# COMPETITIVE ADVANTAGE OF ENTERPRISES IN SMALL TRANSFORMING ECONOMY (example of Slovakia)

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**Abstract:**
A Slovak contemporary business environment mainly enables an uprise of a short range sustainable competitive advantage. Bigger chances to acquire a competitive advantage have small firms, therefore they could respond to quickly changing and developing environments. The Slovak companies are unable to create total competitive advantage to succeed in greater amount in international scope. From selected industries the chemical and partly engineering ones have the most qualitative competitive advantage, the construction and trade businesses are the least competitive. Exeptional competencies are spread into the various firms and industries. Non-concentrated and non-integrated competitive advantage has subsequently a low value only. Non-total competitive advantage is accomplished to a full picture by stronger foreign competitors, which insert enterprises of this domain in their supply chains.

**Keywords:** competitive advantage, external conditions, structure, national competitive advantage, total competitive advantage

**JEL Classification:** M100, M190

## 1. Introduction

Competitive advantage is a phenomenon, which entered the Slovak economic environment only in the first part of the 1990s, when economic transformation has started. In the previous stage of centrally planned economy, this expression of enterprises competitive strength had had only marginal importance. In the conditions of central division of resources, of in forward determined quantity and quality of sales and of state limited territories, when customer had choice, environment for its creation was not established neither there was need felt to do so. Everything that was produced was also sold. Competition concerned only those enterprises, which acted in international environment, but these were separated from the direct competition by state-owned monopoly in foreign trade.

Transition to standard market economy created almost for all enterprises in Slovakia absolutely new situation, which they had no experience yet with. Political and

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economic liberty, privatization, free pricing, free access to foreign currencies, downfall of state-owned monopoly for foreign trade had brought to enterprises a chance for independent decision making. In the same time, however, markets of Central and Eastern Europe decayed, domestic unprotected market was entered by ravening foreign competition and competition has arisen also among domestic enterprises. Competition advantage became an inevitable condition to survive and prosper for each enterprise.

Slovakia is a small open economy. Transition to market economy means a step into unknown for Slovak enterprises, when old skills and experience are mostly useless. Size of the country and its limited resources, dependence on raw materials, fragility of democracy, too various and large industrial structure and need to search a position in an international labour division are escalating potential vulnerability of enterprises, which still learn how to exist in a market competitive environment. Ten years after a start of economic transformation unanswered questions still remain and new are still arising. Do Slovak enterprises own any competitive advantage? What is the structure of the competitive advantage in this territory? Do any differences between industries and size categories of enterprises exist in size and structure of the competitive advantage? What are the conditions for creation of the competitive advantage? Can small competitive enterprises exist in international area? How many enterprises can create a complete competition advantage?

## 2. Theory of Competitive Advantage

### 2. 1 *Internal Enterprise Environment Analysis*

Discussions about the issue whether an enterprise has or does not have a competition advantage start with an analysis of its internal environment. Basis of the competitive advantage is generally located in the enterprise itself, even though some of its parts are present at the suppliers or customers. Internal environment consists of **the resources** that are categorised according to their character as tangible (material or financial), intangible (know-how, trademark, goodwill) and human (quantity, qualification, experiences and skills of labour). Part of the resources is accounted in the book keeping evidence, but Szarková states “skills and experience are not noticed in the accounting documents and its real basis is indeed questionable (1999, p. 88)”. Resources as such are standing and can function only in mutual relations. Resources are entered into action by **capabilities** that represent “skills of an enterprise to co-ordinate its resources and to use them efficiently” (Hill, Jones, 1992, p. 103). Capabilities are though located among and over the resources. They are being a part of procedures and rules according to which an enterprise manages its internal processes to achieve its aims. These managing tools determine how and where the decisions are made, what sort of behaviour is awarded, which cultural norms and values are accepted in an enterprise. These are, for example, a system of management, communication, company culture and so on.

Identification of the competitive advantage segments means to label those within resources and capabilities that are available in larger quantity, higher quality, which are extraordinary or remarkably different in comparison with competition. Resources and capabilities that create a positive difference and lead before competitors are called **core** or **distinctive competencies**. Hamel and Prahalad (1990) suggest using the notion core competencies in order to distinguish resources and capabilities essential for the strategy of a company from those of secondary importance. Thompson and Strickland state that ”a core competence is something a company does especially well in comparison to its competitors (1992, p. 89)“. There exist many kind of core competencies in company practices, for instance unique production facilities, production system without spoilage, top level research and development, well dislocated trade network, quick and sensible perception of changes in needs and tastes of customers, innovative flexibility and other.

Hill and Jones (1992) use a notion distinctive competence, which is created from two complementary components like resources and capabilities of an enterprise. Similarly Selznick (1957) used the notion "distinctive competence" to describe those activities, which an organization does better than its competition. Ansoff (1965) used the same notion at the analysis of basis of growth strategy. When indicated opinions compared, it results in non-existence of essential difference between core and distinctive competencies. Both are **exceptional competencies** and they are the basis of competitive advantage. Exceptional competencies in this article will be associated mainly with functional areas of an enterprise (research and development, production, marketing and others). From among the exceptional competencies, **universal capabilities** are detached. These may carry over to another competitive environment and therefore supply an enterprise with flexibility and adaptability. Into this category, we can assign for instance an information database about customers, which can be efficiently used at the subject change of business.

