial cities that were fundamentally related by these mining activities. It is estimated that in mining industry were lost 150,000 jobs from 1991 to 2004 (Cobârzan, 2007). Several cities have to find alternatively resources to survive and the solution doesn’t come so easy. With a very high level of unemployment, without almost any industrial facilities, with a minimal support from the state (as unfavoured economical area with a decreased of the taxes level) these cities have to gap with sever problems concerning their surviving as communities. These kind of mono-industrial cities have represented the main sources for the ruralisation of the country, a main process of moving the population back to their native rural area.

Other cities have passed more fluently this process and the changes in the economical sphere were made without similar dramatical consequences. In all cities with a various economical medium the closure of the former industrial facilities was gradually assumed by the city evolution and replaced by the new economical investments. Beyond the national context it was a problem of the local administrations to attract investors into their area and to negotiate their facilities for the new economical projects.
The brownfield problem is a present and consistent reality but almost a utopian subject in public policy in Romania. Even here where developed extended industrial facilities (including chemical industry) the identification of the brownfields, their decontamination and their reusing is beyond of any dedicated rules or any administrative control. In Romania the official definition to the brownfield is *polluted lands* (Ministry of Waters and Environment) and into a recent study Romania was estimated to have 900.000 hectares, that represent 3.35% from the entire country land (Oliver et. all, 2005).

2.2. Present challenges

The chaotic extensions of the cities towards suburbs and relative villages are today more consistent challenges for the local municipalities. They are working now to recovery as efficiently as possible all the gaps from the unplanned evolution of these new incoherent neighbourhoods. The global economical crisis and the reducing of the access to the bank loans have decreased the pressure toward the development of the suburbs.

The economical regeneration is one of the most important subjects for all Romania’s regions. The former facilities were generally very few competitively and with an older technological structure, without a real economical efficiency and without environmental friendly activities. Each community is really interested to update and to increase its specific economical medium by attracting of investors.

For almost two decades the reusing of the brownfield was generally ignored by the national and local authorities. Many of the former industrial facilities have become private proprieties and the new owner can do anything they want with this. Some of the inner city brownfield was transformed into residential or commercial area. But the decontamination of the land was a private option of the owner, without any direct control from the state. Other industrial facilities were just dismembering for recycling of some material (especially iron) and after that the rests was abandoned.

All these three topics remain open subject and contemporary challenges for the Romanian administration.
3. Shrinkage in Timisoara

3.1. General presentation

Timisoara has become recently the second Romanian city, an important economical, social and cultural urban centre. Until 1990, the city had a relatively continuous growing, moderate at the beginning of the 19th century, but artificially accelerated during the communist period. After the political change, the city has started a natural process of reconfiguration, similar with the national and euro-regional trends. The decline of the Timisoara’s population was almost constant during 1990-2008 and, thus, it clearly reflects that the growing of the city under the totalitarian regime was not a functional, adequate or pertinent model. The statistical fact is eloquent: during 2 decades, Timisoara has lost 14% of its population. By our research we have tried to identify the reasons and the premises of the city shrinking, but in the same time, the impact and the consequences of the population decline.

Table 1 - The evolution of the population of Timisoara

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Year</th>
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<td>2004</td>
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<td>1996</td>
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<td>351,293</td>
<td>2000</td>
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</tbody>
</table>

Source: National Statistic Institute

On the base of the statistical data, the shrinking of the city can be delimitated in 2 distinct periods: 1990-1999 and 2000-2010. For the 1990ies, the population decline can be explained by the decreasing of the birth rate (as a general behaviour at national level). Thus, from 1991 the natural spore has become negative, and the number of births was in continuous decreasing until in 2002. From 3,302 newborn babies in 1990, the natural spore has
decreased to 2,201 in 2002 and after that it has increased back till 3,175 in 2008. From 1992 to 2007 the number of deaths was constantly higher than the number of births. The negative spore during this period has cumulated a decreasing of the population with 7,718 inhabitants (2.19%).

All villages around Timisoara have known a significant process of development (the trend is to become a residential area, similar to West European models). The project for the metropolitan area of the local administration is directly connected with these trends. In the context of rural depopulation (specific for the entire national level), all the growing of the villages near the Timisoara represents actually a clear process of suburbanization. For the last decade, this is one of the most important causes for the shrinking phenomenon in Timisoara. During the last 7 years, the population from the 11 villages involved in the future metropolitan area has grown with 5,774 inhabitants (equivalent with 1.64% from the peak of Timisoara’s population).

Another cause of this population decline was the migration. Thus, from 1994 until 2007, the number of persons that have moved from Timisoara in a foreign country was constantly higher than the number of foreigners that have established in Timisoara. During this period 11,684 of Timisoara’s inhabitants have moved away and 2,763 foreigners have moved in the city. These statistics cover especially the ethnic groups (firstly, the German population from Timisoara that have gone in Germany during the 90ies). By this phenomenon, Timisoara has lost 8,921 inhabitants (2.53%).

On the base of the available data can be elaborated a descriptive statistics concerning the manifestations that have come together with the population decline. Thus, using the Pearson correlations and the coefficient of determinations we can be observe several variables that have evolved in the same directions or in opposite directions with the main indicator of the shrinkage process (the population loses). We must specify that at this level of descriptive statistics we cannot differentiate on the base of these coefficients between causes and effects. With other words, we can talk now only by phenomenon those have been manifest together with the de-population (some of them as causes, other as
consequences and other as similar manifestations). The coefficient of determination reflects the connectivity between each pear of phenomenon:

![Figure 1 – Population decline in Timisoara and collateral phenomena](image)

In Timisoara, 99% of the population decline comes together with the decreasing of the urban population density. These two manifestations are very strongly positively correlated (99%) because the volume of the population is involved into the formula of the urban population density. Similarly, 85% of the population decline comes with the increasing of the dwelling space per person and here we have the same explanation (the volume of the population is also involved into the formula of the average dwelling space per person).

Another very important correlation is between the population evolution and the age structure. In this case it was recorded a strong negative association with -81%, and that reflects that the decreasing of the population is going together with the increasing of the age structure. This distribution reflects the trend of ageing of the population and this can be generated firstly by the decreasing of the birth rate with direct effect on the average age of the population but also, secondly, by the out-migration of the young population. This explanation is confirmed also by the two other correlations: (i) the age structure over 65 year has recorded a strong negative correlation with the population volume (with value -81%) and (ii) the average age has also a strong negative correlation with population (-78%). These represent that both indicators (age over 65 and average age) are increasing when the population is declining.
Another strong positive correlation was recorded between the population volume and schooling (0.78). In this case, the decreasing of the population has generated also a decreasing of the schooling and this is another confirmation of the hypothesis that city has losing mostly young population.

3.2. Contemporary trends

After the economical growing period (more visible from 2004 until 2008) the population decline was stopped and the city has started to recover the population. The natural spore has become positive (at least for 2-3 years) and the city remains an attractive destination for many people. After the beginning of economical crisis can be estimated a new decreasing of the birth rate and thus can be reflected into another slope. The natural dynamics of the population can be considered in present more accentuate that into the beginning of 1990s.

