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Abstract

Globalization is a fundamental and much discussed phenomenon of our days' economic development. This paper discusses its consequences in manufacturing, using the example of the Hungarian economy, where multinationals and other foreign companies play a key role. First the general nature of globalization and its effects in Hungary are discussed. Then data from two international surveys are used to characterize manufacturing practice, comparing three groups of companies: multinationals, other foreign-owned and local companies. The consequences illustrate the important role of multinationals in bringing new technologies and managerial techniques to the country, giving an example for beneficial effects of globalization.

Keywords:

Globalization, Hungary, manufacturing strategies and practices

Összefoglalás

A globalizáció alapvető és sokat elemzett jelenség napjaink gazdasági fejlődésében. Ez a tanulmány a globalizáció termelési következményeit tárgyalja a magyar gazdaság példáján keresztül, ahol a multinacionális, és más külföldi vállalatok kulcsszerepet játszanak. Először a globalizáció általános természetét és annak Magyarországra gyakorolt hatását vizsgáljuk. Utána két nemzetközi felmérés adatai segítségével járjuk körül a termelési gyakorlatot három vállalatcsoport: a multinacionális, a külföldi többségi tulajdonú és a magyar többségi tulajdonban lévő vállalatok jellemzőit összehasonlítva. Eredményeink arra utalnak, hogy a multinacionális vállalatok fontos szerepet játszanak abban, hogy az új technológiák és menedzseri módszerek hazánkba bejussanak, jó például szolgálva a globalizáció kedvező hatásaira.

Kulcsszavak:

Globalizáció, Magyarország, termelési stratégia és gyakorlat

Introduction

Globalization is one of the most important factors of today's economic development fundamentally influencing all fields of business, including production. The large multinational companies (probably the most characteristic „products” of globalization) play determining role in the development of their sectors globally and country by country, both by setting the

trends of technical/technological innovation and by applying and disseminating up-to-date management approaches and methods. Their actual role is subject of heated discussions from many sides.

It is a unique opportunity that this role can be studied almost like in a laboratory by following the recent transition of Central and Eastern European economies where multinationals have just appeared first about ten years ago. Hungary, as the country attracting the largest per capita foreign direct investments in the region, provides an exceptionally good case study to examine, what is the role of multinational companies in the changing competitiveness of the manufacturing industry.

Our paper is to examine this question as a key issue of the effects of globalization. The technology, the management culture and last but not least the actual capital brought into a country by foreign companies have a very substantial effect on the competitiveness of the country examined, both directly (by the operations of the multinationals' subsidiaries) and indirectly (via their effect on local industry). In fact, substantial increase of country competitiveness can be achieved only if there is an organic connection between multinational and local companies.

The Hungarian economy has shown a remarkable development in the 1990s, as a result of the transition to a market economy (Berács and Chikán, 1999). This process was a very complicated one - here we deal with only one aspect of it: the role played by foreign companies. Further closing the focus of our paper, we concentrate on the field of production (for an earlier analysis and some more details see Chikán and Demeter, 1995). Even though one of the characteristic features of the transition has been the very substantial increase of share of services in the production of GDP, manufacturing has kept its importance mainly by its contribution to the balance of payment of the country. This contribution is mainly due to the large foreign direct investments (FDI 22 billion dollars in the last 10 years), which generated an export driven growth in the country. Although Hungary has been always a relatively open country, an extremely fast reorientation of Hungarian exports from the old COMECON orientation to the markets of the developed countries occurred. Export to the OECD countries had a share of about 40% in 1989, while 80% in 2000. This reorientation was very important from the point of view of preparing Hungary's accession to the European Union, which has been a main strategic goal ever since the start of the transition.

In the paper the above issues are addressed concretely in the case of Hungary, using the results of a survey recently completed. Data were collected in the first half of 2001 at 58 Hungarian companies, using a questionnaire, which combined two international surveys: the GMRG (Global Manufacturing Research Group) and the IMSS (International Manufacturing Strategy Survey). We compare the performance of three groups of companies a) Hungarian subsidiaries of multinational companies, b) other companies where foreign investors have majority ownership, c) companies in domestic ownership.

