Business Attitude Survey – Olomouc

2010 Report

City of Olomouc

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1. Introduction and Methodology

The Business Attitude Survey whose results we are hereby presenting was sort of follow-up to the previous surveys that had been carried out as part of preparations for the Strategic Plan of Economic Development of the City and Microregion of Olomouc, and subsequently repeated and updated surveys of 2002, 2004, 2006 and 2008 in notable enterprises of Olomouc area. Unlike the previous surveys, this one has made use of the ongoing interviews with entrepreneurs of Olomouc Region within the development of Regional Innovation Strategy, and after the list of interviewees had been supplemented with other companies from Olomouc, the survey provided for comparison of situation in the regional capital and other municipalities of the Region. Apart from the objectives equal to the previous surveys, i.e. collection of objective data on the entities doing business in the City, and subjective views of the entrepreneurial environment in Olomouc, major topic of the interviews was the issue of innovative potential and competitive strength of the companies interviewed.

Some 180 distinguished employers in all the important industries have been selected to participate in the survey, together with about 50 smaller entities, where the focus on innovations was assumed (those located in VTP UP or involved in R&D projects). As of 15 November 2010 there were 59 businesses that had participated in the guided interview, with registered office in Olomouc or immediate vicinity (Hlubočky, Bystrovany, Lutín, Hněvotín), which can be from the viewpoint of local economy perceived as part of "Olomouc area". 57 companies in Olomouc district outside this area, and in all the other districts of the Olomouc Region have been visited for the purposes of RIS.

The sample under survey included businesses employing 26,000 people in the Region, of which almost 11,000 in Olomouc, in a number of industries and services. By line of business strong presence was recorded of: electric engineering and information technologies, manufacture of medical, precision, optical and metric devices; mechanical engineering and metalworking; pharmaceutical and chemistry; services (health care, education, advertising, project and engineering management, water supply engineering, transport, commerce); foodstuffs and others, represented mostly by construction, printing and plastics.

The Report first summarizes main findings of the survey, dividing them in two categories - positive and negative. Section *"Barriers of development"* sums up views of the businesses regarding external factors that have major influence (according to the managers) over optimum development of sales of the enterprises concerned. Section *"Turnover and export orientation"* monitors territorial structure of sales; combined with specific data on the volume of sales it enables assessment of the level of export orientation of local economy. Section *"Workforce and employment"* deals with growth of employment in the companies, and subjective evaluation of the quality of workforce, and incorporates personnel data in multiple years, including anticipated trends. Chapter *"Innovation, research and development"* covers competitiveness conditions of local businesses within 21st century global economy. Chapter *information on "Properties and investment" goals* establishes to what extent properties are limiting with regards to business development, and deals with other issues related to technical infrastructure, while section "*Demand for assistance"* looks into the opinions of managers on the current level of support for innovations and competitiveness, assessing the most suitable instruments that can be used for the purpose.

2. Summarized Findings from the Survey

This section consists only of a summary of findings without comments. The results are described in detail in the following chapters.

The findings considered most significant:

- ***Innovative activities of the businesses.*** The interviewed enterprises demonstrated very positive indicators in the field of research, development and innovations. They develop new products, enter new markets, and for a number of the firms competitive strength based on innovations is a clear driving force[1].

- ***Innovation infrastructure.*** The Science and Technology Park is successfully developing its activities in the City, providing tens of enterprises with facilities and services. Four new research centers are being built to produce commercially viable results. Palacky University and other institutions (University Hospital) and businesses are involved in solutions to hundreds of R&D assignments and projects.

- ***Availability of properties for business in manufacturing.*** Mechanical engineering, food and other industries have at their disposal relatively sufficient lands for future development; some of the available properties will be offered for lease or sale; new industrial zones and parks are emerging.

- ***Quality of life in the City.*** Olomouc has been traditionally considered a place rich with culture and historic monuments, and at the same time young city with a strong university and favorable environment, attractive for living.

- ***Positive experience with services of Municipal Authority.*** Economic development activities of Olomouc Municipal Authority compared to authorities of other municipalities (Přerov, Šternberk) or regional authority were rated high (especially in the area of business property preparation).

There are negative findings from the Survey as well:

- ***Slow "recovery" of global economy.*** Local enterprises believe they have already overcome effects of the crisis (and some figures prove them right), but they have not achieved yet the same sales as two years ago, and uncertainty in global markets prevents them from planning new strategic investment goals.

- ***Lack of qualified manpower in many specializations.*** This problem ceased to be perceived as the most pressing in the context of crisis and layoffs, but lack of specialists in a number of technical professions and crafts has been felt in the City for a long time.

- ***Poor level of cooperation between the academic and business spheres.*** Despite some positive examples there is still barrier between the two worlds, often due to inadequate communication and sharing information on what could be mutually beneficial domain of cooperation.

- ***Entrepreneurial environment in the Czech Republic.*** Complaints of business owners and managers of large companies related to "the mess" in the Czech Republic were mostly directed at national level (enforceability of law, quality of legislation, too protective Labor Code, corruption, transparency of decision making), but that does not mean there would be nothing to improve at local level.[2]

[1] Due to the selection of participants for the survey, and "positive discrimination" of innovative businesses this evaluation does not apply to the entire economy of the City / Region.
[2] It is necessary to mention though that unlike the previous survey, this time the respondents said they had not come across claims of corruption at the City Hall.

3. Results of the Survey

3.1 Basic Characteristics and Ownership Structure

The fact that Olomouc economy relies on services and food and mechanical engineering, with special position of pump making industry has more or less remained unchanged. Information technology sector and manufacture of electric, medical, optical, metric and precise devices have been developing lately. The sample under survey was divided in six subgroups: electro and IT (9), mechanical engineering, metalworking (15), chemistry and pharmaceutical (6), services (16), food (5) and others (8).

Individual groups are outlined by the following basic features:

1. Electric engineering and production of medical, precise, optical and metric devices, information technologies: With regards to the growing links between "electro" industries and the technologies used within the industries and links to IT group was created whose members manifest many similarities and both existing and potential relations. These are mostly medium enterprises, according to the survey with growing sales that are above-average in comparison per employee, aimed at expansion of export markets, remarkably active in the field of development and innovations.

2. Mechanical engineering: Represents traditional industry with high share (considering the locally usual level) of foreign capital, above-average export orientation, with plans to develop new products and expand to new export market.

3. Pharmaceutical and chemistry: Industry with less considerable number of entities, though with major innovation potential, and at the same time string links to local educational system (including tertiary level). By total sales it is moderately important industry, but the firms are developing new products and expecting expansion.

4. Services: Major employer, focusing first of all on Czech market, including different services for both businesses and citizens. They differ from the views of manufacture-oriented firms in more than one respect (availability of properties, infrastructure, and manpower). They often have clear attitude towards R&D at universities, which is opportunity for cooperation for some, and unfair competition for others.

5. Food production: Includes both traditional companies, presently with foreign capital sources, oriented at export from the Region to the rest of CR and abroad, with high productivity and major local suppliers of raw materials, and small and medium sized enterprises making use of "market niches". Food production industry is still a major employer in the local economy conditions.

6. The category others includes namely construction firms and individual representatives (printing, paper and plastics processing, clothing). They have in common comparably high revenues per employee, and low export orientation.

Approximately a quarter of the surveyed businesses in Olomouc is owned by foreign entities; these companies employ 34% of total workforce in the sample, as they are the largest ones. In regional comparison, with the same share of foreign owners, the figure is 45% of the workforce, which once again illustrates the structure and importance of the foreign investors. By comparing 29 companies that participated in Olomouc survey in 2008 and this year we learn that the portion of employees of foreign entities fell from 61 to 55 per cent as a result of more intensive layoffs in foreign-owned companies than in Czech ones.

3.2 Business Environment - Strengths and Weaknesses

The respondents were asked to evaluate the business environment at all levels (transnational, national, regional and local), and identify problems that in their view demanded urgent solution. Despite the repeated skepticism ("public administration has known about those problems for a long time, and it's not able/willing to solve them") we find it useful to sort and articulate these issues.

At the European / transnational the problem stressed was almost exclusively the "Brussels red tape", excessive bureaucracy and too many directives. It is self-evident how frustrating it must be for the interviewed creative and innovative personalities to subdue to formal regulations with unclear purpose / benefit. It's been mentioned several times that "had the same rules applied in the 1990s (and been enforced), our company / product would have never materialized".

Comments on the national level mostly criticized the absence of industrial / agricultural / energy / educational policies. In the current times of crisis the businesses need at least some fixed point / direction that would make easier their dealing with strategic development issues; one such topic is Euro. Export-oriented enterprises raise this question always in connection with strengthening Czech Koruna (more or less continuous process in the last 8 years). State aid policy has more opponents than supporters. Some of the interviewees still think it unjust from the state to have used investment incentives (e.g. Philips Hranice is too close an example), others mentioned specific negative experience to demonstrate non-transparent and unfair allocation of subsidies from the Structural Funds. [3] There is also a substantial group of managers / directors who think that any subsidies are wrong on principle, spoiling the market and leading the "beneficiaries" to focus on the ways to secure various grants, rather than on their competitiveness itself. On the other hand there are businesses complaining that the State / local government does not support them at all. To find balance between these two opinions is one of the major tasks for the local government.

At regional level it is the non-existence of technical university that clearly deserves most attention. Technical faculties in Brno and Ostrava (or Zlín and Pardubice) are not too far for cooperation (and a number of colleagues studied there and maintain personal contacts). However, there is a problem when firms in Olomouc (not to mention more remote places in the Region) become interested in graduates from these universities (e.g. with IT specialization). They are usually not able to give an offer more attractive than that from Brno. This is related to another frequently mentioned problem, and it's the "outflow of brains" from the Region. But the managers themselves admit the solution is not to establish new technical faculty, because with a view to the present supply overhang visible in tertiary education institutions such faculty could hardly maintain necessary quality. It makes much bigger sense to develop potential of existing fields of study (chemistry, pharmacy, optics) and higher focus on practical application in IT studies[4].

Frequent complaint / concern heard particularly from the small and medium enterprises was the non-existence / lack of successful local companies to drive the local economy and serve as customers for local SMEs. This is also related to the issue of size of the Region, because for some regional intervention policy tools Olomouc Region is too small for an effective pro-innovation policy, which is better executed / coordinated for a larger territory (Moravia or its substantial part).

City of Olomouc is accepted as a good place for business, only 14 respondents mentioned negatives concerning the City directly, i.e. 24% of the interviewees. Basically there are three groups of problems - transport, housing and "metropolitan capacities". Regarding transport the external accessibility has been perceived positively (however, the need of an airport closer than Brno or Ostrava was mentioned twice); the most pressing problems in this respect are parking at the premises and commuting of employees (which is obviously connected - low capacity of public transport results in higher utilization of passenger cars, and consequently higher demand for car parks). According to some of the managers offer of good quality and affordable housing for young specialists in the necessary professions would help to solve problems in the field of qualified manpower. Metropolitan capacity has been put in doubt in relation to several parallel projects of R&D / innovation centers that won't be used to capacity in some respondents' views.

