





Work package 5

The Governance on Urban Shrinkage in Bytom and Sosnowiec. Both Labour Market and Brownfields Cases (Bytom & Sosnowiec).

Case of Vacancy-housing (Bytom)

Research Report

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The views expressed are the authors' alone and do not necessarily correspond to those of other Shrink Smart partners or the European Commission. Comments and enquiries should be addressed to:

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Introduction

The shrinking of the cities has numerous causes; the consequences of this phenomenon are also varied. The common ground, both for causes and consequences of the described phenomenon, is the broadly understood rural policy. Under this term the authors of the Report understand the whole of the activities conducted at various levels of urban development management, with special emphasis on the role of municipal authorities. Undoubtedly, the role of the authorities is crucial, for they constitute the body appointed in democratic elections (Mayor, Council), as an expression of community support. It is assumed this style, and no other, of urban policy, emphasizing and solving specific problems is acceptable by the local community.

We adopt it after a number of definitions that a style of urban governance based solely on decisions of municipal authorities, or units controlled by the authorities, is of the nature that is referred to as government. Nevertheless, within social and economic progress, the growing role of social, economic and institutional groups, the management model based on the idea of governance is becoming more and more influential (Furmankiewicz, 2002; Gmina pasywna, 2007; Lackowska, 2007, 2010; Swianiewicz, 2005, 2007; Swianiewicz and Others, 2004). In the Polish environment, established both by administrative legislature and certain traditions or social and political standards, the ideal governance model is a very broad collaboration of municipal authorities with a number of institutions within the framework of a contract which states that urban development is of utmost importance (Gorzelak and Others, 2007). The cooperation goes beyond political party preferences, beyond the well-being of individual stakeholders, and beyond an individual need to succeed by the municipal authorities. It is also a cooperation founded on urban development, and in the situation of such cities as Bytom and Sosnowiec (figures: 1, 2), pulling them out of either a negative path of development, or reinforcing them by means of assigning new city-forming or metropolitan functions. We are aware of the fact that an ideal model does not exist anywhere – in any Polish city, and will never exist for various reasons; still we would like to identify the situation in the studied cities, while indicating the possibilities to find certain improvements for the future

Figure 1. A view on city of Bytom (the first picture) and view on city of Sosnowiec (the second picture)



Source: "Armada Development" and R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

Figure 2. City Marketplace in Bytom (the first picture) and The Centenary Square in Sosnowiec (the second picture)



Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

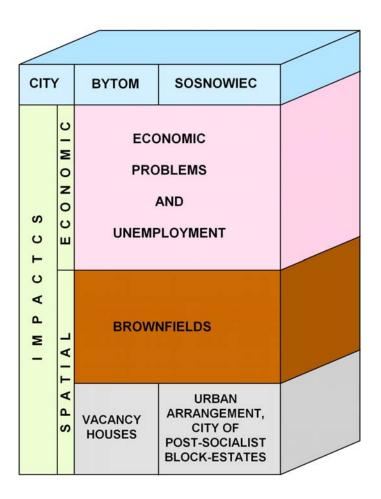
As already mentioned, the shrinking of urban areas is a multi-aspect phenomenon, yet, from among many causes and consequences of this phenomenon in the analysed cities, two issues seem to be crucial¹. One of them is the labour market as regards selected economic and social phenomena. We assume that the labour market, or from a different perspective – the volume and nature of the economic base, significantly creates the opportunities of

¹ M. Kogut-Jaworska (2008) has presented interesting background of spatial, economic as well as social factors for local and regional development.

development of Bytom and Sosnowiec, as well as other cities of the Katowice Conurbation. Unemployment is also an element which is directly connected to the labour market and has negative associations (figure 3).

The other problem is the image of cities, and more specifically, perceiving the urban space through the specificity of industrial and post-industrial nature. In that case a special role is played, in both cities, by brownfields, and in Bytom - by technically derelict vacant flats and vacant-housing caused by coal mining activity. A crucial part is played by the run-down, multi-family housing estates in the case of Sosnowiec and, in Bytom, to a lesser degree.

Figure 3. Role of some impacts in shrinkage processes. Both - Bytom and Sosnowiec cases



Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

On the basis of private research, the analysis of documents and interviews with people representing various spheres of socio-economic life, as well as interviews with inhabitants of

the examined cities, we conclude that the problems of the labour market and unemployment, and, to a lesser extent, the spatial issues are the most crucial and direct regional cause of city shrinking.

On the one hand, they have lead to migration outflow and, on the other hand, they significantly block the migration inflow through the real facts and also social reflection. The problems of the labour market do not have a positive influence on the possibilities of family development for the people who stay in the region and, despite difficulties, they have no intention to migrate. Two aspects of the local labour market, namely unemployment and low salaries, determine the phenomena of the lack of new families, of formalized relationships, and marriages of the 2+0 and 2+1 types.

The spatial issues and, in particular, the problems with image, pose one of the two most important factors that block the migration inflow. The negative perception of the cities by inhabitants of other regions, but also the inhabitants of the cities themselves, causes that the migration outflow is in no case counterbalanced by the migration inflow.

The Report, in its governance aspect, therefore, concentrates on two basic aspects:

- the economic, that is the general urban labour market in Bytom and Sosnowiec,
- the spatial, divided into two issues: the functioning of the brownfields in both cities and vacancy housing in the centre of Bytom.

1. Determinants of shrinkage (economic aspects) and the impact of shrinkage on urban policy

1.1. Problem of Labour Market in Bytom and Sosnowiec

Changes to the labour market in the Katowice Conurbation, including the studied cities of Bytom and Sosnowiec, have been of revolutionary character in the past 20-25 years, both in terms of quantity and quality (*Wojewodztwo Slaskie*, 2008). The basic features of the described transformation:

- decrease in the overall number of employed,
- change to economic function of cities from industrial to service and industrial,
- in the 90's, occurrence of the phenomenon utterly unknown to post-war Poland unemployment,
- breaking free of the mono-functionality of coal mining and iron&steel industry, and complete change of industry structure in the region,
 - emerging of utterly new business activities, unknown in the region.

The entire of the above changes took place alongside the violent change to the economic and political system at the turn of the 1980's and the 90's.

Despite a number of coinciding issues as regards shaping of fundamental guidelines of the labour market, such as: the number of economic enterprises, volume of the employed or unemployed, both cities enjoyed different dynamics of changes (table 1). Part of the consequences are apparent in the current shape and image of economies of both cities.

The 1980's. Employment in Bytom in 1988 was 94,000, in Sosnowiec the volume was 89,900 (tables: 2, 3, 4). Considering the size of employment, the cities were the largest labour markets in southern Poland. Among the largest industrial establishments, the dominant ones were four hard coal mines in Sosnowiec ("Kazimierz-Juliusz", "Porabka-Klimontow", "Sosnowiec", "Niwka-Modrzejow", and part of KWK "Saturn" in Czeladz), as well as six in the area of the contemporary Bytom ("Centrum", "Miechowice", "Rozbark", "Szombierki", "Bobrek" and "Powstancow Slaskich"). Furthermore, each city hosted two steelworks ("Cedler" and "Buczek" in Sosnowiec, and "Bobrek" and "Zygmunt" in Bytom). Each of the aforementioned hard coal mines employed 3,000-4,000 or even 5,000-6,000 people. Similar proportions were applicable to the iron and steel industry.

Bytom also boasted well-developed building engineering and building industry, as well as companies contributing to the coal industry. Sosnowiec boasted extremely dynamic textile and clothing and electrical and machine-building industries.

Table 1. Labour Market in the cities of the GZM (a core of the Katowice Conurbation), 1992-2008

	Class		1992-1996	1996-2000	2000-2004	2004-2008	1992-2008
1	2	3					
+	+	+	Piekary Slaskie	Siemianowice	-	-	-
				Sl.			
+	+	-	Myslowice, Ruda Slaska	Myslowice,	Ruda Sl., Zabrze	Chorzow	-
				Tychy			
+	-	+	Bytom	Gliwice,	Chorzow, Jaworzno,	Myslowice, Zabrze,	Myslowice,
				Jaworzno	Bytom, Siemianowice Sl.	Piekary Slaskie	Piekary Slaskie,
							Zabrze
+	-	-	-	Sosnowiec	-	Ruda Slaska,	Ruda Sl.
						Swietochlowice	
-	+	+	-	Katowice,	Katowice, Piekary Sl.,	Jaworzno,	Tychy
				Ruda Slaska	Sosnowiec	Siemianowice Sl.,	
						Sosnowiec	
-	+	-	Gliwice, Katowice,	Dabrowa Gor.	Gliwice, Myslowice,	Gliwice, Katowice,	Gliwice, Katowice
			Tychy, Zabrze		Tychy	Tychy	
-	-	+	Chorzow,	Piekary Slaskie,	Dabrowa Gor.,	Bytom,	Bytom, Chorzow
			Swietochlowice	Swietochlowice	Swietochlowice	Dabrowa Gor.	
-	-	-	Dabrowa Gornicza,	Bytom,	-	-	Dabrowa Gor.,
			Jaworzno, Sosnowiec,	Chorzow,			Jaworzno,
			Siemianowice Slaskie	Zabrze			Siemianowice Sl.,
							Sosnowiec,
							Swietochlowice

Explanations:

+/- Dynamics higher/lesser than average for a core of conurbation.

1 – number of economic enterprises, 2 – number of employed, 3 – number of unemployed.

 $Source: R.\ Krzysztofik,\ J.\ Runge,\ I.\ Kantor-Pietraga.$

In 1989, in Bytom, employment was 60.8% of the overall employment in the economy. In Sosnowiec this rate was 58.0%. In that rate, approximately half of the employed worked for the coal mining and related industries (53.2% in Bytom and 49.2 in Sosnowiec), and 1/10 for iron and steel (12.6% and 10.4% respectively) (tables: 5, 6).

However these markets differed. The labour market in Bytom was of immigration

nature, whereas the labour market in Sosnowiec was of emigration character. In 1988 the relation of incoming employees in Bytom to the outgoing ones was 28,000 to 15,600. In turn, the dissimilarity of the labour market in Sosnowiec, at the end of the 70's and in 80's, followed from its vicinity to Katowice – the largest labour market in the area of the contemporary Slaskie Voivodship, and the location of the largest regional industrial investment of the time – "Katowice" ironworks and "Przyjazn" cookery in neighbouring Dabrowa Gornicza. Therefore, Sosnowiec became a vital housing base for the economies of the two cities. In 1988, the number of people leaving Sosnowiec for work was 35,000, while only 17,900 would come to work there. The dominant group of commuters comprised people employed in the coal mining, iron and steel, and other industries.

Table 2. Structure of employed in cities of the GZM-region, 2000-2007

Cities					Emp	oloyed in	1 % of	total				
	Agrica	ulture, fo	restry	Indust	Industry, construction Mar		arket services		Non-r	Non-market services		
	1988*	2000	2007	1988	2000	2007	1988	2000	2007	1988	2000	2007
Bytom	-	0,8	0,3	61,8	46,0	34,7	18,6	29,7	34,7	19,6	23,5	30,2
Chorzów	-	1,4	0,2	58,9	41,2	33,1	20,1	33,1	39,6	21,0	24,3	27,1
Dąbrowa Górnicza	-	0,1	0,2	75,8	62,3	54,9	12,0	23,5	29,8	12,2	14,0	15,2
Gliwice	-	0,5	0,5	63,7	41,8	42,8	15,5	37,4	38,7	20,8	20,2	18,0
Jaworzno	-	0,1	0,1	68,2	50,9	48,3	18,8	29,7	28,9	13,0	19,2	22,7
Katowice	-	0,3	0,2	51,4	35,4	28,3	25,8	42,4	48,6	22,8	21,9	22,9
Mysłowice	-	0,3	0,0	68,3	57,5	54,7	17,0	26,0	27,1	14,7	16,2	18,1
Piekary Śląskie	-	0,6	0,0	72,6	58,7	53,1	14,6	19,3	23,2	12,8	21,4	23,7
Ruda Śląska	-	0,2	0,3	72,3	67,9	55,8	14,9	17,2	24,7	12,8	14,7	19,2
Siemianowice Śl.	-	0,2	0,2	70,2	49,1	43,0	12,6	30,1	32,7	17,2	20,6	24,1
Sosnowiec	-	0,3	0,3	64,2	43,3	37,3	15,4	30,2	37,8	20,4	26,1	24,6
Świętochłowice	-	0,6	0,3	67,3	50,5	41,3	10,9	24,8	35,0	21,8	24,0	23,3
Tychy	-	0,4	0,1	67,2	50,7	55,9	17,1	31,1	29,8	15,7	17,9	14,1
Zabrze	-	0,1	0,0	66,1	44,3	38,6	12,5	29,0	34,4	21,4	26,5	27,0

Signature: * - agriculture and forestry were counted with market services. It should be noted that share of these sections probably were lesser than 1% in each of cities.

Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga by Statistical Office in Katowice.

Table 3. Structure of employed in cities of the GZM-region, 1988-2000. Dynamics

	Dynamics %						
	Agriculture, forestry	Industry, construction	Market services	Non-market services			
Cities	Dynamics 1988-2000 Dynamics 1988-2000		Dynamics 1988-2000	Dynamics 1988-2000			
Bytom	-	-15,8	+11,1	+3,9			
Chorzów	-	-17,7	+13,1	+3,3			
Dąbrowa Górnicza	-	-13,5	+11,5	+1,8			
Gliwice	-	-21,9	+21,9	-0,4			
Jaworzno	-	-17,3	+10,9	+6,2			
Katowice	-	-16,0	+16,6	-0,9			
Mysłowice	-	-10,8	+9,0	+1,5			
Piekary Śląskie	-	-13,9	+4,7	+8,6			
Ruda Śląska	-	-4,4	+3,3	+1,9			
Siemianowice Śl.	-	-21,1	+17,5	+3,4			
Sosnowiec	-	-20,9	+14,8	+5,7			
Świętochłowice	-	-16,8	+13,9	+2,2			
Tychy	-	-16,5	+14,0	+2,2			
Zabrze	-	-21,8	+16,5	+5,1			

Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga by Statistical Office in Katowice.

Table 4. Structure of employed in cities of the GZM-region, 2000-2007. Dynamics

	Dynamics %						
	Agriculture, forestry	Industry, construction	Market services	Non-market services			
Cities	Dynamics 2000-2007		Dynamics 2000-2007	Dynamics 2000-2007			
Bytom	-63%	-25%	+17%	+28%			
Chorzów	-86%	-20%	+20%	+11%			
Dąbrowa Górnicza	+100%	-12%	+27%	+8%			
Gliwice	0%	+2%	-3%	-11%			
Jaworzno	0%	-5%	-3%	+18%			
Katowice	-33%	-20%	+15%	+5%			
Mysłowice	-300%	-7%	+4%	+12%			
Piekary Śląskie	-600%	-10%	+20%	+11%			
Ruda Śląska	+33%	-18%	+30%	+30%			
Siemianowice Śl.	0%	-12%	+9%	+17%			
Sosnowiec	0%	-14%	+25%	-6%			
Świętochłowice	-100%	-18%	+41%	-3%			
Tychy	-25%	+10%	-4%	-21%			
Zabrze	-100%	-13%	+19%	+2%			

Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga by Statistical Office in Katowice.

Table 5. Employment in coal-mines in cities Bytom and Sosnowiec,, 1989-2008

Cities		1989		2008			
	Number of Employment Avera		Employment Average		Employment	Average	
	coal-mines	(in thousands and	employment in 1	coal-mines	(in thousands and	employment in 1	
		percent of total)	coal-mine		percent of total)	coal-mine	
Bytom	6	27,8 (53,2%)*	4,7	1	3,7 (12%)	3,7	
Sosnowiec	4	21,5 (49,2%)*	5,4	1	1,9 (12%)	1,9	

Source: M. Tkocz, 2008, p. 213; information from The Katowicki Holding Weglowy, Inc.

Table 6. Employment in coal-mines in cities Bytom and Sosnowiec, 1989, 1998, 2008

1989		1998		2008						
CITY OF BYTOM										
Name of coal-	Employment	Name of coal-	Employment	Name of coal-	Employment					
mine		mine		mine						
Bobrek	3,7	Bobrek-Miechowice	4,1	Bobrek-Centrum	3,7					
Miechowice	3,5	-	-	-	-					
Powstancow Sl.	7,8	Powstancow Slaskich	2,0	-	-					
Rozbark	4,7	Rozbark	2,4	-	-					
Centrum	4,6	Centrum-Szombierki	2,4	-	-					
Szombierki	3,5	-	-	-	-					
1989	<u>I</u>	1998	I	2008						
		CITY OF SOSN	OWIEC	1						
Name of coal-mine	Employment	Name of coal-mine	Employment	Name of coal-mine	Employment					
Niwka-Modrzejow	5,5	Niwka-Modrzejow	2,6	-	-					
Kazimierz-Juliusz	4,9	Kazimierz-Juliusz	2,5	Kazimierz-Juliusz	1,9					
Porabka-Klimontow	6,5	Porabka-Klimontow	1,2	-	-					
Sosnowiec	4,6	-	-	-	-					

 $Source: M.\ Tkocz, 2008, p.\ 213; information\ from\ The\ Katowicki\ Holding\ Węglowy, Inc.$

During the socialist period – until the end of the 80's - the economy of both cities was highly specialized, or mono-functional, if studied from a different perspective. That was a centrally planned, socialist economy; significant organizational elements in the analysed cities were: excesses of employment that were a partial remedy to technological lags in heavy

industry, energy consumption, wastage of materials and half-finished products, lack of rationalisation as regards production organisation which, by principle, resulted from the predetermined plan, not economic calculation, low qualifications and education of personnel employed by traditional industries, and many more. A separate issue was the negative impact of coal mining and industry on the comfort of life, and a degrading influence on the city image, particularly in Bytom.

