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## The Evolution of the Market of the Hungarian Printing Industry after 1989: The End of a Success Story?

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MŰHELYTANULMÁNYOK

DISCUSSION PAPERS

MT-DP – 2010/14

**The Evolution of the Market of the  
Hungarian Printing Industry after 1989:  
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MIHÁLY LAKI

Discussion papers  
MT-DP – 2010/14  
Institute of Economics, Hungarian Academy of Sciences

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The Evolution of the Market of the Hungarian Printing Industry after 1989:  
The End of a Success Story?

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# **The Evolution of the Market of the Hungarian Printing Industry after 1989: The End of a Success Story?**

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## **Abstract**

This article examines a case study of one industry in order to explore the factors influencing changing performance levels in the industries of post-socialist economies. It explores the influence on industrial performance of a number of once-only non-repetitive factors of market development that were typical of the transition period and compares them with longer term aspects of the market economy. The case that we discuss here is the development of the market for products of the Hungarian printing industry since the late 1980s. During the transition phase, privatisation, deregulation, the abolition of administrative distribution, and radical cuts in subsidies were all among the factors affecting this industry. Its supply chains also changed radically. However, these lost their importance after the transition had been completed and the long term processes of technical development and consumer behaviour became the main determinants of the behaviour of the printing companies.

**Keywords:** printing industry, post-socialist economies, transition

**JEL:** L11

# **Egy sikertörténet vége?**

## **A nyomdaipari termékek piacának átalakulása**

### **1989 után**

LAKI MIHÁLY

#### **Összefoglaló**

A tanulmányban a nyomdaipari termékek piacán folytatott kutatásunk eredményeit ismertetjük. E piac különös tulajdonsága, hogy szereplői, elsősorban a termelő vállalatok, gyors és átfogó technikai-technológiai változáson mentek át a vizsgált évtizedekben.

A nyomdaipari termékek piacán a fejlődést befolyásoló tényezők egy része csak a rendszerváltozás utáni élénkülés és a transzformációs visszaesés időszakában fejtette ki a hatását. A dereguláció, a politikai ellenőrzés és a keretgazdálkodás felszámolása, az állami ártámogatások drasztikus csökkentése jellemzően a rendszerváltozás, az átalakulás kísérői voltak.

Az állami vállalatok magánosítása is csak ebben a két szakaszban befolyásolta a piac átalakulását. Az élénkülés időszakában főként a házinyomdák magánosítása, később a nagyobb nyomdák váltakozó sikerrel zajló privatizációja befolyásolta a piacon tevékenykedők számát. A deregulációtól és a magánosítástól korántsem függetlenül átrendeződtek a termékpályák, miközben az új vállalkozások viszonylag olcsón jutottak munkaerőhöz, használt gépekhez és épületekhez.

A 2002-ig tartó hosszú fellendülés, majd az ezt követő visszaesés idején az átalakulás nem ismétlődő tényezői egyre kevésbé hatottak a piaci folyamatokra. A piac állapotát, a vállalatok viselkedését ezért a technikai fejlődés, a fogyasztói szokások korábban is ható hosszú távú folyamatai határozták meg. A lokális versenyelőnyöket csökkentő vagy megszüntető, illetve a papírból készült termékeket növekvő mértékben helyettesítő technikai újítások, új termékek terjedése, az olvasási kedvet, az olvasásra fordított időt csökkentő termékek és szolgáltatások terjedése kedvezőtlenül befolyásolta a nyomdaipar, a nyomdaipari termékek piacának növekedési esélyeit.

Az átmenet első éveiben, főként a transzformációs visszaesés időszakában kidolgozott sikeres vállalati stratégiák (főként a termék- és piacváltások és a „mindenevés”) a transzformációs

visszaesést követő fellendülés idején *ellensúlyozták* a kedvezőtlen hatásokat. E sokáig sikeres stratégiák kifulladására után a nyomdaipari termékek piacának terjedelme csökkent, a zsugorodó piac szereplői növekvő mértékben használták a vállalati válság áthidalását és ritkábban a megoldását szolgáló versenyesszközöket.

Tárgyszavak: nyomdaipar, rendszerváltozás, transzformáció

JEL: L11

# **The Evolution of the Market of the Hungarian Printing Industry after 1989: The End of a Success Story?**

MIHÁLY LAKI

## *Abstract*

This article examines a case study of one industry in order to explore the factors influencing changing performance levels in the industries of post-socialist economies. It explores the influence on industrial performance of a number of once-only non-repetitive factors of market development that were typical of the transition period and compares them with longer term aspects of the market economy. The case that we discuss here is the development of the market for products of the Hungarian printing industry since the late 1980s. During the transition phase, privatisation, deregulation, the abolition of administrative distribution, and radical cuts in subsidies were all among the factors affecting this industry. Its supply chains also changed radically. However, these lost their importance after the transition had been completed and the long term processes of technical development and consumer behaviour became the main determinants of the behaviour of the printing companies.

THE BRANCH STRUCTURE OF FORMER SOCIALIST ECONOMIES changed radically in the first decade of post-socialist transition. Not only did the share of the industry as a whole diminish in the majority of countries, while the weight of service sectors increased, but there were also significant structural changes within industries and subsectors (Vienna Institute for International Economic Studies 1999). In particular, among other changes, the structure of the manufacturing industries altered rapidly in the post-socialist countries. How can we explain these developments? Which factors generated the decline of some industries while the output and the share of others increased? We may formulate the problem in another manner: what are the main reasons for the performance differences of industries and of markets?<sup>1</sup>

In advanced market economies the main reasons for such differences are the diverse speed and degree of the extension (or protraction) of national and global markets and the national and supranational industrial policies that modify the impacts and consequences of market developments. However, in the former socialist economies,

<sup>1</sup>Performance differences are measured by the rate of growth of output or by numbers of employees.

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while these factors are also important, a number of other, unique factors, specific to the transition, should also be considered in explaining the specific performances of different industries and sectors.

### *Unique factors specific to the transition period*

Alongside the impacts of markets and industrial policies as long term determinants of the structural changes in post socialist economies, certain stimuli that were specific to the transition period had a significant influence on the speed and extent of the post-socialist transition. Among these factors were the impacts of deregulation, privatisation and the disappearance of the institutions and policies of the old regime; as well as the effects of spontaneous processes which began in the period of socialism but survived the change of the system.

The first features of the old system to disappear were certain typical decisions and priorities of the industrial policy of the communist regimes. The prevailing positive discrimination (long term financial support) towards heavy industry was abolished everywhere. The freely elected new parliaments abolished several institutions of the central management of the socialist economy (the planning offices, the branch ministries, and the departments of the Central Committee) which were responsible for the elaboration and fulfilment of economic policies. In connection with this reorganisation, a huge number of rules, prescriptions and conventions were changed or allowed to lapse. Another important sign of the change of priorities was that the government ended the policy of subsidising the exports of state-owned large companies in order to acquire Western currencies. COMECON the decisive supranational institution of coordination and planning of these countries was abolished as well. As a result, most of the long term contracts between firms based on the bilateral and multinational agreements of the COMECON member states lost their force and a lot of the specially regulated COMECON markets ceased to operate. The new governments also ended their financial and political support for industries or companies which were involved in bilateral or multilateral COMECON agreements.