Causes of competitive disadvantage are weaknesses and mainly **key vulnerability**. Weakness is becoming a key vulnerability, if this is a competency, which an enterprise is missing and majority of competition has it and at the same time it is inevitable for a success in certain competitive environment.

**Competitive advantage is an integrated and cross-sectional phenomenon.** Idea of integration appears in the works of Rue and Holland (1989) and Grant (1996). As far as core and distinctive competencies generally concern individual functional areas, competitive advantage often results from connecting several functional areas. Competitive advantage is created by integration of unique and useful resources in several functional areas of an enterprise that are interconnected and activated by capabilities. Since the strenght is only an assumption, possibility, potential capability, competitive advantage is a real competence and a reality that will manifest not only in, for example, ability to design and develop a product, but also to produce and sell for more competitive prices and (or) in higher quantity as competitors. Competitive advantage means to gain an advance, because such a product or service is launched to the market that competition is unable to provide, or is unable to provide with comparable parameters.

### 2. 2 *External Conditions Required for a Rise of a Competitive Advantage*

Competitive advantage can arise only in favourable conditions caused by differences between enterprises. Competitive advantage does not generally arise if there is no room and no reason for the rise of the differences. Differences among enterprises are caused by character of their external and internal environment.[1) ] External conditions in many industries represent, for example, price deviations of input raw material, changes in exchange rates, sharpening of norms on ecology and other. These changes in external conditions will result in competitive advantage only in such case, when they have different effect on enterprises because of their different resources and capabilities. Opportunity to create a competitive advantage de-

1) An idea of external conditions, which are favourable for an origin of competitive advantage, is covered by publication of Grant, 1996. In this book on p. 151 – 157 there are characterised external sources of change, which influence size of competitive advantage.

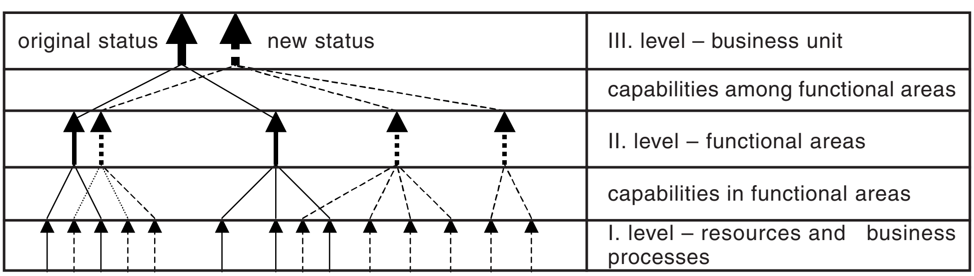
pends on the size, variability and complexity of external change and on the level of differences in quality and quantity of internal environment of enterprises. The more turbulent is industrial environment, the bigger number of changes and objectively larger space for creation of competitive advantage environment. Similarly, it is valid for complexity of environment. On the other hand, in a relatively stable industry with about the same powerful enterprises we can observe generally only minor competitive advantages.

### 2. 3 *Competitive Advantage Models*

Each enterprise executes a set of activities in terms of suggesting, producing, providing, selling and supporting its product or service. All these activities can be described by the model named **value chain** and it originates from M. Porter (1995). Value analysis was formerly suggested as an accounting analysis. This was supposed to clarify profit making in individual phases of complex manufacturing processes to locate the areas where it is possible to lower the costs or add more value. Porter connected the identification of phases and setting the added value with resource analysis of competitive advantage. He states that realising the strategic competencies has to start with identification of individual value creative activities.

Value chain is based on the knowledge that it is not possible to identify the causes of competitive advantage and to evaluate it while looking at the whole enterprise. Enterprise has to be decomposed to set of partial activities, which are studied individually according to the contribution to total manufactured value. Value creative activities are the basis of competitive advantage. In order to gain a competitive advantage enterprise must perform value creative functions at lower costs as competition does, or to perform them the way that product is then very different in its quality in order to be able to demand a special price. An enterprise must then create exceptional competencies in one or more value creative functions in order to create a competitive advantage. On the other hand, if any striking weakness is among these functions, an enterprise has to face a competitive disadvantage.

**Dynamic Multilevel Bundle of Resources and Capabilities**




**Dynamic and multilayer bundle of resources and capabilities** is a model, which demonstrates competitive advantage as a group of elements and relations. Tangible and intangible resources are interconnected with capabilities. A model from outside is not transparent and it consists of more layers to be penetrated in order to find out primary and essential resources of competitive advantage (see Figure). Mastership at the consistence of competitive advantage perceived this way lies in remaking ordinary issues into extraordinary results. In this case decisive role is played by relations and connections, which are considered to be the ”soft” tools of management. Here we can search a recipe how to build a competitive advantage in environments with an unsatisfactory developed tangible resources, in the industries with mobile resources, or in mature or fragmented industries.

