

**OPPORTUNITIES IN
ENTREPRENEURIAL
HOUSING CONSTRUCTION
IN NYÍREGYHÁZA**

**A LOOK AT A LOCAL
HOUSING MARKET**

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EXECUTIVE SUMMARY

Both the County of Szabolcs-Szatmár-Bereg and the county seat, Nyíregyháza, can rightly take pride in having conspicuously good housing construction indicators. Despite the fact that the circumstances of both the housing construction in general and entrepreneurial housing construction had been becoming more difficult since the economic and social change of regime. Housing construction as such can be traced back to social and economic motives, out of which the most important factors can be summarized as follows:

- Within the population, the higher proportion of younger age groups.
- A family- and household-size bigger than the average, consequently a higher residential density in the flats and rooms.
- In spite of a relatively younger housing stock, the indexes indicating how well these flats are supplied with infrastructure still show a poor performance both on the national and provincial average.
- The prevalence of the tendencies characterizing large cities: an increase in the number of households because of divorces, and the low inclination for rearing children, respectively.
- The stimulating effect of the housing construction allowance, including even the abuses related to the allowance.

As a result of the above-mentioned factors, the residential density significantly decreased between the years of 1990 and 1998. At the same time the number of newly built flats per year indicates very extreme fluctuations, mounting up to between 0.7 percent and 2.1 percent of the housing stock within the time-span examined. This proportion then dropped back to and stagnated at about 1 percent over the last two years.

Professional developers have been active in the county seat since 1990. Actual completions by developers¹ as a percent of total newly built flats has decreased since 1994, yielding 18 percent in 1997 (about 100-200 flats per year). The increase in the prices of the new flats built by entrepreneurs first had followed the tendency of the extent of the change in the consumption price index, then it exceeded its extent in 1998. Those middle-class families represent the most important segment of the demand-side with children who already have a flat, but who have not yet claimed the housing construction allowance.

The lower income-rate of the households in the county seat (a household with two breadwinners has an income of about HUF 70,000 to 75,000 per month in 1999).

¹ Their products are; on the one hand, flats only partially constructed before being sold, on the other hand, flats completely finished at the time of sale.

The relatively low construction costs upgrade the significance of the different types of subsidies, in comparison with those of other areas displaying different income and housing market characteristics. Although the County of Szabolcs-Szatmár-Bereg “excelled” at having committed abuses with regard to the acquisition of housing construction allowances, the county seat, however, may rightly be “proud” of barely a few cases like the kind.

When comparing the tendencies of housing construction in towns having similar number of residents, we may conclude that the economic development and prosperity do not necessarily mean an increase in the volume of housing construction, since there is a more intensive housing construction activity in the less developed towns. The number of inhabitants of nine settlements belonging to the Nyíregyháza agglomeration has been increasing as an impact of the rising natural birth rate and/or in-migration, as a consequence of which the intentness of housing construction has also, be increasing.

According to a “retrospective” analysis regarding housing demand, almost in every year more flats were constructed in Nyíregyháza than would have been motivated by the calculated income-rate. The reason for this is the inappropriate operating of the institutional system of the housing market (housing subsidies and housing loans).

The prospective tendencies in the major factors influencing the market chances of the products of entrepreneurial housing construction can be summarized as follows below:

- The number of the residential population in the county seat is expected to be slightly decreasing during the forthcoming five years. The increase in the number of households by approximately 330 every year is expected to continue, owing to the effect of the transformation taking place in the structure of both the households and the families. This growth, however, is the continuation of the previous tendency, consequently it does not result in essential surfeit demand. On the other hand, an important demands component is the growth of the cohort (the 25 to 29-year-old age group) entering into family-establishing age, which will appear in the second half of the period examined.
- The economic growth of the town is expected to exceed the rate of the national average, resulting in an approximately 5.5 to 6 percent growth in GDP². As a consequence of this, the increase in the income rate of the households may mount up to even 5 percent, simultaneously with a prospective growth in the income field of both the entrepreneurial and the employee sector (according to the prognosis of the GKI Ltd.).

² More precisely: *Gross City Product* (GCP).



- On the basis of modeling the prospective tendencies of the demand, it can be concluded that a minimal positive housing demand can be expected during the forthcoming five years only if the yearly-planned scale of housing constructions does not exceed 500 flat units. In the case of a volume smaller than that, the demand for new flats can be positive, whereas in the case of a volume exceeding that; there can be a negative demand to be expected.
- The appearance of new credit products and advantageous forms of saving may result in new buyer groups on the demand side.

Nevertheless, the factors defining the demand side to be expected during the forthcoming five years give occasion only for cautious optimism. A boom-like change taking place in the demand towards flats constructed by entrepreneurs cannot be expected; what is rather to be expected is a gradual enlargement of the demand side due to the appearance of the growth in income, the establishing of new households, and new credit products.

OPPORTUNITIES IN ENTREPRENEURIAL HOUSING CONSTRUCTION IN NYÍREGYHÁZA

A LOOK AT A LOCAL HOUSING MARKET

INTRODUCTION

With the preparation of the feasibility study, we had a double purpose. On the one hand, through the example of Nyíregyháza we want to introduce those factors, which influence to a considerable degree the supply and demand towards the entrepreneurial housing construction. Therefore the tendencies taking place in these factors (supply and demand) are highly recommended to take into permanent consideration by real estate developers dealing with housing construction. On the other hand, on the basis of the forecasts related to supply and demand we wanted to introduce a practical approach to one of the possible methods to forecast demand for housing.

In accordance with the above-outlined double objective, the feasibility study bifurcates into two fundamentally different directions. In the first part, there can be found a systematized description of the factors influencing the demand side, as well as an analysis expounding some particularities characterizing the situation of the local (and that of the county's and the county seat's) housing market. In the second part, however, an assessment of the prospective demands manifesting themselves towards the newly constructed flats has been outlined through 2004. The method employed is, of course, only one of the many potential ones.

The United States Agency for International Development (USAID) has financed the realization of this feasibility study, within the framework of a training program aimed at strengthening professional housing development.³ In the preparation of the paper, the "Housing Developers Club" established in Nyíregyháza through the program played a decisive role; a club whose members with their constructive remarks and observations contributed to an extremely large extent to the realization of this study at our joint meetings and personal encounters.

Special thanks for their assistance and voluntary cooperation must go to:

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³ The Urban Institute and Metropolitan Research Institute carried out the program in 1998 and 1999, under the management of Iván Tosics and Katharine Mark.



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THE TYPES OF HOUSING CONSTRUCTION IN THEORETICAL APPROACH

Housing construction may be carried out in a variety of ways. Cardoso and Short (1983) identify four ways of them. These are:

- Self-produced housing construction
- Entrepreneurial housing construction based upon individual contracts
- Entrepreneurial housing construction based upon institutional contracts
- "Speculative" housing construction⁴

These different ways of housing construction are not mutually exclusive. In any one city, all four of them may be found simultaneously. In more market-orientated economies the speculative mode of housing construction will take dominance, whereas in less developed countries self-produced housing construction will take dominance. The following chart below is intended to graphically show these four ways of housing construction:

Figure 1 The Different Types of Housing Construction

<p><i>Self-produced housing construction</i></p> <p>This type of housing construction relies exclusively upon the consumer of housing and is often referred to as "housing of one's own resources". Historically, it was this mode of housing production that was applied to the greatest extent in the housing industry. Similarly, at this moment in time, it is this mode of housing production that largely prevails in the poorer countries of the world. If the private market or the Government is unable to effectively respond to the demands present towards housing, then it will be this mode of housing production that will satisfy the households' needs related to these housing demands. As the above chart shows, the developer, the builder, and the contractor are one and the same person.</p> <p><i>Entrepreneurial housing construction based upon individual contracts</i></p> <p>This mode of housing production is usually reserved for the more wealthy consumers.</p>

⁴ "Speculative" housing construction means the entrepreneurial housing construction with realization purposes. In the translation, we have employed the English terminology, which is devoid of any negative overtone attributed the word "speculative".



Under this mode of housing production, the developer is also the owner who commissions an entrepreneur with the whole production process. The scale of this type of housing production is done through individual contracts for the purpose of building one single-family house. Houses built under this mode of construction tend to be larger than the ones produced under any method of the other three ways of housing production.

Entrepreneurial housing construction based upon institutional contracts

This mode of housing production is based upon large-scale mass housing development. Historically, company (government) laborers had been provided with flats on panel-type housing estates built by a single firm having employed technology according to uniform housing quality standards. Public sector housing is particularly suited to this type of housing production.

“Speculative” housing construction

Housing production of this kind implies entrepreneurial housing construction in order to meet general demands. Under this heading the reason for which housing construction is called “speculative” is that construction has been completed before the realization price could have financed the purchase itself. Under this type of production, the costs of producing housing are extraordinarily high, which fact is in relation to the capital invested. Therefore, this method gets employed only in places where sophisticated financial systems exist, since not only does the person undertaking the burden of satisfying housing demands need working capital but also the user (purchaser) does, once the housing product becomes available on the market.

Since housing construction has relatively large multiplier effects in an economy, governments have found that by stimulating housing production, they can also increase the overall output of economy. For this purpose it often occurs that governments intervene, through financing housing construction, into the machinery of how housing market should be working. However, irrespective of the fact of what kinds of means are available for financing housing construction, in such cases real estate developers are supposed to have some estimates with relation to the prospective demands at the local level in order to be able to proceed with housing development.

Supply and demand in a housing market under the speculative mode of housing production

To satisfy housing demands in a market economy is a complicated process not only because it involves multiple reciprocal interactions between both economic and social forces, but also because it effects the chain of various participants of the process, that is purchasers, sellers, tenants, private entrepreneurs, real estate developers, financiers, and local as well as central governmental organs which may be operating only within the context of the legal, regulatory, and macroeconomic constraints. As it is with any other possessions, the housing market is also guided by the basic principle according to which supply undergoes changes by responding to demand.

An analysis embarking upon examining demands towards housing needs concentrates on the consumer by identifying their size and characteristics with relation to the fact of what kinds of flats they relate to, furthermore by finding out how much the households are willing and able to pay for satisfying their housing demands. It is useful for housing demand to be considered as being a factor that includes not only the concern for the size and quality of the flat, but also for certain topographic preferences of it, which can be



characterized by factors such as, for example, the quality of the schools in the neighborhood, the access possibilities to public transportation, and other locational characteristics. Among the key factors that determine housing demands there can be enumerated things like the establishments of households and the composition of them, their income conditions, the access to financing housing matters, the Government's fiscal and tax policy, furthermore the fact of what kinds of flats there is preference for.

On the other hand, also housing supply encompasses characteristics of the existing housing stock such as price, structural quality, and quantity being expressed in the size of flats. Real estate developers (both public and private enterprises) are operating within such specific regulatory and macroeconomic environments that can affect their ability and intention, respectively, to construct, maintain, or terminate flats accordingly to the changeable winds ever present in the field of housing demands. Real estate developers are being influenced by the price in all the four models of the housing production outlined earlier. High housing prices and profitability are propitious indicators for them in terms of increasing the supply on the housing market.

Supply is influenced by a lot of collateral factors on the housing market. In the case of the demand, however, the number of these influencing factors are fewer. For example, supply can be influenced by the cost factors of the investment such as technological innovations, and labor wages. In addition to this, the various interrelated markets also influence the cost factors - such as the land and capital - of the housing construction, making an effect on the supply side.

Furthermore, local governmental prescriptions regulating housing investments can also severely affect the supply side. On the other hand, demand is affected by the factor of how much households want and are able to expend on investments with housing purposes, which dilemma is for the most part represented by the phenomenon of how much share of their income they want and are able to expend on purchasing a flat, what kinds of financing possibilities there are at their disposal, and what the prospective number of new households may be.

Source: Cardoso and Short (1983)

THE ACHIEVEMENTS OF THE COUNTY AND THE COUNTY SEAT IN THE PERFORMANCE OF HOUSING CONSTRUCTION IN THE 1990s

Prior to analyzing the market chances of the new flats, we are going to provide a survey of the tendencies characterizing the housing construction in the counties and the county seats in the 1990s. It is even more well-worth yielding a survey of the past's tendencies if we consider the fact that the achievement in housing construction of Nyíregyháza (and that of the county) has been strikingly significant all over the past few years - although the footing area of the flats constructed is traditionally smaller here than it is in other regions of Hungary. The residential density per flat (i.e., the number of residents per 100 flats), nevertheless, is higher to a considerable extent here - despite the relatively high number of housing construction - than it is in other regions of the country.



A Comparison of the Regional Housing Construction Data with Those of the Counties:

- The absolute degree of the increase in the housing stock was saliently high in both the region and the county between 1990 and 1998; it is preceded only by the Central-Hungarian region, Budapest, and the County of Pest, respectively.
- As far as the housing construction falling to 1,000 inhabitants is concerned, both the region and the county take the first place.
- It is characteristic for the county to have the smallest footing area as related to the newly-built flats, and to have the highest residential density ratio of the whole housing stock.

First of all, let us take a closer look at the fundamental data of the housing stock, according to the regional distribution (Table 1). The data reflect the facts definitely well that both this county and the regions take a distinguished good position in the field of housing construction in general. Taking into consideration the absolute figures of the change in housing stock between 1990 and January 1, 1998, the region of the Northern Hungarian Plain and, within this, the County of Szabolcs-Szatmár-Bereg are preceded only by the region of Central Hungary, and Budapest and the County of Pest, respectively. The values of the relative intensity indexes of the housing construction (the number of flats constructed per 1,000 inhabitants), however, range both the county and the region to the first place. (Notice that the high proportional ratio of the region is due primarily to the “achievement” of the county.) As the number of flats constructed falling to 1,000 inhabitants considered, both the towns of the county and its villages display the highest proportional ratio, in comparison with the similar settlement types, exceeding even the double of the national average.

In spite of the “plan-like” data, it is a striking factor that in the county and the region the average footing area of the new flats constructed (80.2 and 84.6 square meters) is the smallest, and it is this country that is characterized by the highest residential density index per flat, i.e., the number of residents is 276, falling to 100 flats.



Table 1
The Data of Housing Stock and Housing Construction According to Regional Distribution

	Housing stock 1,000 units (January 1, 1998)		Number of residents per 100 flats (January 1, 1998)	Number of flats constructed per 1,000 residents in 1997			Average footing area of the flats constructed in 1997 (square meters)
	1990	1998	1998	Town	Village	In total	
Hungary	3,853	4,032	251	2.2	3.7	2.8	95.4
Budapest	794	819	227	—	—	1.7	100.2
Central Hungary	1,134	1,188	241	2.1	5.2	2.8	100.2
Central Transdanubia	402	420	265	1.5	3	2.1	101.8
West Transdanubia	358	378	263	2.7	3.4	3	100.9
South Transdanubia	368	384	256	2.6	2.5	2.5	95.6
Northern Hungary	482	501	256	1.6	3.5	2.5	95.1
Northern Great Plain	556	585	262	3.2	5.5	4.1	84.6
County of Szabolcs- Szatmár-Bereg	193	207	276	4.6	8	6.5	80.2
Nyíregyháza	38	42	266	—	—	4.3	92.5

Source: Hungarian Statistical Yearbook 1997, page 135 KSH.

Housing Construction in the County Seat:

- The residential density has remarkably decreased in the town between 1990 and 1998.
- The number of the newly-built flats per year shows very extreme changes: it had mounted up to between 0.7 percent to 2.1 percent of the housing stock, but dropped back to an index of approximately 1 percent over the past two years.
- Natural persons participate in the housing construction activity to a more or less well-balanced extent, whereas economic organizations perform in it in a remarkably uneven way.
- The entrepreneurial sector “real” housing construction performance in comparison with the total number of flats constructed has been decreasing since 1994, representing 18 percent on the market in 1997.
- After 1994, the construction of the four- and more than four-roomed flats dropped back virtually to the half of its previous index. The average footing area of the flats has, on the other hand, been increasing, which is currently between 92 to 95 square meters.

Between 1990 and 1996, the housing stock of the town had increased by 3,600 flats; as compared with the estimated data of housing stock in 1998,⁵ the increase is 4,400 flats. According to the data of the residential density per 100 flats (see: Table 1 the index of the residential density decreased in the town to a significant extent: in 1990 it had been 298, and according to the assessment prepared by 1998 it fell down to 265. The number of flats constructed in the town represents very extreme changes: the difference between the maximum value (1990) and that of the minimum one (1993) is closely three-fold. The increase in the number of the demolitions is a remarkable phenomenon to be taken into consideration, which had reached its maximum value when housing construction had reached its minimum one, then it began to be decreasing, and in 1996 it did not reach the number of 100 flats constructed in yearly proportion.

The flats constructed constitute 0.7 to 2.1 percent of the whole housing stock, which indicator corresponds actually to the proportion of the households occupying a new flat. In the past two years, this proportion decreased to a value of about 1 percent. The economic profit-making organizations⁶ participate in the housing construction to a very different extent. In 1991, they had constructed 43 percent of all the new flats, whereas in 1993 they constructed only 6 percent of them. Following the period after the deepest bottom reached in 1993, an unequivocal increasing trend cannot be still seen clearly; we can only point out that the economic organizations build 6 to 9 percent of the flats constructed every year. The decrease registered at the beginning of the 1990s in the number of the flats constructed by the economic organizations is due to the termination and transformation of the companies dealing with housing construction.

Table 2
Housing Construction as per the Builder, the Number of Housing Units and Changes in Percentage of any Previous Year in Nyíregyháza

	1990	1991	1992	1993	1994	1995	1996	1997
Local governmental budgetary organization	43	—	—	2	1	—	—	—
In percentage of any previous year		—	—	—	50.0	—	—	
Natural persons	782	458	294	281	413	562	666	460
In percentage of any previous year		58.6	64.2	95.6	147.0	136.1	118.5	
Economic organizations	—	347	122	18	223	41	66	26
In percentage of any previous year		—	35.2	14.8	1,238.9	18.4	161.0	
In total	825	805	416	301	637	603	732	486
In percentage of any previous year		97.60	51.7	72.4	211.6	94.7	121.4	
Number of flats constructed in	312	276	68	61	288	168	238	87

⁵ From the account of the Mayor, 1998.

⁶ Every flat, which had not been constructed by a local governmental or central budgetary organ or a natural person, has been considered as a flat *constructed by an economic profit-making organization*.



	1990	1991	1992	1993	1994	1995	1996	1997
multi-story buildings with several flats								
In percentage of any previous year		88.5	24.6	89.7	472.1	58.3	141.7	36.6

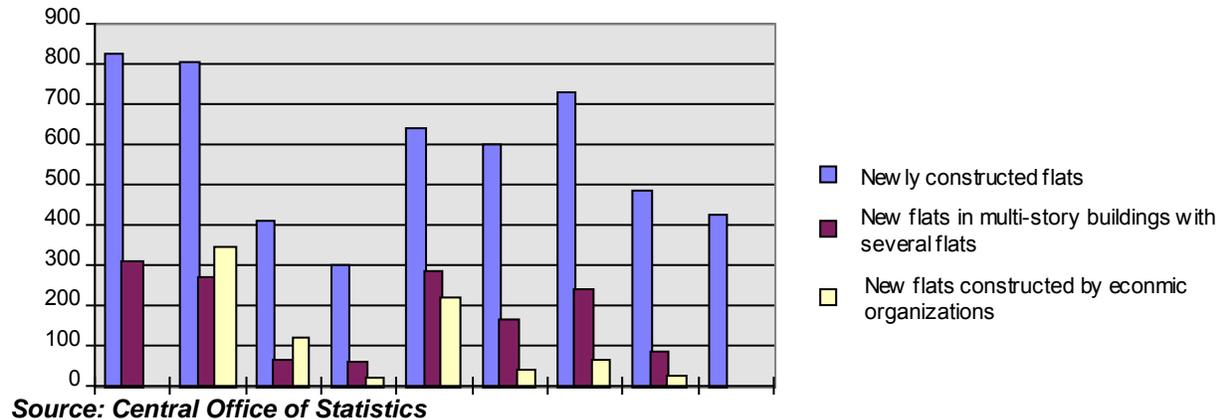
Source: Central Office of Statistics

The comparison of the yearly housing construction data, carried out according to as per the builder indicates the fact that the number of flats constructed by natural persons displays a much more balanced change than that of the flats constructed by economic organizations. These latter-mentioned economic organizations are building flats synchronically in larger quantities primarily with realization purposes, and they seem to have reacted extremely sensitively and in an unbalanced manner to the aforementioned factors because of the frequent amendments in the regulations related to the enterprises, housing construction, and flat occupiers.

It is an interesting turn that - according to the statistical data - in 1991 and 1992 the number of flats constructed by economic organizations is higher than that of the flats constructed in multi-story buildings with several flats, but this tendency gets reverted after 1993, and the number of flats constructed by economic organizations reaches merely 25-30 percent (!) of the flats constructed in multi-story buildings with several flats (with the exception of the year of 1994, when it was more than 77 percent). The reason for this is that a significant quantity of the new condominium flats constructed in the county seat are being built before the realization in a construction-ready state or in a 75-80 percent implementation grade. The construction of these flats - in general - will be completed by the owners themselves, consequently they are qualified in the statistics as being flats constructed by natural persons. According to both the professionals of the local governments and the entrepreneurs, the housing construction achievement of the entrepreneurs' sector is characterized by the number of flats constructed in multi-story buildings with several flats. The number of flats in the aforementioned buildings displays a significant fluctuation. In comparison with the number of flats constructed in total, it had reached a merely 16 percent percentage in 1992. The maximum number of constructions was achieved in 1994, when it exceeded 45 percent. Since 1994, it has been continually decreasing as compared to the number of all the flats constructed, representing an index of 18 percent in 1997.

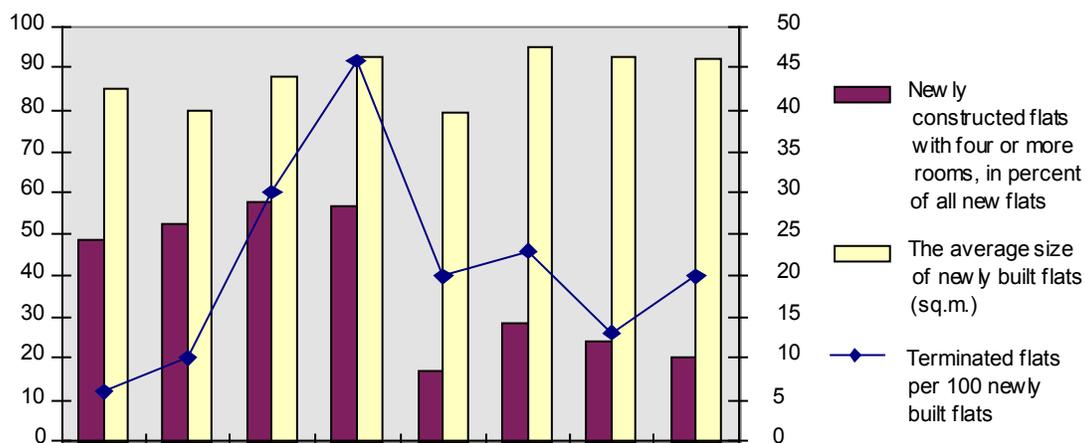


Figure 2
The Number of all Flats Constructed, Flats Constructed by Economic Organizations, and Flats Constructed in Multi-Story Buildings with Several Flats in Nyíregyháza between 1990 and 1998



On the basis of the data available, taking into consideration the modification happened in the number of rooms of (all) the flats constructed, one may draw the conclusion that in the period preceding the year of 1994 more than 50 percent of the new flats constructed had been built with four or more than four rooms. After 1994, however, the construction of “multi-roomed” flats fell back virtually to its half, and has been fluctuating between 20 to 25 percent since. The existence of the tendency that can be continually experienced since 1995 will be justified by some. Since the beginning of the 1990s, the average footing area of the flats has been increasing, and at this moment in time it has stabilized at a size of about 92 to 95 square meters. After a growing period until 1993, the number of flats terminated as opposed to that of the flats constructed has been considerably decreasing, and it has stabilized at an index number of about 20 units (falling to 100 flats constructed).

Figure 3
The Number of Rooms of the Flats Constructed, their Average Footing Area, and the Proportion of the Flats Terminated



Source: Central Office of Statistics

Entrepreneurial Housing Construction Activity in Nyíregyháza:

- Entrepreneurs constructing flats with realization purposes build currently about 100-200 flats in the town every year.
- Lands in the downtown area are the most wanted for constructing condominium flats.
- It was the raising of the amount of housing construction subvention that gave the entrepreneurial housing construction momentum in 1994, but its booming impact has been decreasing.
- In its tendency, the growth in the realization prices of the new flats built by entrepreneurs first had followed the change in the extent of consumption price index, and then it exceeded it in 1998.
- Those middle-class families represent the most important segment of the demand-side with children which have already got a flat, but who have not claimed the housing construction allowance yet.

