ORGANISATIONS WITH FOREIGN DIRECT INVESTMENT AND INDUSTRIAL INTEGRATION IN CENTRAL EUROPEAN COUNTRIES

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This article is based primarily on data collected within the framework of the research project EU Integration and the Prospects for Catch-Up Development in CEEC's: The Determinants of the Productivity Gap "Productivity Gap" (the project is funded by European Commission within the 5th Framework Programme), as well as on materials prepared by partners in the framework of this project.

The aim of the article is to find answers to the following four main research questions:

1. What are the initial roles, or what is the standing of the branches of multinational companies in Central Europe vis-à-vis their parent corporations?

2. What is the relationship of a branch of a multinational corporation in Central Europe to the management of multinational corporations and to other branches?

3. What are the relations of branches of multinational corporations in Central Europe to local businesses and the business environment?

4. What changes have occurred in the development of the roles and decision making rights of the branches of multinational corporations in Central Europe?

The conceptual model is based on two forms of evolution of the position of branches:

- An expansion of functions, i.e. gaining new responsibilities and functions,
- An expansion of business lines, i.e. the expansion of the scope of existing powers by means of manufacturing new products.

The conceptual approach described was tested on data gained by means of a two-page questionnaire for firms with foreign direct investment operating in the manufacturing sector. The questionnaires were sent to 2203 organisations with foreign direct investment (FDI) in selected countries (Slovakia, Estonia, Slovenia, Poland, Hungary), where 433 questionnaires were returned, representing a return rate of 19.7%. The highest return rate was in Slovenia (34.4%), followed by Slovakia (30.2%), Estonia (30.0%), Poland (18.8%) and Hungary (10.6%).

The greatest share of organisations with FDI, as regards their number and employment, is found in Poland. From the aspect of sectoral structure, marked differences exist between the countries, the representativeness of the sample is relatively low in terms of the number of organisations, but is relatively high, if we take employment into consideration. The representativeness between countries is markedly different, the majority of firms included in the sample are medium-sized, the share of large firms increases only in the case of Poland and Hungary, which is given by the size of the countries. The majority of firms were established in 1993 or earlier, an absolute majority are firms in foreign ownership. There are more firms in the sample producing intermediate products than those producing final products.

All sectors of the NACE classification are represented in the sample.

Independence of branches (organisations with FDI)

The data collected allowed it to be ascertained whether individual functions are fulfilled only/mainly by the branch or only/mainly by the foreign owner. The independence of business functions is grouped into operational, marketing and strategic independence.

On average, as well as for all countries, organisations with FDI have the greatest independence (autonomy) in the field of operational management. Of the four business functions, branches have the greatest autonomy in the field of accounting and financial operations. In the framework of operational management the lowest independence in all countries is found in management of the manufacturing process. This was to be expected, since the management of the manufacturing process covers also technological development, requiring a certain level of capability with modern technology.

The lowest level of independence is found in the group of business functions in the field of strategy, where product development is dominant, which overall is the business function with the lowest degree of independence. In the framework of marketing activities

Table 1: Independence of business functions in organisations with FDI

Business functions	Autonomy indicator*					
	Total**	Slovenia	Slovakia	Hungary	Poland	Estonia
Manufacturing management	0.253	0. 111	0. 199	0. 212	0. 370	0. 262
Technological development	0. 353	0. 278	0. 245	0. 396	0. 426	0. 338
Supplies and logistics	0. 247	0. 194	0. 278	0. 237	0. 268	0. 232
Accounting and corporate management	0. 145	0. 083	0. 140	0. 124	0. 165	0. 220
Autonomy of operational management	0. 250	0. 167	0. 216	0. 242	0. 307	0. 263
Distribution and sales	0. 306	0. 319	0. 454	0. 323	0. 201	0. 366
Promotion and advertising	0. 336	0. 333	0. 460	0. 340	0. 282	0. 310
Customer services	0. 256	0. 305	0. 362	0. 270	0. 181	0. 232
Marketing	0. 373	0. 403	0. 515	0. 352	0. 295	0. 379
Market research	0. 391	0. 463	0. 563	0. 376	0. 287	0. 352
Marketing autonomy	0. 332	0. 365	0. 471	0. 332	0. 249	0. 328
Pricing	0. 363	0. 315	0. 490	0. 335	0. 355	0. 310
Financing investment	0. 389	0. 269	0. 475	0. 307	0. 412	0. 506
Product development	0. 501	0. 454	0. 643	0. 490	0. 475	0. 447
Management strategy and planning	0. 500	0. 398	0. 580	0. 468	0. 532	0. 482
Strategic autonomy	0. 438	0. 359	0. 547	0. 400	0. 444	0. 436

