ACESSION TO THE EUROPEAN UNION: ADVANTAGE OR DISADVANTAGE FOR CZECH COMPANIES?

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Abstract. In this paper has been studied effects of accession to the EU on Czech companies which were selected and grouped according to 5 parameters: region, legal form, operation area, business sector and size of the company defined by number of employees. Questionnaire containing 14 questions have replied in total 146 respondents. It is possible to conclude that accession to the EU brought more advantages to big global joint- stock companies than to small regional companies which were mostly negative and claimed worsening of business results due to European integration. Most of the 146 respondents asked via questionnaire containing 14 questions did not agree with acceptance of Euro, while those who agreed had been estimated 2020 as ideal year to access Eurozone. Companies in quaternary sector were mostly positive on the opposite to the companies in tertiary sector which were negative. Companies in Prague and Central Bohemia were much more positive towards EU benefits than in rest of the Czech Republic regions.

Keywords: EU, Czech, entrepreneurship, parameters, Euro.

JEL Classification: P16, F55.

1. Introduction

On 1st May 2004 became Czech Republic (CR) valid member of the European Union (EU). Expectation before access has been different. It was expected that due to institutional and legislation changes which Czech government committed to keep, economy will change significantly which will influence entrepreneurs in Czech Republic and their behaviour. In the first years after the EU accession, the Czech economy experienced an unprecedented growth since the beginning of the economic transformation at the beginning of the 90s (Jonas, Bulir 1995). The growth was accompanied by an increase in labour costs and by the strengthening of the Czech crown. The impact of the crisis of 2008–2011 has been relatively limited. The major reason is the conservative approach of Czech banks in the pre-crisis period. As an export-oriented economy, however, the Czech Republic has been very sensitive to the consumption trends of its EU neighbours, particularly in Germany (Jacobsen 2002). The export to Germany dropped almost by

10% in 2009 in comparison with previous years and the economic recovery in Germany in 2010 was reflected in the growth of Czech exports. As an EU member, the Czech Republic has gained a potential to influence the regulatory framework of the internal market as an active player, in contrast to the position of a passive recipient of acquis in the pre-accession period. The experience of the first post-accession years has demonstrated with great clarity the importance of defining and pursuing national interests within the EU structures. It is obvious, that not all changes related to access of Czech Republic to the European Union has occurred only in 2004 which is year of access to EU. It can be said that some changes had been happening already since establishment of Czech Republic or even further since transformation of Czech economy to market economy (Cecchini *et al*. 1998). However, there are existing changes and their consequences which were caused by borders opening and accessing one market of European Union. First negotiations about access of Czech Republic to EU has started in 1990 and hence this year can be considered as beginning of all changes related to access of Czech Republic to EU (Holub 2003). Application of access to EU has been submitted by Czech government on 17th Jan 1996 (World bank 1999). Since this year has been existing requirements on harmonisation of law, account and tax system, duties, protection of consumer etc. Adaptation to Czech law to European Union law has touched Czech entrepreneurs in several ways. Preparation for access has helped to improve economic environment (Ministerstvo pro místní rozvoj České republiky 2014). On the other side, it has forced companies to major investment to reach unification with new law and regulations. Also, increase of indirect taxes influenced in some areas demand.

Main goal of this paper has been described and analyse perception of Czech entrepreneurs, executives and managers of companies from different regions, legal forms, economical classification of business area or number of employees, regarding accession of Czech Republic to the European Union and its consequences on entrepreneurship area.

2. Scientific literature review

While EU integration was much desired and greatly anticipated goal for most of the Czechs, it also called for many fears and concerns. Among them was fear that EU membership could harm competitive position of Czech Republic in global economy, it would lead to higher unemployment and influx of foreign workers, higher prices and inflation, undermine social cohesion. There was also fear it will be costly and net drain on Czech budget. However, after 12 years it has shown up that this fear was unfounded.

Economic growth. Accession has had positive impact on the performance of Czech economy, as it continued to grow and slowly catch up with EU 15 in terms of per capita income, standard of living, and changes in the structure of consumption. Supported by increase of export and FDI, since 2000 GDP of Czech Republic has consistently growth at higher rate than EU 15. Czech GDP reached 4.5% in 2004 and Czech economy grew

by more than 6% for next 3 years, which was much above EU average growth. However, after the global crisis growth have been slow down.

Unemployment. Despite predictions of huge unemployment rate increase, it did not change dramatically, in fact it declined. Before accession unemployment was reaching level 7–8%, in 2004 it reached 8.3% (compare to EU average 8.5%) and it was gradually decreasing in following years. In 2008 unemployment fell to historically lowest value of 4.4%. Employment rate reached in 2008 66.6% exceeding EU average of 66.3%. Unemployment increased in 2009 to the level of 6.7%. By December 2008 nearly 285 000 foreign workers employed legally in Czech Republic which is more than 250% increase from the 108 000 foreign workers in 2004. The biggest amount of workers were coming from Slovakia (39%), Ukraine (29%) and Poland (8%). However, in spite of this increase, immigration was not perceived as a problem by Czech society.

Prices and inflation. A major concern in 2004 was that domestic prices for goods and services would rise sharply after accession. Because of the gap between price levels in the Czech Republic and the EU 15 (average price level of CR has been 52% of the average price level of EU 15), there was a pressure for nominal convergence. It was even more so because of geographical proximity of the Czech Republic to more economically developed countries of Germany and Austria. Gradual increase of prices with convergence to global prices started already in 1990. Relatively high prices could be found in equipment for investment, passenger vehicles, communications and clothing. On the other hand, services such as housing, education or health care have been remained at generally low levels. Despite expectations prices did not increase significantly after accession. Prices were growing gradually and in 2008 were in average 40% higher than in 2005. However, this trend was consequence of higher global energy and food prices the EU integration. Increase related to the EU accession can be linked with tax harmonization as strategical goal of EU has been indirect tax harmonization (VAT and consumption tax). VAT tax has been fixed to 15% as a minimum. Direct tax such as income tax have not been harmonized. Tax legislation have been received in 2004 and touched were also alcohol, cigarettes and petroleum gas products. Total estimated impact of tax harmonization has been one third lower than estimated by Czech National Bank. There was not significant impact on growth of inflation.

