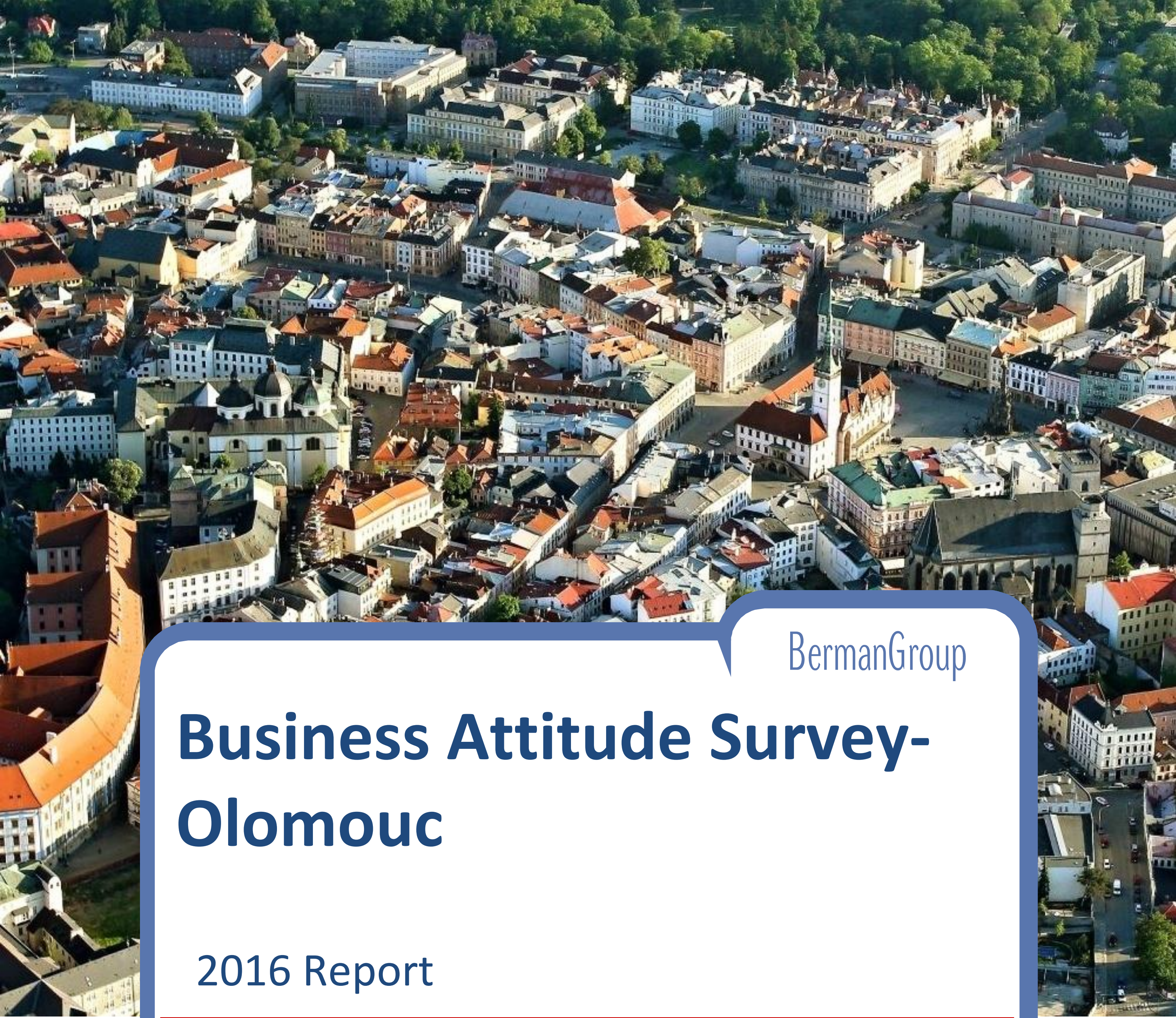

BermanGroup

Business Attitude Survey-Olomouc

2016 Report

City of Olomouc

- Client: **City of Olomouc**
- Contractor: **Berman Group**
- Date: **October 2016**

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2 Introduction and Methodology

The Business Attitude Survey whose results we are hereby presenting is a follow-up to the surveys that have been performed by the City Office on regular basis: every two years among the major businesses of Olomouc since 2000. Berman Group interviewers in cooperation with OK4Inovace association completed 37 interviews with business managers and directors, the companies being selected from a file of some 100 most important (largest) employers in industry and strategic services, complemented by a group of small companies with a growth potential. The interviews took place in the businesses where appointment was successfully made in September 2016.

In this respect, we would like to appreciate that vast majority of the contacted interviewees gave their helpful consent to the visit and interview. This means the public administration is responsible for the results not being neglected, and the views of business community considered when defining the strategic targets of the City of Olomouc.

3 Summarized Findings from the Survey

Positive findings considered most significant:

- ***Innovations, R&D.*** The share of companies trying to succeed in the market through innovations has grown. The number of people engaged in R&D and collaboration between businesses and academic sector (Palacký University) has increased.
- ***Performance and employment have grown.*** Companies are improving their performance and creating jobs, especially industrial entities have secured contracts for the future, almost struggling with local development limits.
- ***Investments.*** The enterprises invest regularly in modernization of technologies and reconstruction of properties. Overall volume of the investments under preparation is almost CZK 1.8 billion. 3 engineering companies from Olomouc have succeeded with applications for investment incentives at the Ministry of Industry and Trade.
- ***Cooperation with schools.*** Lack of workforce with the required qualification results in an active cooperation between the companies and secondary schools and colleges, and looking for new ways of professional preparation of graduates.