The 90s and the 2000s decade. The period after transformation in 1989, due to the introduced political and economic changes, completely revolutionised local labour markets. During the 90's and at the beginning of this century, Sosnowiec lost almost its entire industry, and at that time did not create any new jobs in new industrial establishments. The dramatic situation was saved only by employment in commerce and services. The new transition came later in the last decade, with seventeen new industrial facilities built within the city, fourteen of which were within the Katowice Special Economic Zone (table 7).

Table 7. The Industrial Structure of the KSEZ. New Investment in Sosnowiec, 2009

The KSEZ Areas in city	Companies	Type of economic activity	Capital	Employed
of Sosnowiec				(2009)
Area 1,,Milowice",,	Polskapresse	Printing, editorial office	German	77
	Duda-Silesia	Meat-industry	Polish	1248
	Gimplast	Manufacture of plastic products	Italian	63
Area 2 "Dandowka"	Caterpillar	Manufacture of metal products	American	195
	Ergom Poland	Automotive	Italian	305
	Ergomoulds Poland	Manufacture of plastic products	Italian	237
	Bitron	White goods industry	Italian	885
	Nadwozia-Partner	Automotive	Polish	75
	Process Electronics	Electronics industry	Canadian	47
Area 3 "Mikolajczyka"	Magneti Marelli Exhaust System	Automotive	Italian	153
	Watt	Engineering industry	Polish	100*
Area 4 "Narutowicza"	Segu Polska	Automotive	German	219
	Ferroli	Manufacture of metal products	Italian	210
Area 5 "Zaruskiego"	Automotive Lighting Poland	Automotive	Italian	1042
The KSEZ Sosnowiec -	-	-	-	4756 (4856)
total				

Explanations: * - 2010, December.

Source: The Katowice Special Economic Zone (The KSEZ) - The Sosnowiec - Dabrowa Subzone, Sosnowiec.

Although services played a significant and growing role after the economic transformation, changes to the labour market in Sosnowiec after 1989 are to be viewed in the context of heavy industry. Due to the above, two periods can be identified, and their border

was the beginning of this century. Over time the character of economic base diversified in a similar manner in the other city – Bytom. However, in Bytom, the emphasis of the discussed process were distributed differently. The 90's were rather a period of restructuring of coal mining and Bytom industry. Closures of industrial establishments were rare; they rather underwent organisational changes as regards management of individual coal mines. The shock associated with closing of coal mines and ironworks came as late as the last decade, on average a decade later than in Sosnowiec. Although closures and restructuring took different paths, in the case of individual coal mines and ironworks, the fact is that in 2010, only one coal mine operated, and ironworks (principally new entities established on parts of ironworks) are on an inclined plane, despite the restructuring they have undergone.

Division into the indicated sub-periods, and their distinctive character creates a slightly different reality in the labour markets of both cities.

Problems in coal mining that emerged in the 90's focused mainly on huge capital consumption in relation to economic profit, and exhaustion of resources in certain coal mines. The 90's saw a spectacular decision to close down part of hard coal mining in the contemporary Katowickie Voivodship. The main goal of this process was to close down the mining industry in the eastern part of the region – the Dabrowa Basin, with the centre in Sosnowiec.

The coal mine KWK "Saturn" was closed in 1996, in 1998 KWK "Sosnowiec", and in 2000 – KWK "Porabka-Klimontow". In 2001 the coal mine KWK "Niwka-Modrzejow" also was closed down. In 2010 only a portion of KWK "Kazimierz-Juliusz" was operating, giving employment to a mere 1,500 workers (figure 4). Meanwhile the restructuring processes were started (iron and steel industry), and closures (clothing and textile industry) in other factories. By 2004 almost half of the electromechanical and metal industries (from the pre-1989 period) were closed down – among the closed factories were FMG "Niwka", FSMM "Silma", Metal Industry "Sostal".

The consequence of the vast restructuring of industries and part of non-market services was a drastic decrease in the total employment from 66,000 in 1992 to 46,000 in 2004, accompanied by an increase in unemployment from 12,700 in 1992 to 22,100 in 2002.

At the beginning of 2000, Sosnowiec became one of the most problem-laden Polish cities in the Silesia voivodship. The reason for that was the pace of industrial restructuring, the scale of negative phenomena, such as an increase in unemployment, or fall in the number of jobs in the area, and difficult changes to the economic countenance of the city.

The problematic nature of the situation was mitigated by the establishment of the

Katowice Special Economic Zone, and investment activity within the city by bigger entities located in large-format establishments, by industry and services.

Figure 4. Coal mine "Kazimierz-Juliusz" in Sosnowiec



Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

As regards large-format shopping centres the process started with the construction of "Macro Cash and Carry" in 1994, and the establishment of the "Bitron" factory at the end of the 90's. The period from the 90's to the beginning of the millennium consisted mainly of the establishment of new shopping centres: "Auchan", "Real", "Plejada", "Fashionhouse Outlet", and "Plaza". Particularly desirable exogenous investments, mainly industrial, picked up pace only after 2000.

Until 2010 within the KSEZ alone, fourteen new industrial establishments were created (see: tab. 2). Apart from the above mentioned, other important large-format establishments must be mentioned, such as: the industrial facility of "Cebi", "Haerus Electronite", and "Hoermann", "Salzgitter Mannesmann", "Chrysler Mercedes Benz" in the wholesale industry, "Prologis Park", "Slaskie Centrum Logistyczne (Silesian Logistics Centre)" in forwarding, and three crucial investments pertaining to exogenous services: the editorial house of the daily "Polska. Dziennik Zachodni", Centrum Targowo-Wystawiennicze (trade fair and exhibition centre) "Expo Silesia" (figure 5), and accounts centre of the company "Timken".

The aforementioned investments, also in the higher education sector and culture, or other non-material services, have significantly altered the structure of employment in the city.

To a large extent they formed an alternative to the process of closing traditional industry. However, the issue of dropping employment in the city was a serious one. It is worth mentioning that in 2009 all companies located within the KSEZ employed approx. 4,800 people. That was the level of employment in a single Sosnowiec-based coal mine in the 80's.

Figure 5. Sosnowiec. Trade Fair and Exhibition Centre "Expo Silesia"



Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

A crucial issue to Sosnowiec, and Bytom alike, was competitiveness of labour markets in the neighbouring cities of the Katowice Conurbation, and its surrounding. There were at

least ten-odd large and medium-sized cities in the Slaskie Voivodship in a situation similar to Sosnowiec and Bytom. True, spatial vicinity of individual urban centres gave the opportunity of working outside the city limits, which is especially apparent in the Sosnowiec-Katowice relationship, nevertheless a major quality was operation of a new investment in the city.

Revolutionary changes to the labour market in Sosnowiec were different from Bytom. The period of the 90's, although marked with restructuring activities, was rather limited to organisational operations, though decrease in employment in individual large industrial establishments, including coal mines, was already apparent.

The most pregnant effect of the changes to the labour market in Bytom was the fall in the employment numbers from 65,200 in 1992 to 32,700 in 2008, and an increase in unemployment from 4,400 in 1992 to 17,800 in 2002. In 2008, in Bytom, unemployment reached 6,800. Notwithstanding the elements that contributed to the economic development within the city, especially telling is the fact that in 1992-2010, Bytom lost half of the current jobs. Another negative element that accompanies the local labour market is a very high unemployment factor against other county cities in the region (see: tab. 3). Although unemployment dropped in the last decade from 24.6% in 2005 to 16.7% in 2009, it is still high, and, disturbingly, has been rising from 2008 (12.9%). The structure of unemployment is also unfavourable (tables: 8, 9).

Comparing to Sosnowiec, another unfavourable element of the unemployment structure is also its concentration in specific districts (Bobrek, Rozbark), and that in consequence contributes to their being perceived as problem-breeding and social exclusion areas (table 10).

A special place on the map of Bytom is occupied by the district of Bobrek, where accumulation of economic and social problems is greatest, not only in Bytom, but probably in the entire conurbation. The biggest problems in the area are: unemployment, little professional and social initiative of the inhabitants, demanding attitude, alcoholism, low level of education, on average low level of income per inhabitant, low housing comfort, extensive devastation of buildings, up to recently a high level of air pollution.

Starting in the 90's Bytom was attracting investments from only small and medium-sized enterprises. New enterprises are being founded on restructured traditional industrial establishments (predominantly iron and steel and metal industry). However, they are not entirely new entities in the economic sphere, they are more a consequence of the process of restructuring. The key element of exogenous function of Bytom is still hard coal mining. Apart from large-format shopping centres ("Plejada", "Real", "Tesco") that period was

marked by scarcity of meaningful business investments of large-format nature.

Table 8. Basic data on registered unemployed persons in 2007

Specification	Registered unemployed persons			Registe-	Newly	Persons	Job of	fers		
	Total		Of	total		red	registered	removed	During the	As of 31
		Women	Previously	Terminated	Possessing	unem-	un-	from un-	year	XII 2007
			not	for	benefit	ployment	employed	employ-		
			employed	company	rights	rate in %	persons	ment rolls		
				reasons						
Bytom	8935	5661	1865	99	1019	15.9	13739	17145	3024	154
Chorzow	5190	3128	1015	104	596	12.6	9440	12196	972	49
Dabrowa Gorn	6906	4202	1918	128	734	11.6	10727	13014	1056	1059
Gliwice	5933	3764	1819	466	521	6.2	9412	12164	9024	780
Jaworzno	3968	2682	893	328	329	13.0	6481	7283	1368	57
Katowice	6826	3967	1057	151	734	3.3	15096	19080	7272	373
Mysłowice	2700	1777	623	224	239	9.1	4836	5751	1524	278
Piekary Slaskie	2645	1611	759	143	208	14.5	4289	4874	6840	1555
Ruda Slaska	3196	2105	721	48	367	6.8	8818	10737	2112	335
Siemianowice	2789	1683	561	84	581	13.6	8079	9251	2436	215
Sosnowiec	9854	5876	3774	517	1215	12.0	18358	21671	4128	894
Swietochlowice	1743	1072	309	22	308	12.8	4521	5840	6960	405
Tychy	3091	1954	526	127	468	5.2	6946	8822	4764	1293
Zabrze	7897	5301	1664	782	877	13.0	11278	15120	8196	609

Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga by Statistical Office in Katowice.

The 2000's did not bring almost any substantial change in that respect. The only difference has been apparent over the past few years, when important documents were developed and implemented to provide investors with freedom of location of their enterprises within the city limits.

Nonetheless the 2000's mainly brought a dramatic loss of jobs in large establishment of traditional industry. From 1994 to 2004 four out of six coal mines in Bytom were closed down ("Miechowice", "Szombierki", "Powstancow Slaskich" and "Rozbark"). KWK "Bobrek" was formally merged with KWK "Centrum". In 2010, mining exploitation was partially resumed in the area of the former KWK "Powstancow Slaskich". The estimated target employment here, however, will amount to only 300 employees. The restructuring of iron works was not a complete success. Part of the entities founded there went bankrupt.

Table 9. Unemployment characteristics in cities of the GZM by The Z. Ziolo synthetic indicator

	Structure								
	Age	of unemployed	Educ	eation of unemployed					
	Indicator	Cities	Indicator	Cities					
1	15,20	Sosnowiec	15,62	Sosnowiec					
2	13,58	Bytom	12,36	Bytom					
3	10,98	Zabrze	9,78	Zabrze					
4	8,44	Dabrowa Gornicza	9,20	Dabrowa Gornicza					
5	8,40	Gliwice	9,0	Gliwice					
6	7,86	Katowice	8,88	Katowice					
7	6,90	Chorzow	5,88	Chorzow					
8	5,20	Jaworzno	5,50	Jaworzno					
9	4,90	Ruda Slaska	4,80	Tychy					
10	4,54	Tychy	4,54	Siemianowice Slaskie					
11	4,38	Myslowice	4,38	Myslowice					
12	4,26	Siemianowice Slaskie	4,34	Ruda Slaska					
13	3,28	Piekary Slaskie	3,16	Piekary Slaskie					
14	2,46	Swietochlowice	2,54	Swietochlowice					

Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

The labour market in Bytom is in an extremely difficult position. The fate of traditional industry is sealed. Meanwhile, unlike Sosnowiec, there are no alternative changes in the structure of industry. Bytom has not been covered by the influence of the KSEZ. Advantageous factors of location of large-format industrial activity, such as transportation convenience (construction of the A1 motorway, among others), and substantial market outlet of the entire conurbation, do not constitute, as yet, a sufficient incentive for significant change of the economic countenance of the city, including the labour market.

1.1. Questions of governance on labour market. The 1970s and the 1980s.

The socialist economy period in Poland, and in the Katowice region up to 1989, was marked by dominance of management of city sphere by large business institutions, and decision-making at various levels of the Polish United Workers' Party. As regards urban development it was characteristic that the position of a mayor and their deputies was absent from the system. The actual power – perceived as taking key decisions for cities – was yielded by Municipal Committees of the Polish Unified Workers' Party; Municipal Office structures were almost exclusively executive in nature.

Table 10. Employment and unemployment rate by quarters in Bytom and Sosnowiec, 2002

Quarters	Employment rate	Unemployment rate		
Bytom	0	/ ₀		
Sucha Gora	38.1	22.9		
Gorniki	34.4	24.3		
Stolarzowice	39.6	20.8		
Stroszek-Os. Gen. J. Zietka	39.6	23.1		
Miechowice	42.4	22.6		
Karb	34.3	30.7		
Bobrek	26.6	49.3		
Srodmiescie	35.8	28.2		
Rozbark	33.3	31.1		
Szombierki	38.3	23.9		
Lagiewniki	36.7	26.3		
Sosnowiec	%			
Milowice	36.3	25.0		
Pogon	37.8	25.3		
Polnoc	35.1	28.5		
Sielec-Srodula	37.3	22.9		
Zagorze	44.6	23.6		
Stary Sosnowiec	44.5	21.2		
Srodula	50.1	24.7		
Klimontow-Dandowka	35.7	22.1		
Kazimierz Gorniczy	33.1	25.3		
Ostrowy Gornicze	37.1	21.7		
Porabka	25.9	26.6		
Maczki	39.6	24.8		
Niwka	39.0	24.2		

Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga by Statistical Office in Katowice.

Another important issue for development of cities in that period was that decisionmaking related to certain investments and areas was delegated to the provincial or even national level.

Activity of urban elites as regards spatial, investment and social development could only by made by approval of superior authorities, and never in opposition to the policy realized by them.

Municipal authorities enjoyed independence in the realization of urban policy only in certain aspects of endogenous development of Bytom and Sosnowiec (primary and secondary education, libraries, part of the health care system, and others).

Clusters of large industrial establishments were independent actors, or troupes of actors. In case of Bytom and Sosnowiec it was especially important, due to the role of industry in defining the economic base of both cities. The key role was of course played by individual coal mines subordinate to the Ministry of Mining and Power Industry. Coal mines and organisations of business nature subordinate to them (a supporting role), or social nature (schools, culture clubs, health care centres) created partially independent "urban life". Organisation of the majority of the districts of Bytom and Sosnowiec was connected with the activity of coal mines and the Ministry of Mining and Power Industry. A typical element of arrangement of "urban groups" were numerous patrimonial, aka, patron housing projects, inhabited almost exclusively by employees of a single industrial establishment. A similar situation was applicable in the iron and steel industry. In both cities, industry controlled the building and inhabitation of a majority of new flats and housing projects. In the case of Sosnowiec, whose substantial part of inhabitants were employed in Dabrowa Gornicza ("Katowice" iron works, "Przyjazn" cookery) there were also additional interactions that went beyond the city limits. Other industries played lesser roles.

The 70's witnessed a growth of understanding between certain entities representing municipal authorities and individual large employers; in principle, the situation lasted until the 80's. It was apparent mainly in the field of municipal and housing economy (joint investments), and environment protection (careful contestation of the rule "goal justifies means" which caused that permitted limits for dust and gas emission were significantly exceeded in Bytom and some parts of Sosnowiec).

Nonetheless it must be noted that the role of municipal authorities was marginalized. Many a decision connected with economic and social investments was made by individual employers. Large-scale industrial establishments also created labour policy, and in turn also the municipal labour market. The needs of large establishments, frequently irrational, to a large extent gave incentive to an increase in employment. This irrationality led to political and economic changes at the end of the 80's, and structural changes that accompanied them.

1.2. Questions of governance on the labour market. The 1990s and the beginning of the 21st century. The 90's.

The political transformation that came with the 90's completely altered the economic and social situation in Poland and the Katowice region. The role of municipal government increased, while the role of industrial establishments decreased, and the Polish Unified

Worker's Party disappeared completely. However, it is noteworthy that municipal authorities were never apolitical after 1989.

Placement of individual decision-makers creating municipal policies towards the labour market and unemployment in Bytom and Sosnowiec was similar to some extent, and different in other respects.

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1.2.1.Governance arrangements, governance responses and outcomes to economic problems

Municipal authorities have become the major designers of urban policy in both cities. With increasing economic and social crisis that accompanied the political system transformation in the 90's, it was the method of management and creativity of cities that directly influenced urban development. Earlier - prior to 1989 - large industrial establishments played a vital role, and in certain circumstances they could contest (and often did) the contemporary policy of municipal and political authorities.

An extraordinary thing occurred when a city found itself in a situation that was not merely problematic, but dramatic – as was the case with Sosnowiec in the 90's.

