THE EVOLUTION OF THE SERVICE SECTOR IN THE CONTEXT OF ROMANIA'S ACCESSION TO THE EUROPEAN UNION

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Abstract

The article aims to identify the characteristics of the evolution of the service market in Romania between 1993 and 2006. The development of the service market will become an important factor for the economic development of Romania and for its integration in the European structures in the following years. During the transition period the service sector faced substantial changes regarding the type of services provided, the features of the companies providing services etc. The present study uses statistical data made available by the National Institute of Statistics starting with July 2008.

1. Introduction

The transition period caused significant changes in the dynamic and structure of the service market. Moreover, the development of the service market, both for the population and the business environment, represents a positive factor for Romania's economic development. The changes in the economy and the increase of the private property generated an increase in the number of companies, as well as changes of their characteristics. Companies reduced their dimensions and the number of employees, and started to offer a more diverse range of services for population and for the production sector. The preparation process for the accession in the European Union generated major changes in the service sector with regard to regulation issues, types of activities developed, etc. The medium term development of this sector is directly influenced by a series of factors, such as the evolution of the European service market, the development of other sectors of the economy, new regulations of the sector, the increase of population incomes, etc.

It is for this reason why the analysis of this sector must take into consideration the following observations: on the short and medium term the EU will face sustainable development of this sector; the development of this sector must take into consideration the demand for services of the population and of the companies; the new European regulations regarding general services will cause positive changes in the service market.

2. The European service sector

In 2000, the EU member states signed the Lisbon Agenda, which established that the European economy would become the most competitive in the world in next 10 years. The integration process of the new states from the Eastern European, but also a series of economic and political factors (the increase of the oil price, the continuation of the Gulf War, etc.) which were not initially taken into consideration situated Europe far away from reaching the established target.

The service sector has a greater contribution than other sectors to the economic growth and job creation. This sector is considered to be "a more and more important instrument of competitiveness for all enterprises from the European Union, but most of all for the industrial sector". In this context, the economic development of these countries is stimulated by the development of the service market. According to international studies, at the moment, all developed countries have become real "service economies", that understood the economic and the social role services play and which take the tertiary sector into consideration when developing strategies (Task Force of the Monetary Policy Committee of the European System of Central Banks, 2006: 63).

Access to efficient services and, most of all, to modern production services has become and essential factor for economic development and for the contemporary competitiveness of economies. In a short period of time we have witnessed a growth of the percentage of labor force working in the service sector.

From this point forward, a series of models for analyzing the position of the service sector in a developed economy will be presented. The first regression model investigates the linear relationship between the proportion of labor force working in the service sector into the total labor force (P_L) and the proportion of the activity volume in the service sector into the economy of a country (P_GDP). In order to establish whether there are significant differences between the European states and Australia, Canada and USA, a second model has been defined, which contains the dummy variable *d_s*. The dummy variable attributes value "1" for a European state and "0" for other states.

The second model is a redefinition of the first one as the variables are no longer expressed in absolute values, but become log (P_L) and log (P_GDP). The estimations for this model were made using the smallest squares method, using data from1996 until 2003. The year 1996 was chosen as a starting point because beginning with 1995 the worlds' service trade has began to use an elementary set of rules established by the Uruguay Agreement. The results are displayed in Table 1. In brackets each estimator stands for the average standard deviation; the limit of significance for which each parameter is considered to be significantly different from zero is also specified for each estimator.

Table 1: The parameters of the linear regression models

	2003				1996
	M_1	M_2	M_3	M_4	M_4
a_0	45.68* (12.336)	51.57* (11.340)	2.64* (0.772)	2.73* (0.696)	2.76* (0.920)
a_1	0.39*** (0.186)	0.39** (0.166)	0.390*** (0.850)	0.39** (0.166)	0.37**** (0.221)
a_2		-7.72*** (3.600)		-0.107*** (0.052)	-0.127** (0.059)
R^2	0.24	0.44	0.24	0.43	0.38
AIC	6.64	6.46	-2.03	-1.87	-1.77

$*\text{–}\alpha<0.01, **\text{–}\alpha<0.03, ***\text{–}\alpha<0.05, ****\text{–}\alpha<0.1$

The above results highlight the following relevant aspects: for the year 1996 the linear relationship between the two variables can not be proved because the parameters of the M1-M2 models are not significantly different from zero; the services market is more developed in Australia, Canada and USA than in the EU. Considering this aspects it is obvious that even the less developed countries (category that includes also the states in transition to the market economy) must reconsider the place and the role of services in order to perform a systematic change.