Positive of Olomouc mostly put in the first place is quality of life, the City being pleasant place for living, offering a number of cultural, sport and social activities. Another positive is the presence of university with about 20,000 students; the City has a chance to be young and dynamic. Aspect that can be objectively measured is the lower cost of doing business (rents, wages, services) compared to Prague (Brno) - the goal is to "produce in Olomouc and sell in Prague". Many entrepreneurs have positive experience from dealing with municipal authorities; these are in particular new investors and

[3] On the contrary the program "Educate yourself" administered by labor offices and aimed at subsidized staff training in the time of crisis was frequently seen as very positive.
[4] Information studies at Palacký University are – according to several respondents – more thoretical than studies in Ostrava or Brno and that is why companies prefer their graduates.

companies moving to municipal industrial zones[5]. Last but not least, major strength of Olomouc is its geographical position that enables numerous companies to serve the markets in fast and reliable manner not only in CR, but also in the Eastern/Western Europe.

3.3 Barriers of Business Development

The importance of individual factors with negative impact on the current and future development of the companies has been changing throughout the Czech Republic, and these changes provide more useful information than their mere sequence of importance. For the first time since 2002 the biggest problem mentioned is the economic crisis (31% of the businesses, regionally 36%, two years ago 16%). In the companies that participated in both the surveys the increase is even more remarkable (38 vs. 18%). The crisis has been reflected mostly in lower sales, which frequently resulted in redundancies and layoffs. For the next year the crisis means also uncertainty in respect of future market development (and impossibility of optimum planning of future development of the business), reduced willingness of the businesses regarding new investments, and very cautious assessment of the future). 23% of the respondents (regionally 26%) have made it their main task for the next year to "Survive the next year and stabilize the company", because "no increase of investments in the industry has been seen yet". At the same time it can be claimed that all the businesses feel effects of the economic crisis, and at best see its impacts as neutral.

The second place (until 2008 regularly the first position) was taken by the lack of qualified personnel. Due to the crisis, lower need for manpower and simultaneously increasing unemployment this problem is felt by "only" 25% of the interviewees (two years ago 51%). Under no circumstances the situation could be described as good, there are professions missing to maintain development of competiveness (for more see the section dealing with workforce), according to some of the respondents "there simply are no qualified workers and technicians in Olomouc"). Moreover, in some industries (chemistry and pharmaceutical 50%, electric and IT 44%), this problem is as serious as two years ago. At the same time the number of complaints about the quality of graduates from secondary schools and universities is rising; the firms are "forced" to work with what there is due to critical lack of skilled manpower.

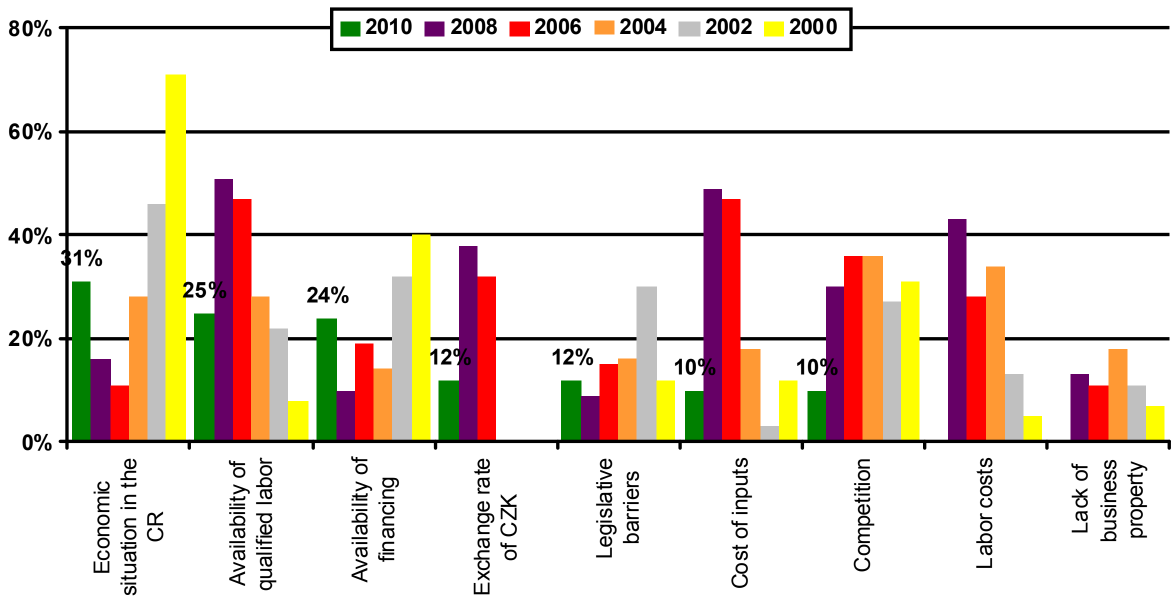

Chart no. 1 – Barriers of business development

24% of those interviewed mentioned problems with financing - making them the third barrier in the order of importance. The businesses stress mainly the stricter terms and conditions of loans, and difficulties when obtaining bank guarantees for export. For innovative start-ups non-functioning venture capital market is critical. Quite colorful are the views of subsidies under national and European programmes. On the one hand there are businesses that would like to get subsidies, and point at the

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[5] While the firms have no experience with e.g. Regional Authority (except working visits of the hetman), the City Hall is viewed as an important partner.

administrative difficulties and sometimes hazy conditions of grants; on the other hand there is quite strong group of managers clearly opposed to the whole concept of subsidies as they "spoil the market, distort thinking and behavior of businesses, and in some cases grant of subsidy damages competitors of the beneficiary in the same town / region".
These responses are related to the fourth most frequent problem (12% in Olomouc and 19% regionally), which is the Czech Republic as place for doing business (excessive bureaucracy, poor law enforcement). The companies in this group were at the same time very skeptical about the prospects of public administration willing and able to solve / improve the situation. 10% of the respondents mentioned competition as a major barrier, but in the most represented category of mechanical engineering the figure was 27%.

3.4 *Export Orientation*

Olomouc economy, according to both the surveys and Czech Statistical Office, has been less export-oriented than Czech average in long run. Compared to the previous survey share of export in the sales of local companies increased from 30 to 37% - see Chart no. 2. Regionally this share is 57 per cent, which corresponds to concentration of services in Olomouc and on the contrary manufacturers (frequently owned by foreign entities) in the rest of the region. It is logical to monitor export orientation in 29 companies that participated in both the surveys. The increase here is not that remarkable – from 38.4 % to 42.5 %, nevertheless it is visible. Main drivers of export are clearly mechanical engineering, chemical and pharmaceutical industry and food production. 21 % of the businesses (mostly IT + electro and mechanical engineering) is planning to penetrate new markets with their products, usually in the Eastern Europe and Russia, whereas 32 % of the respondents are going to maximize their market potential where they are already established.

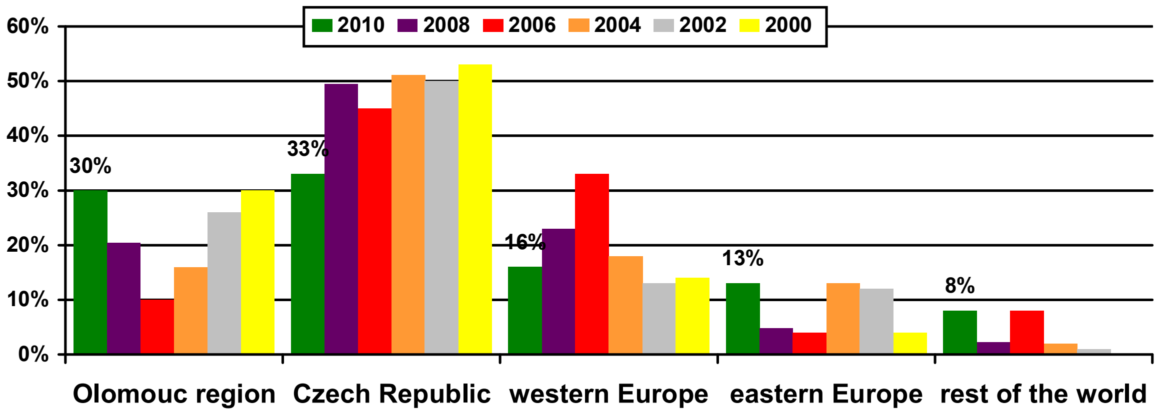


Chart no. 2 – Export orientation

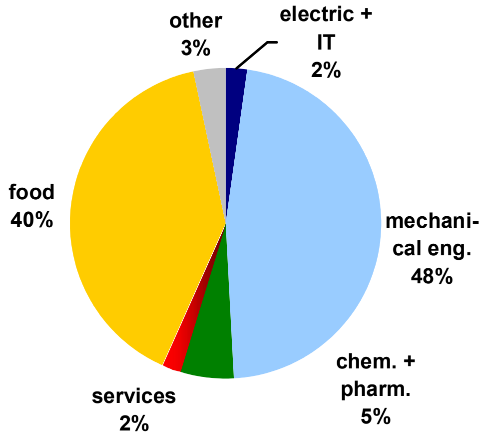


Chart no. 3 – Structure of export

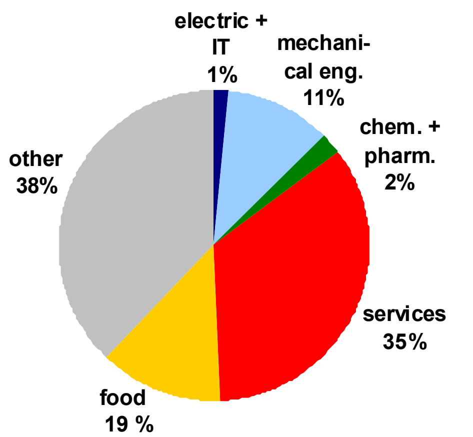


Chart no. 4 – Structure of domestic revenues

The previous two charts (nos. 3 and 4) illustrate the structure of revenues of local economy. Long term results of the surveys have repeatedly confirmed there are practically only two industries participating considerably in exports (food production 40% and mechanical engineering 48% - by the way the figures are more or less equal to those of 2008). Domestic market in this respect is consequently dominated by "other" sectors, in this case especially construction (38%) that is even the strongest industry within this survey, and services with 35% share.

Information on sales was taken from annual reports published at the portal of Ministry of justice (www.justice.cz). As a result of global economic crisis the sales in the monitored companies between 2008 and 2009 fell by 15 % (from CZK 26,854 to 22,853 million); this fall is clear throughout the Region. On the contrary increase by 11 per cent is expected in 2010, while in the rest of the Region the businesses speak of further decrease, this time "only" by 5%. Sales per employee have followed similar pattern: from maximum CZK 2.37 million in 2008 through CZK 2.18 million in 2009 back to this year's CZK 2.33 million. Total volume of sales does not reach the level of 2008, but this is more or less compensated for by the number of employees. These values are roughly by a third higher than those mentioned by the businesses located in the rest of the Region.

