

János Zsugyel: The economic and social situation of the region of Northern Hungary in the context of European integration

Hungary's accession to the European Union in 2004 encourages the representatives of regional sciences among other things to continuously bring their knowledge up-to-date on our social-economic life also in the context of European integration. A comparison of the characteristics of the economic and social processes in Hungary with those in the other member states of the European Union is essential for making an objective judgement of our situation and for setting the tasks of our development activities. Previously it was rather difficult to compare the situation in Hungary with the European tendencies, for the approach and methodology of our national statistics were not in every case identical with the statistical practice of the European countries. The uniform statistical data collection system of the European Union, however, creates favourable conditions for this activity, for EUROSTAT, the Statistics Office of the European Union has provided an increasingly comprehensive statistical data background with a uniform approach for the various analyses. In the course of data collection and data processing, it has become possible to compare the individual indicators in an international context on the basis of the uniform methodology applied in the EUROSTAT, thus there arises an opportunity to analyse the actual situation of the region of Northern Hungary in a context of the European integration. In addition to exploring the current situation in detail and determining the position among the European regions it will be possible to form an opinion on the possible directions of future development.

The analysis of the situation of the region of Northern Hungary was done on the basis of major indicators of the yearbook containing the regional statistical data of the EU for the year 2005. Regarding some of the indicators, it was possible to judge the tendencies of evolution in time as well, however, it was not possible to do so for the complete scope due to lack of data.

Demographic processes

The demographic situation provides one of the most fundamental conditions for the economic-social performance of the regions. It is obvious that demographic processes exert an influence on the development of the levels of employment and unemployment, on creating and maintaining the balance of social security systems. Among demographic indicators the changes in the total fertility indicator shows a synthesis of the willingness of the society to have children. This indicator shows how many live births are there on average in the fertility period of women. From the long-term time series of the EU-25 countries it can be established that the indicator dropped from a value of 2.72 in 1964 to a value of 1.4 in 1999, then has become stabilised around a value of 1.46 in recent years. The value of the indicator is 1.2, in the Czech Republic, 3.9 in Ireland and 1.3 in Hungary. This indicator is not broken down for NUTS2 regions, but the regional breakdown of the general fertility indicator is available for the average of the years 2000-2002. This indicator relates the number of live births to the number of women in childbearing age (between 20-44 years). For the individual regions, the value of the indicator varies between 4.3 and 10.6. For the region of Northern Hungary the value of the indicator is 5.94, thus it reaches only 56% of the maximum value.

The fertility required for the reproduction of the population, which is connected to value 2.1 of the total fertility indicator, is not ensured in the European average either, and Hungary does not even reach the European average. Within this, the situation in the region of Northern Hungary is not unfavourable, for according to the general fertility indicator it has the second best value. To sum it up, it can also be established that the differences between the countries are greater than the differences between the regions within the individual countries. Considering the total fertility indicator, the differences between the data for Western and Eastern Europe are the most conspicuous. While the data for Western Europe have been continuously decreasing to the present value for the past half century, the dramatic deterioration of the situation in the Eastern European countries is connected to the period following the change of regime, and today their data fall even short of the low values of Western Europe. The determination of the current demographic processes by the social-economic transformation seems self-evident in the case of the Eastern European countries. Since the willingness to have children is determined in the long run by cultural, religious and other factors as well, they may result in some improvement of the current unfavourable value after the economic-social conditions have become stabilised later on.

Development of the state of health of the population

The development of the state of health of the population is important additional information for judging the demographic processes. High per capita income has its limitations in expressing the standard of life of the population in a given area, although several of its elements exert a fundamental influence on the level of the per capita income.

The development of the number of hospital beds provides information regarding the development of health care services as well as regarding the average state of health of the population. In the past years an approximate 20% decrease in the number of hospital beds was characteristic of the EU-25 countries. This results from a decrease in the length of stay in hospital, as well as from a reform of the health care system. The indicator of the provision of hospital beds in Hungary can be considered favourable in its absolute value in a European comparison, which, however, can presumably be related to the failure of launching the health care reform. For the regions in Hungary the value of the indicator for 100,000 persons scatters from 701 to 945. The value of 727 shown for the region of Northern Hungary is the fifth in the ranking of the regions. In view of the fact, however, that there are no teaching hospital capacities in the region, and partly Debrecen and partly Budapest can be regarded as the teaching hospital centres for the population, the value of the indicator can be considered satisfactory only as a first approach.