The current "strong actors" on the cities' "development stage" began more and more to act as "supporting" or even "minor role" actors. The "roles" of other actors "expired". Alas no new "players" were to be found in this peculiar game. Especially, those who could replace the leaving "actors". For cities the size of Bytom and Sosnowiec, it is a matter of absolute priority to possess a well-organized and strong economic base. As already mentioned, it underwent, first in Sosnowiec, then in Bytom, a spectacular transformation at a scale unheard of in those cities for decades. In the case of Sosnowiec, it was an unprecedented change. Regrettably, the transformation was accompanied by a number of negative features.

Already, in the 90's the urban policy, especially in Sosnowiec, became principally a "monodrama" (figures: 6, 7). The scale of problems that emerged: liquidation and restructuring of consecutive industrial establishments, and some service organizations, decreased employment, and dramatically increased unemployment, real reductions to the municipal budget forced the authorities to tackle accumulating social problems, often unheard of, such as unemployment. The city was becoming depopulated, economically degraded, and the number of closed, large industrial establishments was rising, followed by a growing number of post-industrial and post-mining areas. Scarcity of municipal funds, and lack of external funds (regional, national, foreign) caused that the scale of remedial measures, especially those that could constitute a new reality, had to be and were seriously limited during the 90's. It does not mean, however, that the period was completely wasted.

First, the problems were diagnosed, and works were started to develop a strategy to tackle the problems. Guidelines for remedial measures were approved, although it was clear that not every measure would be implemented or executed, almost invariably due to economic reasons, and often due to reasons of legal and organizational nature. Documentation and studies were prepared both at the regional and local (municipal) level.

Since the 1990s, the politics in Sosnowiec have been created by the left-wing authorities, who, during some periods, governed together with central parties. This element, however surprising it may seem, was overall positive, judging from the perspective of twenty years. The mayors of the cities were of extreme importance, especially contemporary mayor and previous mayor. Both mayors applied the politics of total reconstruction of the economic and functional bases of the city with the principle of "building a new house, starting from the foundation." The grounds were to be the new economy of the city and the modernized and developed technological and transportation infrastructure, that would be a convenience for

new industrial operations and large service businesses. This model, even though it was criticized by some political opponents and other stakeholders of socio-economic life and, despite its drawbacks, has been implemented. And in overall reckoning, it shall be considered as the only one that is justified and very positive (planned, logical, creative, consistently implemented, and exemplary in many aspects).

1980s 1990s 2000s SOCIALIST GOVERNMENT MAYOR OF OF SOSNOWIEC **ECONOMIC AND (OR) SOCIAL DEPARTMENTS IN MUNICIPAL OFFICE** SINGLE COMPANIES OR FACTORIES (OLD OR NEW) MINISTRY OF INDUSTRY THE KATOWICE SPECIAL ECONOMIC ZONE AGENCY OF LOCAL MANAGEMENT COUNTY EMPLOYMENT OFFICE REGIONAL OR GOVERNMENTAL AGENCIES (GAPP, GARR) **NGOs** REGIONAL CONTRACT local business other national or European partnership NGOs

Figure 6. A timeline diagram of the labour market policy in Sosnowiec, 1980's-2000's

Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

Generally the activities were three-fold: to win new investors, limit degradation of the city economic base, and to solve social problems, including the problem of unemployment. Many issues were utterly beyond the control of the municipal authorities. Some of them were of general nature, e.g. the economic situation for a specific type of industrial production, or the relation of production to the capability to sell with profit. Among others, this element reduced almost the entire textile and clothing industry in Sosnowiec. In that situation, any remedial or aid measures would not generate the expected results. The industry, in the shape inherited from the previous period, was, by and large, doomed. And it happened so. It was used only as the base for a mere few dozen small, often one-person companies in the small and medium businesses sector.

Figure 7. Municipal office in Sosnowiec



Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

Nonetheless, part of the activities that degraded the economic base of the city were planned at the central level, if based on economic calculations. That was the case with coal mining. In the mid-90's, the final decisions to close down four coal mines were made. The plan was realised until the beginning of the 21st century. The decision was made at the regional and central levels. The municipal authorities, as the local forum representation, could only oppose the decision or delay it. Yet it did not halt the entire process. The local government was left to bear the consequences of those decisions – to solve the manifold problems accompanying the phenomenon. In the case of coal mining, and the iron and steel industry, the two most serious consequences were growth of wastelands, and, most of all, the decrease in tax-generated revenue. The problem of unemployment was mitigated by special umbrella programmes. The following are noteworthy: earlier retirement, granting high individual gratuities and funds whose purpose was to inspire the recipients to start their own business activity, and relocation of employees to still operating industrial establishments.

The nature of the programme was diverse. Some of the activities, although socially debatable (early retirement), were the best-performing elements of the stabilization activities. Other undertakings, such as awarding non-repayable funds, although principally positive – did not serve its purpose.

It still needs to be stressed that lack of umbrella activities for heavy industry, although

highly debatable, eased the situation on the labour market. Instead of a catastrophe, the city was undergoing a "mere" tragedy.

A separate problem was growing unemployment, and generally low average pay in all sectors of the economy. If during the 80's we were dealing with budgets of individual employed persons in a family (the model: employed husband, employed wife, employed adult child), and budgets of single-generation families, in the 90's and the 2000's, the key role was played by collective family budgets, very often of a multi-generation family (the model: low pay of one of the spouses, unemployment benefit of the other spouse, unemployment benefit of an adult child, grandmother's pension).

One of the most important figures on the labour market in the 90's was the local employment offices in Sosnowiec and Bytom alike. Their roles grew throughout the 90's. Currently they realize, among others, the following tasks: employment agency, organisation of trainings and courses, intervention and public works, and paying out unemployment benefits. Currently, employment offices constitute a pillar of multi-node cooperation on the local labour market. They continue to evolve to become creative centres for building the labour market in the still difficult economic situation in both cities.

An attempt to solve problems of the unemployed and unemployment as a phenomenon was the implementation of various projects and programmes. The local employment office coordinated a majority of those activities. They were of diverse nature and were addressed to different social and professional groups. A majority of the projects lasted from one up to three years and in their goals they made reference to the current labour market situation or the specificity of the unemployed in a given city, e.g. the programmes: "Postawmy na przedsiębiorczosc", "Inwestycje w kwalifikacje deficytowe na rynku pracy" or "Aktywna kobieta" organised by the Employment Office in Bytom, and the programme "Dobry poczatek", the Project, "Promocja młodej aktywnosci" – perspectives for the youth, "Krok do przodu", and "Postaw na swoim". Co-partners of the above projects were training companies, enterprise development agencies, and selected business people.

An attempt to solve many problem areas of the Slaskie Voivodship, including the studied cities of Bytom and Sosnowiec in the Katowice Conurbation, was the so called "The Regional Contract for the Katowice Voivodship" established in 1995. It was probably the greatest governance task in the whole of region in the post-war history of Poland, participated by entities from various hierarchical levels: national, regional and local. Even more diversified was the structure of the collaborating entities, or those resulting from implementation of the *Contract* – voivodship authorities, social, economic, and scientific

institutions. *The Regional Contract*, through the integration of numerous institutions, economic, as well as, social entities, and people representing the world of science or culture, became an activity that provided momentum for the created image of the region during its infrequently dramatic transformation. It was irreplaceable for the labour market and unemployment problems described here. At least half of the provisions and stressed problems in the *Contract* focus on issues connected with: the new opening to structure of industry and economy as such, restructuring of coal mining and heavy industry, labour and employment market, and the problem of unemployment.

One of the elements of activities and strategies initiated by the *Contract* was establishment of a few sub-regional Development Agencies, and support given to the Katowice Special Economic Zone project (figure 8).

Those institutions' goal was to provide support to economic growth in those parts of the region that were especially threatened economically and socially. Branches of the two institutions were also founded in Sosnowiec. Today these are the Local Development Agency and the Sosnowiec-Dabrowa Sub-zone of the Katowice Special Economic Zone.

Figure 8. Sosnowiec. New investments localised on brownfields in The Katowice Special Economic Zone. The Investment Area "Dandowka"



Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

The first institution mentioned plays an integrating and supportive role, especially for small and medium businesses. That is where it is most successful. This entity, despite being organisationally dependent on municipal authorities, is almost completely autonomous in its operations.

Still, establishment of the KSEZ and the determination of investment areas within Sosnowiec was of immense importance. It should be noted here (getting ahead of the text) that the umbrella operations within coal mining and the establishment of the KSEZ in Sosnowiec were the most important activities that limited the dramatic situation on the city labour market (figures: 9, 10).

One of the factors of establishment of the investment areas within the city limits was the dramatically growing unemployment, but also the scarcity of opportunities to tackle other consequences of transformation, such as: scantiness of the municipal budget for prodevelopment goals, wasteland problems, social exclusion, and others.

Figure 9. Sosnowiec. The Headquarter of The Katowice Special Economic Zone – The Sosnowiec – Dabrowa Subzone at Modrzejowska Street



Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

Nonetheless it should be noted that by the end of the 90's only organisational and planning operations were being carried out within the city. Yet, in that period, the KSEZ became one of the most important co-partners in the organization of the new vision of economic development in Sosnowiec. The most prominent axis of cooperation was born and established in that period, and, to a large extent, joint decision-making: Municipality Office – the KSEZ – investor(s).

In this arrangement each entity participates equally, although each has a different role

to play. The goal of the cooperation is one – to achieve economic success through building of an industrial facility. For the municipal authorities this role is obvious – tax revenue goes up, unemployment goes down, the scale of social problems decreases. For the KSEZ structure each new investor strengthens the role of this institution: economically, organisationally and prestige-wise. At last there is the investor who finds relatively inexpensive investment land, tax relief, and a model-like cooperation with the municipal authorities at every stage of realisation of investment. The common ground that reinforces that arrangement is the economic success which conditions consequences of other, mainly social, nature.

EUROPEAN FUNDS KATOWICE **SPECIAL** ECONOMIC ZONE **PRIVATE NGOs INVESTORS** MAYOR MUNICIPAL **OFFICE** INSTITUTIONS CONCERNED ON GOVERNMENTAL LABOUR MARKET **AGENCIES** QUESTIONS EUROPEAN FUNDS

Figure 10. A diagram of "cut sections" for issue of labour market policy in Sosnowiec

Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

The effects of the KSEZ's actions, and interactions between the local authorities, the KSEZ and other companies have been described in detail in the previous chapter. It shall be recalled here that in 2010, 14 medium-size and large companies, employing over 4000 workers, were in operation in Sosnowiec.

A similar understanding can also be found in three-fold relations: the city authorities – Local Development Agency – Entrepreneur. In that case, however, the interrelations between the city authorities – Entrepreneur are noticeably limited.

The actions of the Local Development Agency are mainly focused on the small, and frequently, single-person businesses. The Agency, together with the District Employment Agency, is a kind of safety and support buffer as well the chance to activate all of the more enterprising inhabitants, who intend to take up some economic activity. In this aspect, the role of the institution shall not be underestimated.

From the 90's, both in Sosnowiec and Bytom, the role of direct relations grew between the city authorities and large commercial corporations. In that case the cooperation was also positive, although not all of the started operations and assumed obligations were finalized. For some time now an unsolved, yet generating relatively little cost, problem is the problem of a grade-separated pedestrian crossing of the two-lane road DK 94 in the immediate vicinity of the hypermarket "Auchan". Similar problems were present in the vicinity of CH "Plejada" in Bytom.

Shopping centres of renowned European networks built in the 90's were important in solving problems of the labour market, development of wastelands, and modernization of commercial services. Due to its endogenous nature, they are no longer perceived as having such big investment value as was the case in the 90's. Municipal policy towards shopping centres is rather conservative. This pertains to two shopping centres in the city centre – "Plaza" in Sosnowiec and "Agora" in Bytom, though advisable, as regards the location, yet it seems - visually rough.

However, transformation of the economy in the 90's left behind a number of industrial establishments created during socialism, or even before WWII. The role of local governments consisted of providing support to all activities of those companies, so that the period of restructuring would be least painful. It did not always work. Despite various forms of support, the market situation left those establishments in dire straits. Nonetheless, it must be emphasised that there are no untried methods of cooperation with those businesses.

Still, many companies have found their opportunities to develop. A textbook type is the cooperation between the city authorities in Sosnowiec and the company "Timken" and "Foster Wheeler". The former company, to a large extent, participates in financing and supporting various social ventures.

A special role, certainly a symbolic one for the region, is played by the coal mining industry. If, at the beginning of the 90's coal mining in Sosnowiec played the key role in the city economy, now, it is only of complementary nature. The coal mine KWK "Kazimierz-Juliusz" employs approx. 1,500 people. Generally, though, the problems connected with the liquidation of coal mining are mainly of indirect nature on the labour market.

It is a known conflict between the city authorities, the KSEZ, and the Italian company Ferroli on one side, and the Polskie Sieci Elektroenergetyczne S.A. on the other. The subject of the conflict is a disused power line to the closed down coal mine KWK "Sosnowiec" that has been blocking development of the Ferroli factory. That, in turn, limits the opportunities to increase employment by the company. The issue of image and spatial perception is a separate one.

Another conflict-generating aspect of the development of Sosnowiec is the policy conducted by the General Directorate of National Roads and Motorways (the Polish acronym GDDKiA). In that case, the economic factor causes GDDKiA to suspend the construction of an important junction with a grade-separated internal road, financed by the city authorities, that is to connect the investment area of the KSEZ – "Dandowka" with the express way S1. Although the conflict has no immediate impact on the labour market in the city, it seriously undermines further investment capacity, at least in this part of the city (figure 11).

Figure 11. Unfinished road to the investment area of the KSEZ – "Dandowka"



Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

Hard coal mining is still a vital element of the economic structure in Bytom. The coal mine "Bobrek-Centrum" still employs 3,500 people. However, as an important player on the local labour market it is also the most important operating business entity detrimentally influencing the infrastructure, and, to some extent, the image of Bytom.

The relationship between the city authorities and the coal mine, or rather the "Kompania Weglowa" it is a part of, for obvious reasons, cannot be entirely positive. The scale of problems – immediate and indirect – that coal mining caused in Bytom is virtually unheard of on that scale in any other coal mining city. Meanwhile, the coal mine is the largest employer in the city, beside the whole of institutions subordinate to the city authorities.

The 2000's brought further redundancies in the traditional industry in Sosnowiec. And in Bytom it was the time of the declining years of industry. The problem in Sosnowiec in the 90's and beginning of the 2000's surfaced in Bytom with an approximate 10-year delay. The economic situation is strengthened by a substantial sector of small and medium-sized businesses. At the same time it must be noted that in recent years this sector has also been suffering from a minor fall (figures: 12, 13).

1980s 1990s 2000s SOCIALIST GOVERNMENT MAYOR OF CITY OF BYTOM ECONOMIC AND (OR) SOCIAL DEPARTMENTS IN MUNICIPAL OFFICE SINGLE COMPANIES OR FACTORIES (OLD OR NEW) MINISTRY OF INDUSTRY REGIONAL OR GOVERNMENTAL AGENCIES (GAPP, GARR) NGOs REGIONAL CONTRACT COUNTY EMPLOYMENT OFFICE THE BYTOM INDUSTRIAL PARK local business other institutions national or European

Figure 12. A timeline diagram of the labour market policy in Bytom, 1980's-2000's

Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

Co-participation in management of the labour market in Bytom is based predominantly on good relations with employers' organizations and economic self-government:

- Bytomska Izba Przemyslowo-Handlowa,
- Zwiazek Pracodawcow Miasta Bytomia i Aglomeracji Gornoslaskiej

- Regionalna Izba Gospodarcza (delegatura) and

Cech Rzemiosl Roznych i Przedsiebiorczosci.

Similarly to the situation in Sosnowiec, in case of the Local Development Agency, the immediacy of relations between the city authorities – entrepreneurs must be limited here. In the case of Bytom and Sosnowiec, subjectivity of the relations grows with the increase in importance of a given business, and its role in the city economic system.

NGOS

MAYOR
MUNICIPAL
OFFICE

REGIONAL OR
GOVERNMENTAL
AGENCIES

EUROPEAN FUNDS

Figure 13. A diagram of "cut sections" for issue of labour market policy in Bytom

Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

The situation is extremely unfavourable due to the lack of new, significant industrial investments instead of the liquidated ones in the traditional industry. The municipal policy that is to tackle that problem follows good guidelines. Nonetheless it seems that the third element is missing that would support the investment process of the KSEZ.

In the situation of competitiveness of investment areas that follows from vicinity of other cities in the region, it is necessary to have a specialized unit, such as the KSEZ, that forms solid investment conditions. This issue is potentially of developmental character since Bytom possesses investment grounds, and excellent transportation accessibility, especially

after opening the A1 motorway.

2.1. The spatial aspect. The problem of brownfields (Bytom, Sosnowiec)

Brownfields¹ in the spatial structure of Bytom have been visible since the early Modern Era, and in Sosnowiec – since 19th century. In Bytom until mid-20th century their development was progressing virtually around the entire centre, in all districts. In Sosnowiec, on the other hand, the largest clusters were located in southern and eastern districts. By that time the areas were mainly of the former deep and surface hard coal mining (Bytom, Sosnowiec), and zinc ore (Bytom), as well as surface sand exploitation (Sosnowiec). Exhaustion of deposits resulted in abandonment of the areas. Until the end of the 1970's, as a result of plant succession, most of them turned into forests and greens. Other industrial or service facilities and housing estates were being developed less. In the 1970's and 80's the areas of wasteland rather decreased than not. In 1962 in Bytom wastelands totalled 5.6 km² which was 10% of the city area. By 1972 the area decreased by approx. 2 km².

