

Some cooperation characteristics of micro, small and medium enterprises in Békés and Csongrád counties in Hungary

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Nowadays, business networks, clusters and co-operations have become more widespread phenomena. This study analyzes the specificities, motivations and practices of the co-operations concerning a special circle of enterprises based on the empirical findings of a Hungarian-Romanian common research project. One of the main objectives of the research was to identify and characterise the potentially cooperating circle of enterprises among the Békés and Csongrád county SMEs in Hungary. For that reason, we made a detailed analysis of the forms of manifestation, relation, frequency and importance of existing (and non-existing) cooperations among the enterprises of the two counties and the role of their cooperation with universities and research institutes, which could contribute to the improvement of the innovation potential.

Key words: SMEs, cooperation, universities

JEL code: I23, L25, O18, R11

1. Introduction

In modern economies, business networks, clusters and co-operations have become more widespread phenomena. There are several factors explaining why firms seek the opportunities for engaging in co-operations. Generally speaking, via co-operating the enterprises aim to take the advantages that they are not able to realize by individual efforts (Brito 2001), or in more expressive words: they aim to exploit collective efficiency (Schmitz 1995). Another finding that belongs to this context is that in order to succeed in their objectives, firms can also utilize the resources that they do not possess individually by taking part in a business network (Szerb 2003). Thus, co-operation will be understood as a relationship between independent enterprises or partners that combine their efforts and resources in a value creation process (DG ENTR 2004).

Motivations are of great significance in forming, operating and shaping networks. We try to emphasize the most frequently mentioned elements from the relevant and very diversified literature, such as, for example: the common benefits of co-operation for the partners. Our typology is made up of the different motivations with the most frequent occurrence because we assumed that these are

the most explanatory factors behind the co-operation. Our typology is very similar to the DG Enterprise's typology (DG ENTR 2004) with the modification that we have combined the advantages of reducing transaction and transformation costs into one group. According to categorization of the relevant literature, we can distinguish the following five fundamentally diverse motivations driving the small and medium companies to cooperate (DG ENTR 2004, Johannisson 1997, Lechner–Dowling 2003, ADAPT 2001, OECD 2004, Elfring–Hulsink 2003, Imreh 2008):

- the need to secure resources, e.g. labour and capital;
- reduced costs;
- efficient access to markets;
- enhancing reputation; or
- learning and access to new knowledge.

There are of course many other reasons for the cooperation of the enterprises in addition to this; however, we think that these causes of collaboration appear in the case of almost all cooperations to some extent.

It seems highly important that, although in Hungary there is a growing number of enterprise foundations, there is a shortage of international relations essential to survival in successful world market competition (Kállay–Lengyel 2008). One of the success factors of the cross-border cooperations is exactly the recognition of the benefits implied in cooperations.

This study analyzes the specificities, motivations and practices of the co-operations concerning a special circle of enterprises based on the empirical findings of a Hungarian-Romanian common research project. The research started in November 2009 with the cooperation of the University of Szeged, the Szeged-based Association of Young Research Economists (Fiatal Kutató Közgazdászok Egyesülete) and the University of western Timisoara (Universitatea de Vest din Timișoara) for investigating the small and medium enterprises in the region of the Hungarian-Romanian border. The project named InCoDeSME, in which the University of Szeged was represented by the Faculty of Economics and Business Administration, aimed at mapping the operation, the innovation and cooperation inclination and activity of the SMEs working in Csongrád and Békés, as well as in Timiș and Arad counties, then at formulating proposals on development for the policy decision-makers and the wide-ranging dissemination of the findings. The work and research success of the consortium was supported by the European Regional Development Fund and the Hungarian and Romanian States within the framework of the Hungary-Romania Cross-border Cooperation Programme 2007–2013.

2. Objectives and methodology of the survey

*The fundamental objective of the survey*¹ was to get to know the innovation willingness and activities and the level of cooperation and internationalism of micro, small and medium enterprises operating in Békés and Csongrád counties in Hungary. The survey was repeated with the same methodology on the other side of the border in Timiș and Arad counties, in Romania. Our expectations are that the findings will be of interest to researchers, entrepreneurs and development policy decision makers. In this paper we are focusing on the cooperation characteristics of micro, small and medium enterprises in Békés and Csongrád counties.

The survey involved micro, small and medium enterprises *employing more than one person* and which had been *established prior to 1 January 2008*. International innovation surveys usually focus the research on companies employing over 10 or 20 employees; however, that way, we would not have got an adequate sample, since this underdeveloped region is dominated by smaller enterprises. The *headquarters* of the companies *had to be in Békés or Csongrád county*. *No business types were excluded from the survey* since a significant proportion of enterprises operate as private enterprises in the region. We applied a *sector neutral* approach, i.e. all profit oriented companies apart from financial services could participate in the survey. During the selection of the companies to be included in the survey, we opted for random stratified sampling. Stratification was performed according the number of employees (corporate size), the age of the enterprise and the size of the settlement.

The survey was conducted in May 2010 by the employees of Szociográf Kft. Some 2000 enterprises were approached in order to get the *500-entity sample*, but besides refusal, often no one was found at the headquarters, and there were many non-operational companies, or those under liquidation or already terminated. During the personal questionnaire query, the person providing answers was the owner in the case of companies with less than 20 employees and, in the case of those with more, a member of the management.

¹ The survey was supported by the Hungary-Romania Cross-Border Co-operation Programme 2007–2013 (project ID: HURO/0801/087).

3. Introduction to the counties and the enterprises participating in the Survey

Békés and Csongrád counties are parts of the Southern Great Plain – the largest region in Hungary. This region's competitiveness is very poor with few internationally competitive products and services. Local economic sectors cannot generate significant economic growth, and the expansion of industrial activities falls behind the national average (Lengyel 2003).

We questioned over 1% of the enterprises operating in Békés and Csongrád counties. The sample, due to the stratified sampling providing preference for enterprises with a history and with employees, *does not represent the total population*, that is, the approximately 46,000 companies operating with a headquarters in one of the two counties. (The real population is even narrower, since the sample only included enterprises with a history of at least 2 years and which had at least two employees.)

62% of the enterprises of the region were private enterprises, while the remaining 38% were partnership enterprises in 2007 (Table 1). However, the sample largely did not include private enterprises that generally had no employees and a half of which actually pursued agricultural activities (according to the information from the Central Statistical Office – KSH). The type of corporation with the highest proportion in the sample is the Kft. (65%) followed by the Bt. (22%), and the other types are more or less equally represented in the sample.