The situation in the regions in Hungary can by far not be considered to be satisfactory in a European comparison of the state of health of the population. Among the incidence frequency of the major illnesses the indicator of the share of cardiovascular disorders is available in the system of regional statistics. This is the most frequent among the causes of death, amounting to 42% of total deaths. The indicator available in the system of regional statistics shows the relation between the rate of death of men due to a given illness and that of women. The values of the indicator varied between 2.62 and 3.14 in 2002. The value for the region of Northern Hungary is 2.82, which is the highest in a comparison in Eastern Hungary, the value of the indicator essentially being identical with the value of 2.84 for Central Hungary.

The value of the indicator is above 2.0 in all European regions, and the regions with the highest values exceed even the value of 4.

Agriculture

The importance of agricultural production for the member states of the European Union derives from the fact that the common agricultural policy together with the common trade policy belongs to the scope of community cooperation specifically named in the Rome Treaty of 1957, and agriculture is even today the highest financed area of the cooperation between the member states as it amounts to approximately 40% of the community budget. Within agriculture the most important branch is cereal farming, for through the grain market regulations a decisive influence is exerted on the competitiveness and profitability positions of livestock farming and the food industry, and even the catering industry, and through that on tourism.

The rate of land utilised for cereal farming out of agricultural land is an important indicator of the level of the share of the community subsidies obtained. In 2002 42.5% of the agricultural land of the EU-25 was used for cereal farming. Among the regions in Hungary, the rate of cereal farming land is lower than 50% in the regions of Central Hungary, Northern Hungary and the Northern Alföld, with the lowest value of 35.12% found in the region of Northern Hungary. This means that the community support of the agriculture sector may be of an accordingly low level, which is not indifferent in terms of the income producing and population retaining capacity of the region.

Income situation

The value of the indicator of the per capita GDP measured at purchasing power parity is generally accepted for the purpose of comparing the income situation of the regions. The indicator is suitable for evaluating the per capita value of incomes irrespective of the different purchasing power of the currencies of the various countries. According to figures for 2002, the value of the indicator varied between 4337 and 66761 PPS¹ in the regions of the EU-25 member states. The income in no region of Hungary reaches the average of the EU-25, 21192 PPS. Among the regions in Hungary the region of Northern Hungary is in the most unfavourable situation with a value of 7902 PPS GDP/head, which hardly exceeds one third

¹ Purchasing Power Standard

of the value (20329 PPS) of the most developed region of Hungary, Central Hungary. The value for Northern Hungary means 36.1% of the regional average of the EU-25.

Evaluating the data on the changes in the income situation also represents important information, for a stronger growth rate connected to a possibly more unfavourable income situation may create in the long term a chance of the differences in income currently experienced ceasing in the long run. The indicator reflecting the change in income is the indicator of the difference in rate measured against the average growth rate of the EU-25 in the period 2000-2002. As for Hungary, all the 7 regions have positive values of the indicator, with a distribution between 0.39% and 16.62%. In line with the European tendencies, the difference in the growth rate of the region of Central Hungary including the capital is the highest. For the region of Northern Hungary the value of the indicator is 2.47. This can be regarded as a middle value, for 3 regions have more favourable, and 3 have less favourable values. At the same time this means that no considerable modification can be expected in the income situation of the region of Northern Hungary, for the growth rate does not show an outstanding value even in domestic comparison, thus the elimination of the level of backwardness cannot be expected either.

The regional GDP/head indicator is suitable for indicating the level of income produced in a given region, although the level of income available in a given region depends on other factors as well. Commuters who are employed in the given region but using the income in different regions have to be taken into account as well as other income, and income of interest, holding and leasing type, which increase the income of the population of other regions. Accordingly, for comparing the actual welfare situation of the regions surveys of household statistics have come into the foreground recently. Although they do not substitute information on the regional GDP, they provide other information of a supplementary nature on the actual income situation of the population. The primary income of households in 2002 showed a distribution between 2693 and 24082 PPS in the regions of the EU-25 member countries. This means that the outstanding regional incomes of the large agglomerations calculated on the basis of the GDP/head indicator became moderated, which results from the impacts due to commuting. The value of the indicator of the region of Northern Hungary was 5480 PPS, which was the second worst value following that of the region of the Northern Alföld. The vicinity of the capital and the elimination of the impact of commuting decreased the backlog against the region of Central Hungary, where the value of the indicator was 11385

PPS. The relative deterioration of the situation of the region of the Northern Alföld means that the distance from the job opportunities in the capital plays a decisive role in the income situation of the regions in Hungary.