Following the database analysis and the conclusions from the work package two, in Timisoara the process of population lost was mostly a process of urban spread over the administrative border and not quite a visible urban shrinking process. More than that, the population decline has happened during a period of economical growing. With other words, the city was overloaded (due to political reasons) and the shrinking phenomenon was actually a natural trend to recover the population optimal density. In this context, the suburbanization, the economical regeneration and the brownfield are not necessarily only causes of the shrinking phenomenon but also collateral manifestations.

Even in this context, the lost of the population is a very complex and important process that can not be ignored by the local administration. Nowadays it is expected from the city to become a real growing urban pole into the Development Euro-region and for this, the decreasing of the population can not acceptable. In the next pages we will focus on the governance reactions on three main policy areas (suburbanization, economical regeneration and brownfield)
4. Suburbanization in Timisoara

The suburbanization represents a very consistent process in Timisoara. This trend of the city to spread around, on the closer villages has been manifest since the last decade. The municipality has tried to follow this “natural” process and to cover it with a master plan for the developing of the metropolitan area. The main goals of this plan are to assure an adequate infrastructure and a coherent vision on the developing of the entire area. Following the conclusion of the stakeholder workshop, another very important objective is to develop a polycentric metropolitan area, not to keep all these suburban area as a “sleeping neighbourhoods”, without any other facilities, but to transform them into “living centres”, with all necessary services. Another idea discussed at this workshop was about the consequences of the evolution of the metropolitan area on Timisoara regarding the assurance of a significant extension of the land but a quite reduced increasing of the population volume. On the base of all these considerations, the suburbanisation of the city toward near villages represents a very important and consistent dimension of the shrinking process.

4.1. The impact of shrinkage on the suburbanisation

Shrinkage is not present into the official discourse of the local authorities in Timisoara. From 2003 to January 2011 the City Hall has made 1775 press announces (with its decisions, intentions, planning etc) without any reference to the lost of inhabitants in Timisoara. The decreasing of the population during the last 2 decades is considered a “natural” national trend. There are few discussions concerning the lack of the working forces, because of the high level of employment is not favourable for the economic development.

The suburbanization process in Timisoara has become more visible in the first part of 2000’s when the private banks policies start to allow mortgage loans. The process of “timisorenisation” is present in all villages around the city, until around 20-30km (distances
and routes that assure a daily commutation. Thus, the middle to top class has began to move from the downtown to this suburban areas, from historical buildings or block-flat apartments to a “house on ground”, with a small green place. The “mirage” of this kind of living is still active, and still represents the most desirable model of home even many of these suburb areas does not have almost any facilities (roads, current water, sewage, cable TV etc.). Despite all these drawbacks (that until the end, in 1-2 or more years will be finally solved) to have your own house and garden is considered the highest living standard.

Figure 2-3 – The chaotic suburbanisation around the Timisoara (the Sag village)

Following the data interpretations, suburbanization is actually one of the main causes of the depopulation (and not a consequence). The moving of the inhabitants from Timisoara toward the peripheries represents also a process of urban decongestion (the decreasing of the urban crowd) by the extended of the dwelling space. It is estimated that the suburbanisation can explain around 12% from the entire decreasing of the population (5,774 inhabitants).

The developing of the suburbs around the city it was made chaotically, without any master plan, without any urban systematization, without an adequate infrastructure, without any estimation of the profile for each area. Many of these houses have been deployed on the lands without any utilities. After they bought themselves the extension of the electricity network, some of them have to keep waiting to be connected to the centralized system of water and sewage. The chaotic constructions in suburbs engage several problems concerning the deploying of the routes for access and the extensions of the utilities (water, sewage, natural gas, public transportation, public lighting etc) on an already built space.
Complementary, Timisoara has known a process of suburbanisation of the commerce. Many of the big commercial centres have been deployed outside of the initial urban perimeter (due to lack of adequate space inside of the city). More than that, many new economical investments have been made outside of the city. These two aspects have facilitated an increasing of the traffic fluency on the downtown area. The current economical crisis has blocked many of the real estate projects from suburbs; the developing and growing rate are nowadays significant diminished.

4.2. Governance arrangements in Timișoara for the suburbanization issue

The local public administration from Timisoara (City Hall, Local Council, Chambers of Commerce, County Scholar Inspectorate and so on) is significantly connected with the phenomenon of losing of population by suburbanisation. One of the main problems of the city of Timisoara is the lack of available free land inside of the city border, necessary for the municipality projects (Junie, 2010).

In this context the perspective of several suburbs already made around the city that can be integrated into the urban territory has represented a relevant opportunity for the local governance. Even the decreasing of the urban density (after an overloading during the communist regime) is not necessarily a sign of warning for the authorities, they start to express in last 2-3 years a real interest toward the suburbs around the city.

By other hand the local administrations from each villages that known the trend of city spread are also directly engaged into the sustaining of this process. For the beginning they just have rearranged the destination of the land from agricultural destination toward construction of houses. After that, they approved more easily the approbation for housing building, without a detailed master plan. The increasing of the number of inhabitants represents a more or less explicit formulated goal for the local administration from each village. By these new comers the local economy has been increased with new commercial and services business, and also the local budget has been reached.
After a period of manifestation of this phenomenon, the Timisoara City Hall has started to work toward the development of the metropolitan area, to get control over a more extended space, to get back the former inhabitants (into the new enlarged border of the city) and to design and apply a further sustainable developing plan.
### Table 2 - Major institutions, initiatives and conditions involved in Timisoara’s suburbanisation

<table>
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<th>Year</th>
<th>Timisoara City Hall</th>
<th>Strategical concept for economical and social development of Timisoara Area (the city and 6 other villages)</th>
<th>surrounding villages City Hall</th>
<th>Political differences between central and local authorities</th>
<th>Political differences between central and local authorities</th>
<th>GTZ – technical and financial assistance for historical building rehabilitation</th>
<th>Timisoara Growing Pole by National Authority</th>
<th>DM is replaced with Euro – the houses prices are doubling over the night*</th>
<th>bank mortgage become more accessible</th>
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<td>2006</td>
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</table>

**economical evolution: inflation and market speculation**

<table>
<thead>
<tr>
<th>Year</th>
<th>houses price ROL/sqm</th>
<th>houses price USD/sqm</th>
<th>dwelling space sqm/pers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>2.148</td>
<td>0.11</td>
<td>12.35</td>
</tr>
<tr>
<td>1991</td>
<td>206,461</td>
<td>11.55</td>
<td>16.97</td>
</tr>
<tr>
<td>1992</td>
<td>19,563,722</td>
<td>673</td>
<td>16.97</td>
</tr>
<tr>
<td>1993</td>
<td>32,766,000</td>
<td>1,092</td>
<td>16.97</td>
</tr>
<tr>
<td>1994</td>
<td>39,895,000</td>
<td>1,252</td>
<td>16.97</td>
</tr>
</tbody>
</table>

*It was for the first time when the speculation on the real estate market has become a reality. All the prices have changed only the type of money: i.e. from 15,000 DM they become in one day 15,000 Euro without exceptions. The perspective to increase dramatically the houses’ prices has got its first precedent.
If we take in consideration the entire period of the last 2 decades as a continuum, we have a starting point with dwelling space 12.35 sq m /person and 11 USD per sq m (average price of apartments) in early 1990s and a final point of 16.97 sq m/person and 1,252 USD per sq m in the late of 2009’s. The local authorities and especially the Timisoara City Hall are continuous connected with the shrinking process by suburbanisation. Even at the beginning the orientation toward suburbs of the residential, commercial and business is not so visible, the lack of available space inside of the city has represented the main cause for the increasing of the interest for the extra-urban lands. With other words, the lack of capacity of the City Hall to offer available land inside of the city was a main cause to start the suburbanisation process.