The compiled database, which, similarly to many other innovation studies is not representative, includes commercial companies in the highest proportion (36.4%), which are followed by the processing industry (16.4%), construction (10.6%) and agricultural companies. The sector of national economy underrepresented the most is agriculture, due to the reasons mentioned above.

Almost 60% of micro, small and medium enterprises participating in the survey employ fewer than 10 employees, one sixth employs 10–19 persons and another sixth 20–49 persons. Medium enterprises are the ones most overrepresented in the sample, since although they add up to 0.7% of companies in the region, they provide 10.4% of the companies in the database.

Table 1. Characteristics of the sample and the population

Division of enterprises	In the sample		In Békés and Csongrád counties	
	number	proportion (%)	number	proportion (%)
According to corporation type*				
Private entrepreneur	15	3.0	28 702	62.1
Limited partnership (Bt.)	110	22.0	8 035	17.4
Private unlimited company (Kkt.)	21	4.2	271	0.6
Limited liability company (Kft.)	325	65.0	8 064	18.6
Company limited by shares (Rt.)	20	4.0	177	0.4
Cooperative society	9	1.8	261	0.6
<i>Total</i>	<i>500</i>	<i>100,0</i>	<i>46 195</i>	<i>99.7</i>
According to age				
2 - 6 years	138	27.6	n/a	
7 - 10 years	133	26.6	n/a	
11 - 15 years	103	20.6	n/a	
over 16 years	126	25.2	n/a	
<i>Total</i>	<i>500</i>	<i>100.0</i>	<i>n/a</i>	
According to main scope of activities **				
Agriculture, game management, forestry, aquaculture	45	9.0	62 762	46.1
Processing industry	82	16.4	4 854	3.6
Construction	53	10.6	5 594	4.1
Transportation, storage, postal services, telecommunications	19	3.8	2 500	1.8
Accommodation, catering	23	4.6	3 609	2.7
Trade, repairs	182	36.4	13 500	9.9
Other sectors of the national economy	96	19.2	43 206	31.8
<i>Total</i>	<i>500</i>	<i>100.0</i>	<i>136 025</i>	<i>100.0</i>
According to number of employees*				
1 – 9 persons §	292	58.4	43 871	95.0
10 – 19 persons	74	14.8	1 237	2.7
20 – 49 persons	82	16.4	724	1.6
50 – 249 persons	52	10.4	317	0.7
250 persons or more	0	0.0	46	0.1
<i>Total</i>	<i>500</i>	<i>100.0</i>	<i>46 195</i>	<i>100.0</i>
According to location of headquarters*				
Békés	231	46.2	18 644	40.4
Csongrád	269	53.8	27 551	59.6
<i>Total</i>	<i>500</i>	<i>100.0</i>	<i>46 195</i>	<i>100.0</i>

Notes: * operating enterprises, 2007 data, ** registered enterprises, 2008 data § in the sample 2 – 9 persons

Source: Regional Statistical Yearbook (2009)

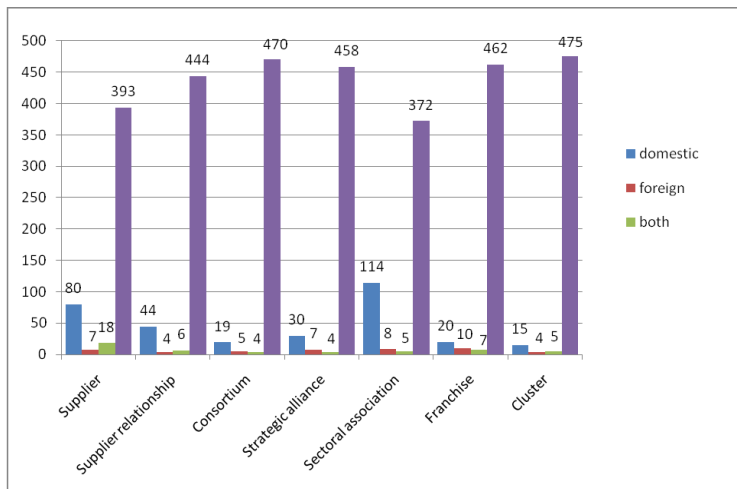
4. Characteristics of cooperation between SMEs

One of the main objectives of the research was to identify and characterise the potentially cooperating circle of enterprises among the Békés and Csongrád county SMEs. For that reason, we made a detailed analysis of the forms of manifestation, relation, frequency and importance of existing (and non-existing) cooperations among the enterprises of the two counties and the role of their cooperation with universities and research institutes, which could contribute to the improvement of the innovation potential.

4.1 The forms of cooperation

Figure 1 clearly shows that a significant majority of enterprises *does not participate* in cooperations currently. It is also clear that existing cooperations are primarily entered into with domestic partners, foreign cooperations being much more rare. The *most common form* of cooperation is participation in sectoral or professional associations, and, apart from that, cooperations for the sake of supply and purchasing and strategic cooperations are also relatively widespread. *Foreign cooperations* are also most often supplier relationships, or – interestingly – implemented within franchise networks.

Figure 1. Frequency and relation of various typical forms of cooperation



Note: The figures on the columns show the number of cases. The violet coloured bar shows those companies which do not participate any cooperation.

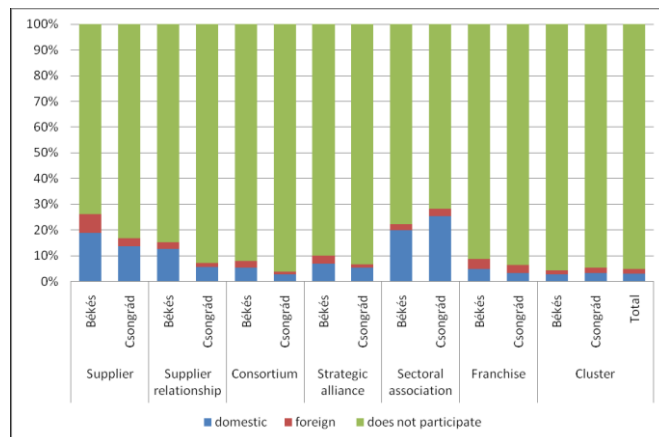
Source: own construction

Comparing the enterprises of the two counties – Békés and Csongrád – it is clear that we find a larger proportion of cooperating enterprises in Békés county,

which is also visible concerning cooperations with a foreign relation, that is, Békés county enterprises are more active concerning foreign relationships (Figure 2). The only exception is participation in sectoral or professional associations, in which Csongrád county enterprises are relatively more ready to participate.