Czech Republic and EU budget. EU budget increase several times in subsequent years. In period of 2007–2013 it was allocated for Czech Republic nearly 27 bil. Euro in cohesion policy funds which was 3rd highest among all memberstates and highest in per capita terms. As a results position of net recipient has improved. Cumulative positive balance has reached 3.1 bil. Euro mostly from structural and cohesive funds.

Economic convergence. EU membership entails the obligation of adopting Euro and joining Euro area. In the Accession Treaty which CR and other states were required to accept goal of EMU but they were not obliged to meet the criteria for entering Eurozone during accession. It was expected that memberstates could enter Eurozone only after

meeting necessary convergence criteria. While Czech Republic did not enter Eurozone it is required to implement steps that will help it to become prepared for joining Eurozone. Czech Republic is in longterm preparation phase and it needs to meet following 5 criteria during this phase: 1. Exchange rate stability defined in ERM II without devaluation and severe tensions and volatility; 2. A balance budget over business cycle, defined a a budget deficit not higher than 3% of GDP; 3. Manageable public debt defined as less than 60% of GDP; 4. long term price stability define as inflation no more than 1.5% higher than average of 3 lowest EU memberstates for last 12 months; 5. Stable long term interest rate defined as 10 years bond rates no more than 2% higher than 3 EU memberstates with lowest inflation. The most challenging criteria to meet for Czech Republic is sustainability of fiscal stence and structural deficit which was increasing relatively fast due to strong economic growth period.

Current literature and studies. There are existing many publications and studies regarding EU integration analysing economic impact and macroeconomy parameters, mostly published in 2014, 10 years after Czech Republic accessed to the European Union. However, these studies are focused on whole Czech Republic and not specifically on enterpreuership area. Czech Ministry of Industry and Trade is publishing annual reports of actual status of SME (small and medium businesses) based on collected analytical and statistical information. These studies are based on easily quantify economic parameters like GDP contribution, exports, employment in SME etc. However, study focused on subjective perception of parameters which are difficult to quantify like company culture, profit, availability of labour resources, administration and legislation improvements is in available literature missing. Companies studied in this paper were selected randomly but with condition of minimal existence since 2000 in order to be able to answer questions related EU integration with high relevance.

3. Methodology

Questionnaire based on Likert scale has been used as a key investigative qualitative technique to evaluate subjective perception of the respondents. All the answers from 146 respondents with response rate 2% have been summarized and given to Tables. Most significant results based on relations of the answers and 5 chosen parameters have been captured into Table for each question as well.

Statistical evaluation. Dependence and independence of 2 observed parameters is typically evaluated by Pearson chi- quadrat test and Fischer exact test. However, outcome of these 2 tests is the only decision about presence or unpresence statistically significantly relation. Nor one of them is able to quantify proven relation. Key parameters which help to quantify tightness of these relations are relative risk (RR) and odds ration (OR). By using these 2 parameters can be compared probabilities of occurrence for observed phenomenon in 2 different groups which are called experimental and controlled (Pagano, Halvorsen 1981).

Relative risk and odds ratio. Calculation of relative risk (RR) is comparison of probabilities of occurrence of observed phenomenon in 2 different groups experimental-experimental (P_1) and controlled (P_0). Final result is number which express how many times is probability of occurrence in experimental group higher than in controlled group.

Binomial testing. Except continual there are existing also discontinued categorical data where are the simplest example binary data. Binary data are described by binomial distribution as a base for statistics of binary data, confidentiality intervals and binomial testing. From Table 1 is obvious that evaluation of binomial variable lead to testing of null hypothesis of shares, where main target is evaluation of statements about parameter π binomial distribution which is reflecting probability of occurrence of considered feature in observed population (Zar 2010). Except point parameter π are important also:

– Confidentiality interval for parameter π.
– Test for parameter π against constant π_0.
– Test about parameter π in 2 different groups.

Table 1. Rules for rejection of H_0 for test for ratio of one selection according to chosen alternative

Alternative	$H_1 : \pi \neq \pi_0$	$\rightarrow \mathrm{Reject} H_0 \; if$	$|Z| > z_{1-\alpha/2}$
Alternative	$LOANS_{US\vert}$	$\rightarrow \mathrm{Reject} H_0 \; if$	$Z > z_{1-\alpha}$
Alternative	$H_1 : \pi < \pi_0$	$\rightarrow \mathrm{Reject} H_0 \; if$	$Z < z_\alpha$

4. Experimental part

Experimental part of the research is focused mostly on description and structure of the experiment, process of obtaining and analysing data, selection of key parameters of answers selection. Due to huge amount of questions and parameters are presented only most important results and findings, which resulted from questionnaire. Main goal of practical part has been sharing info and results which are valuable inputs for interpretation, analysis and formulation of final recommendations.

Description of the experiment. In order to evaluate subjective perception of respondents regarding accession of Czech Republic to the EU for areas and questions which are not easily quantified I decided to use qualitative research and hence form of questionnaire. Main goal of questionnaire investigation was to define perception of accession to the EU by different companies within different categories and sectors in Czech Republic. Questionnaire has been created out of 14 questions while 11 have been closed with opportunity to choose one of 5 choices of scale of agreement. Two questions have been opened and one has been half-opened. One of the questionnaire main targets have been to find out subjective opinion of entrepreneurs in areas which are very difficult to measure and quantify like company culture, perception of competition and competitive-

ness, possibilities to raise outside capital, perception of corruption or ideal year for Euro acceptance. Hence quantification of subjective measures evaluated by questionnaire would be ideal fulfilment of easily measured and quantified data like macroeconomic analysis. Questionnaire has been answered by 146 respondents. Questionnaire evaluation is including percentage expression of the answers to all closed questions and the most frequent answers for open questions grouped to several representative statements. In each question is explored relation between answer and size of the company, geographical region, legal form, size of the company and sector of entrepreneurship. In questionnaire are not included physical objects or companies which were established after 2004 as I believe they would not be able to asses with relevance impact of accession to the EU. I emphasize that questionnaire was not addressed to ordinary people but to different business representatives and hence questions are always referring to impact of accession to the EU on entrepreneurship area and not to the common economic welfare or perception of quality of life by ordinary citizens.