The impact of the levelling of incomes is also increased by the role of income rearrangement of the state budget, the indicator of which appears in the indicator of the available income. Its distribution was between 2826 PPS and 18332 PPS. On the basis of the value of this indicator the relative domestic position of the region of Northern Hungary has not changed, it continues to precede only the region of the Northern Alföld with its value of 5222 PPS, but the relative position of the region of Central Hungary has further deteriorated under consideration of this indicator, for it achieved only a value of 9041 PPS.

In terms of the income differences an interesting indicator is the development of the rates of the incomes available to households and the incomes produced by the various regions. Since the incomes available to households also show the impacts of commuting, rental charges, dividends, and interest-type incomes and of the income rearrangement by the state, significant differences can be found between the GDP produced and the available incomes. The negative impact of the above regional rearrangement of incomes was evident to the greatest extent in the region of Central Hungary. There the available income amounted to 79.4% of the GDP produced, while in the region of Southern Dunántúl 124.0% of the income produced was available to the households. The region of Northern Hungary occupies a middle position in the ranking of the regions. With its value of 95.3% it is ranked 4th among the regions, thus with the state transfers the average incomes available to the households equalise its unfavourable income-producing capacity. In all this means a favourable position in spite of the basically unfavourable income and growth of income positions of the county.

An illustrative indicator of the income positions of households is the rate of income tax and social security contributions depending on the available incomes. Regarding this indicator the change from the situation in 1995 to that in 2002 is at our disposal for the regions of the EU-25 countries. All the regions of Hungary have positive values, thus the taxation level in proportion with the available incomes, i.e. the proportion of taxable employment and entrepreneurial income, may have also increased within the income available to the households, the two extreme values being 0.2793% and 1.4679%. For the region of Northern

Hungary the value of the indicator is 0.7768%, which means rank 5 in the ranking of the regions.

Labour market situation

Employment

Improving the labour market situation to a considerable extent is the most important field of the efforts aimed at stabilising the competitiveness of the European Union. In line with the Lisbon employment objectives decided upon in 2000, the employment rate should be raised to 70% for men between 15 and 64 years of age, and to 60% for women by 2010. The European Council of Stockholm has set the supplementary objective of achieving an employment level of 67% for men and of 57% for women by 2005. From the data for 2003 it can be established that achievement of the objectives for 2005 cannot be expected, and this fact will make it more difficult to achieve the objectives set for 2010. As regards Hungary, the employment rate is distributed between 51.16% and 62.27%, with the region of Northern Hungary having unfortunately the least favourable value. In the period 2002-2003 the changes in employment level show a highly diverse picture. In some regions the rate of the annual change was between -2.39% and +4.24%. Within that, the indicator for the region of Northern Hungary is 1.6%, i.e. it is ranked 4th among the regions, which is suitable for its relative position to improve among the regions if the positive tendencies become permanent. There is all the more chance of that since in Hungary the line of the Danube represents a strong dividing line. In the three regions east of the Danube the level of employment is between 51-52%, while in the area west of the Danube and in the central region an employment level of 60-62% was measured.

The value for the employment of women is extremely low, with a distribution between 45.4% and 55.7%. Regarding this indicator, the region of the Northern Alföld is in the least favourable situation, but with its value of 46.4% the region of Northern Hungary is in the last but one place among the regions.

The indicator of the level of self-employment within employment shows the ratio of self-employed and entrepreneurs, and through that the prevalence of initiative, qualification and entrepreneurial ability in society. The values for the regions of Hungary are between 10.43% and 15.48%. The most favourable situation can be found in the region of the Southern Alföld,

where the high value of the indicator is probably due to the high number of agricultural enterprises. Based on the expositions discussing the situation of the agricultural sector it is no surprise that it is the region of Northern Hungary that has the lowest value of 10.43%.