* The indicators were calculated on the basis of individual responses according to the following weights: 0 = the branch alone has decision-making powers in the given field; 0.3 = mainly the branch; 0.6 = mainly the foreign investor; 1 = the foreign investor alone. The lower the indicator, the higher the branch's autonomy in the given field.
** Average

customer care and distribution and sales enjoy the highest degree of autonomy. On the other hand, market research has the lowest autonomy.

The usual order of fields of business activities – from operative functions with the highest independence through marketing activities to strategic functions with the lowest degree of independence – was found in three countries: Slovakia, Hungary and Estonia. In Poland branches are more independent in the field of marketing than in operative management. This may be a consequence of the size of the market and the manner of market research in Poland.

On the basis of our analyses it may be expected that the autonomy of branches is influenced also by market orientation. The more the branch is oriented on the domestic market (i.e. the motive behind the FDI was access to the local market, "market-seeker" FDI), the greater the autonomy we can expect in marketing and partially also in operative functions. An appropriate example is Slovakia itself. Slovak organisations with FDI are the most oriented on export, whereas Polish organisations with FDI are most focused on the domestic market. This hypothesis however may be confirmed only by more thorough econometric analysis, since these facts are mutually interconnected with other matters.

Branches of foreign companies in Slovenia have the greatest autonomy, where marketing independence is almost equal to strategic independence. Slovenian branches have significantly greater autonomy also in certain operative functions (operational management, accounting and finance).

- Differences in the autonomy of organisations with FDI may be explained by the differing inherited capacities and various market orientations of branches. The greater the capacities of a branch, the greater its autonomy.
- Autonomy in marketing and strategic functions are mutually interdependent and the market orientation of branches varies depending on sector, as well as country.

Slovakia in more detail

In the field of decision-making powers, or responsibilities for individual fields of activity, we can gradually observe a positive trend in the transfer of foreign partners' responsibilities into the hands of Slovak management, and this in all fields of activity, with the exception of technical product development and strategic planning.

The competences of domestic management are greatest in the field of accounting and financial management (86%), the situation is roughly identical in the field of production management (in this field in the initial phases of FDI entry, decision-making was prevailingly in hands of the foreign owner). The competences of Slovak management are slightly lower (83%) in the field of operational planning. Other fields are arranged in descending order according to the powers of Slovak management: supplies, logistics (76%), product pricing, investment planning, sales and distribution (59%), market research (51%).

In the remaining fields the responsibility granted to Slovak management is also relatively high, ranging from 50 – 55%.

Market orientation and supplier structure

The market orientation of branches is a significant factor in understanding the level of autonomy of branches in individual business functions, as well as in understanding the ways of raising the level of branches. At the same time it shows the degree of a branch's integration in the framework of the multinational corporation. Significant differences were found to exist between the countries examined. In the case of three countries significant orientation on exports can be observed: Slovenia 72.9% of the volume of annual production, Slovakia 64.4% and Estonia 59.8%. On the other hand there is Poland, where up to 67.1% of production is sold on the domestic market, and Hungary, where the corresponding figure is 52.1%. Slovenian and Slovak firms sell most of their production to a foreign partner: Slovakia 47.5% and Slovenia 37.1%. Slovak branches export to their foreign parent corporations three times as much production as to other foreign customers. This is confirmed by the fact that Slovenian and Slovak branches are mostly oriented on exports and are dependent on their parent corporation. By far a smaller share of exports goes to the parent corporation in the cases of Poland, Hungary and mainly Estonia. In the case of Estonia 30.6% of production goes directly to foreign customers and only 29.2% to the parent corporation. The orientation of Polish branches on the domestic market is in accordance with their high degree of independence in the field of marketing.