Nonetheless, we must point to huge ambiguity of the term *wasteland* in definitions of the time. This term did not cover part of hillocks and degraded areas overgrown by forests and shrubbery, and treated them as forest areas. Others of similar nature functioned as degraded areas and wastelands. S. Czaja (1994) determined wastelands in Sosnowiec in 1985 as 9.2 km², i.e. 10.1% of Sosnowiec of that time. Their growth in reference to the year 1955 reached approx. 100%.

In Sosnowiec, wastelands constituted significant parts of such districts as Niwka, Dandowka, Debowa Gora and Sielec. The most apparent area, approx. 4 km², of wastelands within the city limits was that between Debowa Gora and Niwka. Those were areas of former coal mining and post-mining hillocks, with filling sandpits here and there (Ziolkowski, 1960). Part of the area was of *blackfields* nature, especially the grounds adjacent to the "Cedler" steel mill, part of which is now the municipal cemetery. Among hillocks and pits were sediment

¹ The term *brownfields* we understand as the entire industrial areas, post-mining areas and in rare cases those used by railway transport that have lost their functions, thus forming disused, degraded urban space (predominantly industrial and post-mining buildings, post-demolition sites of industrial buildings and infrastructure or railway infrastructure, hillocks, storage yards, pits, etc.)

We apply the term *blackfields* to the part of degraded areas where the level of degradation overlaps harmful environmental impact, e.g. former coal-slurry tanks, dumping grounds and hillocks that are especially harmful to humans, post-flotation tanks, chemical waste dumps, etc.

We use the term *greyfields* in reference to former commercial and combined commerce-service infrastructure objects (and their surrounding), mainly large-format or multi-storey facilities, both wholesale and retail. In the article the notion also covers abandoned office buildings of transport bases, and other of service character or directly connected with industry, theoretically capable of being used in the future for different or similar activity (Kantor-Pietraga, Krzysztofik, Runge, 2010).

traps and sludge tanks. The area also served as an illegal dump for waste from coal mines, power plants and other industrial facilities.

In Bytom the largest wasteland clusters were located in the eastern strip of the city, near the border with Piekary Slaskie, and in the south and south-west, on the border with Ruda Slaska and Zabrze (figure 16). They were predominantly former zinc and lead mines, and partly coal mines. A separate category were different wastelands not subject to development due subsidence.

Figure 16. Bytom. Post-industrial landscape with plant-succession



Source: "Armada Development", Bytom.

The most distinctive element in the wasteland structure in Bytom during the socialist period were various dumping grounds. In 1962 they occupied almost 3 km² within the city.

By the end of the 80's the areas of wastelands did not grow. Plant succession even made some areas valuable in terms of natural and landscape qualities. This was especially the case with those areas where industrial and mining activity was ceased in 19th and at the beginning of 20th century. In Sosnowiec, in the districts of Modrzejow, Ostrowy Gornicze and Bobrek a few complexes of special landscape and natural value were formed. In Bytom the most precious natural areas were located in the southern part of Rozbark, in Sucha Gora and Miechowice.

Mining (sand and coal) subsidence contributed to the formation of anthropogenic

overflow land and water areas. Some of them were components of natural complexes. Zabie Doly in Bytom are of special natural value. Other overflow lands and pools such as: "Balaton", "Lesna" and "Stawiki" in Sosnowiec contributed to the creation of leisure and recreation areas. The latter ones were formed only where filling sands were exploited.

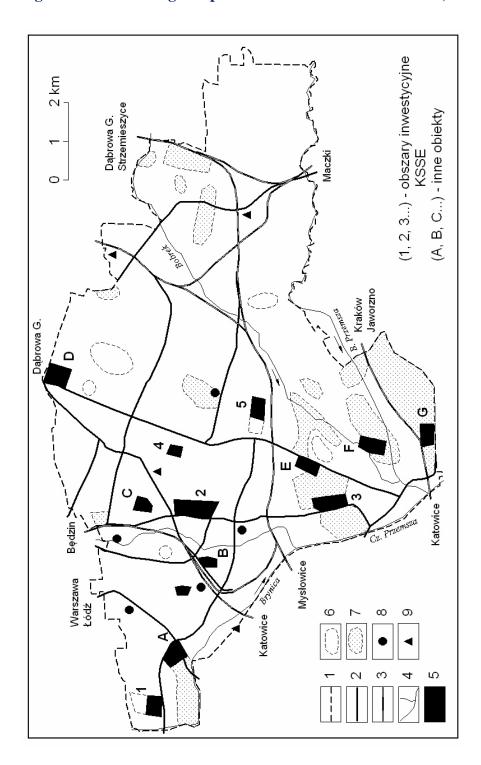
Significant growth of brownfields took place in the 1990's, together with the collapse of the industrial and mining function of the city. By the end of the 90's brownfields occupied approx. 11 km² in Sosnowiec. In 2005, in Bytom, their area occupied approx. 6%. In the statistics pertaining to land use a number of wastelands were recorded as "other type of land use", "forests" or "grounds for building development". Based on local research and studies in 2010 we estimate that areas formerly used for mining or industrial activity, unused areas and areas that lack investment, make up approx. 12.5-13.5 km² in Bytom. Approximately 2/3 are made up of forest or forest and shrubbery complexes. There are 242 hectares of total brownfields per coal mines liquidated in the 2000's.

In both cities, new wastelands were emerging in all districts, although in Sosnowiec the growth was greatest in central (Sielec), southern (Niwka, Dandowka), eastern and northwestern districts. In Bytom the process was most apparent in southern and western districts (Rozbark, Dabrowa, Lagiewniki, Szombierki, Bobrek).

In Sosnowiec, at the beginning of the 2000's 4 hard coal mines were closed, and a few large industrial establishments (mainly electrical and machine-building and textile and clothing industries). In 2005, in Bytom, 7 coal mines were operating. After numerous transformations and, most of all, liquidation of coal mines, currently only the KWK "Bobrek-Centrum" still remains. If by the end of the 80's the townscape consisted mainly of industrial areas, from the 90's the city image started to "gain" more and more devastated and deserted buildings and technical devices. Some of them were soon demolished, others, like former ZPD "Wanda" in Sosnowiec, or former KWK "Rozbark", are still degrading the city image.

Brownfields are of varied character. In Bytom, the most visible are those objects, and what is left of them, which were formerly connected with hard coal mining and the steel industry. In Sosnowiec the most evident are post-mining areas (no buildings), and buildings of the former clothing and textile industry. Areas and buildings connected with other industries have the least negative impact on the city image. In this case, we observe the most advanced spatial revitalization and assignment of new functions to those areas (figure 17 and tables: 11, 12, 13, 14).

Figure 17. Post-mining and post-industrial areas in Sosnowiec, 1995-2010



Explanations: 1-city limits, 2-main streets and roads, 3-main railways, 4-rivers, 5-wastelands developed in 1995-2010, 6-areas of industrial post-mining wastelands, 7- wastelands overgrown by forests and meadows, 8-revitalised individual objects and lesser areas of revitalisation (up 20 10 areas), 9-recreation and rest areas based on former post-mining wastelands.

Table 11. New enterprises localized on brownfields in Sosnowiec. Functions and localization

Name of enterprise	Function of enterprise	Type of land use	Part of city	
		before		
Automotive Lighting Poland	Automotive	Brownfields	Zagorze	
Bitron	White goods industry	Brownfields	Dandowka	
Caterpillar	Automotive	Brownfields	Dandowka	
Cebi	Electronics industry	Brownfields	Niwka	
The Jehovah's Witnesses	Religious functions	Brownfields,	Niwka	
Convention Centre		Greyfields		
Centrum Handlowe ul. 1 Maja	Shopping centre	Greyfields	Sielec	
Duda-Silesia	Meat-industry	Brownfields	Milowice	
Ergom Poland	Manufacture of metal products	Brownfields	Dandowka	
Ergomoulds Poland	Manufacture of plastic products	Brownfields	Dandowka	
Expo Silesia	Exhibition	Brownfields	Zagorze	
Fashionhause Outlet	Shopping centre	Brownfields	Niwka-Jezor	
Ferroli	Manufacture of metal products	Blackfields	Sielec	
Gimplast	Manufacture of plastic products Brownfields		Milowice	
Haerus Electronite	Electronics industry	Brownfields	Sielec	
Hoermann	Manufacture of metal products	lucts Brownfields Milow		
Magnetti Marelli Exhaust System	Automotive	Brownfields	Zagorze	
Nadwozia-Partner	Automotive	Brownfields		
Netto	Shopping centre	Brownfields	Stary Sosnowiec	
Okraglak	Hotel, 3-stars	Greyfields	Sielec	
Plejada	Shopping centre	Brownfields Si		
Polskapresse	Printing, editorial office	Brownfields	Milowice	
Process Electronics	Electronics industry Brownfields		Dandowka	
Real	Wholesale	Brownfields	Milowice	
Saltzgitter Mannesmann	Shopping centre Brownfields		Bor	
Segu Polska	Automotive Brownfields S		Sielec	
Silesian Logistics Centre	Logistics Brownfields Ni		Niwka-Jezor	
Silesian University of Medicine	High Education Brownfields		Dandowka	
Watt	Engineering industry Brownfields		Niwka	

Table 12. Economic activity in Sosnowiec – today, yesterday and before yesterday

Name of enterprise	Function of enterprise	Type of land use or economic
		institution
		before
Automotive Lighting Poland	Partly brownfields	"FSM"
Bitron	Brownfields	Coal mining (before 1945)
Caterpillar	Brownfields	Coal mining (before 1945)
Cebi	Brownfields	Coal mining (before 1945)
The Jehovah's Witnesses	Brownfields,	"Transgor"
Convention Centre	Greyfields	
Shopping Centre at 1 Maja street	Greyfields	Cotton-industry (before 1945)
Duda-Silesia	Brownfields	KWK "Saturn"
Ergom Poland	Brownfields	Coal mining (before 1945)
Ergomoulds Poland	Brownfields	Coal mining (before 1945)
Expo Silesia	Brownfields	"Silma"
Fashionhause Outlet	Brownfields	Railway areas
Ferroli	Blackfields	KWK "Sosnowiec"
Gimplast	Brownfields	KWK "Saturn"
Haerus Electronite	Brownfields	KWK "Sosnowiec"
Hoermann	Brownfields	KWK "Saturn"
Magnetti Marelli Exhaust System	Brownfields	Coal mining (before 1945)
Nadwozia-Partner	Brownfields	Coal mining (before 1945)
Netto	Brownfields	Manufacture of metal products
Okraglak	Greyfields	Local clinic at KWK "Sosnowiec"
Plejada	Brownfields	Former mine slag heap
Polskapresse	Brownfields	KWK "Saturn"
Process Electronics	Brownfields	Coal mining (before 1945)
Real	Brownfields	Sand pit
Saltzgitter Mannesmann	Brownfields	KPP "Maczki-Bor"
Segu Polska	Brownfields	KWK "Sosnowiec"
Silesian Logistics Centre	Brownfields	Coal mining (before 1970)
Silesian University of Medicine	Brownfields	Waste-land
Watt	Brownfields	Coal mining (before 1945)

Table 13. Sosnowiec. Non Built-up Areas Localized on Former Brownfields

Name of enterprise	Function of enterprise	Type of land use before	Part of city
Recreation-Sport Centre (figure 18)	Recreation	Brownfields	Srodula/Zagorze
Cmentarz Komunalny	Cemetery	Blackfields	Niwka
"Lesna"	Recreation	Brownfields	Kazimierz Gorniczy
"Stawiki"	Recreation	Brownfields	Stary Sosnowiec

Table 14. Sosnowiec. Enterprises Under Construction (01.2011)

Name of enterprise	Function of enterprise	Type of land use before	Part of city	
The Climbing Centre 3-stars hotels at historical power	Recreation	Brownfields	Sielec	
station	Hotel	Brownfields	Sielec	
"Heather Gardens"	Housing estate	Brownfields	Sielec	
Silesian University of Medicine (continuation)	High Education	Brownfields	Dandowka	

Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

Figure 18. Sosnowiec. Recreation-Sport Centre "Srodula"



Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

Currently, in Sosnowiec, the biggest and almost undeveloped post-mining area is the former KWK "Porabka-Klimontow". This pertains to the exploitation area in Klimontow and Zagorze. Part of the former administration and technical buildings are still in use. Most of the technical installations have been liquidated. The area has been party levelled. Plant succession has appeared here and there.

The former hard coal mine "Niwka-Modrzejow", in the district of Niwka-Pawiak, on the border of the Bobrek housing estate, is of similar character. The other part of the area occupied by the former coal mine, on the border of districts of Niwka and Modrzejow, has a different nature. A majority of post-mining buildings were adjusted to the requirements of the organized Science and Technology Park (figure 19).

Figure 19. Sosnowiec-Niwka. Post-mining buildings localized on the area of planned Science and Technology Park



Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

The greatest transformation took place in the former coal mines of "Sosnowiec" in the district of Sielec and "Saturn" in the district of Milowice. The two brownfields were included in the investment grounds of the Katowice Special Economic Zone, with an eye to having them transformed from coal mining to industrial function (Milowice), and service and industrial function (Sielec). Time has showed the plan has been rather successfully realized. The following enterprises have been located in the investment area "Milowice" and in its vicinity: "Polskapresse" (figure 20a), "Duda-Silesia", "Gimplast" and "Hoermann".

More diverse in character is the investment ground "Narutowicza" that covers the area of the former hard coal mine "Sosnowiec". The first to pave the way (except the KSEZ) was the factory of "Haerus-Electronite". Other investments followed shortly. In 2005, in the northern part of the region, the factory "Segu Polska" was built, and "Ferroli Poland" has been operating there since 2008 (the centre of the area). New development stimulus in this part of the city was given to the city in 2010. A new restaurant and hotel complex was established on the revitalized former hard coal mine "Sosnowiec". Prior to the revitalization, the area was considered greyfields.

Figure 20. Sosnowiec. Some investments on browfields: A - "Polskapresse", B

"Silesian Logistic Centre", C - Silesian University of Medicine







Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

In 2010 three new investments were started there: a hotel that integrated historic buildings of a power station, a recreation centre with the largest climbing wall in that region (figure 21), and a multi-family housing estate called "Wrzosowe Ogrody" (figure 22).

Each of the investments is of an important city-forming nature. The two first private investors (Polish capital) are building their services investments with the supra-regional character here. A three-star hotel is absolutely necessary in the city-centre zone. A recreation centre around the historical mining shaft, will have a climbing wall as its main attraction.

An extremely interesting project being currently being built by "Pieceksport", is the large housing complex called "Wrzosowe Ogrody". It is the first investment in Sosnowiec and probably in the region being realized on the area of brownfields, since the 1980s. Its importance, from the point of view of city shrinkage, lies in several aspects discussed in the Report:

- development of brownfields as a space with a negative image,

- -revitalization of a significant part of the area comprising an urban vacancy,
- -building new flats, especially required by the potentially new inhabitants of the city.

Figure 21. Sosnowiec-Sielec. Investments under construction on the base of post-mining buildings (New hotel on left and the largest climbing wall in the southern Poland on right



Figure 22. Multi-family housing estate – "Wrzosowe Ogrody" localized on the area of former coal-mine "Sosnowiec", Sosnowiec



Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga (the first view) also *Consortium "Pieceksport"*, investor of multi-family housing estate – "Wrzosowe Ogrody" (the second view).

From among activities undertaken on brownfields formed in the 90's and the 2000's, there are also noteworthy investments not connected with coal mining. The biggest success was the transformation of the former electro-technical factory "Silma" into the exhibition facility "Expo Silesia" – one of the largest exhibition and trade fair centres in Central and

Eastern Europe.

Many new investments were located in Sosnowiec on older brownfields. Six new enterprises were founded in the investment area "Dandowka" located on a former coal mine: "Bitron", "Caterpillar", "Ergom Poland", "Ergomoulds Poland", "Nadwozia-Partner" and "Process Electronics". Close by is a new building of the Pharmaceutics Faculty of the Medical University of Silesia, currently being extended.

In the district of Niwka, on former coal mining grounds, two large factories were founded in the past two years – "Magnetti Marelli Exhaust System" (figure 23) and "Watt". Both of the facilities were built as part of the KSEZ - Area "Mikolajczyka". South of the "Watt" establishment is a factory of "Cebi Poland", built there even earlier.

Figure 23. Sosnowiec. "Magnetti Marelli Exhaust System" localized in the KSEZ



Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

However, the very beginning of revitalization of the post-mining and post-industrial space in the area was the establishment of the Jehovah's Witnesses Convention Centre (figure 24). It was built partly on post-mining grounds, and party based on buildings and the car-fleet base of the former company "*Transgor*". Older (here: post-mining) example is a Catholic church in Sosnowiec-Porabka (figure 25).

Apart from the printing house and editorial staff offices of "*Polskapresse*" in Milowice, and the trade fair centre "Expo Silesia" in Zagorze, it was undoubtedly one of the most spectacular ventures not only as regards the change to spatial function, but also in terms of assigning to it highly aesthetic values which, unfortunately, is not that common in the city.

Figure 24. Sosnowiec. The Jehovah's Witnesses Convention Centre built up partly on

brownfields



Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

Figure 25. Sosnowiec-Porabka. Former post-mining building conversed into a Catholic church



Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

Brownfields were also in the scope of interest of the shopping centre capital: "Geant", currently "Real", "Plejada" Shopping Centre, "Salzgitter Mannesmann" and "Fashionhouse Outlet".