3. The service sector in Romania

According to the National Institute of Statistics (NIS) the market services "represents the amount of selling and buying activities from the market, no matter the moment of the payment, the type of price and the instruments used to cash" (NIS, 2007). In this sector we do not include trade, finance, banking, insurance, education and health activities. In this study there are presented a series of characteristics of the market services provided for the population, transport, mail and telecommunications, real estate transactions and renting. The study does not include de characteristics of the services provided to companies as well as activities for draining, sanitation care and waste management.

In 2006 the structure of the services market was the following: 22% of the total services market were services provided for economic agents (excluding mail, transport and telecommunication services); 17% of the services market were services provided to the population (excluding mail, transport and telecommunication services); 61% of the market services were transport, mail and telecommunication services (both for the population and the economic agents).

Four categories of services have an important proportion in the GDP. The following graph presents the GDP evolution between1990 and 2006 for four categories of services: Hotels and Restaurants (H), Transportation, Storing and Communication (T), Financial intermediary and Real estate transactions (I), Renting and other services provided mainly for enterprises (TIM).

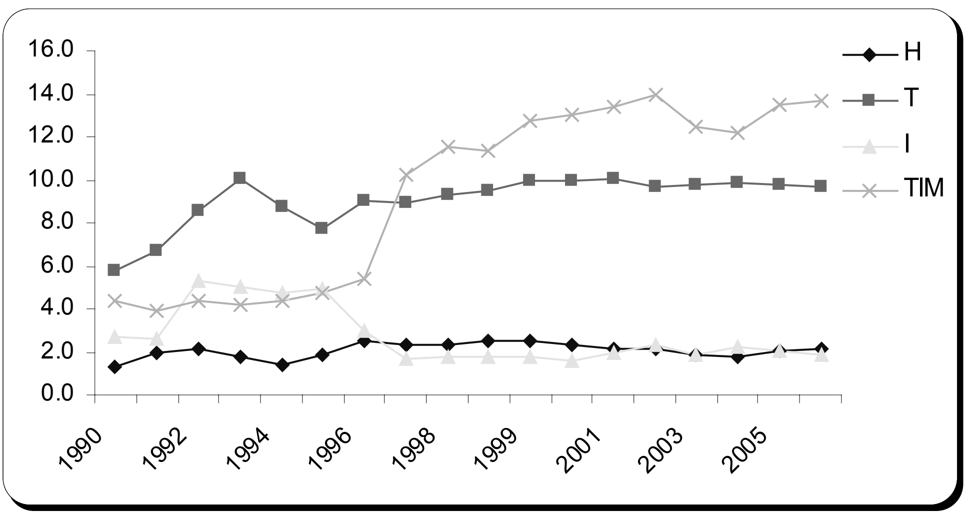

Figure 1. The weight of some activity fields in the GDP during 1990-2006

Concerning Romania, a series of characteristics and trends can be noticed at the level of the market sector. First of all, starting with 1996, Real estate transactions, renting and other services provided mainly for enterprises (TIM) have developed a lot. In only two years, 1997 and 1998, this category had doubled its weight in the GDP. Another characteristic regards another two categories of services, Hotels and Restaurants and Transport, Storing and Communication, which have remained at the same level in GDP since 1995. Also the Financial intermediary services have the same characteristics since 1997.

4. The characteristics of the service market

Between 1993 and 2006, the amount of the services delivered to the population market has increased with 120,4%. Significant increases have been registered in eleven years, and decreases comparing with the previous year were registered only in three years. The growth was different for several periods. Between 2001 and 2004, an annual average growth of 13,6% was registered, a lot higher than the one registered between 1993 and 2000. In the two years prior to Romania's accession to the EU the highest annual growth of 14,5% was registered. Between 1993 and 2006, there were three years when decrease was registered comparing with the previous period. This situation is characteristic for the period beginning with 1997 (the decrease was 31,5% comparing with the previous year), 1998 (3,7%) and 2001 (5,4%).

Table 2. Annual average index for service growth

Period	Annual average growth parameter
1993-2000	105,6
2001-2004	113,6
2005-2006	114,5

A number of five market services provided to population hold the majority in the total amount of services. The five services, stated in order of their importance in 2006, were: (i) Restaurants, (ii) Sport activities and other leisure activities, (iii) Hotels, (iv) Pubs, snack bars and other places for preparing food, (v) Radio and TV activities. Other activities have a smaller proportion in the total amount of services.