As for the quantity, the entrepreneurs in Nyíregyháza build about 100 to 200 flats every year. There are two real estate development companies constructing permanently flats in the county seat, and at this moment in time two more development companies are expected to appear on the market, which had previously taken part in the housing construction industry in both the town and the county, respectively. At the moment, the

target areas of the market being able to compete are determined by the neighborhoods within Nagykörút (Inner City Ring Road) area of the town or the neighborhoods attached directly to it. Since substantial demands from the flat buyers' side on areas situated farther away from these ones cannot be detected for the time being, therefore there are no entrepreneurs embarking upon building up even the potential land pieces, either. Because the inner city zone is the most wanted one to be built up, as a result of this the land pieces available here are gradually shrinking. The solution is - at least for some more time - the demolition of older family houses for which higher and higher bids are being offered, and their redemption or replacement with new buildings (the land prices within the inner city zone are fluctuating between HUF 5 to 6 million).

It is the rise in the *housing construction subvention* (Hung. "LÉK", namely the former "socio-political subsidization") effectuated in 1994 that provided fresh impetus for the entrepreneurs' housing construction, the role of which is significant in the realization opportunities of the flats even these days, although the prosperity effect of the rise in the subsidization is decreasing, according to the data of the housing construction. According to the entrepreneurs, about 75 percent out of the new flat buyers raise a claim to this form of subsidization. In financing the investment, the subsidization of the families plays also an essential role. The used flats of the new flat buyers are going to be realized by entrepreneurs, who incorporate into its selling price also the *housing construction subsidization* (about 80 percent of it) accompanying the new flat. It must also be noted that one of the factors inducing the failure of a major-scale entrepreneurs' housing construction investment was the regulation restricting the aforementioned utilization of the *housing construction subsidization* accompanying the sale of used flats.

Table 3

Year	Some Housing Construction Projects Running in Nyíregyháza in the 1990s
1991	The II-a housing construction schedule ("panel project") in the neighborhood of Örökösöld came to an end, with an investment value of HUF 509 million at the moment of delivery.
1993-1994	The investment in Törpe Street; the investor went bankrupt right before the full completion of the construction; the local government bought up the enterprise, implementing the unrealized flats (20 to 30 percent of the flats constructed).
1995	The housing construction investment planned in Semmelweis Street in the neighborhood of Örökösöld.
1995-1996	The housing construction project planned in Moszkva Street (84 units).
1999	The housing construction project planned in Iskola Street (approximately 40 units).

Analyzing the changes in the realization prices of the entrepreneurial housing construction (in Nyíregyháza), those of in the consumption price index and in the net



nominal average income falling to one wage-earner⁷, two important deductions may be drawn, such as follows:

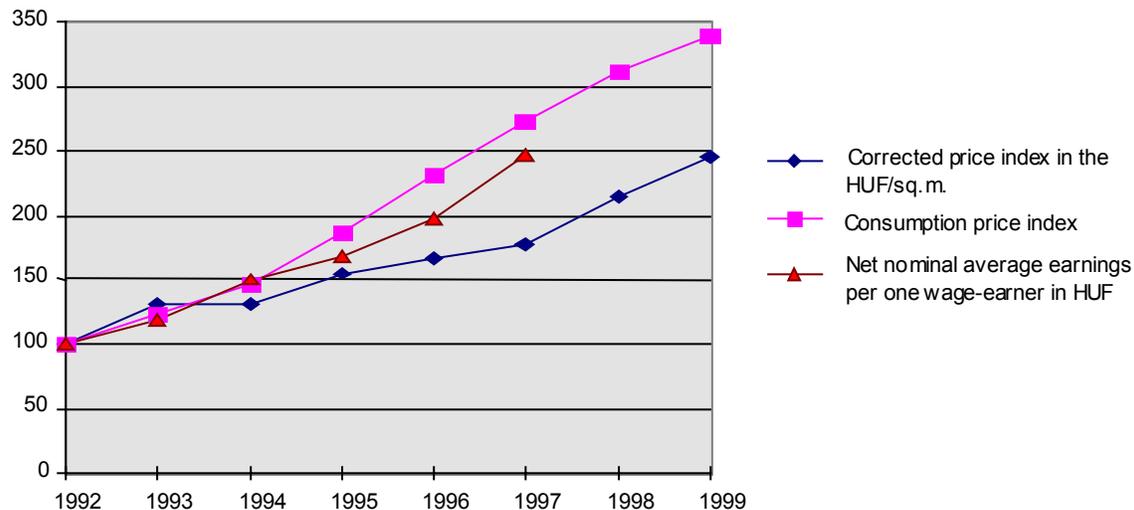
- The relative prices of the flats constructed by entrepreneurs had been stronger and stronger lagging behind the changes occurred in the consumption price index between 1994 and 1997. The earnings had exceeded the rhythm of the changes occurred in the flat prices and had endeavored to keep pace with the inflation rate, but since they did not succeeded in doing so, they had suffered loss in their real value. As a consequence of this, the saving and financial solvency capacity of the potential purchasing layer had been gradually decreasing. In 1998 (!) and in 1993, however, the changes in the local flat prices exceeded the inflation rate, and it is expected that the prices exceeding the inflation rate are going to be likely to be realized on the market. (See: *Figure No. 4*)
- The changes in the prices of the new flats constructed could follow -although with major fluctuations - the inflationary tendencies until 1997, whereas the price hike of 1998 contrary with this tendency can be interpreted as being a temporary phenomenon. It can be forecasted that the prices of the new flats constructed are going to be likely to follow the changes occurring in the price index. Even further on (namely they will be growing in a constantly decreasing measure), nevertheless the year-by-year changes in the flat prices are likely to exceed the inflation rate in the short run.

⁷ The gross monthly average income of the employees in Nyíregyháza is similar to the national average level.



Figure 4

The Prices of the Flats Constructed with Realization Purposes in Nyíregyháza (100 percent Completion Grade, VAT+), the Consumption Price Index, and the Net Nominal Average Income Rate Per One Wage Earner in Hungary



Source: Central Office of Statistics; Research Institute of Economics; National Bureau of Architecture; TOT Bureau of Architecture

The realization prices of the entrepreneurial housing construction to be expected in 1999 (including VAT):

- Flats structurally completed: 65,000 HUF/square meter
- Flats with an 80 percent completion: 100,000 HUF/square meter
- Flats with a 100 percent completion: 100,000-120,000 HUF/square meter

As being a potential demand layer for the new flats constructed at the current realization price of HUF 100 thousand/per square meter can be considered those families belonging to the middle class who have not taken the housing construction subvention (Hung. "LÉK") yet, and have a flat property.

The typical groups of buyers purchasing from the entrepreneurial housing construction sector are as follows:

- The young married couples belonging to the middle class layer who have a flat property. Any escape opportunity from the immense and unbearable outgoing inflicting those ones who live in the high-rise panel building quarters is a significant stimulating factor for the families (namely no more district-heating costs and measurable consumption possibility). (This particular group of buyers represents approximately 65 to 70 percent on the demand side).

- Those elderly married couples living in flats of large footing area and requiring high outgoing who would like to move into new flats of smaller size with less maintenance expenses (this particular group of buyers represents approximately 5 to 10 percent on the demand side).
- Those inhabitants living in the countryside who want to buy a flat for their children (this particular group of buyers represents approximately 5 to 10 percent on the demand side).
- Those people living in the countryside who wanted to raise claim to the housing construction subvention (Hung. "LÉK") but, instead of moving into their new flat, rented it out.

Some of the entrepreneurs' housing construction investments initiated in the town had aborted prematurely; these flat constructions were eventually completed by either the residents themselves or by some other entrepreneur. On account of these - in some cases uncompleted until now - investments ended in failure, the entrepreneurs have to prove their potentialities and reliability before their buyers; as a result of this - among other factors (such as the lack of local knowledge and connection nets, etc.) - it is fairly difficult for a non-local enterprise to enter into the market.

A DESCRIPTION OF THE TOWN'S HOUSING MARKET

The Potentialities of the Housing Stock and the Operation of the Housing Market:

- During the past half a year the secondary housing market in Nyíregyháza has been turning into a market of demand. A solvent demand appears to be primarily towards small-sized, inexpensive, old-typed condominium and panel estate flats, respectively. Purchasing flats with investment purposes is significant.
- The magnitude of the housing stock rented out by the local government has dropped back to 30 percent of the one in 1990. The number of flat applicants claiming (social) rental flats is bigger than the available 50 percent of the current flat stock. No local governmental rental flat has been built in the town since 1988.
- A market of demand characterizes private rental flat market, but flats are not buying built expressively with rental purposes.
- The proportion of the vacant flats does not exceed 5 percent.



The Evaluation of the Secondary Housing Market

Over the five years preceding the last half a year, there had been a housing market characterized primarily by supply in Nyíregyháza; the over-supply was about double the demand. In the last few months, the secondary housing market has begun to be transforming into a demand-orientated housing market. The solvent demand seems to be interested not in the new flats of good quality, but, in the first place, in the used, inexpensive, old-fashioned, condominium and panel-like flats, respectively, of HUF 2 to 3 million (50 to 60 square meters, 1.5 to 2 rooms). According to professionals dealing with real estate realization, the households have withdrawn their savings from the banks and have been investing them into real-estate businesses. They lease some of the real estate bought up this way in most of the cases with investment purposes. The prevailing majority of the buyers are inhabitants residing in the surroundings of Nyíregyháza. The strengthening on the demand side has influenced the prices: at this moment in time the prices of the one and a half-roomed flats previously sold at HUF 1.5 million can mount up to or exceed even HUF 2 million. Another consequence of the starting vigorousness palpable on the demand side is that there appears to be a dearth of real estate that can be acquired as a second flat (namely of the flats of 50 to 60 square meters).

Additionally, the phenomena of both the demand towards the flats in Nyíregyháza and the real estate prices being constantly upgraded can be to a large extent explained by the fact that the market value of the flats and houses are extraordinarily low in the settlements surrounding the county seat.

A lot of students attending one of the institutions of higher education buy (or their parents do) a panel colony-flat for the period of their studies, then they sell them if they no longer stay in the town.

The Rental Housing Stock of the Local Government

As a consequence of the privatization processes, the number of flats rented out by the local government had decreased to 2,440 units by 1997 from the flat stock of 8,500 units back in 1990. More than 70 percent of the residents living in the approximately 2,500 rented flats (1,800 families) have to pay arrears. At this moment in time more than 1,400 persons are registered at the local government as applicants are for social tenancy flats, although they are capable of allocating only a maximum of 20 local governmental flats yearly.

Since 1988, not a single tenancy flat whose construction would have been financed from a central or local resource has been built. Out of the 82 flats, constructed within the framework of the entrepreneurs' housing construction project subsidized also by the local government, tenants paying to the local government could move into 12 flats in 1996.



The Size of the Private Rental Sector, its Prices, and the Unoccupied Flats

The market of the flats rented out by private persons is characterized by a rising demand. The average tenant seeks for tenancy flat up to HUF 20 to 30 thousand. At the top of the imaginary list of the private rental sector there can be found the executives and leading employees working for multi-national companies, who rent real estate, of course, for multiple rental fees of the average rentals.

Private rental fees in Nyíregyháza:	
— An independent family house of 150 square meters:	HUF 100 to 150 thousand per month + outgoings
— Flats in the inner city (the most wanted ones):	HUF 60 to 80 thousand per month + outgoings
— A 2 to 3-roomed flat, fully furnished:	HUF 30 to 50 thousand per month + outgoings
— A 1.5 to 2-roomed flat (depending on the grade of the furnishing):	HUF 20 to 30 thousand per month + outgoings
— Flats in the panel buildings constructed with tunnel-frame work:	HUF 15 to 20 thousand per month + outgoings

The entrepreneurs engaged upon housing construction build flats only with realization purposes. They lease only those flats, which they cannot realize on the market.

According to certain assessments, the proportion of the unoccupied flats among the used ones does not reach 5 percent, because the owners rent out what they are able to. On the basis of the data of the Census executed in 1990, 3.4 percent of the housing stock, approximately 1,300 flats were unoccupied. Lodgings are sought for especially by the student population at the institutions of higher education, as well as by the building companies for their employees involved in constructing new department stores. This latter category, however, can be considered as only a temporary phenomenon, since the workers of enterprises - coming from other regions of the country - will return to their original residence once the construction has been completed.



The Demographic Situation: Modification in the Number of Population and in that of the Households:

- In the 1990s, the number of the residential population stagnated in the county seat, but – on the basis of the data of 1997 – a slight decrease has been characteristic ever since, owing to the moderate natural decrease and to the more significant migration-out.
- Because of the decrease of the average size of households, the number of households has grown.
- According to the data available, the number of flats exceeds that of the households.

Between 1990 and 1997, the residential population⁸ had decreased by 1,600 persons, but the number of decrease became publicly known only in the last data of the year of 1997. The change in the number of population had been characterized by slight growth both *before* and *after* the residential registration reform of 1994, which was a yearly 0.2 to 0.3 percent representing approximately a 230 to 360-person increase every year⁹. The thousands of Nyíregyháza residents (an excess number of residents) not staying permanently in Nyíregyháza (which could have meant approximately 2,200 households at the end of 1995), or at least a great number of them, are supposed to move back into the town, providing so a potential demand for some of the new flats to be constructed.

Between 1990 and 1997, the number of living births had decreased. The last three years were characterized by stagnation (11.7 to 11.8 living births per 1,000 residents). After the year of 1994, the growth in the mortality rate reversed and, at this moment in time it is characterized by a decreasing tendency. The origin of all this, the indicator of the natural increase in the population has been positive since 1995 (it was - 3.8 per 1,000 inhabitants on the national average). The migration difference is an indicator characterized by also a positive sign (1.4 per 1,000 residents in 1996), consequently on the basis of the indicators characterizing the modification in the town's population the increase is the characteristic tendency. According to the lesson provided

⁸ The *residential population* is the total number of the persons having a registered permanent flat, but not having elsewhere a temporarily registered flat, and that of the persons having a registered, temporary flat in the place of registration (Hungarian Statistical Yearbook, 1995). The term *residential population* covers also those citizens who live not in flats but at institutions providing permanent accommodation (the number of people looked after at institutions providing permanent lodging or temporary accommodation in Nyiregyháza in 1996: 892, whereas in 1997: 1,010).

⁹ At the end of 1995, 119 thousand persons had a permanent registered flat in Nyiregyháza, which means that 6,000 (6,181) more people than the number of residential population. Consequently, from the point of view of the permanent residents of the town the number of temporary registrations (temporary residential permits) was a positive indicator, namely the number of Nyiregyháza residents registered also in another settlement exceeded the number of residents registered in the town itself.



by the data of 1997, however, the increasing tendency in the population number of the town seems to reverse, and at this moment in time the negative migration, the moving out of the town (the removal) gets characteristic (the residential population has decreased by approximately 500 inhabitants - i.e., by approximately 170 households, which means a 0.4 percent decrease, in comparison with the year of 1996).

According to the data of the Census that had been carried out in 1990, there were 39 thousand (39,318) households in the town; about any further modification of this figure there are no data available for us, consequently we cannot but refer to some careful assessments. According to the professionals in Nyíregyháza addressing the data of the demographic changes, the size (!) of the households follow the national tendency, exceeding it a little bit. As a bottom assessment of the average size of the flats in Nyíregyháza we can accept the national data, however when comparing them with the county's data one might draw the conclusion that the latter data reflect the tendencies characterizing the town much better than the national data. The city life-style is highly likely to have an influence upon the number of households, therefore - according to our assessments - the average size of the households had already been under the county average in the second half of the 1990s (the number of residents sharing 100 households was 275 in 1996).

Table 4
Changes in the Number of Residents and in that of the Households in Nyíregyháza

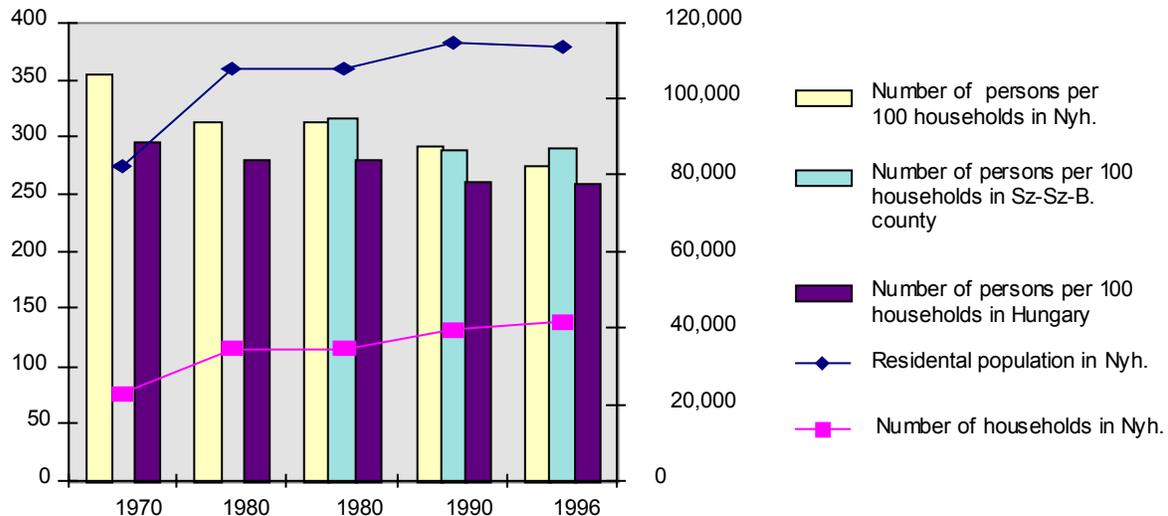
	1970	1980	1990	1996
Residential population in Nyíregyháza	82,046	108,156	114,596	113,489
The number of households in Nyíregyháza	23,204	34,559	39,318	41,268 ⁽²⁾
The number of persons per 100 house-holds in Nyíregyháza ⁽¹⁾	354	313	291	275 ⁽²⁾
The number of persons per 100 house-holds in the county of Szabolcs-Szat-már-Bereg	no data available	316	289	290
The number of persons per 100 house-holds (national data)	295	279	260	258
The number of residential population per 100 flats in Nyíregyháza	no data available	331	270	270

(1) Calculated figures: The ratio of the residential population and the number of households

(2) Assessment

Source: Central Office of Statistics

Figure 5
Changes in the Number of Households in Nyíregyháza, in the County, and in Hungary



Source: Central Office of Statistics

In connection with the demographic situation of the county seat one can conclude that its residential population stagnated in the 1990s. On the basis of the 1997 year data, the population of the town seems to be slightly decreasing, which can be due to the fact of, on the one hand, the moderate natural decrease (*negative natural birth-rate indicator*) and of, on the other hand, the migration to a major extent (*negative migration balance*). As a consequence of the decrease of the average size of the households, the number of households has increased, which meant approximately 2,000 “new” households in the period between 1990-1996.

It seems to be relevant to be noted that whereas the number of households had exceeded the number of flats by approximately 800 households in 1990, - according to the evaluated data of 1996 - this tendency has reversed, and by today there are more flats in the town than households (it meant a surplus of 800 flats on the scale in 1996). In other words, only the so-called quantitative flat shortage taken in the broad sense of the word, which arises from the difference between the two indicators, is NOT characteristic for the county seat.

The Role of the Local Economy and the Employment

- The role of the town of Nyíregyháza in the economy of the county is prominent. One third of the scarce foreign investments in the county is concentrated in the town.

- There can be found 11 thousand enterprises pursuing factually various economic activities in the county seat. Out of the companies employing over a 300-strong personnel there can be found 11 here.
- The number of the registered unemployed is 11.5 thousand, and the unemployment rate is 15.4 percent.

Nyíregyháza plays a remarkably important role in the county's economy. Here can be found approximately the half of the seats of the county's profit-making orientated organizations, operating with an enterprise density higher than the national average. Regarding the county as a whole, the role of foreign investments with profit-making orientated companies is insignificant. One third of the foreign investments in the county has been concentrated in the county seat (data of 1996). By the beginning of 1997 four enterprises established with the help of foreign capital of over HUF 100 million had been registered in the town; since then to these latter four two more enterprises that transformed into foreign interest must be attached. The total foreign value of foreign investments with companies having their headquarters in the county seat had mounted up to HUF 10.5 billion at the end of 1996, which means 0.7 percent of the country's total foreign investment value, and out of whose sum 30 percent had flooded into the enterprises of Nyíregyháza.

In 1996, the number of operating enterprises per 1,000 residents was 98 in Nyíregyháza, and 50 in the County of Szabolcs-Szatmár-Bereg (the provincial average without the capital is 60, whereas Hungary in total 69. Source: Central Office of Statistics 3.).

11 thousand enterprises engaged upon pursuing factual economic activities in the county seat, in which approximately two-thirds were self-employed enterprises. Out of all the 21 companies having over a 300-strong employee staff, 11 had based themselves in Nyíregyháza in the early 1997. On the basis of the main activity of the operating companies, 39 percent were aligned - under the title of national economy - with the category of ameliorating the commerce, 21 percent were aligned with real estate businesses agents and other adjacent services, 12 percent were aligned with industry, 7 percent were aligned with the building industry, and 3 percent were aligned with agricultural enterprises.

In 1996, 30 percent of the employees in the county were employed in the county seat. One-third of the employees have been employed by entrepreneurs engaged into the general industry and processing industry, whereas the majority of them (58 percent) have been pursuing some activity in one of the branches of the servicing industry, as interpreted in the broad sense of the term. The half of the employees being employed for jobs dealing with financial affairs, real estate businesses, and building activities have been residing as employees in Nyíregyháza. The largest companies employing industrial workers in Nyíregyháza are as follows: *SZABOLCSTEJ* Dairy Products

Processing Company and *EKO* Ltd., both of them employing a 900-900-strong personnel; *START* Rehabilitation Company and its Joint Institutions, and *TAURUS* Agricultural Tyres Ltd., having more than 1,200 employees.

The unemployment rate in 1992 was the highest in the county seat; currently it could be characterized as being in a stagnating phase. According to some professional outlook, the number of around 5,000 can be expected not to change for 1999; or else there may be a tendency to be expected of slight decrease. Alongside with the presence of this unemployed layer, there exists a group of approximately 5,000 other unemployed people who do not have regular income. The number of the registered unemployed is 11,495, which meant a 15.4 percent unemployment rate in Nyíregyháza¹⁰ in January 1999. The registered unemployed persons in Nyíregyháza (as those ones elsewhere) come from the least qualified social layer; 24 percent of them finished merely primary school, 41 percent of them finished some vocational or specialized technical school, 30 percent of them graduated from high school, and 6 percent of them have a college or university degree.

One of the significant factors related to the employment issue is that the vast majority of the unemployed people are not capable of assuming any regular work any longer. This phenomenon is well-proven by a workers' recruiting action carried out by a plant, in the course of which the firm could find in the town only two-thirds of the originally planned labor force to be employed, on account of the aforementioned reasons.

Table 6
The Number of Unemployed People (end-of-year data)

Year	The number of unemployed people
1992	9,802
1993	no data available
1994	6,807
1995	6,375
1996	5,320
1997	5,901
1998	5,500 ⁽¹⁾

(1) Figure expected

¹⁰ Source: Világ gazdaság [*World Economy*, a journal published in Hungary], February 26, 1999. The origin of the data comes from the Center of Labor Force in the County of Szabolcs-Szatmár-Bereg. At the beginning of 1997, 8 percent of the residents at the corresponding age in the town of Nyíregyháza (namely women at the age of 18 to 54, and men of 18 to 59 years of age) were registered as *unemployed* people at the Center of Labor Force; the corresponding proportion was 14 percent in the county.



(This chapter has been prepared on the basis of the studies written by the County's Administrative Office of the Central Office of Statistics - *Central Office of Statistics 2, 3, and 4.*)

Income Situation and Savings

The gross average monthly incomes are similar here to the domestic ones, having been HUF 45,000 per month in 1996. A household with two breadwinners had an average monthly income of about HUF 60,000, which meant an amount enough for maintaining a four-member family at the level of around the existence minimum.

- The above-mentioned two-breadwinner household has an income of about HUF 70,000 to 75,000.
- The number of families inflicted with arrears was HUF 8,000 to 10,000 in January 1998.

Incomes in the county lag well behind the country's average by 15 to 20 percent because of the quality and structure characterizing its economic performance capacity, the immense burden of its untrained labor force, and the bigger subsidizing obligations, which are the strongest income-influencing factors.