There were also negative findings:

- ***Permanent lack of qualified manpower in many specialisations.*** The local businesses have repeatedly criticized lack of qualified people in several professions and crafts. Dissatisfaction with the quality of secondary school graduates persists despite some positive exceptions.
- ***Insufficient supply of business properties.*** Development plans of some enterprises are threatened due to zoning plan issues and lack of developed lands.
- ***Transport infrastructure.*** Increasing traffic (partly due to the development of warehouses in the city) has led to dissatisfaction of business with transport accessibility. Some bottlenecks persist (specific roads, sidewalks, bridges).

4 Results of the Survey in Companies and Institutions

4.1 Basic Characteristics

35 companies were visited during September 2016, using a list of the biggest employers, complemented by a group of small and medium enterprises with growth potential, compiled in cooperation with the City Office and OK4Inovace association, based on the knowledge of local innovation environment. 2 enterprises filled in website questionnaire. The visited businesses were classified by their activities in 4 groups: engineering (14), construction (4), other industrial (10) strategic services and IT (9).

There were 12 joint stock companies, 23 limited liability companies, and 2 business units of foreign corporations. Twenty-four of the interviewed have headquarters in Olomouc, while thirteen entities are (mostly) manufacturing plants with HQ elsewhere in the EU (5), the world (3) or another place in CR (5).

Based on the respondents' answers to the questions related to corporate vision, strategy, and competitive advantage sources, the following categories were identified by the level of their aspiration for leadership in global market:

1. Leader (4): company aspiring to set the trends and changes in the global market.
2. Pioneer (7): invests in searching for and trying new solutions in the market, successful in a narrowly defined field.
3. Follower (9): company aspiring not to lose sight of the leaders and be able to swiftly react to their initiatives. This company is a direct competitor of the Leaders, focusing on the ability of fast response to their actions.
4. Optimiser (17) has no aspiration to play a leading role in global market changes. This company performs necessary changes, focusing on optimisation of its products, their properties and manufacturing processes. These are very often production plants of multinationals.

4.2 Barriers of Business Development

Traditional question asked in every survey is aimed at what prevents the businesses from further development, and what are the most serious problems. The weight of individual factors has been changing throughout the Czech Republic since 2000, and these changes provide more useful information than their mere sequence of importance, as we can see in charts no. 1 (comparison with previous surveys) and no. 2 (this year's results by individual categories).

The most serious and frequently mentioned issue is - for the second time - the availability of qualified workforce, complained about by 68 % of the interviewees (80 % in machine engineering, the least in public administration). Therefore, we have reserved an entire section below for the topic.

The second place is taken by "legislative limitations" (41 % of the respondents, more often in services and engineering companies). This is a complex and wide issue including for instance:

- Practically the highest level of taxes in Europe (incl. contributions to health care and pension schemes), and rather paradoxically even the Great Britain might become a cheaper country after Brexit.

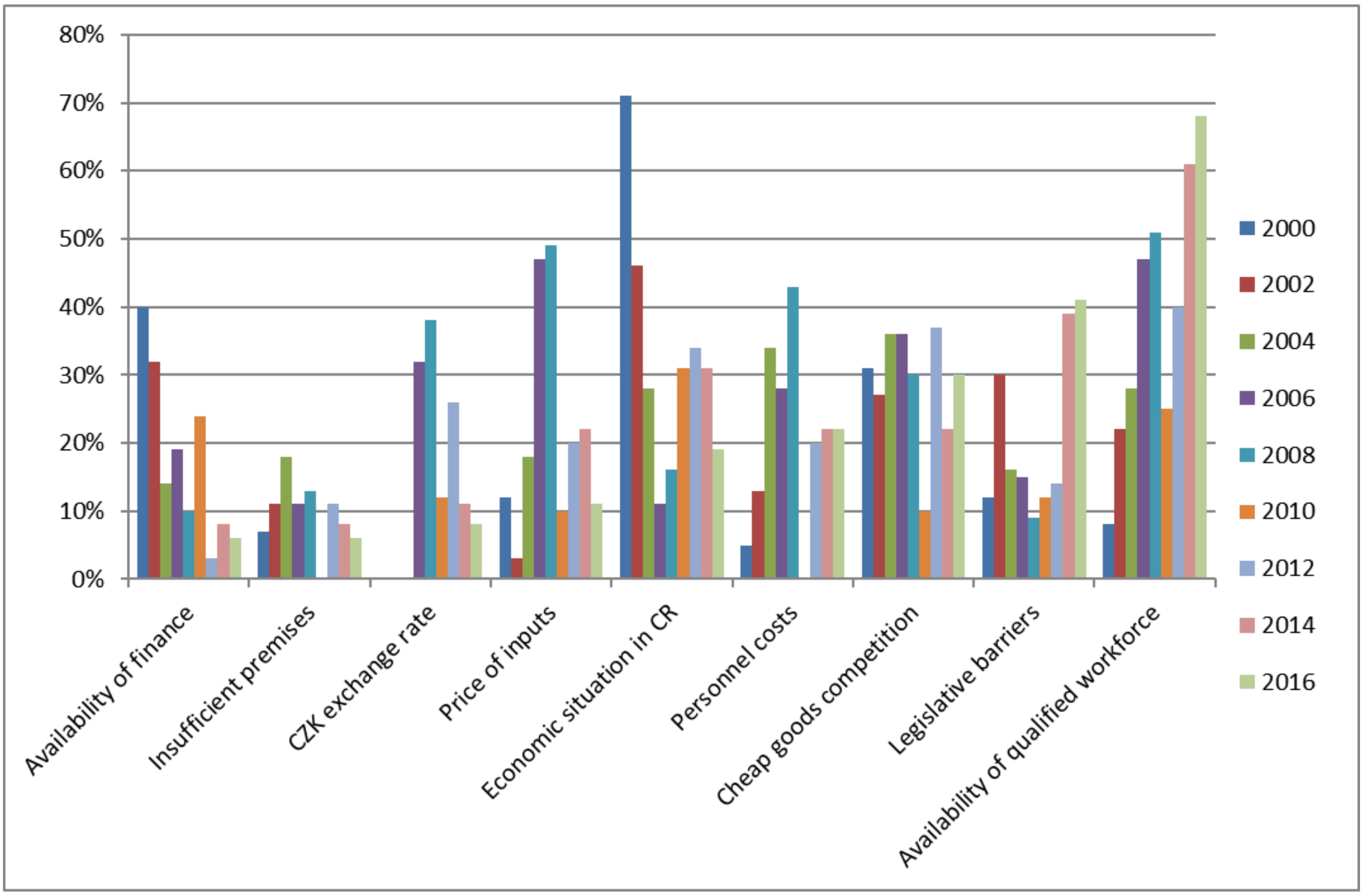
- Legislation is a huge barrier (specifically in relation to nanotechnologies), and is extremely difficult and costly to deal with.
- Legislative problems are getting worse all the time: EIA, Building Act amendments, public procurement laws – every new amendment means 1-2 more months to the proceedings, instead of making it shorter as the politicians promise.