Analyzing the results presented in Table 3, the following aspects can be observed. During the period taken into consideration, services have registered a sustainable development, as the average growth was around 8% per year; the most important growth, which exceeds those registered at the global level of market services, have been registered for the following types of services provided to population: Radio and TV activities, Photographic activities, translations, secretariat, photocopying, Renting personal and household goods, and Art activities and theaters. For most types of services, the most important growth was registered during the period 2005-2006. The only type of service that registered a decrease of 0.8% was Production, distribution and projection of cinema films.

Table 3. Annual change in services provided to population (%)

	1993-2006	1993-2000	2001-2004	2005-2006
Total services	8,5	5,6	13,6	14,5
Hotels	7,6	6,3	4,8	6,8
Camping and other facilities for short term accommodation	13,6	-8,5	40,5	50,4
Restaurants	5,7	-3,6	19,5	14,9
Pubs, snack bars and fast food restaurants	4,0	0,1	19,4	22,9
Tourism agencies and tourist assistance	9,3	8,7	5,8	13,1
Renting personal and household goods	19,5	35,6	-34,4	11,9
Photographic activities, translations, secretariat, photocopying	19,8	15,3	21,8	27,8
Production, distribution and projection of cinematograph films	17,8	22,5	21,8	-0,8
Radio and TV activities	20,3	29,2	21,3	8,6
Art activities and theaters	15,6	7,8	23,3	4,6
Press activities, libraries and museums	10,3	4,9	42,3	23,6
Sport activities and other leisure activities	12,9	13,3	13,4	20,4
Other activities	4,1	2,4	-2,3	15,4

At the level of the market services delivered to population it can be noticed a growth in the number of companies, the number of employees and a decrease of the dimension of companies comparing with the average number of employees. The following arguments support the above mentioned aspects:

- During the period 1998-2005, the number of companies from this sector of activity almost doubled, growing from 18288 in 1998 to 34668 in 2005.

Significant increases registered between 2001 and 2005, as shown in the graph below.

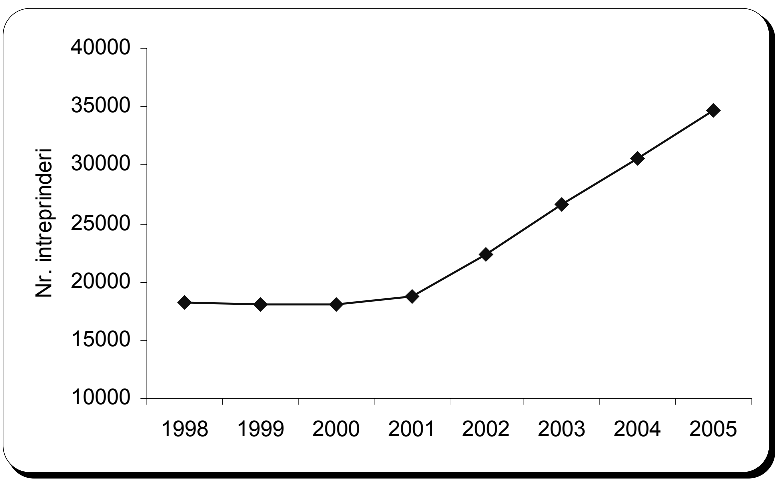

Figure 2. The number of companies operating in the service sector between 1998 and 2005

- In the same period of time, the number of employees working in this sector increased with an average growth rate of 3,16%, representing, in absolute values, a growth of 40407 persons. A significant growth was register between 2003 and 2005, with an average growth rate of 9,5%.

• At the level of this sector it can be noticed a reduction in the number of employees working in a firm. Thus, the average number of employees has decreased almost to half between 1998 and 2005 (see figure 3). On the other hand, the average turnover didn't change very much. The turnover expressed in the prices of 2006 grew from 352,7 mil in 1998 to 357,1 mil in 2005.

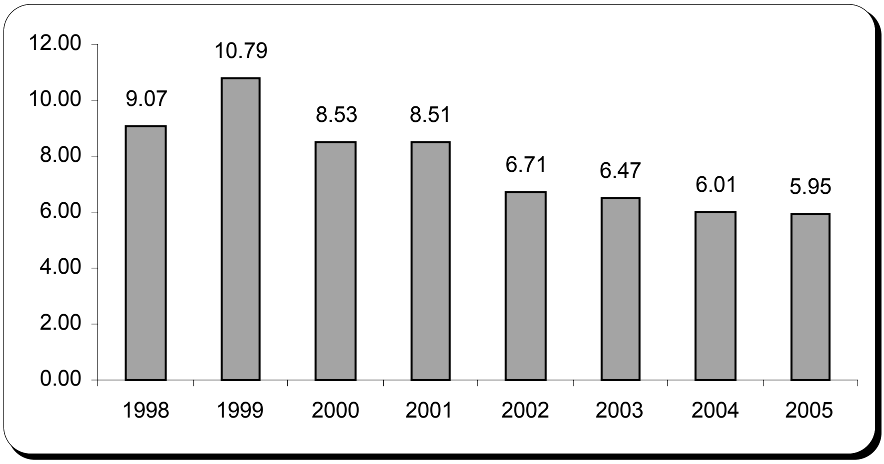

Figure 3. The average number of employees of companies delivering services to population

The companies from this sector were interested in modernizing their activity by making important investments each year. Between 1998 and 2005, the investments of the companies that deliver services for the population grew more then 3.3 times. The average investment made by a firm expressed in the 2006 price level was in 2005 of 43,72 mil lei, 1.75 more than in 1998. The average evolution of investments between 1998 and 2000 was negative, -6.6%. During the period that prepared Romania's accession to the EU, a growth of the average investment per firm has been registered, with an annual average percent of 6.9%. During the entire period, an important growth of the investments per firm comparing with the turnover has been registered. This situation can be explained by the fact that companies adopted a long term development vision.

Table 4. The average indicators that characterize companies (2006 prices)

Year	The average number of employees	The turnover	The investment volume
1998	9,07	352,7	24,92
1999	10,79	435,9	29,77
2000	8,53	399,9	21,73
2001	8,51	413,9	34,74
2002	6,71	325,8	30,26
2003	6,47	335,0	32,00
2004	6,01	366,8	42,36
2005	5,95	357,1	43,72

The private companies have the highest average number of employees, comparatively with the public companies. Moreover, the proportion of private ownership in this sector grew from 92.4% in 2003 to 94.3% in 2005 (see figure 4).

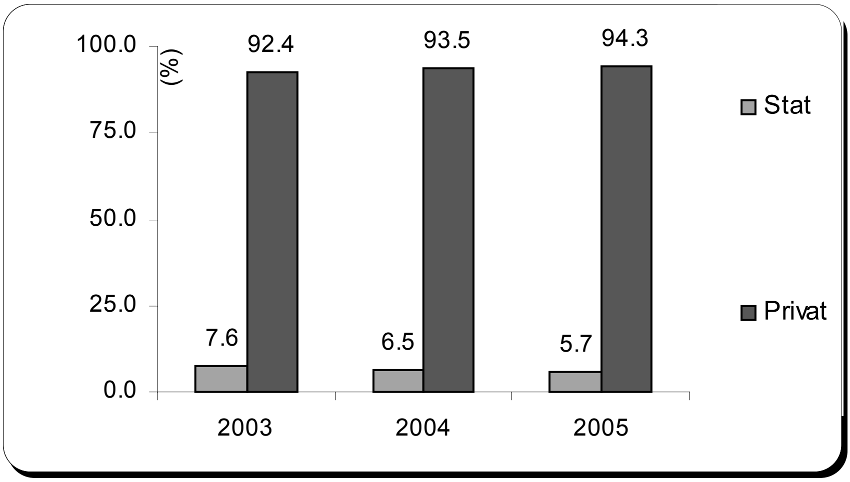

Figure 4. Average number of employees by property type of the companies

The concentration level of the specific services delivered to the population decreased during the period 1993-2006; at that moment, on the market there was a high diversity of services for population. In order to estimate the service concentration level for a certain type of service delivered to population we have calculated the Herfindal concentration index (Andrei, 2003). In order to calculate this static indicator for all 14 years the following elements are taken into consideration:

- X_{it} represents the volume of activity of a market service delivered to population A_i, i=1,...,13 for each year level.
- $X_t = \sum_i X_{it}$ is the total service volume on the market delivered to population each year.
- $y_{it} = \dfrac{X_{it}}{X_t}$ represents the weight of one type of service from the total amount of services delivered to the population.

Using these elements we calculated for each year the Herfindal concentration index, based on the following formula:

$$H_t = \sum_i y_{it}^2, t = 1993,...,2006 \quad [1]$$

The values calculated for the period 1993-2006 are presented in Table 5 and are graphically represented in Figure 5. The data from this table show a high diversity of services delivered to population and a decrease of concentration within the period 1993-2000. Starting with 2001 the Herfindal index stabilized at the value 0.13.

If in 1993 the first three types of services in order of their importance (Restaurants – 26,46%, Pubs, snack bars and fast food restaurants – 23,02% and Hotels – 15,61%) were about 65,08% of the services delivered to population, in 2006 these services are on the first places as well (Restaurants – 18,87%, Pubs, snack bars and fast food restaurants – 13,26% and Hotels – 13,99%), but the proportion of this services has decreased to 46,12%. On the other hand, other services increased: Radio and TV activities increased from 3,18% to 12,17%, and Sport activities and other leisure activities increased from 9,91% to 16,63%.

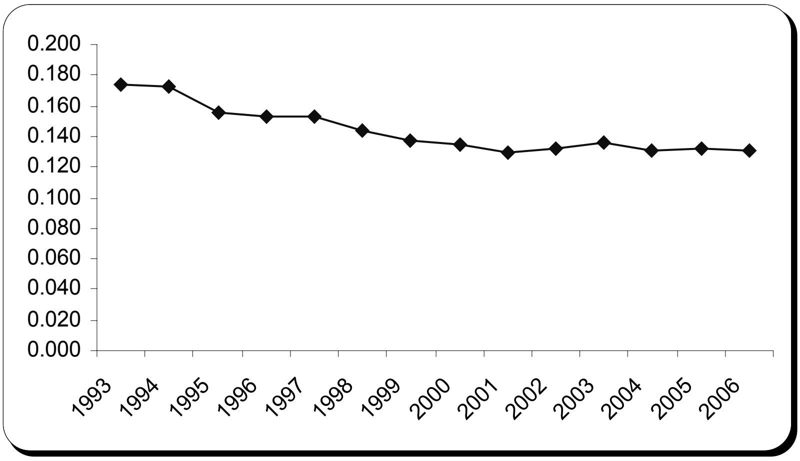

Figure 5. The evolution of Herfindal concentration index between 1993 and 2006

Table 5. Herfindal concentration index for the services delivered to population

Years	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Ht	0,174	0,173	0,156	0,153	0,153	0,143	0,138	0,134	0,130	0,132	0,136	0,130	0,132	0,131

The concentration level of employees working in the services market reported to the companies' dimension is bigger in the public sector than in the private sector. Moreover, around 90% of public sector employees work for companies that have more than 250 employees. Regarding the employees that work for private companies, 33,5% of them work for companies with less than 9 employees, which represent 92,8% of the total number of private companies that provide services. For the period 2003-2005, National Institute for Statistics groups the number of employees for this sector into five categories: below 9 employees, between 10-19, 20-49, 50-249 and more than 250 employees. Using the formula [1] we can determine the Herfindal concentration index for 2003, 2004 and 2005, both for the public sector and private one. Table 6 presents the distribution of the number of employees working in companies, by the size and the type of property.

Table 6. Distribution of the number of employees of the public and private companies grouped by the size of the company

Private sector					
Year	Companies by the number of employees				
	0-9	10-19	20-49	50-249	250 and more
2003	40,3	14,0	13,8	20,2	11,7
2004	37,4	10,2	15,7	22,4	14,2
2005	40,5	14,4	16,9	17,0	11,1
Public sector					
2003	0,0	0,3	2,8	7,5	89,4
2004	0,0	1,2	2,3	6,7	89,9
2005	0,9	0,9	1,6	5,8	90,8

Most employees working in the service sector work for private companies. Thus, the proportions for last three years considered were: 92,4% in 2003, 95,5% in 2004 and 94,3% in 2005. Most public companies are included in the category with more than 250 employees (around 90% of the public sector employees work for companies with more then 250 employees). Around 40% of private sector employees work for companies with less than 10 employees. The average investment per employee made by the large private companies is bigger than the investments made by companies with a smaller number of employees. Thus, the value of the reports between the companies with 250 employees and the companies with 10 employees are the following: 1,6 for 2003, 2,5 for 2004 and 1,3 for 2005.

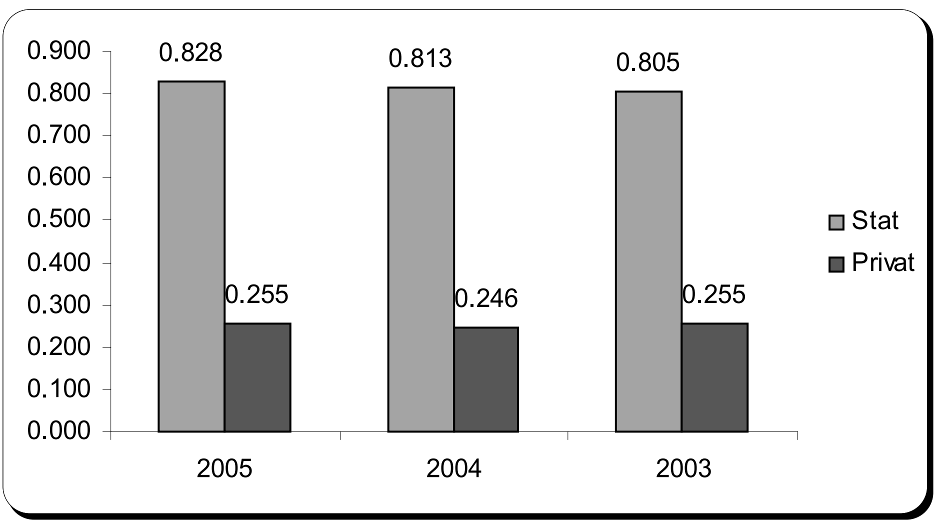

Figure 6. Herfindal index calculated for the level of concentration of employees of companies delivering services according to the type of property

The gross added value at the factors' price (GAVFP) and employees expenses (EE), calculated as average per employee, have a higher value for the companies with more employees.

Between 2003 and 2005, for the two indicators, we calculated the report between the average level for each type of firm and the level of the characteristics registered for companies with the smallest number of employees. The results shown in Table 7 allow us to make the following comments: the GAVFP per employee is bigger within companies with a higher number of employees. For 2005 this level is more than five times bigger than for the companies with less than 250 employees. Expenses per employee growth with the firm`s dimension. For big companies, the report calculated for GAVFP is bigger than the one calculated for EE. For the companies from the first two categories the values are almost equal.

Table 7. Indexes calculated for GAVFP and EE

	Gross added value at the factors price					Employees expenses				
	0-9	10-19	20-49	50-249	249 and more	0-9	10-19	20-49	50-249	249 and more
2003	1	1,3	1,2	1,6	4,8	1	1,3	1,2	1,7	3,1
2004	1	1,5	1,7	3,0	3,9	1	1,5	1,8	2,5	4,5
2005	1	1,6	1,7	2,3	5,5	1	1,4	1,7	1,8	3,7

5. Conclusions

The study we have conducted allows us to summarize some conclusions regarding the characteristics of the service market and possible future evolutions of this sector. In Europe the following period will bring the development of the service market, both for developed countries and for less developed ones. In this moment, the essential conditions for the development of a service market at the European level are unitary and non discriminatory regulations that let players enter and exit a market without being restricted. The coming into force of the European Directive guarantees this fundamental condition and represents a positive factor for the development of this market. The new regulations will generate faster circulation of services and a better access for citizens to various market services provided by various companies.

On medium term, the development of the service market will represent an important source for economic growth for countries from the Central and Eastern Europe. The new regulations stimulate the development of this market and the free circulation of services. For Romania, but also for other new EU member states the economic growth of this sector will be directly linked to the structure and the productivity aspects. At the moment, in the countries that have recently joined the EU, both the proportion of this sector in the economy, as well as the level of productivity is much under the European average. For example, in 2005, in Romania, the level of labor productivity in the labor sector was only 40% of EU-25 average. The productivity will increase due to operators from the communication fields, which will enter the service market and will promote the latest technologies, but also due to the investments that companies will make in modern technology.

During the investigated period, the increase of the proportion of the labor force working in the service sector was more rapid comparatively with the increase of the proportion of the added value brought by this sector. Some explanations justify this evolution: the service sector is still very young and the extensive development has always been an important feature of this sector; labor productivity is lower in this sector; in general, service sectors companies do not have a very high technological level.

Other characteristics of the evolution of this sector between 1993 and 2007 refer to the following aspects: increasing diversity of market services offered to the population; growing number of companies and employees in this sector; decrease of the dimension of the companies providing services comparatively with the average number of employees; most companies from this sector, around 95%, are private owned companies.

In order to develop the service sector, the following recommendations should be taken into account: the implementation as fast as possible of the Service Directive in order to create a favorable environment for businesses; attracting international competitive players, which use the latest technologies; decrease of the transition costs and of the fiscal pressure; promoting specific measures for stimulating small and medium size companies; clear definition of the property rights, creating adequate administrative and juridical structures, capable of making the law come into force and assuring respect of the contractual obligations.

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