

CHARACTERISTICS OF THE INDUSTRIALIZATION PROCESS AROUND THE MOMENT OF COLLAPSE OF A CENTRALIZED POLITICAL SYSTEM. ROMANIA AS A CASE STUDY

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Abstract

Although a country with a relatively small area, Romania has a variety of natural resources, which in time were favourable prerequisites to the development of processing activities. Most of these resources are not able to provide entirely the requisite, but cover parts of it in certain proportions. The territorial distribution of natural resources and the different cultural influences have fostered the development of certain regions or industrial centres of the country. The dynamics of the industrial exploitation of these centres has grown continuously, reaching a paroxysm in the centralised regime, when some of the resources have been largely exhausted. Rapid and often risky industrialisation, relying mainly on the basis of propaganda and not of economic efficiency has led to a falsely balanced development. New industrial structure, both territorial as well as sectorial has proven ineffective in the very first year of transition from the centralised system to the market economy.

Keywords: *industrialisation process, communist regime collapse, very early transition period, Romania*

Rezumat

Caracteristici ale procesului de industrializare în jurul momentului de colaps al unui sistem politic centralizat. România ca studiu de caz. Deși o țară cu o suprafață destul de mică, România are o mare varietate de resurse naturale, care au devenit în timp premise favorabile pentru dezvoltarea activităților de producție. Mare parte a acestor resurse nu pot constitui în întregime o premisă, dar pot acoperi părți din aceasta într-o anumită proporție. Distribuția teritorială a resurselor naturale și diversele influențe culturale au impulsionat dezvoltarea anumitor regiuni sau centre industriale ale țării. Dinamica exploatărilor industriale din aceste centre a urmat un permanent trend ascendent, atingând paroxismul în regimul centralizat, când unele dintre resurse au fost în mare parte epuizate. Industrializarea rapidă și adesea riscantă, bazându-se în principal pe propagandă și nu pe eficiență economică a determinat o aparentă dezvoltare echilibrată. Noua structură industrială, s-a dovedit ineficientă atât teritorial cât și sectorial încă din primul an de tranziție de la sistemul centralizat la economia de piață.

Cuvinte-cheie: *proces de industrializare, prăbușirea regimului comunist, perioadă de tranziție incipientă, România*

INTRODUCTION

Twenty years since the fall of the totalitarian regime a retrospective analysis on the industrialisation process in a country that has experienced among the highest forms of centralisation may be an important document for the acquaintance with the mechanisms of transition from a totalitarian society to market economy and democracy. Since the political collapse, the insertion of changes in the dynamics of the industrialisation process shows that industrialisation had created the premises for achieving political changes. Socialist industrialisation meant hypertrophy of the working class, concentrated in large and very large enterprises. The degree of technical concentration caused a concentration of

thousands of workers in certain places (Ianoș, 1993), who represented the force removing the communist regime during the popular uprising of December 22, 1989.

Obviously, the moment of removing the dictator in Romania was strongly influenced by the international political situation, the "mistake of organising a rally turned against the regime", as well as promoting intellectuals, as a long-term impact on political leaders, particularly after 1965. Their duality, which clearly knew the effects of the communist government and anticipated the opportunity of changing, generated the chaotic reaction of the regime at the beginning of the Romanian revolution, by their lack of involvement and the support of the uprising (Ianoș, 2009).

THE ROMANIAN INDUSTRY DURING THE INTERWAR PERIOD

Before the First World War, the industrial activities in Romania continue the growth and diversification started at the end of the nineteenth century. Many factories dating from this period, later became defining for the economy of some towns. Basically, the explosion of the number of factories reaches all industries, the most important seeming to be metallurgy and machine construction, revitalised around the beginning of World War 1st and after this moment. For example, only during 1914, the mechanical-metallurgical and mechanical equipment factories were created in Ploiești, Iași and București, shaping their production for war. Light industry is also filled with some textile and footwear enterprises that have become traditional (Suveica București, Codlea, Arad and Craiova textile factory, Lugoj silk spinning factory, Cîsnădie carpet factory, Clujana in Cluj, Guban in Timișoara, etc.).

Since late 20th century, an infusion of foreign capital penetrated the Romanian industry, particularly the German, English, French, Belgian, Dutch and American capital. Besides the national capital development, a restructuring of the hierarchy of foreign capital occurred immediately after the 1st World War by replacing the German capital mainly by American, English and French ones. They took advantage of the favourable situation after the war and moreover, the loans taken by Romania from banks in New York, London and Paris. Nevertheless, the general effects of these loans were beneficial for the Romanian economy and especially for the industrial activities.

The following range among the most important groups or concerns: the English “Wickers”, represented by the English group “Auschnit” (in siderurgy and machine construction), the German concern “I.G. Faberindustrie” in the chemical industry, the “Malaxa” Romanian concern in machine construction and the Belgian trust “Solvay” in the chemical industry.

The industrial development of the country reaches a paroxysm in the interwar period due to the numerical increase of enterprises and workers in the already existent industrial enterprises. The number of large industrial enterprises reaches 186, representing all branches, including those of high-tech at that time (electro-technical, aviation, chemical industry, medicine). It was only in the period 1929-1938, for example, that the national industrial production registered an increase of 55% materialised in a rebalancing in the branches' structure.

Among all industries, food and light industry (textile, leather and footwear) stood out, covering almost 50% of the total industrial production. The second place was taken by oil industry (13%), followed by other branches, such as machine construction and metal processing (10,2%), exploitation and wood processing (9,5%), chemical industry (2.2%), etc. Overall, consumer goods industry had 54.5% and the other category of branches involved in the development of industrial production and other economic branches had 45.5%. Basically, a certain balance between the two categories was reached.