By other hand, to this lack of capacity of the City Hall referring to the issue of available land, have contributed the political differences between the local and central authorities. Especially into the period 2000-2004 and from 2008 to present the mayor of Timisoara has a difficult collaboration with the governmental stakeholders due to political differences. Thus the administration of the lands outside of the city has represented a subject of conflict between the Timisoara City Hall and the Timis County Council, with negative consequences on the planning of the future metropolitan area.

From a complementary perspective, the replacing of the Deutsche Marks with the Euro has generated a speculative process that moved the real estate market into light of instability and crispness prices. In a very short time (few weeks) the prices on the free market of houses has changed the unit of measurement, from DM to Euro or USD. Thus, an apartment of 10.000 DM has becoming 10.000 Euro and for that period this has represented almost doubling prices, without any effort, just on a speculative base. After this experience, the houses have become very interesting investments for short or medium time, with a high level of revenue.

More than that, from 2004 the system of bank mortgage has become more and more accessible and thus the perspective of having your own house or apartment (at least) wasn’t a so difficult dream. Within a general context of economical growing the interest for a long time (up to 30 years) consistent bank loan has become a “strategical” movement. Thus, the
prices of house and apartments have growing exponentially, together with the new suburbs residential areas around the city. For example, a modest house at 1 km by city centre, with a garden of around 600 sq m was drawn on the market at price of 650,000 Euro in 2009. The buyer was interested to take it only for land, with the plan to demolish the house and rebuild a new construction. With a medium national salary of 500 Euro per month, these prices have represented an artificial and unsustainable level.

At the moment of 2004-2005 the local authorities from all the villages around the Timisoara has become more and more interested to attract new inhabitants. For this, they assure a more facile authorisation of construction, they try to improve as much as possible the old and inefficient infrastructure (electricity, routes etc) and services. Without any exception the increasing of the local population of new comers with high living standards represent an attractive option for each City Hall from involved villages.

The central administration launches the national structure of the regions for development and defines Timisoara as a growing urban pole (the single pole for the West part of Romania). This new situation offered a full legitimating for the municipality strategy to develop the metropolitan area, and thus the last “resistance” against this process (from some villages) was defeated. In the following map it is presented the initial form (2008) of the metropolitan area, with the opposition of only one village in North-West:

Figure 4 – The map with the first form of the metropolitan area of Timisoara (2008)
This representation of the first version for the metropolitan area of Timisoara reflects its very realistic approach, especially by its not so extended dimension. In other cases, for example the capital Bucharest it was elaborated a metropolitan area with a more extensive space of influences with 40 km around the city (more detailed data can be accessed at Bucharest Metropolitan Area at http://www.zmb.ro). Even these two cities are difficult to be compared we must agree that it is very important to have a realistic approach and to fit the master plan with the current situation and trends. Of course it is also very useful to have a vision on the long time but is important to have also the targets and goals for the close and medium time. Thus, we have now the program Timisoara 2030 but also very detailed actions, projects and measures to achieve the main strategically scopes.

4.3. Governance responses to the problems concerning the suburbanisation caused by shrinkage

Even the process of suburbanization is related with the period of 2000’s, the Timisoara City Hall had a post-factum approaching. Their response to the depopulation by suburbanisation was generated after the consistent manifestation of this process. Analysing the data-base of the public declarations of the Timisoara City Hall for the period 2003-2010, from 1775 of press announces with a medium of 5 topics per day (that’s mean over 8,800 articles), we can keep only the following declarations concerning the suburbanization process:

1. The extensions of the public transportation lines were made firstly in the 15th of October 2003, as a request of the citizens to connect the downtown with 2 marginal neighbours. It was applied experimentally for 2 weeks and after that as final routes. Two years later, in December 2005 2 other lines were approved for extension toward 2 big commercial centres.

2. The urban development perspective is formulated only in 2004, where it is estimated the extensions of the city toward the North part, but the political conflict with the central administration make almost non-possible the modification for the destination of the land outside of the city. In December 2005 the City is official extended with 3.6 km in North
and 0.7 Km in South and include 2 commercial centres (that can not been reached by personal cars without the paying of the road tolls).

3. One year later, in 13 December 2006 a commission from Fraunhofer Gesellschaft Germany start the collaboration with the Timisoara City Hall for the elaboration of the Integrated System of Traffic and Transport for Timisoara and sub-urban area that include the entire metropolitan urban traffic.

4. In November 2007, the City Hall in collaboration with GTZ (Deutschen Gesellschaft für Technische Zusammenarbeit) organizes a public debate concerning the improving of the living standard into the historical neighbourhoods Iosefin and Fabric. Even it can not be directly related with the population engaged into the process of suburbanization, this approaches to improve the dwelling conditions represent a clear preoccupation of the City Hall for its inhabitants.

5. Another distinct topic that can be indirect related with the preoccupation for the control of sub-urbanisation is represented by the extensions of the urban infrastructures. Thus, the water supply system and the sewer systems have covered only 70% of population in 2004 (around 230.000 inhabitants). In all marginal areas of the city these facilities did not exist 6 years ago and thus, there were a lot of problem with the floods by rains. From 2004, each year these systems where extend (with several kilometres of new pipes yearly) and this is actually a preparation for the connection of the last residential neighbourhoods from suburbs.

6. Also, directly related with the quality of life, the municipality start to develop a green barrier against the winds and from 2001 they have planted 19 hectares of forest into the North-West part of the city (on the direction of the most active winds). This improving will affect into a positive way booth, the living conditions inside the city borders but also in suburbs.

7. Despite all delaying in developing and implementing a strategical plan for the metropolitan area, the mayor is nowadays (2011) at him 4th mandates and has win in 2005 the award of the Excellence in Administration as “The most active mayor from Romania”.

8. As a response of this significant growing of the interest for the living around the city, the municipality start to think about the quality of life in the historical neighbourhoods.
Thus, in November 1st 2004 it is started a debate together with GTZ (Deutschen Gesellschaft für Technische Zusammenarbeit) for the improving of the living standards into 2 important historical neighbourhoods, Iosefin and Fabric.