Differences are visible in the willingness towards cooperation of the enterprises of the two counties in relation to the division according to *age* and *size*. Cooperation implemented in the form of *participation in sectoral and professional associations* provides a bigger role for older enterprises in Csongrád county, while in Békés county, we see more activity among middle-aged enterprises (Figure 3). Concerning the division according to size (Figure 4), the activity among the Békés county companies with over 50 employees is striking, whereas a relative passiveness is seen among smaller companies in both counties.

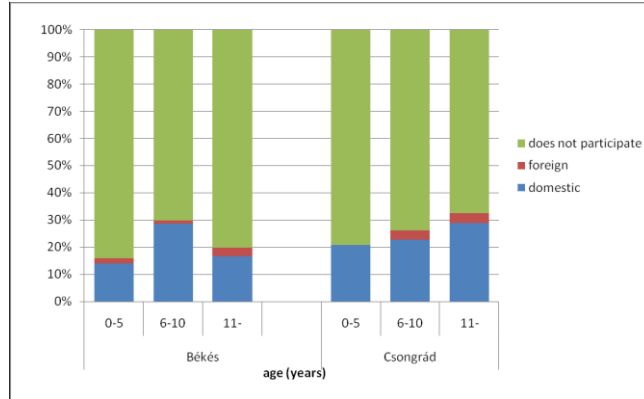
Figure 2. Different proportions of the frequency of various types of cooperation in the two counties



Note: 1. Foreign relations include enterprises cooperating with both domestic and foreign partners. 2. The figures on the columns depict the number of responders that stated that they did not participate in the given form of cooperation.

Source: own construction

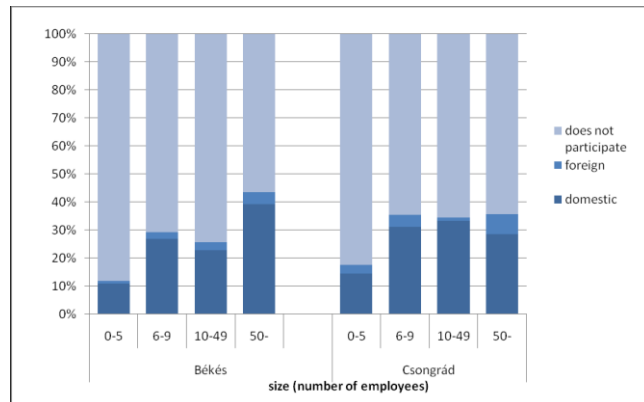
Figure 3. Participation of enterprises of various age in sectoral and professional associations



Note: Foreign relations include enterprises cooperating with both domestic and foreign partners.

Source: own construction

Figure 4. Participation of enterprises of various size in sectoral and professional associations



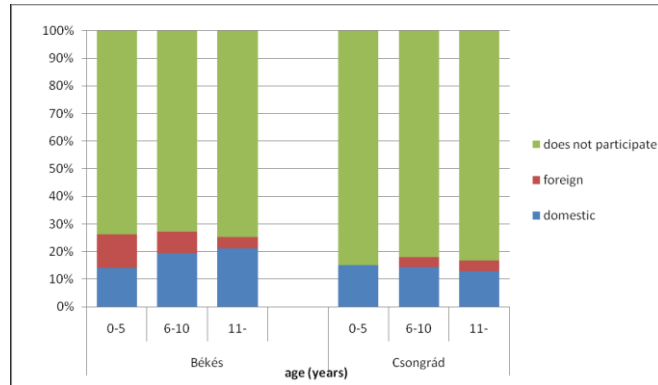
Note: Foreign relations include enterprises cooperating with both domestic and foreign partners.

Source: own construction

In relation to *supplier relationships*, the larger activity primarily visible among Békés county enterprises in a foreign relation is striking (interestingly, that is especially abundant among the youngest Békés county enterprises) because the same is absolutely uncharacteristic of Csongrád county enterprises (Figure 5). Analysing the division according to size, it is clear that supplier relationships are more common among the smallest and largest enterprises in Békés county. In Csongrád county,

however, the relative passiveness of small enterprises and the foreign activity of larger companies is characteristic (Figure 6).

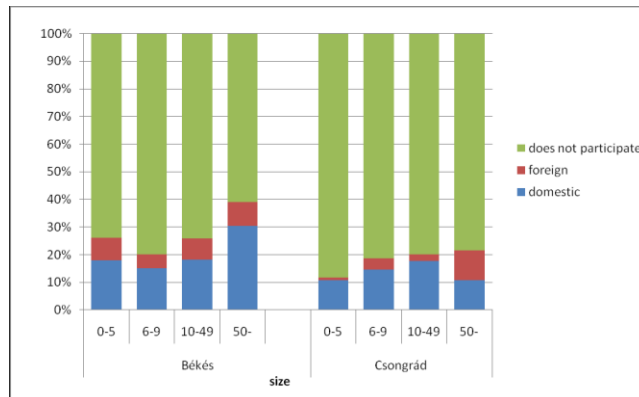
Figure 5. The participation of enterprises of various age in supplier networks



Note: Foreign relations include enterprises cooperating with both domestic and foreign partners.

Source: own construction

Figure 6. The participation of enterprises of various size in supplier networks



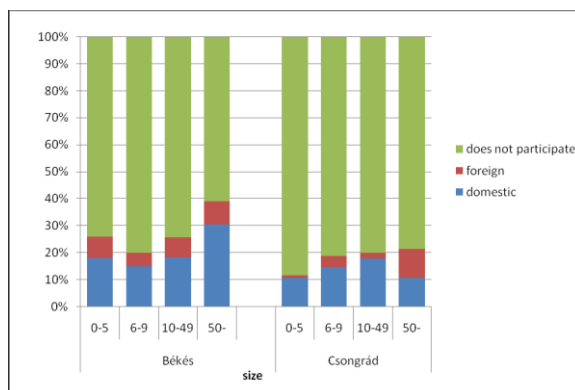
Note: Foreign relations include enterprises cooperating with both domestic and foreign partners.

Source: own construction

The third most common form of cooperation are *purchasing associations*, targeting purchase. The activity of companies in the various age categories seems relatively balanced; however, in the division according to size, differences are *more plastic*, and it is the *largest enterprises that display the most activity within the sample* (Figure 7).