The supplier structure is a further significant factor for understanding the autonomy of branches in individual business functions and as well as for understanding the ways of increasing the level of branches (possibilities were: imports from the parent corporation, from other partners aboard, from a domestic branch of the parent corporation, from other domestic suppliers). At the same time it points to the branch's degree of integration in the framework of the multinational corporation and its standing in the domestic economy. In contrast to the situation in sales, where the foreign partner dominates, in supplier relationships domestic suppliers are in first place (34.4%), followed by other foreign suppliers (28%) and only in third place comes the foreign partner (27.6%). On the basis of this it seems that branches have greater autonomy in supplies than in sales. Greater exports are usually connected with greater imports and vice versa. The size of the country is a further important factor. Smaller countries offer fewer possibilities not only as regards sales, but also supplies.

Differences exist however between the countries examined. Slovenian and Slovak branches are above-average in receiving supplies from foreign suppliers, where as regards Slovenia this is from other foreign suppliers and as regards Slovakia from the foreign partner; and are below-average in receiving supplies from domestic suppliers (Slovakia). Conversely, Polish branches are below average in receiving supplies from other foreign suppliers. The same applies to Hungarian branches, where they are supplied more by domestic suppliers. The only surprise may be said to be that Slovenian branches are supplied mainly from domestic sources.

Slovakia in more detail

Slovakia, as a country with a small market, is prioritised by foreign, export-oriented investors. In 2001, the year for which the research was performed, the share of the volume of exports of organisations with FDI in the total export of Slovakia was 52% and the share in the total import 45% (in both cases this concerned volumes excluding commercial organisations with FDI). In this, the share of intra-enterprise supplies between the branch and parent corporation alone represented in imports 35.2% and in exports 39.4% in the framework of foreign trade. This is a significant share, which however from the time aspect is gradually decreasing through the involvement of small and medium-sized domestic enterprises in sub-supplier activities, which are systematically growing. Essentially this concerns the important matter of the progressive interconnection of organisations with FDI with domestic industry and, in the framework of multinational manufacturing cooperation, with all positive influences, such as high quality and volume of production, the possibility of export with ensured sales, employment, qualification, etc.

New, large investments, which are currently coming to Slovakia, primarily in the car industry, provide the basis for further active development in the respective contiguities of the integration of the manufacturing and commercial relationships of organisations with FDI with abroad and on the other hand also with the domestic manufacturing and sales environment.

The influence of industrial integration on the local branch

The results of the questionnaire research helped to gain a certain picture as to the importance and types

Table 2: Extent of changes in organisations following the entry of FDI*

Country	Sales volume	Exports	Productivity level	Technology level	Quality level
Total**	0.50	0. 45	0. 56	0. 55	0. 56
Slovenia	0. 61	0. 57	0. 57	0. 51	0. 46
Hungary	0. 59	0. 39	0. 61	0. 56	0. 56
Poland	0. 46	0. 35	0. 54	0. 58	0. 58
Estonia	0. 69	0. 46	0. 56	0. 56	0. 56
Slovakia	0. 26	0. 57	0. 54	0. 51	0. 60

* rate of changes: -1 = significant decrease, -0.5 = decrease, 0 = no change, +0.5 = increase, +1 = significant increase
** = average

of changes at local branches following the entry of foreign capital.

The analysis showed two main features in the development of changes in organisations with FDI. The intensity of changes is very similar as regards productivity, quality and technology levels. Differences in these three categories are not significant, with the exception of Slovenia, where the quality level is lower than the average value for all countries. These minor differences in the scale of changes point to the fact that technological improvements in Central European countries continue to appear more in fields such as quality, education and the manufacturing sector.