There is "competition of cheaper and poorer quality goods" on the third place with 30 % of answers, most frequently mentioned by engineering companies. It is interesting to comment on the structure of answers by the leadership aspiration – Pioneers suffer the most, while Optimisers almost feel no problem here.

One consequence (pleasant for the employees) of the lack of manpower is the necessity to increase salaries. However, this means some businesses (22 % of the respondents) see the personnel cost as a serious issue, and especially with the multinational affiliates this can lead to moving the affected jobs elsewhere.

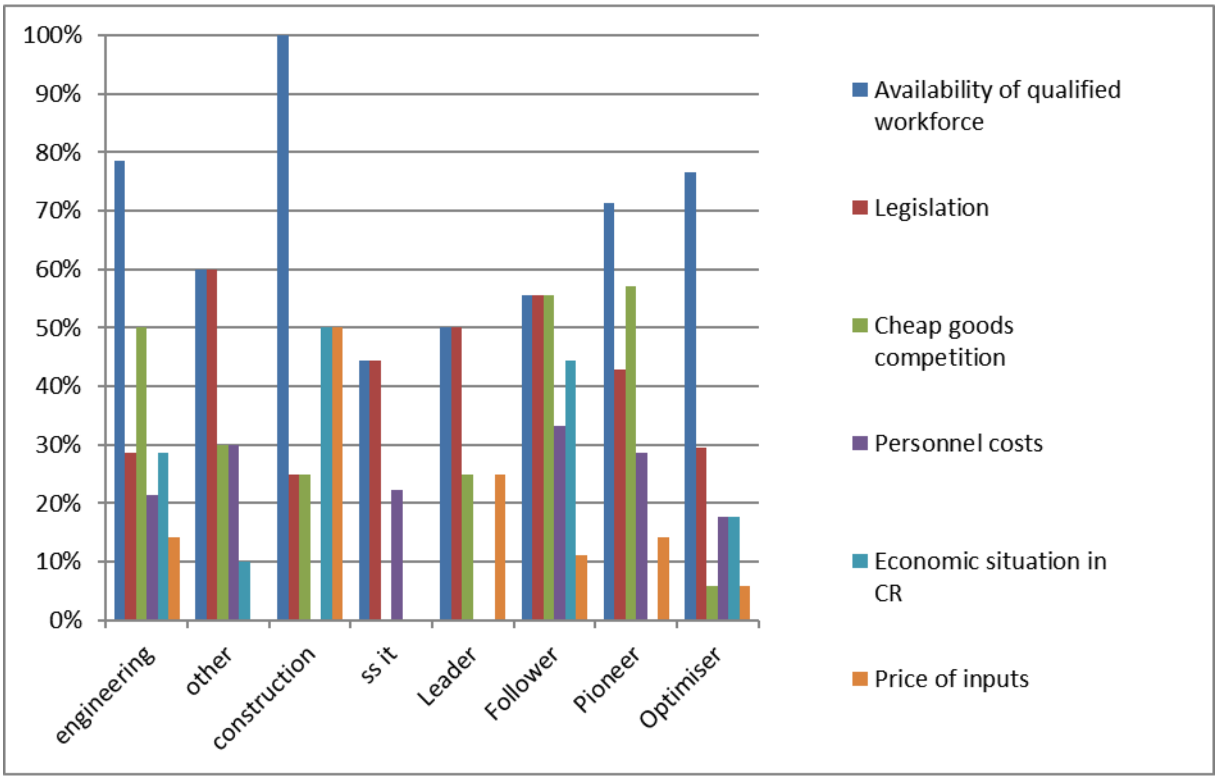
The factor of "economic situation in CR" takes only the fifth place (19 %). This is a marked drop compared to the previous surveys – 70 % of the respondents chose this option in 2000, and after the crisis in 2010-2012 the number of businesses suffering because of overall economic situation going down. More often than not these include the businesses relying on state investments in infrastructure, taking the brunt of budget cuts in this area.