It is also worth analysing cooperations surfacing in the form of strategic associations. No significant differences are visible between the age categories, however, upon analysing the division according to size, the increased activity of larger companies is clearly visible in these types of cooperation (Figure 8). An interesting difference is seen in the proportion of the activities of the smallest companies to the benefit of those in Békés county.

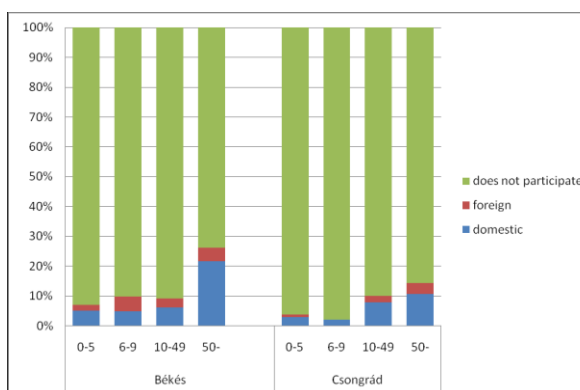
Figure 7. The participation of enterprises of various size in purchasing associations



Note: Foreign relations include enterprises cooperating with both domestic and foreign partners.

Source: own construction

Figure 8. The participation of enterprises of various size in strategic associations



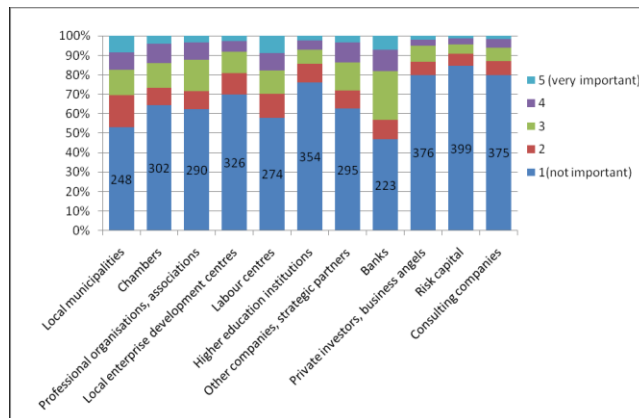
Note: Foreign relations include enterprises cooperating with both domestic and foreign partners.

Source: own construction

4.2 Relations of cooperation

The enterprises are and can be related to numerous *institutions and organisations*, and these relationships can also be interpreted as some sort of cooperation. During the research, enterprises were asked to evaluate on a scale of 1 to 5 (1 – totally unimportant, 5 – very important) the importance of these types of cooperation in the development of the enterprise, based upon the experiences of the previous three years. The results depicted on Figure 9 show that the most important relationships for enterprises are those with *banks* (the average of the responses was 2.21), *municipalities* (2.03) and *labour centres* (1.98). It is especially sad that there are very few responders who regard the role of higher education institutions important. At the same time, although it was no surprise that for a great majority of responders risk capital and private investors were not important, it was unexpected that 4.2–4.6% of responders regarded their role as important.

Figure 9. The importance of various external organisations' role according to the evaluation of enterprises

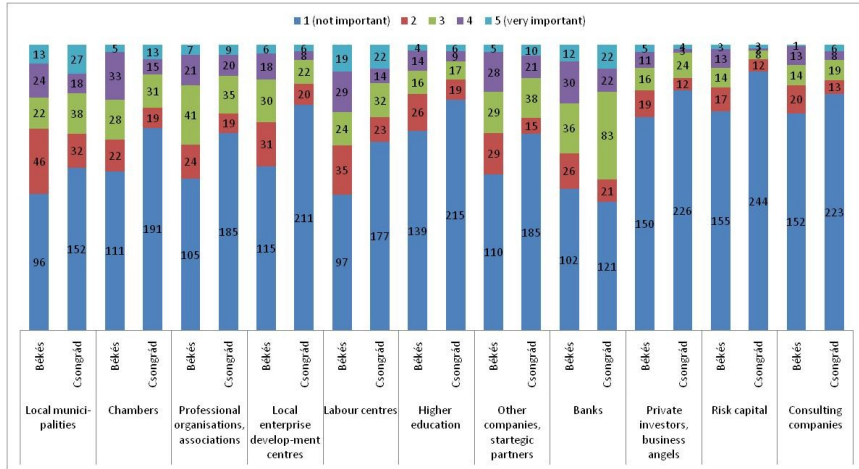


Note: The figures in the columns show the frequency of the response “totally unimportant” in relation to the organisations.

Source: own construction

The evaluation of the relations towards organisations is different in the *two counties* (Figure 10). In the majority of cases, it seems that these organisations have played a more important role in the life of Békés county enterprises in the past period. That difference is most striking in the case of labour centres, local enterprise development centres and chambers. Only the evaluation of banks displays any highlighted role among Csongrád county enterprises. Interestingly, the proximity of higher education institutions in Csongrád county (Szeged is a university town) is not reflected in the evaluation of their importance.

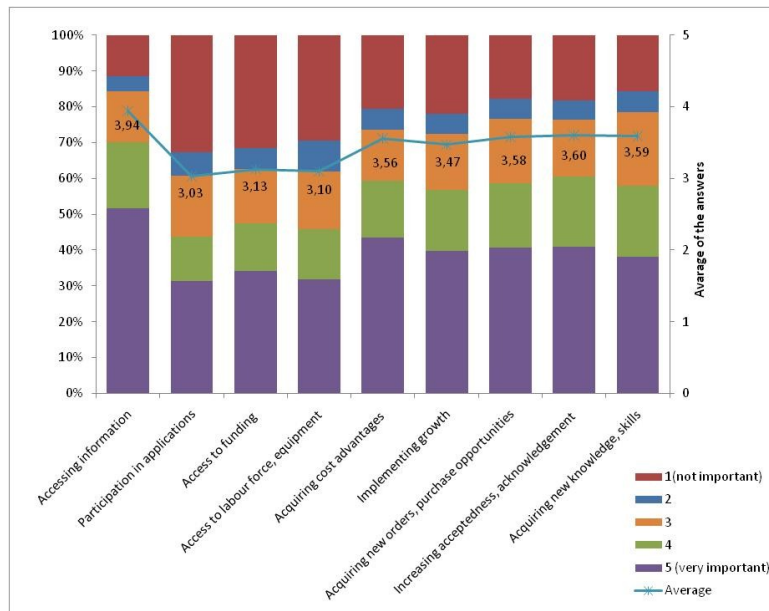
Figure 10. The importance of various external organisations' role according to the evaluation of enterprises, by county



Source: own construction

One of the main objectives of the research was to discover the *inducement of cooperation* with other enterprises. Enterprises were asked to evaluate on a scale of 1 to 5 (1 – totally unimportant, 5 – very important) the possible positive impacts of cooperation. Figure 11 shows that *gaining information* was the most important for enterprises, but the *desire for acknowledgement, acquiring new skills and knowledge, gaining potential orders and purchasing opportunities*, and last, but not least *gaining cost advantages* also appeared as important aspects. Enterprises regarded the advantages deriving from joint participation in tenders relatively less important. The comparison of the two counties shows that Csongrád county enterprises expect more from the cooperations (Figure 12).