Changes in sales and exports are of a slightly lesser intensity. The higher growth in sales than in exports indicates that branches are strengthening their position in the local market. The results of the research reveal a significantly higher rate of changes in sales in Hungary and Estonia and a significantly lower rate of change in Slovakia. Conversely, Slovak branches have recorded a significantly higher rate of change in the case of the exports than the average for the whole sample, and the same applies also in the case of the quality level, where Slovakia achieved the highest growth.

Slovakia in more detail

Exports, by individual sector monitored, have prevailingly a growing trend; an exception is mining and the processing of mineral ores, likewise services, food production, printing, production of non-metal materials, hotels and related services. Other sectors are export-oriented. They direct their production primarily to their foreign partner, or other foreign customers. Parent corporations to a lesser extent support exports also through making their foreign markets available.

Imports and domestic purchasing by individual suppliers exhibit similar trends as exports. The share of supplies from Slovak suppliers has recently been increasing, which is a positive fact. This applies particularly in the case of services, part of the economic industry, in the production of non-metal products, the production of metals, metal constructions, parts of machine and car production and furniture production.

Essentially, however, the import of raw materials and components remains high, also in such sectors where domestic sources could be used.

Internal and external competitiveness of branches

The competitiveness of branches can be a result of their own activities, support from the parent corporation or other external organisations. Several conclusions may be derived from the research results:

• The most important sources of competitiveness in all fields (quality control, management, human resources, research and development, patents and licences) are the own activities of branches and their relations to the parent corporation.

• Branches are dependent on partners (local suppliers and customers) only in the field of quality management.

• Other branches of the foreign partner and other foreign partners are not an essential source of competitiveness in any field.

In a comparison of the determinants of the competitiveness in individual countries having an average overall model, two differences can be observed:

1. The Slovenian, Slovak and Estonian model is most similar to the overall average model. In this, it is necessary to bear in mind that these are export-oriented countries, which makes them in the field of quality control dependent not only upon the foreign parent corporation, but also on permanent foreign suppliers and customers.

2. Poland and Hungary are less dependent on partners as regards supplier-customer relationships. Their increased orientation on the local market has the consequence that local suppliers and customers have a greater influence on quality control than do foreign suppliers and customers. Polish branches are heavily dependent on the parent corporation. Hungarian branches are relatively less dependent on the parent corporation, where they consider their own quality management to be the most important factor of competitiveness.

Slovakia in more detail

With the entry of foreign investors, the importance of domestic research generally declines. In particular in the framework of large concerns research is concentrated in the parent organisations, something which however is a worldwide trend. The car industry serves as a typical example, where the potential model of the "Slovak car" is at present not a realistic prospect. There is however here the chance to develop final production in the structure of programmes, which are acquiring a more sophisticated level. On the other hand, smaller firms do also make use of domestic research, for example in certain electro-technical sectors, in the food or paper industry.

Research results deserving particular interest are those concerning the importance of individual fields for a firm's competitiveness (a scale of 1 to 5 was used, where 1 = insignificant, 2 = of little importance, 3 = important, 4 = very important, 5 = extremely important):

• licences, patents – the evaluation of their importance is low, prevailingly being evaluated as important (3), or of little importance (2). The reason probably lies in the fact that a form of licences or patents is not used in all organisations.

• human resources – are prevailingly evaluated as very important (4) and important (3). On the basis of research, foreign investors evaluate the labour force in Slovakia very highly, especially from the aspect of its technical level, but recently also in the field of management. Slowly language barriers are also coming down.

• management – is prevailingly evaluated as very important (4) and extremely important (5), lower evaluations were given only exceptionally.

Financial integration

Similarly as in the case of competences in business functions, branches are also significantly dependent on their own revenues and the foreign parent corporation as regards financial flows. This situation is a little different only in the case of Hungary, where domestic sources (banks or other firms) are more important than sources from the foreign parent corporation. This corresponds to the relatively low importance of the parent corporation as a source of competitiveness for Hungarian branches. The use of other foreign sources (other than parent companies) for financing is greatest in Poland, which may reflect the relatively expensive domestic sources of financing for Polish branches.