Chart No. 1: Development Barriers (2000 – 2016)



Of the other barriers it is worth to mention perhaps the price of inputs in construction, or change of consumer demand in engineering, but this applies to individual businesses, and considering the number of respondents we can derive no conclusions. Quite a number of the other presented problems was mentioned once or twice, be it relations with government authorities, distance to markets, availability of financial resources or business properties[1].

Chart No. 2: Development Barriers (2016)



The comments below may illustrate the situation further:

- "50 % of our contracts are for public sector, where the level of investment has dropped considerably, it is very difficult to succeed in a tender, therefore we are expanding our portfolio of services to compensate. We strive for better management, innovative services and corporate governance."
- "The state just 'crossed out' investments between 2015 and 2016."
- "Problems with unfair competition - businesses not bothered by laws can compete with lower price."
- "EU subsidies have distorted the conditions, for example by allowing poor businessmen to acquire top-notch technologies."
- "The new electronic registration of sales is a new barrier in itself."
- "We are just an affiliate; the parent company is responsible for strategic issues."

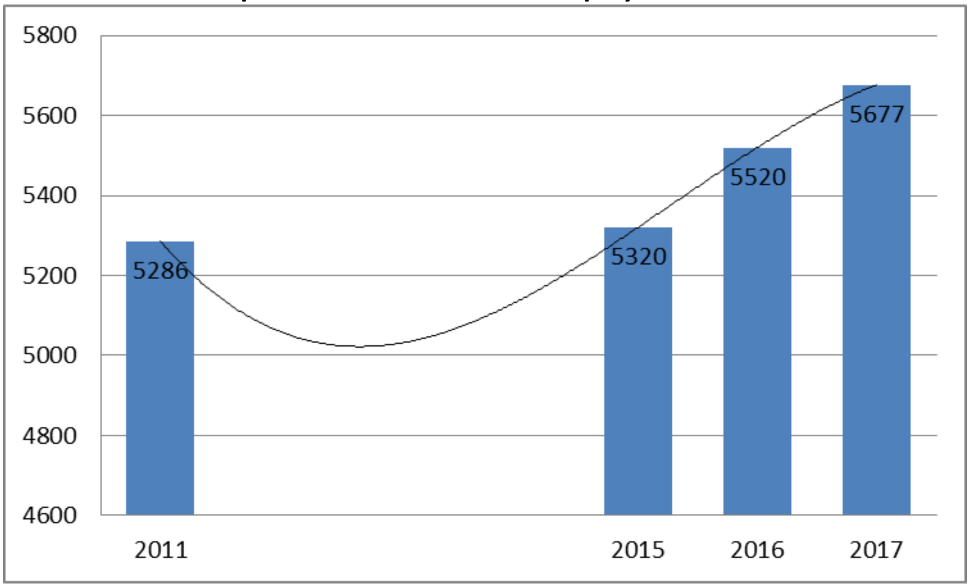
4.3 Workforce and Employment

There were about 5,520 employees in the interviewed companies in September 2016. The Chart no. 3 show growing employment trend, expected to continue in this and the next year. However,

[1] This situation can get worse in the future – see section 4.6.

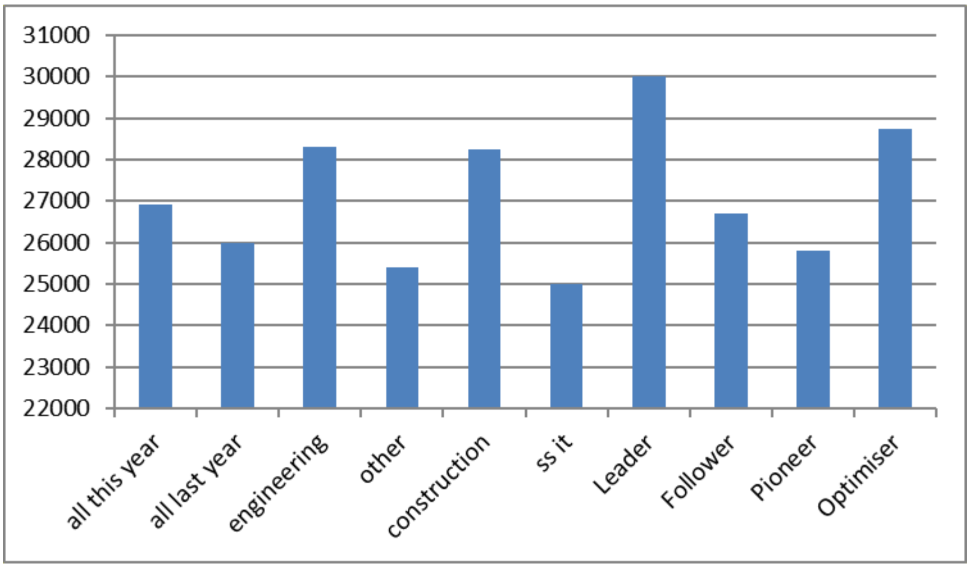
individual companies have experienced different developments, and six of them have laid off 5 and more percent of their workforce in the last 5 years. There are ten other companies that have compensated for the decrease with new jobs, and the balance is markedly on the plus side. To provide a more specific idea: industry was growing, and construction falling. The situation in services was under negative influence of staff cuts in one large company.