The dimension of the family-supporting obligation in Nyíregyháza is similar to that of the county itself, with the difference of higher earnings in favor of the county seat. The gross monthly average income of the employees in Nyíregyháza is similar to the national standard, which surpasses by 20 percent the county's average income rate. Financially speaking, the average gross income rate in 1996 was HUF 45,000 per month, within of which blue collar workers could take home HUF 33,000 gross per month, whereas white collar ones could HUF 58,000 gross per month. In accordance with the assessments carried out by the officers of the county's statistical office, in the above mentioned year two active wage-earners had HUF 60,000 net per month on the average in Nyíregyháza, which meant approximately the minimal subsistence level of a household with 4 members. According to the prediction of the members of the local working team, the same household as above would earn in 1999 approximately HUF 70,000 to 75,000 net per month.

About the residents in Nyíregyháza falling into arrears: in January 1998, the number of families having fallen into arrears was approximately 8,000 to 10,000, which fact displays a 15 to 20 percent relative frequency. On the other hand, the percentage of families being in long-lasting arrears is about 30 to 35 percent (within the households having fallen into arrears), which signals a rate lower than the 53 percent of the national average.



THE ROLE AND OPPORTUNITIES OF THE LOCAL GOVERNMENT IN ASSISTING WITH THE ENTREPRENEURIAL HOUSING CONSTRUCTION

- The Local Government of Nyíregyháza has laid a special emphasis upon subsidizing housing construction, but because the resources available were enough only for shaping building sites and stimulating and subsidizing the entrepreneurial housing construction activity, the plans as outlined in the housing concept in some cases could not be fully implemented.
- The Local Government supported entrepreneurial housing construction by land sales and examining the possibilities some role players – i.e., the local governmental tenants - on the potential demand side may have in it.
- In January 1993 in Nyíregyháza, for the first time in the country the value-based real estate tax extending over establishments/premises constructed for non-living purposes was introduced.

The Local Government of Nyíregyháza lays a special emphasis upon the importance of housing construction. In the housing construction concept prepared, the local government had indicated the construction of an elderly people's home and that of a studio flats' building for the young, but it had to expend the resources attached to these investments on the implementation of other tasks. Between 1995 and 1998, approximately 60 building sites had been prepared for occasional constructions, whose bulk became furnished with full public utility network. The fact of having prepared the *Regional Rehabilitation Plan* [abbreviated as "RRT" in Hung.] - e.g., the area of the village of *Bujtos* -, and that of having made certain areas incorporate into the downtown district (e.g., in 1995, the area situated north of *Örökösöld*; in 1996, some inner area in *Butyka*, the southern side of *Orosi Street* in *Oros*; in 1997, the area situated on the eastern side of *Törpe Street*; in 1998, approximately 55 hectares out of the area situated near the linking road *Korányi-Pazony*, whose one-fifths is a commercial-economic zone, and whose remaining part is residential area) could conjure up some more good opportunities for turning more ground into further residential districts.

In the interests of subsidizing the entrepreneurial housing construction and the chance of flat acquisition, the local government realized two lots possessed by itself through an open tender. With the purpose of a less circumstantial realization concerning the flats to be constructed on these sites and with that of wanting to increase the rental flat stock, it also took a very active part in tracking down the would-be flat proprietors. It sent out questionnaires to the families living in the tenement-dwellings with two and more children in order to get to know their mobility intentions and their private resources indispensable for carrying out a plan like that. On one of the two building sites announced in the tender, the entrepreneur-type investment was completed with success, and into 12 out of the 84 flats constructed local governmental tenants moved.



The fact that the value-based real estate tax was introduced firstly in the country (January 1, 1993.) has an inherent/direct connection with the real estate development. Its basis is the real market value, which gets determined on the basis of the contract of sale or the real estate value assessment, respectively. It extends over all types of establishments/premises constructed for non-living purposes, with the exception of holiday homes and garages. (Consequently, workshops, shops, service premises, establishments, etc., are concerned.) On the basis of the experiences gained so far, the inference can be drawn that only approximately 50 percent of the planned proceeds rolls back. Since many of those involved could not still accept the new procedure, they disobey their tax return and payment obligations. It is under planning that habitation tax will be levied upon holiday homes and even garages over a certain value limit. According to the present experiences, there is a wide-spread protest against the introduction of the new tax items. In the case, however, when the amount paid is being collected onto a separate bank account or on an important purpose worth being supported, the paying inclination is increasing. (Such a purpose - that could be made generally accepted - is/would be the support of housing constructions housing rehabilitation/renewals, in the framework of which (inner or outer) professionals could be permanently employed for the implementation of the above-mentioned objectives.)

ASPECTS OF INTERPRETING THE HOUSING CONSTRUCTION TRENDS CHARACTERIZING THE COUNTY AND THE COUNTY SEAT, RESPECTIVELY

The Causes of the Prominent Volume of the Housing Construction

- The lower income-rate of the households in the county seat and the relatively low construction costs upgrade the significance of the different types of subventions, in comparison with those of other areas displaying different income and housing market characteristics.
- Although the County of Szabolcs-Szatmár-Bereg “excelled” at having committed abuses with regard to the acquisition of housing construction allowances, the county seat, however, may rightly be “proud” of barely a few cases like the kind.

In connection with the significance of the housing construction subvention, a far obvious fact is worth being mentioned, according to which in the county the (relative) role and importance of the subsidization’s are getting upgraded, on account of the lower income rate and the relatively less expensive building costs. The increased subsidization ratio appearing in the whole building/purchasing costs has a positive influence upon the housing investment inclination as well. Let us consider a simple example of this below:

Table 7
The Effects of the Change of Subsidy on two Different Housing Markets

	Budapest		Nyíregyháza	
	Without allowance	With allowance	Without allowance	With allowance
The net monthly income of the household (HUF 1,000)	100	100	60	60
The net annual income of the household (HUF 1,000)	1,200	1,200	720	720
The price of the new flat (HUF 1,000 per square meter)	120	120	100	100
The price of a 50 square meter flat (HUF 1,000)	6,000	6,000	5,000	5,000
Housing construction allowance (HUF 1,000)	—	1,200	—	1,200
The ratio of housing construction allowance to the housing price (in percent)	—	20	—	24
The ratio between housing price and household income* (in percent)	5.0	4.0	6.9	5.3

**Subsidy has been deducted from the purchasing price of the flat.*

The example elucidates the fact that in the case of lower household income and lower cost of flat the ratio between the housing cost and the household income drops back to a greater extent than it does in the case of Budapest. In other words, the family represented by our example receives relatively higher subsidization through the housing construction subvention. In the case of identical income rates and different housing prices the decrease present in the housing price/household income ratio is of identical degree. The consequence that can be drawn from the example (illustrating how sensitively the housing construction inclination reacts to the extent of subsidy) and that can be projected onto the macro-level is that the areas with lower income and housing prices react with greater sensitivity to the changes effectuated in the subsidies.

Professional analyses (R. Kovács, 1997.) prove that the County of Szabolcs-Szatmár-Bereg performed “eminently” on committing fraudulent malpractice in the interests of snatching the housing construction subvention, and this circumstance must be taken into consideration when it comes to evaluating the data of the extensively of housing construction. According to the information provided by the members of the local government, on the administrative territory of the town there have been only a few cases of misuse registered. Over the past three years there were altogether five such cases detected, whereas in 1998 there were none at all. The fraudulent misuses in



connection with the housing construction subventions are characteristic primarily for the settlements in the countryside, and understandably, of course, for the agglomeration settlements surrounding Nyíregyháza proper as well. At this moment in time both the local governments and the lending institutions address these types of constructions much more carefully than before, and nip the trials of the kind in the bud.

A Comparison of the Intensity of Housing Construction in Nyíregyháza with that of in Other Towns of a Similar Size

- When comparing the tendencies of the housing construction in towns having similar number of residents, we may conclude that the economic development and prosperity do not necessarily mean an increase in the volume of housing construction, since there is a more intensive housing construction activity in the less developed towns.

Having compared the housing construction indicators of Nyíregyháza with those of other three towns having a similar number of populations, one might draw the conclusion according to which the indicator has dropped in all four settlements, in comparison with the 1990 situation. This fact does not provide a value of discovery in itself, nevertheless it is an interesting phenomenon to observe that in the given housing construction indicators of the two county seats (Győr and Székesfehérvár), considered to be the strongholds of the national industry and thereby the outstanding examples of the current economic development, the impact of the economic development cannot be experienced (yet?), and the housing construction indicator of these two large towns keeps on staying under the housing construction indicator of the other two county seats, Kecskemét and Nyíregyháza. For the explanation of the phenomenon, we can mention two reasons: on the one hand, the impact of the “economic boom” is likely not to be seen as a change to be easily demonstrated in the short run, because it rather brakes the volume of the housing construction. The impacts appearing in the long run, namely the reverse of the negative tendency is not a perceptible phenomenon yet. On the other hand, the favorable economic and investment opportunities can appear for a short while as the alternative expenses following the housing construction or the purchase, namely one part of the households representing the solvent demand side does not appear on the housing market but is rather “doing business”, because its investment has much better recovery than an investment turned into real estate. The counter-pole of the above-mentioned explanation can also be a relevant factor when the phenomena of the prominent housing investments have to be understood in the case of economically underdeveloped regions. In other words, it is possible that it was just the dearth of investments furnished with satisfactory yield (and that of the capital to be invested) that caused the housing investments to be increasing, because it was considered by the households as to be an “investment” providing the most profitable yield, making the fortune be growing.

When it comes to drawing the inferences, some additional factors must also be taken into consideration, such as the structure of the housing stock, the tendencies of the housing market, and the differences on the scale of the moving-out into the agglomeration surrounding the town (the data related to the agglomeration and the smaller regions can be found in *Appendix No. 3*).

Table 8
Data on the Population and Housing Factors in Four Towns with Similar Number of Residents

	Name of the town			
	Székes- fehérvár	Nyíregy- háza	Győr	Kecskemét
The number of population on January 1,1997	106,772	113,489	127,429	105,155
Change in the number of residents 1997 to 1990	-2,889	-1,598	-2,301	1,647
Change in the number of residential population per 1,000 residents (1990)	-26.5	-13.9	-17.8	15.9
Natural increase per 1,000 residents (1990)	2.7	3.9	1.2	2.8
Natural increase per 1,000 residents (1997)	-1.3	-0.1	-2.3	-1.1
Migration balance per 1,000 residents (1990)	-1.4	—	0.8	7.2
Migration balance per 1,000 residents (1997)	-3.9	-4.2	1.3	1.7
The number of flats built per 1,000 residents (1990)	4.7	7.2	3.3	5.8
The number of flats built per 1,000 residents (1997)	1.6	4.3	1.8	4.5
Personal income tax re turns in HUF billion in 1997	1.38	1.25	1.63	1.15
Personal income tax returns per capita in HUF million in 1997	12,966	11,072	12,830	10,975

Source: Central Office of Statistics



The Territorial Specification of the Housing Market in Nyíregyháza

- The number of inhabitants of nine settlements belonging to the Nyíregyháza agglomeration has been increasing as an impact of the rising natural birth rate and/or the migration-in, as a consequence of which the intensiveness of housing construction has also, is increasing.

Until this point in the analysis, we have stayed within the administrative boundaries of the town of Nyíregyháza. However, we must not ignore the fact that some examinations should also be carried out in the attracting areas surrounding the county seat. Such an examination seems to be even more motivated if we consider the remark of one of the prominent professionals engaged upon real estate development matters in Hungary, according to which “it is the agglomerations of the present-day Hungary where the housing construction of fine quality can be found”.

According to analyses carried out by specialists, the 14 settlements situated around the county seat can be considered as the town’s attracting area¹¹. From the countryside and the settlements of the agglomeration area there are still people moving into the county seat, but a tendency opposite to this can also be simultaneously observed, namely there are also families moving out from the town to the neighboring settlements (e.g., Oross, Nyírtelek). There are appearing the “emigrating” intellectuals in the neighboring settlements (e.g., Nagykálló), and some settlements want deliberately to attract the young settling families (e.g., Sénye).

In the table below (see *Table No. 9*), settlements belonging to the agglomeration zone of Nyíregyháza have been categorized, on the basis of the data of 1997 on the natural increase and migration rate of the residents.

The population of the settlements (including also the county seat) that can be found in the first group (“*decreasing*”) had been decreasing - or had stagnated - between the years of 1990 to 1997. Currently the balance of both the natural increase and the migration rate is negative that is the number of birth cases does not counterbalance the number of deaths, and migration is the characteristic tendency. In 1990, these settlements had performed positively with relation to both indicators, apart from the migration balance of the village of Kállósemjén.

In the second group (“*increasing*”) the settlements had enjoyed an increase in the number of population between the years of 1990 to 1997, and the balance between the number of births and migration rate was positive in 1997. In parallel with the decrease in

¹¹ The “First Development Association in Nyírség” constituted by the county seat and the 14 agglomerate settlements consist of 15 local governments. Each settlement is bordering on Nyíregyháza. On the basis of the agglomeration research executed by the County Directorate of the Central Office of Statistics, it is these settlements that can be regarded as belonging to the agglomeration zone of Nyíregyháza. Two of the settlements established tighter links, eight of them established looser ones with Nyíregyháza.

the birth rate indicator, it is a remarkable phenomenon worth being mentioned that the migration halted and the immigration became a tendency.

The third group (“*emigrating*”) can be characterized by positive/stagnating birth rate indicator and by a definite migrating tendency. The relative change in the number of population indicates a slight increase in comparison with the year of 1990.

The population of the fourth group of settlements (“*immigrating*”) has increased compared to 1990, and the current tendencies can be characterized by a “natural decrease” and a significant immigration indicator.

It follows from what has been said above, that in the settlements belonging to the “increasing” and “immigrating” groups the intensity of housing construction activity increased compared to 1990, while it decreased in the case of the settlements belonging to the other two groups.

Table 9
Changes in the Size of Residential Population and Housing Construction in Nyíregyháza and in the Settlements belonging to the Agglomeration Zone in 1990 and in 1997

Name of the village	Change in the number of residential Population 1990-1997	Change in the number of residential population per 1,000 residents (1990)	Natural increase per 1,000 residents (1990)	Migration balance per 1,000 residents (1990)	Number of flats built per 1,000 residents (1990)	Natural increase per 1,000 residents (1997)	Migration balance per 1,000 residents (1997)	Number of flats built per 1,000 residents (1997)
Nyíregyháza	-1,598	-13.9	3.9	—	7.2	-0.1	-4.2	4.3
Apagy	11	4.7	4.3	2.1	6.4	-3.9	-0.9	8.1
Kállósemjén	-201	-47.8	4.5	-4.5	4.3	-4.5	-3.5	3.0
					6.0			5.1
Sényő	104	80.9	11.7	-13.2	3.1	2.9	—	5.8
Napkor	161	47.0	8.4	-2.9	8.5	6.4	6.1	5.3
Nyírtura	134	83.5	6.9	-8.1	5.6	0.6	3.5	2.3
Kótaj	205	51.3	—	-25.0	7.3	5.5	6.7	10.9
Nagykálló (1)	28	2.8	3.9	-7.5	3.7	2.3	2.7	5.4
					5.6			5.9
Nagycserkesz	74	42.7	-3.5	-22.5	5.8	7.2	-3.9	3.9
Nyírtét	-10	-8.9	2.7	10.7	7.1	—	-6.3	10.8
Újfehértó	295	22.6	9.0	-7.7	5.7	1.5	-2.5	3.6
Kálmánháza	40	19.7	-0.5	-10.3	3.9	1.0	-4.3	2.4
					5.6			5.2
Nyírtelek	296	44.5	0.6	9.5	6.6	-1.7	11.2	10.2
Kemecse	277	61.4	2.9	-8.2	7.3	-1.7	6.9	7.7
Nyírbogány	68	24.0	3.9	-2.5	6.0	-1.0	3.8	6.9
Nyírpazony	248	90.3	-1.1	21.1	6.9	-3.0	12.7	4.0
					6.7			7.2

(1) It is not a member of the “First Development Association in Nyírség”, but from the perspectives of the issue it is an important settlement.

Source: Central Office of Statistics



The Analysis of the Demands towards Housing Construction in the 1990s

- According to a “retrospective” analysis regarding housing demands, almost in every year there were constructed more flats in Nyíregyháza than it would have been motivated by the calculated income-rate. The reason for this is the inappropriate operating of the institutional system of the housing market (housing subsidies and housing loans).
- The increase in the number of the flats terminated in 1992-1993 and the significant decrease in the housing construction activity induced unsatisfied demand, contributing strongly to the growth in the number of housing construction activities started in 1994.

In this part of the study, a model - later employed for making forecasts - is going to be presented (on the basis of the studies of *N. Carn - J. Rabiński - R. Racster - M. Seldin*). Beyond our intention to introduce the model employed for analyzing the demands present towards the new flats constructed, we would also like to make some important conclusions in connection with the housing construction achievement and housing demands of the county seat. Thus, in this chapter we will be analyzing the housing demands of the 1990s “backwards in time”, as though we were in 1990 preparing an imaginary demand forecast for the forthcoming seven years.

Table 10
The Housing Demands towards New Flats Constructed in Nyíregyháza in the 1990s

	1990	1991	1992	1993	1994	1995	1996	1997
Yearly demand								
(1) The change in the number of households	330	330	330	330	330	330	330	330
(2) Losses owing to demolitions	25	32	41	48	37	72	42	52
(3) Other losses (e.g., natural disasters)	26	51	83	91	88	66	52	36
(4) The number of flats necessary for transformations; substitution (+/-)	96	100	101	101	103	104	105	106
(5) The number of all the flats terminated (lines 2+3+4)	147	183	225	240	228	242	199	194
(6) The yearly demand (lines 1+5)	477	513	555	570	558	572	529	524
Construction								
(7) Housing construction or “pipeline” accomplishment	825	805	416	301	637	603	732	486
(8) Minimal production requirement and reserve (e.g., display/model flats)	20	20	20	20	20	20	20	20
(9) The number of housing constructions forecasted (line No. 7 or line No. 8)	825	805	416	301	637	603	732	486
(10) The unsatisfied demand (+) and the over-supply (-) (lines from 6 to 9)	-348	-292	139	269	-79	-31	-203	38

	1990	1991	1992	1993	1994	1995	1996	1997
Unoccupied flats								
(11) The number of all the unoccupied flats on the market	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300
(12) The "frictional/normal" vacation (minimum level)	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250
(13) The unintentional vacation (lines 11+12)	50	50	50	50	50	50	50	50
Unsatisfied demand, housing construction opportunities								
(14) The net unsatisfied demand (+) or the vacation surplus (-); (lines from 10 to 13)	-398	-342	89	219	-129	-81	-253	-12
(15) Housing construction opportunities to cover the unsatisfied demand at a yearly level		-740	-651	-432	-561	-642	-895	-907

While having prepared the model analyzing the demand side, we have employed more various hypotheses, which we will be conveying in the description expounding the sense of the above lines.

As a first step, we are going to define the size of the yearly demand, which will be represented by the growth of the number of households and the demand that had been generated by - for some reasons or others - the termination of some flats:

- (1) The change in the number of households: here we have employed the yearly average change (+330 households) publicized by the Central Office of Statistics.
- (2) Losses owing to demolitions: in this line we have encapsulated the number of flats terminated by housing construction.
- (3) Other losses: here we have written the number of flats terminated for every different reason other than as under (2) above.
- (4) The number of flats necessary for transformation; substitution: in this case we have made the presumption according to which the number of substitutions necessary for the transformations (e.g., turning flats into offices or selling premises) is positive, that is approximately 0.25 percent of the housing stock every year on the scale; in other words about 100 flats "disappear" in this manner out of the full housing stock.
- (5) The number of the flats terminated: the term comprises the total number of the flats terminated because of demolitions, transformations, and for any other reasons.

- (6) The quantity of the whole yearly demand: this heading covers the idea of the total amount of the growth experienced in the number of households and the number of all the flats terminated.

The following data are going to display the achievement of the demand side, that is they will summarize the number (to be expected) of the housing constructions. In this case we will use the real housing construction data in the course of the forecast, then we will employ assessments with relation to the prospective number of housing constructions. The (prospective) number of housing constructions is going to be compared with the minimal number of that flat quantity which will have to be constructed by the local enterprises so that they should be able to retain their most important employees, to maintain their office, to make display/model flats of their own operate, as well as to keep on remaining the participants of the housing market even further on. Inasmuch as the (prospective) number of the housing constructions were to exceed the number of flats of the so-called minimal housing construction "constraint", the demand indicator - in the prospective case - will be given out by the necessary quantity of housing constructions forecasted, otherwise - in the case if the number of real housing constructions were to fall short of the prospective number - it will be given out by the latter factor, namely by the minimal number of the necessary housing constructions.

- (7) Housing construction or "pipeline" accomplishment: in this rubric the factual quantity of the housing constructions has been incorporated, but in the course of preparing the forecast we will write the figures of the accomplishments to be expected, that is the amount of the so-called "pipeline" accomplishments. This term indicates actually that particular estimated figure which is to show how many flats will be surely being constructed in a given year, namely it has already become incorporated into the "pipeline".
- (8) Minimal production requirement and reserve: this means the estimation of the above-mentioned minimal production. The rubric does not provide significance (yet) in the Hungary of the 1990s, since the vast majority of the housing constructions is being carried out through employing private resources, in the case of which this rubric cannot be interpreted.
- (9) The number of housing constructions forecasted: this factor corresponds either to the prospective number of the housing constructions or to the indicator of the minimal production.
- (10) The rubric of the unsatisfied demands and the over-supply sheds light upon the difference appearing between the demand (line No. 6) and the prospective supply (line No. 9).

According to the presuppositions present in the model, the satisfaction of the demands originating from the growth in the number of households, in that of the flat



terminations, and finally in that of the flat transformations can be carried out by turning back the unoccupied flats into circulation - in the case if there are not enough new flats constructed. At this stage, the used flats' market cannot be taken into serious account, because the surplus demand originating from the newly established households will find the supply either in the new flats constructed or in its decision on buying a used flat, although in this latter case it is a must for the seller of the used flat to move into a new flat.

- (11) The number of all the unoccupied flats on the market: under this heading the number of the uninhabited flats, considered as being so on the basis of the Census conducted in 1990, has been defined as "unoccupied flats".
- (12) The rubric of the "frictional/normal" vacation points out the fact of how low the minimum level of this vacated housing stock lies. This vacated housing stock is "always" vacated, consequently it does not offer any supply for the surplus demand. It has been assumed that merely a fragment - that is 50 flats - of the unoccupied flats provides a reasonable supply.
- (13) The heading of the unintentional vacation displays the number of the unoccupied flats presenting the supply, which might as well absorb some of the surplus demand.

It is the net unsatisfied demand or the vacation surplus and the indicators of the opportunities offering housing construction chances that provide information for the entrepreneurs about the opportunities assessed on the market.

- (14) The net unsatisfied demand or the vacation surplus indicates the fact of how the supply and demand interrelate on a particular market at a yearly level.
- (15) The housing construction opportunities employ the information being given relating to the yearly level in a way that they accumulate the values of the unsatisfied demand or the surplus vacation, because the market will absorb the new flats constructed out of the supply shortage or out of the surplus in the forthcoming year(s).

Naturally, the data presented and formulated in the *Table* contain more presuppositions and assessments, which are considered to be as rough approaches rather than facts. The professionals knowing the local market well and dealing with the real estate businesses in practice could - on the basis of their information - provide substantially more exact assessments with relation to the above-exposed variables, thereby they would/will be able to give explanations and forecasts standing closer to the reality on the supply-demand interrelations. Simultaneously with the acceptance of the above parameters assessed by us, some interesting deductions might be worth being



drawn in connection with the housing demand characterizing Nyíregyháza, thereby proving the practicability of the model as well.

With the exception of two years (1992 and 1993), more flats had been being constructed than the calculated demand it would have motivated by the calculated demand (see the negative figures in lines 14 and 15). An explanation for this “over-construction” can be found in the constructions carried out by having employed private resources, notably in the fact according to which a substantial majority of the ones constructing flats by employing private resources embark upon housing construction, either because they are incapable of entering into the used flats’ market (not being supplied with the subvention necessary for this), or because of the fact that the segment of the (used) flats’ market available for them is not appropriate (e.g., they could purchase a used flat out of the resources available for them, but they still plump for deciding on constructing a family house in a way that the sum necessary for the construction does not stand at their disposal, consequently the construction will be dragging over years). The aforementioned “distortion” (i.e., they embark upon housing construction because they are unable to enter into the used flats’ market) can be regarded as being operational failures present in the institutions (e.g., housing construction subvention, housing credits) of the housing market, which are supposed to be gradually decreasing to a minimal level by the transformation and modernization of the institutional system. By consequence, it must be noted that the negative figures present in the unsatisfied demand (see rubric No. 14) and the housing construction opportunities (see rubric No. 15) are not meant to suggest the idea that there should be no use in dealing with the entrepreneurs’ housing construction in the county seat, but merely the fact that- because of the decisive importance of the housing construction implemented out of private resources - the information is being carried by the fluctuations and not by the absolute figures of the model.