3.5 Workforce and Employment

Total number of employees in the surveyed companies has gone through rather dramatic process in the last two years. Between 2008 and 2009 the employment dropped by 7.5 % (almost 900 places), but slow recovery is apparent, and this year nearly 400 new jobs should be created (increase by 3.7 %). The data for the rest of the Region are even more alarming. Number of jobs lost between 2008 and 2009 is 2,800 (down by 15%), and this fall has not stopped this year, it's just slowed down (decrease by 9 %, i.e. 1,410 employees). It seems the economy of Olomouc City based more on services was better able to absorb the impacts of economic crisis.

Again it is interesting to compare responses of the businesses included in surveys of 2008 and 2010. From the original more than 5,800 they dropped down to this year's 4,867. Their estimates from summer of 2008 that they would keep, or even slightly increase the number of employees, proved to be too optimistic. Maybe that is another reason why the managers were very cautious this year, and mentioned their plans to recruit dozens of new employees in this and the next year. There are 5 such companies in the Region.

It seems that problems related to availability of workforce have become less pressing / urgent due to the deepening crisis and reduced number of employees. 32 of those 59 addressed (54%) claim it is difficult to find high quality personnel, and for some (up to 10) others this is no problem only because they are laying off their staff at the moment. The missing professions have always been connected to the technical qualification (result of low attraction of technical specializations for young people, and competition of Brno and Ostrava in the fight for college graduates), the most frequently mentioned being IT experts, process engineers, developers, designers, metal workers, welders, CNC machine operators…. Demand for professions "nobody teaches anymore", usually requiring interdisciplinary knowledge in 2 and more fields, is worth mentioning. Typical example is the sales reps / people with economic background, who would understand the products of given company - such specialists are sought for in the sales of medical devices, software or medicines.

Assessment of secondary education is inconsistent, the same number of respondents rate it in a positive and negative way. Several companies mentin good level of cooperation e.g. with Secondary electrotechnical school, Secondary polytechnical school (Rooseveltova), Secondary polygraphic (printing) school or Secondary scholl of mechanical engineering (Lutín). The other half criticizes lowering numbers and quality of graduates in technical fields at the expense of managerial studies preparing „managers“ who can hardly find jobs.

The businesses are trying to deal with the lack of sufficiently qualified workforce in different ways, necessity being the work with fresh graduates, expected to take 12 months at minimum before they bring any benefits for the company. In some cases this time is shorter by the internship period, e.g. as part of work on the student's thesis. However, this practice faces problems related to the period of time and frequency of possible presence of the student in the business, necessary leadership and the person assigned to it; that is why less than 10 companies are involved in this activity. Quite exceptional phenomenon is scholarship fund for students and graduates that would enable the young people to get to know the future workplace and employer (three responses). The business expect from

the public sector mostly good quality of education system (= of its graduates), continuation / expansion of the offer of retraining course (usually by the Labor Office, or subsidies for their own training programs), and assistance with improvement of conditions for student internship programs ("so that it is convenient for the enterprise, i.e. being able to choose the time when the students can come, be it once a week for one hour, or 14 days in a row, possibly with financial support, to be able to pay the students for their work not from the corporate resources") etc.
Unlike the quality of fresh graduates the overall quality of workforce is perceived as satisfactory; the previous layoffs allowed to keep "the better ones" and get rid of the worse employees. In particular with the small and medium enterprises the answer "all employees are of key importance for us, and all of them have to be excellent" was quite usual.
Average wage of CZK 28,210 in the sample is above the statistical national average, recorded for the first time within BAS Olomouc exercises (in 2008 it was CZK 23,333), also due to focus of the survey on the successful and innovative businesses, and the above-mentioned reduction of manpower while keeping the more important / better paid jobs[6]. Comparison of 29 participants of both the surveys gives absolutely the same picture (CZK 28,408 this year, CZK 23,728 two years ago) manifesting the fact the selection of participants was as representative as in the previous years. It is no surprise that figures form other companies in the Region lead to average CZK 21,783.

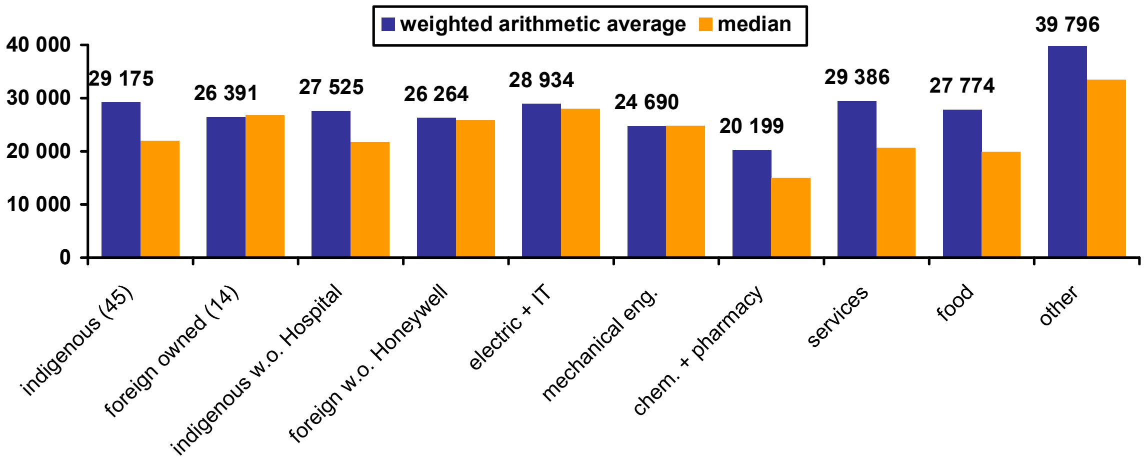


Chart no. 5 – Average wages comparison

Comparison of domestic and foreign businesses by individual industries and wage levels provides an interesting insight (Chart no. 5). Despite CSO statistics hinting at lower level of wages in the segment of companies without foreign capital, the findings are to the contrary in the surveyed businesses. Only median value for the foreign companies is higher than that for domestic ones. However, when we consider size of the enterprise by the number of employees, the domestic enterprises pay in average by CZK 2,800 a month more. This is mostly due to the largest entity - University Hospital Olomouc that represents 46% of the workforce in the participating domestic companies. When excluding this employer from the analysis in the group of domestic entities, and Honeywell Aerospace Olomouc in the group of foreign entities, the wage difference between the groups is just CZK 1,261. Regarding individual industries, then highest wages are paid in other (construction, printing) companies (even though there are major differences), in services and electro + IT, and on the contrary average wages are paid in chemistry and pharmaceutical. The above-mentioned information illustrates strong influence of the largest businesses on the remuneration level, and subsequently on the labor market and indirectly on the volume of household spending in Olomouc Region.

3.6 Innovation, Research and Development

As soon as the respondents were being selected for the survey, entities were preferred with assumed competitive edge based first of all on innovation, by which we mean "modifications of products and services offered, and also methods of production and marketing". Visits in the companies have mostly

[6] Another explanation is in the fact that for the first time the wages were not established on the basis of query, but annual reports.

demonstrated correctness of the selection process. However, the high occurrence of innovating businesses with their own R&D activities to be commented in the paragraphs below, (unfortunately) does not mean this would be typical feature of the entire local economy.[7]
For major part (44%) of the interviewees the innovations represent basic source of competitiveness, their management is one of the key processes in their companies. The second largest group (39%) has been improving their products on regular basis, modernizing their technologies, but these are not activities essential for their ability to succeed in the market, whereas similar figures (40 and 39%) were recorded among other participating businesses in the Region. Only 8% of the respondents replied that innovations were negligible issue, their customers were not interested. From the surveys conducted in other regions, or even in Olomouc in the past (but focusing on major employers) we have learned that in reality this is the biggest group in the Czech economy.
From the viewpoint of management of innovation processes we can divide the participating businesses in three basic groups:

a) Small enterprises dealing almost entirely with research and/or development, established either by privatization of large enterprises in the 1990s, or lately as spin-offs from Palacky University thanks to the incubator and the Science and Technology Park. They have the advantage of possible wide scope of their activities, flexible response to the customers' needs, and possibility to look for clients in other industries. These companies most often plan to create completely new markets with new products (and services, i.e. "to be the first in the new market". They mostly employ staff of up to 10-15, succeed rather domestically, or in the neighboring countries (Slovakia, Poland). While some of the (he older) expect growth by maximum order of individual employees, others have a potential of more substantial influence over the local economic development. Major partners for these entities are frequently universities, be it UPOl, VUT Brno or VŠB-TU Ostrava.

b) Manufacturers owned by foreign capital have their R&D activities usually concentrated in corporate HQ (country of the seat), performing only "application development" in the Czech Republic, i.e. design, lead-in, market research, adjustments of products to local environment and the like. These companies do not normally cooperate with local universities (even though there are positive exceptions), often because "we actually haven't thought of that". However, for the future it is important to increase the complexity of tasks to be performed by the Czech subsidiaries, as examples from elsewhere (even from other places in Olomouc Region) show that development centers can be expected to move from abroad to the areas where successful production plants operate.[8]

c) Medium-sized companies with value chain: Development - lead-in - production - sales - services, with their own R&D department, representing traditional idea of an innovating enterprise. Unlike the first type, these businesses have their R&D depts. "tied" by the corporate strategy, unable to "afford" development of anything that would have no direct effects in the manufacture / sales prospect.

17 visited companies (29 %) operate their own R&D with total 230 employees. The figures may not give a complete picture of development in the enterprises, because namely the small innovation companies are sort of R&D departments in themselves, and they are not included in the statistics. That is another reason why the share of companies with R&D departments is considerably higher in the Region (42%). Interesting, though hardly surprising is the finding that development is a program for the same enterprises that participated also in 2008 survey, and the number of employees in their R&D depts. Is practically the same (132 and 134). The same portion of 56% of the respondents declared as sources of their innovation activities their own innovation and ideas, as well as feedback from customers and suppliers. 19% also mentioned results of joint R&D projects implemented with R&D entities (universities, research organizations which is partially due to the selection criteria.

Challenges in the field of development and innovations are related to:

[7] Some originally selected respondents have excused themselves from the survey, claiming their companies did not have any innovation activities, and dealt solely with custom-manufacture for clients.
[8] In this survey and on the territory of the Region it is for example Hella Mohelnice.

a) First of all availability of qualified specialists. In small enterprises the innovations can rely on 1 - 2 people, but R&D departments in manufacturing companies depend on the possibility to attract and keep high quality personnel (university graduates).

b) Looking for / finding partners for cooperation. Commercially operated businesses can't afford investments in R&D that will never bring results, or will bring results after many years, therefore they are willing to agree with universities having more time and people at their disposal.

c) Economic crisis and share of operating and strategic problems solved in the company. For a number of enterprises it is currently difficult to find space for long-term concept, when they have to deal with cutting costs and all the activities not bearing immediate fruit. Innovation cycles in many industries (pharmaceutical) take very long time; financial instruments of public assistance would help here.