Chart No. 3: Development of the Number of Employees



Average wage in the period 2011 to 2015 was established on the basis of annual reports (median for 2013 was CZK 26,900 in 2013, which means increase by 4 % from 2011). Average wage this year - according to those managers who provided the data - is about CZK 28,000, which corresponds to the most common reply that "wages have increased by several per cent". The comparison provided in Chart no. 4 shows that on average the best payers are companies with leader aspirations, among industries engineering and construction.

Chart No. 4: Gross Monthly Wage Median



84 % of all the enterprises (including all those with 50 and more employees) feel the lack of manpower with key skills and competences. We see no improvement from the last survey, and the

list of missing professions (technical, sometimes combination of technical qualification and language skills) has not changed either. More and more often staff with the highest qualification is missing (top management), and the problem of age structure of shop floor operators and technicians is getting more urgent, as the 1950s generation is going to retire. Let's see some actual comments to illustrate the situation:

- “Like many other engineering companies, we struggle with the lack of workforce. Recently the situation has reached zero point; we have to take on insufficiently trained, or completely unqualified people, and spend time and money to train them.”
- “With our technology and capacities we could generate 20 % higher turnover, but our staff is not willing to work weekends - we’ve had the problem with manning weekend shifts for a long time.”
- “Poor language skills – English is getting better, but nobody speaks German.”
- “Low professional qualities of the graduates, Olomouc IT school specializes in math, producing scientists, who are useless in practice (for applications etc.).”
- “The problem is education, we need designers, programmers and toolmakers. We need to improve cooperation already at elementary level.”
- “The few graduates we get often run away after 2-3 months. 2 out of 10 people we hire take root – it is enough to be at least a bit manually and technically competent, education is of little importance, we teach them everything.”
- “There are serious problems at the Secondary Polytechnic School, with only 8 bricklayers and 7 carpenters, of whom about half are useless; there is a general lack of craftsmen with brains, meaning there will be more and more foreigners working on our building sites!”

It would be only natural to solve the lack of qualified people directly with schools, both secondary and universities. 60 % of the respondents have cooperated directly with regional schools, and half with universities outside the region. Good collaboration was mentioned several times with the vocational school in Lutín, Secondary Polytechnic in Olomouc, Sigmund secondary and machine engineering school, civil engineering in Lipník, one grammar school in Olomouc, and Palacký University (UPOL), Brno University of Technology, Czech Technical University in Prague, UTB Zlín and University of Pardubice. Examples of good practice:

- Internship and scholarship programmes, site visits, targeted recruitment;
- Various types of support for vocational school students, unfortunately graduates are not inclined to work in construction;
- Long-term internship possibilities, study and training visits etc.;
- Job exchange, labour trade fair;
- Diploma theses, trainee programmes, UPOL lectures;

On the other hand, there is also opposite experience:

- “The bricklayers and carpenters leaving schools are complete disaster, and the Ministry of Education just doesn’t care that we have no adequate replacements. Our foremen assist during final exams at vocational schools, trying hard to identify the better students, but the efficiency is rather low.”
- “We’d like to cooperate with UPOL, but their IT major is too much math, no focus on applications, they teach things invented 20 years ago.”
- “Our problem with vocational school graduates is poor quality and lack of any interest.”

- "We need ready professionals, we don't have capacities to solve problems with schools, staff reserved to deal with these issues. Graduates lack experience, the first two years they are pure liability for the business."

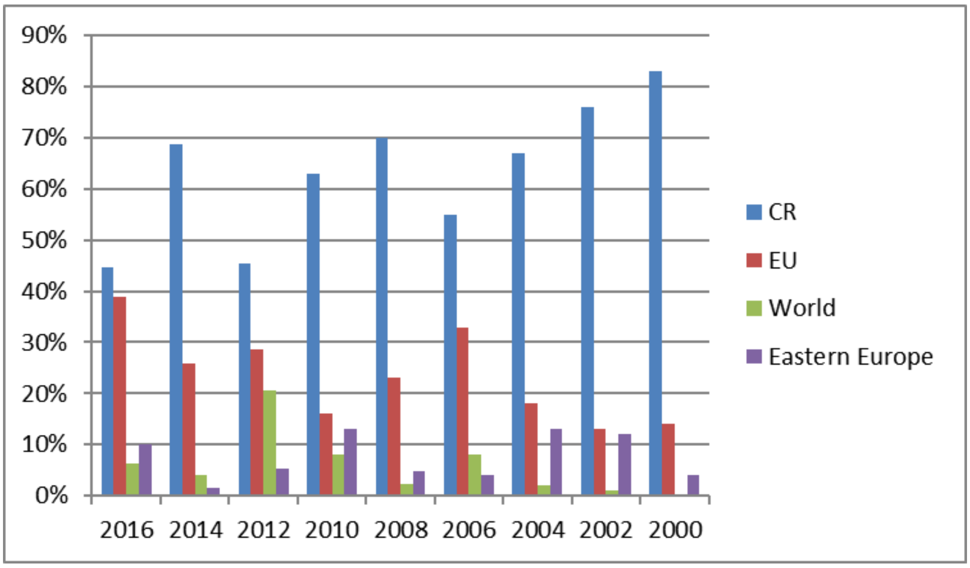
We should add here that unemployment in the district is more than 6,000, and the Labour Office succeeds regularly to fill the available vacancies with job applicants. The reasons why this ratio is not higher have been known for a long time – high share of the unemployed in distress proceedings (not motivated to work), with disability, "happy" with the existing welfare system. The qualification structure of the unemployed (majority administrative staff, or no qualification) does not match the companies' needs either. And yet there are ways to employ more people currently in LO files: commuter allowances, or wider offer of part-time jobs for those who cannot work full time for health or other reasons.