### 2. 4 *National Competitive Advantage*

The task of national conditions at influencing international competitiveness of industries and enterprises is described in the theory of comparative advantage (e. g. Samuelson, Nordhaus, 1992). This theory says that if one country has absolute advantage in the production of all products it produces, it can still gain from international trade, if it is specialised only in those products, which it is able to produce more efficiently than its other products. Comparative advantage expresses differences in national efficiency, because one country compared to another is relatively more efficient in production of one product than in production of another product. It depends on many other factors whether comparative advantage can change to real competitive advantage. Development of exchange rate has the biggest part on it and also the fact how close it is to the purchasing power parity.

Theory of comparative advantage lies in an assumption that production factors are not mobile among the nations. However, present labour, capital and technology are mobile, they move freely in the world economy and competitive advantage is moving with them. M. Porter thinks that present international trade and development of competitive advantage is more useful than comparative advantage. He identifies four factors which determine and co-create competitive advantage of nations (Porter, 1998, p. 71):

a) **factor conditions** (production factors): national position in basic production factors as labour, raw material or infrastructure. For example, labour can do its best by its price, qualification, skills, discipline, endurance and other;

b) **demand conditions**: character of domestic demand for products or services. If domestic consumers are too demanding, they force domestic enterprises to produce top quality, but appropriate in price in order to succeed in the own country. Enterprises that are able to satisfy demanding domestic customers, gain important advantage when they compete in other countries with rivals that were not facing this pressure;

c) **related and supporting industries**: presence or abstention of domestic supplying and familiar industries that are internationally competitive. For example, for top technology industry it is important to be supplied by domestic resources of knowledges from basic and applied research;

d) **strategy, structures and rivalry**: national conditions specify how enterprises are to be created and organised and what is the character of domestic rivalry.

The more favourable is the character of individual factors for enterprise, the better are its prospects to succeed in international competition and the more probable is the gain of defendable competitive advantage. National competitive advantage is a structured phenomenon that consists of system of elements and relations similarly to previous models of competitive advantage.

## 3. Object and Method of Survey

Survey focused on finding of presence and size of competitive advantage in enterprises in Slovakia was done in the period from October to November 1999. The survey was made by students of the 4$^{th}$ year of Faculty of Business Management of the University of Economics in Bratislava (Slovakia) as a component part of education of compulsory subject Strategic Management. Researched pack of 359 questionnaires after revision comprises of 309 enterprises divided to 15 industries, out of that 75 small (1 – 25 employees), 155 medium (26 – 500 employees) and 79 big enterprises (more than 500 employees). Collection of data was performed by questionnaire. Every interviewer looked after one sole enterprise. Most of the answers were commented in detail in the appendix of the questionnaire to increase its reliability. All collected data were inserted and processed in Access 97 database.

Results are presented in three levels. Primarily in full context for whole studied file, then on the second level according to size categories of enterprises in case substantial deviations from whole file appear and finally on the third level according to industries, but again only in such case if substantial deviations from whole file appear.

Because of a big number of industries there will be presented only those results that were most numerously represented in the file as chemical industry (45 enterprises), machinery (41 enterprises), services (40 enterprises), food industry (33 enterprises), construction industry (25 enterprises) and trade (25 enterprises).[2)]

Results are organised to four thematic units:
– external conditions of competitive advantage origin,
– structure and level of competitive advantage,
– conditions of competitiveness in international scope,
– complex competitive advantage.

Results are qualitatively expressed in percentage share of existence of studied parameter in whole file of enterprises, eventually in size category of enterprises or in selected industries. Evaluation scale ranges from local level to international or in the scale from no level to top level. Part of the results is recorded by point scale.

## 4. Results of Survey and Discussion

### 4. 1 *External Conditions of Competitive Advantage Origin*

External conditions were evaluated indirectly by means of industry life cycle phase, action radius of competition, intensity of competition and predictability[3)] of development as an indicator of future changes.

There are open very favourable conditions for competitive advantage origin in the embryonic and growth stage of industry. 0.32 % of enterprises were in the embryonic phase, 22.01 % of enterprises in the growth phase. In the shake-out phase, when

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2) According to OECD classification of ISIC the standard nomenclature of industries are :
chemistry – DG Manufacture of chemicals, chemicals products and man-made fibres,
engineering – DK Manufacture of machinery and equipment N.E.C.,
services – K Real estate, renting and business activities, research and development,
foodstuffs industry – DA section 15 Manufacture of food products,
construction – F Construction,
trade – G Wholesale and retail trade. This classification was made acccording to publication: Industrial Classification of Economic Activities. Bratislava, Statistical Office of Slovak Republic 1994.