3.7 Information on Properties and Investment Goals

Chart no. 6 illustrates responses to some property-related queries. As regards properties for business, the situation has been stabilized; two thirds of the surveyed companies are located in their own premises, new feature being the entities located in VTP UP. This is one of the main reasons of the difference between companies in Olomouc City and the rest of the Region, as of the latter 90% are located in their own premises.

Willingness to invest in business expansion is now lesser due to the crisis ("We have contemplated it, we've had plans to transfer / build new facilities, but considering the uncertainties of the market we have postponed"). There are five enterprises in the sample owning more than they can use, going to offer part of their properties. Combined with the fact that new Technology Park is being established in Olomouc-Hněvotín, availability of industrial / warehouse facilities is no problem for the businesses. Newcomers also got used to the services provided by the municipal authorities, and they are going to deal with possible development issues in cooperation with the municipality. Businesses offering services have repeatedly asked for class A office premises, for which the "municipality should find a location in the master plan, and enable a developer to build".

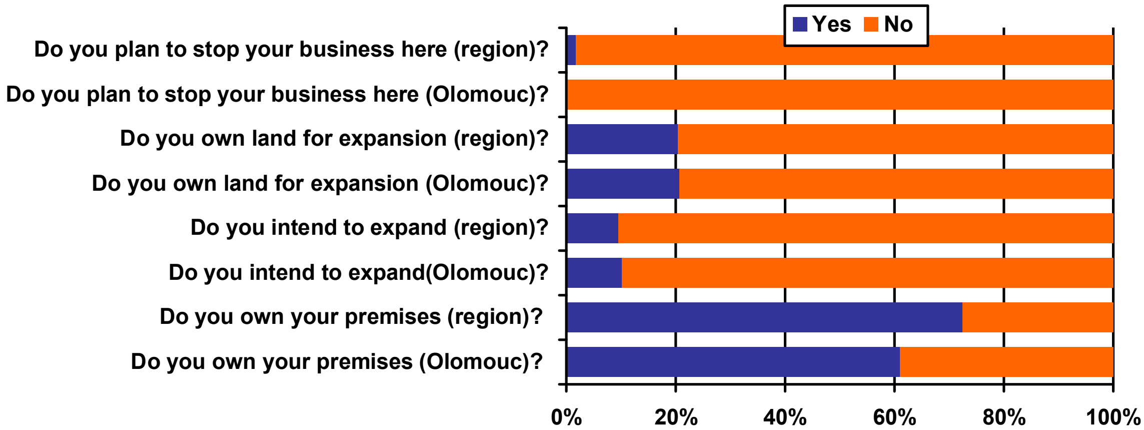


Chart no. 6 – Information on investments and properties

The most serious problems with business properties are thus related to transport infrastructure, in particular parking, or availability of public transport. This time there was no company in the City (elsewhere only one, and the second refused to participate for the same reason) planning / forced to terminate its activities in the City.

3.8 Demand for Assistance

Like the previous surveys, the current one has asked about the services that should be provided by the local government. This question was first put as an open one, followed by 11 tools offered; the respondents were to decide which of those were relevant. Answers to the pen question most often touched upon the issue of human resources. The recommendations included:

- Offer simple flats and lands, thus attracting young and educated people to Olomouc, not just for work (the businesses will provide that);
- Innovate syllabus of some specializations offered at schools, taking into account the needs of new industries;
- Increase demand / make stricter the conditions of leaving exam at secondary schools and universities, improve promotion of necessary vocational specializations, re-direct resources in secondary education towards the specializations where there is demand for their graduates.

Other suggestions worth notice:

- We need somebody who will help us with patent procedure, we don't know whom to contact - local government should have an instrument of assistance in these matters;
- Establish seed fund[9], because the banks aren't able to assess risks in new industries;
- Ensure mutual exchange of information on what is going on in Olomouc City / Region, being invented, what are the outputs of UPOl and its centers, so that the businesses could decide whether something has commercial potential;
- Investments of the municipality resulting in both direct and indirect employment opportunities for local businesses (under the applicable laws);
- Create database / network of local suppliers, so that the large manufacturers have products available within easy reach that they otherwise transport from far away (see one "old" CzechInvest program).

Final query related to specific tools was answered as follows, and in many cases the results proved what had been said earlier (Chart no. 7):

- The first place is shared between the support for the access of local companies to financial resources aimed at innovations - 47% (67% in chemistry and pharmaceutical, 56% in electro and IT). New instruments of the innovation voucher type, patent fund, or any form of venture capital were called for, as well as traditional subsidies in marketing, staff training or technologies.
- 47% of the respondents support cooperation with schools in the field of preparation of graduates, evenly distributed in all sectors (the least 40% food production, he most 56% electro and IT).
- Third place was taken by support for export (39%) demanded namely by manufacturers. More possibilities were mentioned: participation in foreign trade missions (but well prepared, so that the companies really meet suitable partners) and support for participation in exhibitions and trade fairs, and tailor made services similar to the Czech House in Moscow.
- The fourth place belongs to the support for cooperation with R&D entities, technology transfers (36%), with above-average representation in all manufacturing industries, and below-average in in services and construction. Both "soft" projects, i.e. meetings and information exchange, and direct financial support for TT would be welcome.
- Electronic public administration, reduced red tape and administrative burden follows with 34% of respondents (mostly services - 44%). Higher share of this response was prevented most likely by skepticism of the respondents ("nothing will change anyway") than by them not seeing this as a problem. As an example how this should not be done the data boxes were mentioned ("the project costs twice as much than necessary, forcing every plumber to introduce data box despite the fact he doesn't need it, and public institutions send their documents in paper anyway - but let's hope this is just a start!").
- On the contrary topics that ended up the last with less than 15% of responses should be perceived as follows - space for business is not a key issue for most of the companies, related

[9] This request was aimed more at the regional government.

almost entirely to the infrastructure for the start-ups. External investments are generally welcome, but in the context of competitiveness and innovation capacity development they play rather secondary role. Promotion of positive experience is supported in particular by enterprises focusing on local market.

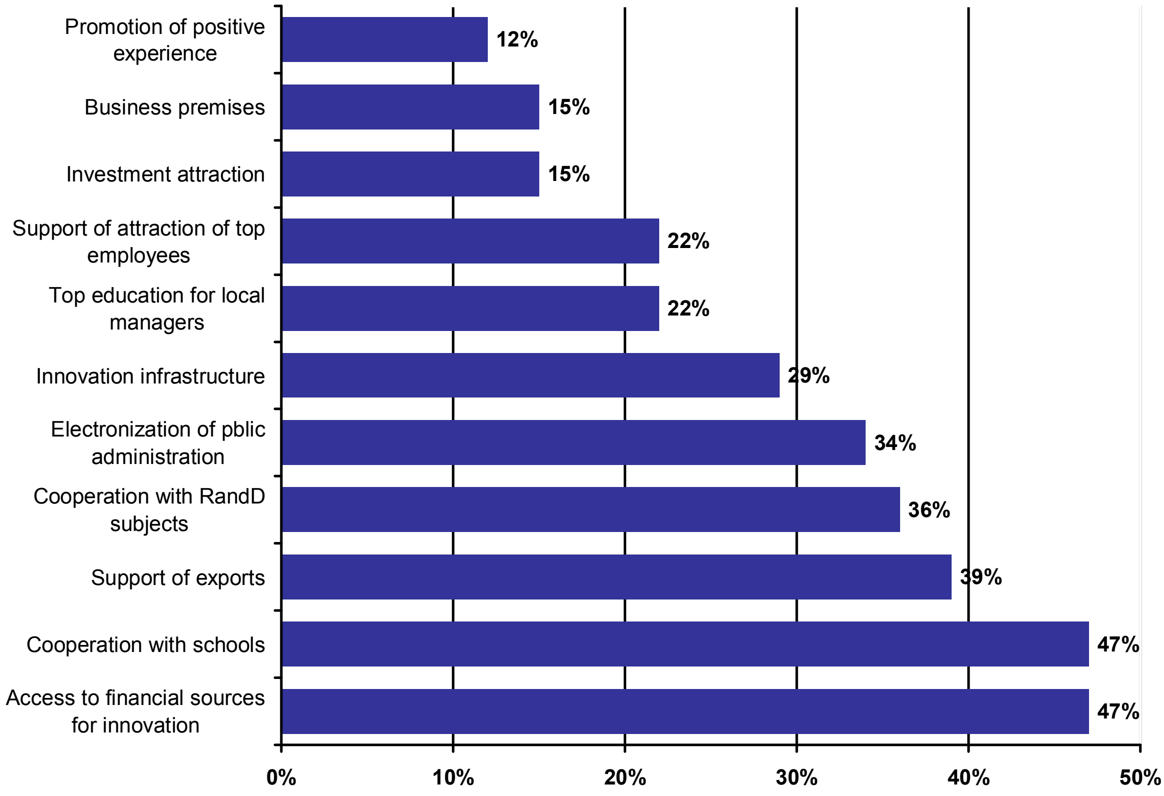


Chart no. 7 – Recommended topics

4. Conclusion

We believe the sixth sequel in the line of business attitude surveys will be a valuable source of information on the views of businesses active in Olomouc. The results cannot be considered as a comprehensive description of conditions for doing business in the City, yet apart from specific data on almost sixty major enterprises they illustrate the "state of mind" of their top managers, including those who have not responded for various reasons (mostly due to their lack of trust in the municipality, or insufficient willingness to communicate). In any case the survey has sent a positive signal to the business domain: Public sector is interested in the conditions for business in the City, and it wants to cooperate with the entrepreneurs in their improvement. Number of the interviewed companies have appreciated the possibility to express their views on the problems, and they are interested in the results of the survey.

Comparing to 2008 it is clear how local economy has suffered due to the global (and national) crisis, but at the same time we may read the results cautiously as signs of economic recovery and improvement. Inclusion of businesses outside the City of Olomouc revealed the differences of "white collar" economy in Olomouc from the industrial / agricultural base in the Region.

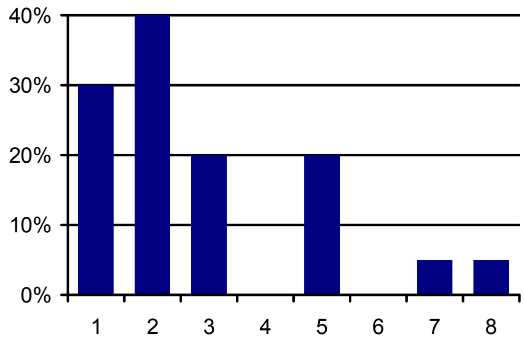
Finally we would like to thank very much all the directors and managers who participated in the survey and provided valuable information. In the current era of widespread telemarketing, when potential respondents hang up as soon as they hear the word "survey", the positive response and willingness to participate of more than 100 very busy people is a proof that the enterprises want to cooperate with the local government on improvement of business conditions.

Annexes

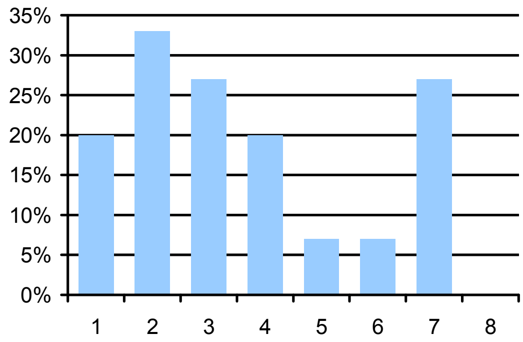
Annex 1 – Barriers of development

1 – Economic situation in CR
2 – Availability of qualified personnel
3 – Availability of financial resources
4 – Koruna exchange rate
5 – Legislative limitations
6 – Price of inputs
7 – Competition
8 – Technical infrastructure

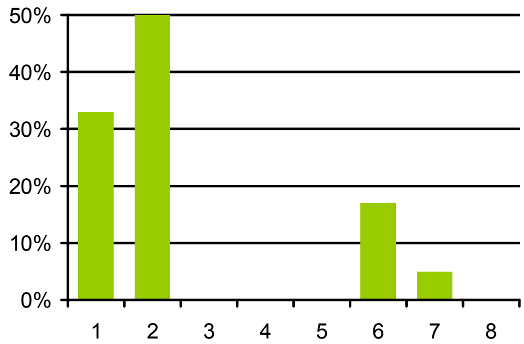
electric + IT



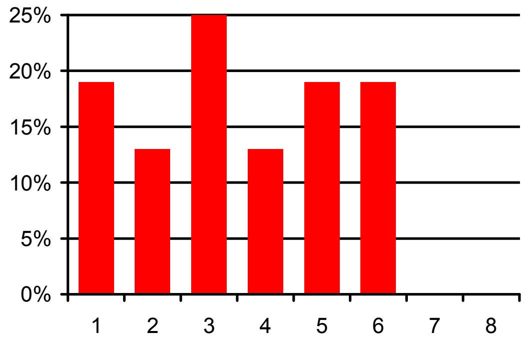
mechanical engineering



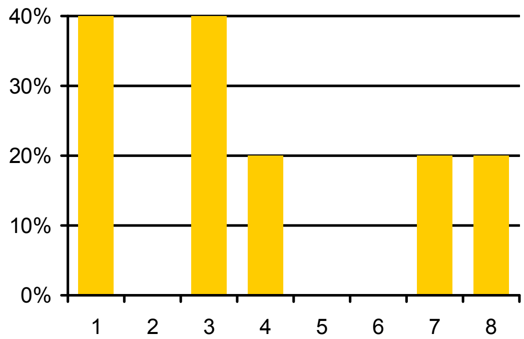
chemistry + pharmacy



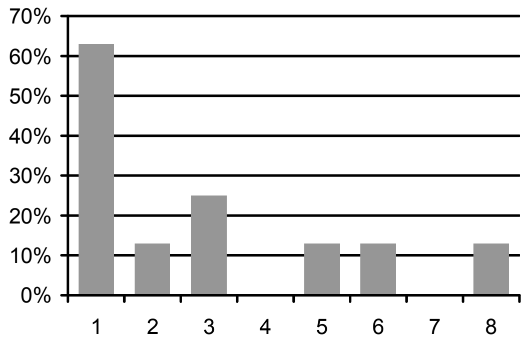
services



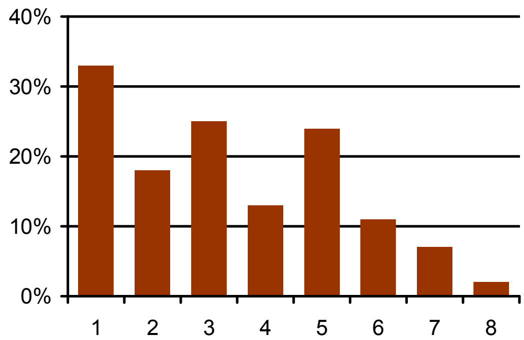
food



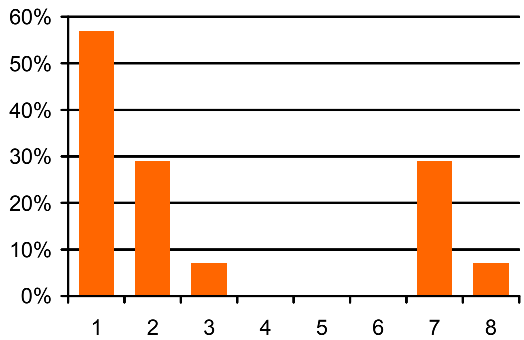
other



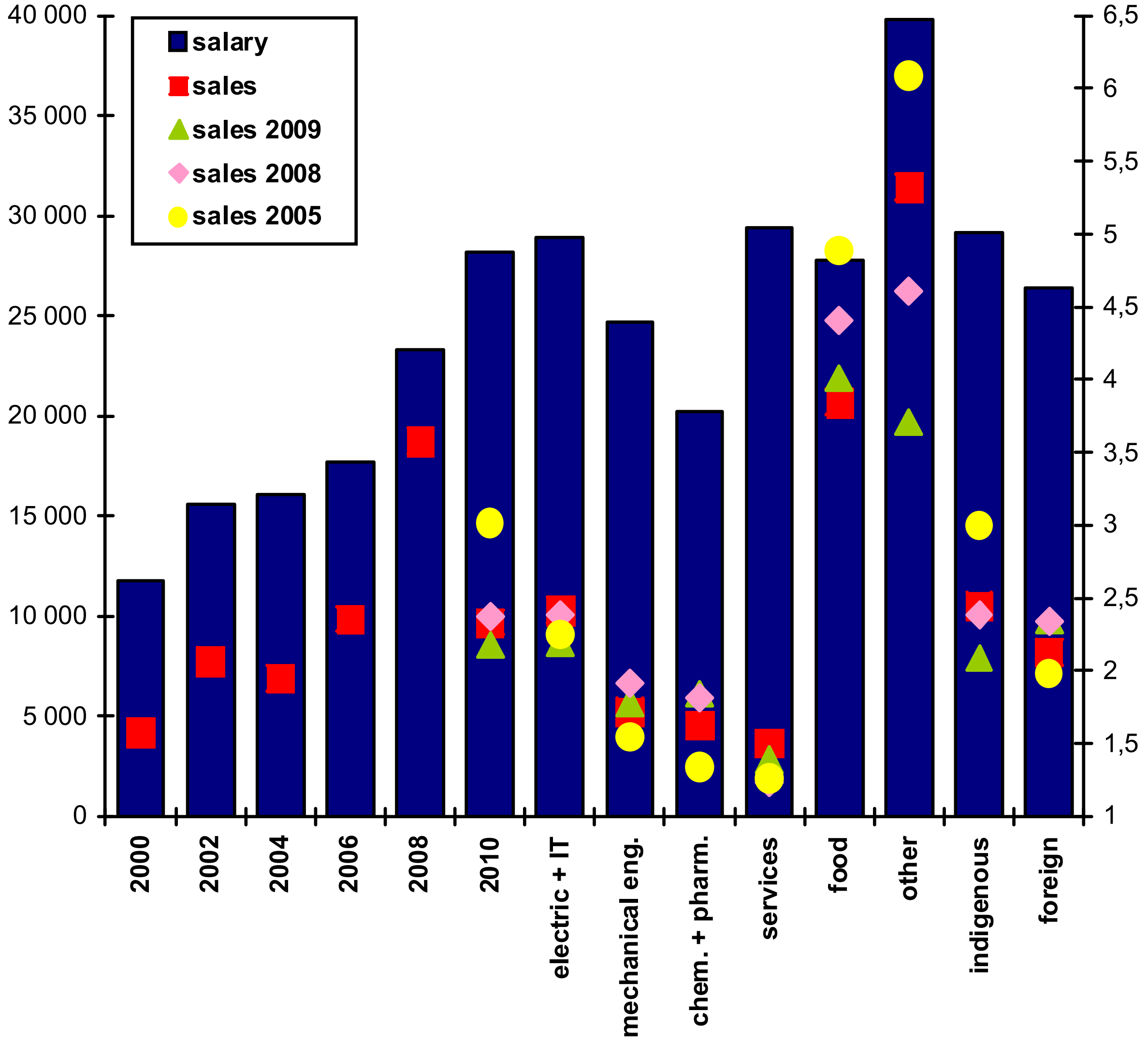
indigenous



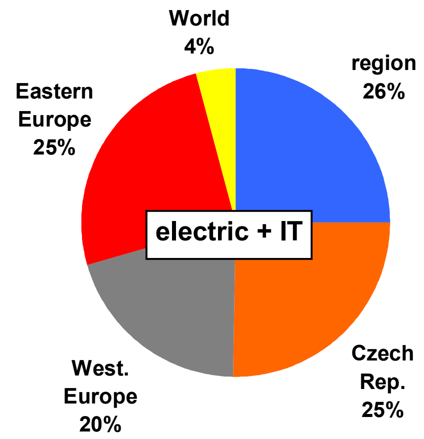
foreign

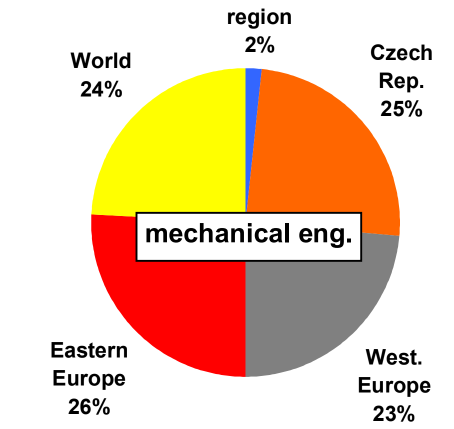


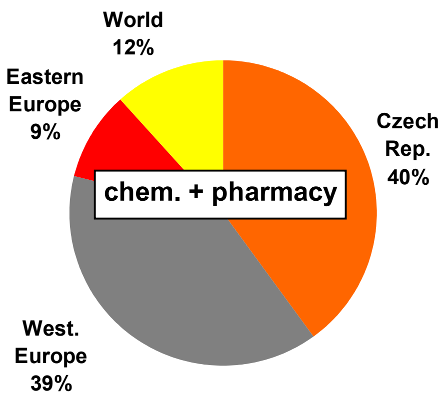
Annex 2 – Average wages (CZK) and sales per employee (million CZK)

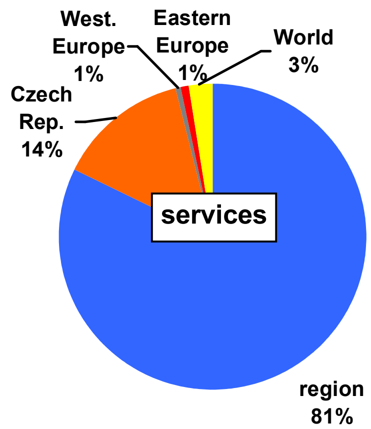


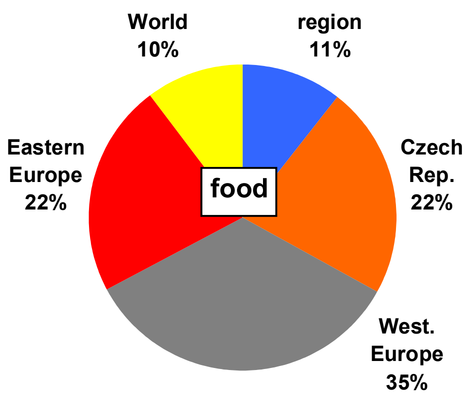
Annex 3 – Export orientation

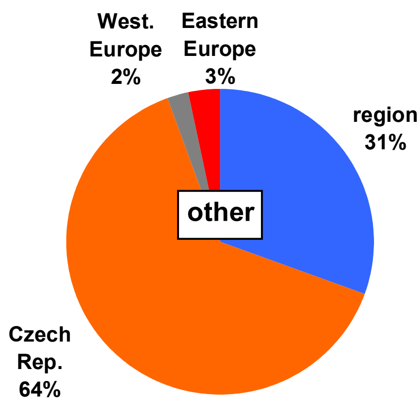


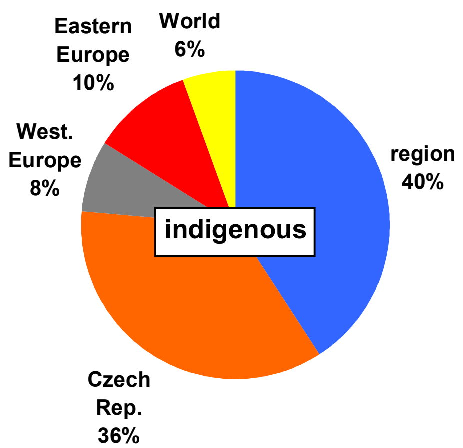


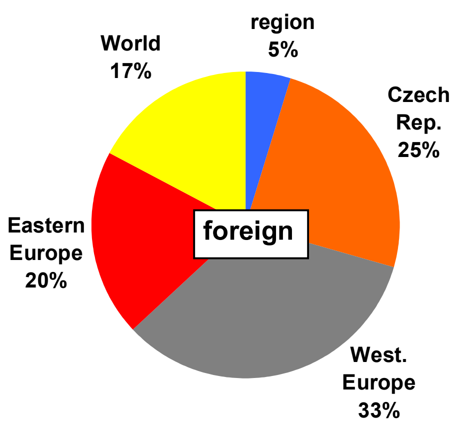




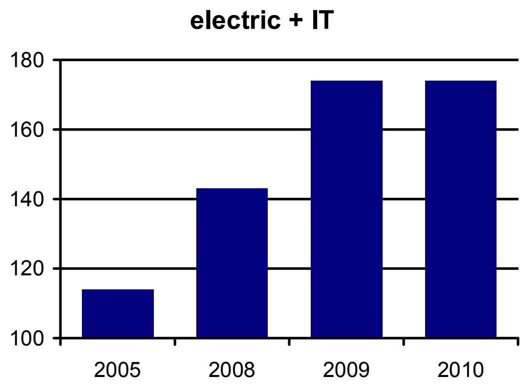


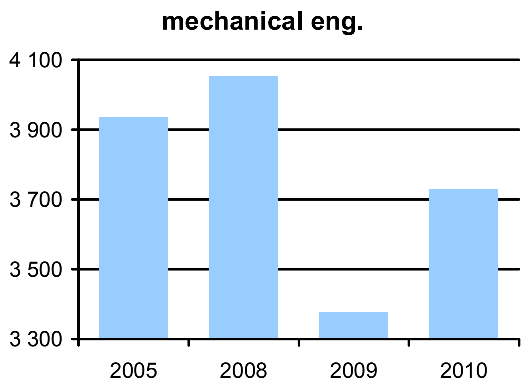


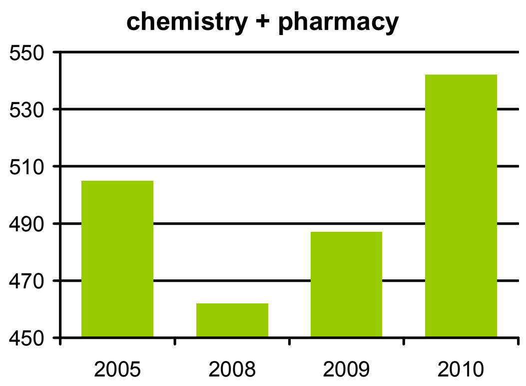


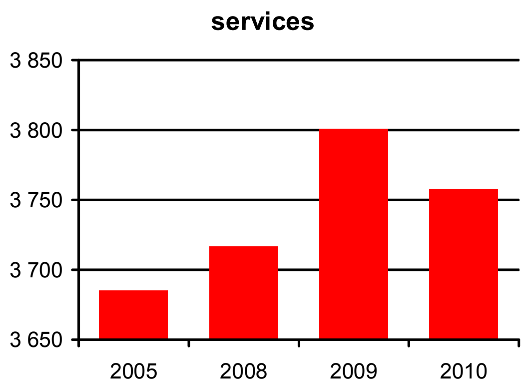


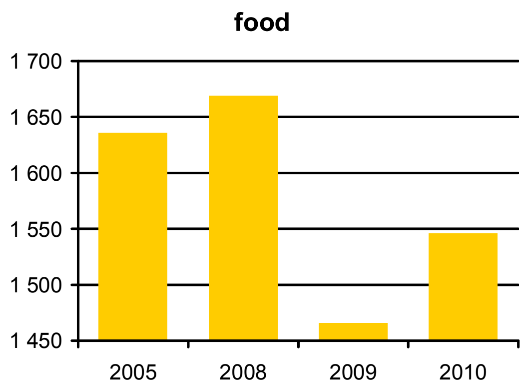
Annex 4 – Number of employees

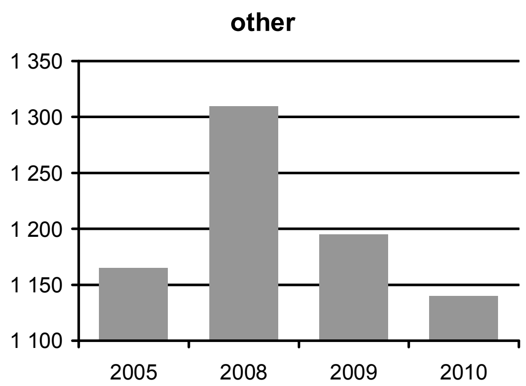


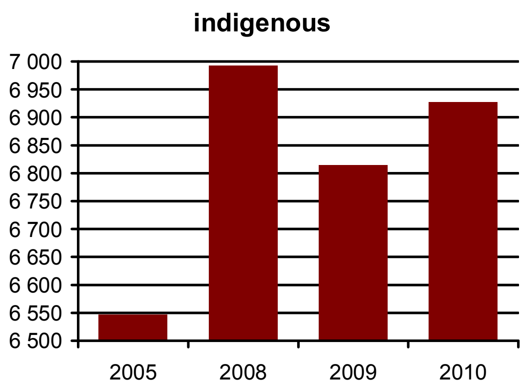


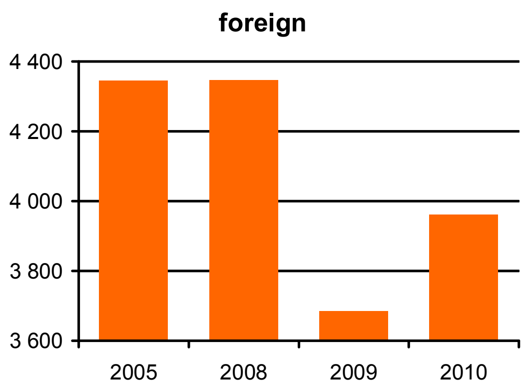






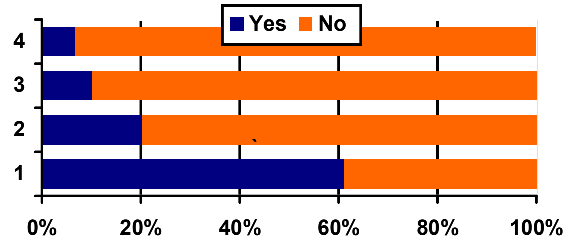


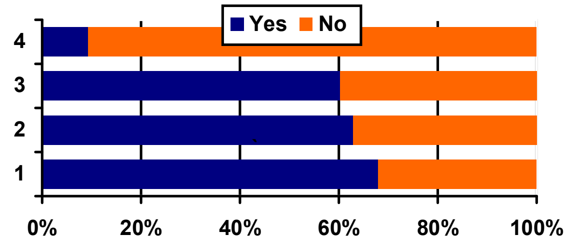


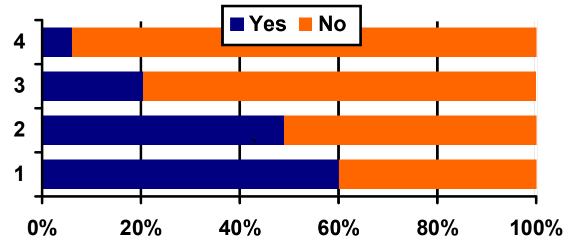


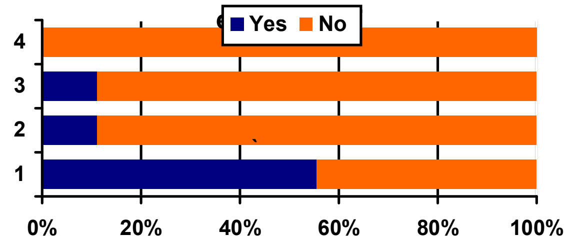
Annex 5 – Information on investments and properties

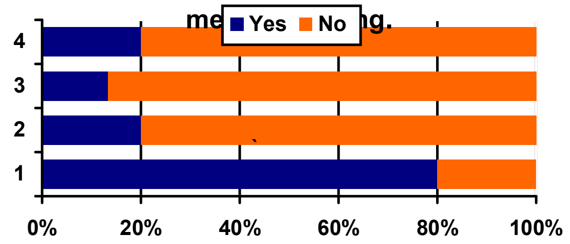
1 – Are you owners?
2 – Having land to expand?
3 – Going to expand?
4 – Looking elsewhere?

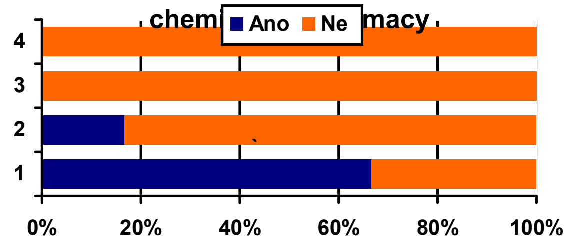


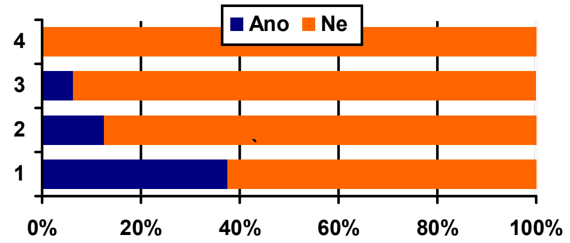


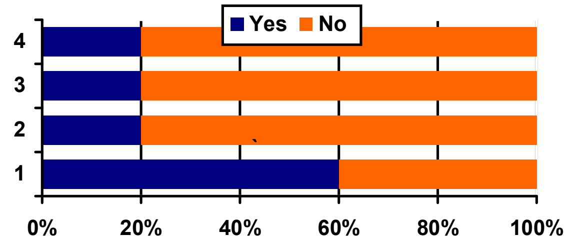


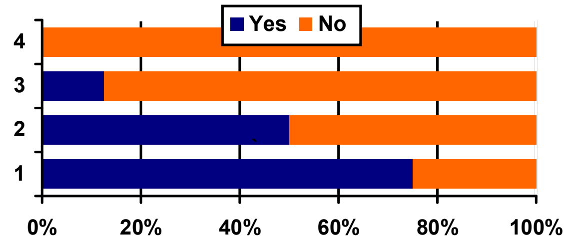


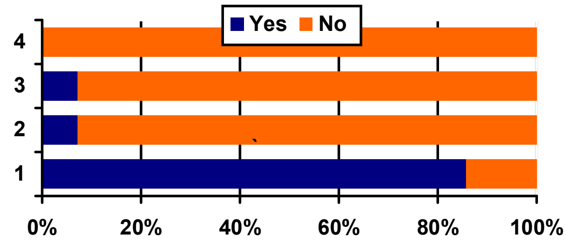




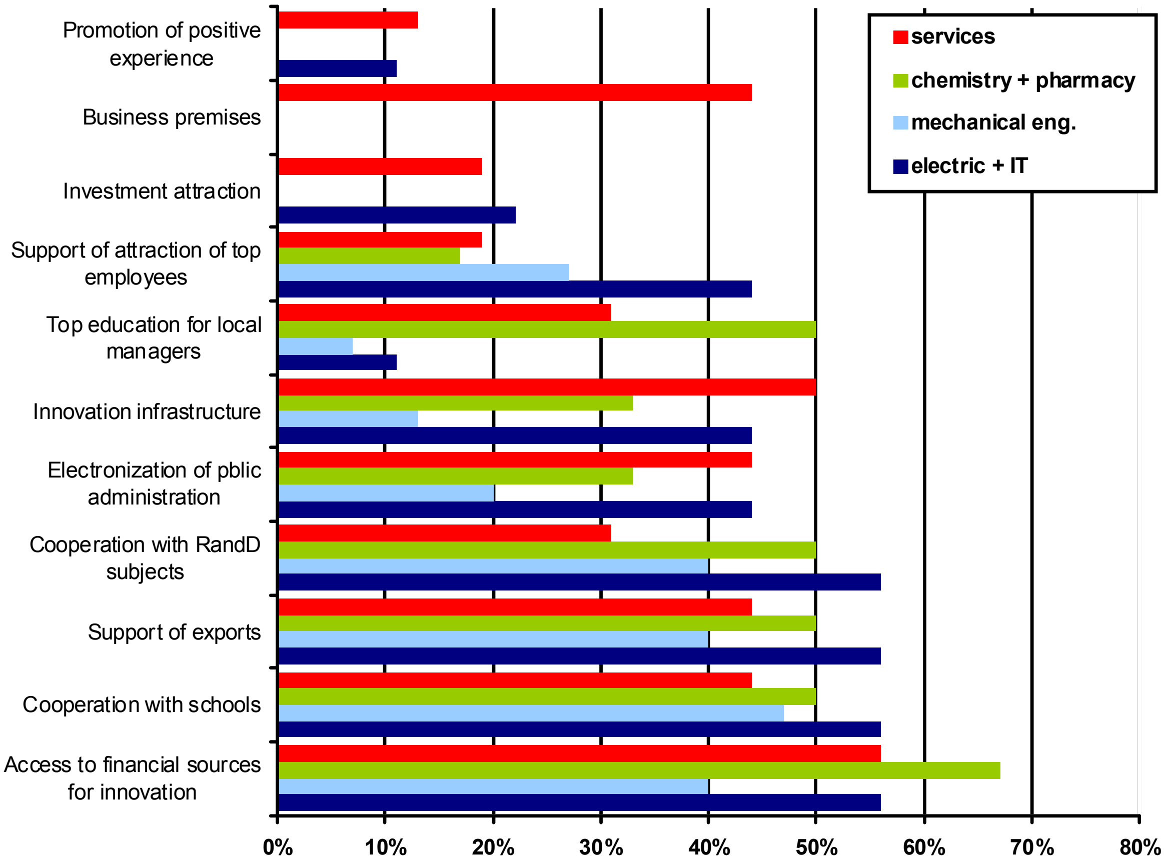


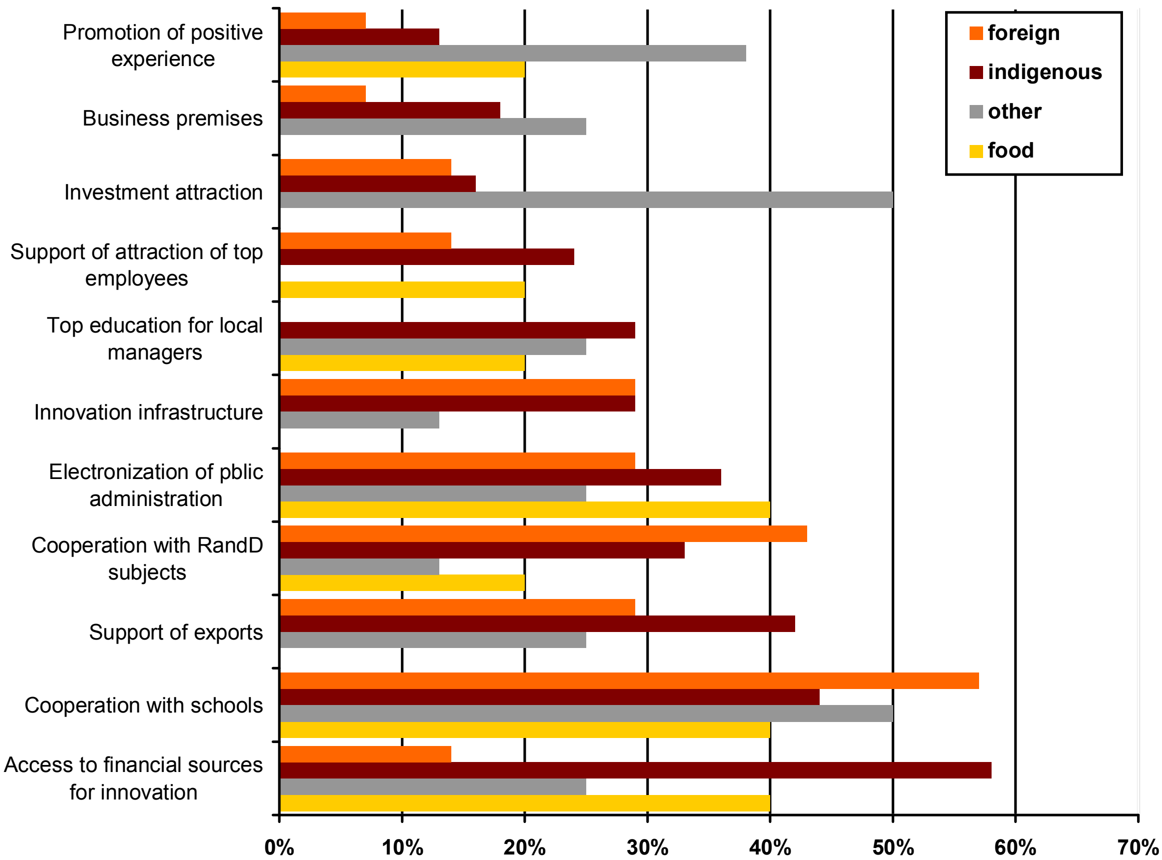






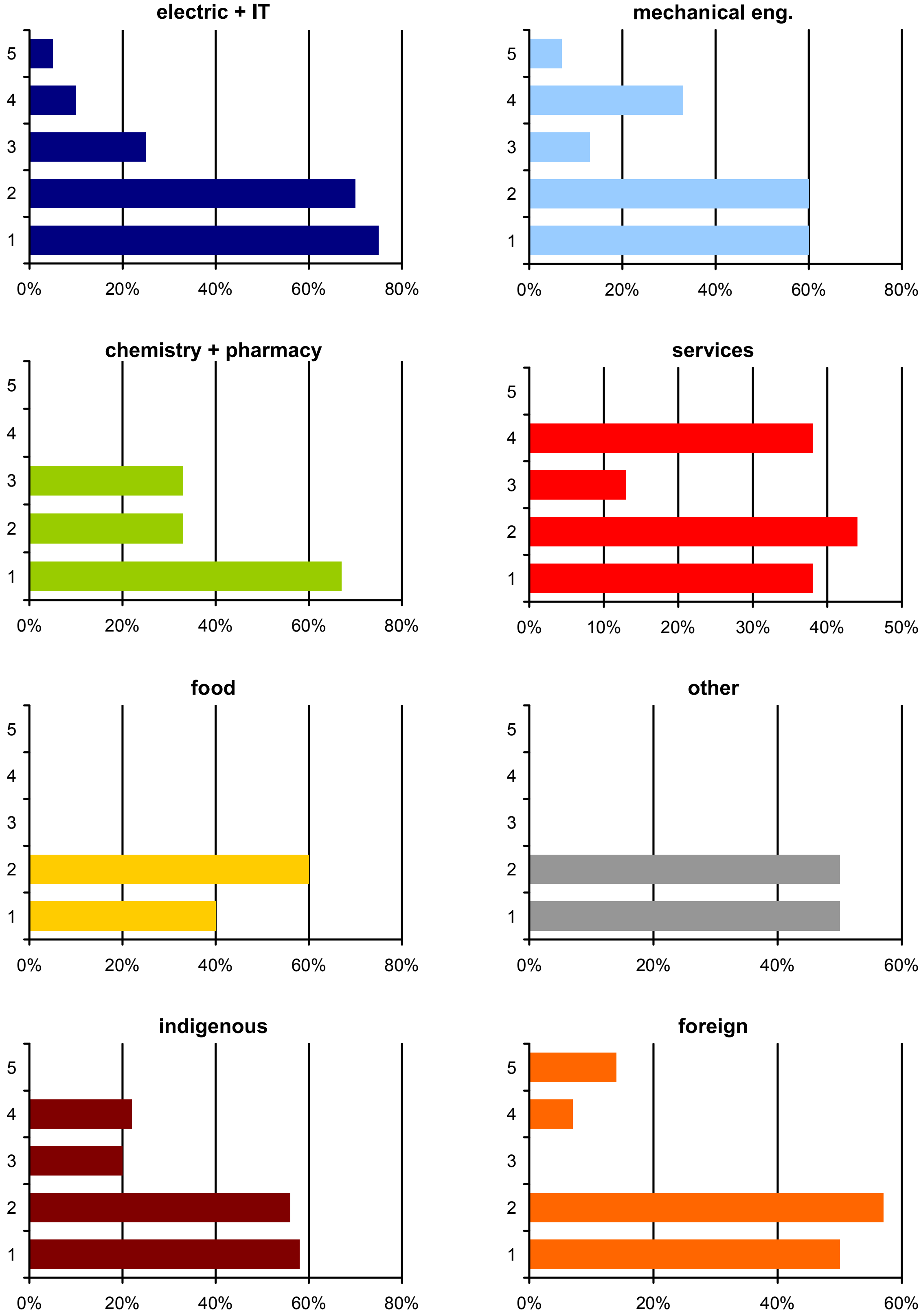
Annex 6 – Recommended topics





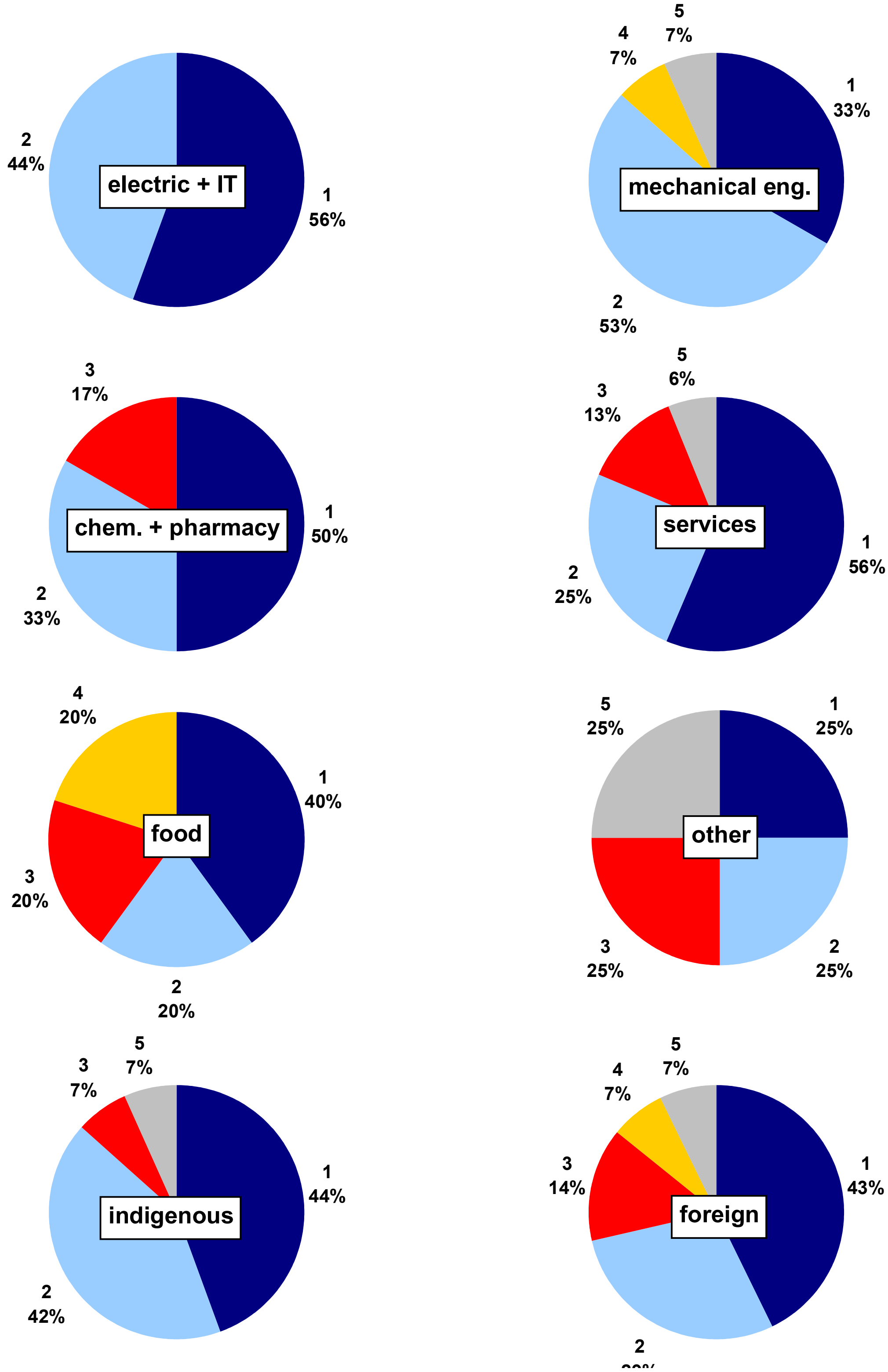
Annex 7 – Main sources of innovation activities

1. Internal innovation ideas
2. Feedback from customers / clients
3. Own R&D projects financed from public sources
4. R&D projects with universities
5. Use of ideas of competitors



Annex 8 – Role of innovation

1. Innovation is the main source of our competitive advantage
2. We regularly improve our technologies and products, however, this activity does not substantially influence our ability to sell
3. Our customers do not expect / want inovation from us
4. We feel the necessity to innovate but so far we do not do this
5. Other



Annex 9 – List of visited companies

id	Company Name	Address
1	ABO Valve s.r.o.	tř. Svobody 43/39, 771 11 Olomouc
2	ABOT - fotovoltaická zařízení s.r.o.	Šlechtitelů 813/21, 779 00 Olomouc
3	ADM Prague s.r.o.	Hamerská 50, Olomouc
4	Alfaprojekt Olomouc a.s.	Tylova 4, Olomouc
5	ALW INDUSTRY s.r.o.	U Panelárny 594/6, 779 00 Olomouc
6	Aqua Industrial s.r.o.	Dalimilova 54b, 783 35 Olomouc - Chomutov
7	BioApex, s.r.o.	Šlechtitelů 21, Olomouc
8	BioPatterns, s.r.o.	Šlechtitelů 21, Olomouc
9	Condata	Železniční 547/4a, 772 00 Olomouc
10	DRAPS s.r.o.	Ondřejova 13, 772 00 Olomouc
11	DSL FOOD s.r.o.	Šlechtitelů 11, Olomouc 779 00
12	Dystiff	Železniční 548/4B, 779 00 Olomouc
13	EOLA s.r.o.	Šlechtitelů 241/11, Olomouc
14	Espace Morava	Ibsenova 12/128, 779 00 Olomouc
15	EUROGEMA CZ a.s.	Blanická 19, Olomouc
16	EXL service	Kosmonautů 989/8, 772 00 Olomouc
17	Fagron, a.s.	Holická 1098/31M, 772 00 Olomouc
18	Fakultní nemocnice Olomouc	I. P. Pavlova 6, Olomouc
19	Farmak, a.s.	Na Vlčinci 16/3, Olomouc
20	GEMO Olomouc, spol. s.r.o.	Dlouhá 562/22, Olomouc
21	Grapo s.r.o.	Šlechtitelů 1, 772 00 Olomouc
22	Grapo Technologies	Šlechtitelů 583/1, 772 00 Olomouc-Holice
23	GRM Systems, s.r.o.	Sienkiewiczova 18, Olomouc
24	H+A Eco CZ s.r.o.	Šlechtitelů 21, Olomouc
25	Honeywell Aerospace Olomouc, s.r.o.	Nádražní 50, 783 66 Hlubočky - Mariánské Údolí
26	HOPI POPI, a.s	Sokolovská 80/4, 772 00 Olomouc
27	Hopr Group a.s.	Nešverova 683/2, Olomouc
28	Hydrosystem project, a.s.	Kosmonautů 6a, Olomouc
29	IDOP Olomouc	Řepčínská 82, 779 00 Olomouc
30	IntellMed, s.r.o.	Šlechtitelů 21, Olomouc
31	Koyo Bearings Česká republika, s.r.o.	Pavelkova 253/5, 779 00 Bystrovany
32	Mapro spol. s r.o.	Bystrovany 211, 779 00 Bystrovany
33	Medkonsult	Balcárkova 8, 779 00 Olomouc
34	MERIT GROUP a.s.	Březinova 136, Olomouc
35	MOLPIR GROUP CZ a.s.	Železniční 469/4, Olomouc
36	Mora Moravia, s.r.o.	Nádražní 50, Hlubočky - Mariánské Údolí
37	Mafraprint tiskárna	Pavelkova 7, Olomouc
38	Moravské potravinářské strojírny a.s. Olomouc	Dolní Hejčínská 47/25, Olomouc
39	Nanomat, s.r.o.	Šlechtitelů 21, 783 71 Olomouc
40	Nanotrade, s.r.o.	Mozartova 178/12, Olomouc
41	NAPRO s.r.o.	Hamerská 624/19, Olomouc
42	Nestlé Česko, s.r.o.	Tovární 11 - 13, 772 51 Olomouc
43	Novotisk, s.r.o. Tiskárna Olomouc	Šlechtitelů 6/636, 772 11 Olomouc
44	OK Design, s.r.o.	Holická 47, Olomouc
45	OL TRANS CZ, s.r.o.	K Mrazírnám 1193/11, Olomouc
46	OLMA a.s.	Pavelkova 18, 779 00 Olomouc
47	ProMinent Dosiertechnik, s.r.o.	Sobieského 1, 770 10 Olomouc
48	SeniorAutomotive Czech s. r. o.	Průmyslové 9, Olomouc
49	Schiebel s.r.o.	Holická 31, Olomouc
50	Sigma Group, a.s.	ul. Jana Sigmunda č. 79, 783 50 Lutín
51	SIGMA Výzkumný a vývojový ústav, s.r.o.	ul. Jana Sigmunda č. 79, 783 50 Lutín
52	SIWATEC, a.s.	Tř. Svobody 43/39, 771 11 Olomouc
53	Skanska DS a.s., závod Olomouc	Pavelkova 1133/6, Olomouc
54	Smurfit Kappa	Průmyslová 779/18, Olomouc
55	Spolpharma	Hněvotínská 56, 779 00 Olomouc

id	Company Name	Address
56	Tenzováhy	Brněnská 82, 779 00 Olomouc
57	TOS Olomouc, spol. s r.o.	ul. Tovární 1180/30, 779 00, Olomouc
58	Vision Praha, s.r.o.	Hodolanská 35, 772 00 Olomouc
59	WANZL spol. s r.o.	Hněvotín 333