4.4 Economic Performance and Export

One of the most important characteristics describing the success of businesses is their economic performance measured by revenues, and the ability to achieve their goals in foreign markets. The sales figures have been collected in the annual reports and at justice.cz server, sometimes verified during the interviews. Aggregate performance of the interviewed businesses was CZK 15.8 billion in 2016, expected to grow up to CZK 16.4 billion in 2017. Sales per employee thus reached almost CZK 3,000,000 (2,976,000 to be exact). Improved economic performance is expected by 25 interviewees in the next years, while 8 foresee stagnation (4 did not comment). The highest share of "stagnating" ones is in the Optimisers' category, which confirms that innovative enterprises with ambition to find new solutions are more optimistic. On the other hand, the Optimisers achieve the highest performance per head (up to CZK 3.5 million this year), which is another proof of how good the technicians and workers are in productive manufacture of things invented by others.

Chart no. 5 shows that the interviewed entities are rather export-oriented, considering the comparably high share of construction and service companies. And yet 17 businesses (almost all the interviewed industrial companies) export minimum 50 % of their production, most frequently in the European Union. The most important foreign markets are Slovakia (14, also thanks to constriction and IT firms), and Germany (9). The Great Britain (4), Russia (4) and Poland (3) were mentioned more than twice.

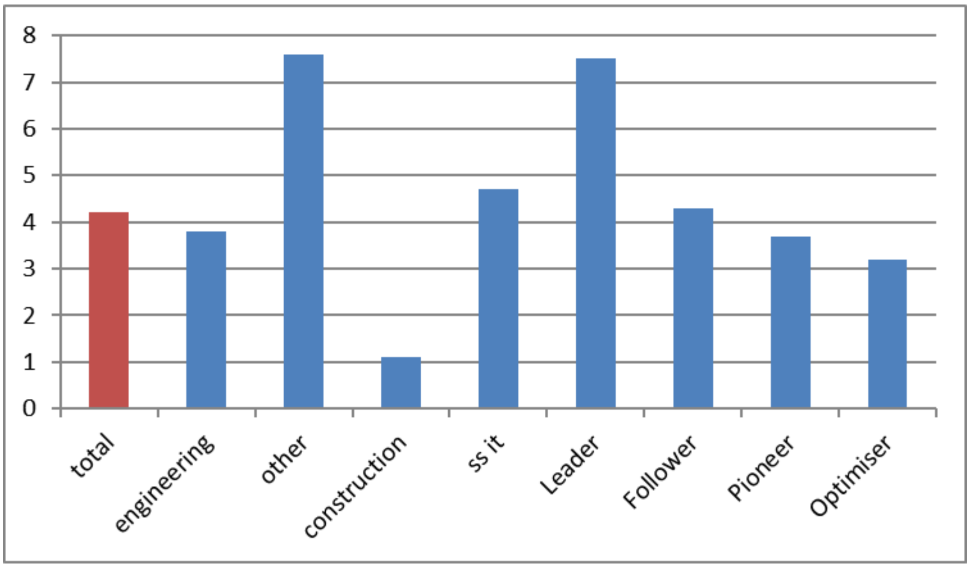
Chart No. 5: Export Orientation



4.5 Innovations, R&D

Own development and innovation capacities represent ever more significant competitiveness factor for the businesses. Even though namely the smaller businesses were picked with regards to their "innovative" potential, total number of 31 companies (84 %) with development personnel is quite surprising. 230 employees deal with new products, production processes, or design/technology modifications to meet specific requirements of clients. As shown in the Chart no. 6, the highest share of R&D staff is in the businesses with Leader aspirations, while there are Optimisers on the other side of the scale, which corresponds to their ambitions and needs.

Chart No. 6: R&D Staff per 100 Employees



Despite the frequently mentioned "inconvenient" specialisation of Palacký University, this survey has found 6 businesses cooperating with the university in research and development, which is the same number as with the UT in Brno.

Innovation activities bring improved quality of products or services (for 73 % of respondents), extended portfolio of products or services (41 %); market share expansion (30 %), and better production flexibility / cost efficiency (both 19 %). This evaluation does not completely apply to the Optimisers - for them reduction of labour costs per production unit has 35 % importance, while market expansion 18 %.

Excessively high costs are the most frequent limiting factor, stated by 51 % of the respondents (and all the Leaders). It is followed by the lack of qualified personnel (41 %), inflexible regulation and standards (24 %), and excessive economic risks (16 %). It seems that both EU and MIT programmes aimed at the support of innovative businesses and technology transfer can successfully reduce negative impact of the first two factors.

4.6 Properties and Investments

Vast majority (73 %) of the interviewees own their properties, but 13 (35 %) replied they'd need facilities to expand their production. According to the respondents there soon will be demand for at least 50,000 square metres of workshop floor. At the moment such an area is not available in

Olomouc, and the businesses are willing to contemplate brownfield utilisation, or even developing elsewhere. And there are companies (usually Japanese) striving for intensive development, i.e. better use of the existing premises.