9. In February 12th, 2008 Timisoara was declared by the central authority “Growing Urban Pole”. That means that Timisoara can transfer “development” to the entire region around. With this opportunity, the Timisoara Mayer, Mr. Gheorghe Ciuhandu has made the following declaration: “For the local economy to keep growing it is necessary a harmony and adequate spatial development, an extension of the urban area. This can be made only if the urban comfort is extended into the per-urban areas. Even into their spatial development some built areas of the municipality has touch the built areas of some close localities and they form now a compact space, they are discontinue as urban structure, as infrastructure and socio-economical facilities. At these contact points there are spatial, structural, services and utilities malfunctions (such differences among the street profiles, differences between the high limit of constructions, industrial facilities close by residential facilities etc.). There are many interest for collaboration with the villages around the Timisoara: the developing of the roads networks, the railways detour, the connection with the further highway; the extension of the infrastructure, the development of the urban space toward the villages territory, the environmental issues, the economical development and so on.”

10. In 29th of May, 2008 the Timisoara City Hall together with GTZ have started a program of 5 millions Euro (partial non-reimbursable assistance, partial bank loan) in partnership with Germany Governs to start the rehabilitation of the historical building from the historical neighbourhoods of Timisoara.

11. In October 2008 it was signed a protocol for the suburban public transportation between the Timisoara City Hall and the city halls from the villages around the city. The first metropolitan lines have become available at 1st June 2009.

12. In 2009 there were organized several seminaries and public workshop concerning the urban development, urban planning and rehabilitation of the public space. In October 2010, with the official presentation of the consortium that will elaborate the General Urban
Plan it was organized another roundtable about: “Urban regeneration – Tool for Integrated Urban Development in Romania”.

The metropolitan area represents yet a very consistent master plan. In the next future it will affect both, the municipality administration but also the authorities from all involved villages. Nowadays Timisoara is promoted as a national growing pole so the City Hall has to deal with a lot of new challenges, despite the population loses. In the meantime all the mayoralities from the villages around the city try to exploit all the land that can be used for building of houses. The significant increasing of the local budgets in all these villages is not yet always visible on the development of the local infrastructures and facilities. The Timisoara City Hall is not directly concerned about the population losing but on the decreasing of the available working forces. Thus, the strategy for the city includes some policy, measures, programs and actions to attract young graduates that can supply the deficit from employee market.

On the base of all these considerations, the local model of governance concerning the suburbanisation can be defined on the following dimensions (table number 2):

**Table 3 – The local model of governance concerning the suburbanisation in Timisoara**

<table>
<thead>
<tr>
<th>Key decision makers</th>
<th></th>
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<tbody>
<tr>
<td>- variety of players</td>
<td>small elite</td>
</tr>
<tr>
<td>- state officials and administration</td>
<td>market actors/civil society organisations</td>
</tr>
<tr>
<td>- public resources</td>
<td>private resources</td>
</tr>
<tr>
<td>- top-down</td>
<td>bottom-up decision-making</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Relations/coalitions/forms of cooperation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- integrated</td>
<td>fragmented</td>
</tr>
<tr>
<td>- formal</td>
<td>informal</td>
</tr>
<tr>
<td>- bargaining</td>
<td>issue-oriented</td>
</tr>
<tr>
<td>- material</td>
<td>symbolic</td>
</tr>
<tr>
<td>- network</td>
<td>market/hierarchies</td>
</tr>
<tr>
<td>- common-interest oriented</td>
<td>group-interest oriented</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Governing logic</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- inclusive</td>
<td>exclusive</td>
</tr>
<tr>
<td>- cooperation</td>
<td>conflict</td>
</tr>
<tr>
<td>- network/coalition</td>
<td>command-and-control</td>
</tr>
<tr>
<td>- top-down</td>
<td>bottom-up</td>
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</table>

<table>
<thead>
<tr>
<th>Political objectives</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>- material</td>
<td>symbolic</td>
</tr>
<tr>
<td>- strategic</td>
<td>short term advantage</td>
</tr>
<tr>
<td>- managerial</td>
<td>entrepreneurial</td>
</tr>
<tr>
<td>- (short-term) maximizing profit or benefit</td>
<td>stabilizing or balanced</td>
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</tbody>
</table>
4. SUBURBANIZATION in Timisoara

These dimensions (marked by bold) are characterised for the governance of the suburbanisation and not for suburbanisation itself. With other words, it is about the model of governance and not about the manifestation itself of the suburbanisation. Thus, concerning the key decision makers the local governance of the suburbanisation in Timisoara is approached by a small elite represented by the mayors, local councils and urban planners of the involved municipalities (Timisoara and closer villages). The ensemble of the suburbanisation process is sustained by a variety of players, but these are not involved into the governance policy. The small elite that deal with the governance of the suburbanisation are represented by state officials and administrations. They try to manage the public resources toward solving the specific problems of the suburbanisation and they have used for this especially a top-down approach.

Concerning the relations and coalitions, the governance of the shrinkage in Timisoara is generally fragmented, formal, bargaining orientated, material and symbolic, focused on network and common interest orientated. The governing logic is inclusive, cooperative, command and control and top-down approach. The top level is represented especially by the local municipality that have to deal with all direct challenges related to suburbanisation. It can be estimated that in short time some others local actors will involve into the governance of the suburbanisation and thus, the approaching will be balanced (not only top-down but in an equal way bottom-up). The political objectives are mostly symbolic, following short term advantages, into an entrepreneurial balanced benefit.

4.4. The outcomes of governance responses to the problems concerning the suburbanisation by shrinkage.

Timisoara City Hall has prepared, approved and applied the master plan for the developing of the metropolitan area. One of the main goals is to transform the current “sleeping neighbourhoods” into real functional suburbs, with all necessary public services, infrastructure and other facilities. The mayoralities from the villages around the city have
started to increase their infrastructure, to improve the living standards for the inhabitants that are living there. All these positive trends, together with two other very important premises – the prices of the land quite lower than in the inner city and the deep wish to have an individual house on ground (in opposition with the block flat living) – keep an high public orientation toward suburbs. It can be estimated that with adequate resources and efficient management the municipality will solve in short time all the remained main problems of the suburbs (of course, only those can be solved in this context).

4.5. Is the city [after shrinkage] characterised by a lack of capacity (financial, institutional etc.) in this policy area?

Following the conclusion of the applying interviews and from the local stakeholders workshop, the main problem for the Timisoara City Hall is the lack of autonomy in the relations with the national administration. Into the context of an inefficient legal system, the local initiative to solve any specific problem is very difficult to be implemented. The developing of the metropolitan area is a very consistent project but its full achievement still depends by many variables that come from the national level.

The city doesn’t have any possibility to make any reconfiguration inside of its borders, because almost all-locative spaces are in private propriety. Thus, in Timisoara is almost not possible to apply administrative measure for demolishing of the old, un-functional, underdeveloped buildings and to replace them by new more adequate buildings. Thus, the perspective to spread around the city toward suburbs does not have any other counteroffer into the living project alternatives.