The process of technical concentration of the production was an important feature of the industry development in the interwar period. That is why in 1938 the number of enterprises falls by 8% as compared to 1927, while the number of employees increases by 35% and the production by 56%. This situation is also reflected by the fact that although the number of enterprises with more than 200 employees only represented 10% of the total number of enterprises, these owned 65.4% of all employees and 69.1% of the installed engine power. Almost all industries were guided by criteria of efficiency, various cartels operating within these, integrated into the international market. By 1938, there were 94 cartels gathering 1600 industrial enterprises. These cartels ensured the functioning of the economy that was getting integrated in the European economy, although this one was already influenced by the preparations for the Second World War.

Participation of industry in The National Income grew very quickly, holding 30.8% in 1938, as compared with the share of agriculture which was reduced to 38.5%. Taking into consideration the level reached in some industries, Romania was situated on a leading position that would have provided a further upward development. From a very low level of industrial production at the end of World War Ist, important achievements had already been made by 1938 and they were materialised in oil industry, metallurgy, machine building and even chemical industry.

Considering the criteria of efficiency and accessibility, Romanian industry was mainly concentrated in a few areas and centres. Thus, București, Valea Prahovei, the central-southern part of Transilvania and Banat owned about 60% of the global production, forming in fact the economic heart of the territorial location of industry, the important role of natural resources, the engine that drew the Romanian industry into a competitive European level.

Table 1. The production achieved for some industrial products in 1938

Product	Measurement unit	Production
Electricity	million kWh	1.130
Oil extracted	thousand tons	6.594
Steel	thousand tons	284
Finished rolled articles	thousand tons	318
Sulphuric acid	tons	43.900
Sodium carbonate	tons	35.000
Cement	thousand tons	510
Sugar	tons	95.100
Edible oils	tons	17.800

Source: *Statistical Yearbook of Romania, 1939-1940, p.76*

In Romania, there were six industrial concentrations in 1938, among which *București, Valea Prahovei, Brașov* stood out with over 24% of the number of employees and more than 1/3 of the value of the industrial production and the area contained in the *Valea Jiului - Hunedoara - Arad - Reșița* square by about 17% of employees and 15% of the value of industrial production. The other industrial concentrations were dominated by the one in the centre of Transilvania by about 10% of both indicators at the national level.

QUICK SOCIALIST INDUSTRIALIZATION, AN END IN ITSELF

Immediately after the 2nd World War, Romania entered into the sphere of influence of the former Soviet Union as a result of the Yalta Agreement, which meant changing the capitalist market with the centralised (over-centralised) communist one. Right from the beginning of the transition towards centralism, the importance of industrialisation was emphasized, being considered a decisive factor of 'the general progress of society'.

Given the status of an ideological slogan, industrialisation became one of the main directions considered characteristic of communism, the key factor through which, in a very short time, both social homogeneity and harmonious economic development of all country areas could be simultaneously achieved.

Poor quality products were accepted, quantity was the only thing that mattered, the latter being the only criterion included in international statistics; the change transformed a purely economic process into a product for the political embellishing of society. The assessment of the levels of development, mainly through the level of industrial production and especially the one reached in heavy industries, led to the idea of transforming the industrial activities in an aim in itself but not in their correct integration within the national economy, in

increasing their incentive role for other economic branches or for the actual living standard of the population.

Generally, one can distinguish two phases in the process of socialist industrialisation: a slower development between 1948 and 1965, mainly oriented towards regional centres and the construction of new industrial centres with a high degree of specialisation; and a second one, of rapid development and concentration of industrial activities in gigantic units. Basically, taking into account the particularities of these two phases, the first one stands out, closely following the Soviet model (most decisions were taken by consultation with Soviets specialists) and the second one, originating in Romania, born from the megalomaniac ideas of *Ceaușescu* is related to industry development.

The subsequent evolution of economic life, even under the over centralised regime, has demonstrated the inefficient nature of the structure and the evolution of Romanian industrial activities. The isolation policy promoted in all fields, including the economic one, the strictly autarchic orientation of general development, the excessive use of figures, more or less true, about industrial production, for propagandistic purposes, these may altogether lead to the idea that rapid industrialisation was in fact, an end in itself.

THE PRE-CEAUȘESCU STAGE OF INDUSTRIALISATION - INDUSTRY, A REAL SLOGAN

The preserved high pace of development was an important feature of the industrialisation during this first stage and moreover, throughout the entire communist period. This high rate has made the Romanian industry share to increase from 0.30% in 1938 to 0.98% in 1965 within the worldwide industry. The pace was different for specific branches of heavy industry and industry producing consumer goods. In 1965, as compared to 1950, the industrial production was almost 6.5 times higher, with a doubled dynamics of heavy industry, which grew by 8.2%, as compared to that of consumer goods which only recorded a rate of 4.6%.

The comparative analysis of the contribution made by industry in the national income shows a continuous growing, this contribution coming close, in 1965, to 50% (48.9%). It is interesting to notice the variation in ratio of these activities, the phenomenon showing no correlation with an increase or decrease of the industrial activities. Thus, in 1950, the industry contributed with 44% to

the national income, so that in 1995 it fell below 40% (39.8%). It was only in 1960 that the share reached the value recorded in 1950 (Table 2), although the industrial production value was over 3.4 times higher this year. This disturbance was due to a very low level of the Romanian agriculture in the years 1946-1950, as a result of totally adverse climatic conditions and therefore of its low contribution to national income.