In Bytom, the situation is much worse. A majority of large industrial facilities that collapsed in the 90's and during the 2000's, have not been developed in any way so far. Hard coal mining is in the most dramatic situation.

Infrastructure of the hard coal mine "Powstancow Slaskich", to the north of the city centre, has been demolished almost completely. The area that covers approx. 30 hectares, adjacent to a forest, is considered interesting investment ground, as it lies close to the currently constructed motorway A1. In 2010, the area was still not developed. Due to demolition and party revitalization works, its image impact is mildly disadvantageous.

No investor stepped forward (end of 2010) to develop the area and buildings of the former coal mine "Rozbark (closed down in 2004). As regards to the image and perception of the city, the area is important as it is adjacent to the city centre. The areas of both former coal mines are currently managed by the local authorities in Bytom.

In 2005, the coal mine "Miechowice" was finally closed. The infrastructure and buildings were demolished. The area that has already been affected by plant succession are typical brownfields in this part of Upper Silesia.

The former coal mine "Szombierki" is in the best disposition. Since 2008, the coal mine has been owned by a private enterprise "Armada Development". The company intends to transform the area into a multi-function service facility (figures: 26, 27).

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Figure 26. Master-plan for brownfields on the area of former coal-mine "Szombierki"

Source: "Armada Development", Bytom.

Figure 27. Former Coal-mine "Szombierki" in Bytom. "Armada Development" Company reclaims post-mining brownfields toward recreational, cultural also housing

functions. Lower pictures The "Krystyna" Shift – monument of industrial architecture from the interwar period







Source: "Armada Development", Bytom.

The following elements are emphasised: development of housing, recreation and leisure (golf course), and shopping and services. The revitalization shall also cover the retained post-mining buildings.

The most advanced is revitalization in the former coal mining facility "Orzel Bialy" on Siemianowicka Street in the eastern part of Rozbark. This area (4.6 hectares) is home to Bytom Industrial Part that integrates new service and manufacture enterprises. It is essential that the historic industrial buildings have been brought back to life. Current works consist of land reclamation to the east of the already developed area.

In the 2000's, the iron and steel works "Zygmunt" and "Bobrek" were partly liquidated. The part of the works that was excluded from production, as a result of the restructuring, was soon demolished, ruined, and only partly developed. Those areas form the least desirable element of the city image.

Brownfields were used as foundations of 2 out of the 3 largest shopping centres - CH "Real" and partly CH "Plejada". Those brownfields were, to a large extent, of older origin.

The specificity of transformation of post-mining and industrial wastelands in Bytom is to put them to recreation and leisure use (e.g. "Dolomity – Sportowa Dolina"), and grant some of them (e.g. "Zabie Doly", "Suchogorski Labirynt Skalny") the status of protected areas. They all cover the areas that were excluded from exploitation prior to 1945, or even before 20^{th} century.

The most distinctive alas disadvantageous townscape element in Bytom are dumping grounds and hillocks. The most apparent are dumping grounds in the area of the hard coal mine "Bobrek - Centrum", dumping grounds in Siemianowicka street, and in the area of the former coal mining activity "Nowy Dwor" in north-east and north part of the city. Since 2009 the material from those dumping grounds has been used to build e.g. the motorway A1. Due to that a limited land reclamation is conducted there as well.

Wastelands in Sosnowiec and Bytom cover extensive parts of both cities. From the functional and image perspective they can be divided in the following manner:

- a) Brownfields and grey-fields that require immediate intervention, and that visibly affect the city image the former hard coal mine "Rozbark" in Bytom; the former ZPD "Wanda" in Sosnowiec, abandoned office building of the Medical University of Silesia on Ostrogorska Street in Sosnowiec, and the dumping grounds by the coal mine "Bobrek Centrum", the area of the former hard coal mine "Porabka-Klimontow" in Zagorze (Sosnowiec), the former iron and steel works: "Bobrek" and "Zygmunt" (Bytom), buildings in the vicinity of the former FMG "Niwka" (Sosnowiec);
- b) Brownfields that require immediate intervention, having a limited negative impact on the city image the former hard coal mine "Porabka-Klimontow" in Klimontowo (Sosnowiec); the former hard coal mine "Powstancow Slaskich" (Bytom); the post-mining area of "Nowy Dwor" (Bytom), the former factory "Politex" and "Intertex" in the district of Pogon (Sosnowiec), the post-mining

- areas on Siemianowicka Street (Bytom), the the southern part of the former KPP "Maczki-Bor" (Sosnowiec);
- c) Brownfields that do not require intervention and do not harm the city image greens in the former post-mining and industrial areas in Niwka, Dandowka and Juliusz (Sosnowiec), greens in the former post-mining areas in Dabrowa Miejska, Sucha Gora, partly Rozbark (Bytom).

2.2.Questions of governance on brownfields. The period before 1990

The city policy in Sosnowiec and Bytom towards brownfields was clearly diverse, and depended on the level of industrial function development, and the existing political and economic systems.

The period before 1945. The first period, until 1945, was full of spatial mismanagement located outside the very centre of cities, and resulting from ownership fragmentation, the significant role of industrial and coal mining enterprises, the limited role of local authorities, and lack of economic policy of cities that was replaced by policies of individual entrepreneurs and investment capital. The Sosnowiec of that time saw the formation of the largest (to date) wasteland clusters in the southern part of the city – they have been gradually developed from the 1990's. Part of the wastelands in the south-east districts of Bytom are from the same period.

In Sosnowiec, revitalization activity focused only on the city centre (building of a new centre in the area of Moscickiego and Zwyciestwa Streets). Industrial areas and buildings were mixed with re-developed areas. There were two directions at that time – extension of the existing industrial facilities and housing. In the latter case, housing was often of substandard level (e.g. Debowa Gora, Sielec).

A more common case in Bytom and Sosnowiec was abandonment of finished mining or industrial activity without their redevelopment. The consequence was the formation of numerous greens and forests as a result of plant succession (figure 28). The local authorities, although aware of the degeneration of the spatial form of the city, did not have the economic means or, more often, legal and administrative capacity to react to those phenomena.

Since the existence of both cities was strongly dependent on entrepreneurs and

investment capital, local authorities, in that respect, were at the mercy of efforts by individual companies. Positive revitalisation ventures were rare and focused on city centres.

Figure 28. The Katowice Conurbation. Examples of plant succession on post-mining areas. Coal mining has been finished here 10 years ago (the first picture). Coal mining has been finished here 60 years ago (the second picture)



Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

In the period between the wars, the problem of Bytom was the planned translocation of the city by the contemporary German authorities to a new site in the area of Pyskowice. Due to that, the expected coexistence of the cities and mining was being violated more and more. The city area was to become a predominantly industrial and extensively exploitation area. The problem of wastelands was of secondary importance.

1945-1989. The second period of development, from 1945 to 1989, i.e. the socialist

economy, was a period of intensive investment activity in Sosnowiec, both in industry and municipal economy. Wasteland management policy consisted mostly in using wastelands as the basis for investment activity, or leaving them without any organizational activity according to the assumption that after some time they would naturally transform into greens.

The former took place if industrial facilities were built or extended in the vicinity of wastelands. Those activities were not focused on the need to introduce order to that space, but to temporarily attract investment (e.g. southern Dandowka in Sosnowiec). Part of the wastelands, especially where interference with the geographical space was smallest, were used for housing and other forms of development (e.g. the housing estate Naftowa).

At that time, little interest in wastelands being used for investment purposes resulted from two things:

- the cities possessed a certain reserve of greenfields that were cheaper and safer to use. In 1975 the reserve was strengthened by the inclusion of not-well-developed land on the eastern outskirts of Sosnowiec and southern outskirts of Bytom.
- secondly, many wastelands were burdened with legal and ownership complications. Many of them were owned by various businesses that saw no interest in their sale, lease or surrender. Paradoxically, almost all of the entities, especially the large ones, were nationalized at that time, and theoretically, the procedure ought to have been easier.
- In Bytom the process of new industrial and municipal investments was very limited. Mostly greenfields were used for that purpose.

In Bytom the revitalization activities were conduced only within selected post-mining areas. The need to complement the economic base and to tackle the problem of negative impact of dumping grounds and post-mining hillocks were combined into one solution. Positive examples: extension of sports and recreation facilities on hillocks in Lagiewniki, Rozbark and Karb (Bytom, 1979 pg. 574).

2.3.Questions of governance on the brownfields. The 1990s and the beginning of the 21st century

In the 90's and the 2000's, at least 200 hectares of industrial areas were added in Sosnowiec. An important issue to solve was that nearly all new degraded areas were not owned by the city, which posed substantial legal and administrative limitations as regards their change of use. Although the local spatial development plan imposed the character of the

new form of development, the institutions and entities (mainly the Spolka Restrukturyzacji Kopaln S.A., the State Treasury, accountant in bankruptcy, and private companies) that owned the land exhibited little revitalization or re-industrialization activity.

Brownfields became a difficult topic faced only by municipal, and partly, by provincial authorities. It is noteworthy that apart from vague guidelines, the problem was not treated as a serious one at the national level.

The municipal policy of that time was focused in two directions. The first one consisted in the establishment of tools and undertaking preliminary actions in order to revitalize. They were mostly limited to the development of documentation of the areas, graded regulations, purchase of land or taking over debts and the creation of long-term strategies of wasteland development.

The other element of the municipal policy was systematic revitalization of a portion of the wastelands, new and old, degraded even before WWII. Revitalization procedures were financed from municipal budgets and private funds. From the mid 90's the EU co-financing has been most desirable. In opposition to preceding decades, the use of reclaimed land was rationalized with regards to the social and economic needs of the cities.

2.3.1.Governance arrangements, governance responses and outcomes to spatial problems

In the case of Sosnowiec privatization, and the further fragmentation of land, numerous legal land ownership complications caused that it was becoming more and more difficult to find extensive, over 20-hectare grounds, for municipal and commercial investments located on greenfields. Virtually the only solution to that problem was a policy aimed at winning new post-mining and industrial wastelands.

The incentive that strengthened the pro-investment activity of municipal authorities was the assignment and formal establishment of the Katowice Special Economic Zone in 1996-1998, together, with the establishment of the Sosnowiec-Dabrowa Subzone. Sosnowiec, due to the problem of growing structural unemployment, was selected as one of the main centres to realize that venture. Originally three investment areas were formed within the city limits: "Milowice", "Dandowka" and "Kazimierz" of total area of 63 hectares.

The area of "Milowice" and "Kazimierz" were established on former hard coal mines. The area "Dandowka" was localized within the pre-war post-mining wastelands. The owner of the lands earmarked for business activity was, in most cases, the State Treasury, liquidated coal mining companies and a private company (PP-U "Dandowka" under liquidation). In the 2000's, with the establishment of three new areas - "Zaruskiego", "Mikolajczyka" and Narutowicza", the change of localization of investment grounds of the KSEZ in Sosnowiec was finally made. Meanwhile, the area "Kazimierz" was liquidated. As a result of the changes, the KSEZ investment grounds in Sosnowiec covered a total of 95 hectares, of which 76 hectares were developed to meet business activity needs (data: the KSEZ in Sosnowiec).

With regards to the municipal policy, it is particularly noteworthy that the city and the Katowice Special Economic Zone realized the concept of directly taking over the land, mainly through purchase. Considering the budget restrictions in the 90's, and the beginning of the last decade, it was an audacious policy, as it was not bound to succeed. On the other hand, those activities were supported by the participation of the KSEZ, with regards to legal, administrative and organizational issues.

The initial concerns, or even social and political resistance was deepened by the fact that employment by companies at the KSEZ in Sosnowiec commenced as late as 2000. Commitment of the city authorities to development investment grounds is apparent in the investment amounts spent on building the necessary roads and technical infrastructure. In 1996-2009 the investment input reached an amazing 18.47 million PLN, i.e. 63.3%. The respective investors' and the KSEZ's share was 6.99 million PLN and 3.96 million PLN (data: the KSEZ in Sosnowiec). The idea of the local authorities' participation in organization of degraded areas and their adjustment to new functions in Sosnowiec revolved around three activities:

- full reclamation of degraded land, including the so called blackfields,
- levelling of land consisting in adjustment of a given plot of land to serve a specific investment, drainage,
- building of road infrastructure where it was needed. Those activities consist in junction road investments (e.g. the area "Milowice") and by-pass roads (e.g. the area "Narutowicza"), or even arterial roads that improved transport around the investment areas and rendered their accessibility better (the district of Niwka, planned: the investment area "Dandowka").
- construction of complete technical and municipal infrastructure service connections are located within specific investment plots (Krzysztofik R., Runge J., Kantor-Pietraga I., 2010, and data collected from Economic Policy Department and the Design and Urban Laboratory at the Municipal Office in Sosnowiec).

Depending on specific cases the city authorities undertook the activities alone or in partnership with the KSEZ, or individual investors. Among the earliest large-format investments connected with the development of post-industrial and post-mining areas that made references to participation within the broadly understood idea of governance are revitalization and investment activities in the area of Baczynskiego (1998), Staszica (1999), and Orlat Lwowskich Streets (2001).

To summarize that period of wasteland development in Sosnowiec, we find that it was of rather passive nature as regards the scale of *in situ* ventures. Nonetheless, they constituted a vital step of a well-conducted planning and building strategy of future development. It was also crucial to win an important partner in those activities – the Sosnowiec-Dabrowa Subzone of the Katowice Special Economic Zone.

In the case of Bytom the situation was quite different. The 90's were a period of continued existence of a majority of traditional industry, including hard coal mining.

Formation of new wastelands was very limited. Unfortunately, limited economic sources stopped enterprises for brownfields reclamation. The shock of urban voids within the city space, after closing down of large industrial facilities, occurred in the following decade.

In the past 50 years the period was most effective as regards the municipal policy of Sosnowiec in conjunction with post-industrial areas. The basic features of the period are dynamism of real activities, partnership participation and decision-making (governance), and generally extensive realism of plans and strategies.

The period was generally a continuation of municipal activities from the 90's, yet more active in comparison to the preceding decade.

The issue of immense importance is *governance* of investment areas where the key partner has become the Sosnowiec-Dabrowa Sub-zone of The Katowice Special Economic Zone (KSEZ). The activity partnership was also visible in cooperation with municipal authorities and individual investors outside the KSEZ, and provincial authorities. In the KSEZ area alone, approx. 50 hectares of post-industrial and post-mining, as well as, wastelands of older origin have been brought back to life. That constituted approx. 0.5% of the city area, approx. 3.5% of wastelands, and approx. 25% of the so called new wastelands (1990-2000) whose impact on the city image and its spatial and functional structure was particularly negative. Governance in Sosnowiec was of extremely specialized economic nature. Networks of connections in that system were based on typically economic activities and entities or combined economic and political. From the perspective of importance of the economic base in each city, it was blatantly obvious, especially in a city undergoing unprecedented economic

transformation.

The key player of the changes in the area of brownfields development were city authorities. A city mayor acted as a stimulus and creator that set the pace and character of the changes. Since brownfields investments were a priority, they became the focal point of interest of the Department of Economic Development in Sosnowiec City Hall, and Pracownia Projektowo-Urbanistyczna, Informacji i Promocji Miasta (Department of Design and Planning, Information and promotion of the City). Those units, as well as other departments of the City Hall, in cooperation with the City Mayor, were all in favour of comprehensive development and facilitated new investments. The activities were aimed at winning investors and providing them with the best opportunities to conduct business activity. However, cooperation with other entities (the Katowice Special Economic Zone, the Local Development Agency) interested in development of industrial areas, frequently with regards to the economic aspect, was of varied character.

The City Hall enjoyed the most favourable relations with business entities, the worst with some of the NGO's that contested legitimacy of certain activities(Forum dla Zaglebia Dabrowskiego, Zielony Ring Przemszy). The main problems with NGO's revolved around the manner of development of certain wastelands (the issue of the former KPP "Maczki-Bor" addressed by the association "Zielony Ring Przemszy" (figure 29) and rationality of certain investments that reinforced the localization potential of a few investment areas addressed by the Forum dla Zaglebia Dabrowskiego.

Figure 29. Salzgitter Mannesmann is localized on the area of former KPP "Maczki-Bor"



Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

Cooperation between the City Hall, the KSEZ and a few other entities (land and property owners) is of various nature. From very positive, where the city participated and supported individual investors or the KSEZ in acquiring new brownfields (a majority of

industrial and commercial investments), to conflict situations, as the problem of liquidation of the aforementioned power line owned by PSE S.A. that blocks development of the Ferroli factory complex and further development of wastelands.

The role of other entities providing support to the urban economic development, including, indirectly, the development of brownfields through new investments, was rather of secondary importance, albeit very positive (figure 30 and table 15).

The role of NGO's was of opinion-forming, contesting and sometimes a supportive nature. Generally, NGO's interested in the subject of the cities spatial development were attentive to the activities, and looked for the most optimal solutions. The influence of the political opposition on NGO's is not entirely clear. NGO's, mostly unaware of it, may be the tool of political critique of the city authorities. Nonetheless, it must be stressed that all political forces operating in Sosnowiec treat it as their absolute priority to further economic and spatial development of the city, bearing in mind the development of brownfields. The differences are sometimes about methods or cost-bearing of certain investments.

1980s 2000s 19906 SOCIALIST GOVERNMENT MAYOR O F CITY DEPARTMENT MUNICIPAL O F SPATIAL PLANNING MINISTRY OF INDUSTRY SINGLE COMPANIES OR FACTORIES THE KATOWICE SPECIAL ECONOMIC ZONE COMPANY OF RESTRUCTURING OF COAL-MINING (SRK) RESCUE REGIONAL OR NATIONAL AGENCIES (GAPP, GARR) CTL "MACZKI-BÓR" FORMER KPP "MACZKI-BÓR" **NGOs** national or European NGOs

Figure 30. A timeline diagram of the brownfields policy. A case of Sosnowiec

Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga

The overall relations between individual groups of players concerned about the

problem of brownfields and their transformation has been depicted in table 15. The table is based on the available data concerning individual interactions. Part of the information is secret. The information has been compiled from press notes, interviews and available documents.