The increase in the number of the flats terminated between 1992 and 1993 by more than 50 percent (in comparison with the year of 1991) and the decrease in the housing constructions to a considerable extent resulted in a net unsatisfied demand. What is more, this fact may have been likely to be instrumental in the increase in the number of housing constructions perceptible from 1994 on (and not only the subsidizing amount of the augmented housing construction subvention).

THE PROSPECTIVE FORECAST OF THE DEMANDS IN THE ENTREPRENEURIAL HOUSING CONSTRUCTION SECTOR

On the basis of the data available for us, in this chapter we are going to make an attempt at making statements and forecasts concerning the demands to be expected manifesting towards the entrepreneurial housing construction with relation to the forthcoming five years.



Household projections

- The number of the households in Nyíregyháza is expected to be growing by approximately 330 on average every year until 2005, whereas the number of persons falling to 100 households is expected to drop back to 240.
- Out of the age groups mostly affected by marriage and family establishment the one of the youth between 25-29 years of age will intensively be increasing during the five-year-period examined.
- The marrying inclination is not likely to be intensifying, but there are odds that the diminishing trend in the marriage inclination, characteristic can come to a halt on account of the enlargement of the younger age groups.

On the basis of the prognosis prepared by the County Directorate of the Central Office of Statistics, the residential population of the county seat is expected to be slightly decreasing in the forthcoming years, notably by approximately 100 to 200 persons on the average every year (this prognosis can be read through in its complete extension in **Appendix No. 3**). The impact of the natural births and migratory indexes influencing the trends of the demographical changes is also a contributory factor to the moderate decreasing tendency in the town's population.

As a result of the modification in the number of population, the number of the households is expected to be slightly diminishing, but as a counter-effect due to the demographical impacts characterizing the population (*e.g.*, a youthful age structure) and to the changes in the lifestyle (*e.g.*, divorces, the prestige of a lifestyle of living alone, the births out of wedlock), the number of the households is expected to be prevailing by approximately 330 on the average every year until 2005 in Nyíregyháza. Taking into consideration the structure of the growth forecasted regarding the number of households, it can be taking shape under the following circumstances:

- The number of the households consisting of only one family will be - although to a lesser degree than before - increasing.
- Similarly to the county indexes, the number of the households establishing households bearing the coexistence of more families is also expected to be increasing.
- A moderate increase is expected to be experienced in the number of the unipersonal households, although one of the components of this phenomenon, which is the chance of the appearance of the unipersonal households consisting of unmarried/maiden persons, seems to be narrowing. At this stage, the growth in this factor proves to be the consequence of the men's extraordinarily high mortality rate.



Table 11
The Prospective Number of Households in Nyíregyháza

Denomination	The estimated number on April 1, 1996	The yearly average change between 1990 and 1996	The number to be expected of the households	
			January 1, 2000	January 1, 2005
Consisting of one family	30,600	+ 240	31,560	32,760
Consisting of two families	880	+ 20	960	1,060
Consisting of three or more than families	50	+ 4	66	86
Family households in total	31,500	+ 260	32,540	33,840
Unipersonal households	8,300	+ 20	8,380	8,480
Households of mixed composition	1,500	+ 50	1,700	1,950
Households in total	41,300	+ 330	42,620	44,270

Source: *The County Directorate of the Central Office of Statistics in the County of Szabolcs-Szatmár-Bereg*

As a resultant of the moderate decrease in the number of population and the increase in the number of households, the average size of the households is expected to be drastically decreasing. By the year of 2005, the number of persons falling to 100 households will have dropped back to 240, contrasting with the (estimated) figure 260 calculated in 1996.

The number of the age groups (between 20 to 24 years of age and 25 to 29 years of age) mostly affected by marriage and family establishment is expected to be slightly diminishing after the year of 1998, however the number of the above-mentioned elder age group (i.e., between 25 to 29 years of age) will intensively be increasing in the five-year-period examined. In this latter age group the number of the men may be growing by approximately 1,300 persons (in 2002), whereas that of the women by approximately 1,100 persons (in 2004). With reference to the research survey carried out by the County Directorate of Statistics the presumption may be forecasted that the marrying inclination of the two age groups in question will not be intensifying, while - on the other hand - the diminishing indicator of the marriage inclination, characteristic for the whole of the town, can come to a halt (on account of the enlargement of the younger age groups).

Income projections

- The average monthly net income rate of the households in Nyíregyháza was approximately HUF 56 thousand.
- The county seat is capable of performing an economic development that may surpass the national average during the forthcoming five years, which is to mean an approximately 5.5 to 6 percent growth in the GDP. As an impact originating from this, real income rates may reach a yearly 5 percent increase, in the case of a favorable economic development course.
- The growth of the incomes may generate an intensifying demand on the real estate market, primarily among social layers with higher income rates.

According to some assessments (see forecast of the Central Office of Statistics in *Appendix No. 3*), the income rates characteristic for the county seat exceed those ones characteristic for both the county and the whole region by approximately 15 percent. As a consequence of this, the average yearly income rate of the households in Nyíregyháza was HUF 676 thousand in 1997, which correspond to approximately a net income of HUF 56 thousand every month.

Table 12
The Average Member Number in the Households, and the Net Income Per Capita and Per Household in 1997

	The average member number of the households	The net income per capita, HUF in thousand	The net income per household, HUF in thousand
Hungary	2.7	254.6	687.4
Northern Great Plain	2.8	226.1	633.0
The county of Szabolcs-Szatmár-Bereg (1)	2.8	203.5	569.7
Nyíregyháza (1)	2.6 (2)	260.0	676.0

(1) Estimation

(2) Estimation for the year of 1996

Source: Central Office of Statistics

According to the economic prognosis prepared by the *GKI* Research Institute of Economics Ltd. (see *Appendix No. 4*), the county seat is capable of performing an economic development surpassing the national average during the forthcoming five years, which may mean an approximately 5.5 to 6 percent growth in the GDP (or to put it more exactly in the *Gross City Product*, namely the *GCP*). As an impact originating from the economic development, the residential real income rates may reach a yearly 5 percent increase, which hits, or even slightly exceeds the rhythm of growth of the residential real income rates at national level, in the case of a favorable economic



development course (namely an approximately 4 to 5 percent growth up to 2004). Also in the structure of incomes in the county seat favorable changes may be expected, because the income rates both in the entrepreneurs' sector and in the employees' one may be increasing. The ever enlarging savings based upon the growth of the incomes - in our opinion - may be generating an intensifying demand on the real estate market, being founded primarily upon social layers with higher income rates.

Assessments on Some Potential Outcome of the Housing Demand in Nyíregyháza until 2004

- According to the prognosis that can be made relying upon the model, the unsatisfied housing demand, that is the positive opportunities in housing construction for 500 flats planned to be built are minimal, but, at least, the demand is not negative any longer. If every year fewer flats are planned to be built than that (see, for example, the forecast prepared by the Central Office of Statistics), it will result in an increase in the unsatisfied demand, otherwise it will be decreasing.

With the help of the model made known in details in Chapter VII. under paragraph D., and with that of the forecasts put together to predict the prospective scale of the housing constructions in the enclosed studies prepared by the Research Institute of Economics (*GKI*) and the Central Office of Statistics (*KSH*), we have prepared four scenarios to describe the prospective tendency in housing demands. The difference between the scenarios appears merely in the prospective yearly magnitude of housing constructions (every year 670, 450, 560, and 500 flats, respectively). The other parameters have not been altered, or else their prospective values have been estimated upon the basis of the hitherto tendencies.

Naturally, the departing values of the model have yet to be made even more exact (in this the number of flats to be constructed play an important role), although the versions can already in their present shape point out the fact that - depending on the number to be expected of the housing constructions - the demands towards the new flats constructed are primarily characterized by either - on the one hand - the vacation surplus (namely the negative opportunities for housing constructions) or - on the other hand - the unsatisfied demand (namely the positive opportunities for housing constructions).

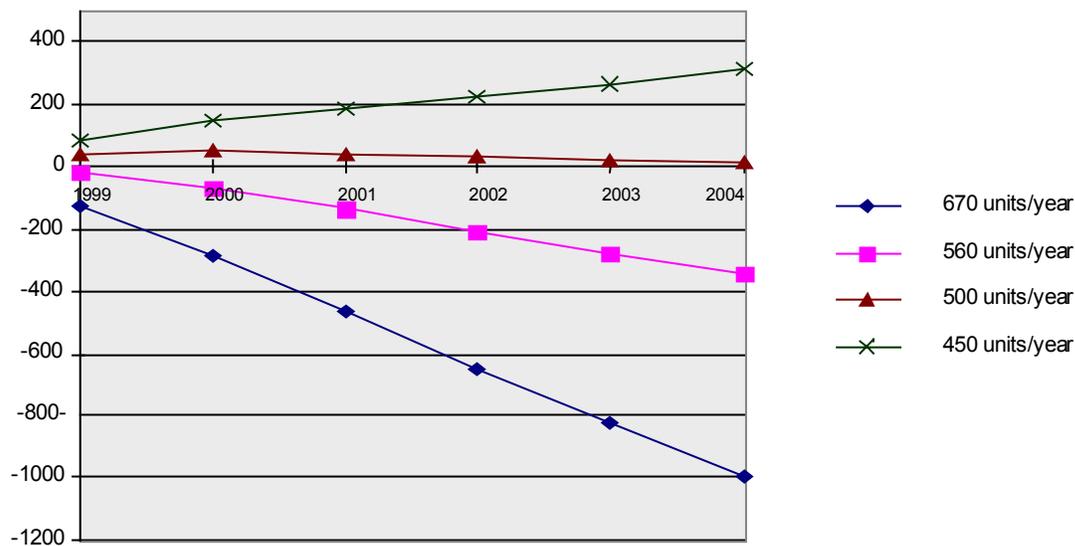
In the following table (and chart), we have summarized the results of this very simple "*sensitivity model*". It can be drawn as a consequence that - in parallel with the diminution of the yearly magnitude in both the housing construction and the "pipeline performance", respectively - the magnitude of the construction opportunities is also growing. The 500 flats constructed every year might well be considered as being a "turning point"; this volume indicates already a minimal unsatisfied housing demand for each year in the five-year-period forecasted. In the case of the realization of the volume



forecasted by the Central Office of Statistics with regard to housing construction, the unsatisfied housing demand may become of an ever larger size and is likely to gradually be accumulating over the forthcoming years.

It is important to be noted, though, that the model aimed at estimating the prospective magnitude in housing demand does not take into consideration the impact generated by the household income tendencies, therefore it is not suitable in itself for making assessments concerning the tendencies of the solvent housing demand.

Figure 6
Opportunities for Housing Construction to Cover the Unsatisfied Housing Demand at a Yearly Level, Depending on the Prospective Volume of Housing Construction in Nyíregyháza.



Source: Central Office of Statistics

Table 3
Assessments with Relation to New Flats to be constructed in Nyíregyháza between 1999 and 2004

	Fact in 1997	Fact in 1998	1999	2000	2001	2002	2003	2004
Version No. 1 (Forecast made by the Research Institute of Economics)								
(7) Housing construction or "pipeline" accomplishment, respectively	486	430	670	670	670	670	670	670
(14) Net unsatisfied demand (+) or vacation surplus (-); (lines from 10 to 13)			-132	-155	-179	-177	-176	-174
(15) Opportunities for housing constructions to cover the			-132	-287	-466	-643	-819	-993



	Fact in 1997	Fact in 1998	1999	2000	2001	2002	2003	2004
unsatisfied demands at a yearly level								
Version No. 2 (Forecast made by the Central Office of Statistics)								
(7) Housing construction or "pipeline" accomplishment, respectively	486	430	450	450	450	450	450	450
(14) Net unsatisfied demand (+) or vacation surplus (-); (lines from 10 to 13)			88	64	40	40	41	42
(15) Opportunities for housing constructions to cover the unsatisfied demands at a yearly level			88	152	191	232	273	315
Version No. 3 (The average of the forecast made jointly by the Central Office of Statistics and the Research Institute of Economics)								
(7) Housing construction or "pipeline" accomplishment, respectively	486	430	560	560	560	560	560	560
(14) Net unsatisfied demand (+) or vacation surplus (-); (lines from 10 to 13)			-22	-46	-70	-70	-69	-68
(15) Opportunities for housing constructions to cover the unsatisfied demands at a yearly level			-22	-68	-139	-208	-277	-345
Version No. 4 (Housing construction when optimal)								
(7) Housing construction or "pipeline" accomplishment, respectively	486	430	500	500	500	500	500	500
(14) Net unsatisfied demand (+) or vacation surplus (-); (lines from 10 to 13)			38	13	-11	-10	-9	-9
(15) Opportunities for housing constructions to cover the unsatisfied demands at a yearly level			38	51	40	30	21	12

Presumptions divergent from the assumptions of the model previously made known, according to the number of lines employed in the model (see Table 13):

- Forecast prepared by the Central Office of Statistics with relation to the change in the number of households (about 330 households come into being on average every year).
- Flats demolished because of 50 housing constructions on average every year.



- A loss of 100 flats in 1999 and a loss of 75 flats in 2000 incurred for other reasons, such as damage caused by floods and inland waters; in the subsequent years 50 flats per year.
- The number of flats necessary for the related transformations, or in other words *substitution*, which makes up 0.25 percent of the housing stock.
- The “pipeline” accomplishment of housing construction, that is the corresponding forecast carried out jointly by the Research Institute of Economics and the Central Office of Statistics, the average of the prospective housing construction volume assessed by the Research Institute of Economics and the Central Office of Statistics, and the “optimal” housing construction volume making the minimal positive housing construction opportunity possible.

The Prospective Transformation of Financing Resources for Housing Constructions and Flat Purchases

Together with the favorable changes to be expected regarding the incomes of the households, transformations of decisive significance are expected to be effectuated within both the system of providing housing subventions and that of financing housing matters. If not at once though, these changes to come will still step by step modify to a substantial extent the composition of the flat buyers' (and constructors') financing resources. At this moment in time, however, little is known of the components of the prospective changes in the housing policy, nevertheless the most important impacts likely to happen can be formulated also in this field of study. Henceforth, let us consider the impacts to be expected of the changes influencing the flat buyers' financial resources:

- The real income rate of the households is expected to be growing in the forthcoming years.
- The role and share proportion of the savings is likely to be increasing in the case of a potential new flat purchase or construction, primarily because of the advantageous and subsidized housing savings bank system. The impact of this will appear in an impulse-like manner, but it is predicted to be lessening later on.
- The role of the extraordinarily low financing resources of the loans at this moment in time is forecasted to be increasing, on the one hand because of the appearance of the new credit products (e.g., mortgage loans, housing savings), and on the other hand because of the prospective decrease of the



loan interests and the ever-intensifying competition perceptible among the commercial banks.

- The amount falling to one family/household - or its real value - of the subsidies provided for housing constructions or flat purchases and originating from local governmental or State resources, respectively, is not expected to be growing.
- As a resultant of the above-mentioned impacts, the importance of the used flat already owned at the time of the purchase and playing a crucial role in the purchase of the new flat may be lessening among the factors regarding the financing resources, that is the households of less expensive value, or continually not owing a flat of their own, may become potential buyers of the new flats constructed, if the growing incomes, savings, and the new credit products are able to generate the missing resources.

As a consequence of the above assumptions, the banking sector plays a decisive role in the fact of how quick and how effectively it can make the best of the opportunities provided by the increasing incomes with relation to the savings and loan takings, and thereby indirectly generating demand for the new flats constructed.

APPENDICES

IX. SUPPLEMENTS

Supplement No.: 1.: The Housing Situation and the Housing Tendencies in the County

On the basis of the county's housing data the question may arise whether the data describing the County of Szabolcs-Szatmár-Bereg are to characterize an "extensive housing construction period" divergent from the development characterizing the majority of the counties, which phenomenon could be - to put it very simple - encapsulated into the following definition: *in areas displaying high residential density there are being - in great many a number - built flats of relatively small footing area.* The housing data provided by the Central Office of Statistics seem to support this presupposition. Prior to the years of the 1990s, the intensity of the housing constructions had been saliently high in the county, then it dropped back to a significant extent between 1990 and 1993, then thereafter the number of constructions began again to be growing, supposedly owing to the effect originating from the change carried out in the structure of the housing construction subvention. This latter phenomenon indicates the fact that both the economic and the social change of system affected in a disadvantageous manner the housing construction indicators of the county, and this tendency was crushed only by the change executed in the structure of the housing construction subvention. The favorable impact, on the other hand, means at the same time defenselessness, too, since in the case if the housing construction subvention is made ceased or limited, its effect will immediately be felt also in the number of housing constructions.

The below summary giving an account of the housing situation in the county has been prepared on the basis of the survey put together by the County Directorate of the Central Office of Statistics (COF 1.).

The indicators of the population and the housing construction are as follows:

Between 1970 and 1979, the population of the county had increased by 20.9 thousand people, whereas between 1980 and 1990 it decreased by 21.5 thousand inhabitants (because of a decreasing birth-rate, an increasing mortality, and the impact of the migration-out). According to the data available, the number of the population in the county stagnated between 1990 and 1998, and since 1990 its number has been in the vicinity of the 1970 rate. It is worth being mentioned that the number of the population in the county seat did not suffer a significant change during the aforementioned period (1990-1998).

The Population of the County of Szabolcs-Szatmár-Bereg and the Index of the Housing Shortage

	Population in thousand	Housing shortage (1)
1970	573	7.6
1980	594	6.6
1990	573	4.9
1998	572	no data provided

(1) The formula is: the number of * ((households-flats) 100)/the number of households.

Source: Central Office of Statistics

In spite of the fact that the housing stock in the county is younger than the national average, the indicators of the housing supply (*remember* the residential density) are the worst in the country. The average family size is larger here, therefore the residential density/per room is also higher than in other counties or on the national average, respectively (the indicator expressing the proportion between 100 occupied flats and the rooms is identical with the national average index, but it is more favorable than the average in the countryside). The large size of the households generates the high residential density; the question is whether it is the size of the flats that will adapt itself to the size of the households or it is the households that will be shrinking to a more considerable extent than the national average.

In the larger cities people pledge themselves to have fewer and fewer children and the rate of the divorces is very high there; both of these factors strongly contribute to the fact that the size of the households is reducing. On the other hand, it is in the large cities where the number of residents sharing the very same room displays the most advantageous indicators. The larger the settlements are in extension, the larger the size and number of the flats will become, and the proportion of the flats remaining without residents will indicate a decreasing index.

The qualitative degree of how well the flats are supplied with comfort and infrastructure is lagging well behind the national average, although the *gas network* project brought a significant step forward (having already reached the national average). On the other hand, the proportion of the flats connected with the drainage and sewerage facilities and with the water supply system is also lower in the region than elsewhere in the country.

Housing shortage and housing construction in the county

The housing shortage as on the basis of the data calculated by the Central Office of Statistics had been attenuated between 1970 and 1990 in the county, but in 1990 it exceeded the proportion measured nationally in the countryside. The large-scale growth experienced in the number of households was induced by the quick increase occurred in the number of unipersonal households. The growing number of the aging population consisting of unipersonal households is not supposed to be inducing a housing shortage to a considerable extent, but - by contrast -the phenomenon of establishing families are likely to do so. In the county, the number of the households living under the same "roof"

(in other words, in the same house or flat) is greater than elsewhere in the countryside or on the national average.

While in the case of the settlements granted with the title of being *towns* as early as before 1970 (before January 1st, 1970 this matter involves three towns, namely Nyíregyháza, Mátészalka, and Kisvárda) the housing stock and the number of households had been increasing extremely intensively between 1990 and 1990, at the same time the housing shortage had been abating in every town. By the year of 1990, the extent of the housing shortage had become similar in the single settlement types (towns and villages), and its percentage had decreased by approximately 4.8 to 5.0 percent in comparison with the number of households.

"In the County of Szabolcs-Szatmár-Bereg, the form of housing construction subsidized by the State was a 'tradition' neither at that time nor earlier, since this region had always assumed much less role in the housing investments than the average characterizing the countryside." (*Central Office of Statistics 2., pg. 14.*)

On the basis of the long-term trends, in the county there have always been more housing constructions falling to 1,000 inhabitants than the national average, because there live more juveniles here than elsewhere, And because the adults are constructing, the degree of the arising burden-assumption of the households is also higher in this county. Despite the intensive housing constructions, still the housing stock was enlarging to a lesser extent here than elsewhere in the county on account of the high proportion of flat terminations. According to the study, in the first half of the 1990s smaller and smaller share of the housing constructions had fallen to the county, the housing stock of which - as a consequence - had been enlarging at an ever less impulsive pace.

The number of both the housing constructions and that of the housing permits issued had been decreasing to a considerable extent between 1190 and 1993. This tendency has seemed to reverse since 1994, owing to primarily the effect that had been caused by the favorable amendments effectuated in the decree on the housing construction subvention. The signals of abatement of the housing construction fever generated by the housing construction subvention could already be perceived as early as in 1997, then by the year of 1998 they could already be visibly demonstrated (the so-called "correctional period").

If we compare the number of all the flats constructed between 1991 and 1993 with that of the households, it can be stated that out of 100 households approximately 3 had ventured to embark upon housing construction in the county; the corresponding proportion was 2 on the national average. It was only the County of Pest where the frequency of the housing constructions reached a proportion higher than in the County of Szabolcs-Szatmár-Bereg.

In 1994, 86.3 percent of the flats were constructed by natural persons and 10.3 percent of them by economic organizations, which proportion, as a matter of fact, corresponded to the national average (namely to 10.1 percent).

Supplement No.: 2. The Situation of the Young in the County Seat

The below summary has been prepared having employed the survey compiled by the County Directorate of the Central Office of Statistics (COF 2.).

The fundamental problem of the young is how to establish/settle an autonomous walk of life, within whose domain the central question is how to be coping with the serious occupational difficulties generated by the unemployment. The youthful age structure is a much more striking fact in Nyíregyháza than it is elsewhere in the county. In 1997, there were 51 thousand young (aged between 0 and 29 years of age) residents in Nyíregyháza, although their proportion within the population had been significantly decreasing between 1980 and 1997. The youthful age composition of the county seat is due to the relatively small proportion of the elderly. The longevity chances of the adults, especially those of the men, are extremely unfavourable. The indicators of the mortality rate of the young men's age group, especially in the case of men between 25 to 29 years of age, exceed the national average data.

In the county, the intention of children's assumption is not expected to be intensifying in the near future, either. At this moment in time, the fertility rate among women older than 25 years old is stagnating, while that in the younger women's generation is decreasing. According to some specialists' conclusion, smaller and smaller part of the population lives in family structure. Among the young, the growth of prestige towards an unmarried/single lifestyle can unequivocally be demonstrated. In Nyíregyháza, the number of divorces is nearly double the figures characterizing the county in this respect, and it also exceeds the national average (as far as the divorces falling to 100 conclusions of matrimony are concerned). On the other hand, the form of establishing a cohabitation relationship is also becoming a more frequent choice. In the county seat, every other juvenile (minors under 14 years of age) are imperiled by some sort of abuse, that is approximately 15 thousand children living in about 5 thousand families (the majority of these imperiled children live in families where there are more children). The primary source of these children's imperiled status (affecting 83 percent of all the children being in this category) can be traced back to financial insecurity.

Among the young, there is a higher rate of education, still they are affected by the unemployment to a higher degree than other age groups. The children of the *Ratkó-éra's* children have appeared on the labor force market just now, when the occupational difficulties manifest themselves to a most serious extent. The graduated young of these aforementioned 'children' (now parents) have begun to inundate the labor force market since the second half of the 1990s. On the basis of the data of the *Microcensus* of 1996 conducted in the county, 15 percent of the age group between 14 and 29 years of age can be considered as being unemployed. Which is by 6 percent higher than the national average, and by 5 percent higher than the county's average. The strongest factor

determining the position of the young on the labor force market is that the crisis is deeper in this region than elsewhere, the struggles on the labor force market are more fierce here, and the market potentially absorbing the labor force is feeble. Over the last couple of years, approximately from 9 to 9.5 thousand youngsters have been entering into the employment starters' age of 15 years, but there is hope that the impact of this influx tendency will not catch the labor force market unexpectedly. The situation for the young in Nyíregyháza seems to be somewhat more advantageous than elsewhere in the county, nevertheless the town does/cannot emanate a real attracting force. As a consequence of this, after having received their college or university degree, only a tiny proportion of the most qualified layer returns back to the county.