It is shown that in many respects there is a significant difference in the manufacturing strategy and operation of the companies in the three groups. The major dimensions where substantial differences can be observed include market focus, the use of resources and various technologies and even the organization of operations. Conclusions will be drawn regarding the effects of production strategy and performance of the three groups on Hungary's chance to a smooth landing in the European Union in the foreseeable future.

We are well aware of the fact, that the questions examined in our paper are related to only a small proportion of the many factors influencing the Hungarian transition.

However, we believe that some important conclusions can be drawn from this analysis, several of which can be interpreted not only in the Hungarian context, but as factors of the globalization process.

Globalization

Globalization is a series of changes, where countries and economies integrate more and more due to economic activities crossing country borders (Moss Kanter and Pittinsky, 1996 cited by Czakó, 2000). In case of Hungary integration takes place in two fronts (Czakó, 2000): with the efforts to access to EU, and with the appearance of multinational companies bringing their buyer-supplier relationships as well as increasing local market competition. We here deal with the latter integration process, first examining three important questions: a) why do multinationals come to Hungary, b) what is their strategy, and c) why is it good for the country?

- **Why is it worth for multinational companies to come to Hungary?** Country characteristics are essential in location decisions. Christmann et. al. (1999) has shown using cross-country data for four multinationals in a single industry, that the relative importance of country characteristics is the highest as compared to the importance of industry structure, corporate characteristics, and subsidiary strategy as the four determinants of subsidiary performance. They considered the following factors as country conditions: a) *the level of economic development* (measured as per capita income) which determines factor costs, consumer spending, and also affect infrastructure development, urbanization, and specialization of physical and mental labor; b) *macroeconomic stability* (e.g. low inflation rates, stable exchange rates); c) *political situation* (risk of unpredictable government intervention, regulatory constraints, tax rates, trade barriers). Thus countries fitting the criteria of multinationals in these factors can be an attractive place to invest.

Brouthers (2000) analyzes the business environment of multinationals with the factors of factor costs, corporate climate, competitive structure and demand conditions, and describes the EU business environment as follows: “European multinationals have the highest labor/taxation costs among the Triad nations (US, EU and Japan) and a demand base that is more quality than price sensitive.” Since Hungary is nearby the EU, it means that both proximity between supply chain firms and the market is given (Barrel and Pain, 1999), so with a relatively low labor/taxation cost Hungary can be an attractive place to invest assuming that this labor is able to fulfill the quality requirements of the EU market.

Indeed, experiences show that multinationals came to our country for the following reasons (Chikán et. al. 2002):

- Good labor conditions comparing their performance/cost ratio,
- Stable political situation,
- Good to live in the country with family. (They do not mention tax advantages.)

This practical reasoning combines the factors of both Christmann et. al. (1999) and Brouthers (2000), and also highlights that the good performance/cost ratio of labor especially in comparison with EU nations is (with the expression of Hill, 1993) the order winning criterion for Hungary, while the other two are qualifying criteria. Although Vos (1997) suggests that the traditional sources of cost advantages (labor, land, etc.) are of decreasing importance in the strategies of multinationals, and on the basis of Doz and Prahalad (1988) he emphasizes strategic capabilities instead, still this reason seems to be a

relevant one (see e.g. Barrell and Pain, 1999) if we have a closer look on the strategy of foreign investors.

- **What is the strategy of foreign investors?** According to Bartlett-Goshal (1989) the role of subsidiaries within a global company can be determined along the dimensions of the strategic importance of local markets and the level of local resources and capabilities. On the basis of these dimensions four possible strategies can be followed: a) strategic leader b) contributor c) implementer and d) dark horse. Czakó (2000) states that the majority of investors in Hungary belong to the implementer group, where neither the local markets are important or the local resources and capabilities can contribute to the global company though there is a growing number of companies which can be considered counterexamples being in other, quite often strategic leader position (she mentions GE-Tungsham as a counter example staying in the strategic leader position). In the implementer group the main task of subsidiary management is to deliver value added to the company (in this case a good performance/cost ratio of labor mentioned above can be essential, and can explain the attractiveness of this feature). Strategy, sales directions and advertising are centrally decided. The success of the local management depends exclusively on operational efficiency.
- If this is the case and foreign companies take out at least part of their profit from the country, then **why is it good for a country to attract foreign capital? What kind of effects these foreign investments have on domestic companies and on the country?** Porter's diamond