As regards Slovakia, from the aspect of the importance of a firm's sources of finance, own revenues are evaluated as being the most important, followed by funds from foreign investors. Other domestic sources are also relatively important (banks, firms, etc.). Financing from other domestic branches of the foreign owner were evaluated as the least important.

Conclusions

This article has presented certain results of international research focused on issues of the integration of industry at the level of branches in selected Central European countries.

From the research it results that branches have the greatest degree of independence in the operational field (accounting and finance, supplier relations and logistics, operations and manufacturing process management) and the least independence in strategic functions (pricing, investment financing, product development and strategic management). Operative and strategic independence are greatest in Slovenia. Operative independence is lowest in Slovakia. On the basis of the research we are can assume that autonomy in the marketing and strategic fields are mutually interdependent. The differences between the countries examined may be caused by inherited capacities and the market orientation of the branches in these countries.

Industrial integration by means of FDI has led to a growth in labour productivity, technology and quality. Differences between the countries in the development of these three categories are statistically insignificant.

The main sources of a branch's competitiveness are quality control and management, followed by a qualified workforce, where slightly less importance is ascribed to research and development, patents and licences. This demonstrates that the branches researched have established their market position more on developed production than on quality technologies. The most important source of competitiveness are the own activities of the branch, or of the foreign parent corporation, and in the field of quality control also members of the supplier-customer chain.

Industrial integration in Slovakia over the past 14 years has passed through various phases of development, which unequivocally we can assess as positive, and this from simple forms of FDI entry into individual organisations in the first years (1990 – 1995), which gradually through mutual recognition and improvement of the political-economic environment transformed into more successful forms. An important moment at present is the interconnection of organisations with FDI with domestic enterprises, which has a multiplier effect on the positive influence of FDI on the Slovak economy.

In organisations in which foreign direct investments feature, or which are 100%-owned by foreign owners, a significant shift has occurred towards improving the efficiency of production. Technological equipment has been modernised, the quality of products increased, leading to an increase in their acceptable price. The economic efficiency of production has increased, as has the qualification of employees. Wages have increased partially and there has been a growth in labour productivity, as well as the overall volume of production, where this has been achieved primarily through maintaining the domestic market and expanding the position in foreign markets, in many cases especially with the contribution of the foreign partner.

In conclusion it may unequivocally be stated that foreign direct investment has operated in favour of integration both at the national and international level, where such investments have acted as a stimulant in balancing out differences in production and its organisation.

References:

1. HOŠKOVÁ, A.: A Comparison of foreign direct investments development in Slovakia and in transforming economics. National bank of Slovakia, Bratislava 2000.
2. HOŠKOVÁ, A.: Foreign direct investments connection with the domestic industry. National bank of Slovakia, Bratislava 2001.
3. HOŠKOVÁ, A. – ŠESTÁKOVÁ, M.: International undertaking. ELITA, Bratislava 1993.
4. HUNYA,G. – STANKOVSKYJ.: Foreign Direct Investment in Central and East European Countries and the Former Soviet Union. WIFO – Austrian Institute for Economic Research, Wienna 2001.
5. EU Integration and the Prospects for the Closure of the Productivity Gap. Country Papers, 2003
6. SABOL, T. – HOŠKOVÁ, A.: Foreign direct investments in the Slovak economy and their influence in the corporate sector. Biatec journal 1/ 2003, s. 18 – 20.
7. SABOL, M. – HOŠKOVÁ, A. – ŠOLTÉS, M. – HREŇO. J.: EU Integration and the Prospects for the Closure of the Productivity Gap. Košice: Country paper Slovakia, TUKE, 2003.
8. TREND – TOP, Businesses and markets of the SR in figures, Bratislava, yearbook, Trend 2001.
9. TREND – TOP, 2001 in Slovak industry. Bratislava, yearbook, appendix to Trend magazine 2001.
10. TREND – TOP, 2003 in Slovak industry. Bratislava, yearbook, appendix to Trend magazine 2003.