Supplement No.: 3. Malakucziné Póka Mária: The Prospective Modifications in the Residential Population, in the Household Compositions, and in the Housing Stock in Nyíregyháza until 2005

The prospective modification in the number of residential population

The decrease in the number of living births is expected to continue also in the County of Szabolcs-Szatmár-Bereg, but the proportion of the number of living births keeps on exceeding the national average. In this respect, the data describing Nyíregyháza are - to some extent - bound to be changing in a more unfavorable way than those ones describing the county as a whole, nevertheless there have been no striking differences between the two data series yet which are not supposed to undergo any changes in the future, either.

In parallel with the diminution in the birth-giving disposition of the women, there had been a growth in the mortality rate. However, over the past few years there has been shaping a propitious turn in this regard: the number of deaths has been diminishing. As a result originating from these two tendencies, the balance drawn between the living births and deaths had been giving out fewer and fewer natural births (net reproduction), and by 1997 a moderate decrease began characterizing Nyíregyháza, too.

During the forthcoming couple of years an increase in the number of natural births is not expected to be taking place. The balance of the natural social mobility (or migratory) processes is expected to yield slight intensity, but it will certainly indicate a gradual decrease rather than increase.

Another factor characterizing the tendencies occurring in the number of population is the balance drawn between the immigrations *into* and emigrations *out of* Nyíregyháza, which phenomenon can be examined on the basis of the domicile registrations. Unfortunately, this requirement displays anomalies in the fact that domicile changes simply are not registered. In the interest of eliminating these deficiencies, since the second half of 1994 residents who did not extend their temporary residence at a particular address over two consecutive years have been cancelled out of the domicile register and have been registered - as residential population - at their permanent

domicile. As an impact of the administrative measure taken, the population of the large university and college towns 'decreased' to a substantial degree. Apart from this incidence, the town of Nyíregyháza could be characterized by a moderate migratory surfeit, and for the past couple of years it has been characterized by a migratory shortage, respectively. As regards the domestic migrations, the national tendency is the move *out* of the towns into the surrounding settlements. In the background of this phenomenon, the non-negligible unemployment rate of the towns plays a significant role. This situation in the communities/villages can be improved to a certain extent by the private production of some goods. What is more, the real estate prices in the villages have also undergone some remarkable changes. On the other hand, in these processes the intensification of the affection for nature might also be playing an important role - although this feature is supposed to effect mostly the larger cities.

Consequently, migrations are not likely to increase the population of Nyíregyháza on a larger scale in the near future; on the contrary, they will rather decrease it to a moderate extent further on. Thus, the reduction in the number of the town's population can be prognosticated for the forthcoming years, which means - according to the underlying tendency - that as a consequence of the decrease the number of 112.998 inhabitants registered at the end of 1997 can drop by approximately 100-200 inhabitants every year on average. So, by the year of 2005 it can fall back to 112 thousand inhabitants, which number will be likely to be stagnating between 112 and 113 thousand people.

The Indicators of the Natural Social Mobility Tendencies in Nyíregyháza

Year	Living births	Deaths	Natural births (net reproduction) and decrease, respectively (-)	Migratory balance	The number of the residential population at the end of the year
1990	1,541	1,095	446	- 20	114,596
1991	1,535	1,145	1,145	- 31	114,955
1992	1,541	1,202	1,202	- 14	115,280
1993	1,470	1,263	1,263	156	115,643
1994	1,334	1,273	1,273	- 2,795	112,903
1995	1,337	1,196	1,196	86	113,136
1996	1,332	1,132	1,132	153	113,489
1997	1,168	1,182	1,182	- 477	112,998
To be expected:					Persons in thousand
1998					112.9 - 112.8
1999					128.8 - 112.7
2000					112.7 - 112.6
2001					112.6 - 112.5
2002					112.5 - 112.4
2003					112.4 - 112.3
2004					112.3 - 112.2
2005					112.1 - 112.0

In itself the moderate change in the number of population does not influence the number of households to a considerable extent, it only mitigates it slightly.

The prospective number of households

The data on the households with relation to the county originate from the periods when censuses were carried out in the county. The latest census, that is the *Microcensus* in 1996, is not suitable for analyses at the settlements' level, because of the representative character of its recording. Consequently, with relation to Nyíregyháza the latest statistical data on the households go back to as early as 1990. Hence, the basis of our prognosis cannot be other than a comparison of the data between the County of Szabolcs-Szatmár-Bereg and the town of Nyíregyháza, as well as the formulation of the major tendencies and trends.

Under the term 'household' we mean the circle of those persons living together who share the same flat or some part of it, and who mutually share - either partially or wholly - the subsistence costs.

The period between 1980 and 1990 is characterized by the disintegration of the larger households into smaller ones, that is there was an increase in the number of the households. In parallel with the increase in the number of divorces and with that of the prestige towards the single/unmarried lifestyle there is an increase in the number of households, too. Additionally, a contributory factor to this process was that the phenomenon of the families' living-together was becoming less and less frequent.

After the change of regime had taken place, however, the phenomenon of the families' living-together was again intensifying, and as a consequence of this, more families were forced to move under common roof than before.

The increase in the number of the unipersonal households continued, to a less intensive degree, though than before. Furthermore, the intensity of the process of establishing family was decelerating, in which phenomenon existential aspects are/were also likely to be playing role. Now more married couples stay together, and the number of divorces is diminishing.

To sum up, the number of households in the county, after an earlier increase, stagnated, that is it was in 1996 approximately as many as it had been in 1990.

The indicators of Nyíregyháza in this respect are remarkably different from those ones of the county in several components. During the period between 1980 and 1990, the number of one-family households had been increasing to a much more significant extent in Nyíregyháza than in the county. To this phenomenon - beside the youthful age structure (the young were had been flushing into the town) - the considerable increase in the number of uniparental families had also been a contributory factor, which fact was due to the increase in the number of frequency of the divorces and extramarital living-births. Thus, contrary to the county's indicators, a further increase in the number of 'one-

family one-household' can be prognosticated, although to a much moderate degree than before.

The phenomenon of the living-together of more families in Nyíregyháza is likely to be changing in a similar way in proportion and pace as it is in the county itself, correspondingly to the previous records.

On balance, the number of family households is expected to be increasing.

During the period between 1980 and 1990, the number of unipersonal households had been increasing to a much less significant extent in Nyíregyháza than in the county. Although the number and proportion of the single/unmarried persons had been increasing also in the county seat, the circle of the widowed and that of the ones being self-supporters in their widowhood had been increasing less rapidly because of the more favorable mortality rates.

The men's mortality rate keeps on being extremely high in the region, consequently the number of the persons remaining alone on the grounds of this particular factor will not be diminishing. On the other hand, the chance of establishing unipersonal households by single/unmarried persons living on their own is narrowing on account of existential reasons. On the whole one may conclude that a moderate increase in the circle of unipersonal households is expected to happen.

The Number of Households in the County of Szabolcs-Szatmár-Bereg and in Nyíregyházán

Denomination	January 1 st , 1980	January 1st, 1990	April 1st, 1996	The 1990 percentage in the percentage of 1980	The 1996 percentage in the percentage of 1990
In the County of Szabolcs-Szatmár-Bereg					
Consisting of one family	140,668	144,912	142,280	103.0	98.2
Consisting of two families	11,116	6,896	8,355	62.0	121.5
Consisting of three or more families	443	276	560	62.0	202.9
FAMILY HOUSEHOLDS IN TOTAL	152,247	152,084	151,195	99.9	99.4
Unipersonal households	26,539	36,355	37,146	137.0	102.2
Households of other sorts of composition	4,431	5,492	5,497	123.9	100.9
HOUSEHOLDS IN TOTAL	183,220	193,931	193,838	105.8	100.0
In Nyíregyháza					
Consisting of one family	26,187	29,166	30,600a/	111.4	105.0a/
Consisting of two families	1,159	734	880a/	63.3	120.0a/
Consisting of three or more families	47	26	50a/	55.3	200.0a/
FAMILY HOUSEHOLDS IN TOTAL	27,393	29,926	31,500a/	109.2	105.0a/
Unipersonal households	6,302	8,180	8,300a/	129.2	102.0a/

Denomination	January 1 st , 1980	January 1st, 1990	April 1st, 1996	The 1990 percentage in the percentage of 1980	The 1996 percentage in the percentage of 1990
Households of other sorts of composition	864	1,212	1,500a/	140.2	120.0a/
HOUSEHOLDS IN TOTAL	34,559	39,318	41,300	113.8	105.0

a/ Prognosticated

If we project - on the basis of what has been said above - the effects and trends of the household statistical data estimated for the period between 1990 and 1996 onto an imaginary one year period, the number of households in Nyíregyháza may be changing according to the indicators as follows:

The Prospective Number of Households in Nyíregyháza

Denomination	The number as it was estimated for April 1 st , 1996	The average year-by-year change between 1990 and 1996	The prospective number of households	
			January 1st, 2000	January 1st, 2005
Consisting of one family	30,600	+ 240	31,560	32,760
Consisting of two families	880	+ 20	960	1,060
Consisting of three or more families	50	+ 4	66	86
FAMILY HOUSEHOLDS IN TOTAL	31,500	+ 260	32,540	33,840
Unipersonal households	8,300	+ 20	8,380	8,480
Households of other sorts of composition	1,500	+ 50	1,700	1,950
HOUSEHOLDS IN TOTAL	41,300	+ 330	42,620	44,270

In Nyíregyháza, every year an increase by approximately 330 on average can be prognosticated in the number of households. Thus, by the beginning of 2000 the number of households is expected to mount up to approximately 43 thousand households, and by January 1st, 2005 it is likely to exceed even 44 thousand households.

The Size of Households

The tendencies outlined above indicate the further disintegration - although to a less intensive degree that had characterized the period between 1980 and 1990 - of the households.

Simultaneously with the increase to be expected in the number of households, some diminution is likely to occur in the number of inhabitants as well. As a consequence of this, the average size of the households is also to be expected to be decreasing to a considerable extent.

In parallel with an increase in the number of population, the number of persons *per 110 households* in Nyíregyháza had dropped from 293 to 276 during the period between 1980 and 1990. Between 1990 and 1996 the number of population was slightly decreasing again. According to the previous data, approximately 4 to 5 percent of the population could not be attached to the category of the ones who lived in households. If we project the same data onto the year of 1996, we can conclude that in 1996 96 percent of the population that is approximately 108 thousand people lived in households.

The Number of Persons Living in Households and the Average Size of Households in Nyíregyháza

Denomination	1980		1990	
	The number of persons living in households	The number of persons per 100 households	The number of persons living in households	The number of persons per 100 households
Consisting of one family	86,375	330	93,572	321
Consisting of two families	6,237	540	3,975	542
Consisting of three or more families	384	1,909	223	858
FAMILY HOUSEHOLDS <i>IN TOTAL</i>	93,018	340	97,770	327
Unipersonal households	6,302	100	8,180	100
Households of other sorts of composition	1,933	224	2,604	215
HOUSEHOLDS <i>IN TOTAL</i>	101,253	276	108,554	293

At the beginning of 1996 (organization more exactly in April 1996) the average size of the households dropped back approximately to 260. On the basis of the prognosticated number of the population and households, this number is expected to drop to 250 households by 2000, whereas by 2005 approximately to 240.

The prospective average size of the households in Nyíregyháza

Denomination	January 1st, 1980	January 1st, 1990	April 1st, 1996	January 1st, 2000	January 1st, 2005
	Factual		Assessed		
Persons living in households <i>in thousand</i>	101.2	108.6	108.5	108.3	107.8
The number of households <i>in thousand</i>	34.6	39.3	41.3	42.6	44.3
The number of persons <i>per 100 households</i>	293	276	260	250	240

The Age Composition of the Persons Living in Households and the New Marriages

The assessment of these processes above is possibly only within a wide range of error percentage, consequently we dare to undertake exclusively the formulation of the mainstream direction of these changes and the introduction of the town's residential population according to age groups.

The residential population of Nyíregyháza according to age groups

Age group	January 1st, 1980		January 1st, 1996		January 1st, 1998	
	Men	Women	Men	Women	Men	Women
0-14	14,386	13,758	13,728	13,135	11,053	10,785
15-19	4,369	4,583	6,030	5 807	5 045	4,994
20-24	4,400	5,496	3,962	4,356	5,737	5,063
25-29	5,019	5,406	3,428	3,692	4,088	3,966
30-34	4,276	4,324	4,326	5,120	3,490	3,321
35-39	3,469	3,571	4,799	5,278	3,567	3,933
40-44	2,829	3,186	3,917	4,195	4,655	5,365
45-49	2,928	2,928	3,164	3,333	4,270	4,785
50-54	2,755	2,939	2,433	3,003	3,179	3,500
55-59	2,356	2,774	2,487	2,782	2,404	2,922
60-64	1,267	1,500	229	2,695	1,974	2,634
65-69	1,537	2,132	1,737	2,446	1,872	2,512
70-74	1,034	1,586	785	1,200	1,355	2,185
75-79	691	1,174	789	1,486	819	1,575
80-84	364	702	360	783	317	703
85-x	177	358	180	487	242	662
<i>IN TOTAL</i>	51,858	56,417	54,354	59,198	54,066	58,932

Because of the large-scale decrease in the number of living births, the number of the young keeps on diminishing as well. The number of the young belonging to the age groups between 20-24 years of age and 25-29 years of age - the two age groups involved the most into the matter of marriage and establishing family, respectively - has been (and will be further on) continuously decreasing since 1998, because the moderate demographic boom in connection with the family-establishing tendencies represented by the children born in the 1950s and in the so-called '*Ratkó*'-era has been (will be) slackening. This phenomenon, however, in the age group of the young between 25 and 29 years of age is expected to be producing some considerable increase.

The Number of Persons between 20-24 and 25-29 Years of Age in Nyíregyháza

Age group Year	January 1st, 1998 factual	1999	2000	2001	2002	2003	2004	2005
		To be expected at the beginning of the year ^{a/}						
Men								
20-24	5,737	5,566	5,318	5,012	4,926	5,045	4,923	4,722
25-29	4,088	4,440	4,947	5,477	5,773	5,737	5,566	5,312
Women								
20-24	5,063	5,218	5,072	4,887	4,972	4,994	4,805	4,514
25-29	3,966	4,059	4,433	4,729	4,922	5,063	5,218	5,072

a/ These are data summarized and steadily updated on the basis of the indexes according to the different age groups of the population and corresponding to the particular years.

In spite of the increase characteristic for the specific period examined in the number of the young who are mostly affected by potential marriages. The number of marriages contracted is not increasing in its essentials, because the time chosen of contracting the marriage is getting postponed ever further in the future and more and more young people plump for the single/unmarried lifestyle.

The Distribution of the Age Groups between 20 to 24 and 25 to 29 Years of Age in Nyíregyháza according to Marital Status

Year	Between 20-24 years of age				Between 25-29 years of age			
	Single and unmarried	Married	Widowed	Divorced	Single and unmarried	Married	Widowed	Divorced
Men								
1980	57.8	40.9	0.1	1.2	16.4	81.1	—	2.5
1990	70.3	28.7	0.1	1.0	24.7	70.8	—	4.5
Women								
1980	35.9	61.5	0.2	2.4	10.6	83.7	0.4	5.3
1990	49.7	47.4	0.1	2.7	13.9	78.4	0.3	7.4

In Nyíregyháza the number of marriages are tendentially decreasing, whereas that of the divorces is increasing. The diminution is hopefully expected not to continue because of the growth in number of the age group concerned.

The Number of Marriages Contracted and Divorces in Nyíregyháza

Year	Marriages contracted	Divorces
1990	894	311
1991	771	311
1992	772	288
1993	686	299
1994	710	285
1995	687	287

Year	Marriages contracted	Divorces
1996	670	380
1997	616	348

Income Tendencies

According to the household statistical data publicized by the Central Office of Statistics, in the counties of Hajdú-Bihar, Jász-Nagykun-Szolnok, and Szabolcs-Szatmár-Bereg constituting the northern region of the Great Hungarian Plain the average net income *per capita* of the population is nine tenths of the national average income. That is HUF 226 thousand in 1997. Taking into consideration the average number of the persons living in one household (2.8 persons), the average income projected *per household* was merely HUF 633 thousand in this region. Within the region, it is the County of Szabolcs-Szatmár-Bereg that is in the most unfavorable situation, since the income here of the employed ones is only 96 percent of the average income rate characterizing the whole region. In this county the unemployment rate is by 2.8 percent higher than that is projected onto the average of the three counties together. What is more, other disadvantageous factors associated with the aforementioned problems in the County of Szabolcs-Szatmár-Bereg are the higher costs arising from the obligation to pay alimony and other sorts of maintenance costs and the inactivity proportion higher than elsewhere. Taking into consideration also the structural factors, an approximately 10 percent backwardness from the income rate characterizing the whole region can be speculated with respect to the County of Szabolcs-Szatmár-Bereg.

Within the county itself Nyíregyháza has obviously a very specific place, since in the county seat (*i.e.*, in Nyíregyháza) can be found four tenths of the enterprises. The unemployment rate is much more moderate here than it is elsewhere in the county, and the proportion of the *active* inhabitants is also considerably more favorable in the town.

The Income Rates and Number of Members of the Households in Hungary according to Regional Distribution, 1997

Regions (counties)	The average number of members in the households	Average net income <i>per capita</i> ; HUF in thousand	Average net income <i>per household</i> ; HUF in thousand
Central Hungary (Budapest, the County of Pest)	2.6	282.9	735.5
Central Transdanubia (the counties of Fejér, Komárom-Esztergom, and Veszprém)	2.8	259.7	727.2
Western Transdanubia (the counties of Győr-Moson-Sopron, Vas, and Zala)	2.8	253.9	710.9
Southern Transdanubia (the counties of Baranya, Somogy, and Tolna)	2.7	247.8	669.1
Northern Hungary (the counties of			

Regions (counties)	The average number of members in the households	Average net income <i>per capita</i> ; HUF in thousand	Average net income <i>per household</i> ; HUF in thousand
Borsod-Abaúj-Zemplén, Heves, and Nógrád)	2.6	240.9	626.3
Northern Hungarian Great Plain (the counties of Hajdú-Bihar, Jász-Nagykun-Szolnok, and Szabolcs-Szatmár-Bereg)	2.6	226.1	587.9
Southern Hungarian Great Plain (the counties of Bács-Kiskun, Békés, and Csongrád)	2.5	241.6	604.0
<i>IN TOTAL</i>	2.7	254.6	687.4

To check the income rates characteristic for the town entitled with county rights, the data on the personal income tax may also be helpful. According to the data on the year of 1997, approximately 50 thousand persons paid personal income tax in Nyíregyháza. The whole taxable domestic income mounted up to HUF 26.4 billion corresponding to HUF 532 thousand if projected onto one tax payer citizen, which is by 23 percent (HUF 433 thousand) more than the county's average taxable income. On account of the more favorable age and employment structure, the income rates characteristic for the county seat are expected to exceed the county's average ones even to a greater extent than this one. Consequently it will exceed also the income rates characteristic for the whole Northern Hungarian Great Plain region by approximately 15 percent, according to our estimates.

The Change in the Housing Stock, the Number of the New Flats Constructed, and the Tendencies of the Housing Shortage in Nyíregyháza

At the end of 1998, the Town of Nyíregyháza Entitled with County Rights possessed approximately one fifth, that is 42.860 flats of the whole housing stock in the County of Szabolcs-Szatmár-Bereg.

At the beginning of the 1990s, the growth in the number of the housing stock had been gradually decreasing owing to the moderate intensity present in the housing construction activity, and by the year of 1993 it fell to an extraordinarily moderate degree. On the other hand, a positive phenomenon of the period under examination may be that a much larger share in the constructions substituted for terminated flats than it did before, which effectively contributed to the establishment of a more modern housing stock. The effect of this, however, did not exert a remarkable change in the low level of intensity of the housing construction, furthermore the improvement in the quantitative index (that is the number of residents *per 100 flats*) representing the fact of being supplied with flats was also becoming less dynamic.

The modification effectuated in the system of the housing construction subvention of 1994 resulted in a temporary improvement, and the construction activity became more vigorous. Still, it could not reach the previous achievements and lasted only over a short period of time, characterizing specifically the years only between 1994 and 1996. In 1997 and in 1998 the number of housing constructions fell again under 500. In the background of the slackening experienced in the constructions, it may be the prospective modification in the system of the subvention and VAT reclaim that guilty is - according to a group of some experts -. The influence of that, nevertheless, - in the mirror of the changes already existing and to be expected - is likely to be more moderate than that of the above-mentioned timespan. This statement seems to be supported by the fact that there is a gradual diminution in the number of the issued housing construction permits, forecasting the tendencies in the prospective housing constructions.

The Tendencies in the Housing Construction, Housing Stock, and Flat Terminations in Nyíregyháza

Year	The number of flats constructed	The number of flats terminated	The proportion of constructions aimed at enlarging the housing stock, percent ^{a/}	Change in the number of the housing stock	The end-of-year number of flats (housing stock)
1990	825	51	94	+ 774	39,319
1991	805	83	90	+ 722	40,041
1992	416	124	70	+ 292	40,333
1993	301	139	54	+ 162	40,495
1994	637	125	80	+ 512	41,007
1995	603	138	77	+ 465	41,472
1996	732	94	87	+ 638	42,110
1997	486	98	80	+ 388	42,498
1998	430	68	84	+ 362	42,860

a/ $\frac{\text{constructed-terminated flats}}{\text{constructed}}$

By calculating with the average number of constructions characterizing the years of 1997 and 1998, the construction of approximately 450 flats is expected to be implemented on average during the forthcoming years in Nyíregyháza. Contemporaneously with this the termination of approximately 80, consequently an approximate 370-unit-increase in the housing stock is likely to be realized every year on average.

On the basis of the prognosticated number of households and flats, a moderate dearth of flats - or no dearth at all - can be forecasted. If the number of housing constructions diminishes, it can still occur. In the field of constructing flats nowadays, it is the necessity for a qualitative flat replacement process that seems to be the most important problem.

SUPPLEMENT

THE REGIONAL DISTRIBUTION OF THE GROSS DOMESTIC PRODUCT (GDP) BETWEEN 1994 AND 1996

Both at county level and related to the whole national economy, the *gross domestic product* (GDP) is the indicator that comprehensively characterizes the economic development. As a consequence of this, the regional data on the GDP are suitable for being employed when the establishing of such decision-making seems to be indispensable which are aimed at equalizing the regional differences.

It was as early as 1994 when the Central Office of Statistics had executed its calculations with relation to the regional distribution of the GDP for the first time. Since then, from year to year the changes can be tracked down.

According to the data available, **if one compares the achievement-capability of the counties' economies, certain proportion-displacements can be pointed out during the period between 1994 and 1996**, which become manifest in the gradual intensification of the diversities between the extreme values and in the equalizing tendencies present in certain groups of the counties.

The Regional Data on the *Gross Domestic Product* (GDP) (at procurement prices)

Capital, Counties and Regions	Gross Domestic Product <i>per inhabitant</i>				Gross Domestic Product, 1996	
	1994	1995	1996		HUF billion	distribution Percent
	In percent of the national average			HUF thousand		
Budapest	180	178	186	1,251	2,372	34.7
Pest	76	71	74	494	489	7.1
Central Hungary	146	142	147	991	2,861	41.8
Fejér	96	98	102	688	293	4.3
Komárom-Esztergom	80	88	89	600	187	2.7
Veszprém	80	87	80	539	203	3.0
Central Transdanubia	86	92	91	613	683	10.0
Győr-Moson-Sopron	104	106	110	740	315	4.6
Vas	103	106	109	731	198	2.9
Zala	94	96	93	626	188	2.7
Western Transdanubia	101	103	105	703	701	10.2
Baranya	84	85	77	518	211	3.1
Somogy	76	80	75	503	169	2.5
Tolna	94	93	90	602	150	2.2
Southern Transdanubia	84	85	79	534	530	7.7
Borsod-Abaúj-Zemplén	70	76	70	473	352	5.1
Heves	73	76	73	489	160	2.3
Nógrád	62	61	57	382	85	1.2
Northern Hungary	70	74	69	461	597	8.7
Hajdú-Bihar	83	77	78	523	287	4.2
Jász-Nagykun-Szolnok	79	78	76	509	214	3.1

Capital, Counties and Regions	Gross Domestic Product <i>per inhabitant</i>				Gross Domestic Product, 1996	
	1994	1995	1996		HUF billion	distribution Percent
	In percent of the national average			HUF thousand		
Szabolcs-Szatmár-Bereg	62	62	59	397	227	3.3
Northern Hungarian Great Plain	74	72	70	472	728	10.6
Bács-Kiskun	77	79	76	508	275	4.0
Békés	80	76	76	510	205	3.0
Csongrád	95	96	93	624	266	3.9
Southern Hungarian Great Plain	83	83	81	545	745	10.9
<i>IN TOTAL</i>	100.0	100.0	100.0	672	6,845	100.0

When making a comparison according to the different counties, **attention must be drawn to the special situation of the County of Pest and the capital, Budapest.** Similarly to the situation characteristic for other metropolitan cities in the world, the GDP in Budapest is saliently higher than it is in its surrounding areas, whereas in the County of Pest it does not reach even the average of the countryside because those who live here are in great number commuting to their workplace in the capital.

With relation to that, the fact must also be emphasized according to which **the GDP *per capita*, in fact, does not reflect the income available for the inhabitants** but indicates the surplus product produced by the economic participants operating in a given area. Thus, it does not necessarily mean that the ones living in a given area would live better or worse than it could be concluded on the basis of the GDP.

Following the capital, the economies of the counties of Győr-Moson-Sopron, Vas, Fejér, then Zala, Csongrád, Tolna, and Komárom-Esztergom are the most developed ones, whereas those of the counties of Borsod-Abaúj-Zemplén, Szabolcs-Szatmár-Bereg, and Nógrád are the most underdeveloped ones. While **the advantage of the ones standing at the front of the field has been further increasing, the situation of the counties lagging at the back has been further worsening.**

The Gross Domestic Product *per capita* was HUF 672 thousand on the national average in 1996; that of the field-leading Budapest was HUF 1,251 thousand, whereas that of the County of Nógrád lagging behind all the counties was HUF 382 thousand. The former one meant 186 percent of the national average, whereas the latter one did 57 percent of it.

Under 75 percent of the national average, there remain also the achievements of the counties of Szabolcs-Szatmár-Bereg (59 percent), Borsod-Abaúj-Zemplén (70 percent), Heves (73 percent), and Pest (74 percent). The achievement of the County of Somogy reaches the 75 percent degree, whereas that of the counties of Bács-Kiskun, Békés, and Jász-Nagykun-Szolnok minimally exceeds it (76 percent). **The**

intensification of the divergences in the GDP *per capita* characterizing the individual counties becomes manifest in the relative distribution of the indexes.

Some Indicators of the Divergences in the GDP *per capita* according to the Counties ^{a/}

Denomination	1994	1995	1996
The proportion between the highest and lowest indicators	2.36	2.33	2.59
The relative distribution, percent	23.0	21.8	24.8

a/ When having calculated the indicators, Budapest and the County of Pest represented one unit.

SUPPLEMENT NO.: 4.

**GKI Ltd. Research Institute of Economics: The Economic Prognosis
Forecasted with Relation to the County of Szabolcs-Szatmár-Bereg, Nyíregyháza
and its Surrounding Area until 2004**

**GKI Gazdaságkutató Rt.
(GKI Economic Research Co.)**

**Economic forecast for Szabolcs-Szatmár-Bereg county and for Nyíregyháza and
the surrounding region until 2004**

Budapest, March 1999

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SUMMARY

The economic growth of the whole of Szabolcs-Szatmár-Bereg county can be expected to be similar to that of the national average until 2004, that is, around 4.5 percent yearly, in proportion of GDP. Thus, though the situation of the county will improve, it is likely that it will not be able to catch up with the rest of the country. This can be changed only if the county can attract a few multi-national companies (mainly in the machine industry) to carry out significant projects. Since this also requires huge infrastructure developments, more rapid growth can be expected only in the second half of the examined period even if things turn out favorably. Within the county itself Nyíregyháza is likely to perform better than the average (an annual growth of 5.5 to 6 percent), while the rest of the county is likely to do worse than the national average (3.5 to 4 percent).

The economic structure of the county is characterized by a relatively large proportion of the sectors which lag behind the others and which are in a bad market situation. Agriculture can produce a growth of 2 percent (the national average) at best but to achieve this structural changes (e.g., changes in apple-) are required. Food industry has a large share in industrial production. Since its traditional markets in the CIS countries have shrunk drastically, even to maintain the present level of production will require structural changes. On the other hand, companies transferred into foreign ownership (e.g., in the chemical industry) are likely to make rapid growth. Yearly industrial growth in the whole of the county is around 7 percent and Nyíregyháza may reach 10 percent if it can attract a little more foreign investment. (Of course, foreign investments are most likely to improve the county seat's situation, too). The predictably enduring crisis of the CIS states hits the transporting activity of the county (e.g., Záhony) badly. Moreover, stricter customs regulations in the neighboring countries have an adverse effect on commercial activities (consumers' tourism). At the same time, they reduce internal "black commerce" as well, which has a positive effect as well. This change is likely to be enduring, since Hungary itself must take steps to enforce customs regulations more effectively than before - with regard to its planned accession to the European Union. To sum it up, retail trade is likely to make a somewhat slower growth (annually 3 percent) than consumption because of the decline of consumers' tourism. As for the services a rapid growth of financial and educational services is predictable, but mainly in the county seat itself. The vicinity of the border enhances the development of the banking sector as well.

It is likely that until 2004 there will be an overall growth of 3 percent in employment which is roughly the same as the national average. Thus, the relative situation of the county will not deteriorate, though there still does not seem to be a clear answer concerning the employment of the mainly unskilled workforce of the county. Jobs are likely to be created in Nyíregyháza - in commerce, in services and in the industry. In case Hungary is to get a larger sum of money for regional development from the European Union after 2000, the situation may improve a little.

The development of small and medium size companies is hindered by a lack of capital and markets. Attracting multi-national companies - and making the infrastructure developments required for this - is essential for development. A 30 million dollar yearly operating capital investment including the reinvested profit of the foreign companies that are already present in the county (whether they have their seat locally or not) would be favorable but still not sufficient for providing the impetus needed for the county to catch up with the others. Substantial growth of enterprises can be expected to take place in Nyíregyháza and in two or three other cities and this would result in young people moving to the cities or commuting. The situation would be better if a few large investors could be drawn to Nyíregyháza or to some other cities near the M3 motorway. There may be good chances for this to happen primarily in the machine industry.

The growth of the income of the county's population is likely to remain below that of the national average since high unemployment keeps wages low mainly in jobs which require only a low level of qualifications, the increase of supplementary agricultural incomes are limited by market possibilities and social benefits are not in proportion with the needs. Thus, the county can be expected to have an average annual growth of 3.5 to 4 percent in incomes and consumption. Nyíregyháza, however, may make a growth around 5 percent.

On the whole, in Szabolcs-Szatmár-Bereg county an annual yearly average of 2000 new housing units can be expected to be built until 2004. This is a relatively large number (compared to the size of the population), which is in line with the tendencies hitherto recorded and may also be accounted for by the housing situation, which is worse than the average and by the constructions necessitated by the floods. Nyíregyháza can expect housing construction above the average proportions; it is likely to be around one third of the total constructions, due to a rise in quality demands and the growing attraction of the city.

ECONOMIC FORECASTS FOR SZABOLCS-SZATMÁR-BEREG COUNTY AND FOR NYIREGYHÁZA AND THE SURROUNDING REGION

1. Economic forecast for Hungary until 2004

The medium range economic prospects of the whole of the Hungarian economy are very favorable. Yet the short-term eclipse of economic growth due to the slowing down of the world economy can be taken for certain (economic growth this year is likely to be around 3 to 4 percent, as compared to 5 percent of last year). Internal and external balance are both likely to further deteriorate, though this tendency can be kept within acceptable limits with the help of a pragmatic economic policy. From 2000 on an improvement in world economy is predicted, which is likely to have a stimulating effect on the growth of the Hungarian economy, the growth of GDP may reach 5 percent again after 2000. To improve and later maintain internal and external balance individual and communal consumption must be kept below the growth of GDP, while the growth of developments must be well above it in order to modernize the economy.

In the given period the current account deficit is likely to be around an annual \$2 to 2.5 billion (except this year's exceptionally high deficit), which can be financed through foreign capital investments. A substantial reduction of public deficit must take place in the year 2000. This is necessary for both the balance of the economy and this year is also the most suitable because in 2002 there will be general elections and the government will not want to face serious conflicts before them. A continuous decrease of the inflation can be expected, though the rapid decrease of 1998 and 1999 may cause stagnation in the level of prices if energy and raw material prices in the world market and food prices at home increase. It takes a long time to reduce single-digit inflation. Thus, following an annual decrease of 1 to 2 percent every year, the inflation is likely to be around 3 to 4 percent in 2004. The rate of sliding devaluation will not change this year. It is likely to be reduced slightly next year and in two or three years sliding devaluation may be abandoned and the forint may be fixed to the Euro with an adequate fluctuation range. Real interest rates will be high this year as well but will decrease slowly afterwards.

The influx of foreign capital will continue to be 1.5 to 2 billion dollars on the long term owing to the ability of the Hungarian economy to attract capital and its stable financial situation. This can be supplemented with capital coming through different other channels and EU transfers. We hope that by 2004 the Hungarian economy can join the EU.

National growth indicators (percentage)

	1998*	1999*	2004/1998	1999-2004 average
GDP	5	3.5	31	4.5
Agriculture	0	0	15	2.2
Industry	10	6	53	7
Construction	12	7	60	8
Trade	5	4	30	4.5
Transport	6	4	32	4.6
Other	2	2	21	3.2
Consumer consumption	5	4	28	4.3
Investments	10	8	59	8

*In the percentage of the previous years

Source: KSH and GKI Rt. forecast

In the Hungarian economy the development of industry and construction will be faster than the average. The former can be the result of the dynamic growth of export-oriented activities that are increasingly integrated in the world economy. The latter will be the result of dynamic investment activity - and within this infrastructure development. Transport - telecommunications and trade can perform around the average, while agriculture will be well below average. Within services certain business, for example banking and insurance services can be expected to grow fast, while development will be slower in other services.

In the last couple of years the relative situation of the county has deteriorated even further and it is still the last among the counties in Hungary.

The present economic structure of Szabolcs-Szatmár-Bereg county is characterized by a relatively large share of economic sectors which are behind the others.

The proportion of the main sectors on the basis of the economically active population in 1997, percent

	Agriculture	Industry	Services
Hungary	8.0	32.7	59.3
Szabolcs county	9.9	34.4	55.7

Source: KSH (Central Statistical Office)

- a) The share of the industry is lower than the national average: it is only 34 percent compared to 38 percent in the whole of the country. The poor level of average industrial development in the county is shown by the fact that the per capita industrial production is only half of the national average. The number of industrial workers per 1,000 residents is 53, while this same figure is 72 nationally.

The share of the food industry within the whole of the industrial production is substantial; it amounts to one third. It is related to the processing of raw materials produced in the county (canning industry, pureé-production, tobacco-fermenting and distilling industry). However, a large part of the production was sold in the increasingly narrow market of the CIS countries, thus the level of production can be maintained only through comprehensive structural changes. Chemical industry also has a large share with important branches as rubber industry, pharmaceutical industry and vegetable oil industry. Machine industry has a share way below the national average, only the branch of optics is remarkable. Clothing and shoe manufacturing is also considerable.

Between 1991 and 1997 the industry of Szabolcs county was characterized by a decreasing production. Gross industrial output dropped by 31 percent. The industry of the county began to recover only one or one and a half years ago. Productivity has been low throughout, which is a sign of a lasting crisis.

A few figures concerning the industry*

Description	1992	1993	1994	1995	1996	1997	1997 1991
Gross industrial. production.**							
Szabolcs county	77.8	84.2	104.0	93.0	99.7	109.2	69.0
Hungary total	82.8	100.4	106.7	104.4	104.6	115.0	106.5
Proportion of export in industrial sales, percent							
Szabolcs county	..	29.8	36.5	35.8	38.4	44.1	..
Hungary total	..	24.5	27.7	33.2	36.9	44.2	..
Industrial production per employee**							
Szabolcs county	97.5	95.9	98.6	97.4	103.2	101.5	94.1
Hungary total	95.3	114.9	114.9	106.1	108.6	116.2	168.5
Number of employees in the industry**							
Szabolcs county	79.8	87.8	105.5	95.5	96.6	103.0	70.2
Hungary total	86.9	87.4	92.9	95.0	96.3	99.5	64.2

*Data of companies employing more than 50 persons

** Previous year = 100 percent

Source: KSH (Central Statistical Office)

- b) The value of **construction and repair** activity has dropped to half of its value in the past five years, while it has dropped by only 2 percent nationwide. The construction industry of the county is represented by a few foreign-ownership enterprises (Magyar Asphalt Ltd., Kelet-Speck Ltd.) and a number of Hungarian medium-size companies. The latter played a significant role in the housing construction carried out by developers that helped reshape the city of Nyíregyháza.
- c) In accordance with the nationwide tendencies the **agriculture** of Szabolcs county was characterized in the first half of the 1990's by the decrease of cultivated land. Horticultural production has dropped to a mere 5 percent of the production of previous years and the cultivated land, too, has shrunk. About 50 percent of the land are cultivated, 18 percent is forest, 12 percent is lawn and almost 4 percent is orchard. The state of the county's agriculture is highlighted by the fact that average crops in its main products are well below the national average.

The largest part of the population of **Szabolcs-Szatmár-Bereg** county lives in villages (55.8 percent, as compared to a national 37.2 percent), mainly in large villages. These settlements so far have failed to attract foreign investments, thus the local population is either employed in agriculture or local services or they are commuters. Earlier, commuting had the capital city or other great cities outside the county as its target area. Nowadays, however, it is commuting within the county which is characteristic.

The average income of agricultural laborers in the county is substantially below (by 25 and 28 percent) the industrial and national average. Earlier, household farming (fruits and vegetables) had a large share as a supplementary source of income for village families. Such possibilities, though, are very limited these days. Yet the share of agricultural income within the total income of families is greater (and will predictable remain greater in the years to follow) than nationwide.

Agriculture has an outstanding share in the county's economy. While agriculture amounts to 6.4 percent of GDP nationally, its proportion in the county is double of that figure. Fruit-production (apple, sour cherry and plum), vegetables (tomato, cucumber, paprika) and potato and tobacco are especially important.

The county's agriculture has 2,142 enterprises, 510 of them in the food industry. Together they amount to 8.5 percent of the total enterprises of the county. 67 percent of the agricultural enterprises are individual, while 33 percent are joint-enterprises. Limited partnerships, limited liability companies and cooperatives have roughly the same proportion among joint enterprises.

Of the cultivated land of the county is cultivated individually by private farmers or growers. This ratio is 46 percent nationwide. In tilling the proportion of individual cultivation is especially high (75 percent). This fact may be accounted for by the fact that a large part of the unemployed are working as "forced entrepreneurs" (mainly to supply family consumption).

Food-processing companies and specifically the canning industry and tobacco companies are highly significant. Canning industry was mainly based on the Soviet market and suffered a bad loss of markets in the early 1990s. Efforts to regain traditional markets were successful, though last year the limited capacity of the Russian market hit these enterprises badly. The recurring problems of the Eastern market made it plain that in the future it will not be possible to produce for a single market (and especially not for the Russian one).

The **vast majority of agricultural joint-enterprises** (77 percent) and food-industry enterprises (68 percent) **employ less than 10 persons**. The amount of companies with more than 50 employees is 7 percent and 11 percent respectively. 6.7 percent of individual entrepreneurs work in agriculture. A mere 4 percent of foreign companies work in agriculture, though these are large companies, since their share of the subscribed capital is nearly 16 percent.

The share of agriculture from investments is small even compared to its economic weight and this fact shows that agriculture is not an attractive area for investments in the county. Beyond what has been said above, the aging of

equipment (tractors and machines), buildings and plantations and within the plantations an unfavorable proportion of products is characteristic. Substantial developments are likely to take place in fruit-production and storage.

- d) The growth in **retail-trade** in the last five years was larger than nationwide. This did not reflect the development of the county but the effect of consumers' tourism from neighboring countries. The largest growth was recorded among shops of chemical, industrial and cultural consumers' articles. It is characteristic that foreign companies first appeared only in 1998 in the retail-trade of the county and now three large shopping malls are under construction in Nyíregyháza (METRO, TESCO, SPAR).

Growth in the number of catering units was markedly slower than in retail, which may be explained by the fact that the county is not among the target areas of either national or international tourism.

- e) From the point of view of **transporting** activity, the predictably enduring crisis of the CIS states is unfavorable. Furthermore, strict regulations in customs-duties in the neighboring countries will have a bad effect on consumers' tourism and may hit retail badly.
- f) The share of **foreign capital** is significantly lower than on the national average. This causes a severe lack of capital resources, which is reflected in the fact that in the county structural changes in the different sectors are less significant than nationwide.

Companies in foreign ownership

	1994	1995	1996	1997
Number of entities	290	299	339	584
Percentage within the national figure	1.2	1.2	1.3	2.3
Subscribed capital, Billion HUF	13.7	10	16	19.8
Percentage within the national figure,	1.0	0.5	0.7	0.7
Foreign share, Billion HUF	5.8	7	10.5	14.8
Percentage within the national figure	0.7	0.5	0.7	0.7

Source: KSH (Central Statistical Office)

At the end of 1997 there were 584 companies in partly or wholly foreign ownership with a total of 19.8 billion HUF subscribed capital out of which 14.8 billion HUF is the foreign share. This is only one third of the national average per unit. The most significant foreign investors are the following: Swiss investors have established a the most modern furniture factory of the county in Vásárosnamény; with the privatization of the other factory of MOM the German Zeiss and the Belgian Buchmann have made their appearance in the optical industry; General Electric's has a plant in Kisvárda; UNILEVER has a factory in Nyírbátor; TÉKISZ, the legal successor of Hungarofruct is

now in majority Italian ownership (69 percent); TAURUS CARBONPACK and TAURUS PALMA now belong to the German Phoenix rubber-group; TAURUS Abroncs belongs to Michelin; the Austrian company, DUNAPACK has a factory in Nyíregyháza.

- g) Though investments have increased in the last couple of years, they are still way below the national average both in proportion of the territory and of the population. Thus the present level of backwardness will not be possibly reduced with the present level of investments.

Growth of per capita investments (previous year= 100 percent)

		Agric.	Industry	Construction	Retail	Transport	Educ., Health	Other	Total
1993	Sz	87.9	166.8	66.2	193.1	85.9	132.3	97.7	133.2
	N	105.2	103.5	115.4	114.7	132.9	115.9	116.1	114.0
1994	Sz	172.1	66.7	390.9	39.1	225.1	98.8	159.7	104.4
	N	183.7	129.6	165.2	115.9	153.7	125.7	134.4	136.7
1995	Sz	131.4	97.2	33.7	94.5	100.0	93.6	55.2	87.1
	N	132.8	131.7	135.1	108.8	110.0	98.4	94.8	114.1
1996	Sz	199.7	109.6	91.9	150.3	77.0	75.4	148.2	105.8
	N	128.8	124.0	166.9	163.2	106.5	99.1	107.3	119.7
1997	Sz	117.3	140.7	122.7	170.8	178.4	231.3	191.9	167.4
	N	156.1	130.4	45.3	121.7	155.3	158.7	121.8	137.5
97/92	Sz	465.8	166.7	98.4	182.7	265.4	213.5	244.9	214.4
	N	515.7	285.8	194.4	287.4	371.5	225.2	193.4	292.5

Source: KSH (Central Statistical Office)

Szabolcs-Szatmár-Bereg county was the last among the counties in 1997 in investments per capita. Per capita investments were 47 percent of the national average. Between 1992 and 1997 the county had a mere 2.5-4.2 percent share of the total annual investments at current prices.

The low amount of per capita investments compared to the national average is indubitably a clear sign of the fact that the renewal of the county's economic structure and the modernization process is yet to gain momentum.

Value of investments (Billion HUF)

	1995	1996	1997
Szabolcs	19	21	35
National	788	940	1,288
Sz/N	2.4	2.2	2.7

Source: KSH (Central Statistical Office)

Proportion of the main sectors in the investments

	1995	1996	1997
Agriculture	4.8	8	5.7
Industry	35.5	37	31.1
Commerce	4.4	6.4	6.4
Catering	0.5	0.1	0.5
Transport telecom.	29.8	21.7	23.1
Financial services	1.8	1.3	1.3
Real Estate	2.2	2.2	1.8
Public administration	3.6	7.5	6.7
Education	4.1	3.3	5
Health	7.6	5.1	6.5
Other communal services	2.8	5.3	10.4

Source: KSH (Central Statistical Office)

In 1997 and 1998 five significant companies of the county have realized investments. Two of these (Micheline and Hubner) belong to Nyíregyháza and its surroundings. Both produce rubber-based components of transport vehicles.

- h) Of the population (113 thousand people) live in the county seat **Nyíregyháza**. The other cities are much smaller. Of these the largest are Mátészalka and Kisvárda where 70 thousand and 67 thousand people live, respectively. The density of population in Nyíregyháza is high above the county average (150 people per km²). While the population has decreased by 2.1 percent between 1990 and 1997 nation widely, the population of the county has increased by 0.6 percent, and that of the county seat by 0.5 percent.

The county seat is well above the county average with respect to both its population and the structure of economy. The number of the population is rising here, as opposed to the situation in the smaller settlements of the county. Personal income tax per capita is 30 percent higher than elsewhere in the county. 30 percent of the total housing construction of the county was carried out in Nyíregyháza. 61 percent of the enterprises are settled in the county seat and its area and the average density of enterprises is three or four times higher than that of the county average. 40 percent of industrial workers are employed here and the proportion is the same with respect to retail and catering. 54 percent of commercial accommodation is found here. The city is increasingly becoming an educational centre.

About half of the TOP 100 exporters and importers who basically influence foreign trade are located at the county seat. Beyond the three large old banks (Budapest Bank, Kereskedelmi és Hitelbank, Magyar Hitelbank) CIB Hungaria, ING, Inter-Europa, Volksbank, Unicbank, Konzumbank, Postabank, Iparbank, Hypobank, Erste Bank and Takarékbank are also present here. Most of the banks have their offices in Nyíregyháza.

Comparing all these, it may be concluded that the increasing regional differences in the whole country are present within the county as well. While the whole of the county and especially some of its parts are threatened by enduring backwardness, the development of the county seat is rapid and is likely to be able to accelerate.

2.2 Forecast for the development of Szabolcs-Szatmár-Bereg county and Nyíregyháza

On the whole, considering Nyíregyháza's above the average and the rest of the county's below the average growth, the whole of the county is likely to perform a development near the national average. In case the settlement of multi-national companies gains new momentum, a slightly higher amount of growth is predictable. (Of course, this would in the first place improve the position of Nyíregyháza and a few other cities, but this would have a favorable influence on a wider scope as well). According to a favorable scenario foreign investments will be doubled between 1999 and 2004, that is, they will amount to an annual \$30 million instead of the present \$15 million. At least half of it would be directed towards the industry of Nyíregyháza. In case one or two major multi-national companies make larger investments, it is possible that the amount of growth in the county will exceed the GDP, but it is uncertain.

Growth Indicators (in Percent)

	1998	1999	2004/1998	1999-2004
Agriculture				
Szabolcs	—	2	12	2
Nyíregyháza	—	2	12	2
Industry				
Szabolcs	6	3	59	8
Nyíregyháza	12	6	76	10
Construction				
Szabolcs	8	4	50	7
Nyíregyháza	12	8	76	10
Commerce				
Szabolcs	3	2	19	3
Nyíregyháza	5	4	23	4.5
Transport				
Szabolcs	3	2	34	6.5
Nyíregyháza	4	3	67	9
Investments				
Szabolcs	5	4	30	4.5
Nyíregyháza	10	8	66	9

Source: KSH (Central Statistical Office) and GKI Co. forecast

As opposed to the annual average GDP growth of 5.5 to 6 percent of Nyíregyháza the rest of the county will perform no more than 3.5 to 4 percent growth (including certain smaller cities with growth above the average).

- a) **Industrial growth** may exceed the national annual average (7 percent) if the settlement of foreign investments accelerates. Besides, Nyiregyháza will predictably have a growth above the national average.

The rubber and pharmaceutical companies with billions of sales proceeds are to be found in mainly Nyiregyháza, therefore, the development of the county seat is likely to be much more rapid than the county average. (Betulapharma Pharmaceutical Ltd., Taurus Agricultural Ltd., Taurus Palma Rubber and Plastic Ltd.). The new rubber investment of Michelin is to be completed soon in Nyiregyháza, which, too, is likely to have a favorable effect.

The factory manufacturing spectacles in Mátészalka, a significant representative of the optical industry, managed to operate continuously during the years of the recession and is getting on successfully after the crisis.

Concerning the clothes and shoe-manufacturing industry, it is favorable that the larger companies have also made their appearance besides the smaller ones. The large clothing industry investment of Benetton is to be completed at the county seat, which will create hundreds of jobs. This sector will increase its output and export more rapidly than ever before.

Machine industry would be enhanced by the investment, which is planned to be carried out in the framework of an agreement with the Swedish Saab-Gripen group. The group would like to build factories in the county to manufacture various part and components and to employ about 800 people. It is, however, doubtful whether the agreement will be realized because the promised development is conditional on other businesses.

- b) The medium-term growth of **agriculture** is likely to be below the average growth of the economy. It is mainly because the structure of agriculture is not yet fit to market economy, and there is permanent uncertainty about the transformation of agriculture. Furthermore, the efficiency of agriculture is also low. Moreover, the agriculture of the region in question is hit badly by natural disasters (e.g., floods) and in the long run the high amount of "forced entrepreneurs" will cause difficulties. The medium-term prospects of the county's food industry, however, can be brighter if successful product and market changes are carried out.

The short-term prospects of **agriculture** in the county are not too favorable (like those of the whole nation), yet they are not significantly worse either. It is because in Szabolcs-Szatmár-Bereg county high unemployment and the lack of other jobs put a pressure on agriculture to employ more people. In the part of the county called Nyírség in the branches with huge labor needs (vegetable and fruit production, tobacco) substantial technical developments are required, yet the farmers (individual and joint enterprises) are not able to maintain even the present level relying on their own resources only. In

another part of the county, in Szatmár where the natural circumstances would first of all make the keeping of ruminant animals possible, is hit by a similar lack of resources. The huge amount of small entrepreneurs and "farmers" who work isolatedly are carrying out their activities under economic pressure and only a tiny minority of them can become rent able in the long run. The reorganization of previously existing integration is yet in its initial phases and the growers are at the mercy of the uncertainties of the market.

Due to the natural disasters that have taken place this year and to the loss of traditional markets the best **the agrarian sector** may achieve is to reach the national average growth (2 percent).

The developmental potentials of the agriculture of this region are shown by the fact that foreign investors who want to purchase land here have appeared. The farmers who work with low efficiency are not likely to be able to maintain their activity. For them, to hire out their land for long periods is a possible solution.

According to forecasts the most significant developments are to be expected in the orchard sector. To protect the crop and to improve competitiveness, it is essential to create appropriate conditions of storage. Thus, it is predicted that new stores will be built besides the existing ones. The quality of fruits available cause unrest among the entrepreneurs who carry out storage and sales. This encourages them to make their own orchards with new brands and two or three years ago they actually began to do this. However, the new orchards do not create new quality jobs but increase the amount of agricultural hired labor and seasonal labor.

Growth is being predicted in bio-production with high labor needs, too, where the maintenance of the present level of employment and a slight increase of income is likely. This, though, will not alter the above 30% unemployment rate of the villages.

- c) With regard to the **construction industry**, Nyíregyháza especially has shown an intense activity, which is likely to be continued.

The tendency started in the last couple of years which showed that there is a slow movement of capital investments both in industry, commerce and infrastructure from Budapest and the Western parts of the country to the Eastern regions is continued and this has a favorable effect on the construction industry. The development of local companies will continue to be helped by the policy adopted at public procurement to favor local enterprises among the bidders. Therefore, it is primarily the local companies that carry out the various construction developments(banks, office buildings and housing units) of the county seat.

Beyond construction, the growth of manufacturing structures and construction units is also predicted. The investment of Voest Alpine MCE Stahlbau Ungarn and the Hubner German constructing company is under way. The latter plans to construct structures. The French company that wants to build cold-storage plants and insulated panels in the area also belongs to the construction industry. Its development is soon to be completed and the factory is to be opened.

The investors presumably regard the region as a solid market, since the road constructions are likely to be continued and a further growth of industrial investments is expected.

- d) Among **services**, financial and educational activities are likely to develop rapidly. The former is made possible by the vicinity of the neighboring countries, even though legal relations with them are likely to be reduced. Trade will be significantly affected by the regulations and consumer demand in Ukraine and Romania. The development of the sector is likely since it is closely tied to the agricultural and industrial growth of the region. The development of educational services is enhanced by Nyíregyháza becoming a city hosting universities, which will have both positive and negative effects on the surrounding region. In case of services, too, the rest of the county will predictably perform worse than the county seat.
- e) The greatest problem of the county's economy is the unsatisfactory level of **transportation and the road network**. However, improvements are expected in this area as well.

The construction of the **M3 motorway** will reach the county seat predictably by 2002. This will provide good opportunities for the region. The creation of a railway logistical centre in the area of **Záhony** may improve the region's image in the eyes of investors, though the construction of this centre depends on whether Eastern trade will really go through this settlement and not through Slovakia. There is likely to be a severe competition to host this centre.

The opening of the **Nyíregyháza airport** also serves to reduce the difficulties of transportation and it is likely to be carried out in the course of the next three or four years. This investment, too, requires that the city be easily accessible from the larger settlements of the region, that is, that land transportation be satisfactory, too.

The slowly emerging **industrial parks** provide good opportunities for future investments. These developments are usually carried out through PHARE-support. The industrial parks of Nyíregyháza and Mátészalka are already organizing the investors who are willing to invest in the region. The full completion of the project is expected to take eight to ten years.

Trade investments have a special role in the Hungarian economy. It is likely that the appearance of large shopping malls will make life difficult for local retail shops.

- f) The growth of **investments** in the county between 1999 and 2004 is likely to remain below the national average.

Without Nyíregyháza, an increase of about 4 percent is to be expected. The new developments in Nyíregyháza are expected to expand more dynamically, slightly above the national average, partly because a number of multinational enterprises has still been operating here and they are expanding their activities, and partly because other foreign companies are also expected to start business here.

It is about one third of the projects which takes place in industry and another few are working in the agriculture. The services represent a growing share, and the importance of trade and commerce is increasing within them due to the growing number of shopping centers. Regarding road constructions, and infrastructural development, there is a probability of involving central government development resources, because the county has good chances to receive them as it is an underdeveloped area.

3. Employment in Szabolcs-Szatmár-Bereg County

The total number of employees in the companies employing more than 20 people and at the institutions financed by the state budget in Szabolcs-Szatmár-Bereg County, has decreased by about 25 percent during the period between 1992 and 1997. The rate of the decrease in employment is similar to the national average. Due to the dynamic increase in the number of the new enterprises, nowadays the employment situation is slightly better. Even during the year 1991, the level of unemployment was higher in the county than the national average, and this has remained unchanged during the last seven years.

During the period between 1992 and 1997 in Szabolcs-Szatmár-Bereg County employment increased only in the field of the business services, and the public administration, but here the growth was more dynamic than the national average. During the same period the decrease of employment was more serious than the national average, in the field of the construction, farming, trade and commerce, repair services, while in the field of the health, engineering industry, tourism, the rate of decrease in the employment was lower than the national average. In the field of banking and finance a decrease was experienced in contrast to the nationwide growth, in spite of the fact that quite a number of banks are operating in the county. The employment situation in the whole of the county is very unfavorable, while in the county seat the situation is much better. As far as Nyíregyháza is concerned, various industries and many companies are concentrated here, foreign working capital has flown mainly here,

and the city has received a higher than average share of developments, therefore unemployment can not be regarded as a serious problem here.

According to the estimation of the Institute of Economic Research Inc. the level of employment has remained constant in Szabolcs-Szatmár-Bereg County during the year 1998. An increase of approximately 0.5 percent may be expected during 1999, partly due to the overall improvement of the national economy, partly due to the demand of reconstruction work necessary because of the heavy destruction caused by the recent floods. The improvement in the employment situation depends mainly on the amount of the central government subsidies to be granted in connection with this kind of public and communal work, as the local resources not sufficient.

Around the turn of the millennium, that is **until 2004, an increase of 3 percent is expected in employment and this corresponds to the national average.** This means that further deterioration in the employment on county level is not expected, but no improvement is foreseen. Nyíregyháza can hold its favorable position within the county, and here the employment in trade and commerce, business services, and industry may improve. A slight improvement of employment can be expected in industry and construction in the rest of the county, mainly in connection with the infrastructural projects.

Change in employment (previous year = 100 percent)

The changes in the number of people employed (previous year = 100 percent)

	1993 1992		1994 1993		1995 1994		1996 1995		1997 1996		1997 1992	
	County	Nat. ec. Total										
Agriculture, forestry and fishing	60.4	73.7	66.1	82.1	88.3	91.5	88.3	92.4	92.4	95.4	28.7	48.8
Industry	84.0	87.4	99.9	91.6	93.2	95.7	100.3	96.6	103.0	99.5	80.8	73.6
Construction	82.4	85.5	69.1	83.1	79.6	88.2	84.6	85.3	88.3	90.5	33.9	48.3
Trade, repairs	81.1	82.2	76.0	83.0	90.2	94.1	87.7	92.1	100.2	94.3	48.8	55.7
Hotels, catering	91.7	89.0	90.3	91.7	97.0	95.6	103.3	95.9	107.6	107.4	89.4	80.4
Transport, mail, telecommunications	100.3	97.0	93.6	93.3	97.7	96.7	94.5	95.2	96.6	94.3	83.8	78.6
Financial services	104.2	107.2	103.3	104.3	98.8	101.2	92.2	94.8	95.4	98.5	93.4	105.7
Activities to assist real estate business	96.3	85.4	100.9	88.3	92.7	98.0	89.8	102.0	137.2	102.4	110.9	77.2
Public administration	96.0	112.6	124.5	100.6	100.4	97.3	118.9	98.4	107.7	110.4	153.7	119.6
Education	100.2	102.2	101.2	99.2	99.0	97.9	94.2	94.0	90.6	86.3	85.7	80.6

	1993 1992		1994 1993		1995 1994		1996 1995		1997 1996		1997 1992	
	County	Nat. ec. Total										
Health care	99.5	96.8	97.3	97.1	100.9	97.4	96.1	96.4	93.3	98.1	87.5	86.5
Other communal and personal services	95.1	92.9	99.7	95.1	91.8	93.1	93.7	93.5	142.4	96.9	116.3	74.7
Total	86.7	90.9	93.7	92.3	95.2	95.4	97.3	95.3	99.4	97.7	74.8	74.9

Source: KSH

A better situation than the one described above may come about, if after 2000 within the preliminary process of helping Hungary catch up with the EU before the accession, Hungary receives considerable assistance for development and a part of this is allocated to the development of the Eastern region of the county.

Of course, an unfavorable, lower rate of economic development is also possible and then employment will stagnate, or grow only at a lower rate than indicated above within the whole of the county, but the position of Nyíregyháza will remain favorable in any case.

In conformity with the traditions of the county, free labor can be found in the chemical industry, in the optical industry, in timber processing and in the engineering industry. Employment is possible mainly at the level of semiskilled and skilled labor, to employ professionals with higher qualifications, the improvement of the local education capacity could be necessary, but a re-migration of specialists is also possible.

Regarding unemployment, Szabolcs-Szatmár-Bereg County has the most disadvantageous position at national level. As it can be seen in the table, the rate of unemployment in the county has highly exceeded the national average in each year of the decade. The slight slow-down during 1993-94 was only temporary and since then the rate of unemployment has kept growing.

The level of unemployment

	No. of unemployed persons	Rate of unemployment percent	National rate of unemployment, percent
	Szabolcs-Szatmár-Bereg County		
Dec. 1991	37,927	16.4	8.5
Dec. 1992	61,786	22.4	12.3
Dec. 1993	52,026	18.7	12.1
Dec. 1994	47,288	18.5	10.4
Dec. 1995	44,725	18.8	10.4
Dec. 1996	42,091	19.0	10.7
Dec. 1997	43,063	19.3	10.4
Dec. 1998	40,621	19.6	9.6

Source: OMMK

The structural features of unemployment in the county are rather unfavorable compared to other regions of Hungary. An especially large part of the population is jobless among those who completed only the 8 years, or even less, of primary school. The majority of the jobless population is below the age of 36. The rate of men in the jobless population is very high compared to the national level, it is 60 percent, which is the highest among all the other counties.

Only 22 percent of the registered unemployed population received unemployment benefits during December 1998, and another 41 percent received wage subsidy. Among the registered unemployed, the rate of permanently jobless is extremely high, because they are practically not employable workforce, they can be employed only in subsidized workplaces even in the long term.

In this respect, Nyíregyháza is also in a quite favorable position: the unemployment rate here is about 6 to 7 percent, which is expected to decrease to 5 percent, 'the natural level' by 2004.

In the future, the unemployment situation in the county will change mainly depending on the changes of the subsidy system. **A significant economic upswing, or an investment boom could create jobs only for those in their active age who have retired into the households, into the forced enterprises, and it will not reduce the number of the registered unemployed population.** Unfortunately, the situation of the unemployed population will deteriorate and this, in turn, will generate further social tension.

All these unfavorable economic conditions contribute to the migration of the county's population. This concerns first of all those with a degree in higher education they do not come back to the county because of the weak career chances. This trend may be changed by starting significant large developments and by creating a greater number of well-paid jobs. Considering that the favorable effects of the economic upswing have emerged earlier in other parts of Hungary, migration will have a rather negative balance for Szabolcs-Szatmár-Bereg County. Regarding Nyíregyháza, the migration loss during the 90's was quite low, because it was supplemented by the natural increase of the local population. The migration of the population in active age, mainly in the higher skilled groups, will remain high during the next few years. Great distance commuting may not be expected to be revived again due to the changes in the conditions, such as the relatively high travelling expenses, and the abolition of workers' hostels, etc.

4. Development Trends of the Enterprises in Szabolcs-Szatmár-Bereg County

Entrepreneurial activity (and opportunities) are the highest in the most developed regions, and it is lowest in the less developed places. The best indicator of the entrepreneurial activity and opportunities is **the number of enterprises per one**

thousand inhabitants. This rate is the best in Central Hungary (102) and within this region, in Budapest (119). This rate is only half as much in the underdeveloped counties, such as in **Szabolcs-Szatmár-Bereg** County (52).

It is interesting to note, that in Nyíregyháza **this rate approximates that of Budapest**, though the average amount of capital of the enterprises is lower. Besides the county seat, Fehérgyarmat, Kisvárda, Mátészalka, Nyírbátor and Vásárosnamény are the towns where the number of enterprises per one thousand inhabitants are relatively higher than in other towns of the same size.

Number of active enterprises per one thousand inhabitants (31.01.1999.)

Region	Number of active enterprises		
	Company	Individual	Total
Central Hungary	54	48	102
Central Transdanubia	23	44	67
Western Transdanubia	24	48	72
Southern Transdanubia	24	44	68
Northern Hungary	17	32	49
Hajdú-Bihar County	21	38	59
Jász-Nagykún-Szolnok County	16	36	52
Szabolcs-Szatmár-Bereg County	16	36	52
Northern Plains	18	37	55
Southern Plains	21	44	65
Total	30	43	73

Source: KSH (Central Office of Statistics)

The influx of foreign capital has increased into the county since the year of 1997. The investments financed by foreign capital is concentrated in towns and mainly in the county seat. The eight tenth of the investments takes place in towns, while the three tenth of these investments had their capital subscribed in Nyíregyháza.

The foreign capital is basically represented in the county by **investors from the profession**. In many cases the assets were purchased on the basis of earlier economic contacts, and in other cases the actual technical level and market position of the companies determined foreign purchase. The most important foreign ownership companies are the following: Nyírbau Road Construction Inc. Nyíregyházi Tobacco Fermenting Inc. Agrogép Farm Machinery Co. Alkaloida Pharmaceuticals Inc. MOM Water Guages Co. The most successful privatization among these was the purchase of 55.8 percent of the Alkaloida Pharmaceuticals Inc. in Tiszavasvári with of HUF 7600 million by ICN (USA, California.)

According to a recent public opinion poll, **among the entrepreneurs in Szabolcs-Szatmár-Bereg County** the medium scale entrepreneurs are the most optimistic about their prospects, and the small scale businessmen are the most pessimistic. The larger companies expect no significant change in their business position in the near future. Expansion in employment is envisaged only by the medium

scale companies, while the rest of entrepreneurs expect only the retaining of their work force.

The **small and medium size companies** are not able to dynamize the region on their own accord. They can realize further development, if large companies financed by foreign capital work in their environment, and they can gain a more significant market share as their subcontractors of these. The above mentioned companies and a few other joint ventures with a seat outside the county, with a stable and good market background, are able to carry out an increase in the industrial production generated by the exporting demands. This trend is expected to prevail during the next few years. Both the influx of foreign capital and the increase of the consumption of the local population may cause an expansion for both the small and medium size industries, mainly in the area of industry (machine industry) and services. The situation of small commercial enterprises became worse after large shopping centers appeared (Metro, Spar, Tesco).

Real chance for the dynamic development of the small and medium size enterprises exists above all in the county seat, especially if a few other large investors and multinational companies can be attracted to come to the county. An inevitable precondition of this is the development of the road network. Further involvement of foreign capital may be increased due to the fact that there are now enough enterprises in the Western and Central regions of Hungary, furthermore the level of wages in Szabolcs-Szatmár-Bereg County is relatively low, and the county also has a geographical advantage in the long run.

A general expectation is that the USA Trade Office to be opened shortly will have a favorable impact on the economic development in Nyíregyháza. However, it can not be regarded as an advantage that the educational institutes in Nyíregyháza conduct courses mainly in arts and classics. The GATE (University in Agriculture of Gödöllő) has recently launched education in economics, but this is still not sufficient to satisfy the need for highly skilled professionals able to perform work on the level required by the foreign investors. The work force available at present may be employed in the branches of industry offering labor intensive, simple physical work at semi-skilled level. The number of active population is higher than the national average, but their qualification is lower. It is to be noted that in the field of food processing, chemical industry, engineering, timber works and carpentry, optical industry all which have good traditions, free work force of proper qualification and skill is available. Any need in highly skilled and managerial labor may be covered by migration.

5. The Income, Consumption and Housing Investment of the Population of Szabolcs-Szatmár-Bereg County

The **average gross earnings** of the employees in the county was HUF 45,178 in 1997 and this was 22 percent lower than the national average. This average puts Szabolcs-Szatmár-Bereg County as the last among the Hungarian counties.

In Szabolcs-Szatmár-Bereg County the gross monthly income of the employees working in the education and in the health services was nearest the national average, 8 to 10 percent behind it only. The greatest income gap, more than 30 percent was found in trade and commerce, business services and other communal personal services. The highest incomes can be found in financial services and engineering industry.

No significant improvement of earnings can be expected before 2004. It can be regarded as a great achievement, if the county could be listed forward and could get rid of its last position. On the other hand, the low level of incomes may be taken as an attractive point for the investors, if the accessibility of the county is improved.

Information on the income and consumption of households is available from the family survey prepared by the KSH (Central Office of Statistics).

During 1997 **the yearly average gross income per person was HUF 314,700** in the households, and 21,000 HUF social security contribution and 39,100 HUF personal income tax per person was paid. Hence the average net yearly income per person was HUF 254,600.

The gross income was originated as follow: from employment: 51.9 percent, from individual enterprise: 7.3 percent, from farming: 7.3 percent, from pensions: 22.5 percent, from family allowance: 3.4 percent.

The gross income per person is the lowest in the households in the Northern Plains (16 percent less than the national average), including Szabolcs-Szatmár-Bereg County.

Due to the tax system's equalizing role **there is a little difference in the net income/person between the regions**. The Northern-Plain has the lowest income and this region falls 11.2 percent behind the country average.

The regional differences in the structure of the income can explain the income differences. The proportion of **income coming from full time employment** stays below 50 percent in the eastern parts of the country, while the proportion of the income derived from the enterprises is around 2 to 4 percent. In the Northern-Plain, 11 percent of the total income is derived from agricultural activity. The proportion of pension fluctuates between 20 and 26 percent and is clearly high where the income from employment is low. This latter is true of the other social incomes as well (family

allowance and unemployment benefits). Naturally, the surveys are not able to record the income coming from the grey and the black market.

According to the estimates made by GKI Rt., **the real income of the population** of the country rose by 5 percent in 1998, and in 1999 a 4 percent rise is expected. In the case of a favorable economic development, it will be 4 to 5 percent until 2004. **According to our prognosis, Nyíregyháza will reach this 5 percent of income rise but in the whole county this is not probable. Here a 3.5 to 4 percent/year rise is predicted.** In the case of the county seat it is realistic to expect some favorable changes in the structure of the incomes. Thus, the share of the income coming from enterprises and from employment within the total income will increase, but the proportion of social benefits will remain high in the whole county.

Taking the low level into consideration too, the increase of the income in the county average will provide the permanent inhabitants with slowly growing savings. According to the nationwide tendency, there will be a differentiation in the savings in this region as well. This can create a permanently growing demand in the real estate market among the inhabitants with a higher income. The extent of this demand will, of course, be determined by the housing finance system and the interests.

The **annual consumption of households/person** was 262.7 thousand in 1997 (of this the personal expenses were 242.2 thousand and the self-produced consumption was 20.5 thousand forints.) The lowest personal expense/person rate was recorded in the Northern-Plain (13 percent below the country average).

The increase of the consumption follows more or less closely the incomes. In Szabolcs-Szatmár-Bereg county the structure of consumption of Nyíregyháza - because of the emergence of national storehouse chains which take the expected demand of the neighboring countries into consideration as well - comes close to the country average but the county as a whole still follows a structure of consumption characteristic of "poverty" (in the proportion of comparatively high food and low supplies and durable goods).

Another question to be examined is that of the housing market. Between 1990 and 1997 the **housing stock** in the county increased by 11,811 flats, this means a growing tendency of 6 percent, which is faster than that of the country (3.7 percent). But the number of inhabitants/100 flats, which is much higher than that of the country's, has decreased by 4.4 percent, somewhat less than the national average. In 1996, the number of newly built houses was 140 percent, while in 1997 it was 115 percent of the figure in the year 1990; this is the highest value in the country. (It cannot be excluded that a higher than average number of faked constructions took place here in order to take advantage of social subsidies). The number of constructions/1,000 person was 6.5 in 1997 which is much higher than the 2.8-value of the whole country (a similar value of Nyíregyháza is 4.3). In certain percentage of the houses built between 1996 and 1997 there is no toilet and the proportion of their being equipped with gas piping, public water pipes and drains is also much lower than the country average. In general, it can be

stated that the standard of new flats in Szabolcs county is lower than average; this is true of the flats' average area as well (84.3 sq.m. and 80.2 sq.m.) which is a lot smaller than the national average (96.9 m and 95.4 m).

Compared to the whole of the county, Nyíregyháza shows a much more favorable picture concerning its housing stock, too. Between 1990 and 1997 the increase in the housing stock in the county seat was higher than all the county seats of the country including Budapest, 3,953 new units were constructed, which meant a 10.3 percent growth during the above discussed period. However, the number of inhabitants/100 flats is comparatively high: it is 266; this is the third or fourth worst value among the county seats. A comparatively small size and a poor infrastructural supply is characteristic of the units built in Nyíregyháza as well.

The above mentioned parameters refer to the fact that in the whole of the county and especially in the county town, there is good reason to continue housing construction. The first reason for this is a still perceptible lack in the quantity of flats and the second main reason is to satisfy the qualitative demands. But this has a prerequisite: the improvement of the area's water and drainage system. The high proportion of young people within the population and the large families also inspire constructions.

In the whole of the country, housing construction (looking at the annual average growth) will indicate a slow rise. The time of the process might as well follow a "roundabout route" because in 1999 - in consequence of the postponement of the finishing of buildings in 1998 due to a demand for the promised refund of value-added tax - an artificially high rise is probable, compared to which some fall and then again some rise may take place in the following year.

One of the factors affecting constructions and renovations is the inhabitants' income, where based on the previous facts gradual improvement can be expected. At the same time, "invisible" income (which in certain cases can be invested into construction) deriving from the black and grey market will probably show a decreasing tendency. The change in the housing finance system is probably more important than these, especially the credit and the rates of interest. The crediting policy of the housing saving banks, the growing supply of the mortgage banks, the further decrease in the rate of interest for credit expected from 2000, the changes in the housing subsidies and in the refund of value-added tax will all increase the chances of the citizens to invest into flats. Between 1999 and 2004 on annual average first 30 to 34 thousand, while in the second half of this period even 40 thousand new units can be expected to be constructed. The demand for renovations is even much higher than that and similar development tendencies can be expected.

In Szabolcs-Szatmár-Bereg county, similar processes to that of the whole country may prevail. In this way, we can count on the building of at least 2000 (real) flats on average. In Nyíregyháza, around one third of this in average can be expected.

Housing construction has to satisfy qualitative demands on the one hand, and significant quantitative demands in Nyíregyháza, on the other.

6. The expected changes in the personal income tax

In the county, the incomes serving as the basis for personal income tax is even lower compared to the national average than the gross income.

Data concerning the personal income tax, 1996-1997

	Incomes constituting the basis of the personal income tax			Personal income tax		
	Per one permanent resident					
	1996	1997	$\frac{1997}{1996}$	1996	1997	$\frac{1997}{1996}$
	Ft		Percent	Ft		Percent
The small region of Nyiregyhaza	130,645	167,768	128.2	27,385	32,816	119.8
County of Szabolcs-Sz-B.	110,225	137,635	124.9	21,665	25,125	116.0
Country total	175,510	222,662	126.9	41,430	48,863	117.9
Country average, percent small region of Nyíregyháza	74.4	75.3		66.1	67.2	
County of Szabolcs-Sz-B.	62.8	61.8		52.3	51.4	

Source: Regional Statistical Almanach (Területi Statisztikai Évkönyv), KSH 1996-1997.

It is clear from the table that the taxing ability of Szabolcs-Szatmát-Bereg county is poor. Nyíregyháza has a somewhat better situation but compared to the national average it reflects very poor possibilities as well. Based on the prognosis of GKI Rt., the incomes constituting the basis of the personal income tax will show a growth of 4 percent/year in real value until 2004, following the pattern of the national average. Within this, the development of the county seat will be faster than the national average while that of the other areas will stay below it. According to our prognosis, the county will not really be able to catch up with the national average in incomes and the amount of personal income tax until 2004. Of course, the real income situation of the local councils will be determined by the changes in the regulations concerning the local councils (that is, by the proportion of the remaining personal income tax and the rules of equalization). If there is no basic change in this and in the burden on personal income tax, then the incomes of the local councils deriving from the personal income tax will increase in their real value. At the same time, among the number of tasks to be solved, construction by the local council will not have a separate priority as expected and neither will assistance for housing construction by the local council.

BREAKING-OUT POINTS FOR THE ECONOMIC DEVELOPMENT OF THE COUNTY

The development of the county, coming close to that of the country's, is based on the dynamic growth of the processing industry. Behind this, there is an expectedly powerful investing activity including a few foreign or "green-belt" investments. This is based on the following circumstances and factors:

- The favorable geographical location - the county being adjacent to three foreign countries - is especially important from the aspect of the county's future. After the development of the border stations, trade (besides the present economic activity i.e., "shopping tourism") will become possible towards Romania directly from the county. In the case of improving the economic relations with the countries of the CIS - which basically depends on the solving of the inner problems of these countries - the transferring capacity of the Záhony-zone and the storing possibilities will become more valuable.
- The building of **M3 Motorway** to the county would remove one of the largest obstacles of foreign interest: the difficulty of access.
- Presumably, foreign capital will turn its interest after the middle and the western parts towards the eastern parts of the country. There is still a lot of cheap labor here compared to the country's developed, western regions. However, the suitable physical and psychological infrastructure needed for the reception of foreign capital has been constructed only in the county seat and a few other towns and it will flow mainly to these places in the future also.
- The enterprises which have been bought by foreign companies generally have a good and secure marketing background and therefore are able to make an export-based production growth in the following years. Some of the small and middle enterprises will probably be able to join this as "suppliers" in new areas but since this development is only at the beginning phase, a more comprehensive effect will be expected only by the end of the period.
- There is a qualified **labor** available for new investments in the traditional fields of the county's industry, that is, in the chemical-, optical-, wood- and engineering industry. The only chance to decrease the backwardness of the county is through investments high above the country's average. Developments in the vehicle- and the electronics industry (in the past few years, these have developed a lot in other regions of the country) would mean an effective change, for example. There is a chance for this as average earnings can be expected to remain below the national average on the long term.
- By making good use of the existing expertise and **tradition** for the traditional staple crops, it would be possible to change the market and the products at the companies of the food industry as well. This, however, can bring results

only after a transitory period of a few years and involves a huge demand for investments.

- The development of the **education system** together with the participants of the economy is a condition for the new generations starting work to have the qualifications required by the companies and great emphasis is laid on this in the county. Its importance is highlighted by fact that many of those people who graduate outside the county do not come back and do not strengthen the intellectual potential of the county.
- Based on the experience gained in the county in recent years it will be possible for the county - due to its low level of development - to have access to large amounts of **EU funds** to be opened in the near future as sources for development to make up for the chronically lacking capital. It can be expected that through making use of the already available opportunities of the EU assistance system and through opening up new possibilities significant funds will be directed towards the county and especially Nyíregyháza.

On the long term **agriculture** (and horticulture within this) and food industry can be an important economic resource in the economy of the county. The following main breaking out points are possible on the medium and long term:

- Changing the structure concerning the use of the land. What it would basically mean is that land would be used for a purpose and at an intensity which it is suitable for and which it can bear without any harm suffered. In view of this principle the present area of arable land can be expected to decrease significantly.
- Developing labor intensive sectors where vertical integration (processing, selling) is also necessary (vegetables, fruits, tobacco).
- Extending the cooperation of producers (cooperatives buying and selling, machine associations, etc.)
- The modernization of food industry with a change in the products and the market.
- Joining agricultural-environmental programs.
- Developing the more labor-intensive bio-tourism.
- Making use of the opportunities for tourism of the upper Tisza region (village and agro-tourism).

THE ECONOMIC POTENTIAL OF SZABOLCS-SZATMÁR-BEREG COUNTY AND NYÍREGYHÁZA REFLECTED BY THE FINANCIAL INDEXES

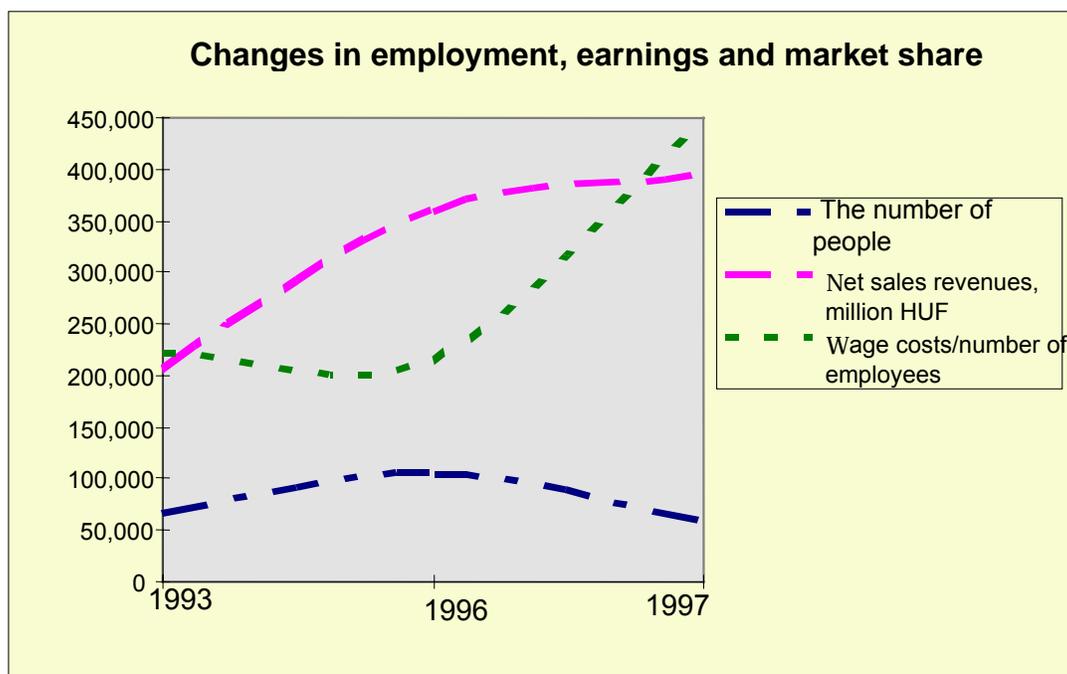
The following county-evaluation examines the economic tendencies between 1993 and 1997 reflected by the financial indexes of double- and single entry accounting enterprises. The data deal neither with the upper part of economy concerning the multinational companies with their seat in Budapest, which settled into the county, nor the lower segment where private entrepreneurs and micro enterprises operate, but refer to the wide layer between the two.

The number of double-entry accounting enterprises in this region increased by 10 percent in 1997 compared to 1996. The average sized companies in the region possess a subscribed capital of 31 million and they work with 18 employees.

Szabolcs county is on the eastern borderline; its development in the examined 5 - year - period has been dynamic and stable but smaller than that of the other counties. Compared to 1993, the number of enterprises in the county has increased by 63 percent. We are not witnessing organizational division in this entrepreneurial circle because the growth of the companies' own capital has been 71 percent. This is partly due to the growth of the capital accumulation index (own capital/subscribed capital) from 1.21 to 1.47. At the same time, there is a large number of micro enterprises in the county, most of which are based on self-employment (in 1996, their number reached nearly 26.000).

Nyíregyháza's share in respect of nearly all the indexes is around 50 percent of that of the county. Regarding the number of its companies, its share of profits is a little bit behind that of half of the companies in the county (48 percent) but in proportion to this, their share of the companies' own capital is smaller, too (47 percent). However, we should not forget that most of the foreign owned companies having a Budapest residence work in the county seat.

The above mentioned enterprises have decreased the number of their employees drastically, by 22 percent in the past five years. This decrease took place between 1996 and 1997.



The market share of the county rose above the production factors, the net sales revenues grew by 90 percent compared to 1993. The earnings per capita grew at an even higher rate, nearly doubled. The dynamics of growth was the rising level of exports, the share of which within the total sales revenues grew from 11 percent to 17 percent.

Item	1997	1993	1996	1997
	Nyíregyháza	Szabolcs county		
The number of companies	3,739	7,171	6871	44,003
The companies' own capital, million HUF	51,758	109,891	86,713	63,937
The number of employees	27,551	57,929	105,412	67,714
Net sales revenues, million HUF	209,200	393,838	359,853	206,767
Export sales revenues	34,461	75,514	52,556	23,136

Source: KSH, GKI Rt. calculations

The county represents the similar sector of the national economy only under the average level. Concerning the most important elements of the economic potential - net sales revenues, export-import revenues, the share of the companies' owns capital - it is between 1.04 and 1.7 percent. It is the number of companies and the number of employees where it reaches and even slightly exceeds the average, which means that the companies we looked at, are small and the number of employees is higher than the average.

In the whole of the county the share of foreign owners was 20 percent and in Nyíregyháza it was lower, only 12 percent. This, however, concerns only registered enterprises. Including subsidiaries with a seat somewhere else would significantly increase foreign ownership share but the county would still be below the national figure of 47 percent.

The enterprises of the county have used more and more foreign sources for their development, therefore their debt (foreign source/total source) has become 54 percent from 49 percent compared to 1993. This is still 5 percent below the country's average. The enterprises of Nyíregyháza are not more in debt than the county. The proportion of the short-term liabilities within the foreign sources is around 80 percent; it shows a mildly decreasing tendency.

The profit before the taxation increased almost five times in the county, 41 percent of which amounts to the profit of the enterprises in Nyíregyháza. Even this drastic dynamics (compared to it) has not made it possible for the county to reach 1 percent of the total profit of the national economy.

The companies paid a 2.2-billion forint company tax in 1997, which is a little bit behind the level of that in 1996. 57 percent of the company tax paid derives from the enterprises in Nyíregyháza. So their share of the taxation is 16 percent higher than their share of the profit. The profit of the financial activity in 1997 decreased that of the companies by 2.2 billion forints in the county. Roughly one third of the produced profit was paid to the budget and the other third to the banks.

There was a spectacular progress in the field of liquidity. In 1997, the average liquidity level (current assets/short-term liabilities) was 1.31 in the county and 1.23 in Nyíregyháza. Both values are better than the national average.

The efficiency of production factors has increased in the past few years. The added value/person (the net income-material expenses/number of employees) has grown by 44 percent in the county compared to 1993, and by 1997 it reached the 1.3 value (in Nyíregyháza: 1.4), but this still falls behind the 2.78-value of the country. The profitability on the companies' own capital reached 9 percent in 1997, and in Nyíregyháza it reached 11 percent, which is higher than the 5 percent country average was.

Although the double- and single entry accounting enterprises of Szabolcs county have made a lot of progress since 1997, they still fall behind the highly developed counties and the national average in a lot of respects. The companies of this region are too small and they employ too many people, their profit and income-yielding ability is weak. They try to cope with their lack of capital through capital accumulation on the one hand, and by involving more and more foreign sources on the other. The price of this is the subtracted profit in return of the interest and capital payment. The solution could be the involvement of owners' capital but in this case the time the return is too long.

The enterprises of Nyíregyháza make up half of the county's above discussed economic segment. In property and profit they fall a little behind the 50 percent, even their liabilities do not come up to the half of the county's total liabilities. On the other hand, they are obliged to pay more wages. This is probably because of the stronger competition in the labor market. Thanks to their size, they can have a larger market-share within the country, but this does not refer to their export.

	Szabolcs Szatmár Bereg county				Nyíregyháza		National economy	
	1993	1996	1997	<u>1997</u> 1993 Percent	1997	Distribution, Percent	1997	Distribution, Percent
The number of enterprises in the county								
The number of entities leading a double and a single entry book-keeping*	4,403	6,871	7,171	162.87	3,799	52.98		
The number of micro-enterprises*	20,653	25,804	n.a.					
Employment income figures								
The number of people employed in the county	67,714	105,412	57,929	78.43	27,551	47.56	2,046,575	5.15
Wage costs, million HUF	15,102	22,594	25,535	169.08	12,643	49.51	1,339,141	1.69
Personal-type costs, million HUF	27,184	37,066	42,503	156.35	21,027	49.47	2,183,105	1.70
Economic potential								
The number of companies (double + single entry book-keeping*)	4,403	6,871	7,171	162.87	3,739	52.14	117,361	5.85
The companies' own capital, million HUF	63,937	86,713	109,891	171.87	51,758	47.10	8,313,426	1.04
The number of people employed	67,714	105,412	57,929	85.55	27,551	47.56	2,046,575	5.15
Net sales revenues million, HUF	206,767	359,853	393,838	190.47	209,200	53.12	21,108,617	1.70
Within this export, million HUF	23,136	52,556	75,514	326.39	34,461	45.64	3,993,871	1.32
Ownership structure								
Subscribed capital, million HUF	52,821	62,396	74,589	141.21	32,846	44.04	6,112,701	1.02
Foreign ownership share, %	11	17	20		11.58		35.98	
Provision of sources								
Own capital /subscribed capital, percent	1.21	1.39	1.47		1.58		1.36	
Total liabilities, million HUF	64,649	107,314	13,7804		61,070	44.32	13,512,938	0.79
Debts (total costs /total sources), percent	49	54	53.55		52.5		59.00	91.53
Short-term liabilities/total liabilities, percent	80	77	78		85		78.28	98.36
Liquidity	0.16	1.23	1.31		1.23	93.89	1.19	103.36
Profitability								
Profit before taxes, million HUF	-3,604	7,592	13,707	480.32	5,684	41.47	866,948	0.88
Profit of financial activities, million HUF	-2,320	-2,978	-2,271	97.89	-1,657	72.96	113,879	-2.62
Tax payments (company tax), million HUF	-1,110	2,227	2,219	302.63	1,268	57.14	158,010	1.41
Dividends paid/profit after taxes, percent	-32	55	24	-75.00	25		55.200	
Efficiency								
Profit before taxes/net sales revenues, percent	-2	2	3	-1.74	3		4.100	
Profit before taxes/own capital, percent	-6	9	9		11		5.000	
Added value/number of employees	0.9	0.75	1.3	144.44	1.41		2.7	
Wage costs/number of employees	223,026	214,340	44,0798	197.64	458,894	104.11		

* Enterprise registered in the county.

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XI. APPENDIX

Appendix No.: A: Statistical Data on Nyíregyháza

Nyíregyháza		1990	1991	1992	1993	1994	1995	1996	1997	1998
Permanent population at the end of the year							119,317			
Residential population at the end of the year		114,596	114,955	115,280	115,643	112,909	113,136	113,489	112,998	
Residential population at the beginning of the year (<i>Census of 1990</i>)		114,152								
Housing stock		38,480	40,041	40,333	40,495	41,007	41,472	42,110	42,498	42,900
The number of households at the beginning of the year		39,318								
Flats constructed		825	805	416	301	637	603	732	486	430
Flats constructed in the percent of the housing stock		2.1	2.0	1.0	0.7	1.6	1.5	1.7	1.1	1.0
Flats constructed in the percent of the households		2.1								
	Budgetary organs of prime cost	43	—	—	2	1	—	—	—	
	Natural persons	782	458	294	281	413	562	666	460	
	Economic organizations	—	347	122	18	223	41	66	26	
	Economic organizations in the percent of all the flats constructed	—	43.1	29.3	6.0	35.0	6.8	9.0	5.3	
	Economic organizations in the percent of all the flats	—	0.87	0.30	0.04	0.54	0.10	0.16	0.06	
Multi-story houses with several flats		312	276	68	61	288	168	238	87	
Family houses		443	449	219	194	260	378	404	351	
	Supplied with gas-	409	445	281	200	565	558	678	431	

Nyiregyháza		1990	1991	1992	1993	1994	1995	1996	1997	1998
	pipe system									
	Supplied with central heating	804	774	399	287	618	584	665	416	
	Per units	21	31	17	14	19	19	67	70	
Flats terminated		51	83	124	139	125	138	94	98	
	The number of housing constructions	25	32	41	48	37	72	42	52	
	Elemental calamities	—	1	1	1	—	—	—	—	
	Settlement planning	—	12	7	13	1	1	4	—	
	Becoming outdated	19	15	24	33	11	13	18	14	
	Other reasons	7	23	51	44	76	52	30		
Living buildings maintained		849	512	505	503	475	451	352	323	
Costs expended on renovating living buildings		99,200	86,879	85,549	91,531	57,281	48,497	104,515	176,593	
	Renovation	24,197	12,885	1,405	—	5,000	—	2,453	7,447	
	Maintenance	61,574	58,348	57,643	73,176	52,281	48,497	39,482	15,764	
Buildings renovated		3	1	—	—	2	—	—	5	
The number of maintenance work implemented		5,518	1,850	1,448	1,186	1,007	750	—	344	
The number of persons looked after in institutions providing permanent boarding and temporary accommodation								892	1,010	
High school students		6,741	7,009	7,080	7,212	7,433	7,533	7,954	8,205	
	Leavers	1,557	1,680	1,803	1,838	1,874	1,882	2,224	2,444	
	Everyday commuters from the country	1,130	1,254	1,236	1,389	1,491	1,428	1,741	1,762	
	Extern students									
College students of day-through branch		2,386	2,504	2,697	3,039	3,360	3,814	4,037	4,322	
	Out of them staying in students' hostel	1,391	1,452	1,535	1,573	1,604	1,631	1,671	1,820	
Investment in		2,765	2,734	3,410	6,412	6,673	6,588	6,800		

Nyíregyháza		1990	1991	1992	1993	1994	1995	1996	1997	1998
HUF million										
	Industry	1,215	848	889	1,525	1,473	1,826	2,336		
	Commerce and repair industry	339	233	438	1,661	401	355	820		
	Transportation, mail, telecommunication	184	216	356	917	2,344	1,778	1,468		
	Whether it is a local governmental budgetary organ or institution	—	—	2,734	5,672	4,869	1,202	1,024		
Retail trading shops		328	1,424	1,368	1,580	2,037	2,461	2,958	2,127	
Area in square kms		274	274	274	274,46	274	274	274		
Residential population at the end of the year		114,596	114,955	115,280	115,643	112,909	113,136	113,489	112,998	
	In the percent of the county	20.7	20.3	20.5	20.6	19.7	19.8	19.8	19.7	
	1990=100.0	—	100.3	100.3	100.3	98.5	98.7	99.0	98.6	
The number of living births	Per 1,000 residents	13.5	13.4	13.4	12.7	11.7	11.8	11.8	10.3	
Mortality rate	Per 1,000 residents	9.6	10	10.4	10.9	11.1	10.6	10	10.4	
Natural increase and decrease, respectively (-1)	Per 1,000 residents	3.9	—	—	—	—	0.8	1.8	-0.1	
Migrational index	Per 1,000 residents	—	-0.2	—	1.4	1.6	—	1.4	-4.2	
The number of residents per 100 flats		298	287	286	286	275	273	270	266	
The number of flats constructed per 1,000 residents		7	7	4	3	5.6	5.3	6.5	4.3	
Out of all the flats constructed flats with 4 or more rooms (percent)		48.8	52.7	57.9	56.8	16.8	28.5	24.2	20.2	
The average footing area of the flats constructed (square metre)		85	80	88	93	79	95	93	92.5	
The number of flats terminated per 100 flats constructed		6	10	30	46	20	23	13	20	

Nyiregyháza		1990	1991	1992	1993	1994	1995	1996	1997	1998
Enterprises operating as legal entities		—	—	1,062	1,296	1,513	1,740	1,780	2,004	
Enterprises operating as non-legal entities		—	—	1,214	1,734	2,137	13,134	9,331	9,680	
	Out of them as private enterprises	—	—	7,342	8,803	10,127	10,687	7,167	7,376	
Enterprises operating <i>In total</i>		—	—	2,276	3,030	3,650	14,874	11,111	11,684	
Automobile stock		—	—	25,167	25,571	28,706	31,710		31,447	

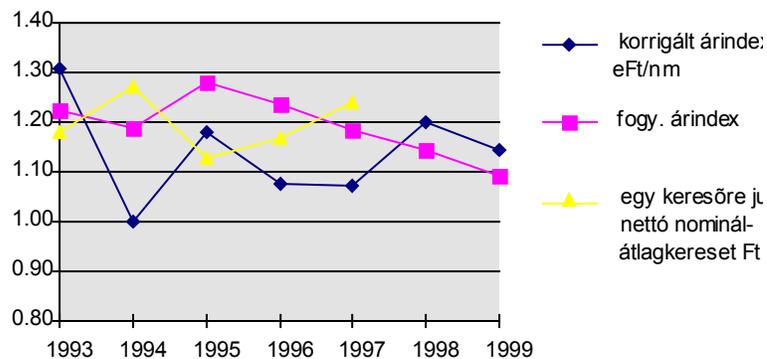
Source: Central Office of Statistics

Appendix No.: B:

The Prices of Flats Constructed for Realization Purposes in Nyíregyháza (100 percent Completion Degree, VAT Included), the Consumption Price Index and the Net Nominal Average Income Rate Per One Wage-Earner in Hungary

	original flat price in HUF thousand per square metre	Corrected flat price in HUF thousand per square metre	corrected <i>cumulated</i> flat price in HUF thousand per square metre	change in the consumption price index in comparison with any preceding year	<i>cumulated</i> consumption price index 1992=100	net nominal average income per one wage-earner in HUF thousand	<i>Cumulated</i> net nominal average income per one wage-earner in HUF thousand 1992=100
1992	38-45	42	100	1.23	100	100	100
1993	55	55	131	1.23	123	117.7	118
1994	55	55	131	1.19	146	127.3	150
1995	65	65	155	1.28	187	112.6	169
1996	65	70	167	1.24	231	117.4	198
1997	75	75	179	1.18	273	124.1	246
1998	90	90	214	1.14	312	—	—
1999	100-105	103	245	1.09	340	—	—

Source: Central Office of Statistics; GKI (Research Institute of Economics); TOT Bureau of Architecture



Source: Central Office of Statistics; GKI (Research Institute of Economics); TOT Bureau of Architecture

- Corrected price index in HUF thousand per square metre
- Consumption price index
- Net nominal average income rate per one wage-earner in HUF

Appendix No.: C:

Data with Relation to the Population and Housing Construction in Four Towns with Similar Residential Population Number

Name	Residential population1997	Change in the number of residential population between 1997 and 1990	Change in the number of residential population per 1,000 residents, 1990	The number of natural births per 1,000 residents, 1990	The number of natural births per 1,000 residents, 1997	Migration balance per 1,000 residents, 1990	Migration balance per 1,000 residents, 1997	The number of flats constructed per 1,000 residents, 1990	The number of flats constructed per 1,000 residents, 1997
Nyíregyháza	112,998	-1,598	-13.9	3.9	-0.1	—	-4.2	7.2	4.3
Nyíregyháza agglomeration	63,254		34.6	3.4	0.8	-4.5	2.1	5.9	6.0
Nyíregyháza micro region	119,439		20.4	1.4	2.5	-7.7	2.1	5.3	6.9
Kecskemét	105,215	1,647	15.9	2.8	-1.1	7.3	1.7	5.8	4.5
Kecskemét agglomeration	25,962		30.3	-1.8	-3.0	3.5	8.9	5.7	3.9
Kecskemét micro region	63,696		16.5	-2.8	-3.6	-2.8	8.1	5.3	3.3
Győr	127,297	-2,301	-17.8	1.2	-2.3	0.8	1.3	3.3	1.8
Győr agglomeration	39,472		49.8	-1.3	-4.3	7.2	6.1	5.4	4.7
Győr micro region	76,057		2.9	-3.9	-4.5	-5.7	5.3	4.3	3.8
Székesfehérvár	106,217	-2,889	-26.5	2.7	-1.3	-1.4	-3.9	4.7	1.6
Székesfehérvár micro region	56,832		53.4	-1.3	-3.8	3.6	11.9	3.9	4.0

Source: Central Office of Statistics