New growth theories stress that international linkages via trade and FDI *may* affect the productivity performance and economic growth of national economies (Grossman and Helpman, 1991 and Barrell and Pain, 1999) mainly through increased competition and labour turnover. The term *may* is important, as it can be seen from Blomström and Sjöholm (1999), who could support this statement only for those segments in Indonesia which were not faced external competition (through export). On the other hand, there is the example of Israel, where multinational invasion started at the same time than in Hungary. Lavie and Fiegenbaum (2000) describe the process of how domestic companies are forced to think globally in their internal and external strategy.

The research questions

If we accept that multinationals come to Hungary to utilize the good performance/cost ratio and they mainly belong to the implementer group then their main concern is operational efficiency. Thus the question naturally emerges: how an efficient operations system looks like? In what aspects is this system different from the operations of local companies? We examine the following aspects:

- Market orientation, which gives us a view on the embeddness of companies in international trade and relations. Do multinationals really produce products for the global (EU) market?
- Development orientation, which reflects long-term strategies. Is there a difference among multinationals and other companies, which can result in sustainable advantages?
- Technology, which describes the status of one of the important production resources.
- Production management, which shows the way of using resources (e.g. the use of ERP systems).

- Efficiency, which can point out the success of strategies, and in particular the success of multinationals' implementer strategy;

Not all foreign investment come from multinational companies e.g. – many inventors from the neighbor countries started to do business in Hungary. The strategic propositions, operational background as well as the motives of the various investors can be quite different so, we distinguished three groups of companies: a) multinationals, b) foreign companies, c) local companies. We used F statistics and LSD test for comparisons.

The survey

Our analysis is based on the results of a survey conducted in Hungary as part two international research programs in the same time. We combined the international questionnaire surveys of the IMSS (International Manufacturing Strategy Survey (for details of the project see Lindberg et al, 1998 and Demeter, 2000) and the GMRG (Global Manufacturing Research Group (Whybark and Vastag, 1993; Whybark, 1997, Demeter, 2000), both started several years ago.

In Hungary the steps of collecting data were the following:

1. Translating the international questionnaire
2. Selecting the sample
3. Phoning companies in the sample to identify production managers
4. Sending letter to identified production managers to request contribution
5. Direct telephone connection
6. Sending questionnaires to companies
7. Follow up
8. Collecting questionnaires
9. Checking and accepting questionnaires (or asking for additional data)

Data were collected between April and June 2001. Based on data of the Hungarian Statistical Office (HSO) all companies were included in the sample, which have a) worked in Manufacturing Industry within the Division of Fabricated Metal Products, Machinery and Equipment (ISIC 38), b) employed more than 200 employees and c) existed at least since two years. The number of companies in this sample was 278. Finally, 58 companies answered the questionnaire, which means a response rate of 20.9%. The structure of the sample appropriately matches the data of HSO about industrial characteristics: the largest group, 43% of companies are from electronics (ISIC 383), 22% from machinery (ISIC 382), 15-15% from transportation equipment (ISIC 384) and metal production (ISIC 381), and finally 5% from measuring and controlling equipment (ISIC 385). The analysis of data is still going on. For the purpose of this paper we have identified three groups of companies, and selected a subset of the data for analysis. The three groups are the following:

1. Multinationals are those companies, which have the following characteristics
 - a) Foreign (non-Hungarian) investors have a majority (usually 100%) ownership.
 - b) Comparing results of three questions: number of a) local employees (i.e. at the Hungarian subsidiary) b) employees in the economic region (like the EU) c) employees worldwide. Companies, which had an increasing number of employees going from a) to

c) were considered as multinationals (in fact, we have checked them by name: they are really global companies).

2. Foreign majority owned, but not multinational companies – those meeting requirements (a) but not (b).

3. Local companies, not meeting any of the above criteria.

For sake of simple references, we shall call the three groups as multinationals, foreign and local companies. There are 13, 18 and 27 companies in the groups, the average number of employees are 856, 486, 438, respectively.

Results of the analysis

Market orientation

Our data reflect the very strong EU orientation of Hungarian companies: both sales and purchasing are mainly focused to and from the European market (although local companies are statistically different significantly from foreign companies in both directions). The pattern of sales and purchasing structure are almost identical, and very logical. Multinationals' sales and especially purchases include more non-EU relations than any of the other two groups (the latter is significant), this way contributing to a more balanced structure of Hungarian foreign trade. Quite naturally, mainly local companies sell to and purchase from the domestic markets. It is no surprise that the European relation is strongest in case of the foreign companies, since these are – as previously discussed – usually mainly SME companies from EU countries.

Data in Figure 1 and 2 illustrates how important foreign and multinational companies are in the development of new trade relations of the Hungarian economy. It is interesting that purchase is distributed more evenly among various relations, than sales – domestic sources of purchasing are somewhat higher than the ratio of domestic sales. This is a consequence of logistics rationality and shows that foreign and multinational companies are deeply rooted in the local economy. It is a matter of fact that at the beginning of the transition most foreign companies and even more multinationals came to Hungary together with their original suppliers. The ratio of local partners in supply has constantly increased, in parallel with the increasing information and growing trust in connection with local suppliers. This is an extremely important process, since it helps deepening the roots of the foreign companies in Hungary (and so increasing the probability of their long-term presence in the country) and increases the local contents of the value added produced with the help of FDI. (In fact the Hungarian government has applied various devices to stimulate the employment of local suppliers.)

Figure 1. Ratio of various relations to total sales

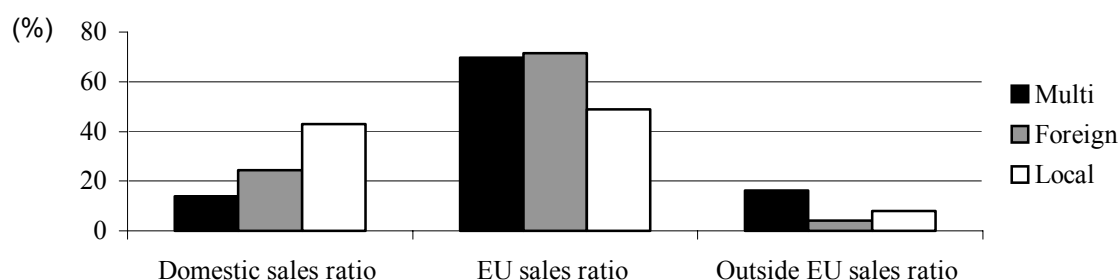
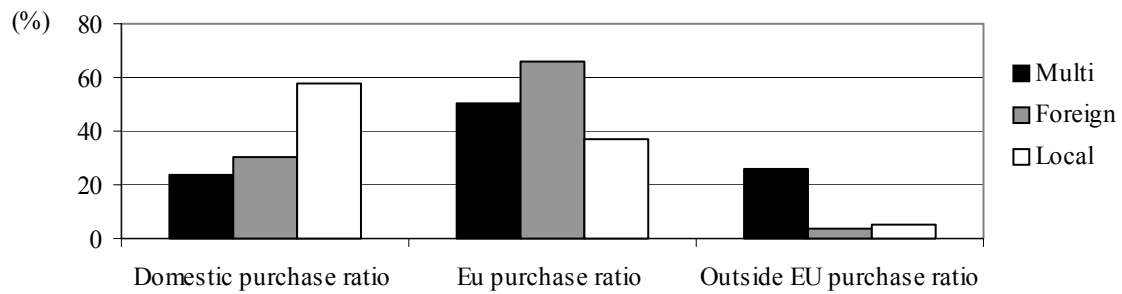


Figure 2. Ratio of various relations to total purchase

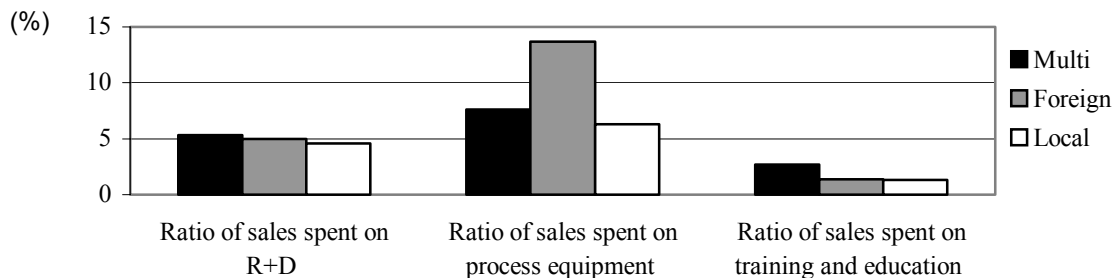


One more remark is necessary: the far greater openness and supply chain integrity of multinationals is illustrated by the figures we collected when asking what proportion of the components and parts used for the finished products is produced in-house: multinationals reported an average 21.5 %, while foreign and local companies produced almost identical averages, far higher than multinationals: 51,6 and 56,4%, respectively.

Development orientation

In the introduction we have emphasized the major role FDI played in the fast technical development of the Hungarian industry. This role is supported by the data from the survey.

Figure 3. Ratio of sales spent on development purposes



The ratio of R+D spending to sales is on the same level at multinationals than in the other groups (see Figure 3). This result, we believe, support that multinationals in Hungary follow the implementer strategy using the classification of Bartlett and Goshal (1989).

On the other hand multinationals' spending on education and training is double of those of the other two groups (although the difference is not significant). It must be added here, however, that this spending has been traditionally relatively low in Hungarian companies. Relying mostly on the really advanced basic education the work force gets in Hungary, companies did not put an emphasis on formally organizing and financing education and training. This is changing now, understanding the needs stemming from the requirements of life-long learning.

The only area where multinationals are behind the foreign (but not the local) companies, is investment in production equipments. There is no clear answer to that (it may be just a basically random consequence of a few major investments by one or two foreign companies), but it is also a fact that the proportion of really green-field investments may be higher in case of small, and mainly medium size foreign companies (the difference is significant).

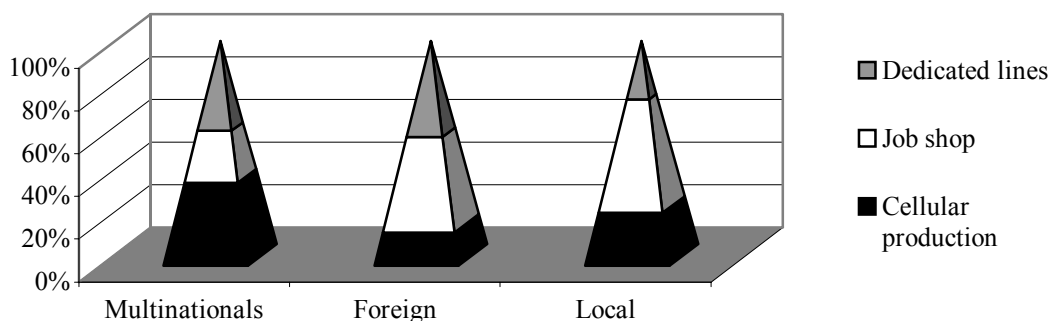
Technology

Our survey results support those opinions according to which FDI played a key role in the remarkably fast technical development of the Hungarian economy. Multinationals rely on the most advanced technologies far more than the other two groups (the average age of their technology is also significantly better than that of the local companies, by 10 vs. 15 years)– in fact they have introduced a lot of technological innovations in the last decade. It should be added, that foreign companies are also more advanced in the application of new technologies than local companies. This is no surprise: the Hungarian industry simply did not have the necessary capital for investments into these usually quite expensive technologies – therefore FDI’s role was absolutely essential for the development of the technological level of industry in Hungary. This development, in turn, was a key precondition of the reorientation of exports, which was so much necessary in the early 90’s for the success of the economy.

However, having the best technology is not enough, we have to manage it (Jaikumar, 1986). Multinationals are better than the other two groups in this aspect, as well, which is shown, for example, with the high ratio of preventive maintenance as compared to breakdown maintenance (46.5% for multinationals, 32.4% for foreign, while 31.6% for local companies).

There is an essential difference also in the use of various process layout alternatives, as shown in Figure 4. Multinationals use significantly more often cellular production than foreign companies ($p=0.043$), and less job shop than local companies ($p=0.037$). We have to add here that local companies have 8 times more (roughly 160) customers in average than the other two groups which can explain the large ratio of job shops here.

Figure 4. The use of different process layout alternatives



Similarly clear picture is drawn by the examination of the emphasis on the use of new production technologies (Table 1). One can immediately see that multinationals lead and foreign companies are second in all categories (only significantly different technologies are shown in the table). The weights given even by multinationals are not always particularly high, but it should be considered that these are globally new technologies. There is a low figure in the automation and robotization rows – the reason for that can be the relatively low cost labor in our country.

Table 1. The use of some up-to-date technologies

Indicators	Multinational	Foreign	Local
CNC/DNC ^{++,*}	3.08	2.73	1.83
Automated tool change ^{+,*}	2.33	2.27	1.54
Automated storage and retrieval systems ^{0,++}	1.82	1.22	1.11
Flexible manufacturing systems ^{0,++}	2.92	2.12	1.81
Computer aided inspection/testing/tracking ⁺	3.42	3.13	2.56
Integrated design-processing systems ^{0,++}	2.58	1.73	1.67
LAN/WAN/Intranet/Shared databases/Internet ^{00,+++}	3.64	2.38	1.85

0, 00, 000 Multinational and foreign companies are significantly different at 0: 10%, 00: 5%, 000: 1%

+, ++, +++ Multinational and local companies are significantly different at +: 10%, ++: 5%, +++ 1%

*, **, *** Foreign and local companies are significantly different at *: 10%, **: 5%, ***: 1%

Production management

There is no significant difference in attributing importance to various manufacturing objectives: improving conformance is considered most important in all the three groups, followed by environmental performance, delivery speed and volume flexibility (there is one deviation: foreign companies consider environmental performance far less important than companies in the two other groups. It is remarkable, that all the three groups are rather skeptical about the influence manufacturing can have on business and marketing strategies – and multinationals are even considerably behind the other two groups (the difference is not significant)! This means probably that central strategic planning at the corporate headquarters leaves very little room for maneuvering at the local level at these companies. (The group averages were the following: multinationals: 2.69, foreign: 3.22, domestic: 3.33, when the extent of influence was weighted on a 1-5 Likert scale).

Though it seems from the above that goal setting does not differ much in the various groups, the means used for achieving goals are quite different. Table 2 gives a summary of the average figures received to the question “To what extent do you use ERP systems in the following areas?” on a 1-5 Likert scale. The difference is striking: while the weight is less than average at both the foreign and local companies, (with a slight advantage of the foreign companies) multinationals provide a far more advanced picture.

Table 2. The use of ERP systems

Management field	Multinational	Foreign	Local
Materials management ^{00,+++}	4.07	2.94	2.74
Production planning and control ⁺⁺	3.62	2.81	2.67
Purchasing and supply management ^{00,++}	3.23	2.50	2.32
Sales and distribution management ⁺⁺	3.85	2.44	2.26

0, 00, 000 Multinational and foreign companies are significantly different at 0: 10%, 00: 5%, 000: 1%

+, ++, +++ Multinational and local companies are significantly different at +: 10%, ++: 5%, +++ 1%

The feeling raised by the difference in the above important aspect is strengthened when going through the use of various production development programs. Table 3 gives the numerical results, which reflect the advantage of the multinationals in all fields without any single exception. The difference is changing by fields, but it is significant in almost all areas. The order of the averages and the local companies varies, there is no characteristic difference between these two groups.

Table 3. The use of production programs (1: not used at all, 5: receives great emphasis)

Management field	Multinational	Foreign	Local
Expanding manufacturing capacity ^{++,***}	3.92	3.89	2.85
Reorganizing company towards e-business configurations ⁰⁰	2.33	1.40	1.92
Rethinking and restructuring supply strategy	3.08	2.38	2.50
Restructuring manufacturing processes and layout to streamline ⁺	3.23	3.00	2.52
Undertaking programs for quality improvement and control ⁺	3.92	3.47	3.23
Undertaking programs to improve equipment productivity ⁺	3.23	2.63	2.48
Improving the process of new product development ⁰	2.67	1.88	2.08
Improving environmental compatibility, safety and health ⁰	3.69	3.00	3.40

0, 00, 000 Multinational and foreign companies are significantly different at 0: 10%, 00: 5%, 000: 1%

+, ++, +++ Multinational and local companies are significantly different at +: 10%, ++: 5%, +++ 1%

*, **, *** Foreign and local companies are significantly different at *: 10%, **: 5%, ***: 1%

The first row of Table 3 deserves special attention: it shows that both multinational and foreign companies plan to extend manufacturing capacity (in fact, according to the figures this is their first priority) while at local companies this emphasis is far lower. This is remarkable from the point of view of the further perspectives of these companies in Hungary. It was about three years ago when policy makers started to say that since almost all great multinationals have already some subsidiary in Hungary, now we have to focus on keeping them here. It seems that this intention is shared by the multinationals and similarly by the foreign companies, so we can count on further FDI in forms of investments in capacity expansion. It is also promising that quality improvement and control receives such a great attention, together with environmental, health and safety considerations (it is interesting to mention that results here underline again, that foreign companies put considerably lower weight on this aspect, then companies in the two other groups. Analysts say that multinationals just cannot afford not to invest in these ethically important areas – local companies are naturally committed, being more deeply rooted in the Hungarian environment, while several smaller foreign companies have a tendency of trying to save these expenses.

Efficiency

We have used four sets of indicators of operating efficiency of the companies:

- Productivity (sales/employee)
- Inventory turnover (days)
- Quality assurance (ISO 9000 and 14000)
- Delivery (speed and timeliness)

As for productivity, multinationals are far ahead of the other two groups: the per capita sales is more than double than those at foreign and local companies (12405, 5594 and 6055 thousand Hungarian Forints, respectively, which are around 50k, 22k and 24k Euro).

Inventory efficiency is very similar at multinationals and local companies: 39,9 and 40,7 days, while this is a bit higher at foreign companies: 29,1 days. On the basis of statistical analysis the results are not different significantly, that is foreign companies are not sub rationally better in this field.

A good proxy for judging quality policy and situation is the examination of the companies' relation to ISO systems. ISO 9000 is very wide spread: all the multinationals, while 83% of foreign and 85% of local companies in the sample have this certificate. There is a far bigger advantage of multinationals in having ISO 14000: 62% of them have this certificate, which is still at the introductory phase in foreign and local companies (13 and 8% have it, respectively). This difference underlines that in many cases multinationals show an example to follow for the local companies.

As far as delivery is concerned, the data in Table 4 offer that multinationals do not show a better performance compared to foreign and local companies. The delivery speed of multinationals is substantially (but not significantly) lower than that of the other two groups (which can be the result of several factors: in many cases market strength plays a key role).

There is no significant difference among the groups regarding timeliness: the proportion of late deliveries is somewhat higher at the multinationals, but the average time of lateness is lower. Interestingly, the lowest performance is shown by the foreign companies – we cannot give any explanation for that.

The rather uniform delivery performance can be an indicator of the strong competition in the various markets: companies in the sample have to correspond to basically the same market requirements.

Table 4. Delivery performance

Performance indicator	Multinational	Foreign	Local
Promised delivery time (days)	44.5	31.2	33.2
Actual delivery time (days)	41.4	36.8	32.9
Ratio of late deliveries (%)	9.7	7.3	6.9
Average time late (days)	6.0	8.2	5.3

Conclusions

Our survey results support the view that FDI played and play a crucial role in the development of the Hungarian industry. Of course the relatively small sample size puts limits on the generality of our statements. However, the picture is so clear that we may draw some important conclusions:

1. Foreign companies do not form a homogeneous set. There are very important differences in the role and behavior of multinational companies and those other companies under foreign ownership, which are of course international, but extend their activity only to a limited geographic range. Multinationals differ more from local companies, than "other" foreign companies, especially since the latter group consists mainly from companies with headquarters in other European countries (mostly Germany, Austria and Northern - Italy). This structure helps in the fast adaptation of the Hungarian industry to the requirements of the EU – both by trade connections and by creating a bridge between many Hungarian suppliers and the EU markets.
2. Survey results show that foreign companies, especially multinationals really play a key role in business development in Hungary both in the technological and managerial sense: they brought new technologies and new managerial techniques contributing greatly to the success of the Hungarian economy in the '90s.
3. The Hungarian case illustrates that globalization, the most characteristic product of which is the multinational company serves not only the benefit of the most developed

economies but it can contribute (in case of the existence of appropriate circumstances) to the speedy development in other parts of the world. This supports the ideological standpoint that the task is not constraining globalization (which is a vain effort anyway) but creating the “appropriate” circumstances.

References

- Bartlett, C. A. - Ghoshal, S. (1989): *Managing Across Borders. The Transnational Solution*, Harvard Business School Press, Boston, MA
- Barrell, R. and Pain, N. (1999): Domestic institutions, agglomerations and foreign direct investment in Europe, *European Economic Review*, Vol. 43, pp. 925-934
- Berács, J. and Chikán, A. (editors) (1999): *Managing Business in Hungary*, Akadémiai Kiadó, Budapest
- Blomström, M. and Sjöholm, F. (1999): Technology transfers and spillovers: does local participation with multinationals matter? *European Economic Review*, Vol. 43, pp. 915-923
- Brouthers, L. E. (2000): The influence of Triad nations' environments on price-quality product strategies and MNC performance, *Journal of International Business Studies*, Vol. 31. No. 1. pp 39-63
- Chikán, A. and Demeter, K. (1995): Manufacturing strategies in Hungarian industry: the effects of transition from planned to market economy; *International Journal of Operations and Production Management*, Vol. 15, No. 11, pp. 5-19.
- Chikán, A., Czakó, E. and Zoltayné Paprika, Z. (2002): *Transition, Competitiveness and Economic Growth*, Akadémiai Kiadó, Budapest
- Christmann, P., Day, D. and Yip, G. S. (1999): The relative influence of country conditions, industry structure, and business strategy on multinational corporation subsidiary performance, *Journal of International Management*, Vol. 5. pp. 241-265
- Czakó, E. (2000): *Competitiveness on the level of industries – in the mirror of globalization*, Ph.D. dissertation, Budapest University of Economic Sciences and Public Administration (in English)
- Demeter (Városiné), K. (2000): *The contribution of manufacturing strategy to business success in Hungarian and international context*, Ph.D. dissertation, Budapest School of Economic Sciences and Public Administration, Budapest (in English)
- Grossman, G. M. and Helpman, E. (1991): *Innovation and Growth in the Global Economy*, MIT Press, Cambridge, MA
- Hill, T. [1993]: *Manufacturing Strategy: The Strategic Management of the Manufacturing Function*, Second edition, MacMillan, London
- Jaikumar, R. (1986): Postindustrial manufacturing, *Harvard Business Review*, Nov-Dec., pp. 69-76
- Lavie, D. and Fiegenbaum, A. (2000): The strategic reaction of domestic firms to foreign MNC dominance: the Israeli experience, *Long Range Planning*, Vol. 33. pp. 651-672
- Lindberg, P., Voss, C. S. and Blackmon, K. L. (editors) (1998): *International Manufacturing Strategies: Context, content and Change*, Kluwer Academic Publishers, The Netherlands

- Moss Kanter, R. and Pittinsky, T. L. (1996) Globalization: new worlds for social, Inquiry, Berkeley Journal of Sociology, Vol. 40. pp.1-20
- Vos, B. (1997): Restructuring Manufacturing and Logistics in Multinationals, Avebury, Aldershot
- Whybark, D. C. (1997): GMRG survey research in operations management, International Journal of Operations and Production Management, Vol. 17. No. 7. pp. 686-696
- Whybark, D. C. and Vastag, Gy. (editors) (1993): Global Manufacturing Practices, Elsevier, Amsterdam