Distinguishing parameters of questioned companies. Respondents has been classified according to location of company headquarter into 8 regions according to NUTS2- Prague, *Central Bohemia, Southwest, Northwest, Northeast, Southeast, Central Moravia*, Moravskoslezsko.

Answers of the respondents are sorted according to size of the company as well. Companies has been sorted according to number of employees into following 3 groups: small (0–99 employees); medium (100–499 employees); big (500 and more employees).

Assumed was also certain level of polarity of the answers for companies operating at regional and global scale. Companies were hence classified into 3 following groups: regional, national, global.

Business sector or economic activity can play significant role for perception of advantages and disadvantages of accession to the EU on entrepreneurship area. Companies were sorted according to business sector into 4 sectors: raw materials (primary sector), manufacturing and industry (secondary sector), sector of services (tertiary sector), knowledge sector (quarterly sector).

The last fifth parameter of classification of the companies was legal form. Classification of the companies according to legal has divided answers into 2 groups- Ltd and joint- stock companies while those 2 legal forms are prevailing in Czech Republic.

Answers evaluation. Question 1: Accession of Czech Republic to the European Union has overall positive impact on entrepreneurship area.

Table 2. Overall percentual evaluation of question 1

Strongly agree (%)	Agree (%)	Nor agree, nor disagree (%)	Disagree (%)	Strongly disagree (%)
32.1%	34.3%	16.8%	10.9%	5.8%

From percentage proportion in Table 2 is obvious, that most of the respondents agree with statement, that access to the EU has overall positive impact and hence positive effects were stronger than negative. This quasi aggregate question in which each respondent is expressing its overall attitude is a key question of full study. From binomial test and Z statistic shown in Table in Appendix is obvious that null hypothesis H_0 with 50% probability of agreement has been rejected ($|Z| = 6.369 > 1.96$), while with 95% confidence will be probability of agreement with question 1 in confidence interval from 0.725 to 0.872. Binomial distribution could be approximated by normal distribution due to compliance with condition $np(1 - p) = 18.360 > 10$.

From Table 3 is obvious that global companies observed the most advantages from accession to the EU and regional companies the least. Chance that global companies will agree with statement in question 1 is 6.24 times higher than for the rest of the companies. It seems like open European market has helped big companies to expand and utilize returns from scale. On the opposite, smaller regional companies were in more difficult situation to compete on the highly competitive market.

Table 3. Classification of the answers for question 1 per operation area and its association in four field table

Operation area	Strongly agree (%)	Agree (%)	Nor agree, nor disagree (%)	Disagree (%)	Strongly agree (%)	OR	CI$_{OR}$	RR	CI$_{RR}$
Regional	19.4	25.8	22.6	22.6	9.7	0.24	(0.09;0.64)	0.68	(0.48;0.97)
National	25.9	35.2	20.4	11.1	7.4	0.74	(0.29;1.87)	0.94	(0.77;1.15)
Global	46.2	38.5	9.6	3.8	1.9	6.24	(1.73;22.48)	1.33	(1.12;1.59)

Question 2: Due to accession of Czech Republic to the European Union has been competition on Czech Market increase.

Table 4. Overall percentual evaluation of question 2

Strongly agree (%)	Agree (%)	Nor agree, nor disagree (%)	Disagree (%)	Strongly disagree (%)
29.9%	45.3%	10.9%	9.5%	4.4%

In total 75% of respondents agree with statement that accession to the EU has increased competition at home market (Table 4). It is hence in agreement with expectations during accession period when open market, Schengen creation or uniform legislation enabled accession of foreign companies to Czech market which lead to increase of competition. It is also obvious that accession and enlargement of European market has contributed even more to globalization tendencies and greater role of international companies and corporations which started to utilize even more profits from scale for new markets. Removal of barriers in the markets has supported even more export policy

(Marek, Baun 2002). Pressure for efficiency has been hence since accession to the EU enormous which has showed up in close out of many small and middle size companies, which were not able to leverage advantage of profits from scale or increase efficiency sufficiently. Several traditional industrial sectors which were not efficient has been hence devastated. Attractiveness for foreign invetors has been given by macroeconomic stability with relatively low and stable inflation (Vasicek 2011). From binomial test and Z statistic shown in Table 27 (see Appendix) is obvious that null hypothesis H_0 with 50% probability of agreement has been rejected ($|Z| = 6.369 > 1.96$), while with 95% confidence will be probability of agreement with question 2 in confidence interval from 0.725 to 0.872. Binomial distribution could be approximated by normal distribution due to compliance with condition $np(1 – p)=18.360 > 10$.

From Table 5 is obvious that without more significant difference in companies according to sectors or regions all the companies have felt increase of competitiveness at local market since accession to the EU. In fact, there was no parameter which could explain significantly answers for this question.

Table 5. Classification of the answers for question 2 according to business sector and its association in four field table

Business sector	Strongly agree (%)	Agree (%)	Nor agree, nor disagree (%)	Disagree (%)	Strongly disagree (%)	OR	CI$_{OR}$	RR	CI$_{RR}$
Primary	39.7	44.4	6.6	3.4	5.9	1.60	(0.83;1.36)	1.06	(0.19;13.55)
Secondary	36.7	44.9	6.1	10.2	2.0	1.38	(0.48;3.91)	1.05	(0.90;1.22)
Tertiary	25.0	46.9	10.9	9.4	7.8	0.59	(0.22;1.58)	0.92	(0.79;1.08)
Quaternary	18.8	37.5	31.3	12.5	0.0	0.81	(0.16;4.10)	0.97	(0.72;1.29)

Question 3: Accession to the European Union has contributed positively to increase probability to succeed in foreign markets.