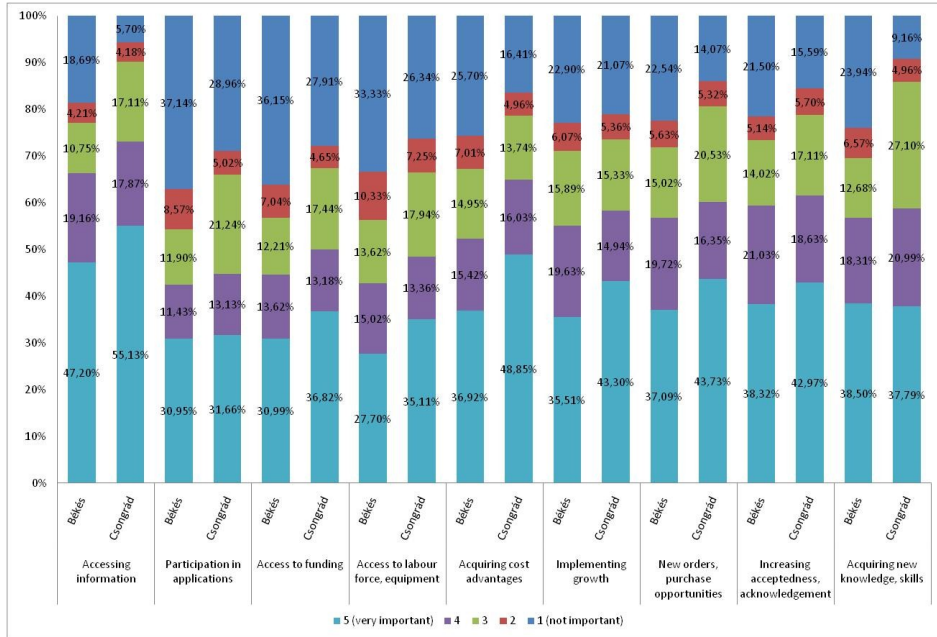
Figure 11. The evaluation of advantages expected from cooperation among enterprises



Source: own construction

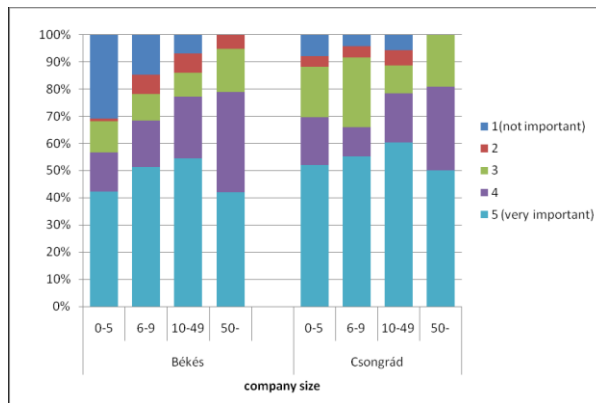
The evaluation of the advantages attributed to cooperation show a different pattern in the case of enterprises of different size and age in the two counties. Analysing the most important inducements *according to size*, we found that the importance of the various aspects increases parallel to the increase in size. That connection is clearly visible in the evaluation of gaining information as a possible advantage (Figure 13). Analysing the important inducements *according to the age* of enterprises, it is striking how important these are in the eyes of the youngest Csongrád county enterprises (Figure 14). The same is visible in Békés county too, but among more mature enterprises: the youngest generation there attributes a strikingly low importance to some highlighted positive impacts of cooperation.

Figure 12. Differences in the evaluation of advantages expected from cooperation in the two counties



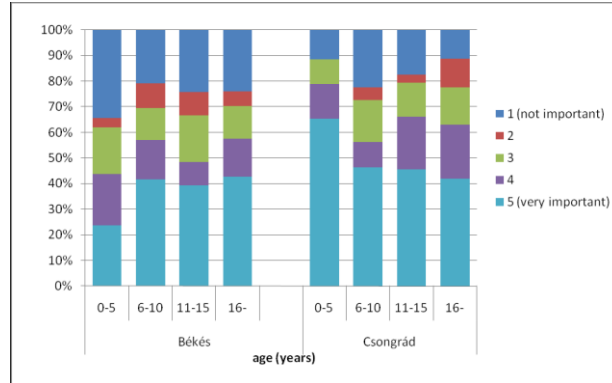
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Figure 13. Differences in evaluating gaining information as an advantage expected from cooperation among the enterprises of various sizes



Source: own construction

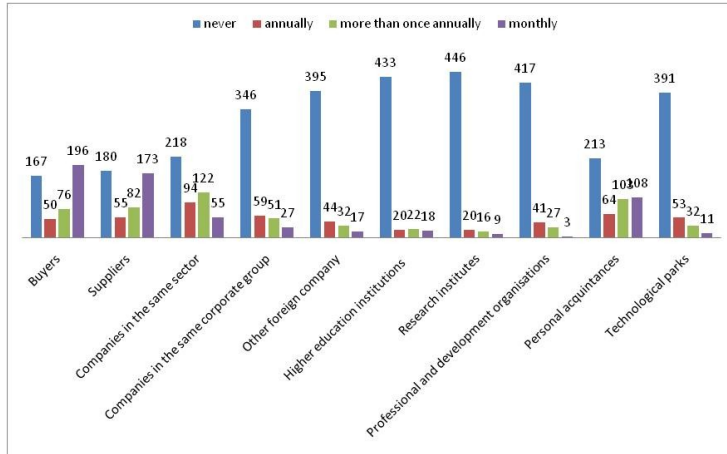
Figure 14. Differences in evaluating acquiring cost advantages as an advantage expected from cooperation among the enterprises of various ages