Chart No. 7: Properties and Investments

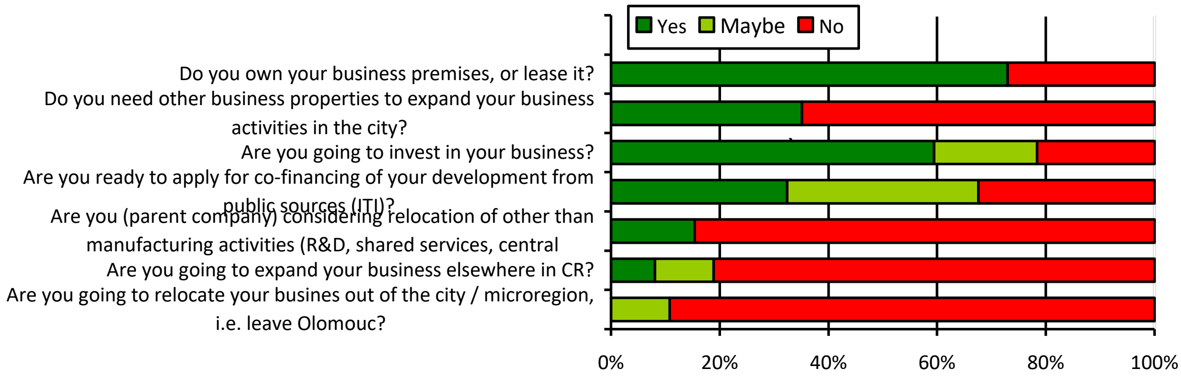


Chart no. 7 further confirms readiness for investments; 32 respondents (60 %) are preparing, and other 7 (19 %) considering investment. However, in many cases this includes regular / continuous investments in technology modernisation, or reconstruction of properties, whereas number of companies have already competed large investments. Overall volume of prepared investment is almost CZK 1.8 billion, to bring at least 210 jobs, whereas problems with workforce availability prevent even higher figure. Machine engineering companies are going to invest the most – their plans equal almost 25 % of annual sales, while in other groups it is about 3 %.

Two of the companies with HQ elsewhere (or parent companies) consider relocating higher added value activities to Olomouc. Solved zoning plan issue, good cooperation with UPOL, and welcoming approach of the local government are factors that may help, even though the final decision will not be made in Olomouc.

Three businesses are going to expand elsewhere in the Czech Republic and other four are contemplating it, common reason being distance to customers or looking for new ones (most often in Prague). Four companies are forced to consider termination of their business activities in Olomouc region, as they have major problem with the zoning plan and transportation infrastructure – topics where the City Hall can help.

Deeper involvement in local value chains, and increased share of regional suppliers can lead to better regional anchorage of the businesses. However, this path is pursued only by 5 (14 %) of the interviewed companies, specifically planning to cut the logistic expenses. Most others are not preoccupied with the origin of their suppliers, interested only in the quality of goods or services for a favourable price. Support in the field of supplier chain relations, e.g. organisation of various match-making events for regional vendors and customers could be the way to promote local enterprises, and help the large corporations to improve their competitive edge.

4.7 Examples of Cooperation with the City Hall

Replies to the question: "What activities should the City Hall perform to help you in your business" were – as expected – mostly related to the workforce issues. Here are some of the more inspiring suggestions:

- Support for technical education (this has been a recurring motif in Olomouc BAS exercise).
- Well-equipped technical facility at Palacký University, cooperating with Brno or Ostrava technical colleges, could open a study programme for the students leaving local technical schools, allowing the enterprises to accurately define their educational needs. The graduates could have Bc. or other technical degree.
- Focus on human resources, develop labour market, so that the local businesses have sufficient pool of employees, not forced to overpay. Invest in the labour market and human capital improvement. Graduates are useless, no experience, it is necessary to train them for years. Any support in the field of human resources would be welcome, namely with the graduates.
- Support of educational facilities, e.g. meetings with the staff / pupils of elementary schools in engineering companies, or promotion of technical specialisations.
- The Labour Office in particular should do more, support graduates and re-qualification programmes, promote awareness.
- Create new IT study / work programmes for composite materials, involve the businesses in IT education.

Transportation infrastructure was the second most important issue:

- Bicycle path all the way to Lutín. About 2,500 people work there, and several cyclists have died commuting to the premises.
- Improve the transport accessibility, deploy smaller buses, not forcing people to transit.
- The City Hall is trying to push trucks out of the city out to the circular road, but our costs consequently increase – possible exception for local businesses?
- Improve transport services (direction Šternberk, tangent line).
- More airlines from Brno and Ostrava to major European capitals and hubs, e.g.: London, Paris, Frankfurt, Amsterdam, Vienna, Moscow, Zurich.
- Complete the sidewalks in industrial zone – the situation is dismal, somewhere pedestrians must walk on the busy roads.

The zoning plan (ZP) is a major issue: businesses demand properties, and some of them mention regulation of the number of warehouses:

- We need to return the corporate premises in the City zoning plan into mixed manufacture category.
- Is it the right development direction, to make the City one big warehouse? The City Hall should try to attract producers that in turn lure more suppliers, or use the existing ones, and not warehouse operators – there have been too many lately! 5-metre height limit would help to prevent "over-warehousing" of Olomouc. For instance Kaufland warehouse has improved nothing, only resulted in a major traffic load!
- We need areas reserved for industrial premises in ZP, there are few, they are expensive, and easily filled by large investors.
- The City Hall should be more on the local enterprises' side, support the existing operations and defend them against people who have recently bought family houses near the industrial zone, not even knowing there were manufacturing facilities nearby.
- Support the development of other business parks (2 or 3 no problem).