Table 6. Overall percentual evaluation of question 3

Strongly agree (%)	Agree (%)	Nor agree, nor disagree (%)	Disagree (%)	Strongly disagree (%)
24.8%	34.3%	27.0%	8.8%	5.1%

From Table 6 is obvious that 59% of respondents agreed with statement that accession to the EU had overall positive impact on possibilities to succeed at foreign markets. However, it is important to notice that this was an advantage mostly for big

international companies and export companies. For local companies, it has not been any advantage and just opposite they had to face increased competition of foreign companies in Czech Republic which is one of the main reason of Euro- negative attitude of smaller companies (Toth 2014).

From Table 7 is visible that advantage to compete on foreign markets has been taken more by companies from quaternary and secondary sectors and with opposite situation in tertiary sector (0R 0.36). This result can be explained by the fact that after unification of legal norms and terms was trade in knowledge sector the easiest with no barriers for penetration on foreign markets. Just opposite for business of service it was the most difficult to compete at foreign markets (Komarkova, Komarek 2007). Local language or habits could play important role (Bakosova 2004).

Table 7. Classification of the answers for question 3 according to business sector and its association in four field table

Business sector	Strongly agree (%)	Agree (%)	Nor agree, nor disagree (%)	Disagree (%)	Strongly disagree (%)	OR	CI_{OR}	RR	CI_{RR}
Primary	12.5	34.5	44.3	2.9	5.8	0.99	(0.10;9.35)	0.99	(0.64;1.56)
Secondary	28.6	36.7	24.5	10.2	0.0	1.83	(0.60;5.57)	1.11	(0.93;1.34)
Tertiary	20.3	28.1	32.8	9.4	9.4	0.36	(0.13;1.02)	0.82	(0.67;1.01)
Quaternary	37.5	46.2	3.7	6.3	6.3	1.78	(0.37;8.57)	1.10	(0.89;1.36)

Question 4: Accession to the European Union has negative impact on administration, legislation and bureaucracy in entrepreneurship area.

Table 8. Overall percentual evaluation of question 4

Strongly agree (%)	Agree (%)	Nor agree, nor disagree (%)	Disagree (%)	Strongly disagree (%)
47.4%	26.3%	13.9%	8.0%	4.4%

Table 8 is showing that accession to the EU has in total negative impact on increase of legislation and administration. At one side is obvious harmonization of the norms which become unified (Hajek 2008). On the other side has many of the companies obvious constrains related to the application of European norms to Czech local conditions while for most of the respondents these norms are not many times applicable or they are not adding value, regulation is inappropriate and work with officers very frustrating.

From binomial test and Z statistic shown in Table 27 is obvious that null hypothesis H_0 with 50% probability of agreement has been rejected ($|Z| = 7.773 > 1.96$), while with 95% confidence will be probability of agreement with question 4 in confidence interval from 0.793 to 0.919. Binomial distribution could be approximated by normal distribution due to compliance with condition $np(1 - p) = 14.551 > 10$.

From Table 9 is obvious that perception of legislation and administration has been more negative for companies with limited liability. Joint- stock companies have disponed most probably with much better human capital or they had established specialized departments or processes and hence could cope with legislation requirements better.

Table 9. Classification of the answers for question 4 according to legal form and its association in four field table

Company legal form	Strongly agree (%)	Agree (%)	Nor agree, nor disagree (%)	Disagree (%)	Strongly disagree (%)	OR	CI$_{OR}$	RR	CI$_{RR}$
Ltd.	41.5	25.3	11.1	17.1	5.1	1.27	(0.40;3.95)	1.04	(0.87;1.24)
Joint-stock company	45.5	29.0	30.8	11.5	3.2	1.15	(0.30;4.40)	1.02	(0.85;1.22)

Question 5: Opportunities to raise outside capital for financing has been improved due to accession to the European Union.

Table 10. Overall percentual evaluation of question 5

Strongly agree (%)	Agree (%)	Nor agree, nor disagree (%)	Disagree (%)	Strongly disagree (%)
8.8%	32.1%	38.0%	15.3%	5.8%

Main target of this question was find out and assess impact of accession to the EU on possibilities to gain outside capital. It was assumed that raise capital will be much easier with more opportunities for financing (Jurajda, Stancik 2012). This assumption has been confirmed in this question as it is obvious from Table 10. Most of the respondents agreed with statements that accession to the EU made process of accessing outside capital easier with increase amount of opportunities to obtain capital (Roman, Sargu 2013). European capital seems to be much easier to access for many of big international companies (Moore, Wang 2007). Data in Table 11 are showing that small companies had with financing more issues than big companies (OR 0.70). It could be seen as a paradox as one of the key goals of the EU had been support and subsidies of small and medium companies (EU Information Centre 2001).

Table 11. Classification of the answers for question 5 according to company size and its association in four field table

Company size according to number of employees	Strongly agree (%)	Agree (%)	Nor agree, nor disagree (%)	Disagree (%)	Strongly disagree (%)	OR	CI_{OR}	RR	CI_{RR}
Small (0–99)	10.0	27.8	40.0	17.8	4.4	0.70	(0.27;1.80)	0.89	(0.65;1.20)
Middle (100–499)	2.9	34.4	42.1	7.8	12.8	1.03	(0.18;6.04)	1.01	(0.56;1.82)
Big (500 and more)	8.1	40.5	32.4	10.8	8.1	1.49	(0.54;4.12)	1.14	(0.83;1.55)

Question 6: Obtaining of Euro funds and subsidies was easy and transparent.

Table 12. Overall percentual evaluation of question 6

Strongly agree (%)	Agree (%)	Nor agree, nor disagree (%)	Disagree (%)	Strongly disagree (%)
2.2%	7.3%	22.6%	44.5%	23.4%

From Table 12 is visible that raising Euro funds is obviously problematic and not sufficiently transparent process which seems to be for most of the entrepreneurs as complex and unfortunately also corrupted process (Moussis 2008). Based on statement of many respondents, it provides competitive advantage to those who reach Euro funds and disadvantage to those who did not access them from different reasons. This makes market disturbances and misbalances even deeper. Overall seems to be this area in unhealthy shape which is also indicated by amount of not used funds in recent period. Governments' subsidies are considered to be a disaster and misbalance mechanism at the market for many respondents. In general, has been Euro funds capital funding very long and complex process which was highlighted by many respondents as well. Full process is accompanied by huge and inappropriate legislation and administration which is pushing deadline terms and drop off dedicated financials.