By the end of the 1990's, the areas of wastelands grew in Bytom by 320 hectares. As opposed to Sosnowiec, the majority of post-industrial areas in Bytom have not been developed (table 16). The first reason is the fact that brownfields were formed as late as the 2000's, and some of them even at the end of the previous decade. Nearly all areas, before they were taken over by the local authorities, who are competent to prepare plans of their development, functioned or still function as private property or property of the coal mines restructuring company called Spolka Restrukturyzacji Kopaln S.A. (Company of Restructuring of Coal-mining) That period, as proved by Bytom and other cities of the region, is nearly almost lost.

Table 15. Relations between actors interested in the question of brownfields in Sosnowiec

MUN	KSEZ	COM	ILO	OEI	NGO
-	4-5	3-5	2-5	4-5	1-4
4-5	-	4-5	2-5	3-5	-
3-5	4-5	-	3-5	3-5	1-4
2-5	2-5	3-5	-	2-5	-
4-5	3-5	3-5	2-5	-	2-5
1-4	-	1-4	-	2-5	-
	4-5 3-5 2-5 4-5	- 4-5 4-5 - 3-5 4-5 2-5 2-5 4-5 3-5	- 4-5 3-5 4-5 - 4-5 3-5 - 4-5 2-5 2-5 3-5 4-5 3-5 3-5	- 4-5 3-5 2-5 4-5 - 4-5 2-5 3-5 4-5 - 3-5 2-5 2-5 3-5 - 4-5 4-5 3-5 3-5 2-5	- 4-5 3-5 2-5 4-5 4-5 - 4-5 2-5 3-5 3-5 4-5 - 3-5 3-5 2-5 2-5 3-5 - 2-5 4-5 3-5 3-5

Explanations: MUN - Municipal authorities, KSEZ - The KSEZ, COM - economic companies, ILO - other institutions land owners, OEI – other economic institutions or organizations, NGO – non-governmental organizations.

1 – very negative, 2 – negative, 3 – neutral, 4 – positive, 5 – very positive.

Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

Due to delays in the heavy industry restructuring process, Bytom is at the same stage as Sosnowiec at the end of the 90s or beginning of the 2000s. As opposed to Sosnowiec, and fortunately for Bytom, the restructuring processes are more evolutionary than revolutionary. Nonetheless, there is an urgent need to develop post-industrial and post-mining areas in at least 6 to 8 places within the city limits.

Table 16. Bytom. Key brownfields for land use regeneration

Name of enterprise	Type of land use	Part of city	Personal
			perception
Former – KWK ROZBARK	Brownfields	Rozbark	Very negative
Post-mining areas ORZEL BIALY	Brownfields	Rozbark	Very negative
Former – STEELWORKS BOBREK	Brownfields, blackfields	Bobrek	Very negative
The KWK BOBREK-CENTRUM	Brownfields, blackfields	Karb	Very negative
Former – KWK MIECHOWICE	Brownfields	Miechowice	Negative
Former KWK POWSTANCOW SLASKICH	Brownfields	Dabrowa Miejska	Negative
Former KWK SZOMBIERKI	Brownfields	Szombierki	Negative
Former – STEEL WORKS ZYGMUNT	Brownfields	Lagiewniki	Negative
Post-mining areas NOWY DWOR	Brownfields	Dabrowa Miejska	Negative

The development creator, similar to Sosnowiec, is the City Hall (figure 31). However, the operational tools are, among others,: *Program Rewitalizacji Bytomia na lata 2007-2020* (*Bytom Revitalization Programme 2007-2020*). It is worth mentioning that the City Council has passed a resolution that temporarily releases potential investors from real estate tax.

As was the case in Sosnowiec, cooperation of a potential investor with the City Hall has been institutionalized, to optimally improve legal and administrative procedures connected with the commencement of an economic activity within the city limits.

The Programme assumes three principal directions: attracting new investors, land reclamation for recreation and leisure function, and formation of greens, and placing the existing ones, in justified cases, under legal protection.

Bytom's problem is that there are no investment areas assigned for the KSEZ. The example of Sosnowiec shows they can be the key element in solving the brownfields problem.

Principally, two major players are responsible for the activities: the City Hall and individual enterprises, both from industry and services. Unfortunately, these activities have been of limited industrial scale. Revitalization of wastelands occurs selectively, it does not cover entire areas. The exception is shopping centres built on wastelands: Real, Plejada (partly), Tesco and Obi.

Figure 31. Municipal office in Bytom



A significant part of wastelands and post-mining areas have been reclaimed and transformed as part of the construction of the A1 motorway. The investor and later administrator of the motorway is the General Directorate of National Roads and Motorways. Transformation took place in the post-mining district of Dabrowa Miejska, also covering the area of the former coal mine "Nowy Dwor".

The City Hall policy towards post-mining areas manifests itself through large-scale liquidation of all surface forms of former exploitation. The already started liquidation of post-mining hillocks in the streets of Jana Pawla II, Siemianowicka and Wroclawska are most important from the perspective of the city image.

Another, and not really expected element of townscape, is specific overflow land formed as a result of mining subsidence. Only some of them are of natural value. Others degrade the city image. Therefore it was a priority to remove them. Re-cultivation of the area near Zgorzelec housing estate was a success (overflow land and illegal dumps); re-cultivation works have also been started in the area of Cicha Street. Liquidation of illegal dumps is a large-scale programme. The programme covers the streets of Zabrzanska, Frycz-Modrzewski, Strzelcow Bytomskich.

In Bytom, the following are the City Hall's partners in revitalization projects: "Kompania Węglowa", "Spolka Restrukturyzacji Kopaln", private entities. The construction of the A1 motorway has created a favourable situation, as material from liquidated postmining hillocks is partly used for building purposes.

The establishment of the Bytom Industrial Park was an attempt to coordinate activities for enterprise development on brownfields (figure 32). The Project was realized in 2004 with the participation of following regional institutions: Gornoslaska Agencja Przeksztalcen Przedsiebiorstw (GAPP), Spolki Restrukturyzacji Kopaln SA, the Industry Development Agency, and the enterprises of Orzel Bialy SA and PUMECH-Orzel Sp. Z o. o. The activities were coordinated by the City Hall in Bytom, and the executive company is the GAPP. The Park covers an area of 4.6 hectares and is being extended by new post-mining areas. The historic buildings within the park are also undergoing revitalization.

1980s 1990s 2000s SOCIALIST GOVERNMENT MAYOR OF CITY DEPARTMENT MUNICIPAL OF SPATIAL MINISTRY OF INDUSTRY ARMADA DEVELOPMENT COMPANY OF RESTRUCTURING OF COAL-MINING (SRK) RESCUE REGIONAL OR NATIONAL AGENCIES (GARR, GAPP) MEDUSA GROUP business other national or European NGOs

Figure 32. A timeline diagram of the brownfields policy. A case of Bytom

Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

The revitalization of the former coal mine KWK "Szombierki" is an interesting venture realized by a private entity. The project is conducted by the enterprise "Armada Development". The concept of development of the post-mining area provides for participation of various private entities and institutions interested in investments within the area. The investor conducts negotiations with various partners, however, the investor is the main entity that undertakes real actions. The project is also supported by the City Hall in Bytom. The quality of the venture follows from three elements:

- vast revitalization area,
- taking into consideration the historic and interesting post-mining buildings while revitalizing the area,
- the changes are aimed at above-local functions (a golf course, interesting sports and recreation facilities).

The "Medusa Group" – a small architectural studio – plays an extremely important role in the transformation of post-mining areas, especially of historic buildings. The main goal of the architects connected with revitalization is functional transformation of the former hard coal mine KWK "Rozbark" into colourful "Gardens" that make references, through its spatial arrangement, to a coal mine underground. The studio has received assistance of world-famous architects and artists: Elizabeth Diller, Jean-Paul Ganem and Ricardo Scofidio.

In reference to Bytom and Sosnowiec it is a separate issue how the problem of brownfields is perceived by central and provincial authorities. Or to be honest, by provincial authorities. The first substantial and most legible address of the issue of post-industrial wastelands was its inclusion in the aforementioned Contract for the Katowice Voivodship, and subsequent strategies of development for the Silesia Voivodship. However, generally, the participation of regional authorities was limited to substantive support, and in some cases – economic, to ventures realized by individual cities, including Bytom and Sosnowiec. The most measurable effect of those activities was coordination, and to some extent consultation of development plans of the KSEZ within the Silesia Voivodship.

The aid funds from the regional and national level aimed at the mitigation of the negative effects of the restructuring of industry and coal mining are insufficient. The company Spolka Restrukturyzacji Kopaln S.A., formerly Bytomska Spolka Restrukturyzacji Kopaln S.A., as the authority (owned by the State Treasury) supervising the post-mining property, and also in charge of that issue, has been only partly successful in fulfilling their mission.

Due to insufficient supervision, a number of objects have deteriorated, are devastated and robbed. The former coal mine KWK "Rozbark" in Bytom finally taken over by the city from the Bytom Mine Restructuring Partnership is but one of many such examples.

2.4. Vacancy-housing in Bytom

The problem of vacancy houses, and especially buildings in a poor technical state, appeared on a larger scale in Bytom (figure 33) in the post-war period, however, it had been present here before World War II (Szczypka-Gwiazda, 2003). This is the reason why there were plans to move the whole city to the suburbs of the conurbation and "devote" the city space to mining purposes. An intermediate solution, the worst of all, was found - the mining exploitation was still continued and mostly no precautions were taken. The main effect of this has been the negative influence of coal mining in land settling. In the period of November 2008 to November 2009, for instance, the following places settled by:

- Municipal Office 0.5 cm
- Swimming Pool 0.5 cm
- Secondary School of Construction 8.0 cm
- St. Barbara Church 20.0 cm
- St. Mark Street 80 cm
- Primary School no. 21 63 cm 68 cm
- Lanowa Street 43 cm
- -the cross-road of Falista and Konstytucji streets 106 cm
- Evangelic Church 27 cm, (*Raport o stanie miasta*, 2010).

Figure 33. City of Bytom. A view on city centre



Source: "Armada Development", Bytom.

This negative phenomenon was accompanied by even more threatening earthquakes, that lead to multiple building damages and also damages in the technical and transportation infrastructures. Some flats have been vacated due to demographic reasons (migration), social reasons or others (figure 34).

In June 1982, powerful rock mass movements caused the damage of over 600 buildings in the inner centre. After that, several hundreds of houses in Bytom were demolished. In the period of 1994-1999 only, the total number of approximately 150 buildings with 1500 rooms disappeared from the urban landscape, which comprised about 5% of the total housing infrastructure governed by the Municipal Authorities (Drabina, 2010, p. 435). In the period of 1945-1982 in Bytom, 650 buildings, with the total number of 3700 flats, were demolished, including the high number of 93 buildings in the period of 1970-1982 (Drabina, 2010, p. 411).

The first demolitions took place even before World War II resulting from the interaction of both mining and also other factors, such as the ravage of Jewish buildings by the Nazis or urban reconstruction. In 1945, the Soviet army unreasonably destroyed substantial parts of the Old Town, including the city square area (figure 35). The actions of Polish authorities after World War II, lead to the further demolition of old buildings and occasional complementing with residential buildings and residential-commercial buildings that significantly clashed with the historical image of the tenement houses next door.

Currently, and in the past, a problem of no less importance for the image of Bytom has been the issue of buildings, which collapse due to the earlier mentioned reasons. In the period of the first three months of 2011, as many as two buildings in the inner city zone have collapsed. In February, it was a building at Korfantego Street (figure 36) and a month later - one at Piekarska Street.

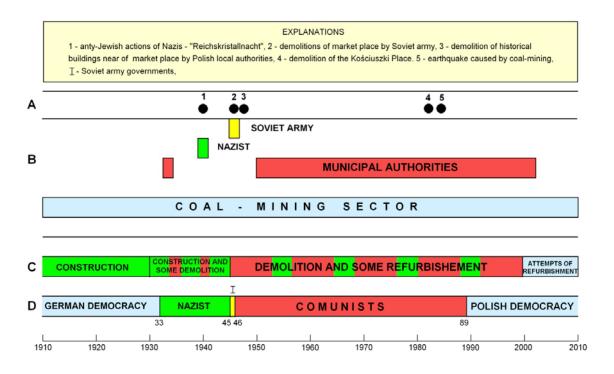
Figure 34. Bytom. Abandoned flats and shops in city centre





Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

Figure 35. A timeline diagram of vacancy-housing genesis in Bytom



Some buildings in poor technical state due to the war, were destroyed after World War II. A spectacular example of the effect of destruction in Bytom is the creation of the "new" Kosciuszko Square in the 1980s, which is a large city centre square. The previous one was several times smaller; and the town square increased two-fold.

The demolition of buildings to create the "new" Kosciuszko Square was one of the most destructive, conscious and intended actions of the communist government in Bytom. In 2010, Kosciuszko Square was developed by the building of the "Agora" shopping centre, which was the first large and successful attempt at revitalizing the inner city area. It shall be stated, though, that the modern architectural image, contrasting with the historic tenement houses and the functions of new establishments have brought about vivid discussions among the inhabitants and other actors of social and economic life (figure 37).

Figure 36. Bytom. Construction disaster at Korfantego Street. Just before and just after



Figure 37. Bytom. Demolished in the 1980s built-up area right by The Kosciuszko Square in the foreground. New shopping-centre CH "Agora" has been opened in this place in 2010



Source: "Armada Development", Bytom.

The ruined buildings are mainly located outside the main viewing point of the streets, they are mostly utility buildings; in the area of Walowa and Jozefczaka Streets, however, one may find an entire complex of ruined residential buildings.

The technical problems of development, the perception of the city centre, the ownership and

social problems have lead to the situation that, in the beginning of 2010, were reported in the central district (Srodmiescie) and the adjacent district of Rozbark, are 506 vacant flats (47 of which were privately owned), and 829 rooms have been excluded from use due to technical reasons. A total of 1,335 flats were excluded from use. 1,178 of the aforementioned flats managed by Zaklad Budynkow Miejskich (ZBM), a company established by the municipal authorities.

The situation is exceptionally difficult with regards to buildings in bad technical condition (tables: 17, 18, 19, 20). Some of the buildings, as already mentioned, are only fit for demolition. Currently there are eighteen such buildings, and in the entire province – only 49.

Table 17. Bytom. Some indicators of social questions by quarters

No	City quarter	Percentage of buildings	Social assistance benefits. Percentage of
		constructed before 1989	beneficiaries in each quarter
1	Centrum	99,39	18,3
2	Karb	99,96	22,0
3	Szombierki	99,74	10,1
4	Lagiewniki	96,50	14,9
5	Miechowice	95,37	8,5
6	Stroszek	98,02	11,5
7	Os. Gen. Zietka	89,38	5,2

Source: Program Rewitalizacji Bytomia na lata 2007-2020, 2009.

Table 18. Bytom. Technical condition of buildings

Condition	Council flats	Housing co	operative flats
Very good	8,0	29,3	1,3
Good			28,0
Satisfactory	58,0	58,3	58,3
Bed	34	12,4	10,4
Very bed			2,0

Source: Program Rewitalizacji Bytomia na lata 2007-2020, 2009.

2.4.1.Governance arrangements, governance responses and outcomes to spatial problems

The question of housing areas is an important point that different actors and urban authorities interested in (*Mieszkania dla ubogich...*, 2005; Cesarski, 2007). The problem of vacant houses and buildings in poor technical condition pertains to a few groups of stakeholders. The first group is made up of building owners and administrators – the municipal authorities, Kompania Weglowa, Spolka Restrukturyzacji Kopaln and other entities. The second group consists of approx. 3,000 persons on waiting lists for flats owned by the city. The third party to that problem is the public opinion that manifests itself through debates on the issue of vacant houses in the city. The public opinion was most clearly expressed through a private venture of an internet website with a meaningful name www.ruinybytom.pl (ruins of Bytom). A totally new initiative (2011) is also the association of mainly young inhabitants of Bytom, who formed a group on Facebook ("Project Bytom"). The group's aim is to monitor and analyse the situation connected with the problem of vacant houses in the city.

The pivotal point in dealing with the problem is the City Hall whose task, on the one hand, is to protect the city aesthetics (vacant houses degrade it to the greatest extent), and on the other – to secure the needs of the city inhabitants – and a city that continuous to lose its inhabitants.

Activities by the municipal authorities towards the problem of improvement of historic buildings, especially in central districts, focus on two elements: improvement of the conditions of the buildings and their surroundings (figure 38). An interesting example is the modernization of a building at 58 Katowicka Street, and its adaptation to the requirements of a replacement flat.

Table. 19. Bytom. Age of housing-buildings

Age of buildings	Council flats		Housing cooperative flats
Before 1918	59,1	92,4	63,5
1918-1945	33,3		
1946-1959	4,6	7,0	32,2
1960-1980	2,4		
1981-2009	0,6	0,6	4,3

Source: Raport o stanie miasta, 2009.

Table 20. Bytom. Technical infrastructure in flats, 2009

Type of infrastructure	Council flats	Housing
		cooperative flats
Plumbing instalation	98,4	99,8
Bath-room	49,3	90,8
W.C.	56,3	95,3
Gas fittings	57,2	96,5
Hot water (system)	No data	4,0
A central heating	25,9	14,6
system		

Source: Raport o stanie miasta, 2009.