Source: own construction

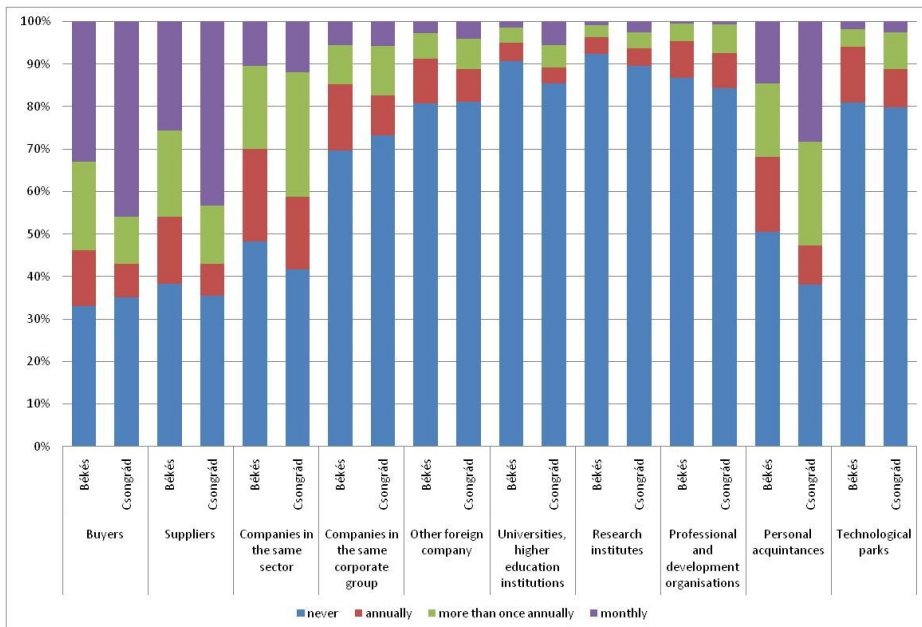
The ability to acquire *new business knowledge and technological skills* and activities in any cooperation targeting their acquisition are decisive components to the innovation potential of enterprises. Figure 11 shows that enterprises regard the acquisition of new skills and knowledge relatively important (according to the average value of responses – 3.59 – this comes in third place) during the evaluation of cooperations. During the survey, we also examined which market players constituted the *main sources* of acquiring new skills, based upon the intensity of cooperation. Figure 15 shows that most enterprises cooperate most intensively with *clients, suppliers, personal acquaintances and other companies in the sector* with the intention of gaining new knowledge. It is quite interesting that almost 100 companies indicated that they cooperated with companies with foreign headquarters to some extent; it is, however, concerning that enterprises work together most rarely with higher education institutions or research centres in order to gain new knowledge. Analysing the difference between the two counties, we find that Csongrád county enterprises cooperate somewhat more intensively with practically all partners, and that difference is relatively significant in the frequency of cooperation with higher education institutions (Figure 16). There is no significant difference in the frequency of cooperation with the most important players among the various generations of enterprises; however, it is true that larger companies cooperate more intensively with most players, and medium companies (50 persons) are the most active.

Figure 15. Frequency of cooperation with the various players in order to acquire new business and technological skills



Source: own construction

Figure 16. The division of the frequency of cooperation with the various players in order to acquire new business and technological skills in the two counties

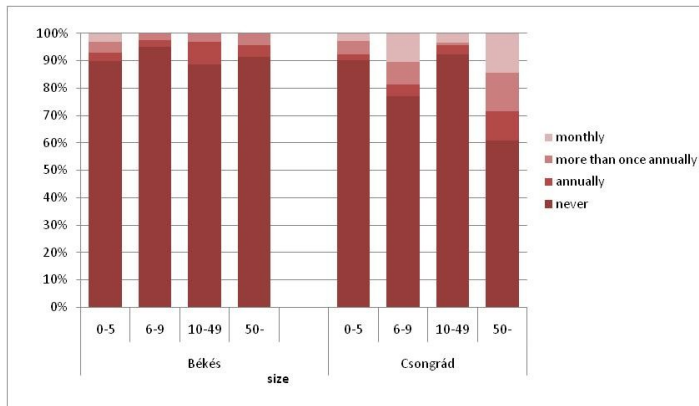


Source: own construction

4.3 Cooperation with higher education institutions

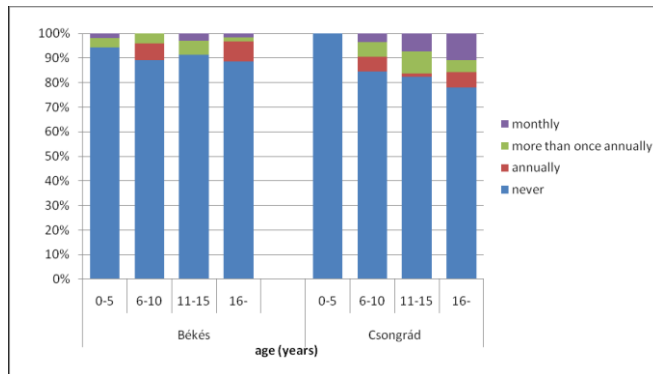
The division according to age and size in the cooperation with *higher education institutions*, which is of special interest to us, shows real differences. The relatively more intense activity concerning cooperation with higher education institutions of Csongrád county medium sized and 6–9-person companies (Figure 17), and, on the other hand, Csongrád county middle-aged (6–9 years) and the explicitly mature (older than 16 years) companies (Figure 18) is rather characteristic.