From Table 13 can be seen that Euro funds have been reached easier by companies from quaternary sector as probability that companies from quaternary sector will agree with this statement is 2.15 times higher than in other sectors. In this question is hence again reflected strategical direction of the EU with focus on research and development. Euro funds requirements and approval process favoured strongly quaternary sector against services. Others companies did not exceed agreement rate by 10%.

Table 13. Classification of the answers for question 6 per business sector and its association in four field table

Business sector	Strongly agree (%)	Agree (%)	Nor agree, nor disagree (%)	Disagree (%)	Strongly disagree (%)	OR	CI$_{OR}$	RR	CI$_{RR}$
Primary	3.2	7.1	33.5	46.9	9.3	1.35	(0.15;12.52)	1.29	(0.20;8.32)
Secondary	4.6	6.1	24.5	44.9	19.9	0.52	(0.13;2.02)	0.56	(0.16;1.91)
Tertiary	3.1	7.8	20.3	45.3	23.4	1.30	(0.41;4.16)	1.26	(0.45;3.50)
Quaternary	6.3	12.5	18.8	37.5	25.0	2.49	(0.59;10.59)	2.15	(0.68;6.79)

Question 7: Qualification and availability of labour resources has been improved after accession of Czech Republic to the European Union.

Table 14. Overall percentual evaluation of question 7

Strongly agree (%)	Agree (%)	Nor agree, nor disagree (%)	Disagree (%)	Strongly disagree (%)
3.6%	17.5%	24.1%	35.0%	19.7%

From Table 14 is obvious that accession to the EU did not bring positives in area of accessibility of qualified labour forces. Opening the market contributed to the leave of qualified and capable workers for higher salaries, wages and benefits abroad. These workers might have been replaced by not so qualified or cheaper workers from eastern Europe or poor countries (Strielkowski *et al.* 2013). This can have negative impact on future competitiveness or inflow of direct external investments as without sufficient number of qualified workers it will be not feasible to cover sufficiently the need of labour market. Answer at this question is clearly showing importance of quality educational system.

Based on data in Table 15 is possible to say that global companies had with accessibility of qualified labour less issues. Qualified workers have been more likely reachable outside of Czech Republic and hence agreed with positive statement of this question. Chances to agree with this statement have been 1.25 higher for global companies.

Table 15. Classification of the answers for question 7 according to operation area and its association in four field table

Operation area	Strongly agree (%)	Agree (%)	Nor agree, nor disagree (%)	Disagree (%)	Strongly disagree (%)	OR	CI$_{OR}$	RR	CI$_{RR}$
Regional	3.2	16.1	25.8	32.3	22.6	0.89	(0.31;2.54)	0.92	(043;1.98)
National	1.9	16.7	25.9	33.3	22.2	0.79	(0.32;193)	0.84	(0.44;1.62)
Global	5.8	19.2	21.2	38.5	15.4	1.36	(0.57;3.25)	1.25	(0.67;2.31)

Question 8: Accession to the EU has contributed positively on your company culture.

Table 16. Overall percentual evaluation of question 8

Strongly agree (%)	Agree (%)	Nor agree, nor disagree (%)	Disagree (%)	Strongly disagree (%)
5.8%	26.3%	35.0%	16.1%	16.8%

From the Table 16 is obvious that most of the respondents disagree with statement that accession to the EU had positive impact on company culture despite free movements of people, labour, goods or capital. Significant part of respondents means under European culture Brussels legislation and bureaucracy, respectively leave of qualified and talented workers. Most probably European methods and ways of management has not been sufficiently penetrated and shared to the Czech entrepreneurship area or they were not perceived as a positive.

When looking at company culture and results of the answers in Table 17 it can be noticed that more advantages have been taken by joint-stock companies. They were likely able to employ more foreign employees and hence gain more from diversity of company culture. Relative risk is 0.84 for limited liabilities companies vs. 1.29 for joint stock companies.

Table 17. Classification of the answers for question 8 according to legal form and its association in four field table

Company legal form	Strongly agree (%)	Agree (%)	Nor agree, nor disagree (%)	Disagree (%)	Strongly disagree (%)	OR	CI$_{OR}$	RR	CI$_{RR}$
Ltd.	3.0	27.3	35.4	18.2	16.2	0.69	(0.27;1.76)	0.84	(054;1.29)
Joint-stock company	12.9	25.8	35.5	9.7	16.1	1.73	(0.63;4.77)	1.29	(0.83;2.00)

Question 9: Transparency of government contracts has been improved and corruption decreased after accession to the EU.

Table 18. Overall percentual evaluation of question 9

Strongly agree (%)	Agree (%)	Nor agree, nor disagree (%)	Disagree (%)	Strongly disagree (%)
1.5%	15.3%	22.6%	29.2%	31.4%

From Table 18 is obvious that most of the respondents do not think that accession to the EU had positive impact on transparency of government contracts or corruption. One of the most criticises area by European Commission is corruption. Hence is it said to say that not even European institutions, accession interviews or change in legal forms did not improve this area. It looks like European norms and legislation are deeply required in entrepreneurship area however they are not successfully implemented in upper government spheres. According to size of the company (Table 19) is obvious that big companies had with corruption much less problems than small companies. Explanation would be similar as for legal form parameter. It is possible that big companies have been competing in average for much bigger businesses and hence were supervised much more carefully.