However, the post-socialist transition was more than a simple destruction of the old institutions. Some social-cultural processes, institutions and structures of the socialist past survived the collapse of the system, and moreover, in many cases their presence improved the performance of post-socialist economies. Included among these (let us say positive) parts of the socialist heritage were markets (both legal and illegal) which were remnants of socialist-period economic reforms, or which had emerged as unexpected consequences of spontaneous developments in the socialist economy, and also flexible inter-firm connections, networks and product chains which had been built in the decades of socialism. Managers of state-owned companies or cooperatives had tried to counterbalance the rigidities and defects of the system by this network-building. There were many cases where these connections, networks or reciprocities improved the performance of an industry or of a company after the collapse of the socialist system.<sup>2</sup>

<sup>2</sup>We should mention also that there were cases when the inherited rigid inter-firm connections blocked the structural changes (McDermott 1993).



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The performance of industries and of companies after the collapse of the socialist system was also influenced by the position they had occupied in the centrally financed and managed reconstruction programmes that the socialist state had introduced. These projects were usually badly managed, and more expensive and less efficient than had been intended, but after the collapse of the system their secondary outcomes (up-to-date machinery, equipment, technologies, and modernised plant) improved the competitiveness of several companies and industries. A similar case can be made concerning the impact of the accumulated knowledge and skills of the socialist period. Furthermore, a recombination of managerial knowledge, experience, and revitalised traditions of business and technological culture all contributed to the business success of several companies.

In order to assess the influence of the above-mentioned unique, non-repetitive factors of the transition period on the performance of different branches of the economy, and to explore how far their influence declined after the transition period, one way of proceeding would be to list the possible reasons for performance differences between branches and thus to reduce the process of structural changes to its components. This often-applied method of analysis would help us to give a detailed description of social processes but, by itself, it would not help us to find out the order of importance or the weight of the different components of an explanation. In cases like ours where several different combinations of factors (including the lack of these factors) may occur, the problem of ranking is more complicated and unfortunately, in the present stage of our research, we are unable to measure how the possible origins and reasons contributed to the performance differences in the process of post-socialist transition.<sup>3</sup> Therefore in developing our research on this topic we adopted a qualitative case study approach, and in the first stage we carried out a series of case studies of the development of markets in different industries which existed before and after the collapse of the socialist system in Hungary (Laki 2004, 2005, 2007). In this article we describe and interpret one of these cases.<sup>4</sup>

The purpose of this article is to examine one of these cases, that of the printing industry as a representative industry of the Hungarian economy over a relatively long period of time.<sup>5</sup> On the basis of our findings for the printing industry it will then be possible to examine the extent to which other branches of the economy exhibit similar of different patterns and to explore the reasons for this. It seemed appropriate to take the case of a traditional, and relatively successful industry that was technically not backward in the socialist economy. For this purpose we chose the Hungarian printing

<sup>3</sup>For reasons of space it would be complicated to review here the practical and methodological problems of measurement and data collection.

<sup>4</sup>Our research project, entitled 'Product and service market development in Hungary after 1989', was supported generously by OTKA (the Hungarian Scientific Research Foundation) between 2004 and 2007. The project included eight case studies which dealt with the development of markets of different products and services (mineral water, shoes, wine, school books, teaching of foreign languages, school-book editing, spa therapy, printing industry). About 200 in depth interviews (which were made in 2004–2008) were the main source of information of these case studies.

<sup>5</sup>We conducted 25 in-depth interviews with owner-managers of Hungarian small, medium-sized and large printing companies in 2006–2007. This sample was not representative but comprised printing houses with different size product mix and regional character.

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industry, and more precisely the development and restructuring of the market for products and services in the Hungarian printing industry over the last decades.<sup>6</sup> We shall demonstrate here the long term place of this industry in the Hungarian economy; the rapid technical and technological development of printing and packaging in Hungary in the last decades; and the above-average performance of the Hungarian printing industry in the decades of the post-socialist transition.<sup>7</sup>

### *Prehistory*

During the 1930s and 1940s the printing industry in Hungary was dominated by small companies. There were 859 printing houses in Hungary in 1937 (Szöllős 1959)<sup>8</sup> and in spite of the serious damage caused by the Second World War, in 1948 there were about 1000 printing houses and paper producing companies. Under the nationalisation programme of March 1948, 22 printing companies and the largest publishing houses were taken into state ownership and in December of 1949 all the small and medium size companies were nationalised as well (Csapó 1993, p. 78). Several of the small printing houses practically disappeared during the nationalisation process but the majority of them were merged into larger companies.

After the communist takeover the management and the size structure of the printing industry was influenced by the Soviet-type planning system, and the industry was subject to control and censorship by the Communist Party and by the secret police. A network of large scale printing companies was formed with specialised sets of products allocated to different companies. Medium-sized companies were established in every county under the control of the county Party committees with the main task of printing the local or regional newspapers of the Communist Party. As a result of the strong control and censorship of this industry there was a total lack of private small businesses or even cooperatives, and even after the radical economic reforms of the 1960s and 1980s there were no private printing houses or cooperatives, even though hundreds of thousands of private companies existed in other branches of the economy. Political control and the state monopoly also influenced the number and size structure of the printing industry. As shown in Table 2 below, there were only between 33 and 35 large and medium-sized printing companies in Hungary during the socialist period. (These statistics do not include the so-called domestic printing houses or departments of which, according to the estimates of our interview respondents, there were between

<sup>6</sup>Insiders distinguish two sub-sectors of the printing industry: printing and packaging. The former relates to a group of producers that prints mainly books or journals. The latter is the group of those who produce leaflets, labels, prospectuses and printed packing materials.

<sup>7</sup>The output of Hungarian processing and manufacturing industry decreased by 28.6% in the period of 1985–1994 while the output of the Hungarian printing industry increased by 16% (calculation based on the data of *Statistical Yearbook of Hungary* (1994, p. 128).

<sup>8</sup>1937 was the last year before the so-called Vienna decisions when the territory of Hungary was more or less the same as today. ‘Only 22 printing houses employed more than 100 employees; 5% of the small and medium size companies employed more than 10; 15% of them employed 6–10 persons; 53% of these printing houses employed 1–5 persons; and in 27% of this sample the owner was self employed’ Csapó (1993, p. 78).

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TABLE 1  
THE VOLUME OF SALES IN HUNGARIAN PRINTING AND IN THE WHOLE OF INDUSTRY (PREVIOUS  
YEAR = 100%)

<i>Year</i>	<i>Printing industry (HUF)</i>	<i>Whole of industry (HUF)</i>
1982	103.6	101.9
1983	104.0	100.3
1984	103.9	102.7
1985	104.1	101.1
1986	105.1	99.9
1987	106.1	103.5
1988	102.9	86.1
1989	102.0	90.5
1990	95.3	90.5
1991	95.9	93.0
1992		102.8
1993	121.6	109.7
1994		104.0
1995	105.6	87.9
1996	104.7	104.2
1997	114.3	121.9
1998	92.6	102.5
1999	113.3	117.2
2000	120.6	120.2
2001	108.3	104.7
2002	97.0	103.1
2003	97.1	106.1
2004	97.1	107.1
2005	109.5	107.1
2006		109.4

*Source: Iparstatistikai Évkönyvek (1982–2006) (Budapest, Hungarian Statistical Office); Ipari és építőipari Évkönyvek (1982–2005) (Budapest, Hungarian Statistical Office); Magyar Statisztikai Zsebkönyv [Hungarian Statistical Pocketbook] (1980–2006) (Budapest, Hungarian Statistical Office).*

600 and 800, operating as sub-units of other organisations including ministries, companies and Party committees.)