Unemployment

The average level of the unemployment rate for 2003 in the EU-25 member states was 9.1%, which means a deterioration of 0.2% compared to the previous year. For the European regions the value of the indicator varies between 2% and 19.6%. The indicator of the average unemployment rate of the regions in Hungary can be regarded as favourable in a European comparison, for its value varies between 4.0% and 9.7%. Unfortunately, the region of Northern Hungary has the least favourable value, which exceeds the average of the regions in the EU-25.

The change from the values of 2002 is also unfavourable. For the various regions in Hungary the extreme values are a growth of 0.8% and a decrease of 1.1%. The region of Northern Hungary produced the highest increase of nearly 1 %.

Research and development activity, and the utilisation of its results in the industrial and services sectors

In line with the Lisbon objectives mentioned in connection with the employment processes, the major priorities of the European integration area until 2010 include creating a knowledge-based economic area, for which purpose a research and development expenditure of 3% of the GDP is required, which has been reached or approached by the USA and Japan. According to data for 2002 the regions of the EU-25 member states have achieved an average of 1.9%, which falls rather short of the objectives. Values below the average value can be found in the regions of Spain, Portugal and Greece among the old members and in those of the new member states. The distribution of the values for the regions of Hungary is between the values of 0.3% and 1.5%, with the region of Northern Hungary having an even less favourable value sharing it with the region of Western Dunántúl. This means that the situation of the region is deplorable even among the regions of Hungary below the Union average, for it has only 20% of the value of the region of Central Hungary, which has achieved the most favourable value. This development has occurred in spite of the fact that in the region Miskolc can be regarded

as a considerable university centre, and the cities of Eger, Gyöngyös and Salgótarján also have higher education capacities. Life in the country in itself does not present an insurmountable disadvantage in obtaining R&D resources, for the values of the indicator in the regions of the Northern Alföld and the Southern Alföld with their respective university centres in Debrecen and Szeged are 0.7 and 0.8%, respectively.

The HRST indicator is one that measures the human resource side of the scientific-technological capacities, which shows the rate of those with higher education qualifications and those employed in jobs requiring higher education qualifications in the number of employed. The average value of the EU-25 member states is 39.8%. The values for the regions of Hungary are between 27.4% and 45.4%. Although the region of Northern Hungary does not have the least favourable value, its value of 27.61% is just above that of the region of Southern Hungary.

In the processing industry the number of employed in the high-tech branches reached 6.6% by 2003. The values for the regions of Hungary are distributed between 4.69% and 13.07%, within that the region of Northern Hungary has a value of 8.65%, which exceeds the value of 6.94% measured in the region of Central Hungary, and is preceded only by two regions in the Dunántúl in the ranking based on this indicator.

Employment in the services sector employing high technology, in telecommunications, in electronic data processing, in the air and water transportation sectors is also high in the European average, approximately 10.4%. The regions showing above average employment in these branches at European level are not necessarily connected to capitals or central regions, thus their powerful development may entail a moderation of the regional development differences within a given country. Regarding the regions in Hungary, the competitive advantage of the provincial regions unfortunately cannot be experienced, for the value of the indicator of no provincial region reaches 50% of the value of the indicator of the region of Central Hungary, 15.1%. For the region of Northern Hungary the value is 5.86%, which is the second lowest in the country.

The branch employing high technology in the processing industry provides information on the extent to which the results of the scientific-technical development have become factors having an impact on the actual economic practice. This rate for the regions of Hungary varies

between 21.6% and 43.4%. Contrary to expectations, the situation of the region of Northern Hungary is not unfavourable, it is the foremost among the regions east of the Danube with its value of 32.8%, and it is more favourable than that of the region of Southern Dunántúl with its value of 25.8%.

The share of services with a high technology level in the services sector is an indicator with similar information content. Its value for the regions in Hungary varies between 10.7% and 18.0%. The value of the indicator for the region of Northern Hungary is the second best value following the region of Central Hungary, thus the region of Northern Hungary shows an overall favourable picture regarding the employment of the achievements of science and technology both in industry and in the services sector. Since companies employing high technology usually do not contribute greatly to the widening of employment, a favourable impact on employment can only be expected to a small extent, while at the same time the settlement of high technology in a given region may generate other, positive processes, therefore it can be regarded as a favourable tendency in every respect and as the starting point of a process creating an opportunity for future growth.