Table 19. Classification of the answers for question 9 according to company size and its association in four field table

Company size according to number of employees	Strongly agree (%)	Agree (%)	Nor agree, nor disagree (%)	Disagree (%)	Strongly disagree (%)	OR	CI$_{OR}$	RR	CI$_{RR}$
Small (0–99)	4.2	13.3	18.6	27.2	36.7	0.42	(0.16;1.08)	051	(0.25;1.05)
Middle (100–499)	2.2	27.6	12.1	29.0	29.1	1.93	(0.44;8.38)	1.62	(0.59;4.41)
Big (500 and more)	5.4	16.2	32.4	27.0	18.9	2.07	(0.75;5.69)	1.73	(0.83;3.59)

Question 10: Accession to the EU has been contributed positively on company profits.

Table 20. Overall percentual evaluation of question 10

Strongly agree (%)	Agree (%)	Nor agree, nor disagree (%)	Disagree (%)	Strongly disagree (%)
10.9%	37.2%	22.6%	18.2%	10.9%

The main target of this question has been identification if impact of accession of Czech Republic to the EU on profits while there are existing many factors which could influence this parameter. Most of the respondents reply that accession to the EU has positive impact on profit which is obvious from Table 20. Open European market, zero trade barriers, increase of competition and pressure for effectivity increase brought more positives than negatives. On the other hand, there is still existing almost 1/3 group of respondents, which expressed in a negative way.

From regions point of view and impact of accession to the EU on business result it is possible to see in Table 21 equal expression of respondents across regions. Many of the parameters could be aggregated and hence final result can strongly depend on prevailing business sector or structure of the region (Heimpold 2008). OR and RR are very similar.

Table 21. Classification of the answers for question 10 according to region and its association in four field table

Region of headquarters NUTS2	Strongly agree (%)	Agree (%)	Nor agree, nor disagree (%)	Disagree (%)	Strongly disagree (%)	OR	CI_{OR}	RR	CI_{RR}
Prague	14.3	38.8	22.4	18.4	6.1	1.50	(0.65;3.48)	1.16	(0.86;1.55)
Central Bohemia	8.1	44.4	12.1	16.1	19.2	1.01	(0.23;4.48)	1.00	(0.57;1.76)
Southwest	7.1	44.0	22.6	15.1	11.1	1.56	(0.29;8.43)	1.16	(0.71; 1.90)
Northwest	7.4	32.6	15.6	22.2	22.2	0.58	(0.14;2.46)	0.79	(0.39;1.61)
Northeast	2.8	17.9	31.7	8.4	39.2	0.22	(0.04;1.19)	0.44	(0.14;1.44)
Southeast	8.3	30.3	30.9	25.0	5.6	0.71	(0.29;1.77)	0.87	(0.59;1.28)
Central Moravia	22.1	44.5	16.0	6.3	11.1	1.90	(0.36;9.90)	1.23	(0.80;1.88)
Moravsko-sliezsko	2.4	68.2	16.4	8.1	4.9	1.89	(0.19;18.79)	1.22	(0.70;2.20)

Question 11: Accession to the EU has been contributed positively to decrease indebtedness of your company.

Table 22. Overall percentual evaluation of question 11

Strongly agree (%)	Agree (%)	Nor agree, nor disagree (%)	Disagree (%)	Strongly disagree (%)
2.9%	7.3%	43.1%	22.6%	24.1%

From Table 22 is obvious that most of the respondents has relatively neutral attitude and hence is can be justified that accession to the EU did not have direct impact in in-

debtedness which could be linked with European integration or impact would be more negative than positive. It can be assumed that Euro funds and government subsidies has substituted partially financing of projects via loans which does not increase indebtedness as an impact of accession to the EU (Machova 2011). There is clearly negative attitude of both- regional and global companies for indebtedness with minimum differences between them (Table 23) as OR is between 0.46 and 1.54. This question can be linked with question of availability of foreign capital as improvements of availability of foreign capital can have overall negative impact on indebtedness.

Table 23. Classification of the answers for question 11 according to operation area and its association in four field table

Operation area	Strongly agree (%)	Agree (%)	Nor agree, nor disagree (%)	Disagree (%)	Strongly disagree (%)	OR	CI_{OR}	RR	CI_{RR}
Regional	0.0	6.5	38.7	29.0	25.8	0.46	(0.09;2.27)	0.52	(0.13;2.11)
National	1.9	9.3	40.7	22.2	25.9	1.10	(0.34;3.52)	1.08	(0.41;2.81)
Global	5.8	5.8	48.1	19.2	21.2	1.54	(0.47;5.00)	1.42	(0.55;3.66)

Question 12: What do you consider as biggest advantage of accession to the EU on entrepreneurship area?

This question was an open question to avoid limitation of respondents by forced selection. Replies are grouped to the statements shown below:

Key advantages of accession to the EU: Schengen, opening of the boarders, cancellation of duty union, faster transfers and logistics; easier access to the European market, access to the new segments of the market, new market opportunities for export; removal of trade barriers and barriers for accession to the market; bigger customer portfolio; overall cultivation of entrepreneurship area and political environment; wider portfolio of suppliers; EU trademark as competitive advantage; free movements of people, goods, services and capital; better opportunity to cooperate geographically, financially and in a human way; positive impact on diversity and company culture; unified norms and certifications, harmonization of legislation; easier to look for and hire labour force; easier development of qualifications of employees- change of roles, internships, external workers; positives in banking area, decreasing of currency risk; opportunities to obtain European subsidies, accessibility of European capital, inflow of investments; penetration of new technology to Czech market.

Question 13: What do you consider as a biggest disadvantage of accession to the EU on entrepreneurship area?

Same as previous, also this question is formulated as an open while grouping the most frequent answers.

Key disadvantages of accession to the EU are: exaggerated bureaucracy, administration, legislation, many times higher requirements than before; work culture of officers "monitor and control"; regulation from EU which are not accommodated to Czech market and hence many times inappropriate and not applicable; not relevant environmental requirements for manufacturing which do not have practical impact on health or environment; negative impact on wage increase of labour; leave of qualified labour outside of Czech Republic; hidden protection of several countries and markets (in a way of forms and prescription); increase of competition at Czech market due to impact of foreign competitors; creation of better conditions for global player, loss of national sovereignty, devastation of Czech industry; advantage only for big companies, small and medium size company only minimum, liquidation of small and middle size companies; unfair handling during allocation of subsidies, positive discrimination, quotes, corruption; subsidies from EU which are providing competitive advantage to the companies which gained them and disadvantages to the company which were not successful; incorrect prioritization and selection of the projects, sources used unequally and unclearly; commands from Brussels, loss of possibility to decide about future, loss of identity, permanent controlling of activities; not existing average real wages, fictive propaganda, figure out numbers; not legal environments, not clear vision of future direction, disunited Europe; production based on need of EU; language barriers mainly for older entrepreneurs.