The procedure of vacant-housing liquidation consists of:

- identification of legal status of a flat (if it is not city property, initiation of judicial and administrative procedures aimed at including it in the municipal housing resources),
- inclusion of the flat in the social flat resources administered by the city, and specifically to the municipal company Zaklad Budynkow Miejskich (ZBM);
 - total repair of flats,
 - renting the flats to person on the waiting list for social flats.

The procedure of commercial vacant-buildings liquidation consists of:

- identification of legal status of a property (if it is not the city property, initiation of judicial and administrative procedures aimed at including it in the municipal real estate resources),
- inclusion of the rooms in the social flat resources administered by the city, and specifically to the municipal company Zaklad Budynkow Miejskich (ZBM);
 - renting the rooms or selling at auction,
 - if consecutive auctions are not effective, transforming the rooms into a flat, if possible (figure 39).

There is also an interesting project, in progress, called "Colourful Backyards" (Wolnego, Elsnera, Pocztowa, Palinskiego, Streets and Pokoj Square). Considering that there are a few hundred such places in the city, the project ought to be continued as one of the most creative ways to improve the housing estates, and to attract potential buyers or tenants (figure 40).

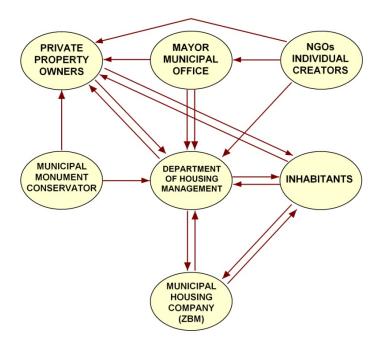
Figure 38. Bytom-Rozbark. The mining damages effects. Tilting building (on left) as well as cracked walls in other (on right)





Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

Figure 39. A diagram of "cut sections" for issue of vacancy-housing in Bytom



Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

The total of activities relating to the development and settlement of vacant houses was included in crucial documents and actions, such as: the Programme of Urban Revitalization, ReRoS, Urban Housing Policy – "Persons Essential for City".

Figure 40. Bytom. Refurbishment of houses in city centre. Slowly refurbishment



Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

Concluding, liquidation of vacant houses in our view is one of the two most crucial activities, apart from improvement of the labour market, aimed at halting the process of contraction of the cities. The municipal authorities are aware of that and it is apparent in their activities. Those activities have a number of variants, depending on the participants:

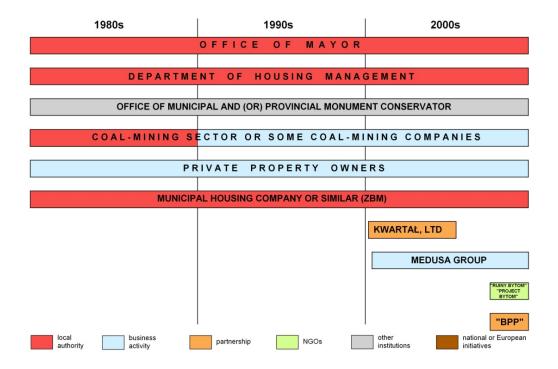
The city and entities connected with coal mining (Kompania Weglowa, Spolka Restrukturyzacji Kopaln) – here the city is the entity that exerts pressure on those institutions that, due to their negative coal mining activity, are obliged to provide material input and to take actions to secure the buildings and to repair them. Independence of the coal mining entities often makes the relations tough. However, generally speaking, the companies fulfil their obligations, although not entirely to the extent that is desired (figure 41).

The city vs. inhabitants awaiting assignment of flats. Here the cooperation varies. Still, two major problems can be blamed on City Hall officials of the previous terms (major negligence and malfeasance), and on certain groups of inhabitants:

- enrolling on the waiting lists without actually being interested,
- lack of information about resignation from the intention to use a social flat. Verification of the situation by the City Hall officers, also by means of on-site interviews, showed that only approx. 3,000 persons are actually interested in flats included in the city housing resources, not the reported 6,000.
- overestimation of capacity when declaring own investment and repair of a rented or sold flat,
- demanding attitude as regards the assigned flat. Dissatisfaction often results in negligence towards the

assigned flat.

Figure 41. A timeline diagram of vacancy-housing policy in Bytom



Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

The city vs. private building owners. Here, the quality of cooperation is extremely varied. In fact, it is exclusively dependent on the intention and economic capacity of private tenement owners. Especially over the past few years, the City Hall has introduced a number of conveniences and incentives to invest and recapitalize the owned houses. The most complicated situations take place when owners of tenements, clearly thinking of their own benefit and capacity, consciously infringe on the city interest as a public and common space. Those are frequently public safety issues, as in the case of the historic infamous tenement on Chorzowska Street, that is in danger of collapsing (figure 42). Negligence and harmful activities are labelled as complexities, ambiguity of the law and rather liberal jurisdiction in situations that are obviously harmful or even dangerous.

By the mid 2000's the problem of vacant-housing was acknowledged by the City Hall, yet left to be solved by itself due to the overwhelming scale. From that time, the issue has been a top priority to municipal authorities, one that is being realized overtly (revitalization) and covertly (revitalization plans, the so called *REROS*, jurisdiction and administrative activities, stock-taking, among others).

Meanwhile, inhabitants express their concern at and irritation with the state of the city, as they are vitally interested in a spruced-up image of their city. Thus, two waves are rising. The first one is the growing visibility of activities of the municipal authorities that bring order to that issue. The other is manifested by the rising frustration of social groups caused by the way they and visitors perceive the city. Against that background, is the explicitly negative reception by the City Hall of all actions that propagate the difficult situation of the city.

Figure 42. Bytom. "Famous" (in the negative context) abandoned private mansion at Chorzowska Street



Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

3. Cities after shrinkage (Bytom and Sosnowiec). Governance context

The city plays the key role in governance interactions, both in Bytom and Sosnowiec. The city is not able to bear the enormous consequences of the economic and political changes of the end of the 20th century in any case, including the examined economic, social and spatial problems.

It shall be stated that the budgets of both cities are modest, which mainly results from the limited number of businesses (the CIT tax) and the employed (the PIT tax). Sosnowiec is in a slightly

better position, hence it increases the tax income by the increase of new work places in the KSEZ. It shall be remembered that the zone generates numerous expenses in the city, which are covered by the city authorities (i.e. the technical infrastructure, transportation, and documentation).

The income structure for both cities is unfavourable as well. In Bytom, for instance, grants and subsidies amounted to 44.5% in 2009. The contribution from taxes paid by inhabitants and businesses has constantly been decreasing. In the period of 2005 to 2009, it plummeted from 24.1 to 21.5%. This element might reflect the intensified and disadvantageous economic situation connected with the crisis of the labour market.

Almost all enterprises, however, both the ones resulting from the improvement in location conditions of the Zone as well as enterprises outside the zone are co-financed by the EU or state funds. The participation system varies, depending on the Programme and the Task; it shall be pointed out, though, that the city itself could not afford any of the enterprises.

With respect to municipal governance towards issues of the labour market, both cities have a slightly different structure. In reference to aid funds in Bytom, the most important issue appears to be the improvement of the labour market through the activation of the so-called "human factor" and the general investment activities in the network of roads, which aim at the improvement of transportation availability. It is treated as one of the main bargaining elements in attracting investors.

In 2009, financial aid for the Projects realized from European funds in Bytom and concentrating mainly on the tasks relating to the improvement in the labour market, its support, creating new possibilities, amounted to 5.5 million Euro, with the total project value of 6.6 million Euro.

The District Employment Agency was an important institution in the city for support and finance acquisition from the EU and the state and it was, next to the Department of Social Policies, the main actor of changes in the scope of positive reconstruction of the labour market in the city.

In Sosnowiec, pro-investment activities are more highlighted, and they are realized towards the specific investment zones, and mostly connected with the operations of the KSEZ, but not only (e.g. the development of the former area of the KPP "Maczki-Bor" for new investments).

These means are not sufficient in any case. Unfortunately, the actions of both cities are not met with the proper understanding among some public institutions, and especially those at the nationwide level.

The previously mentioned conflict between the GDDKiA, city authorities and also the KSEZ, regarding the financing source for the connection of the "Dandowka" investment area with the express road no.1 poses the best example of it. It seems that the governance of investment support is partly dependent on the current political situation and the non-formal and not totally transparent lobbying,

which determine the order and support priorities coming from the central institutions.

This issue presents a good example that breaching an agreement between a governmental agency and city authorities might lead to the lack of stability for many actors of economic life, and also the inhabitants as a community. The lack of the mentioned connection has a negative impact on the comfort of life and safety due to the increased lorry traffic and the heavy traffic of passenger vehicles of the employees of various companies in the Dandowka district. Most of all, it is a limitation to the possibility for the expansion of the investment area. The new road built by the city authorities only partially solves the problem. It connects with the network of city roads and not with the express road. The lorry and to some extent passenger vehicle traffic has not been taken away from the city road network. It puts a heavy burden on the network. The lack of mentioned crossroads depreciates the investment plans of city authorities as well as attempts to gain new investors. Therefore, new, alternate plans are being made, that are not always beneficial. Their implementation will lead to the intensification of social conflicts.

One of the most important questions asked, in the examination of governance, and relating to the phenomenon of city shrinkage, is whether the available means and ways of their usage by specific actors are able to improve the current state.

It shall be stated that the answer is negative in each case. One may even say that city authorities manage the city with a notorious lack of means for the most essential undertakings relating to alleviating or limiting the consequences of city shrinking.

This element is visible in the politics of other actors as well, including owners of land and real estate, small and large private companies, and institutions such as the KSEZ. Due to this reason, many undertakings have been abandoned or only partially implemented and stages have been extended in time.

In the case of the cities, a considerable part of subsidies received by the cities has been devoted to the implementation of basic stabilizing and endogenous tasks, such as hospitals or schools. There are no distinct plans of financial support for communes with problematic nature, like Bytom or Sosnowiec.

Due to this fact, governance relations in both cities frequently lead to conflicts. There are too many groups of actors and, among the groups, many are dissatisfied with the method and/or form of outside means application. Economic and financial factors are key to determining the nature of the relations in the governance system. In this system, the regional authorities are of importance, and also central governmental institutions. City authorities here act as a keystone of interaction at the local level (inner-city) and regional, or beyond regional.

Insufficient means to implement key tasks for the city and the battles for subsidies fought with

institutions and superior authorities lead to a situation in which the city authorities are less likely to participate in the governance idea. Even if they decide to do so, their position has to be definitely dominating, which is more characteristic of the government model. The prevailing principle is: my merit - my decisions.

Governance is mostly visible in the case of economic investments in Sosnowiec. It is due to the fact that there exist at least three financially strong subjects: city authorities, the KSEZ and the most important, present or a potentially more powerful investor. The driving force of the relationship triggers something, which may be defined as task-related know-how, the action towards the positive investment finale. It shall be highlighted that each actor is driven by different principles. The investment, or the expected income, becomes an element that unifies the actors to perform a specific task.

In talks with representatives of all three groups, some premises of interest in the city area are apparent. The city authorities point to the element of financial gain (taxes), spatial gains (the development of brownfields), social gains (the suppression of unemployment and poverty), and prestige (the location of the institution intensifying the role of the city on the map of the Conurbation and beyond). The representatives of the KSEZ underline the economic element. If they can do something for the region in the process, it is only an additional element. The ruthless market game does not leave room here for any location mistakes.

A mandatory element, which acts as a binder in the process of locating economic enterprises and a revitalizing element of the shrinking cites is, on the other hand, the investment climate of the city (it is positive in Bytom and very positive in Sosnowiec).

This aspect sets the tone for the economic dimension of the governance idea. Interviews conducted show that the structure and dynamics of governance, as well as its arrangement, are directly proportional to the overall attitude of city authorities, and also the clerks at various stages of investment completion, to the investor, including small and medium-sized businesses.

As mentioned, an investment tool is also the support within the framework of outside sources from various funds, such as European, national, purpose or structural ones. This element works quite well at the stage of promoting particular programmes and projects. It is not as good at the stage of direct acquisition and application of EU funds. The cooperation between the institutions granting or redistributing funds and the entrepreneurs is not always positive. It is highlighted that clerks are indolent, punctilious and they do not always perceive the overriding, social purpose of the investment. Unfortunately, the authors of the Report, on the basis of performed interviews, became familiar with cases in which this nature of action has already lead to some limitations in the possibilities of employment for a higher number of people.

Nevertheless, the cooperation of many actors and the application of varied sources of financing is an optimal solution and definitely conditioning investment success or, in a broader sense, economic success.

An excellent example is the production hall of the company called Watt - the most recent (2010) industrial investment within the KSEZ in Sosnowiec (figure 43). The result of the participation of the investor, the KSEZ, city authorities and also funds generated from various sources (the National Programme for Refurbishment of Local Roads, 2008-2001 and Programme Accelerator of Green Technologies — Project: GreenEvo as well as Programme - Innovative Economy coordinated by the Polish Agency for Enterprise Development and The **Upper Silesian** Regional Development Agency) came to be one of the largest and most state-of-the-art solar panel factories in Europe.

Figure 43. Sosnowiec. "Watt" Company localised in the investment area "Mikolajczyka" of the KSEZ



Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

The violation of proportions in economic expectations, connected with the value or the way of the city's engagement, might have an adverse effect. An attempt to put pressure on city authorities to spend too many funds on pro-investment activities (even if the purpose is rightful) leads to a blurring of the initial actions towards development, that might be described as economic governance. Such examples are known in the examined region and they constitute a good background in the complicated system of management and organization of space. They are always an important lesson of inner-city governance for all the parties.

Another binder is the one of credit possibilities of investors and the successes achieved here. Unfortunately, in Polish realities, investment capital is of a limited nature and is not always sufficient. This matter frequently introduces a specific anxiety in city-investor relationships. Are plans going to be successful? Are they going to be implemented at all? Unfortunately, in some circumstances, it causes a decrease in the level of contacts between particular actors.

Relationships of different types take place when finances are low. It is clearly visible in the system of co-management of vacant houses in Bytom. Most buildings, including the vacant houses in the centre of the city belong to the city of Bytom or private owners. In this matter, three types of governance apply:

- the city towards its own real estate,
- private owners towards their own real estate, and
- the city towards the real estate of private owners.

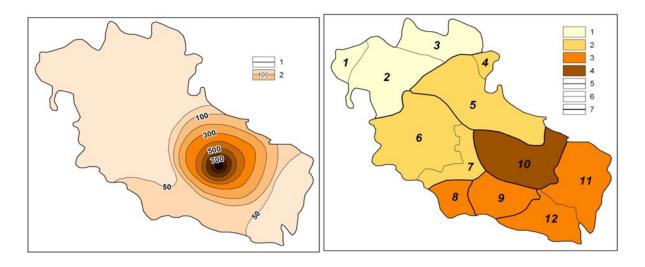
The three interactions have their own, quite visible, economic, legal and administrative conditionings. The low land rent and the range of devastation on one hand, and limited funds destined for renovation on the other, cause the pace of revitalization of the centre of Bytom to be slow (44).

The difficulty of the situation lies in the fact that investing for rent here is of a limited nature (low rent, negative perception of the area, not attractive for families with children). It creates a barrier against the widespread repurchase of tenant houses with the prospect of their commercial rent or the resale of individual flats. The profitability of such an enterprise in Bytom is much more spread out in time than in other Polish cities.

The most depreciated centre of a large Polish city is not a subject of economic interest for the Voivodship or central authorities. The lack of subsidies and aid funds is even more surprising, considering that the problems of the city came as a consequence of the decisions made by socialist authorities in Warsaw, or Katowice, after World War II. City authorities, being the inheritor of the decisions made by the socialist authorities, both central and regional, both political and economic, are truly the only actor in this relationship.

Considering the number of vacant buildings in the centre, their exposure and influence on the perception of the whole city, Bytom is in a disastrous state. The destruction of the housing substance is mainly an effect of natural processes extorted by irrational human activity. The same situation takes place in reference to the more and more frequent floods in other cities, including Silesian Voivodship.

Figure 44. Bytom. Concentration of vacancy-housing. Data for council flats only



Signatures: 1- (0-1), 2- (2-30), 3- (31-100), 4 - (101-887), 5-borders of quarters, 6-borders of the ZBM's districts, 7 - city limits. Signatures of quarters: 1-Gorniki, 2-Stolarzowice, 3-Sucha Gora, 4-Os. Gen. J. Zietka, 5-Dabrowa Miejska, 6- Miechowice, 7-Karb, 8-Bobrek, 9-Szombierki, 10-Centrum, 11-Rozbark, 12-Lagiewniki.

Source: R. Krzysztofik, J. Runge, I. Kantor-Pietraga.

In contrast to the problems in Bytom, the consequences of damage in housing developments are, in each case, alleviated by the financial support for the inhabitants, the local government authorities and institutions. In the case of Bytom, its problems resulting from the destructive interference of the environment, namely the geological surface, are solved almost completely with the use of municipal funds. Some charges due to the mining damages, are covered by Kompania Weglowa, the owner of KWK "Bobrek-Centrum", which performs mining activities. It mainly refers to the areas beyond the inner-city.

A majority of private tenement houses constituting vacant buildings came about as an effect of either insufficient financial means or a game played by private owners in the city space and orientated to purchase a devastated tenement house cheaply, tearing down a part of it (a part of it collapses by itself) and reselling the land, making a profit. The actions against the procedure were only started several years ago. Firstly, the possibility of demolition was limited, pointing out the need to revitalize the buildings, a majority of which are of historic nature. Secondly, in the case of the purchase of a tenement building by a private owner, he or she should show a sufficient own financial contribution to ensure that such a renovation will take place. Unfortunately, the majority of dilapidated tenement buildings had been bought out earlier.