3) Foresighting of a future was evaluated on the work base of Courtney, Kirkland, Viguerie (1997), which distinguishes:
– a clear-enough future, at level 1 the residual uncertainty is irrelevant to making strategic decisions,
– alternate future, at level 2 the future can be described as one of a few alternate outcomes or discrete scenarios,
– a range of futures, at level 3 a range of potential future can be identified. That range is defined by a limited number of key variables, but the actual outcome may lie anywhere along a continuum bounded by that range,
– true ambiguity, at level 4 multiple dimensions of uncertainty interact to create an environment that is impossible to predict.

space for creation of competition advantage is being reduced we found 27.18 % of enterprises. 44.66 % of enterprises were in maturity phase when serious problems with long-term sustainability of competitive advantage occured. Therefore only one fifth of enterprises is in excellent conditions. Action radius of competition tells about suitable conditions for competitive advantage origin controversially in certain extent. The larger it is, the more external opportunities grow, but at the same time the more competition pressure is present. According to the survey results, 58.25 % of enterprises act in international environment or they feel the pressure of foreign competitors. The rest acts in local, regional or national dimension. On the one hand strategic space for competitive advantage origin is opening, on the other hand it is questionable whether reviewed firms are able to use it.

Intensive rivalry lowers the external ability of the competitive advantage origin, shortens period of domination to short periods, pushes towards constant change in the substance of competitive advantage. Only powerful enterprises in the position of industry leader are able to exploit from the existence of sharp competition. Existence of extremely high or high intensity of competition is considered by almost 75 % of studied enterprises, as average it is considered by 16.83 % of enterprises and as low or none approximately by 10 % of enterprises.

It is a paradox that unpredictable future creates the biggest but at the same time the most risky space for competitive advantage origin. It is a space for courageous and pioneer enterprises that stand at the door-step of the birth of new generations of products, or even new industries. Future can be unpredictable also for those enterprises that are unable to aim at even less transparent environment. Definite future creates roughly the same conditions for all competitors and therefore space for competitive advantage origin is rapidly reduced. 32.36 % of enterprises consider their future as definite, 39.16 % of enterprises expect their future in several variants, 11.65 % expect a range of futures and 12.94 % can not predict their future. Approximately 4 % of enterprises were unable to state their position towards predictability of their future.

Almost half of all enterprises think that they are able to exploit changes of external environment for their benefit, one quarter is unable to exploit the opportunities to competitive advantage and the last quarter was unable to declare their opinion. Study of external conditions of competitive advantage origin in terms of size has brought these differences in comparison with whole file of enterprises:

– small enterprises are in a larger extent present in growing and mostly in shake-out industries if compared to medium and big enterprises. However, there is a sharp change in mature industries where only 25 % of small enterprises are present, but almost half of medium, and over a half of big enterprises. Presence of small enterprises is thus more in starting phases of industry life cycle, where we can find bigger space for origin of competitive advantage. On the other hand lower number of small enterprises are able to struggle through to the maturity phase. Medium and big enterprises are concentrated in maturity industries where the level of competition, in general, is about average, but competitive advantage quickly devaluates;

– up to 40 % of small enterprises is unable to identify their competitive action radius. If we compare the results for whole file, small enterprises are involved less internationally (30 % of small enterprises) and international competition is more felt by big enterprises (72 % of big enterprises);

– medium enterprises are the most present in the status of definite future (36 %), big enterprises in the status of variant and continuous future (48 % and 14 %) and small enterprises in the status of unpredictable future (20 %). Explanation of this division can be different. Small enterprises do not have any monitoring or forecast competencies, and therefore they can easily find themselves in an unpredictable situation, or they are pioneer oriented and then it is a natural status. Medium and mostly big enterprises are better equipped to predict future personally and technically and therefore uncertainty is strongly decreased, or they simply ignore the future, either because they are conservative or because they are not willing to risk. In any case, relatively the biggest and at the same time the most risky space for competitive advantage is opened to small enterprises;

– enterprises have problem to express, whether external conditions contribute to competitive advantage origin. It is less obvious in case of small enterprises, because of 16 % that cannot express their position and more obvious in case of big enterprises, because of 30 % that cannot identify the consequences.

### 4. 2 *Structure and Level of Competitive Advantage*

Competitive advantage arises from integration of unique and useful resources in several functional areas of enterprise that are interconnected and activated by capabilities. Structure of competitive advantage is expressed by means of individual functional areas, tangible and intangible resources and relations (capabilities) among them is shown in Table 1.

Table 1
**Structure of Competitive Advantage**

| Exceptional competencies (functional areas) | Value (points) | Unique and valuable resources | Value (points) | Capabilities | Value (points) |
|---|---|---|---|---|---|
| Research and development | 2.07 | Estates | 1.40 | System of management | 2.74 |
| Logistics | 1.75 | Buildings | 1.55 | Organizational structure | 2.23 |
| Marketing | 2.14 | Equipment and technology | 2.64 | Control system | 2.56 |
| Production (operation) | 2.49 | Brand and goodwill | 2.96 | Corporate culture | 2.33 |
| Personnel | 2.46 | Patents and experience | 2.58 | Other | 0.69 |
| Finances | 1.76 | Finances | 1.80 | - | - |
| Other | 0.63 | Personnel | 2.34 | - | - |
| - | - | Other | 0.40 | - | - |

Note: Evaluation scale: 1 – local, 2 – regional, 3 – national, 4 – European, 5 – world.