Figure 17. Division of the frequency of cooperation with higher education institutions among enterprises of various size in the two counties



Source: own construction

Figure 18. Division of the frequency of cooperation with higher education institutions among enterprises of various age in the two counties

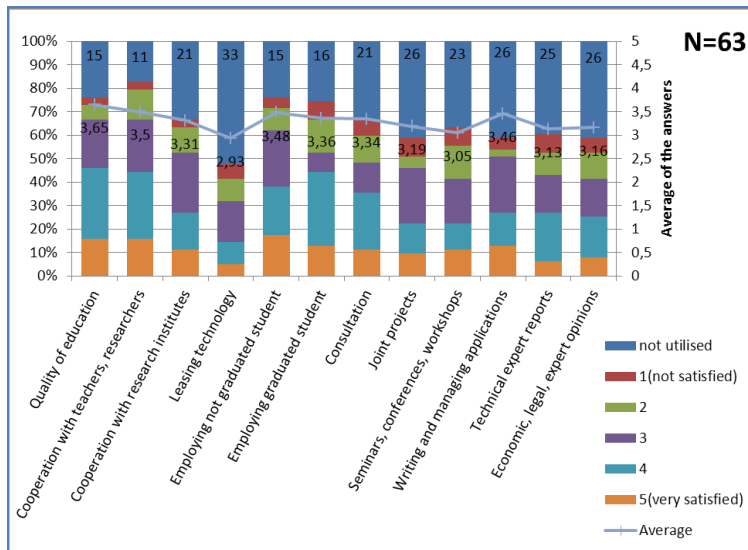


Source: own construction

It is true however, that enterprises that cooperated with a certain frequency with higher education institutions in the past three years (their total number in the

sample was 63) were mostly satisfied with the services provided by the institutions (Figure 19).

Figure 19. How satisfied are you with the services provided by higher education institutions in the past period?



Note: The values at the top of the columns show the number of enterprises that did not utilise the given service.

Source: own construction

What could be the *reason for the weak cooperation* between higher education institutions and companies? The reasons might partly be related to the institutions (they are unaware of their services, their services are not valuable, etc.), but it is possible that it is related partly to the behaviour, approach, or condition of the companies. The responses provided to the questions concerning the possible answers show significant differences among the enterprises utilising higher education services (active) and those not (passive) (Table 2). A striking difference is that in the case of practically all alternatives, the number of uncertain companies is much lower among active than among passive companies. The only odd one out is the first alternative: both groups are highly uncertain in evaluating whether companies are aware of the services offered by higher education institutions. In the case of certain questions, the prevailing opinion of the two groups of companies is fundamentally different. For instance, while the opinion among non-cooperating companies, according to which universities and colleges offer nothing or nothing useful for companies is rather widespread, and at the same time, a vast majority of cooperating companies clearly view the services of higher education institutions as useful. Similar – often very intense – differences in opinion are visible in relation to the

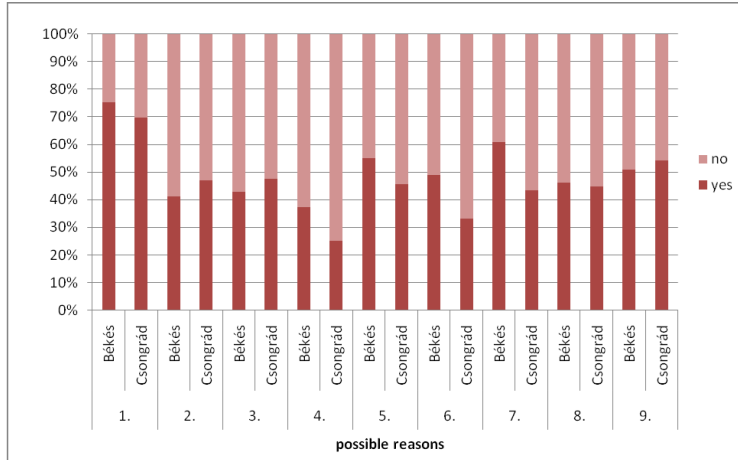
practical experiences of higher education employees, the costliness of higher education services and the speed of response of the institutions. Cooperating companies had a positive view of a majority of the questions. Nonetheless, a majority of active enterprises sense that the institutional mechanisms of handing over knowledge are missing, the services of higher education institutions are not really known to companies, and are also expensive, and that universities and colleges respond slowly to requests. We saw interesting differences upon analysing the opinion of the enterprises of the two counties. Both active and passive enterprises formulated a *more beneficial evaluation of higher education institutions in Csongrád county* (Figures 20 and 21). (The only exception was the evaluation of the first statement among cooperating enterprises: here we saw that Békés county cooperating enterprises unanimously believe that companies are unaware of the services of universities and colleges, whereas we found more companies sharing that thought among non-cooperating companies in Csongrád county.)

Table 2. Companies evaluation of possible reasons for weak cooperation tied to Higher education institutions among cooperating and non-cooperating companies

1. Companies are unaware of the services provided by higher education institutions	<i>passive</i>	98	24%	64	15%	253	61%
	<i>active</i>	18	31%	5	8%	36	61%
2. Higher education institutions offer nothing to companies	<i>passive</i>	151	36%	141	34%	122	29%
	<i>active</i>	17	29%	36	61%	6	10%
3. Higher education institutions offer nothing useful to companies	<i>passive</i>	151	37%	135	33%	127	31%
	<i>active</i>	14	24%	38	64%	7	12%
4. Those in higher education lack adequate corporate practical experiences	<i>passive</i>	226	55%	92	22%	95	23%
	<i>active</i>	22	37%	30	51%	7	12%
5. Corporate cooperation is not an interest of higher education institutions	<i>passive</i>	136	33%	148	36%	130	31%
	<i>active</i>	21	36%	30	51%	8	14%
6. The mechanisms for handing over knowledge are missing (e.g. technology transfer office)	<i>passive</i>	177	43%	127	31%	110	27%
	<i>active</i>	29	49%	24	41%	6	10%
7. Higher education institutions lack adequate technology	<i>passive</i>	131	32%	153	37%	129	31%
	<i>active</i>	18	31%	31	53%	10	17%
8. The services of higher education institutions are too expensive	<i>passive</i>	174	42%	94	23%	144	35%
	<i>active</i>	21	36%	27	46%	11	19%
9. Higher education institutions respond slowly to requests	<i>passive</i>	140	34%	115	28%	158	38%
	<i>active</i>	23	39%	26	44%	10	17%

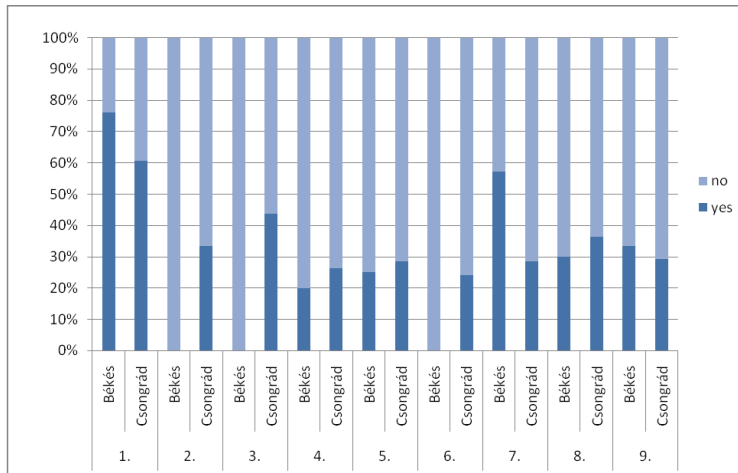
Source: own calculation

Figure 20. Differences in evaluating the various reasons among non-cooperating enterprises in the two counties