The development of the qualification level of the population provides information on the extent to which they can meet the challenges of the age. The rate of participation of the 17-year-olds in school education shows what proportion of the population can potentially achieve a completed secondary education that achieves the minimum level of competitiveness in social and economic life today. The average of the EU-25 member states was 86.3% in 2003. The region of Northern Hungary occupies an unfavourable position in this respect as well, its value of 81.5% is the second worst, and is considerably lower than the value of 92.49% of the region of Central Hungary.

The proportion of the population in higher education in the average of the EU-25 member states is 16.2%. The values of the indicator for the regions in Hungary vary between 8.9% and 27.4%, with the region of Northern Hungary occupying the last place in the ranking of the regions. Since the indicator shows the regional distribution of the education programs and not of those participating in them, certain regional disproportionalities may appear due to the draining effects of the capital and some other university centres. However, since universities play a role not only in creating the conditions of the economic and social life, but through their supply functions they represent significant centres of employment and economic

performance as well, the low value of the indicator gives an explanation for the current economic performance of the region as well.

The rate of people with higher education qualifications in the population in the age bracket fit to work gives a good illustration of the quality components of the labour force. The values for the regions in Hungary vary between 10.58% and 21.3%; the situation of the region of Northern Hungary is not strikingly bad with its value of 11.4% preceding two regions, but even this value is hardly above 50% of that of the region of Central Hungary.

Tourism

The potential of the tourism sector can be regarded as decisive in the European economic region, for it has outstanding significance due to its employment and income producing capacity and also for standards of life reasons.

The number of accommodations per 1000 persons shows extreme distribution in Hungary, from 13.3 in Northern Hungary to 49.5 in Central Dunántúl. Although the region does not have the tourism attractions of the Balaton region, the level of backwardness is astounding even when compared with the regions in Eastern Hungary, for the value of the indicator is 27.7 even for the region of Southern Hungary, which is second worst supplied in the country.

The availability of quality accommodation, which is shown by the number of hotel accommodation as projected to the total number of accommodation, is also unfavourable, for this rate in the region of Northern Hungary is 42.3%, while in the region of Central Hungary it is 74.7%. Thus the low level supply of accommodation is accompanied by an unfavourable composition of accommodation, resulting in an unsatisfactory competitiveness of the region in the quality tourism market.

Determining the cumulative development level of the region of Northern Hungary by means of a cluster analysis of the regions of the EU-25 member states

As a conclusion of the investigation some selected indicators were used to determine the development level of some regions of the EU-25. The analysis was performed by means of a cluster analysis, the indicators used for the analysis were as follows: per capita GDP, per

capita income of households, per capita available income of households, as well as the rate of employment of the regions. The standardised values of the variables were used to put the regions into two clusters. Based on the cluster analysis, 174 regions were classified in the cluster of the developed regions due to the above average values of the indicators, while 82 regions had to be ranked among the underdeveloped regions. Due to the unfavourable values of its indicators, the region of Northern Hungary was put among the underdeveloped regions, sharing the fate of other regions in Hungary and most regions in Central Europe. Among the regions in Central Europe, only the central regions of Slovakia and the Czech Republic are among the developed regions. (Slovenia was not ranked due to lack of data.) Naturally, regarding some of the indicators the regions in Central Europe show considerable variance, therefore the analysis starting from the assumption of two clusters can only demonstrate a narrow segment of reality.

Regarding the region of Northern Hungary, the ranking in the cluster of the underdeveloped regions, however, does correspond to reality with all certainty. Although some of the indicators have values exceeding or matching the European average in the positive sense, the indicators of economic capacity do not in general reach the European values. In the ranking of the regions of Hungary, the region of Northern Hungary is without doubt among the last. This means that the region faces a long and difficult process in the convergence process. Regarding primarily the regions of Eastern Hungary, the task is to improve the situation, then to prevent the three regions east of the Danube falling behind the regions of Central Hungary and the Dunántúl. In this long-term task it may be decisive to mobilise the reserves in the low level of employment, which, through increasing the qualification level of the population, may facilitate the settlement of high technology processing industry and services sector capacities and their establishment in the region of Northern Hungary.

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