It is possible to conclude that accession to the EU has been for most of the entrepreneurs of small and medium size companies perceived negatively. Current migration crisis, Greece debts and unified contribution of all member states to Euro Val, corruption of governments and also European structures, non- transparent funds raising and government subsidies obtaining, opening of the market and related increase of competition, liquidation of part of Czech traditional industry, leave of qualified labour, inappropriate regulations, exaggerated bureaucracy, fear from loss of national identity and possibilities to decide about future, commands from Brussels, inferior German politics, unclear vision and directions, non- actionable European politics, hidden protectionism in forms of local norms and restrictions, non- flexible European structure this all contribute to obvious dissatisfaction.

Question 14: Do you agree with Euro acceptance? What do you think would be appropriate period?

Table 24. Overall percentual evaluation of Euro acceptance

Yes (%)	No (%)
43.5%	56.5%

Table 25. Overall percentual evaluation of ideal year for Euro acceptance

2016 and earlier (%)	2017 (%)	2018 (%)	2019 (%)	2020 (%)	2021 and later (%)
14.8%	11.1%	18.5%	5.6%	40.7%	9.3%

From Table 24 is obvious that slightly more respondents disagree with Euro accept-ance than agree. Reasons are fear from loss of national identity, worries from negative influence on quality of life as a citizen, loss of control for exchange rate or interest rate as a tool of monetary policy, full control of financial and bank sectors by European institutions (Zdarek 2011). On the other side, obvious positives are decrease risk of exchange rate fluctuation as it is not needed to fix it against Eurozone, lower transaction costs, simplification of trade (Rodriguez *et al.* 2007). From Table 25 can be seen that ideal year for Euro acceptance according to respondents is 2020. Table 26 can be inter-preted in the way that joint stock companies would accession of the Euro welcome and opposite, companies with limited liability have overall negative attitude towards Euro with OR 0.60. It has been reflected also in an ideal year of Euro acceptance which has been for shared companies much earlier. Acceptance of the Euro would mean decrease of exchange rate risk or decrease of transaction costs and hence would be beneficial mostly for international companies (Fidrmuc, Horvath 2008).

Table 26. Classification of the answers for question 14 according to legal form and its associa-tion in four field table

Company legal form	Yes (%)	No (%)	OR	CI$_{OR}$	RR	CI$_{RR}$	Ideal year for Euro acceptance
Ltd.	40.2	59.8	0.60	(0.27;1.31))	0.76	(0.51;1.13)	2019.8
Joint-stock company	55.2	44.8	1.83	(0.80;4.20)	1.37	(0.92;2.06)	2019.2

When looking at operating area and Euro acceptance results confirmed expected trend with positive statement of big global companies and opposite- clear disagreement of regional companies. It can be summarized that regional companies see Euro accept-ance mostly like a big threat than advantage (RR is only 0.40). Euro acceptance could enable for big companies even bigger competitive advantage which could have devastat-ing impact on results of many of Czech regional companies. Analogic have been also results for comparison of the companies according to their size. From region point of view results for this question were not surprising as companies from Prague and Central Bohemia would welcome acceptance of the Euro and on the other hand rest of Czech Republic which stands mostly against Euro acceptance.

5. Conclusions

Finding: most of the small and medium size regional companies did evaluate accession to the EU negatively. Big global companies on the opposite did evaluate accession positively. Natural consequences of open market with no barriers of trade. Playground for big players has become even bigger and hence they could utilise advantages from their size (Hvozdenska 2014). Strong are becoming even stronger. Recommendation: strategical focus of the EU on support of small and medium size companies. Establishment of detailed EU study for purpose of quantification of benefits which have been gained by big companies (in monetary parameters) and counting of the losses of small and medium size companies as a consequence of accession to the EU. Proposal of compensating mechanism for small and middle size companies.

Finding: tertiary sector of the companies did evaluate accession to the EU the most negatively. Quaternary sector did evaluate accession to the EU the most positively. Reason: strategical goals of EU regarding support of research and development favoured in subsidy programs mostly quaternary sector. Tertiary sector and services received the least of investment. Recommendation: creation of specific programs and grants for tertiary sector, better balancing of grant programs.

Finding: Companies from Prague and Central Bohemia did evaluate impact of accession to the EU most positively. Rest of Czech Republic more negatively. Reason – in the cities are concentrated mostly bigger companies with global impact and operating area. Education level is higher. Recommendation: equal allocation to the regional budgets for all the regions.

Finding: most of the respondents has expressed negative attitude to Euro accession, mostly small regional companies. Supportive have been only big companies mostly from Prague and Central Bohemia. Strongly against Euro have been companies from tertiary sector. Reason: accession of the Euro would mean zero transaction costs and zero exchange rate risk which would be advantage again for bigger international companies. This would mean significant competitive advantage for bigger companies and threat for small regional companies. Tertiary sector has been in general not supported and it was in general heavily competitive. Euro would offer advantage to external competitors as well. Companies outside Prague has overall much more problems with Brussels bureaucracy and legislation, Euro refuse by principle. Recommendation: later Euro accepting, careful evaluation of Euro acceptance taking into consideration all the potential consequences. In case of Euro acceptance all the next steps should lead to support of development, trade and expansion of small and medium size companies.

Finding: average proposed year of Euro acceptance has been 2020. Reason: companies' processes are not sufficiently optimised and in compliance with EU requirements, Czech companies still did not implement sufficiently EU norms and legislation. Complicated transition to Euro could make situation even worse in spite of clear economic advantages. Recommendation: do not accept Euro before 2020 as companies and their processes are not ready for its acceptance, most of the companies still refuse Euro acceptance.

Finding: raising Euro funds is considered by most of the companies as a complicated process. Reason: too high complexity of the process for raising Euro funds and subsidies, release of money only retrospectively after spending real costs (Cabelkova *et al.* 2015). Recommendation: adjustment of the system in order to finance projects at least partially before realization.

Finding: availability of qualified labour has been worsening after accession to the EU. It has been perceived in a worst way by small regional companies. Reason: qualified and well educated employees have been leaving Czech Republic after accession to the EU as free movements of people has contributes significantly to this phenomenon. Big companies were able to hire employees abroad. Recommendation – support of education and increase of wages mostly in technical job positions.

Finding: impact of accession to the EU is in average not significant. However big companies expressed in average more positively, small companies more negatively. Reason – bigger companies were able to leverage advantage from free movements of the people much better and employ wider range of employees from different countries which contributed positively to increase of diversity and company culture (Fojtikova 2014). Recommendation: motivational incentives from state for multicultural company structure. Subsidized exchanges of employees with western Europe countries and employers.

Finding: there is existing relation between size of the company and impact of accession to the EU on business results- the bigger is the company the more positive attitude. Small companies just opposite on business results negatively. Reason – big companies were able to leverage advantages which has naturally occurred with accession to the EU much more and hence were becoming more competitive (Fojtikova 2015). Recommendation: start-up supports, creation of seed capital funds, opening of centres of development and supports of small and medium size companies. Possibly tax discounts of another forms of supports for small companies up to the level of estimated benefits which were gained by big companies.

Next steps of the research could be more detailed investigation in areas where results were surprising against expectations like EU influence on company culture or Euro acceptance. Benefits from more detailed study of Euro acceptance could be seen in detailed understanding of negative attitudes and fear to accept Euro followed by list of recommendations or time scale when program for preparation to accept Euro should be put in place in CR. Limitations of the study is mainly willingness of respondents to join the survey and defining list of companies with longterm existence at least since 2004 which has shown to be strong limitations mainly for sufficient amount of big companies. Relatively low response rate is indicating negative general attitude to EU and related survey. It is important to consider also fact that survey may have joined with high probability mostly respondents with positive attitude to EU and those with negative were not even willing to fill the questionnaire which could have impact on total results. Total results could be in reality in relation to EU impact on entrepreneurship area worse as euro sceptics might refuse to join the survey.

References

Bakosova, Z. 2004. Czech Republic 2003/2004: entering the EU 2004, *Prague: CERGE-EI* 1(2): 89–101.

Cabelkova, I.; Mitsche, N; Strielkowski, W. 2015. Attitudes towards EU integration and Euro adoption in the Czech Republic, *Economics and Sociology* 8(2): 93–101.
https://doi.org/10.14254/2071–789X.2015/8–2/7

Cecchini, P.; Jacquemin M.; Catinat, A. 1998. *The European challenge 1992. The benefits of a single market.* Gower Pub Co.

European Union Information Centre. 2001. *An introduction to EU: financed programes in the Czech Republic.* Prague: European Union Information Centre.

Fidrmuc, J.; Horvath, R. 2008. Volatility of exchange rates in selected new EU members: evidence from daily data, *Economic Systems* 32(1): 103–118. https://doi.org/10.1016/j.ecosys.2007.09.004

Fojtikova, L. 2014. Foreign trade of the Czech Republic after ten years of membership in the European Union, in *Proceedings of the 2nd International Conference on European Integration*,15–16 May 2014, Ostrava, Czech Republic, 2(1): 121–137.

Fojtikova, L. 2015. A gravity approach to modelling Czech trade flows: does trade liberalisation influence Czech foreign trade?, in *12th International Scientific Conference on Economic Policy in the European Union,* 16–18 September 2014, Ostravice, Czech Republic. Opava: Silesian University in Opava.

Hajek, M. 2008. Economic growth in the Czech Republic and new member states of the European Union in the period 1995–2006, *Politicka Ekonomie* 56(4): 435–448.

Heimpold, G. 2008. Growth versus Equalisation? An examination of strategies for regional policy in the Czech Republic, Hungary and Poland after EU accession, *Review of Regional Research* 28(1): 1–29. https://doi.org/10.1007/s10037–007–0019–2

Holub, A. 2003. Česká *ekonomika na cestě do Evropské unie* (se zaměřením na mezinárodní podmínky). Praha: Professional Publishing.

Hvozdenska, J. 2014. Convergence of the bond yields in dependence on the EU accession and financial crisis: the case of Visegrad group, *2nd International Conference on European Integration,* 15–16 May 2014, Ostrava, Czech Republic, 2(1): 272–279.

Jacobsen, L. R. 2002. The Czech Republic's economic prospects for early EU entry, *Journal of Economics* (MVEA) 28(1): 19–34.

Jonas, J.; Bulir, A. 1995. *Ekonomie reformy – vybrané statio přechodu k tržní ekonomice*. Management Press.

Jurajda, S.; Stancik, J. 2012. Foreign ownership and corporate performance: the Czech Republic at EU entry, *Czech Journal of Economics and Finance* 62(4): 306–324.

Komarkova, Z.; Komarek, L. 2007. Integration of the foreign exchange markets of the selected EU new member states, *Politicka Ekonomie* 55(3): 315–333.

Machova, Z. 2011. Development of cyclically adjusted fiscal balance in the Czech Republic after its entering into the EU, *Central European Review of Economic Issues* 14(3): 227–233.
https://doi.org/10.7327/cerei.2011.09.07

Marek, D.; Baun, M. 2002. The EU as a regional actor: the case of the Czech Republic, *Journal of Common Market Studies* 40(5): 895–919. https://doi.org/10.1111/1468–5965.00402

Ministerstvo pro místní rozvoj České republiky. 2014. *Abeceda fondů Evropské unie 2007–2013.* Praha: Ministerstvo pro místní rozvoj České republiky.

Moore, T.; Wang, P. 2007. