IMPACT OF INDUSTRIAL RESTRUCTURING ON POPULATION DYNAMICS IN THE CITY OF CĂLĂRAȘI

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ABSTRACT - The present paper focuses on a geographical study on industrial restructuring of the Călărași city, in terms of economic and human potential. To develop this working paper, the physical-geographical aspects of the region were taken into account, mainly economic, social and demographic analyzing the main features of each component. Industrial restructuring phenomenon has been studied in the literature of recent years, especially in the context of a global orientation direction towards tertiary sectors, and regional crises. In this sense, by the process of industrial restructuring in the city of Călărași one can understand a decrease in occupancy rates in industry as a percentage of total employees. It is therefore possible to argue that the decrease in the number of employees in industry can simply reflect the share of the industry sector in GDP. Furthermore, the paper analyzes the state of industry in Călărași before and after 1989. The industrialization before 1989 had a strong impact on population, in the idea that the evolution of population had a significant boost due to the permanent migration of a significant part of rural population to urban areas. The industry of Călărași after 1989 did not register a positive trend, the Romanian revolution signifying the “beginning of the end” for most of the powerful industrial units of the city. However, there is an excellent infrastructure for industrial development in Călărași. The analysis showed that Călărași is currently a centre polarizing all fields of activity, its attractiveness exceeding its area of direct influence. Nevertheless, due to its location close to the border with Bulgaria, the city of Călărași can be characterized as a multi-functional contact centre - "the gate of Romania to the South-East.” It is hard to predict, in the current conditions, the future of the city of Călărași in terms of economic development.

Keywords: industrial restructuring, industrialization, urbanization, migration, Călărași

INTRODUCTION

Industrialization took place everywhere and had inevitable consequences on the organization of the geographic space: rural-urban migration, urban concentration of population, suburbanization, urban expansion network, urban network integration, functional integration of rural settlements in urban areas, etc. In addition, industrial evolution has generated the emergence and development of industrial cities, as this sector tends towards the concentration phenomenon.

The twentieth century is the one bringing economic development process changes in Romania, due to the policies that were followed in this area. Two ruptures were experienced, first between 1947 and 1950 and the second from 1989 to 1991. The process of industrialization, at that time, was proposed to be followed, industry being able to sustain its economic recovery from the period preceding the Second World War, a period with a primitive economy. In addition, the city of Călărași was one of the regions with primitive economy; investments were directed towards it, which led to a significant alleviation of territorial disproportions. The industry played and still plays an important role in the development of a country, engaging and developing other sectors of the economy, putting in value the resources of the locality, as well. Industrial restructuring process took place in Romania after the Revolution of 1989. This resulted into (1) privatization, modernization and retehnologization

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of economic units, (2) the development of tertiary sector through the diversification of service supply to the population and to private businesses, (3) support for small and medium enterprises in the production of services and creation of jobs taken with priority by the unemployed work force, (4) attraction, through various forms, of redundant personnel in industry into agricultural activities, especially those who possess land and housing in rural areas.

**MATERIALS AND METHODS**

The study is based on field research in the city of Călărași (mapping and observation), on the consulted bibliography, processing and adding a rich fund of statistical data collected from different censuses.

**RESULTS AND DISCUSSIONS**

Economy plays an important role in the life of a city, its largest effects being reflected in the evolution, natural balance, structure, movement and density of population, having an impact on the environment or other human activities, being omnipresent and operating under the principle of cause-effect. The more activities which have an impact are more complex, the more areas where this impact is felt are numerous and diverse. They have implications at the historical, political, economic, administrative, social, cultural level, etc. Neither many books, nor many articles have been written about Călărași, therefore, it was more difficult to study the topic of this paper. Thus, the existing information related to the city of Călărași today, represents not only the results of the practical research conducted, but also a summation of previous surveys on areas apparently incompatible. To make a detailed analysis of the studied area in order to understand the Industrial restructuring process fully, we will take into account two important periods of the city of Călărași in which two major ruptures took place, one before 1989 (the period 1970-1989) and another after 1989 (the period 1990-2009).

Until 1960, we cannot talk about a complex industrial development in Călărași, the city’s development taking place only after 1960. Therefore, the change was made from a predominantly agricultural and trade town, in which big industry was not even mentioned, to an industrial city that will put Călărași in the category of middle class industrial centres. The lack of subsoil resources, which should generate an activity of their exploitation and processing, led to the development of only small (local) industry-specific activities, designed strictly according to the size of the city they served. Policy actions derived from “controlled” politics of judicious placement of the productive forces throughout the country and the need for the absorption of surplus labour have led to the development of economic units belonging to different industries. The evolution of population in the city of Călărași is closely related to the political, social and economic development history of the city and its environs, reflecting the transformations it experienced in all aspects over time. Naturally, the changes the city underwent as consequence of the big events that marked decisively the modern and contemporary history of the country were followed by significant changes in its socio-demographic structures. The analysis of such changes emphasizes the fact that evolution is part of the Călărași city people.

The phenomenon of industrialization theoretically represents an industrial impact due to all the changes produced as result of the pressure from industry over a period of time. In the city of Călărași, this happened in the period 1960-1989, beginning with the development of economic forces that have strongly influenced the city, with effect on population boom, as well. Large industrial enterprises established in the city of Călărași were “Întreprinderea de Confecții” (current CATEX SA Călărași), “Prefab SA Călărași” in 1965, “Comceh SA” (formerly Combinatul de Celuloză și Hârtie) in 1966, “Combinatul Siderurgic” in 1976, “Fabrica de Pâine” and “Fabrica de Gheată”. Hence, in that period, the city of Călărași recorded a high coefficient of population growth. If in 1970, the city of Călărași had 39,712 inhabitants, in 1989, it had 76,240 inhabitants, almost double. This evolution of the population conferred to the city of Călărași a special place among the cities of Romania, having a decisive influence on the characteristics of its entire development process. We can say that the city's population doubled during this period, this being due to the establishment of industrial units and labour attraction from the influence area of the city and beyond. This process affected the population
movements, namely the numerical growth, natural movements, migration and active population at that time. It should be noted that the industrial impact in this period did not occur suddenly but developed gradually and slowly; the process was phased and was subsequent to a series of interventions aimed at increasing economic and social efficiency.

Compared with the previous period, in the transition to market economy (after 1990), the entire dynamics of the population was determined by the two components of population movements (natural and migration) which correspond to: demographic-administrative measure of liberalization of abortion, economic downturn and a poor social support associated with the expansion of poverty and increased infant and general mortality, de-industrialization effects, industrial restructuring and privatization, phenomena which generate a decrease in the number of inhabitants. The revolution of 1989 had negative effects on all industrial units in the city of Călărași and along with them, the population was also affected. The revolution marked the beginning of the end for all industrial units existing at that time. Now, industrial units are privatized, there are massive layoffs, becoming "victims of the Revolution of 1989" and not functioning at maximum standards. These had a particularly negative role on the number of inhabitants of the city of Călărași, on the natural movement and migration, on the active population of the city. Between 1990 and 2009, the analysis of the numerical growth of the population reveals a decrease during each year. In 1990, Călărași had 75,788 inhabitants, but the number of population decreased to 73,510 inhabitants in 2004 and to 72,838 inhabitants in 2008. This was due to the period of transition and the shortcomings that led people to move to the neighbouring villages and communes, as well as the birth rate that was much lower than in the previous years. Other reasons for the decrease in the number of inhabitants were the migration to other developed cities or even the international migration, as well as the declining influence upon the surrounding space. The industrialization process in the city of Călărași had a positive role on the numerical growth of population until 1992, after this year the situation changed.

According to local census it results that industry and its related sectors played a decisive role in the evolution of population of the entire studied area. They were the main attractors of migration flows, the impact of movement changing the structural population panel. Population growth continued along with the industrial development, it stopped and went into decline, along with its restructuring process. The rapid evolution by attracting labour in industrialized areas has generated one of the most important current global change: urban explosion. Migration growth rate has also considerable importance in the economic characterization of a region or locality while being an indicator of territorial analysis. That is why the index of migration growth can be considered as an index of demographic attractiveness as it represents the value of the attraction exerted by a locality, depending on certain economic, social and natural criteria.

![Figure 1. The evolution of population in the city of Călărași](image)
Exchanges of population between one region and another, or between one locality and another, represents the degree of demographic activity and reflects the development or development prospects of the region or localities. From the evolution of migration balance, it appears that the city of Călărași represented a consistently high attraction for the population of other cities until 1989, when an inflection point of the development appeared; after this moment, the number of people who have left the city has doubled.

Migration contributed greatly to population growth between 1970 and 1989, the great increase in the total number of the city population is related to the fact that the final departures outside the city were lower than arrivals (Figure 2 and Figure 3). The relatively significant industrial development made the influx of population in the city to be quite high.

Between 1970 and 1989, the population increased from 39,712 to 76,240 inhabitants, the migratory balance indicating 13,921 people settling down in the city, while 5,950 people left the city in the same interval.

\[ \text{Figure 2. Arrivals with residence in the city of Călărași} \]

\[ \text{Figure 3. Departures with residence from the city of Călărași} \]
The large number of persons arriving in the city is explained by the permanent migration of a significant part of the rural population changing its residence for the new jobs in the city. In addition, for the first time since 1945, the urban-rural exodus took place, the people settled down in the city returning home in their rural environments.

The growing number of unemployed people in the secondary and tertiary sectors of the economy in urban areas maintained the urban-rural migration trend. Final displacements of population, with a change of residence, began to rise slightly in the new urban-rural migration flow without diminishing too much the migratory balance of rural-urban type, already extremely high - in recent years, the number of arrivals being much lower than the departures.

In the period 1993-2009, the resident departures exceeded arrivals, so that 11,591 people settled down in the city while 12,926 people left the city. In addition, in the first two years after the abandonment of the centralized state system, commuting decreased in intensity, the phenomenon being caused by staff layoffs and by the impossibility of improving the infrastructure, entered in a period of collapse.

After the standardization of these indicators and the application of the following formula:

\[ I_m = \frac{M}{P} \times 1000 \]

where

- \( I_m \) = gross migration index
- \( M \) = total number of migrants (inputs + outputs)
- \( P \) = total number of population,

it resulted that in the period 1970-1990, the migration growth rate reached a significant level for the city found in continuous development, compared with the period after 1990, when the migration growth rate at the local level of Călărași was relatively low. This is explained by the relative saturation of absorption capacity of people arriving from other localities with economic and social activity.

**Figure 4. Total gross migration index in the city of Călărași**

Another important aspect in the study of population is the professional structure - a key indicator in the functional characterization of the human potential of a territory. Functional characteristics of the city of Călărași are well reflected in the professional structure of its population.
Workforce attraction by the city of Călărași, as well as by the existing industrial units within the area, resulted in considerable and continuous development in the number of employees, especially workers. The tertiary activities also included significant part of the population, leading to an obvious change of occupational structure. Industrialization brought changes in population distribution on activity sectors; the number of population employed in agriculture declined under the Communism period, in the favour of industry.

All these changes were due to the industrialization process, which rehabilitated the economic life of the city of Călărași until 1989. The active population of the city of Călărași experienced a dynamic and continuous upward restructuration of the main industry sectors, particularly after 1966. This was due to development of industrial activity, increase in the attraction power of the city and enhancement of other urban functions. Analyzing Figure 5, representing population by economic sectors, it results that in 1970, 22.7% of the total working population of the city was employed in the secondary sector, followed by the tertiary sector with 11.12% and by the primary sector with 6.32%. This is because at that time, large industrial units started to be established in the city of Călărași, which attracted most of the population of the city. At the end of 1976, the share of secondary sector increased, weighting 33.26%, the tertiary sector 13.82% and 8.04% for the primary sector. We must emphasize the upward social burden that fell on the employed population to ensure goods and services necessary both for them and for the inactive or the active unemployed population.

The process of industrialization produced changes in the professional structure, the model of population employment changing essentially compared to the previous period, the services sector starting to record higher percentages at the expense of the industry sector. Industrial restructuring led to mass privatization of industrial units, upgrading, the development of tertiary sector at the expense of the secondary sector. Thus, in 1994, the share of employees occupied in the tertiary sector increased and reached the value of 12.37%, the share of employees in the secondary sector declined, reaching 21.51% and 1.98% in the primary sector.

The restructuring of economic and social activities in the coming years of the transition period, accompanied by the improvement of health services and the promotion of family planning, as well as actions aimed at reducing morbidity, infant and general mortality and a maintenance of natality at a higher level than the former will lead in the future to natural increase of population growth.

![Figure 5. Share of employed population on main economic sectors in the city of Călărași](image-url)
Thus, in 1998, from the distribution of the three activity sectors - primary sector - agriculture, forestry, fishery, fishing, hunting, mining; secondary sector - manufacturing, construction, energy; tertiary sector – government and public services – it can be observed that the highest share is taken by the secondary sector with 18.96%, the tertiary sector increasing yearly. The aspect that stabilized the employment in the city of Călărași was that after 1990, privately held companies have appeared in the city’s economic life, in almost all sectors - some known not only locally, but nationally and internationally, in addition to the old economic units which have been converted and continued their activity. These include a factory that produces OSB, called SC Romply SA, opened in 2004; in 2007, Saint-Gobain Glass Factory and in 2008, the Oxygen, Nitrogen and Argon Factory. Many garments factories were also opened, which employed the female population in the city. All these achievements gave hopes to the population of Călărași with respect to the city’s economic future. Thus, in 2008, the share of employees in the secondary sector (15.52%) became approximately equal to the population in the tertiary sector (15.76%).

The impact on the population dynamics of industrial restructuring in the city of Călărași shows that spatial development of an area knows first a polarization and then a decentralization, the consequences of industrial restructuring being an artefact if we take into account that the complex reactions they involve generate a new dynamic space, new growth poles of convergence or divergence. Therefore, the result of the change is the transformation of disadvantages into advantages. Restructuring is a process of adaptation of an economy to new requirements and the results of the industrial disaster are transmitted in the functional structural changes of the industrial centres, in the shaping of a depressed economic environment, in the restructuring of relationships between settlements setting changes on the economic and demographic component (low level living, unemployment, commuting involution).

**CONCLUSIONS**

The city of Călărași, with a relatively recent history of 175 years, has an important role in the urban hierarchy of Romania, being included in the third rank cities. In the hierarchy of cities according to their economic potential, the city of Călărași is an urban centre with an economic potential of county importance, having an industrial and service profile and playing an important role in the county where it resides. The development of the city of Călărași had consequences on population growth, becoming the most populous city in the county. This increase in population, a rapid one until 1992, was followed by a decrease. In this paper, we also tracked the status of industry in the city of Călărași before and after 1989. The industrial units built before 1989 had a strong impact on population, in the idea that evolution of population knew a significant increase due to the final migration of an important part of the rural population that changed its domicile in the rural area for the new jobs in the city. This increase in population during this period is due to the industrialization process, which had positive effects on the city. During this period, the number of employees in agriculture decreased from over one third to less than a quarter, while the share of the active population in industry increased, exceeding one third of the city’s total active population.

After 1989, the industry of Călărași, with a positive development for many years, was influenced mostly by the Revolution. Large industrial units were strongly affected by the Revolution of 1989, and so was the population of Călărași. The revolution marked the beginning of the end for many industrial units; however, there is an excellent infrastructure for industrial development in the city of Călărași. After 1990, the employment level in the city was stabilized by private equity companies that have appeared in almost all economic sectors, some recognized not only locally but also nationally and internationally, in addition to old economic units converted to trade companies that continued their activity. All these have improved the economic life of the city and unemployment rates have been stabilized. If the geographical location and tradition is taken into account, with more attention focused on small industries, trade and agricultural activities, and if tourism potential in the area is exploited, the city of Călărași can become the city it was before or even more than that. Otherwise, it will continue to remain a city situated on the edge of the Bârâgan Plain and of the country, in one of the areas in Romania characterized by a low economic level.
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