4.6. Does the city [after shrinkage] experience a dependence on external resources to enable local actors to cope with the problems concerning the suburbanisation?

The first condition to manage the suburbs process by applying the master plan for metropolitan area is represented by the collaboration among the local administrations from all involved localities. Thus, the further metropolitan area (and the “recovering” of the population from suburbs) depends by the acceptations and the collaborations with the local
administrations from all involved villages. The incoherence of the national law system and the difficulties to access the EU founds represents another external resources for Timisoara.

4.7. Does the city [after shrinkage] experience dependent, contradicting and instable governance arrangements in which local decisions on this issue are highly dependent on shifts of external frameworks?

The phenomenon of suburbanisation has in generally a natural course. The local government tries to “recover” all these population by moving to the metropolitan level. This trend is not possible without the implementing at the national level of the structure of the 8th development regions and urban growing poles in Romania. The budget allowed by the central administration to the city is bellow its needs and thus, many projects are blocked due the lack of founds.

More than that, the global economical crisis and incoherent action plan of the Romanian national government has significant diminished the perspective of the sustainable growing of the city and metropolitan area of Timisoara. The political dissimilarities between the local and the central leaders affect into a direct way the access to funds and resources. Even if, there are many positive results generated by the private economical area, the present stage of the city is bellow its real potential. The Timisoara City Hall tries to find alternative solution to cover as much as possible from the local demands including the problems generated by the chaotic process of suburbanisation.
5. Economical regeneration in Timisoara

Timisoara never was an intensive industrial city. During the communist period there were developed several industrial facilities inside of the city, with different profile and productions. After the political changes, almost all of these were closed and the land was reused for residential areas and commercial buildings. The new economical investments were deployed around the city or even in villages quite faraway from Timisoara. Following the local stakeholders answering to the interviews the policy of the City Hall was to attract mainly the automotive, IT and creative industries. A special attention was awarded to the commercial sectors.

5. 1. The impact of shrinkage on the economical regeneration

After the 1989, together with the political changes there have been structural and functional changes, especially from the perspective of the working force market. Some of the industrial platforms deployed during the 1970s-1980s (Industrial Platform Mechanical Factory Timisoara, Industrial Platform Calea Buziasului, Economical Area Freidorf) have started to be restructured, up-gradated and even to close some facilities. Into this context, the local authorities have started to search for solutions to decrease the unemployment level. One very consistent answer to this problem was to attract new foreign investors and this has become the main goal into the local strategies for the economical and social development.

By other hand, the law of private proprieties protect now almost all former industrial facilities from any action or intervention for urban regeneration, initiated by local authorities. Thus, the municipality cannot deal directly with the management of these resources, but try to negotiate the changes of their destination. The Timisoara City Hall work very hard to attract new economical investors (by offering plenty of facilities) and to equilibrate the request and demand on the working force market.
5.2. Governance arrangements in Timișoara for the economical regeneration issue

The changes of the economical facilities are administrated, firstly by the local municipality that try to attract bigger investors from multinational corporations. Following the national structure there is a Commerce Chamber that deals with all economical and legal aspects. The City Hall tries to assure as many facilities as possible to the newcomer investors.

Thus, at the end of 1990s the local authorities – City Hall, Local Council, County Council and Agency for Social and Economical Development – have decided to make an analysis of the existing economical platforms and to sustain the developing of the new areas for the economical activities. In this context, starting from 1999 in the South West part of the city, the Local Council and City Hall have started the development project for the Industrial Platform Freidorf with a surface of 60ha\(^1\). The most relevant companies that are working nowadays into the Industrial Park Freidorf are: SC Kromberg\&Schubert România, La Farge România, SC Contitech România, SC Boma Company, H.G. Vermogenverwaltung GMBH\&Co, Nestle Romania, Smithfield.

Complementary, the Timis County Council together with the Agency for Economical and Social Development have deployed in 2004 the second industrial platform of the Timisoara, into the Nord-West part of the city (The Technological and Industrial Platform Timisoara) with an area of 18.37 ha, in the neighbourhood of 3 other very important companies for the city: Flextronics Romania, Coca Cola HBC and Agil.

Nowadays, into Timisoara, beside these 2 new industrial platforms can be delimited other 3 areas dedicated exclusively to economical activities. All these five areas are placed outside of the city borders, close by roads and railways routes, as it is presented into the Figure 5:

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1 The industrial platform represents a delimited area where can be developed economical, research and technological development activities. The land for this kind of facility must have access to a national or European road, must have at least 10 hectares and must be take in utilisation by the institution that wants to deploy the platform for at least 30 years (www.primariatm.ro).
By other hand, after 1995 in Timisoara there were launched specific economical activities for Information and Communication Technologies. Nowadays, there are developed both, working device for international company, such Siemens, Alcatel-Lucent, Flextronics-Solecetron, Continental, Oce, ACI, Saguaro etc but also companies with integral native capital, such Lasting System, Berg Computers etc. In 2006 it was estimated that in Timisoara they were operating 800 companies into the area of ICT with more than 3000 employees. These trends can be observed also into the table number 4:

Table 4 – The evolution of the employees, companies and incomes into the IT areas:

<table>
<thead>
<tr>
<th>Cod CAEN / Name cod CAEN</th>
<th>Employees</th>
<th>Companies</th>
<th>Income (RON)</th>
<th>Profit net</th>
</tr>
</thead>
<tbody>
<tr>
<td>72 – Software services and connected activities</td>
<td>2,447</td>
<td>686</td>
<td>15,164,039</td>
<td>19,230,240</td>
</tr>
<tr>
<td>642 – Tele-communication services</td>
<td>624</td>
<td>117</td>
<td>45,655,244</td>
<td>3,887,749</td>
</tr>
<tr>
<td>73 – Research- Development</td>
<td>312</td>
<td>35</td>
<td>30,881,400</td>
<td>3,493,520</td>
</tr>
<tr>
<td>74 - Other activities of services toward factories</td>
<td>10,480</td>
<td>3,832</td>
<td>655,454,001</td>
<td>201,132,265</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13,863</strong></td>
<td><strong>4,670</strong></td>
<td><strong>883,631,039</strong></td>
<td><strong>227,743,774</strong></td>
</tr>
</tbody>
</table>
Starting from 1996 in Timisoara it was developed a consistent cluster for automotive industry (in 2007 into the entire Region V West there were 156 companies into this field). The most representative nowadays-automotive companies in Timisoara are: *Lisa Draxelmaier, Kromberg & Schubert, Continental, TRW, Luxten Lighting, ELBA-Philips, Ert Group Automotive, Kablesysteme Hatzfeld, Valeo Lighting, Mahle Componente de Motor, Contitech, Autoliv, Electric Life Romania, Hella Romania*. From the civil society there are only small reactions, part of them on the issue of pollution. A very important feedback was assured by the higher education, especially by the Technique University “Politehnica” from Timisoara. They have started to prepare high class experts, specialised on the needs of the new private companies from Timisoara (for example, at Electro-technique Faculty they have the “Siemens Class” and the “Alcatel Class”).