From the Table 1 it is obvious, that Slovak enterprises from the file are generally on the way between regional and national top level. Relatively favourable external conditions, ability to observe and react to external changes are reduced by low level of tangible and intangible internal environment of enterprises. They are not (with very few exceptions) ready and not able to play an open and balanced game with European and worldwide competitors.

Universal competencies were another subject of survey. These give an enterprise an opportunity to act also beyond its traditional or original industry. The question was formulated as an open one, therefore the answers were sorted into several categories, shown in Table 2. One fourth of all answers did not comply with posed question. We can, though, assume that these enterprises either do not have any universal competencies, or their conception of universal capabilities is distorted. Besides generally formulated flexibility and adaptability that based on the system of management, organizational structure and mainly on competencies and skills of managers, there was noticed a more important occurrence in customer relation (existence of more purpose distribution channels, customers databases, market knowledge), quality of human resources (education, experience, skills) and production and operation processes. Usage of these is not limited to one industry. Moreover some small part of enterprises considers financial resources its universal characteristics while available in sufficient amounts or having easy access to them.

Table 2
**Density of Presence of Core Vulnerability and Universal Competencies** (in %)

| Universal competencies | Share | Core vulnerability | Share |
|---|---|---|---|
| Flexibility and adaptability | 14.11 | Organizational rigidity | 10.82 |
| Financial resources | 4.55 | Financial resources | 18.76 |
| Human resources | 12.92 | Human resources | 6.62 |
| Relations with customers | 17.46 | Marketing | 13.69 |
| Brand and goodwill | 6.22 | Dependence | 5.96 |
| Production and operation | 15.31 | Production and operation | 15.01 |
| Other | 4.31 | System of management | 5.96 |
| Unsuitable or not stated | 25.12 | Other | 5.3 |
| - | - | Unsuitable or not stated | 17.88 |

Negative and insufficient competencies on the level of core vulnerability are shown in the Table 2. Respondents were answering open questions again, therefore answers are sorted into more categories. The biggest problem of studied file is a financial question (lack of capital, liquidity problem, insolvency of customers), production and performance processes (low level of technology, lack of capacity), marketing (inability to react to the changes of demand and structural changes in industry) and organizational rigidity (inability to predict and react to the changes of demand in outer environment). Dependence as the core vulnerability was interpreted as an extreme bond to certain suppliers, customers, raw materials and energies. Human resources were becoming vulnerable especially as an effect of experts on exodus. The highest share of answers was evaluated as unsuitable. Among them original or new competitors were considered as the key vulnerability. It relates to the tendency of masking own insufficiencies by, so called, objective reasons. These are supposedly impossible to be influenced by managers.

Complete overview on integrity and size of competitive advantage is stimulant and it is noted in the Table 3. Only less than 7 % of enterprises state the degree of integration to be lower than average (items d + e + f) and only approximately one fourth of enterprises assume that importance of their competitive advantage does not reach a national level (items d + e). This complex evaluation may, however, obscure real structure and level of competitive advantage. This emerges in detailed analysis of items, from which it consists of. The contradiction between partial data in the Table 1 and complete evaluation of the Table 3 is obvious.

Table 3
**Degree of Integration of Exceptional Skills and Capabilities and Size of Competitive Advantage** (in %)

| Degree of a integration | Share | Size of competitive advantage | Share |
|---|---|---|---|
| a) extremely high | 4.21 | a) world top | 6.47 |
| b) high | 47.57 | b) European top | 16.18 |
| c) average | 36.89 | c) national top | 51.46 |
| d) under average | 2.59 | d) regional top | 13.59 |
| e) low | 3.24 | e) local top | 9.39 |
| f) none | 1.29 | f) not stated | 2.91 |
| g) not stated | 4.21 | - | - |

Studying structure of competitive advantage origin in terms of category sizes has brought these differences in comparison with whole file of enterprises:

– average values that appreciate the level of exceptional competencies, unique and valuable resources and capabilities grow in the order from small, medium, to big enterprises with minor exceptions, for example, tangible devices and technology reach 2.97 in medium enterprises and 2.95 in big enterprises. Differences in evaluation of corporate culture are marginal. Only few items exceed three points (national level) as to production competencies of big enterprises (3.17), brand and goodwill of big enterprises (3.44), system of management (3.15) and system of control in big enterprises (3.17);

– presence of universal competencies as well as of the key vulnerabilities in individual size categories is roughly equal to presence of these characteristics in whole file. Perhaps the only item where there are stronger differences, which are considered to be universal characteristics by 10 % of small, 16 % of medium and 20 % of big enterprises, are production and operation. Medium enterprises consider themselves to be more flexible and adaptable. 17.5 % of them assign themselves this characteristics, while only 12.9 % of small and 8.3 % of big enterprises;

– integration of elements and relations of competitive advantage is managed the best by big enterprises, while 16 % of small enterprises deal with integration on the low level or no level, or they are unable to judge. The same counts for 11.3 % of medium and 7.6 % of big enterprises;

– size of competitive advantage associates with the size of enterprise. A majority of small enterprises own competitive advantage on local to national level, only 12 % considers this advantage to be on the European or world level. A majority of big enterprises has a competitive advantage on national level, only 24 % have it on the European and world level. Medium enterprises achieve the highest share of competitive advantage presence on the European and world level (27.3 %) in comparison to other size categories. Here a contradiction between overall and detailed look on competitive advantage arises again.