Failures connected with revitalising a substantial quarter of the city by a company called "Kwartal" should be linked to financial problems, as well as the low level of ground rent. The company was established in 2000 as an effect of the so called Public and Private Partnership PPP. The idea of the company was to develop the quarter of the city between Jainty, Kwietniewski, Weber, and Browarniana streets, which had been demolished in prior years, with modern residential housing and services.

"Kwartal" was created as an effect of a legal agreement of the municipal company - Bytomskie Przedsięborstwo Komunalne (BPK) and several private builders and developers. Unfortunately, after several buildings were erected as shells, the revitalising actions in this part of the Old Town have ceased. Currently, the area of Kwietniewskiego Street requires urgent and further urban interference. The selected fragment of this part of the city was developed by a multi-storey car park, built for the purposes of the neighbouring "Agora" shopping centre. The investor of both establishments - already completed - was the company called Braaten Pedersen plus Partners (BPP).

The limitations in the development of governance interactions previously referred to, in this case, next to the economic, are also of a legal and legal-organizational character. It seems, though, that it has the best chances for improvement.

To conclude, Bytom is the only city in Poland, where the decisions of a governmental institution dating back to the socialist times, that is the Ministry of Industry and Mining, have lead the centre of the large city to a disastrous state. The contemporary central authorities do not want to bear the financial consequences of the past decisions.

Conclusions

Bytom and Sosnowiec are in the group of the most problematic Polish cities. This term, undoubtedly, is connected with the shrinking nature of the cities. In the 1980s, both cities constituted significant pro-development centres. Since the 1990s, they have become areas of multiple and overlapping problems: economic, demographic, social, infrastructural and spatial.

In both cities, problems of the labour market, including the largest unemployment in the Silesia Voivodship, were the direct cause of shrinking. Another important factor, which has blocked migration inflow has been the perception of both centres, as well as the conurbation as a whole. In the case of the two cities, the main image depreciating factors are the post-industrial and post-mining areas. In Bytom, it is additionally caused by the de-capitalization of the buildings in the Central district.

These problems are solved by governance arrangements in a two-fold manner. The first one takes into account regional representation. The role of this interaction is quite insignificant, though. The tendency that has been prevailing since the end of the 1990s, is the tendency towards city self-development, the limitation of the role of voivodship authorities or central authorities in supporting the key problematic issues for the city, especially in terms of finances. The problems might even be caused by the decisions of the previous central authorities. One exception is the beyond-municipal structure of the KSEZ, which is of an economic dimension. The regional and national levels in financing enterprises are much lower than the level of interaction between the city and the European Union.

There are no visible formal support structures within the self-government city association of the Katowice Conurbation - GZM "Silesia". The more noticeable elements are those of destabilizing rivalry, rather than solving specific problems.

Governance arrangement is seen at the local, intra-urban level. It shall be stated here, though, that the governance structures in the region are rather feeble and developing.

City authorities still maintain a strong position in solving problems relating to city shrinking. They are determined creators of various enterprises. This role in both cites deserves a positive response. For various reasons, the effects of these actions are more visible in Sosnowiec:

- the catastrophic situation of Sosnowiec was of a revolutionary, and incredibly dynamic nature and such were the authorities' reactions in the 1990s and the first decade of the 21st century. Until the mid-first decade of the 2000s, the counteractions were not very noticeable.
 - in Sosnowiec, there is a continuity in holding power by one political party, which consistently

fulfils the plans created in the 1990s (not without obstacles or mistakes). They have clear experience and have created a form of capital in municipal governing in crisis. In Bytom, the municipal governance relating to the key problems generated by shrinking was only started in the mid-2000s. The previous period was rather chaotic, incidental and poor. In this respect, Bytom is following the path of Sosnowiec from the 1990s.

- It is confirmed by the situation and evaluation of the actions taken, and interactions on the governance forum. Apart from some selected NGOs and opposition parties openly critical towards the authorities, the arrangement of interactions is quite open, positive, pro-developmental and dynamic. The interviewees, with no exception, admit that the president of the city has charisma. In Bytom, which is a more advanced stage overcoming problems, one may notice steadiness, discernment, minuteness, concentration and sometimes carefulness. This kind of political atmosphere is typical of the crucial moments that might change the face of the city and the principles of its functioning. The arrangement of governance is also weaker, mostly due to the lack of a strong independent institution, such as the KSEZ in Sosnowiec. A similar nature of power exercising, and the arrangement of governance, were present in Sosnowiec in the mid-1990s, on the eve of breakthrough changes for the city.

Another important actor present in Sosnowiec only, are the structures of the KSEZ and the network of new localized investors. The culture of cooperating with economic partners has established a clear arrangement of governance, even in the case of other actors, frequently non-economic ones. Surely, it is due to the fact visible in the urban space. There are 14 new industrial plants working within the KSEZ. Outside the zone, more than ten large industrial enterprises or services have been established, with the clear indication of the location within the post-industrial, and especially, post-mining areas.

Sosnowiec constitutes a model city, which is exemplary in its way of using the post-mining areas and transforming them into new places of economic activity. Nowhere in Poland have so many of them been established and nowhere is their structure so diverse, and frequently even more spectacular (Niwka, Sielec).

The basic problem of development in both cities, as far as the arrangement of governance is concerned, is the limitation, and often even lack of finances to implement the assumed objectives, plans or arrangements. It seems that this factor is the cause of a majority of tensions between the specific actors of social and economic life. The limitations of financial means leads to frustration, disappointment, irritation, disenchantment and action below the expected consensus.

A crucial element in both cities is the creativity of thinking. Particular people, who know what development and positive functioning in development should look like, represent various environments

in the arrangement of governance. They constitute crucial and solid capital in both cities. They are the ones that presently develop the power of governance and will certainly remain to do in the future.

References

Bytom. Zarys rozwoju miasta [Bytom. An outline of urban development]. (1979). Ed. W. Dlugoborski, Warszawa, Krakow: PWN.

Cesarski, Maciej (2007). Sytuacja mieszkaniowa w Polsce w latach 1988-2005 – dziedzictwo i przemiany [Housing Question in Poland, 1988-2005 – Continuation and Changes]. Warszawa: Szkola Glowna Handlowa - Publishing House.

Czaja, Stanislaw (1994). "Zmiany zagospodarowania przestrzennego i powierzchniowej sieci hydrograficznej na obszarze miasta Sosnowca [Changes of Land Use and Hydrographic Network on the Area of Sosnowiec]", *Rocznik Sosnowiecki*, **1994, I**: 68-84.

Drabina, Jan (2010). Historia Bytomia. Od sredniowiecza do współczesności [History of Bytom. From the medieval period to the contemporary times], Bytom: Towarzystwo Milosnikow Bytomia.

Furmankiewicz, Marek (2002). "Funkcjonalno-przestrzenne sieci wspolpracy samorzadow lokalnych" [Spatial-Functional Networks of Local Authorities Cooperation], *Studia Regionalne i Lokalne*, **1** (8), p. 5-24.

Gmina pasywna [Passive Local Government]. (2007). Eds. W. Dziemianowicz, P. Swianiewicz, Studia KPZK PAN, CXVII, Polish Academy of Science, Warszawa.

Gorzelak, Grzegorz, Jalowiecki, Bogdan, Kozak, Marek, Smetkowski, Maciej (2007). "Władze miast wobec zagrozenia degradacja społeczno-gospodarcza w warunkach transformacji systemowej" ["Towns Authorities' Response to Socio-Economic Degradation in the Process of Systemic Transformation"], *Studia Regionalne i Lokalne*, (3) 29, p. 5-31.

Kogut-Jaworska, Magdalena (2008). Instrumenty interwencjonizmu lokalnego w stymulowaniu rozwoju gospodarczego [Instruments of Local Interventionism in Case of Economic Development Stimulating], Warszawa: CeDeWu Publishing.

Lackowska, Marta (2007). "Metropolitan Governance in Poland: Is Voluntary Co-operation Condemned to Failure". Eds. J. E. Klausen, P. Swianiewicz. *Cities in City regions. Governing the Diversity*, Warszawa: University of Warsaw, p. 133-155.

Lackowska, Marta (2010). Zarzadzanie obszarami metropolitalnymi w Polsce. Miedzy imperatywem a dobrowolnoscia [Metropolitan Governance in Poland. Between Imperative and Voluntary Co-operation], Warszawa: The Warsaw University Publishing.

Mieszkania dla ubogich w zrownowazonym rozwoju miast [Flats for poor people and sustainable development of towns], (2005). Ed. H. Zaniewska. Krakow: Instytut Rozwoju Miast.

Swianiewicz, Pawel (2005). "Poland: a time of transition". Eds B. Denters, L. Rose, *Comparing Local Governance: Trends and Developments*. London: Palgrave, s. 100-118.

Swianiewicz, Pawel (2007). "Changing forms of urban government in Central and Eastern Europe". Eds. R.

Hambleton, J.S. Gross. *Governing Cities in a Global Era Urban Innovation, Competition and Democratic Reform*, New York: Palgrave Macmillan, p. 93-112.

Swianiewicz, Pawel, Klimska, Urszula, Mielczarek, Adam, (2004). *Liderzy miejscy w poszukiwaniu nowego modelu zarządzania rozwojem [Polish City Leaders in Search of Local Governance]*, Warszawa: SCHOLAR Publishing.

Szczypka-Gwiazda, Barbara (2003). Pomiędzy praktyką a utopią: trójmiasto Bytom - Zabrze - Gliwice jako przykład koncepcji miasta przemysłowego czasów Republiki Weimarskiej [Between practice and utopia: tri-city Bytom - Zabrze - Gliwice as an example of conception of industrial city from The Weimar Republic time], Katowice: University of Silesia Publishing.

Tkocz, Maria (2008). "Przemysł GZM" ["Industry of The GZM"], Eds. A. Hibszer, R. Dulias, *Gornoslaski Zwiazek Metropolitalny. Zarys geograficzny [The Uppersilesian Metropolitan Union. Geographical outline.]*, Sosnowiec: University of Silesia-Faculty of Earth Science, p. 208-220.

Wojewodztwo slaskie. Zarys geograficzno-ekonomiczny [Slaskie voivodship. A geographical-economic outline]. (2008). Ed. M. Tkocz, Sosnowiec: University of Silesia.

Ziolkowski, Jan (1960). Sosnowiec. Drogi i czynniki rozwoju miasta przemyslowego [Sosnowiec. Ways and factors of the development of an industrial city], Katowice: "Slask" Publishing.

Published documents, reports (both paper or digital version)

2nd International Conference on Managing Urban Land. Towards More Effective and Sustainable Brownfield Revitalisation Policies. (2007). Eds. D. Grimski and Others, Stuttgart: SAXONIA Standortenwicklungs- und – verwaltungsgesellschaft mbH, Nottingham: Land Quality Press.

Bank of Regional Data - Statistical Office in Katowice. (2010). Katowice: Statistical Office in Katowice.

Brownfield Integrated Governance – BRING, Baseline Study – Development phase. (2010), URBACT Project.

Bytom. Raport o stanie miasta [Bytom. City-Report]: (2009). Bytom: Municipal Office in Bytom.

Centrum Aktywizacji Zawodowej. Nowa jakość [Professional Activation Centre. New quality]: (2011), Bytom: Employment Office in Bytom.

Kontrakt regionalny dla wojewodztwa katowickiego [The Regional Contract for the Katowice Province]. (1999). Ed. M. Baranski, Katowice: Silesian University Publishing.

Plan Zagospodarowania Przestrzennego Wojewodztwa Slaskiego: (2004). Katowice: Marshall Office in Katowice.

Prognoza Oddziaływania na Srodowisko Lokalnego Programu Rewitalizacji Miasta Sosnowca na lata 2010-2020: (2010). Sosnowiec: Municipal Office in Sosnowiec.

Program Ochrony Srodowiska dla Miasta Sosnowca na lata 2009-2018 [Programme for Environment Protection for City of Sosnowiec, 2009-2018]: (2009). Sosnowiec: Municipal Office in Sosnowiec.

Program Rewitalizacji Bytomia na lata 2007-2020 [Programme of Revitalization of Bytom]: (2009). Bytom: Municipal Office in Bytom.

Program Rozwoju Miasta Sosnowca na lata 2007-2013 [City of Sosnowiec. Programme of Urban Development, 2007-2013]: (2007). Sosnowiec: Municipal Office in Sosnowiec.

Regionalny Program Operacyjny Wojewodztwa Slaskiego na lata 2007-2013 [Regional Operational Programme for Slaskie Voivodship]: (2007). Katowice: Marshall Office in Katowice.

Strategia Rozwoju Miasta Sosnowca do 2020 r. [Sosnowiec. Strategy of Urban Development to 2020]: (2010). Sosnowiec: Municipal Office in Sosnowiec.

Rynek pracy Bytomia. Szanse i zagrozenia u progu XXI wieku [Labour market in Bytom. Chances and risks on the beginnig of the 21'st century]: (2010), Ed. R. Marszowski, Katowice: GIG Publishing.

Strategia Rozwoju Wojewodztwa Slaskiego "Slaskie 2020", 2010, [The Slaskie Voivodship Strategy of Development]: (2010). Katowice: Marshall Office in Katowice.

Unpublished materials and documents:

Unpublished Materials of "Armada Development", 2010, Bytom.

Unpublished Documents of Municipal Office in Bytom, 2010, Bytom.

Unpublished materials of Employment Office in Bytom, 2011, Bytom.

Unpublished Documents of Municipal Office in Sosnowiec, 2010, Sosnowiec.

Unpublished Documents of The Katowicki Holding Weglowy, 2008, Katowice.

Unpublished Materials of "Pieceksport", 2010, Dabrowa Gornicza/Sosnowiec.

Unpublished Documents of Zaklad Budynkow Miejskich (ZBM) in Bytom, 2011, Bytom.

Interviews and opinions (2010, September – 2011, March) about shrinkage in city of Bytom and in city of Sosnowiec:

Andruszko Elzbieta, Manager in Department of Housing Policy in Municipal Office in Bytom, Bytom; Antosz Krystyna, Investment Coordinator in Invest PA (Pieceksport Consortium) – key developer of "Heather

Gardens" Estate localized on the post-mining brownfields; Sosnowiec, Bieda Halina, Vice-mayor of city of Bytom; Blaszczyk Robert, Head of Zaklad Budynkow Miejskich (ZBM) in Bytom, Bytom; Bubel Miroslaw, Vice-leader of The Katowice Special Economic Zone, Sosnowiec; Prof. Drabina Jan, Historian and monographer of Bytom, Bytom; Frugalski Grzegorz, Head of Economic Policy Department in Municipal Office in Sosnowiec, Sosnowiec; Gorski Kazimierz – Mayor of city of Sosnowiec; Halas Marcin, Journalist of "Zycie Bytomskie" [The Bytom Live], Bytom; Hyria Anna, Project Manager in Armada Development, Bytom; Kincer Rafal, Manager of Armada Development, Bytom; Koj Piotr, Mayor of City of Bytom; Krawczyk Piotr, Leader of Forum

dla Zaglebia Dabrowskiego [The Dabrowa Basin Forum], Sosnowiec; Krol Marceli, Manager in Zaklad Budynkow Miejskich (ZBM) in Bytom, Bytom; Kurek Halina, Vice-manager of Employment Office in Sosnowiec, Sosnowiec; Luckos Malgorzata, Vice-leader Municipal Office of Social Welfare; Sosnowiec; Lukasik Przemyslaw, Leader of Medusa Group (brownfields reclamation), Bytom; Maciejczyk Marian, Vice-Mayor of city of Bytom; Malkowski Zdzislaw, Manager of Invest PA (Pieceksport Consortium) — key developer of "Heather Gardens" — estate localized on the post-mining brownfields; Sosnowiec, Musiol Sebastian, Marketing manager, Watt Company — localized on brownfields in Sosnowiec, Sosnowiec; Ostrowski Jerzy, Leader of Association for Stolarzowice and Gorniki (NGO), Bytom; Paluch Jacek, Export manager in Watt Company — localized on brownfields in Sosnowiec, Sosnowiec; Stanislaw, The first Head of Haerus Electronite — the first company on brownfields in Sosnowiec, Sosnowiec; Raczynski Tomasz, Head of Expo Silesia — exhibition areas localized on brownfields in Sosnowiec, Sosnowiec; Skrzypczyk-Kogut Brygida — Head of Urban Development Office, Bytom; Studzinski Piotr, Author of website: www.ruinybytom.pl; Bytom; Szczudlo Iwona, Vice-manager of Employment Office in Bytom, Bytom; Wieclaw Jaroslaw, Head of Social Policy Department in Municipal Office in Bytom, Bytom; Witek Ryszard, Head of Employment Office in Bytom, Bytom; Zygadlo Nikodem, Marketing-manager of Expo Silesia — exhibition areas localized on brownfields, Sosnowiec.

Surveys:

Anonymous entrepreneurs – sector of production, Bytom – two persons (2010/2011).

Anonymous entrepreneurs – sector of production, Sosnowiec – three persons (2010/2011).

Anonymous entrepreneurs – service sector, Bytom – two persons (2010/2011).

Anonymous entrepreneurs – service sector, Sosnowiec – four persons (2010/2011).

Opinions of inhabitants. City of Bytom, 36 personal, anonymous surveys, (2011).

Opinions of inhabitants. City of Sosnowiec, 39 personal, anonymous surveys, (2011).