Finally, some general topics related to business support were mentioned, such as:

- Reduce business property tax.
- Make the investment incentives more attractive, create conditions / facilities for investors, help with qualified workforce, infrastructure, which should result in more customers.
- Promote the local companies, e.g. in the City Hall periodical; help with PR related to nanotechnologies; organise more common events for entrepreneurs.
- Promote tourism in the city.
- Better communication with the business community; even though there are legal aspects to consider, public procurement proceedings should be *attentive to the origin of tenderers*.
- More public tenders, improve IT, consider quality, not only price in public procurement.
- Our opinion is that government authorities should not intervene in business and harm us.

The interviewees were asked about specific example (positive or negative) of interaction / cooperation with the City Hall. Frequent reply was sponsorship of beneficial events ("we co-finance balls and culture, we help sport and cultural activities, we support ice-hockey, football and theatre, and other own initiatives"). Examples mentioned more than once: cooperation with the Concept and development department at the City Office ("we agreed favourable terms and conditions in the industrial zone, the negotiations were smooth and interesting, we are satisfied"), with public transport enterprise, Job exchange, generally welcoming approach (innovation vouchers, marketing subsidies). Another positive fact is that some companies appreciated the reaction to their specific problems expressed in previous surveys (e.g. improved public transport connection to IZ, infrastructure improvement thanks to IZ, everything "just around the corner").

Negative experience mostly related to the new zoning plan, specifically: "The City Hall doesn't treat us well. Business conditions are worse, the lands were re-classified from mixed manufacture to mixed residential, which can result in business leaving the City," or "The draft of new ZP draws connection road through our premises to Přichystalova street". Other businesses experienced too late information on closed roads, which caused problems with the supply of raw materials and products. There are frequent complaints about the length of building proceedings and the related red tape.

Some companies haven't had first-hand experience, but they develop their projects (purchase of municipal land, own properties, transport infrastructure), where they will need a welcoming response from the City Hall.

And finally, one *sigh*: "The local bus stop bears our name, but we had to build it ourselves..."

4.8 Overall Impression

The respondents were asked to conclude with a description of the most relevant strengths and weaknesses of Olomouc City. The most repeated positive feature was the presence of Palacký University (as a source of workforce, research, or clients for e.g. building companies). Typical responses:

- Enough students at pedagogical faculties, studying math, potentially could be re-made to technicians.
- Presence of UPOL is crucial for research and development. The university has an ideal size and strong department of biology.
- Industrial zone, university and the Science and Technology Park, potential at intellectual level, the city is growing.
- New manpower can be found thanks to the university.

- Concentration of science institutions, university and STP.
- 25 thousand university students, many of them will stay and need housing.

Other strengths traditionally included location, history and present, quality of life, qualified people, good business environment, accessible services and offices, e.g.:

- Good cooperation with the City Hall, good public transport and accessibility for the employees.
- Stable business environment, no substantial changes.
- Geographic location in Central Moravia with decent transport infrastructure.
- Transport services, high level of business infrastructure.
- Labour costs lower than in Prague, lower wages favourable for business.
- Sufficient workforce, some even qualified, thanks to earlier unemployment we've had no problem with employees.
- Representative city, also for businessmen.

On the other hand, negative features (traditionally) included the lack of necessary qualified manpower and non-existence of local technical university:

- Available workforce – there is no unemployment, no people, especially in technical professions.
- Regional technical university is missing, and the capacities of local technical secondary schools are insufficient. Graduates are not prepared to work in automotive; progressive IT specialists, such as application developers, are missing.

Other complaints related to transport and business infrastructure:

- There is no highway to the west, impossibility to park in the centre, major highways full, e.g. Olomouc – Šternberk.
- Poor transport infrastructure – bridges.
- Infrastructure in general. There is a new industrial zone, but the roads around haven't been adjusted. It is impossible to drive towards Brno in the afternoons.
- Poor communication with Transport department regarding road works.
- Lack of spacious industrial zones, business parks would be better developed in the form of ownership, not lease, lack of suitable brownfields.

Finally let us publish some interesting comments:

- Think about a long-term development strategy for the city. This is what we miss in Olomouc; for example Brno has it. There is no sophisticated action plan with measurable objectives.
- Lower wages mean lower purchasing power, which reflects badly on SME development.
- Olomouc Region is afraid to invest (build) after all those scandals, i.e. nothing will change before the elections, then the usual three-month calm, and fingers crossed for improvement with the new political representation.
- Few companies with decision-making powers, few manufacturers.
- Communication with business community could be more pro-active.

- Living costs are quite high, and average income does not match them. New apartments for students are built, even though not many of them stay.

And yet there was quite a number of companies claiming they did not see anything negative in Olomouc!

4.9 Future Prospects

Replies to the question "What is your corporate vision - where will your business be in 5 years' time?" were as follows:

2 companies (both Leaders) want unlimited growth, building up a business with truly global outreach. 10 businesses plan growing performance and number of employees, but not exceeding certain boundary, after which it is not practical to be active in one place. For 19 companies the most important is growth of performance and profit, while the number of employees should not rise much. On the contrary – new technologies should lead to higher productivity under the same conditions. And last 6 respondents do not decide in these matters – usually manufacturing plants of foreign corporations.

Thus, the overall impression of the future in the visited companies is positive. However, it will be important:

1. To develop competitive strengths of the existing industries based on innovation, R&D results, and technology transfer, at the same time

2. Attracting new investors, best in business services sector – considering the focus on humanities of the local university (including the wide range of foreign languages), insufficient present capacities of technically skilled workforce, qualification structure of the unemployed, and excess of administrative staff, insufficient supply of manufacturing properties, and limited possibilities of industrial development on agricultural soil of high quality.