### 4. 3 *Competitive Conditions in International Area*

Overall results that characterise level of determinants of national competitive advantage, in a sense of Porters' four factors, are shown in Tables 4, 5 and 6, which show percentage share of enterprises from the file reaching certain factor level.

Labour is traditionally considered to be the best production factor in Slovakia. Survey results support this statement (Table 4), where one half of questioned enterprises consider character of their labour as above average (on a high level). Only 50 % share of raw material factors and infrastructure corresponds to this high level of labour. On the contrary, average level of labour exceeds roughly double share of raw materials and infrastructure factors on the same level. Similarly non-balanced relation among production factors is present also on the top level (exceptionally high).

Table 4
**Evaluation of Level of Production Factors as Determinants of National Competitive Advantage** (in %)

| Factor level | Labour | Raw materials | Infrastructure |
|---|---|---|---|
| a) exceptionally high | 17.15 | 9.71 | 6.47 |
| b) high | 52.10 | 27.51 | 24.92 |
| c) average | 17.48 | 29.13 | 42.72 |
| d) low average | 1.29 | 1.94 | 9.06 |
| e) low | 2.91 | 4.85 | 4.21 |
| f) none | 4.21 | 11.33 | 5.50 |
| g) not stated | 4.85 | 15.53 | 7.12 |

Conditions of demand (see Table 5) indicate that customers of one half of Slovak enterprises are very demanding. Their requirements correspond approximately with demands of demanding European customer. Slovak consumer can distinguish the quality and appreciates it. Pressure of a demand as a factor of national competitive advantage will, however, bring real results only in case if purchasing power of average Slovak citizen increases. Strategy factor, organizational structure and rivalry

Table 5
**Evaluation of Demand Level, Strategies, 0rganizational Structures and Rivalry as Determinants of National Competitive Advantage** (in %)

| Factor level | Conditions of demand | Strategies, structures and rivalry |
|---|---|---|
| a) exceptionally high | 12.30 | 8.41 |
| b) high | 51.46 | 41.10 |
| c) average | 26.54 | 32.04 |
| d) low average | 3.24 | 5.18 |
| e) low | 3.24 | 4.85 |
| f) none | 1.29 | 2.91 |
| g) not stated | 1.94 | 5.18 |

outputs considerably optimistic values. Complexity of this factor, however, lowers its information power. Similar survey conducted in 1998 examined the level of strategic management in Slovak enterprises (see Slávik, 1999) showed that methods of strategic management are more formally announced than realistically used. It was taken modern dictionary often with old content only.

Familiar and supporting industries (see Table 6) exist almost at three-quarters of enterprises. This high share is very favourable. Most likely it reasons in developed internationalization of economic life and in great openness of Slovak economy, when differences between domestic and foreign industrial bonds are often erased.

Table 6
**Presence of Familiar and Supporting Industries as Determinants of National Competitive Advantage**

| Presence of the factor | Familiar and supporting industries |
|---|---|
| a) present | 73.46 |
| b) absent | 21.68 |
| c) not stated | 4.85 |

Studying international competitiveness in terms of category sizes has brought these differences in comparison with the whole file of enterprises:

– share of labour force on a high level (item b) in Table 4) is 10 % higher in big enterprises, on the other hand 10 % lower in small enterprises;

– big enterprises consider raw material to be an important resource of international competitiveness. 41.8 % of them declare them to be on a high or exceptionally high level. On the contrary, raw materials are a weakness of small enterprises since in 25 % of enterprises they are no or very low level of them, moreover 28 % cannot express their opinion to this issue;

– big enterprises are surrounded by infrastructure the best;

– conditions of demand and severity of domestic customers are felt by all size categories on approximately equal level. A share of 15.2 % of extremely demanding customers at big enterprises is a slight increase in comparison to average;

– higher share of medium and big enterprises in comparison with total average of the file find themselves in the conditions of extremely high intensity of rivalry. It corresponds to more sophisticated and ingenious strategies and organizational structures. On the contrary, small enterprises consider the level of competition mainly as average. This is generally the level of its strategy and organizational structure;

– presence of familiar and supporting industries are felt more by small than big enterprises.

### 4. 4 *Presence of Total Competitive Advantage on the National, European and World Level*

Complexity and complementarity of its constituent components are the conditions of competitive advantage origin. An enterprise must have certain minimum number of elements and bonds of its internal environment that must reach certain level in order to create something that gives sense, can exist and allows surpassing its rivals. Competitive advantage therefore depends on quantity and quality of its structure. In the globalised conditions of economic life, ability to compete is becoming a No. 1 importance on national, but even more on the European and world level.