Table 2 The share of industry in the national income during the period 1938-1965

Year	National income - total -	The share of industry in the national income (%)
1938	100	30,8
1950	100	44,0
1955	100	39,8
1960	100	44,1
1965	100	48,1

Source: *Statistical Yearbook of Romania, DCS, 1983, p.44*

These positive evolutions of the industrial activities were due to some investment programs propelled from the central level. Thus, during the period 1951-1955, 53.8% of the total investments were allocated to industry and in the next 10 years they were maintained at about 45%. The orientation of these investments was towards the heavy industry, which was considered the hub of the communist economy. Thus, over 85% of the total industrial investments were directed to these branches, in 1965 the share even approaching 90% (89.2%).

As a result of the preferential orientation of investments to certain industries in the global industrial production, the main branches experienced important transformations (table no.3). Thus, overall, the heavy industry recorded an increased share, reaching from 45.5% in 1938 to 53.0% in 1950 and 65% in 1965. At the same time the industries of consumer goods reveals a pronounced decrease, reaching 34.8% in 1965.

Table 3 The structure of global industrial production by main branches (%)

Industry branch	1950	1955	1960	1965
Industry - total	100	100	100	100
Heavy industry	53,0	55,8	62,9	65,2
Consumer goods industry	47,0	44,2	37,1	34,8
Energy industry	13,2	13,1	11,6	9,6
Ferrous metallurgy	5,4	4,2	6,3	8,3
Non-ferrous metallurgy	2,1	2,3	2,1	3,2
Machine construction industry	13,3	18,8	24,0	21,2
Chemical industry	3,1	4,7	6,1	6,7
Construction materials industry	2,4	3,2	3,2	3,3
Wood industry	9,9	8,9	7,5	8,2
Pulp and paper industry	1,3	0,9	1,0	1,2
Glass, porcelain and earthenware	0,7	0,7	0,7	0,6
Textiles and clothing industry	18,6	15,7	13,5	11,6
Leather and footwear industry	4,0	3,5	2,8	2,4
Food industry	24,2	21,7	18,9	22,0
Other branches	1,8	2,1	2,3	1,7

Source: *Statistical Yearbook of Romania, DCS, 1981, p.164-165*

The most spectacular increase was obtained during 1950-1965 by the chemical industry (from 3.1% to 6.7%) and machine building industry (from 13.3% to 21.2%). Slight increase was recorded by the ferrous metallurgy industry (from 5.4% to 8.3%) and by the non-ferrous metallurgy (from 2.1% to 3.2%). Meanwhile, other industries such as textile and clothing decreases from 18.6% to 11.6%, leather and footwear industry from 4.0% to 2.4%, wood from 9.9% to 8.2%. Other industries have remained at an approximately constant weight (industry of glass, porcelain, earthenware, pulp and paper, food). The energetic industry, overall,

registered a significant decrease from 13.2 reaching up to about 9.6%.

Table 4. The share of population employed, employees and workers in industry on total economy (%)

Year	Employed population	The number of employees	The number of workers
1950	12,0	38,3	52,4
1955	13,1	36,8	46,6
1960	15,1	38,6	46,8
1965	19,2	38,9	46,3

Source: *Statistical Yearbook of Romania, DCS, 1981, p.98-99*

These changes, under the impulse of directed investment, led to an increase in employment in industry during 1950-1965, by over 850,000 people, raising its share in the structure of employment by about 7.0% (Table 4).

At the same time, an obvious stagnation in the share of working staff and also a decrease by over 6% of the share of total workers in the economy. This shows, in fact, a weighted industrialisation of the Romanian economy in the first stage, with structural changes, but quantitatively a relatively low progress.

Synthetically, we can conclude that in terms of structure and quantity, during that stage, the extractive industry, as compared to manufacturing industries, show the second type of activities to be favoured and an increase in the gap between heavy industry and the production of goods consumption to the detriment of the latter, on a background of overall industry diversification and increase of variety.

The changes in the territorial location of industry occurred in two directions: one aimed at developing the regional residence centres and the second aimed at setting up and developing new industrial specialised centres often located in areas with natural resources considered of strategic importance.

The first direction was largely determined by the administrative restructuring in that period, and the 16 resulting regions. Residence centres were the main points of concentration of investment in industry during 1950-1965, under the pretext of alleviating regional disparities. Thus, these numerous investments meant new branches arising in industrial cities such as Craiova, the capital of Oltenia region (the electrical industry, chemical industry), Constanța, the capital of Dobrogea region (pulp and paper industry, furniture industry), Iași, the capital of Moldova region (the electrical industry, drug industry), etc. Targeting investments mainly to the residence centres of the regions generated great intraregional disparities, which have resulted in the increase in migration toward these centres due to economic stagnation or decline of the other cities.

The second direction was imposed by the idea of immediate exploitation of natural resources, sometimes up to exhaustion, as it was the case of Nucet industrial centre (known for the major nearby uranium deposits). Some specialised industrial centres were created on bare land, being either mining centres (Motru, Nucet) or chemical industry centres (Onești, Victoria).

Despite the efforts made to alleviate regional imbalances, large differences between the major regions of the country are noticed at the level of 1965. Basically, the same regions which in 1938 had formed the group of the most developed ones,

respectively, București, Brașov, Prahova, Hunedoara, Banat and Cluj stood out even now while the regions of Oltenia, Dobrogea, Iași, Suceava, Maramureș and others remained clearly underdeveloped. Even if new industrial centres appeared or the existing ones were developed, intraregional disparities reached maximum levels, the effects of which would have been catastrophic in respect of the future demography and the standard of living.

INDUSTRIALISATION IN THE TIME OF CEAUȘESCU AND ITS MEGALOMANIC FORMS. INDUSTRY FROM SLOGAN TO MYTH

The vestiture of Ceaușescu in the leadership of Romania in 1965 led to the transformation of industrialisation from a slogan into a true 'myth'. The Invasion of Czechoslovakia (August 1968) was a reason for speeding up the industrialisation and the economic separation from the former USSR. Consequently, Romania's idea of economic independence was launched, but also, the idea that the Romanian industry can produce anything and at the highest standards. Ceaușescu's opposition to Moscow was supported by the West, which in various forms, especially in the beginning, encouraged Ceaușescu to materialize his dream of economic and especially energetic and industrial independence.

The fear of a potential Soviet aggression pushed him to a spatial distribution of the heavy industry, offering the possibility of a long-term resistance in case a part of the territory was invaded. This meant that all counties would hold a diversified industrial structure that could easily be converted into an industry of war. In the context of such fears another idea took shape: that only large combines and giant industrial units can provide, at minimum cost, achieving a single integrated flux of the most complex products, machinery or equipment.

But all these facts were premises for an almost enclosed industrial development, because the over centralization of power in the hands of one family created megalomaniac forms of industry. The desire to enter history through 'great achievements', like the Egyptian pyramids, led to a high level of technical industry concentration, the birth of a system of giant industrial units, which were doomed to die even by the absence of 'food'.

THE DYNAMICS OF THE ROMANIAN INDUSTRY AFTER 1965

The analysis of the development of industrial activities between 1965 and 1989 highlights two

characteristic periods: one, which stands out through the rhythms of industrialisation at the highest levels in the world, between 1965-1980, and another, characterized by a stagnation or even slight decrease in this rate after 1980.

The first period can be characterized as explosive in terms of growth rate that exceeded the threshold of 10.0% in the first three years of the "five year plan": 11.8% between 1966-1970, 12.9% between 1971-1975 and 10.1 % between 1976-1980. These rates have led to an improved share of the Romanian industry in the global industrial production (from 0.98% in 1965 to about 1.5% in 1980). The volume of the global industrial production was multiplied by almost 1.7 times every 5 years as compared to 1965. So that industrial production was 5.1 times higher in 1980 as compared to the first year of the period and heavy industry more than 7 times.

The explosive evolution of the industrial production was based on a growing volume of investments allocated to industry. Throughout the period, the investments allocated to this economic branch reached about 50% of the total for the national economy. There must be reported the excessively large gap between the group of heavy industry and the group of consumer goods industry, the first having the benefit, on average, during the period 1965-1980, of over 855 from the total volume of investments. As a result of this dynamics, the share of industry in the national income constantly increased, reaching from 48.9% up to 58.5%.

The explosive growth of industrial production was achieved through an extensive type of industrialisation, by increasing the number of industrial units or by developing the existing ones to huge dimensions. In this sense, about 1800 industrial units started to operate almost every 5 years (1966/1970 - 1580 1971/1975 - 1869 1976/1980 - 2266), representing independent companies or their divisions. Most of the Romanian industry giant units, concentrated in the same place of production, date from this period: Colibași car plant - 28,000 employees, Brașov truck plant - 20,900, Hunedoara steel mill and Brașov tractor plant with 19,800 per one, Faur Bucharest plants - 19,300, Iași heavy equipment factory - 18,700, Ploiești oilfield equipment plants - 16,600, etc.

The extensive nature of the industrialisation process is reflected in the allocating of investment in each County. It was only two counties that received investment of over 10 thousand millions lei in the 1966-1970 period (Galați and Argeș); in the next 5 years this threshold was exceeded by 9 counties and by other 16 during the 1976-1980

period (provided that the value of national currency kept the purchasing power). When comparing with the first period, there was an over 3 times-increase in the 1971-1975 period, in the counties considered to be less developed (Bistrița-Năsăud, Botoșani, Dâmbovița, Gorj, Sălaj, Tulcea, Vaslui). In the 1976-1980 period the investment volume increased over 15 times in Sălaj and Vaslui, considered to be the most disadvantaged.

As a result of these investments, the average annual development rates were very high in some counties in relation to the national average (9.5%). Thus, in the 1976-1980 period, the highest rates have been observed in the counties Bistrița- Năsăud (21.2%) and Sălaj (20.6%), counties with a very low industrial start base. They were followed by other counties, where not even one large industrial centre (urban) or a well shaped industrial area were present: Covasna (17.7%), Tulcea (16.6%), Vâlcea (16.2%) Botoșani (16.1%), Vaslui (16.1%).

One of the main effects of this investment policy has been the employment growth in industry and the size of this increase demonstrates the extensive nature of the process. At the national level, only during 1970-1980 the number of employees increased by 60.2%, meaning a total of 1,201,300 people. This is the largest annual average increase in the number of employees in industry (by over 120,000 people). The increase was due to a very high demand for workforce that was covered as a result of the migration flows from rural areas.

The most important increases of employees in industry, in the same period, have been recorded in the basic industries at the time, as it was the case of machine building industry (234.5%) and the chemical industry (186.1%). Similar significant increases can be also noted for other branches, closely connected with house building and industrial programs. These were held in parallel with the process of industrialisation, the basic branches being the construction materials industry (180.0%) and that of glass, porcelain and earthenware (206.7%). These programs have provided minimum conditions for the massive masses of migrants from rural areas, becoming inhabitants of the town overnight.

The territorial variation of the increase in the number of employees reveals relatively high values for the new counties, with a high degree of rural characteristics, without historical past. Thus, the highest values are recorded in Olt County, where in just 10 years the number of employees in industry increased from 11,551 to 42,672 (over 3.7 times), Vaslui from 13546 to 38145 (of over 2.8 times), Bistrița-Năsăud from 8,334 to 22,642 and Sălaj

from 7805 to 20,959 (both more than 2.7 times). The explosion of industrial activities in these counties was not widespread, being focused in only a few urban centres, which had profound implications in the dynamics of rural-urban ratio.

Yet, quantitatively, the developed industrial districts also recorded the most important values of the volume of employees. For example, București has increased the number of employees by 152,965 people, Brașov and Prahova counties by over 63,000 and respectively, 62,000 people. These increases are equivalent with the increase of some of the counties that have reached the highest relative increases.

These mutations occurred at the level of some indicators, but also reverberated in the dynamics of the industrial production, which was particularly influenced from 1970 to 1980. The overall national industrial production increases more than 3 times, with some differences between branches. Thus, branches like machine building (4.1 times), chemical industry (3.3 times), and clothing industry (3.3 times) were located above the national average. The branch with the lowest increase in production was food industry (1.92 times), which was also reflected in a very low diversification of products on the market. These growth rates below average of this industry were maintained throughout the period of the totalitarian regime, demonstrating the demagogic discourse of the representatives of the regime regarding the living level and the place man had in the policy they promoted.

The materialization of these dynamics was the natural products that entered the productive chains of the industry giants or being export-oriented in order to ensure the raw material for these large consumers. The interval 1970-1980 was the most significant for the industrial boom in Romania. Now the production of electricity almost doubled (ranging from 35 to over 67 thousand million kWh) and the volume of some basic industrial products for a country's economy has experienced the same effect: steel from 6.5 to 13.2 million tons (by the entry into service at full capacity of Galați steel mill and the one in Târgoviște), aluminium from 101 at 241 thousand tons, chemical fertilizers from 0.9 to 2.5 million tons, chemical fibres and threads from 77 to 206 thousand tons, cement from 8 to 15.6 million tons etc.

The support for such industrial development was not always based on local natural resources or raw materials. The import of main raw materials, particularly for the petrochemical and steel industry has increased several times, this also increasing the economic and power dependence on other countries, especially third world ones. In order to

reveal this strong correlation, we mention, for example, that between 1970 and 1980 the import of iron increased by over 2.5 times (ranging from 6,3 million tons to about 16 million tons) and of crude oil?? almost 7 times (from 2.29 million to about 16 million tons). The main countries from which the import of oil was realized were, in order: Iraq, Iran, Libya, Nigeria and Syria.

THE ROMANIAN INDUSTRY STAGNATION AND EVEN DECLINE AFTER 1980

Early '80s on the entire socialist system level is characterized by a strong stall, by blocking economic circuits, which inevitably would have led to an impending implosion. Romania, Ceaușescu's regime, which enjoyed, during the '70s, the obvious support of the Western countries, loses credibility and stands out as one of the harshest communist regimes.

Ceaușescu's megalomania reached its peak in the period following 1980, when the place of big factories and mills with tens of thousands employed was taken by the achievement of large scale objectives, which exceeded the strength of achievement of the nation. So, for example, the works for the Danube-Black Sea Canal completion were amplified, the works for the first nuclear power plant in the country (Cernavodă) started, the work on building the Danube-Bucharest Canal (including the two ports that would have served the city - Glina and 30 Decembrie), the works for București's metro were extended, the complex program to transform Dâmbovița river into a genuine 'canal' was put in place and the building of the new centre of the capital started.

Besides all these great buildings, which meant huge economic and social costs Ceaușescu regime's ambition to pay in three years the entire external debt was added, amounted to more than 10 thousand million dollars. The result of such actions was the depleting of the country's reserves and resources, worsening the living conditions of the population.

Basically, we can individualize a period of stagnation during the last 10 years of communism, until 1986 and another of decline following this year, period overlapped with the one of the effort to pay the foreign debts. This sequence is also noticed in the volume of investments in industry, which, after having slightly increased between 1980 and 1986 (16%), gradually decreased until 1989 with more than 4% below the 1980 level, this, without adding the slight depreciation of the currency.

Yet, the number of employees increased in the same time by about 15%, reaching 3690 thousand

persons in 1989. This growth was differentiated by branches, fuel industry standing out, where the increase was 88.8%, 14.8% in ferrous metallurgy, machine building industry with 14.0% and 11.3% in non-ferrous metallurgy, the last three branches being situated below the national average. Light industry as a whole marked a slight increase (textile and clothing - 10.3%), except for leather and footwear industry that grew by 23.4%. Instead, food industry remained absolutely at the same number of employees (192,571 people). Some branches were clearly declining, like construction materials industry (-10.0%) and chemical industry (-6.0%), the first due to the reduction of housing construction program and the second by the slight reduction in the import of crude oil for petrochemicals.

Territorial differences in the number of employees shows a continuation of its growth in less industrially developed districts, where values frequently exceeded 40.0% (Vrancea 61.2%, Ialomița 53.8%, Vaslui 44.5%, Suceava 42.0%) or even 70% for Sălaj (71.2%) and Bistrița-Năsăud (70.6%). A lower growth was noticed in the counties with an important share of energy (Gorj 30.5%, Hunedoara 23.5%, Brăila 20.2%, Dolj 16.2%). In all other counties there was noticed a very slight increase in the number of employees, except for Giurgiu County (created in 1981 and characterized by the highest degree of rural characteristics), where the number of employees surprisingly decreased between 1980 and 1989 by almost 25% (from 30,396 to 22,852 people). For the first time in this case, the bankruptcy of chlorine-sodium products and heavy equipment enterprises built here is reflected in the statistical evidence.

If in terms of value, the overall industrial output manifested some increases in the analyzed period, in terms of physical production, its decline is obvious. The first indicator measured in lei expresses not actually the real evolution of the industrial production, while physical production is a reliable indicator in assessing the dynamics trend. For example, while the production of metallurgical industry, expressed in lei, increased by over 20%, steel production fell by over 4 million lei (from 13.2 to around 9.0 million tons) and the one of cast iron remained at the same level. The same situation was also in building materials industry, which grew by 33%, while cement production declined by more than 2.3 million tons and the prefabricated production with over 1.2 million cubic meters.

Despite the efforts made at the central level, the decline of the industrial production and the difficulties industrial “mammoth” built in the '70s

surpassed were obvious. The fact that these phenomena have also been noticed by the old regime is reflected by the 'recommendations' given for prior development of small industry and small industrial units in the '80s, as a result of the decentralization of activities in the large companies. That is, for example, in the period after 1980 a number of sections of the companies from major cities or County centres industrialized during 1965-1975 were operating in small towns or countryside. For example, as a result of the decentralization of industrial activities in Timișoara, units of various profiles were developed in cities such as Sânnicolau Mare (a department of socks factory, a section of the former Electrometal enterprise, a section of the Mobitim enterprise) and Buziaș (a section of Garofița factory, a section of Electromotor plant), or in the countryside, as Recaș (a section of Modern factory), Lovrin, and Variaș and Jebel (divisions of Electromotor company) etc. In the new established poorly industrialized counties departments of enterprises from cities of residence were founded in towns and countryside: for example, in Botoșani County, spinning mills and textile enterprises from Darabani, Săveni - both cities, and Flămânzi - rural place were divisions of the enterprises of the same field from Botoșani).

The industrialisation of the countryside was an evident trend in the '80s considering the numerous established companies with very diverse profiles. The vast majority of these enterprises were completely artificially implanted, without any relation to local sources of raw materials, with existing traditions of the area, with a favorable geographical position. In contrast, others which used local raw materials were often oversized, as was the case of sugar factories in some rural localities as Lechința Teiuș, Trușești, Fundulea, Liestal, Fâlcu, etc.

In conclusion, it can be pointed out that industrialisation was a continuous process during the communist era, a process that gave rise to huge units exceeding the real power of their economic integration. The explosion of industrial activity took place during the decade VIII (1970-1980), and their concentration in cities has increased rural-urban migration, which resulted in a true urban explosion. The closed nature of the Romanian economy in the last 15 years of the former regime has diminished the level of modernity of the industrial plants, which even though they were new, they were in an advanced state of obsolescence (intensive energy and materials consumers). Populist expression of industrialisation results from the latest

developments of industrial production and number of employees who have different trends in favour of the last indicator.

Industrialisation at any price and with absolutely inappropriate types of industry of all counties created artificial territorial structures that could not resist for long even while maintaining the centralised system. Short-term social effects seemed to be favourable, but on long term it proved to be downright catastrophic both for the national economy, the system of settlements and for individuals or local communities.

THE DRAMATIC DECLINE OF INDUSTRY IN THE POST-SOCIALIST PERIOD

The increased distortion in the Romanian economy in the first two years after the collapse of the communist political system is reflected in the gradual reduction of production, in the lowering of the internal production potential, in the increasing prices and the ongoing deterioration of social conditions. The transition from the over centralised, command economy system to market economy system was a very complex and contradictory process through practical application, taking into account, on the one hand, the different speeds of changing and reacting of some components of the economy and on the other hand, the social and psychological issues resulted.

The period following December 1989 has meant a real turbulence stage for the Romanian industry, during which, the processes in the basic cells level (of the enterprises) were often chaotic. The dismantling of the network of relationships between enterprises, the decentralization and autonomy of decision-making of industrial units, in terms of no private property in this sector have resulted in a constant regressive evolution of production and its quality and even in the loss of control of the change process.

THE INDUSTRY STATE WHEN THE POLITICAL SYSTEM COLLAPSED

Forcing the pace of industrial development compared with other economic sectors and especially with the tertiary sector resulted in a contribution to national income with 58.1% in 1989 and with 66.8% to the total social product. Despite this very high weights, as outlined after the year 1980, it was noted a slight decrease in industrial activities and a weight loss in the national income by 1% for example, only between 1988 and 1989. Besides, during these two years, the industry

recorded a regression, industrial production decreasing by over 2%. The effects of the strain of the productive apparatus were more obvious, also the effects of the imports of machinery reduction and technically non viable solutions, sometimes improvised, under the conditions imposed by the regime in order to rapidly repay the external debt of Romania.

Romanian industry structure in 1989 reveals the dominance of enterprises with over 1,000 employees (1075), which although represented about 47% of the total, held approximately 83% of the number of employees. Very high degree of technique concentration revealed a concentration of over 60% of these businesses in the County city centres (in 41 localities). In the countryside, there were 43 enterprises with over 1,000 employees.

Small and craft industry, which at one time was part of the territorial development policy, was very poorly represented. The number of enterprises with fewer than 200 employees was only 169 at the country level, with very different profiles, but light industries were dominant.

Between the branches of the national industry, in 1989, the machine building has come off with a share of 27.7%, followed by food industry (11.6%), chemicals (9.8%), ferrous metallurgy (6.8 %) and non-ferrous metallurgy (6.8%). Overall, light and food industry had only 25% of the national industrial production. The idea pursued tenaciously by the old regime after 1965 was to demonstrate that Romania can be economically independent, producing the full range of industrial products. As a result, the excessive diversification of industry, instead of widening branches of tradition, internationally competitive, stressed the dependence between enterprises and reduced the possibility of their functioning, especially after the energy crisis triggered at the beginning of the 8th decade. Exaggerated development of metallurgical and chemical industry, which are industries with high consumption of energy and raw materials, that exceeded the internal possibilities, has increased the depletion of the available reserves.

As a result of these evolutions, the Romanian industry was not bankrupt at the time of the collapse of the political system, but move to a clear degradation, which, however, would have grown during the next stages.

THE IMPACT OF DECEMBER 1989 EVENTS ON INDUSTRY

The surprising fall of the political system in Romania, in late December 1989, resulted in a

critical condition at the national economy level, because of the existing gap between the desire to quickly move to market economy and a democratic society and the real possibilities of building this. The main elements which left their mark on the future development of production were:

- the information break and decision-making jam at the enterprise level, caused by the sudden removal of the central-planned system of management (dissolution of power, the plan and planning);
- the abandonment of the criteria for assessing the performance achieved by the management of an enterprise, in order to avoid confrontations with employees, most enterprise leaders have accepted unjustified claims of employees and acts of indiscipline were tolerated in the workplace;
- the elimination of all instruments for quality control of products, which was passed on to production and technological discipline, the prestige of enterprises in conditions of free competition;
- the inappropriate behaviour of some traders, who have treated superficially the contractual duties, losing significant market outlet for products;
- the populist policy of the transitional government (the unjustified economical reduction of the working time to 40 hours weekly, providing exaggerated salary bonuses, reinstatement of new employees, block promotions policy without a proper assessment of the potential and skills of the candidates etc.);
- the legislative vacuum and then the legislative confusion generated by the existence of new laws together with the old ones, which favoured the establishment of chaos, especially in the cooperation between enterprises;
- the inadequate training of managerial staff in enterprises, given the criteria by which employees were selected in early January 1990.

The effects on industrial production were becoming more evident, so, at the end of 1990, industrial production was only 81% of that of 1989, while the number of employees increased by 1.6%. This shows the effect of applying a policy through which the new power aimed at preserving the public support after highly controversial events: permanent political movements, the events of March 1990 in Târgu Mureş, the Piaţa Universităţii phenomenon, the event involving miners in June 1990, etc. Statistical analysis (Table no. 5) shows that the only sectors in which there was an increase were heat energy (102.9%) and printing industry (100.3%). The first grew slightly due to the priority given to housing heating after about 20 years of reducing the heat and the second barely managed to cope with the avalanche of newspapers appeared during the post-revolution

period at central, local or regional level. The most significant decreases were noted in the coal industry (58.6% of 1989 level), building materials (69.6%), crude oil processing (69.7%), ferrous metallurgy (69.8%) and non-ferrous metallurgy (70.7%).

Table 5. The populism of 1990 reflected by the opposite trends of industrial production and number of employees (1990 versus 1989)

Industry branch	Industrial production in 1990 (1989 = 100)	The number of staff (1989 = 100)
Total industry	81,0	101,6
Electricity and heat	102,9	128,4
Fuel	73,2	102,5
Ferrous metallurgy	70,0	103,9
Non-ferrous metallurgy	70,7	103,6
Machine construction	80,4	99,7
Chemical industry	76,1	104,1
Construction materials industry	69,6	101,2
Wood industry	78,7	99,4
Textiles industry	79,1	100,5
Clothing industry	85,6	97,1
Leather and footwear industry	77,7	98,0
Food industry	93,4	112,3
Print industry	100,3	113,4

Source: Statistical Yearbook of Romania, DCS, 1991 p.430-431; 484-485

Simultaneously, however, a growing number of employees could be noticed in almost all industries in 1990 as compared to 1989. Overall, the growth was 1.6%, but with large differences between branches. Decreases in the number of employees were found only in 4 industries: the clothing industry (2.9%), leather and footwear industry (2.0%), woodworking (0.6%) and machine building industry (0.3%). All other branches recorded an increase, the largest of which being recorded for heat and power industry (28.4%), printing industry (13.4%) and food industry (12.3%).

This contradictory trend of production and number of employees in industry had direct effects on the index of labour productivity per employee, causing a greatly reduced value compared with that recorded in 1989. For the entire industry labour productivity index stood in 1990 at 80.3% of the index registered in 1989. The lowest values were observed in the branches of ferrous metallurgy (67.1%) and non-ferrous metallurgy (68.3%), the chemical industry (72.9%) and construction materials industry (74.9%). Labour productivity in the mining industry stood at about 70% and the

most dramatic decrease was recorded for coal extraction, only 58.4%.

In order to assess more accurately the impact of changing the political system on industrial production it is sufficient to mention the quantitative decreases of some industrial products in 1990 compared to 1989. Thus, electricity production has decreased by over 11.5 thousand million kWh, coal by 26 million tons and the crude extract about 1.2 million tons. Equally dramatically the level of some products decreased, which demonstrated once again 'the vigour of the Romanian economy': steel (from 14.4 million tons to 9.8), aluminium (from 282 to 178 thousand tons), chemical fertilizers (from 2.8 to 1.7 million tons), plastics (from 640 to 473 thousand tons), cement (from 13.3 to 10.4 million tons), etc.

The perception of this decline in County profile was closely correlated with the extent of industrial activities and their profile. In general, counties with a less developed industry have felt less intensely the shock of abandoning the system of centralised management of the economy, while the industrialized ones during Ceaușescu period marked a very significant decrease of the industrial production. At the same time, counties with a profile belonging to the industries most affected by the severance of relations between enterprises have seen the same regression (the case of counties with coal mining and large metallurgical enterprises).

At the industrial production level it is noticed a decrease for all counties, in a range between 1% (Ialomița County) and 29% (Mehedinți County), between the two years at the beginning of transition. The counties that have least experienced on the overall the shock of regime change were those located in agricultural areas, in which food industry holds an important share. Thus, in addition to Ialomița County, minimal decrease recorded Satu Mare County (2%), Călărași and Tulcea (9% each), known by the presence of large complexes of meat and cheese processing, respectively the fishing and fish processing (Tulcea County).

The counties in which the mining industry, ferrous and nonferrous metallurgy have a significant share marked decreases from 20% (Mehedinți County-coal mining, ferrous metallurgy, Hunedoara-26%, specialised in mining and ferrous metallurgy, Caraș Severin-25% mining and ferrous metallurgy, Bihor-24%, with mining and non-ferrous metallurgy, etc.).

A great variety of circumstances was noticed in the evolution of the number of employees in each County. Even if at the whole country level the number of the employed staff increased, the evolution is very

different in each County. Thus in 15 counties the number of employees decreases and in the other 3 it stagnates. So, basically, only for half of the counties the number of employees increases during the two years comparatively analysed. București stands out within the counties with decreases of the number of employees, where the value of decreasing is over 46,000 employees (8.8%). Brașov County (with a decrease of 5.3%, representing 9,500 employees) and Caraș-Severin County (with a fall of over 10%, or 7,100 employees) follow.

The counties that retain the same number of employees have very different industries and are located in different geographic conditions: Harghita, Ialomița and Mehedinți. With some exceptions, it can be concluded that counties traditionally characterized by consistent industrial activity experienced a decrease in the number of employees. This is due to more developed services, which could draw a part of the workforce immediately after the events of December. At the same time, relatively recently industrialized counties under the pressure of workforce surplus in the area and due to low level of other economic sectors, especially services, increase the number of employees. Among these, the most important are: Vaslui (11.9%), Botoșani (11.2%), Teleorman (10.2%), Dâmbovița (7.2%), Bacău (6.9%), Suceava (6.6%), etc. These are counties where the Frontul Salvării Naționale headed by Ion Iliescu has achieved over 90% of voters during May, 1990's elections.

One of the exceptions to the above mentioned is Prahova County, a County with industrial tradition, with a very important share in national production, but which in the period 1989-1990 marked a steep increase in the number of employees, of 9.2%. In absolute values this means more than 17,000 new employees, representing, for example, more than half of industry employees in Tulcea County.

Knowing the inefficiency of large enterprises in the market economy conditions and the flexibility of small industrial units, a process of dividing large enterprises started. This resulted in a growing number of enterprises with 142 new units. For example Faur, or Apaca Titan Industrial Group companies in Bucharest were divided into 8, 13 and 7 units of much reduced size. This division, however, at least for the moment, increased the production and labour productivity reduction, whereas the number of persons that deals exclusively with administrative matters increased (more directors, new accounting, supply and sales of production services) on the one hand and on the other hand, there was a fragmentation of the technological chain. This fragmentation has led to

an increase in the price of production of a finished product, without increasing production itself.

CONCLUSION

The review of the dynamics of the industrialisation process over a century, in Romania, focusing on periods around the moment of transition from communist society to the one based on market economy, revealed the sequence of some steps the characteristics of which show the limits of a forced industrialisation. In addition, indirectly, the importance of extensive industrialisation is revealed for the fall of a totalitarian regime, through the geographical concentration of huge numbers of employees. Their general dissatisfaction quickly turned into a widespread revolt “in the moment of the spark ignition”.

The model of increasing and decreasing of the industrialisation process over the entire analysed period is characterised by the following sequence, performed throughout the period of implementation of the utopian ideology of communism and its replacement:

- a) the nationalisation of the industrial enterprises and radical change of management,
- b) the orientation of the industrial production for heavy industries (machine construction, steel, chemistry),
- c) the construction of large businesses in geographic regions considered underdeveloped, although it had no economic justification,
- d) the hypertrophy of large industrial urban centres - regional capital cities,
- e) the suffocation of big cities as well as overgrowth of industrial mono-specialised centres, leading to visible negative socioeconomic effects,
- f) promoting the idea of small and medium enterprise as a remedy to the inefficient tendency of large industries. While fully maintaining the state ownership and the same type of management, the ideas promoted by the Ceaușescu regime in the period following 1980, naturally, did not give the expected results;
- g) the disaster of economic and social policies favoured the fall of a system built on utopian ideology and a limitation of individual rights,
- h) the fall of the political regime attracted, in the first instance, an economic populism of the new government,
- i) the short period of apparent economic recovery is followed by deep industrial restructuring processes with variable duration.

The focus on spatial dimension of the effects of industrialisation and deindustrialisation is just one aspect for understanding the complex effects of

pushing to the extreme of this process. Such an approach has also the function of prompting the researchers to continue a more analytical approach and integrated into the social and economic changes arising from the sudden transition of a country from a centralised to a market economy.

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