5.3. Governance responses to the problems in the economical regeneration caused by shrinkage

The main local actors engaged into the economical regeneration are: The Timisoara City Hall and the Local Council, Timis County Council, Economical and Social Development Agency, The Chamber of Commerce, Agriculture and Industry, foreign investors, and local universities. Beside these, a very important role is played by the national economical, political and legal context:

*Figure 6 – Actors for Economical Regeneration*
The role of the local authorities toward the economical regeneration is limited to facilitation for the formal authorizations, but without the possibility to change the fiscal national law. The academic medium plays an important role into the development of the ICT, by upgrading of the specific curricula to the specific needs of some companies. The challenges of the economical regeneration can be identified into the objectives for the Growing Pole of the Timisoara, where it is planned the followed: (i). the sustainable economical development on the base of high technology industries, of informatics, telecommunication and creative services; (ii). the development of a complex flexible and integrated technique infrastructure;

5.4. The outcomes of governance responses to the problems in the selected policy field(s) caused by shrinkage.

There are several new industrial facilities around the city and some very new working points for several multinational corporations. Their decision to deploy their working points around the Timisoara was facilitated by the local policy of the City Hall to encourage these kinds of investments (by all possible legal facilities). The main results of the local authorities concerning the economical regeneration are the following:

(i). the attract of local investors from industries with high level of development;
(ii). the development of new industrial platform, outside of the city borders;
(iii). keeping of a relative balance between the demand and offer of working force.
(iv). the development of the public-private partnerships into the area of economical activities.

5.5. Is the city [after shrinkage] characterised by a lack of capacity (financial, institutional etc.) in this policy area?

As all economical facilities represent huge investments, the city doesn’t have financial and legal resources to assure this kind of projects. The City Hall can only to assure some facilities such: to bustle the authorisations approving and other bureaucratic procedure, to deploy new public transportation line from and toward the outside economic location etc.
Today we talk about a limited local and regional institutional capacity regarding the economic sphere. Fiscal and economic facilities are regulated by the central office of government, for which the local / county can not make decisions that will contravene the legislation.

However, unlike other areas of Romania, Timisoara has the advantage of the existence of a university centre, which offers highly skilled workforce and flexible. This resource can contribute indirectly to the economic recovery, and partnerships between private companies and higher education remains at the level of local decision makers (university boards).

**5.6. Does the city [after shrinkage] experience a dependence on external resources to enable local actors to cope with the problems in this policy area?**

The new investments depend by several external variables (their resources, strategies, geopolitical conditions, national laws etc). The global trends have had a significant impact on local economical life: some multinational corporation have come here (because of various advantages), but other working points where moved from here toward Asia (on the base a similar principles, to find cheap working force and other similar advantages).

Economic regeneration of the city is solely dependent on investments, whether domestic investments, whether foreign investments. In the context of globalization and internationalization of markets, without the resources that global corporations have, local economic activities would not be possible, despite the fact that many local authorities made Greenfield investments. Including the city in the European economic Cycle / World is due mostly to the relatively low cost of local labour, correlated with its high level of qualification.
5.7. Does the city [after shrinkage] experience dependent, contradicting and instable governance arrangements in which local decisions on this issue are highly dependent on shifts of external frameworks?

The behaviours of the new economical investors were always depending by the changes in the national legislations, the admission in EU, the economical context of the region etc. Even in the last decade the economical legislation can be considerate as generally constant, the global crisis and the effort of the government and the central authorities to find adequate solutions has generated some confusions into the local economical medium (the incoherence’s of the fiscal code and the gaps from national budget for the year 2010, the pessimistic economical forecast for 2010 etc.) The local authorities try to deal with these instable governance behaviours and to keep a clear, transparent, constant and stable economical medium in Timisoara.
6. Brownfield in Timisoara

Nowadays Timișoara is crossed by two lines that divide the city across its central area: the first one is the green line designed by the Bega River together with all its parks. This represents a very nice border between the South and the North of Bega parts of the city. The second line is drawn by the former industrial facilities across the railway, with several abandoned (not used) small fabrics and deposits. This ugly border is quite close by the river line and remains as an obstacle between the historical centre of the city and the residential block-flats neighbourhoods.

Even the Timisoara wasn’t an intensive industrial city a large part of all these former industrial facilities are not used anymore in present. More than that, with very few exceptions they are all private proprieties, and the City Hall doesn’t have nowadays any possibility to press the owner to clean and to reuse these lands. Due various reasons (lack of legislative support, unallocated founds, missing know-how resources, low civic pressure etc) the public administration does not pay too much attention to the brownfield issue, even this must become a priority under the EU recommendation.

6. 1. The impact of shrinkage on the Brownfield

Inside of the inner city the former industrial facilities was almost all closed or relocated. Thus, nowadays there are several sites with abandoned industrial buildings that actually represent brown fields, very close by the downtown and by the residential neighbourhoods. Part of these sites where transformed into commercial, services or residential area but without an adequate process of decontamination. In the figure 6-7 it is presented a very important former industrial facility, the Chemical Fabric “Solventul” that have started its activity in 1868. Nowadays it is closed and it is dismantling piece by piece and sold for its metallic components, with real environmental risks.
Almost all other former industrial facilities have passed a similar transition, but not all of them have achieved the end point of their transformation. Thus, there are several brownfield sites in Timisoara with a direct impact firstly on the local environment and public health quality but also on the urban aesthetical of the city.

Figure 9 – Examples of brownfields on the former industrial facilities from innercity
At this point we must to emphasis that the shrinking phenomenon can not be considered a factor for generation of the brownfields. All these industrial facilities have become bankrupt due their low competitiveness, inefficient management and administration, lack of capacity of the state for public policy into the industrial area and a quite old technological devices. The lost of population in Timisoara has come together with the genesis of the brownfields, as complementary processes.

### 6.2. Governance arrangements in Timişoara for the Brownfield issue

Almost all present brownfields from Timisoara are in private proprieties. The municipality can only to assure some limited facilities for investors in office buildings, commerce or residential projects. These kinds of reuse of the land involve (in general) a minimal decontamination of the land. For example, nowadays it is a big project on execution to build five office buildings (ten levels high) into a brownfields place, close by historical city centre; and three of them are already functionally.

By other hand, the starting of any real estate project depends only by the decision of the owner (and this is strictly related with the market opportunities). The municipality does not have the necessary resources to force the private owner to reuse the land or at least to make its adequate decontamination. Into the City Hall Plan for the urban development (Timisoara 2030) it was established to be erased the former industrial line by moving the railway underground and to put some pressure on the owners to reuse the brownfields lands into adequate way. It will be a challenge to find the best approaches for this issue.

### 6.3. Governance responses to the problems concerning the Brownfield caused by shrinkage

As private proprieties the brownfields inside of the city are protected by law from any action/intervention from the municipality. Thus, the unfinished projects are waiting to obtain a better price on the market or to attract some big investors for build residential
complex or shopping malls and the city hall have very few legal tools to react. The municipality is very concerned with these unused spaces, since the Timisoara city has a very strong problem with the available land. By other hand, the European law concerning the environmental conditions inside of the city involves (under the risk of penalty for the local municipality) the reducing of all sources of pollution, including dust, which can be directly correlated with the brownfield sites.

The City Hall tries to encourage the development of the big projects concerning the transformation of the inner-city brownfields into office, residential and/or commercial are. Due the very good position of all these brownfields (into the inner-city, very close by the historical city centre) their prices are very high (from speculative reasons) so, it is almost impossible for the municipality to try to buy some of these lands. As we already mentioned the response of the municipality to the challenges launched by the brownfield is not directly related with the population loses but with the economical transformation and regeneration.

6.4. The outcomes of governance responses to the problems concerning the Brownfield by shrinkage.

The reusing of the brownfields in Timisoara represents a main target for the City Hall. The city really needs free space for the urban regeneration and the unused brownfield sites can offer an adequate answer. The local policy concerning the facilities for the big private investments attract some big projects that are already finished or on execution over the place of former brownfields.

6.5. Is the city [after shrinkage] characterised by a lack of capacity (financial, institutional etc.) in this policy area?

The City Hall has a major lack of capacity due to minimal legislative support toward the pressure that can be putted on the reusing of the private brownfields. The national legal system concerning the public administration does not allow the City Hall to have a real public-private partnership or to have investments on the real estate market, like any other private players.
6.6. Does the city [after shrinkage] experience a dependence on external resources to enable local actors to cope with the problems concerning the Brownfield?

The re-using of the private brownfields depend firstly by their owner. Any new real estate investments depend by several external variables (mostly from economical nature).

6.7. Does the city [after shrinkage] experience dependent, contradicting and instable governance arrangements in which local decisions on this issue are highly dependent on shifts of external frameworks?

As any main investment project, the urban regeneration by reusing of the brownfields is directly connected with the external framework. In the last decade the changes of the large context have both positive and negative shifts (UE admission but also the global crisis). There are a large brownfield close by the student campus area on the place of the former shambles (still working until 1995). They have sold the entire ensemble and the private owner start to demolish it for building a new commercial centre. During this process the national authority has declared the old part of the building as national patrimony. Thus, the private owner has to save the historical part of the building and to try to integrate it into the new mall. Meantime due various reasons the project has been stopped, the land was resold, and another project of a new mall wait to be deployed (after the end of the economical crisis).
Conclusions

The suburbanisation and the economical regeneration are highly correlated. Even if Timisoara is declared a growing urban pole, the local administrative autonomy is quite limited and under the supervision of the national level. The geographical position of the city represents a positive reason used as strength in almost all development strategies of the municipality.

The suburbanization represents a very consistent process in Timisoara. This trend of the city to spread around, on the closer villages has been manifest from the last decade. The municipality try to follow this “natural” process and to cover it with a master plan for the developing of the metropolitan area. The main goals of this plan are to assure an adequate infrastructure and a coherent vision on the developing of the entire area. Following the conclusion of the stakeholder workshop, another very important objective is to develop a polycentric metropolitan area, not to keep all these suburban area as a “sleeping neighbourhoods”, without any other facilities, but to transform them in “living centres”, with all necessary services. On the base of all these considerations, the suburbanisation of the city toward near villages represents a very important dimension of the shrinking process.

Following the data interpretations, suburbanization is actually one of the main causes of the depopulation (and not a consequence). The moving of the inhabitants from Timisoara toward the peripheries represent also a process of urban decongested (the decreasing of the urban crowd) by the extended of the dwelling space. It is estimated that the suburbanisation can explain around 12% from the entire decreasing (5,774 inhabitants).

The developing of the suburbs around the city it was made chaotic, without any master plan, without any urban systematization, without an adequate infrastructure, without any estimation of the profile for each area. Many of these houses have been deployed on the lands without any utilities. The chaotic constructions in suburbs engage several problems concerning the deploying of the routes for access and the extensions of the utilities (water, sewage, natural gas, public transportation, public lighting etc) on an already built space.
Complementary, Timisoara has known a process of suburbanisation of the commerce. Many of the big commercial centres have been deployed outside of the initial urban perimeter (due to lack of adequate space inside of the city). More than that, many new economical investments have been made outside of the city. These 2 aspects have facilitated an increasing of the traffic fluency on the downtown area. The current economical crisis has blocked many of the real estate projects from suburbs; the developing and growing rate are nowadays significantly diminished.

The local public administration from Timisoara (City Hall, Local Council, Chambers of Commerce, County Scholar Inspectorate and so on) is significantly connected with the phenomenon of losing of population by suburbanisation. One of the main problems of the city of Timisoara is the lack of available free land inside of the city border, necessary for the municipality projects (Junie, 2010). In this context the perspective of several suburbs already made around the city that can be integrated into the city territory has represented a relevant opportunity for the local governance.

By other hand, to this lack of capacity for the City Hall referring to the issue of available land have contributed the political differences between the local and central authorities. Especially during 2000-2004 and 2008 to present the mayor of Timisoara has had a difficult collaboration with the governmental stakeholders due to political differences. Thus the administration of the lands outside of the city has represented a subject of conflict between the Timisoara City Hall and the Timis County Council, with negative consequences on the planning of the future metropolitan area.

Even the process of suburbanization is related with the period of 2000’s, the Timisoara City Hall had a *post-factum* approaching. Their response to the depopulation by suburbanisation was generated after the consistent manifestation of this process. The metropolitan area represents yet a very consistent master plan. In the next future it will affect both, the municipality administration but also the administrations from all involved villages.

Concerning the key decision makers the local governance of the suburbanisation in Timisoara is approached by a small elite represented by the mayors, local councils and urban
planners of the involved municipalities (Timisoara and closer villages). The ensemble of the suburbanisation process is sustained by a variety of players, but these are not involved into the governance policy. The small elite that deal with the governance of the suburbanisation are represented by state officials and administrations. They try to manage the public resources toward solving the specific problems of the suburbanisation and they have used for this especially a top-down approach.

Concerning the relations and coalitions, the governance of the shrinkage in Timisoara is generally fragmented, formal, bargaining orientated, material and symbolic, focused on network and common interest orientated. The governing logic is inclusive, cooperative, command and control and top-down approach. The top level is represented especially by the local municipality that have to deal with all direct challenges related to suburbanisation. It can be estimated that in short time some others local actors will involve into the governance of the suburbanisation and thus, the approaching will be balanced (not only top-down but in a equal way bottom-up). The political objectives are mostly symbolic following short term advantage, into an entrepreneurial balanced benefit.

Following the conclusion of the applying interviews and from the local stakeholders workshop, the main problem for the Timisoara City Hall is the lack of autonomy in the relations with the national administration. Into the context of the inefficiency of the legal system, the local initiative to solve any specific problem is very difficult to be implemented. The developing of the metropolitan area is a very consistent project but its full achievement still depends by many variables that come from the national level.

The city doesn't have any possibility to make any reconfiguration inside of its borders, because almost all-locative space is in private propriety. Thus, in Timisoara is almost not possible to apply administrative measure for demolishing of the old, un-functional, undeveloped buildings and to replace them by new more adequate buildings. Thus, the perspective to spread around the city toward suburbs does not have any other counteroffer into the living project alternatives.
The phenomenon of suburbanisation has in generally a natural course. The local government try to “recover” all these population by moving to the metropolitan level. This trend is not possible without the implementing at the national level of the structure of the eight development regions and urban growing poles in Romania. The budget allowed by the central administration to the city is below its needs and thus, many projects are blocked due the lack of founds.

The **economical regeneration** is a process with a deep heterogeneous manifestation at the national level. Since the Romania was a political industrialized country, with a forced artificial development of the industrial facilities, the rediscovery of the freedom has generated various manifestations of the economical regenerations. Timisoara never was an intensive industrial city. During the communist period it was developed several industrial facilities inside of the city, with different profile and productions. After the political changes, almost all of these were closed and the land was reused for residential areas and commercial buildings. The new economical investments were deployed around the city or even in villages quite faraway from Timisoara. Following the local stakeholders answering to the interviews the policy of the City Hall was to attract mainly the automotive, IT and creative industries. A special attention was awarded to the commercial sectors.

The changes of the economical facilities are administrated, firstly by the local municipality that try to attract bigger investors from multinational corporations. Following the national structure there is a Commerce Chamber that deals with all economical and legal aspects. The City Hall tries to assure as many facilities as possible to the newcomer investors. After 1995 in Timisoara it is launched specific economical activities for Information and Communication Technologies.

The main local actors engaged into the economical regeneration are: The Timisoara City Hall and the Local Council, Timis County Council, Economical and Social Development Agency, The Chamber of Commerce, Agriculture and Industry, foreign investors, and local universities. Beside these, a very important role is played by the national economical, political and legal context. The role of the local authorities toward the economical
regeneration is limited to facilitation for the formal authorizations, but without the possibility to change the fiscal national law. The academic medium plays an important role into the development of the ICT, by upgrading of the specific curricula to the specific needs of some companies. The challenges of the economical regeneration can be identified into the objectives for the Growing Pole of the Timisoara, where it is planned the followed: (i). the sustainable economical development on the base of high technology industries, of informatics, telecommunication and creative services; (ii). the development of a complex flexible and integrated technique infrastructure;

The main results of the local authorities concerning the economical regeneration are the following: (i). the attract of local investors from industries with high level of development; (ii). the development of new industrial platform, outside of the city borders; (iii). keeping of a relative balance between the demand and offer of working force. (iv). the development of the public-private partnerships into the area of economical activities.

As all economical facilities represent huge investments, the city doesn’t have financial and legal resources to assure this kind of projects. The City Hall can only to assure some facilities such: to bustle the authorisations approving and other bureaucratic procedure, to deploy new public transportation line from and toward the outside economic location etc. Today we talk about a limited institutional capacities that we have at local and county level regarding the economic sphere. Fiscal and economic facilities are regulated by the central office of government, for which the local / county can not make decisions that will contravene the legislation.

Economic regeneration of the city is solely dependent on investments, whether domestic investments, whether foreign investments. In the context of globalization and internationalization of markets, without the resources that global corporations have, local economic activities would not be possible, despite the fact that many local authorities made Greenfield investments. Including the city in the European economic Cycle / World is due mostly to the relatively low cost of local labour, correlated with its high level of qualification.
The behaviours of the new economical investors were always depending by the changes in the national legislations, the admission in EU, the economical context of the region etc. Even in the last decade the economical legislation can be considerate as generally constant, the global crisis and the effort of the government and the central authorities to find adequate solutions has generated some confusions into the local economical medium. The local authorities try to deal with these instable governance behaviours and to keep a clear, transparent, constant and stable economical medium in Timisoara.

The brownfield problem is a present and consistent reality but almost a utopian subject in public policy in Romania. Even the Timisoara wasn’t an intensive industrial city a large part of all these former industrial facilities are not used anymore in present. More than that, with very few exceptions they are all private proprieties, and the City Hall doesn’t have nowadays any possibility to press the owner to decontaminate and to reuse these lands. Due various reasons (lack of legislative support, unallocated founds, missing know-how resources, low civic pressure etc) the public administration does not pay to much attention to the brownfield issue, even this must become a priority under the EU recommendation.

Inside of the inner city the former industrial facilities was almost all closed or relocated. Thus, nowadays there are several sites with abandoned industrial buildings that actually represent brown fields, very close by the downtown and by the residential neighbourhoods. There are several brownfield sites in Timisoara with a direct impact firstly on the local environment and public health quality but also on the urban aesthetical of the city. The shrinking phenomenon can not be considered a factor for generation of the brownfields. All these industrial facilities have become bankrupt due their low competitively, inefficient management and administration, lack of capacity of the state for public policy into the industrial area and a quite old technological devices. The loosing of population in Timisoara has come together with the genesis of the brownfields, as complementary processes.

Almost all present brownfields from Timisoara are in private proprieties. The municipality can only to assure some limited facilities for investors in office buildings, commerce or residential projects. These kinds of reuse of the land involve (in general) a minimal decontamination of the land.
By other hand, the starting of any real estate project depends only by the decision of the owner (and this is strictly related with the market opportunities). The municipality does not have the necessary resources to force the private owner to reuse the land or at least to make its adequate decontamination. Into the City Hall Plan for the urban development (Timisoara 2030) it was established to be erased the former industrial line by moving the railway underground and to put some pressure on the owners to reuse the brownfields lands into adequate way. It will be a challenge to find the best approaches for this issue.

As private proprieties the brownfields inside of the city are protected by law from any action/intervention from the municipality. Thus, the unfinished projects are waiting to obtain a better price on the market or to attract some big investors for build residential complex or shopping malls and the city hall have very few legal tools to react. The municipality is very concerning with these unused spaces, since the Timisoara city has a very strong problem with the available land. By other hand, the European law concerning the environmental conditions inside of the city involve (under the risk of penalty for the local municipality) the reducing of all sources of pollution, including dust and all these aspects can be directly correlated with the brownfield sites.

The City Hall has a major lack of capacity due to minimal legislative support toward the pressure that can be put on the reusing of the private brownfields. The national legal system concerning the public administration does not allow the City Hall to have a real public-private partnership or to have investments on the real estate market, like any other private players.

As any main investment project, the urban regeneration by reusing of the brownfields is directly connected with the external framework. In the last decade the changes of the large context have both positive and negative shifts (UE admission but also the global crisis).
Bibliography:


Junie, Aura, 2011, *Semi-structured interview with local stakeholder*, The Head of the Urban Planning Department, Timisoara City Hall, applied in March 2011, by Bogdan Nadolu.


*** Timisoara City Hall Press Conferences – available at www.primariatm.ro