Competitive advantage appears in a certain enterprise only in case of concentration of all necessary competencies, resources and capabilities on one spot and at the same time on certain qualitative level. This resulted in filtering the databases, in use by surveyed enterprises, that deal with exceptional competencies, resources and capabilities (see Table 1) on the national (3 points), European (4 points) and world (5 points) level. The results for the whole studied file are indicated in Table 7. The shares represent existence of enterprises, where evaluated components of competitive advantage are concentrated together on one place. Every group of components of competitive advantage (competencies, resources and capabilities) were evaluated individually and then all the groups together. First of all "softer" criterious were used for analysing the presence of enterprises that have half of competencies, resources and capabilities that meet appropriate standards. Then, more severe criteria were introduced for investigation of the number of enterprises that have all the competencies, resources and capabilities from the national to world level. Table 7 tells us that transition from lower to higher qualitative level accompanies a break point. Similar obvious difference is observable also at reviewing of the presence of one half and all the competencies, resources and capabilities. Enterprises with complex competitive advantage on the European and world level are only slight fragment of whole file. Detecting only 4.8 % of enterprises on the national and higher level is not a very optimistic information.

Table 7
**Shares of Enterprises from Whole File, where Evaluated Competencies, Resources and Capabilities are Present All Together at Same Time and in Same Place** (in %)

| Level | Exceptional competencies | | Unique and valuable resources | | Capabilities | | Competencies, resources and capabilities[1)] |
|---|---|---|---|---|---|---|---|
| | Half | All | Half | All | Half | All | All |
| a) world | 6.1 | 0.7 | 2.26 | 0.3 | 7.1 | 1.3 | 0.3 |
| b) European and higher | 25.8 | 1.6 | 8.71 | 1.6 | 25.5 | 9.4 | 1.0 |
| c) national and higher | 62.6 | 13.2 | 36.1 | 10.3 | 55.8 | 29.0 | 4.8 |

1) Presence of enterprises with total competitive advantage.

Studying the presence of complete competitive advantage in terms of selected industries has brought these differences in comparison with the whole file of enterprises, which are pictured in Table 8. Industries show the same tendency of decreasing enterprises from the national level to the world level and from one half to all evaluated components of competitive advantage. Chemical industry and machinery are the most competitive among all industries and trade is the least competitive. The wider the basis of national level, the more probable an ability for progress to higher qualitative levels. Quality resources constitute the lowest share, a little higher is the share of quality exceptional competencies and the strongest is the presence of capabilities mainly in the category "all capabilities".

Severity of the criteria and complexity of competitive advantage evaluation can be further increased by application of the criteria of international competitiveness. The database from Table 8 was filtered for all the determinants on the level a) and

Table 8
**Shares of Enterprises, where Presence of Competencies, Resources and Capabilities is on Certain Level in Selected Industries** (in %)

| Industry and level | Exceptional competencies | | Unique and valuable resources | | Capabilities | | * |
|---|---|---|---|---|---|---|---|
| | Half | All | Half | All | Half | All | All1) |
| **Chemistry** | | | | | | | |
| a) world | 11.1 | 2.2 | 2.2 | - | 11.1 | 2.2 | - |
| b) European and higher | 35.5 | 2.2 | 17.8 | 2.2 | 37.8 | 6.7 | - |
| c) national and higher | 86.6 | 15.5 | 48.9 | 15.5 | 68.9 | 42.2 | 2 |
| **Trade** | | | | | | | |
| a) world | 4.0 | - | - | - | 4.0 | - | - |
| b) European and higher | 12.0 | - | 4.0 | - | 24.0 | 8.0 | - |
| c) national and higher | 32.0 | 4.0 | 12.0 | - | 28.0 | 20.0 | - |
| **Food** | | | | | | | |
| a) world | 12.1 | - | 6.1 | - | 3.0 | 3.0 | - |
| b) European and higher | 30.3 | 3.0 | 12.1 | - | 9.1 | 12.1 | - |
| c) national and higher | 54.5 | 15.2 | 39.4 | 6.1 | 45.5 | 30.3 | 1 |
| **Services** | | | | | | | |
| a) world | 7.5 | - | 2.5 | - | 7.5 | - | - |
| b) European and higher | 25.0 | - | 5.0 | - | 22.5 | 12.5 | - |
| c) national and higher | 60.0 | 2.5 | 37.5 | 10.0 | 57.5 | 30.0 | 1 |
| **Construction** | | | | | | | |
| a) world | 4.0 | - | 2.5 | - | 8.0 | - | - |
| b) European and higher | 20.0 | - | 2.5 | - | 36.0 | 8.0 | - |
| c) national and higher | 40.0 | 7.5 | 22.5 | 7.5 | 48.0 | 16.0 | 2 |
| **Machinery** | | | | | | | |
| a) world | 4.9 | 2.4 | 4.9 | 2.4 | 9.8 | 2.4 | 1 |
| b) European and higher | 22.0 | 7.3 | 14.6 | 7.3 | 9.8 | 9.8 | 3 |
| c) national and higher | 75.6 | 17.1 | 46.3 | 19.5 | 75.6 | 36.6 | 5 |

1) Enterprises with complex competitive advantage. Number in column mean number of enterprises in industry that fulfil all required criteria.

b). All the determinants of national competitive advantage on high and extremely high level are fulfilled by 19 enterprises (6.13 % share), where extremely high level is represented by only one enterprise (0.32 % share) from the whole file. Fulfilment of all the criteria of international competitiveness in selected industries are showed in Table 9.