Note: The code numbers of possible reasons correspond to the numbers used in Table 2
 Source: own construction

Figure 21. Differences in evaluating the various reasons among cooperating enterprises in the two counties



Note: The code numbers of possible reasons correspond to the numbers used in Table 2
 Source: own construction

The evaluation of possible reasons related to *companies' behaviour*, approach or condition also differs in the case of cooperating and non-cooperating enterprises (Table 3). The majority of cooperating companies, which are much less uncertain in evaluating the various components, as opposed to non-cooperating companies,

believe that companies have the adequate knowledge and human resources for any cooperation with higher education institutions and regard the utilisation of the services of universities and colleges as necessary for innovation since the knowledge offered by higher education institutions can successfully be applied at the company. A larger part of both active and passive companies share the opinion that companies do not show interest in the services provided by higher education institutions, and that the establishment of any cooperation is hindered by a lack of financial resources.

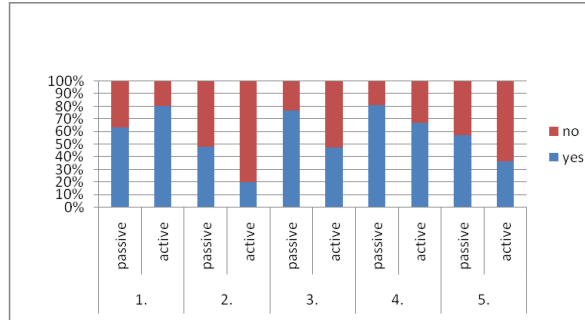
Table 3. Companies evaluation of possible reasons for weak cooperation tied to companies among cooperating and non-cooperating companies

Alternative	yes		no		does not know		
	number	percent	number	percent	number	percent	
1. Companies are not interested in the services offered by higher education institutions	<i>passive</i>	181	44%	153	37%	77	19%
	<i>active</i>	34	58%	21	36%	4	7%
2. Companies do not have enough knowledge or people for cooperation	<i>passive</i>	158	38%	193	47%	62	15%
	<i>active</i>	21	36%	35	59%	3	5%
3. Companies do not necessarily require the participation of higher education for innovation	<i>passive</i>	241	58%	118	29%	54	13%
	<i>active</i>	26	44%	31	53%	2	3%
4. Companies lack the adequate financial sources for cooperation	<i>passive</i>	275	67%	79	19%	59	14%
	<i>active</i>	36	61%	20	34%	3	5%
5. Companies do not believe the skills offered by higher education could be applied successfully	<i>passive</i>	174	42%	167	41%	70	17%
	<i>active</i>	18	31%	33	56%	8	14%

Source: own calculation

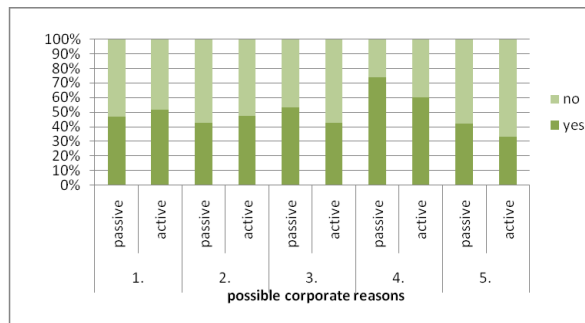
Upon comparing the enterprises of the two counties, it becomes clear that we find more companies among cooperating and non-cooperating enterprises in Csongrád county that agree with the aforementioned statements (Figures 22 and 23). The evaluation of the second reason is very different in the two counties. In Békés county, compared to passive companies, there is a high proportion among active companies of those that believe that companies do not have adequate skills and human resources for any cooperation with higher education institutions, while among Csongrád county active companies, the exact opposite opinion is predominant.

Figure 22. Differences in evaluating various corporate reasons among Csongrád county enterprises



Note: The code numbers of possible reasons correspond to the numbers used in Table 3
Source: own construction

Figure 23. Differences in evaluating various corporate reasons among Békés county enterprises



Note: The code numbers of possible reasons correspond to the numbers used in Table 3
Source: own construction

5. Conclusion

According to our research, a significant majority of enterprises (nearly 60 percent) *does not participate* in cooperations currently. Existing cooperations are primarily entered into with domestic partners – foreign cooperations are much more rare. The *most common form* of cooperation is participation in sectoral or professional associations, and, apart from that, cooperations for the sake of supply and purchasing and strategic cooperations are also relatively widespread. *Foreign cooperations* are also most often supplier relationships, or – interestingly – implemented within franchise networks.

Most enterprises cooperate most intensively with *clients, suppliers, personal acquaintances and other companies in the sector* with the intention of gaining new

knowledge. It is quite interesting that almost 100 companies indicated that they cooperated with companies with foreign headquarters to some extent; it is, however, concerning that enterprises work together most rarely with higher education institutions or research centres in order to gain new knowledge.

Gaining information was the most important for enterprises, but the *desire for acknowledgement, acquiring new skills and knowledge, gaining potential orders and purchasing opportunities*, and last, but not least *gaining cost advantages* also appeared as important aspects. Enterprises regarded the advantages deriving from joint participation in tenders relatively less important. The comparison of the two counties shows that Csongrád county enterprises expect more from the cooperations.

The research also revealed *some probable reasons for the weak cooperation* between the higher educational institutions and the enterprises. According to the majority of the enterprises, the participants in higher education do not have sufficient corporate practical experience, the institutional mechanisms of knowledge transfer are missing, the services of the higher educational institutions are not really known by the enterprises, and, in addition, they are expensive and the universities, colleges respond to the invitations slowly. From the causes concerning the corporate side, the entrepreneurs considered the insufficient financial resources as the most important cause, furthermore, that the involvement of the higher education is not necessary for the renewal of the enterprises. This all shows that there may be considerable reserves in the South Great Plain in the utilization of the knowledge base for business through cooperations, thus finding the effective methods of utilization can be identified as a potential break-out point among the possible endogenous factors of development.

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