## Principles for introducing a new type of industrial production index

The statistical practice of Hungary - similar to the politics and economy of the country - has now been in a period of transition for several years. This transition has also been reflected by changes in industry statistics.

Since 1 January 1992, a new Standard Classification of Economic Activities has been introduced, which is more compatible with the ISIC Rev. 3 and the NACE Rev. 1 systems (mining, manufacturing, energy and water supply). Consequently, the number of 4-digit level economic branches in the industry has increased from 74 to 164.

Up to the end of last year, the scope of the industry surveys was only comprised of industrial enterprises possessing legal entity (state enterprises, limited liability companies, incorporated companies and other associations, as well as co-operatives). From the beginning of this year onward, the coverage has been extended to the private unincorporated companies and entrepreneurs without legal entity having double-entry (simplified double-entry) book-keeping.

The smallest legally autonomous statistical unit is the enterprise (company). Structural changes in industry – splitting and merger of enterprises – take place more rapidly and, consequently, traditional surveys and methods (based on organizational delimination instead of activities and local units) are no longer sufficient for current statistical gathering.

Nowadays industry statistics faces new challenges and requirements: it should follow up on changes in time, it should assure comparability and should reliably reflect the performance of the industry, netting out breaks and distortions in the data. Therefore, it has become important to elaborate a new method for the production index.

The new index is of net type, characterized by activity aspects, based on product series as well as on a value-added weighting system of base period (Laspeyresindex).

The index concentrates on industrial activities carried out by the industrial units. The non-industrial activities (e.g., construction, agriculture, transport, etc.), as well as the industrial activities of the units falling outside the industry, are, for the time being, out of accounts.

The starting point is that every activity can be considered as a mass of products and services, of which the most important items characterize the activity as a whole. These selected items are part of the monthly commodity statistics being completed by every industrial enterprise employing more than 50 people. According to preliminary conceptions, the number of the series needed by the index computation is approx. 800.

In the mining and foodstuff industries, as well as in the greater part of the basic industries (e.g., metallurgy, production of building materials, many fields of the chemical, textile and paper industry, etc.) performance can be measured by natural units (e.g., ton, cubic meter, piece, etc.). Several branches of manufacturing (e.g., pharmaceutical industry) often have varying production structures of a wide range. In this case it is advisable to use data expressed in value (also because of the comparability. There are some other branches, notably those of long-term technologies (e.g., shipbuilding), as well as those of services where working hour consumption is to be taken into consideration. It should be noted that the application of value data – owing to the deflation by price indices – requires more time and cost, and thus we will try to replace these series, if possible, with working hours input.

The main stages of the calculation process are as follows: As a first step every selected item supplied by the enterprises on the monthly industry survey has to be aggregated on an 'industry total' level. Afterwards, the individual production index is to be calculated from this data and from the monthly average data of the basis year (1991).

As a second step, the activity's production indices are created from the adequate individual production indices – weighted by the sales value of the selected items of the weighting year (1990). It's important to emphasize that for every single activity there will be just one index (practically an industry average) computed, which is of general validity wherever the activity is carried out in the industry.

The final step is to create the net index of the branches from the activity's production indices weighted by the constituent activities' value-added of the weighting year (1990).

The activities' value-added can be compiled from the sales value of the products and services assigned to the activity multiplied by the activities' value-added ratio. The latter is calculated with data of the relevant 4-digit level branches: the valueadded divided by the gross production value of that branch, in which the activity has predominance. This ratio contains some biases (e.g., parts of the performances and costs of the branch not belonging to the main activity). The biases are inevitable, because the activity-level data (above all the cost's data) are not available and at the present time cannot be collected without overburdening the statistical reporting system.

From the net indices of the 4-digit level branches indices of a higher level can be treated. The weight is the value-added of the appropriate branch of the weighting year (1990).

The net production indices will be seasonally adjusted as well.

Because of the above-mentioned problems of the transition period, the year 1992 was devoted to carrying out a lot of experimental countings. The new index type is intended to be introduced in 1993.

## Changes in the number and composition of population in Lithuania in 1991

The demographic situation was extremely bad in Lithuania last year (see Table 1). Compared with the last 32 years (since 1960), Lithuania saw in 1991:

	1960	1970	1980	1991
Total population as of				
January 1 (thousand)	2756	3127	3415	3752
Annual increase	46	40	23	10
Births	62	55	52	56
Deaths	21	28	36	41
Natural increase	41	27	16	15
Marriages	28	30	32	34
Divorces	2	7	. 11	15
Per 1000 persons:				
Births	22.5	17.6	15.1	15.0
Deaths	7.8	8.9	10.5	10.9
Marriages	10.1	9.5	9.2	9.5
Divorces	0.9	2.2	3.2	4.1

 Table 1

 Population change, natural increase, absolute figures and rates

- the smallest increase and natural increase in the number of population;

- the highest death rate due to traffic accidents, suicides, murders, drowning, etc.;
- the highest divorce rate;
- negative migration balance with the former republics of the USSR for the second consecutive year.

At the beginning of 1992 the population of Lithuania was 3,761,000; 31 percent of the population lived in rural areas.

Since the beginning of 1960 the population in the republic increased by 1,006,000 of which 777,000 is due to natural increase and 229,000 to immigration from the former Union republics.

The highest increase was in 1961 (46,000 due to natural increase and 6,000 due to immigration from the former republics of the USSR). The lowest increase was in 1991 (15,000 natural increase; 5000 negative migration balance).

1991 also saw the lowest birth rate (15 births per 1000 persons). This can be accounted for by the fact that the women giving birth were of the 1965-1970 generation, which, itself was not numerous. The economic situation had its own impact as well.

With the present birth rate every woman could give birth to approximately two children compared to 2.6 children in 1960.

Approximately 51 percent of the families with children under 18 years of age have only one child, 7 percent of the families have 3 children.

During the last two decades (1972-1991) 646,000 marriages and 216,000 divorces were registered. There were 9.5 marriages per 1000 persons.

In 1991, 34,000 marriages or 9.1 percent and 15,000 or 4.1 percent divorces were registered.

The highest divorce rate was among Russian and mixed nationality families.

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### Living conditions in Lithuania: 1989 population census data

This population census provided data on the type of ownership of dwelling, housing facilities, number of rooms, total and living floor space, etc.

There are approximately 19 sq.m. of total and 12 sq.m. of living space per person.

Living conditions in neighbouring countries are indicated in Table 1.

More than half (54 percent) of the republican dwelling fund consists of state, public and cooperative property. Private dwelling property accounts for 46 percent. 86 percent of state, public and cooperative dwelling fund is concentrated in the towns. Private houses predominate in rural areas. They comprise 72 percent of the dwelling fund.

62 percent of the population lives in apartments built by state, cooperative and public enterprises and organizations; more than 7 percent lives in houses owned by residential cooperatives; 31 percent resides in private houses.

35 percent of the families lives in private one-family houses or in a part of it; 51 percent of the families lives in separate apartments; almost 7 percent live in communal or cooperative apartments and 7 percent (66,500) lives in hostels. 18,300 families rent a dwelling. Family members residing in hostels comprise 65 percent of those living there.

For single people there are 37 sq.m. of total and 32 sq.m. of living space per person. However, 18,600 single people rent dwelling space. 76 percent of them live in the towns.

The rural population is better supplied with housing than the town population.

Distribution of population according to living space per family member is very uneven. 7 percent of the town population have 4 sq.m. of living space per family member.

	Average space j	per person (sq.m.)	
	Total	Living	
Lithuania	19	12	
Latvia	18	12	
Estonia	20	13	
Byelorussia	17	12	

Table 1

Table 2						
Provision	with	housing	by	form	of	ownership

	Type of ownership indicated	Cype ofSeparateownershipapartmentndicatedor house	of those living in			Do not	of those living in	
			private houses	a part of a private house	apartments	have a flat or a house	communal-type or cooperative flats	hostels
			То	own population				
Total population	100	79.1	10.1	5.6	63.4	20.9	8.0	12.9
Families	100	81.8	10.2	5.9	65.7	18.2	8.6	9.6
Single people	100	60.3	7.6	7.9	44.8	39.7	9.7	30.0
			R	ural population				
Total population	100	94.2	61.5	10.5	22.2	5.8	2.7	3.1
Families	100	96.0	64.3	10.4	21.3	4.0	2.6	1.4
Single people	100	87.3	57.5	15.1	14.7	12.7	2.5	10.2

Almost 31 percent of the town population has from 9 to 12 sq.m. of living space per family member. This pertains mostly to those living in separate apartments as well as those living in a part of a private house.

20 percent of the population is well-supplied with housing (13-16 sq.m. per family member). This pertains to those living in separate apartments and private houses.

38 percent (120,600) of the rural population has 17-20 or more sq.m. of living space per family member.

2700 families and almost one forth of the single people in the towns occupy part of a room. 24 percent of families and almost half (46 percent) of the single people have one room. These people live mainly in communal or cooperative apartments or hostels, or rent a room in a private house.

40 percent of the families and almost one forth of the single people have 2-room apartments; 36 percent of the families and 8 percent of the single people have 3- and more room apartments (of those 9.5 and 2 percent, respectively, have 4- and more room apartments). The majority of them lives in private houses.

In rural areas 400 families and almost 9 percent (8,000) of the single people occupy part of a room (7,600 live in hostels). 13 percent (41,400) of the families and 34 percent of the single people have one room. 33 percent of the families and the single people have 2-room flats. 54 percent of the families and 24 percent of the single people have 3- and more room flats (of these 18 and 5 percent, respectively, have 4- and more rooms). The majority of this population lives in private houses. The greater part of the rural families lives in 3-room apartments.

The flats of 4,200 people are not supplied with housing facilities, not even electricity. 1,700 of them live in town, the rest -2,500 – in rural areas. The supply of housing facilities is worse in rural areas. Only 50 percent of the population has central heating, 48 percent has running water, 40 percent has a sewarage system and only 2.8 percent has hot water.

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