Finally, common filtration of data was realized from Tables 8 and 9. Number of enterprises whose all competencies, resources and capabilities are on the European or world level and in the same time determinants of their national competitive advantage, which are on an extremely high level were looked after. The combination “European” and “high level” satisfies only one enterprise from the whole file (machinery industry), the combination “world” and ”extremely high level” does not satisfy any of the studied enterprises from the whole file.

Table 9

**Conjoint Presence of All the Determinants of National Competitive Advantage on Certain Level in One Enterprise in Selected Industries**

| Level | All determinants of national competitive advantage (number of enterprises) | | | | | |
|---|---|---|---|---|---|---|
| | Chemistry | Trade | Food | Services | Construction | Machinery |
| a) extremely high | - | - | 1 | - | - | - |
| b) high and extremely high | 8 | - | 4 | 1 | 1 | 2 |

## 5. Conclusion

Shake-out and mature industries with intensive domestic competition and widening international competition are a typical external overwhelming contemporary environment for enterprises in Slovakia. Conditions of this type allow uprise of a short-term sustainable competitive advantage only. Almost three-fourths of enterprises consider their future as definite or variant and these are not favourable prospects for the creation of long-term sustainable and strong competitive advantage. Subjective perception of future opportunities is approximately 25 % more positive than is a reality. There is a higher chance for gaining competitive advantage for small enterprise, since these exist in environments that change, develop and they view a connection between competitive advantage and external business conditions better. In this sense, services are in quite favourable external conditions. Other industries act in a contradictory and ambiguous external conditions.

Enterprises sensibly perceive external changes and react to them relatively quickly. Speed of reaction depends on the size of enterprise. Small enterprises react faster than big ones. Changes are more most perceived by services and trade industry and together with construction industry they react the fastest towards external changes.

The level of individual components of competitive advantage move between regional and national top and fall behind the development of external environment. Low quality of competitive advantage in Slovak enterprises does not allow to exploit the changes in external environment and to muddle through in international economic space. Self-view of Slovak enterprises does not correspond to reality. Overall evaluation of the size and integrity of competitive advantage strongly exceeds concrete and detailed valuations of its individual components and relations. Managers of Slovak enterprises undergo a delusion of exceptionality and competitiveness of enterprises they manage. Qualitative level of individual components and of entire competitive advantage grows with the size of enterprise. Only big enterprises, even very mildly, overcome the national level of competitive advantage. Chemical industry and partially machinery industry dispose with the strongest competition advantage; the least competitive are construction and trade industries. The reasons are obviously historical, since development of heavy industry was the preferred one during the industrialization era of Slovakia, on the contrary, trade in centrally planned economics was underestimated.

Selection of protection method of competitive advantage before imitation is partially conditioned by the size of enterprise and its legal form (Ltd. versus Stock Co.). At the same time, type of industry plays an important role.

National competitive advantage is structured phenomenon consisting of a system of elements and relations. Low costs of labour force and favourable geographic location are often highlighted national competitive advantage in the Central European transforming countries. However, one determinant is not enough to achieve national competitive advantage, if others are missing, or other integrating elements and relations are of a low quality. Low cost of labour force itself does not mean anything. Further question has to be posed: whether this labour force is educated, skilled, disciplined, tenacious or responsible? In order to complete a competitive advantage out of incomplete resource of this type, foreign investors generally append it with technology, operation know-how and entrance to the distribution channels connected to the world markets. Similarly, location of the country or region itself, without appropriate infrastructure does not have a big value. National competitive advantage develops only in case of condition of complementarity is fulfilled. This means, being based on all the decisive determinants that will complement and reinforce each other.

Bigger enterprises have their determinants of national competitive advantage on higher level than medium and small enterprises with an exception of familiar and supporting industries, whose favourable influence is more felt by small enterprises. In no industry, bigger number of determinants of national competitive advantage on higher level concentrates, and therefore no industry has complex competitive advantage in international scope.

Total competitive advantage is very rare. It is, however, a competitive advantage of the highest quality, which is an inevitable condition for success and achievement of leading positions on the market in the era of globalization of economic life. Enterprises with incomplete and uncomplementary competitive advantage get to the position of supplier for stronger competitors, or they will be pushed out to the margin. Then they will work with low profits and resign to the determination of competitive rules.

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