Typical problems experienced by the industry were poor performance and excess demand, reflected particularly in extremely long delivery times, especially in cases of smaller orders. Different reasons may be suggested for the excess demand. These include the backwardness of technology compounded by the priorities determined by economic policy. The rate of investment in the printing sector was very low in the first decade of the communist regime when economic policy gave priority to the rapid development of heavy industry. However, by themselves, these factors do not provide a full explanation. In certain circumstances the industry was able to work efficiently, for example, when a collection of a Party boss's speeches, or Party conference brochures were required. A further factor was the influence of structural imbalances in the industry. The output of the printing industry grew faster (in terms of its monetary value) than the volume of the paper available (measured in metric tons) in the first decade of communist rule. This explains the perceptions of several of our interview respondents who attributed the long delays in delivery times to a shortage of paper.

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TABLE 2  
NUMBER OF EMPLOYEES AND OF COMPANIES IN THE HUNGARIAN PRINTING INDUSTRY

<i>Year</i>	<i>Employees (persons)</i>	<i>Companies (units)</i>
1980	19,527	35
1981	18,867	35
1982	19,107	35
1983	19,067	34
1984	19,289	33
1985	18,910	45
1986	18,648	55
1987	18,299+	71
1988	17,805+	83
1989	19,111+	132
1990	21,412	369
1991	20,984	663
1992	15,593	
1993	13,457	1952+++
1994		2324
1995	12,172	
1996	11,091	2509++++
1997	14,107++	2949
1998	14,780	3046
1999	16,076	3149
2000	19,533	3200
2001	19,510	3278
2002	19,510	3459
2003	19,270	3374
2004	16,472	3360
2005	16,432	

*Notes:* +=in the last years of socialism (1987–1989). The figures for this period represent only printers employed in the printing industry. More than 1000 other individuals were engaged in some sort of printing activities outside the industry during these years.

++=since 1998 employees with printing activity. The figures for this period represent people who were printers by profession working both in and outside the printing industry.

+++ =since 1993. The figures for this period represent limited companies engaged in printing in the print industry and the publishing industry.

++++ =since 1996. The figures for this period represent the number of companies active in the printing industry as shown in the statistical yearbooks (rather than the number of registered companies).

*Source:* *Iparstatisztikai Évkönyvek* (1982–2006) (Budapest, Hungarian Statistical Office); *Ipari és építőipari Évkönyvek* (1982–2005) (Budapest, Hungarian Statistical Office); *Magyar Statisztikai Zsebkönyv* [*Hungarian Statistical Pocketbook*] (1980–2006) (Budapest, Hungarian Statistical Office).

The priorities of the planned economy also influenced the incentive structure in the printing industry. The state publishing houses soon adjusted to the incentives of the socialist system of production and had no interest in working faster or more efficiently. According to one respondent, it was the accepted norm in the publishing industry for books to only appear in the shops a year after they were listed in the publishing programme, and there were cases when the delivery time was more than a year later.<sup>9</sup> Their publishing plans were controlled and regulated by the Chief Administration of Publishing, a central office of censorship subordinated to the Ministry of Education

<sup>9</sup>Interview with the chief editor of a medium-sized publishing company, Budapest, 2007.

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and Culture and to departments of the Central Committee which were responsible for ideological questions in culture and education. This office was responsible for the supply of paper for books and journals as part of the annual plan for publishing houses. The bargaining process between companies and the Chief Administration that was inherent in the way the planning system operated was a further cause of delays.<sup>10</sup> The publishing houses and the printing companies offered to increase exports to the West in return for an increased volume of paper and the bargaining involved in this required a lot of administrative work which also extended the time of delivery.

During the last decade of the socialist system these three factors, and therefore the market position of the printing industry, changed remarkably. The technical–organisational backwardness of the industry diminished and even partly disappeared in the 1980s when a very large amount of money (12 billion HUF) was invested into different Hungarian printing companies as part of a central-budget financed development programme. The proportion of production provided by offset printing—which was the most advanced technology at that time—steadily increased during this period. According to Bárány ‘because of the reconstruction programme of the 1980s the quality of products of the Hungarian printing houses was not very different from the products of their foreign competitors. The technology invented was among the best in the region and a lot of well educated printing specialists worked in these companies’ (Bárány 1998, p. 13).

Meanwhile, as a result of huge investments in the Hungarian paper industry the shortage of paper diminished in the 1980s and the procedure for the supply of paper was changed to enable printing companies and publishing houses to receive their annual allocation for paper in money rather than in tons of paper as earlier. This created more room to manoeuvre for the publishers and the printing houses, and also contributed to the end of paper shortages. Delivery times shortened and the number of unfulfilled orders diminished as well. Indeed, rather than simply witnessing an end to shortages, a number of the printing companies even had excess capacities in the second half of the 1980s. Because of the reconstruction of some local printing companies capacities increased in a period when the number of copies printed of local daily newspapers was stagnating. In this new market situation the management of these companies tried to change their product composition and increase the variety of their products. According to one respondent,

Beginning in the seventies these printing companies tried to figure out how could they step outside the environment of party control and move into real market conditions. A substantial proportion of printing companies began to search for markets and they found the production of packaging materials to be a promising activity.<sup>11</sup>

However, we should also note that the changes in printing and publishing did not extend to political censorship which remained in force until the end of the communist system.

<sup>10</sup>From the huge literature on planning and of plan bargaining, see for example Berliner (1976), Kornai (1957), Kornai-Lipták (1965) and Johansen (1979).

<sup>11</sup>Interview with the owner-manager of a large printing company, western Hungary, 2007.

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### *The stages of market evolution since the last years of socialism*

In measuring the process of market evolution in the Hungarian printing industry three indicators may be used: the volume of sales measured by the annual turnover of the printing industry (Table 1), the number of market players as reflected in the number of printing companies, and the number of employees (Table 2). These indicators help us to separate the stages of market evolution of the printing industry. However, two of them are problematic for our purposes: the index of sales includes the impact of inflation; and the index of the number of companies does not reflect structural changes of the market (concerning the growing share of small companies for example). These features complicate the measurement of the extension or the development of a market and for this reason we use the index of number of employees as a control indicator as well.

The evolution of the printing industry may be divided into four stages. The first stage includes the years immediately before and after the change of the system. All three indicators show that the magnitude of this market increased in the period 1987–1990. The growing number of employees, the volume of sales and the rapidly increasing number of companies in this market all reflect this tendency. The second stage (the years 1991–1993) coincides with a part of the transitional recession (Kornai 1993). The decreasing volume of sales and of the number of employees indicates the diminished magnitude of the market but the number of (mainly small and newly established) companies steadily grew in this period. The third stage of 1994–2002 includes the years of a longer recovery period and our indicators reveal that the magnitude of the market further increased. In the fourth stage from 2002 to 2005 our three indicators contracted again. Not only did the volume of sales and the number of employees decrease, but (for the first time since 1991) the number of printing companies also diminished.

The development of the printing industry and that of the whole of Hungarian industry was more or less similar until 2002, with a steady increase between 1987 and 2002 in the number of companies both in the printing sector and in Hungarian industry as a whole. However, within the general picture of similarities, the rate of growth of sales was higher in the printing industry than in the whole of industry, especially during the late 1980s. The transitional recession began earlier and was longer and deeper in the whole of industry than in the printing industry alone. The rate of employment was nearly zero in Hungarian industry after the transitional recession while the printing industry showed a remarkable surplus of employment during the same period. These developments suggest that the performance of the printing industry was better than average.

The three indicators then diverged substantially after 2002. The volume of sales and the number of companies increased in industry as a whole, but decreased in the printing industry after 2002–2003. The number of employees has decreased faster in printing than in the whole of industry since 2003.

### *Explanatory factors*

A range of different factors may be identified as possible causes of the differences between the stages of market evolution. They include the impact of economic policy

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and regulation; innovative processes and technical changes; changes in the property rights regime; the impact of supply and demand (independent from technical development); changes in the markets for inputs into the production process; and differences between the printing industry and industry more generally.

In the following sections we will interpret and compare the four stages described above (including the development of important market niches and of product groups). Our interpretation draws on the available statistical data, interviews, scientific publications and newspaper articles. With regard to economic policy and regulation measures we shall focus on the impact of deregulation and of industrial policy (concerning the positive discrimination towards different branches or activities) and on the consequences of EU accession. Concerning changes in the property rights regime we will concentrate on the privatisation of the state sector and on the emergence of the new private sector. Regarding innovative processes and technical changes we shall take into consideration a range of factors: the new technologies of printing which modified the working process and changed the cost structure of plants and factories; and therefore the economies of scale and the optimal and minimal sizes of companies; the new methods of electronic text writing and data transfer which altered the division of labour between printing and publishing companies;<sup>12</sup> and the substitution of several paper-based goods and services by their electronic version (such as for air tickets, railway guides, and tax return documents). As in other industries, demand was also influenced by the output and input prices (the cost of labour, price of machines and raw materials) and also by changes in the product assortment and consumer's behaviour.

### *The first stage: the assertive expansion of 1987–1991*

In the period 1987–1990 the output of the printing industry grew faster than industrial output as a whole, and the number of employees increased somewhat in the printing sector while it diminished in industry as a whole. During these years the number of printing companies grew very rapidly. Thereafter the process of post-socialist deregulation had a remarkable impact on the performance of the printing industry resulting in above-average results in the first years of post-socialist transition. The political barriers to market entry disappeared along with the abolition of censorship and political control. The new, freely-elected parliament abolished the Chief Administration of Publishing and the administrative distribution of paper also came to an end. The shortage of paper ceased and competing trading companies began to supply the products of both Hungarian and foreign paper producers.

However, the privatisation of the large printing companies only began relatively slowly (Tóth 1997). An overwhelming majority of the newly established private printing companies were previously domestic printing houses of organisations outside the printing industry of the socialist period, mainly because the market entry of these private businesses needed relatively less money for investment. In the midst the privatisation of large companies in other industries, and in the course of the

<sup>12</sup>In particular this meant that printing companies only produced and no longer designed their product as they did in the past.

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reorganisation of local governments and ministries, the managers of domestic printing departments bought the printing machines at a favourable price. During the period of countrywide privatisation it was easy and cheap to buy or to rent plant as well. These new entrepreneurs employed their former co-workers and offered the services of the new company to their previous (formal or informal) customers and business partners.

According to Bárány (1998, p. 201) 'there were 25 registered editing companies in 1987, their number was 300 in 1989 and about 1300 in 1993'. The very rapid growth in the number of printing and editing companies is explained not only by a growing inclination towards entrepreneurial activity in Hungarian society (Lengyel 1997–1998) but also by technical developments. As a result of the reconstruction project of the 1980s, the Hungarian printing industry was in a relatively good shape in the first years of transition. The chances of achieving a successful start-up were increased by the nearly up-to-date levels of technology and organisation, the disciplined character of the work force, and the high levels of education of the technicians and managers of the printing houses. New technologies and methods of text writing and editing had also become more widespread during these years.

Furthermore, according to our interview respondents, the relatively good performance of the printing industry could be explained by growing demand during the first years of transition. They describe an increase in publishing activity in the late socialist period which continued in the first years of the post-socialist transition as well. The number of published books, the average size of editions, and annual turnover all increased (Table 3). Moreover the business sector spent more on printed advertisements in these years. However, what was only rarely recalled by our respondents was that demand increased only in certain market niches of the printing industry. In spite of the growing number of newspapers and periodicals the market for these products showed distinct oscillations (Table 4). The output of printed package material also declined, its production dropping from 8187 metric tons in 1991 to 7620 metric tons in 1993 (*Yearbook of Industry 2005*, p. 332).

### *The first recession: 1991–1993*

The impact of technical and technological innovation and of deregulation described above contributed steadily to the extension of the market but, because of adverse factors, especially the dramatic contraction of the book market, the output of the printing industry diminished in the years 1991–1992 (though to a lesser extent than the industrial average). Not only the number of published books, but the average size of editions diminished dramatically (Table 3). The main reason for this drop in sales was the radical change in the state's cultural policy. In the period of socialism books, newspapers and journals were subsidised by the state budget and therefore these goods were available at extremely low prices.<sup>13</sup> After the collapse of socialism the overwhelming majority of these subsidies came to an end, and the state's supportive

<sup>13</sup>The spectacular performance of book editing and distribution made possible the remarkable development of the book culture. Because of the state subsidies the prices of books did not depend on the costs and on the market conditions. Owing to their low prices the population was able to buy more and more books' (Kókay 2000, p. 88).



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TABLE 3  
BOOK PRODUCTION IN HUNGARY 1989–2006

<i>Year</i>	<i>Size of edition</i>	<i>Average size of edition</i>	<i>Sales of books (HUF)</i>
1988	87,966,000		
1989	108,419,000	14,300	
1990	113,112,000	15,200	
1991	91,405,900	12,700	
1992	80,988,500	10,600	
1993	72,076,100	8500	
1994	70,291,000	7500	
1995	62,984,000	7200	
1996	51,929,000	5900	
1997	52,125,000	5900	24,434,000,000
1998	47,046,000	4400	29,997,000,000
1999	44,652,000	4600	33,477,000,000
2000	35,246,000	3900	38,642,000,000
2001	32,615,000	3690	45,742,293,000
2002	45,502,000	4458	53,604,202,000
2003	32,627,000	3544	56,871,989,000
2004	32,035,000	2857	58,194,650,000
2005	40,974,000	3177	62,740,883,000
2006	38,281,000	3365	65,533,324,000

*Source: Statistical Yearbook of Hungary (1988–2007) (Budapest, Hungarian Statistical Office); the Association of Hungarian Publishers (MKKE, Magyar Könyvkiadók és Könyvterjesztők Egyesülése), available at: <http://www.mkke.hu> (accessed 18 February 2008).*

TABLE 4  
THE SIZE OF EDITION OF NEWSPAPERS AND OF PERIODICALS (MILLIONS OF UNITS)

<i>Year</i>	<i>Size of edition (million)</i>
1985	1410
1986	1444
1987	1465
1988	1242
1989	1275
1990	1275

*Source: Statistical Yearbook of Hungary (1985–1990) (Budapest, Hungarian Statistical Office).*

presence on the demand side contracted as well. A good illustration of this withdrawal is that not only did the number of public libraries diminish in the first years of transition but their stock of books did too.<sup>14</sup>

A further source of problems was the risky behaviour of some of the newcomers to the market that led to trade disturbances and liquidity problems. According to one respondent,

There were hundreds of newly established printing houses with a lack of solid capital. They ordered on credit only. And it remained an open question whether they were able or not to

<sup>14</sup>The number of such libraries was 7340 in 1990 and 4466 in 1995. Their stock of books was 51.64 million in 1990 but 47.13 million volumes in 1995 (figures based on data of *Statistical Yearbooks of Hungary* (1995, p. 198)).

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sell their products. I have to add that the successful market transactions did not counterbalance the low level of business morale in several cases. A lot of people who entered the branch thought that this was an easy way to make money. And these clumsy state-owned companies who sourced for work—because they did not want to diminish the labour force—accepted a lot of doubtful orders which led them into bankruptcy.<sup>15</sup>

Unknown publishing houses, newly established retail companies and political and civil organisations extended the list of customers of the printing companies and several new buyers of printed advertisements and package materials entered the market as well. However, the disturbances to the market caused by these occasional players and their speculative transactions were the concomitants of, rather than the main reasons, for the decline in demand for cultural products which began in 1991–1992.

A further factor was the long term changes in consumer behaviour—in this case the decreasing reading activity of the Hungarian population—which decreased the demand for printed cultural products such as books and literary journals in the 1980s (Kóky 2000). While surveys showed that the Hungarian population read more in the first two years of the transition than before, once the delays in supply of the socialist period were solved and suppliers had caught up with the postponed customer orders, demand for books, newspapers and journals dropped again. Thereafter, what has become a long-term trend towards a decline in reading was re-established.<sup>16</sup>

### *The long recovery (1994–2002)*

The following period of 1994–2002 was one of long recovery in which all the three indicators showed positive development in the printing industry. With some fluctuations in separate years the general trend was for an increase in the numbers of employees and companies and the volume of sales throughout the period (Tables 1 and 2). Compared with the period of the initial recovery (1987–1991) the factors influencing the long recovery were more complex. We need to consider both the question of the continuing role of factors that were influential in the initial recovery and new factors which were specific to the long recovery.

First, as noted above, the intensive deregulation of the industry had been among the factors that contributed positively to the performance of the printing industry in the years of the first recovery. However, thereafter, since there were no further preferential or discriminative regulations that influenced the performance of the printing houses, the impact of state regulation became neutral for industry in the later recovery.

Secondly, also noted above were the positive effects on the initial recovery of the central reconstruction programme of the printing industry in the 1980s. The new technologies and organisation, which were implemented in the frame of this programme, contributed to the positive results of the first recovery. However,

<sup>15</sup>Interview with the chief manager of a large printing company, eastern Hungary, 2006.

<sup>16</sup>A study of the Association of Paper Producers and of Printing Houses concluded that ‘Reading behaviour is changing in a negative direction and this tendency will influence the market position of the edited production in the future as well. The usage of the internet as a source of information is increasing constantly. Therefore we may expect a further shift to the detriment of the printing industry’ (PRINTEXPO 2005).

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concerning the second recovery we also have to take into consideration the other side of the coin. The designers of the reconstruction project had based their assumptions regarding scale and technology upon the market circumstances and institutional frameworks of late socialism. Although it had a positive influence in the early 1990s, the rigid technology, which is a typical side effect of mass production, hindered the successful and quick adaptation of several printing companies in the late 1990s.

At the same time, exerting an opposite influence, new data processing and text formation technologies speeded up the flow of information (scripts) between the publishing and the printing companies, shortened the time of delivery and diminished the costs of production. The most important effect of this development was that the barriers to entry diminished in the local markets and the number of contestable market niches increased.

A further outcome of these changes was that more and more Slovak and Romanian printing companies, which were well prepared to edit and to print Hungarian text, became partners of Hungarian publishing houses. Hungarian printing companies were differently influenced by this import competition. The so-called ‘jobbing’ or ‘back-street’ printing houses (as they were known in the slang of Hungarian industry) did not experience competition from foreign companies (or if they did, it was only in a limited manner).<sup>17</sup> On the other hand, several large and medium-sized companies, whose main products were books, journals and magazines, gradually lost their limited monopoly positions on local or regional markets because of the growing presence of foreign competitors in the years of the long recovery.

Meanwhile, the change of the property-rights regime was a factor that was influential in the first expansion and continued to be important during the period of the long recovery. For the latter period we may note three new developments. First, over the years of the long recovery, as was the case in other industries, the majority of large state-owned printing companies were privatised. Foreign investors or the management of the company bought the factories. A proportion of the companies were broken up into smaller units during the privatisation process. Privatisation also caused liquidity problems and market losses in this industry. Secondly, the majority of newly established small printing houses were no longer the former domestic printing departments of local organisations, as they had been in the first years of the transition, but were *de novo* businesses in which human capital, business contacts and the goodwill of the founders were invested into the company. As one respondent explained,

We—my wife and I—had a little repro workshop earlier but it was a so-called economic partnership and not a private company. We founded this company with a very small sum of capital. It was 1.2 million HUF [about €4,800] only. All the three founders were printing engineers. I got my diploma at the Leipzig Technical Academy of Printing and spent the bigger part of my life at the biggest Hungarian printing house. My wife and my business

<sup>17</sup>Our category of company size does not deal with mass production of books and journals. To deliver and distribute these products is complicated’ (interview with the owner–manager of a small printing house, Budapest, 2007).

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partner finished the Academy of Printing here in Budapest. They were employed in big state owned printing companies until the transition as well. So we were not outsiders or newcomers, beginners in this field. We gathered up and started this printing house from zero practically.<sup>18</sup>

In the majority of these businesses the owners reinvested their profits and took loans to buy further machines and buildings. Thirdly, the start-ups of small scale (so called ‘garage’) businesses were different. Usually they were not based on the human and network capital of the owner-managers but on the low cost of market entry. As occasional or short-term market participants these companies offered cheap but low quality services for their business partners.

Mostly positive developments were observable in the sub-markets of printed products as well. The contraction of the book market ended in 1997 so that the incomes of booksellers increased in the last years of the century (Table 3). The prices of books (especially of school books) also quickly increased (Table 7), and in many cases market entry was stimulated also by the high profit margins for the sale of books. As one respondent recalled, ‘the profit rates were around 20% in this industry in those years and we were able to reinvest practically all of this money and buy new machines’.<sup>19</sup> According to the same respondent, ‘the larger than average price increase (which was the result of a subsidised and therefore low starting price) counterbalanced the negative effects of *the contracting volume of production*’.

The price of newspapers also increased in spite of the fact that the market for newspapers and other periodicals stagnated steadily in the years of the long recovery. The fast growth in the output of catalogues and of printed (political and business) advertisements contributed further to the positive development of the printing industry (Table 5). Package materials and labels were among the engines of the

**TABLE 5**  
PRODUCTION OF IMPORTANT PRINTED PRODUCTS (METRIC TONS)

<i>Year</i>	<i>Printed advertisements and catalogues (metric tons)</i>	<i>Book of accounts registers and folders (metric tons)</i>
1996	3802	12,786
1997	6616	10,278
1998	9399	13,520
1999	21,357	13,534
2000	25,590	14,334
2001	28,208	9594
2002	34,927	8991
2003	38,877	10,527
2004	40,720	11,559
2005	44,982	9053

*Source: Ipari és Építőipari Évkönyvek (1996–2005) (Budapest, Hungarian Statistical Office).*

<sup>18</sup>Interview with the owner-manager of a small printing house, Budapest, 2007.

<sup>19</sup>Interview with the owner-manager of a small printing house, Budapest, 2006.

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recovery. The production of these goods grew quickly in the second half of the 1990s and in the first years of the new century (Table 6).

### *An additional explanation: company strategies*

Despite the significance of the factors discussed so far in explaining the pattern of growth of the printing industry, we have also noted that in some ways their influence was not consistently positive. Therefore it cannot be assumed that these factors are fully sufficient to explain the length and scale of the recovery of 1993–2002, and several other factors also had an impact. These include an increased availability of skilled printers on the labour market. The privatised (and contracting) companies were the main sources of this labour force. The shortage of printing machines on the market came to an end during this period as well, and this also improved the chances of success. However, the most important further factor was the influence of

TABLE 6  
PRODUCTION OF PRINTED PACKAGE MATERIALS (METRIC TONS)

<i>Year</i>	<i>Labels from paper (metric tons)</i>	<i>Corrugated cardboard paper and other package materials (metric tons)</i>
1996	5775	175,056
1997	5352	216,372
1998	5417	231,744
1999	6652	236,848
2000	10,236	282,928
2001	11,200	292,107
2002	11,141	318,405
2003	7616	341,466
2004	7604	345,155
2005	7423	336,970

*Source: Statistical Yearbook of Hungary (1996–2005) (Budapest, Hungarian Statistical Office).*

TABLE 7  
CONSUMER PRICE INDEX OF SOME PRODUCTS OF THE PRINTING INDUSTRY (PREVIOUS YEAR = 100%)

<i>Year</i>	<i>Newspapers and periodicals</i>	<i>Books</i>	<i>School-books</i>	<i>Total consumption</i>
1991	141.3	145.6		135.8
1992	127.5	164.9	359.2	123.0
1993	146.8	122.5	302.8	122.5
1994	122.8	124.7	245.7	118.8
1995	135.7	127.5	165.6	128.2
1996	123.6	131.3	138.1	123.6
1997	117.3	119.1	125.2	118.3
1998	114.4	113.9	113.3	114.3
1999	114.1	105.9	106.8	110.0

*Source: Statistical Yearbook of Hungary (1991–1999) (Budapest, Hungarian Statistical Office).*

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companies' own strategies. I have documented in an earlier article<sup>20</sup> that increases in prices and of profit share are not only the indicators of economic recovery, and that they denote in turn the growth of aggressive crisis-solving strategies by companies themselves. We may suppose therefore, that a further reason for the recovery of 1993–2002 was that a large part of the newly established or privatised printing companies worked out and implemented efficient business strategies in the second half of the 1990s.

We shall discuss here the most popular business strategies, the decisive elements of which are the change of product composition and technology; the change of product composition without change of technology; all-purpose printing for the different needs of specific customers; and a strategy of 'going against the trend'.

### *Change of product composition and technology*

The most common form of this strategy involved a shift in the focus of printing companies from the production of books or newspapers to packaging materials. This change in product composition needed significant investment because in these cases, old machines and equipment were not suitable for the new product lines, in some cases because of the preferences of planners in the socialist economy—hoping for increasing economies of scale—to simplify and narrow down the product composition of the printing companies. In the early years of the socialist system it was typical for one company to be selected to produce package materials, labels and commercial prints. This monopolistic position was only gradually abolished in the last two decades of socialism when some printing houses, which were subordinated to the county party committees (and produced local newspapers), changed their product composition and increased the production of package materials. For example, according to one respondent who was the chief manager of a printing house

There were printing houses which accumulated some experience in the production of packaging materials in the 1970s and the 1980s. A few of them such as the Petőfi Printing House emerged from this group. This company stopped printing publishing products at the beginning of the 1980s; more precisely there was a separate division which printed the local party newspaper until the end of the socialist system, but 91% of the company's output was package material by that time. When Coca Cola entered the Hungarian market another company, the Zalai Printing House—as well as party newspapers and weeklies—began to print their labels.<sup>21</sup>

Foreign investors mainly bought these companies after the system change and they expanded their package production capacities very quickly to the point where the traditional profile of the companies became negligible. According to an interviewee

Italian business magnate Carlo De Benedetti recognised the opportunities of package material production—as a practically brand new field of industrial activity—in the Eastern

<sup>20</sup>Laki (1993). Grosfeld-Roland (1996) and Blanchard (1997) worked out a similar typology of adaptation.

<sup>21</sup>Interview with the chief manager of a large printing company, western Hungary, 2007.

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European region in the 1990s. The idea was put into action: the Cofinec company which was established to invest in this field bought stocks of the Petőfi Printing House, Kecskemét in 1990, and of the Kner Printing House, Békéscsaba in 1992. Cofinec's share increased to over 90% in both cases. Up until 1994 it invested \$35 million in the Petőfi Company, which was followed by \$27 million in 1999. The Cofinec company invested about \$3 million in the smaller Kner Printing House as well.<sup>22</sup>

The rapid and permanent increase of package material production (Table 6) confirmed the investor's calculations. Taking into consideration here the long-term increase in the production of printed labels, it can be seen that the trade-off between publishing and packaging was not only a successful form of adaptation in the printing industry, but it was also one of the engines of recovery.

### *Change of product composition without a change of technology*

The majority of printing houses were unable or did not want to exit the publishing market and in this group of companies their inherited technology and labour force determined their market strategy. In a number of cases these companies could not leave their traditional markets because the new owners did not have enough money to modernise the technology. Moreover there were cases when the new owner's aim was not to invest but to disinvest. Some of these companies which were constrained by their existing technology and labour force were edged out of the market for newspaper and journal printing but began to produce catalogues, leaflets and (especially election years) political posters and propaganda bulletins. The demand for these products increased very quickly in the whole period of transition (Table 5).

### *The strategy of the majority: all-purpose printing for the different needs of specific customers*

The typical Hungarian small and medium-sized printing house is able to produce books, catalogues, posters, bulletins according to demand. As one of the owners of a small printing house expressed it:

We, like the majority of the Hungarian printing industry, meet all the demands we recognise. I don't know whether the others mentioned it or not, but one of the important characteristics of Hungarian printing houses is a kind of broad spectrum. I am ready to print books, magazines, registers, leaflets, visiting cards. We print everything.<sup>23</sup>

These multi-purpose small companies give a warm welcome to casual individual customers, but also they have made serious efforts to keep and extend the number and the share of their exclusive customers as well.

<sup>22</sup>Interview with the chief manager of a large printing company, eastern Hungary, 2007.

<sup>23</sup>Interview with the owner-manager of a small printing house, Budapest, 2007.

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Contacts based on personal relationship networks are the norm in Hungary. Personal contacts and not the price quality or the level of service determine the list of consumers.<sup>24</sup>

### *Going against the trend*

Several companies gave up the printing of books and magazines or reduced the share of these products in their total output but we found some cases where books became even the main or most strategic products of a company. For example, according to one interviewee (who was the chief manager of the Szekszárd Printing House), in the socialist period,

Szekszárd Printing House was one of the 19 county printing houses which offered the total service of printing from calling cards to mourning cards or to newspapers. This company differed from the other county-managed ones because the production of calendars was its main profile. The share of calendar production was about 60% of the total output besides newspapers and other products.<sup>25</sup>

During the transition however, the Szekszárd Printing House moved its focus to concentrate on the niche market of book production as a strategic choice and this became the engine of the development of the company. Although the company had been in a very comfortable position on the Hungarian market in the last decade of socialism, delivering 99% of the annual turnover of calendars, after the collapse of socialism not only did the demand for calendars shrink, but foreign competitors also entered this market niche. This was the point when the company changed the product composition and entered the sub-market of book printing. According to the chief manager

What is the difference between a date-calendar and a book? From the point of view of the printing technology they are the same. Both need a cover, a block and you may put these parts together. It is no matter that thrillers, novels or calendars are printed on the pages. The yearly income of the Szekszárd Printing House increased to 1.4 billion HUF and the book printing's share was 90%.<sup>26</sup>

Thus a strategy of going against the trend was successful and the company succeeded in becoming one of the 'big five' of the book printing market in the last years (PRINTEXPO 2005).

### *The second recession*

The long recovery came to an end in the years 2002–2003. The output and the number of employees of the printing industry decreased and, for the first time since 1989, our third indicator, namely the number of market players (printing houses), diminished as well.

<sup>24</sup>Interview with the owner-manager of a small printing house, Budapest, 2007.

<sup>25</sup>Interview with the owner-manager of a large printing company, southern Hungary, 2006.

<sup>26</sup>Interview with the owner-manager of a large printing company, southern Hungary, 2006.



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According to the opinions of our respondents, state regulation could not be the reason for this unfavourable development. They mentioned only the usual negative or positive impacts of it and they did not refer to any exceptional political or economic effects of Hungary's accession to the EU in the printing industry either.

There are interesting interpretations that the earlier successes of this industry were mainly based on the advantageous logistical and technological parameters of its products. We quote here the convincing interpretation of a prestigious person in the industry:

The printing industry not only survived the socialist transition but it was among the winners of this period. A lot of industries collapsed and disappeared but this industry was able to develop and invest. New printing houses were established and new technology was implemented. There were three explanations for this development: first, in the vast majority of cases the price of the product could not cover the costs of long distance delivery; second, the time lag between the input of information and the output of the products shortened therefore it was more profitable to produce in the same locality; and the third explanation is that there are printed goods which are difficult to produce outside the Hungarian speech area.<sup>27</sup>

These advantages of the Hungarian printing industry had already begun to diminish in the period of recovery. We have seen that a growing proportion of the Hungarian publishers cooperated with Slovak and Transylvanian printing companies. The reason for this activity was obvious: because of the new innovative technologies the long distance cooperation of publishers and of printing houses became profitable.

This tendency continued after 2002, moreover, the Hungarian producers competed not only with printing houses located in neighbouring countries, but also with producers from the Far East. This was not a Hungarian peculiarity. Chinese printing companies entered the Western European market in the late 1990s and since that time they have extended their market share. The extremely low wages and subsidised low prices in China are the main explanatory factors for this development. The above-mentioned innovations, which diminished the dominant market position of local or regional printing companies, also contributed to the successful market entry of Chinese traders.

The substitution of paper-based goods or services with their electronic versions (for example, timetables and airline tickets) also continued in the first years of the new century. However we have not found any dramatic acceleration of this substitution process in the period 2002–2003.

Since privatisation had finished prior to this recession, we cannot explain the shrinkage of the market through its impacts. Then again, a remarkable concentration of the property was observable in the trade of published goods that noticeably modified the size structure and therefore the power relations of the market participants.

While the number and share of the small and medium-size companies increased in the printing industry contrary tendencies could also be observed, especially in the bookselling arena. The market share of the 13 biggest publishing houses in annual

<sup>27</sup>Interview with the owner-manager of a large printing company, western Hungary, 2007.

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total turnover was 54.7% in 2002 and 58% in 2005. The market share of the 14 largest bookselling companies increased to 58.9% in 2006.<sup>28</sup> This concentration process was accompanied by centralisation in the previous two or three years. The Alexandra Publishing Company which is one of the biggest Hungarian publishers and booksellers bought three other companies in 2005. In line with these tendencies, more and more newspaper publishers decided to buy or to build press plants. This vertical integration also diminished the bargaining power of the printing industry.

Another important reason for the recession is that the demand for specific products of the printing industry diminished. The decline in demand for the most prestigious newspapers and weeklies which commenced in the years of the long recovery continued, and in some cases accelerated, in the years of the recession (Table 8). We can observe a turnaround in the sales of the packaging sub-sector as well. The rapidly growing turnover in the production of labels began to drop and the dynamic increase in the production of corrugated cardboard came to an end after 2002 (Table 6). The other side of the coin is that the stabilisation and occasionally slow increase in bookselling continued (Table 4). Within the product group of catalogues and printed advertisements sales increased as rapidly as previously. The common effect of these developments was that the growth of the printing industry's output stopped in 2005. Moreover, the daily newspaper *Világgazdaság* estimated in 2004 that the Hungarian printing industry had about 30% idle capacity (Hargitay 2004).

### *Do we need an additional explanation again?*

For the period after 2002 all the indicators and explanatory factors that were found to be influential for previous periods turned out to have a negative effect except the (neutral) impacts of state policy. The bargaining power of the printing companies weakened and the advantages of local producers diminished. These unfavourable tendencies were caused not only by a concentration process among the customers of

**TABLE 8**  
AVERAGE SIZE OF PUBLISHED ISSUES OF SOME PRESTIGIOUS HUNGARIAN NEWSPAPERS (1000 UNITS)

<i>Year</i>	<i>Népszabadság</i>	<i>Magyar Nemzet</i>	<i>Kisalföld</i>	<i>Heti Világgazdaság</i>	<i>Nők Lapja</i>
2000	224	91	84	130	497
2001	222	88	82	134	342
2002	221	116	81	132	306
2003	207	102	82	128	296
2004	186	92	82	118	259
2005	175	93	82	112	295
2006	169	81	81	110	293
2007	151	78	81	108	282

*Source: Magyar Statisztikai Zsebkönyv [Hungarian Statistical Pocketbook] (2000–2006) (Budapest, Hungarian Statistical Office).*

<sup>28</sup>MKKE (*Magyar Könyvkiadók és Könyvterjesztők Egyesülése*, Association of the Hungarian Booksellers and Editors) information (PRINTEXPO 2005, p. 2).

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the printing industry and by the impact of the technical development, but also by the substitution of paper-based products by electronic versions.

Moreover the demand for several products of the printing industry decreased and the dynamic growth of the packaging sector stopped in 2003–2004. Changes in the purchasing strategy of the multinational companies (which are decisive business partners of the Hungarian printing houses involved) indicated the growing market power of the buyers:

The extension of the EU market in 2004 gave birth to a new period in the packaging industry. The change was generated by the end users and not by the producers of their inputs. As the 10 new members joined the Union [EU] the European producers of consumer goods and services immediately integrated the new markets into their European purchasing systems. Before 2004 the vast majority of our key buyers—multinational companies—had their purchasing departments in Hungary. These units decided where and how to buy inputs. This practice ended in 2004. Nowadays the Nestle headquarters in Paris decides about the purchasing businesses of the Hungarian Nestle companies in Szerencs and in Diósgyőr. A radical realignment has occurred on this market. Traditional market relations died and new networks and regions of acquisition emerged. Since Hungary is a member of the Union calls for tenders haven't been restricted to Hungary but are extended to another 5 or 6 countries in the region. We have to compete for orders with Polish and Slovak companies. Only those were able survived who adapted to these conditions. The others dropped out.<sup>29</sup>

Also, the extent and the degree of this recession were exacerbated by the disappearance or exhaustion of key elements of the earlier successful company strategies. Symptoms of a shortage of skilled pressmen and operators, the figures of the printing industry, were increasingly clear by the end of the privatisation process and this caused difficulties for many printing houses in the first years of the new century.

As discussed above, a change in product composition had been among the most efficient types of company strategies in the Hungarian printing industry during its recovery, and there were printing companies that successfully applied this strategy in the period of 2002–2005 as well. For example there were companies that counter-balanced the decline of newspaper production with the growing output of printed advertisements and catalogues (Table 5). However, based on our estimates, the number of cases in which this strategy could be adopted was much less than it was in the period of the long recovery.

In the business climate of the second recession methods of postponement have become more common again (Laki 1994). Several companies accepted diminished profits as price cuts became the main tool for keeping their market share.

It was unbelievable but in several cases the profit rate was about 30–35% in that time [during the recovery period]. There is a well known rule of thumb in the printing industry that a 10% rate is more than rewarding. People are happy with less than 10% and the printing industry produced these high rates. Today the situation is different. Because of the very strong competition it became impossible to modify prices. We are working with 6 or 7 year-old

<sup>29</sup>Interview with the owner-manager of a large printing company, western Hungary, 2006.

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prices for example. Taking inflation into consideration this is in fact a price cut. There are no chances of a rise in prices. The only way is the improvement of technology by investment—more efficient up to date machines.<sup>30</sup>

The price competition has been extremely harsh on this market since 2002. A convincing indicator of this development is the producer's price index which practically stagnated, or only increased more slowly than the price index of the industry as a whole in the period of the second recession (Table 9).

Another important area of competition was where a seller offered more favourable conditions of payment to customers. The most frequent form of this competitive behaviour was when the seller extended the contracted or tacit term of payment.

Earlier—let us take the example of our printing house—eight days were the ordinary term of payment. And then this period of price cuts came. All the publishing houses tendered the printing companies and collected as many offers as possible. Their decisions were based not only on prices but they took into consideration the terms of payments as well. We were forced to change the term of payment if we wanted to retain our contractor as producer. The eight days term—which was the rule three years ago—is an exception nowadays and we deal in the majority of cases with 30, 45 moreover 60 days term of payments. Indeed, these are loans when printing houses became pocketbooks of the publishers.<sup>31</sup>

These market conditions have brought about a re-evaluation of the role of long term business contacts and of the retention of clients. Moreover, because of the severity of the competition, the business organisations of the printing industry have been unable to influence and coordinate the behaviour of the market participants. For example their capacity to elaborate and coordinate of the rules of fair market behaviour has weakened in recent years. According to the owner of a medium-sized company

A few years ago we agreed here in the business association that the longest period of payment was 30 days. And there were colleagues who, five minutes after leaving the room where the agreement was made, agreed contracts including payment periods of 60 days. So we could not do anything.<sup>32</sup>

**TABLE 9**  
PRODUCER'S PRICE INDEX (PREVIOUS YEAR = 100%)

<i>Year</i>	<i>Printing industry</i>	<i>Industry total</i>
2002	101.1	98.2
2003	100.2	102.4
2004	100.4	103.5
2005	104.0	104.3
2006		106.5

*Source: Statistical Yearbook of Hungary (2002–2006) (Budapest, Hungarian Statistical Office).*

<sup>30</sup>Interview with the owner-manager of a small printing house, Budapest, 2007.

<sup>31</sup>Interview with the owner-manager of a large printing company, southern Hungary, 2006.

<sup>32</sup>Interview with the owner-manager of a large printing company, southern Hungary, 2007.

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TABLE 10

FACTORS INFLUENCING MARKET DEVELOPMENT AND THEIR OUTCOMES

<i>Factors which influence the market development</i>	<i>Period of initial growth 1987–1991</i>	<i>Recession 1991–1993</i>	<i>The long recovery of 1994–2002</i>	<i>Recession after 2002</i>
<i>Regulation (by the state or the EU)</i>	Deregulation, abolition of political control and censorship; abolition of administrative distribution of raw materials	Aftermath of deregulation: drastic decline of state orders for books and journals	Neutral	Neutral
<i>Technical development</i>	Reconstruction has a positive effect on modernisation	Legacy of rigid forms of technology from previous reconstruction have an unfavourable impact	New technologies diminish local market advantages. Increased competition from imports	Introduction of new electronic products rapidly diminishes local market advantages. Escalation of competition from imports
<i>Property rights</i>	Slow privatisation of large enterprises; rapid privatisation of smaller former state and party printing houses	New private publishers and customers with risky business strategies. Several new printing houses on the market	Successful privatisation especially in the packaging sector	Concentration of publishing companies
<i>Supply and demand</i>	Books—rapidly growing Newspapers—stagnating Advertisements—rapidly growing Packages—stagnating	Books—contracting Newspapers—contracting Advertisements—growing Packages—growing	Books—growing Newspapers—contracting Advertisements—rapidly growing Packages—rapidly growing	Books—growing Newspapers—contracting Advertisements—rapidly growing Packages—contracting
<i>Inputs</i>	Qualified labour force	Qualified labour force. Second-hand machines	Qualified labour force. Increasing turnover of printing machines	Shortage of labour
<i>Business strategy</i>		Wait and see behaviour; new strategies in preparation	Change of the product composition; all-purpose printing; occasional involvement in the market	Slowdown of change of product composition. Spread of postponing methods

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Those who were unable to survive or sustain the unfavourable effects of price competition and of the longer terms of payment (especially those who lost a substantial part of their business partners), decreased their output and temporarily abandoned, or gave up their business. A suggestive indicator of such voluntary or forced market exits was that the number of printing houses—especially the smaller ones—decreased in 2003–2004 (Table 2). Unfortunately we have no data about the size and the strategy of the companies which left the market; we only know that a few large printing companies collapsed, and several ‘garage’ printing houses ceased production. It is an open question whether the business strategies that were effective earlier are, or will be, adaptable to the new market situation.

### *Conclusions: the end of transition*

In this article we have examined the influence of a wide range of factors on the changing performance of the Hungarian printing industry since the end of the socialist system and we have noted various changes in nature of their influence in different periods. This is summarised in Table 10 above. If we compare the factors across different periods, it is observable that some exerted an influence only in the periods of the first recovery and the first recession. Deregulation, the abolition of censorship and the system of administrative distribution, and radical cuts to the subsidies were accompaniments of these two periods of transition, and only in these two periods did the privatisation of state-owned companies influence market development. The supply chains also changed radically while the price of the factors of production (labour, machines and buildings) were relatively low. The impact of these unique non-repetitive factors were less and less noticeable in the period of the long recovery and afterwards. The long-term processes of technical development and consumer behaviour became the main determinants of the market evolution and of the behaviour of the companies. These factors, especially the substitution of paper-based products, growing import competition and the decline of reading activity among the population influenced unfavourably the market position and the growth potential of the Hungarian printing industry and printing companies.

Another interesting conclusion of the study is that the successful business strategies which were elaborated in the first years of transition (especially the radical change of product composition) counterbalanced the unfavourable tendencies in the period of the long recovery. However, when the sources of growth (created by these successful strategies) became exhausted, the players of this shrinking market used methods of postponement instead of methods of problem solving.

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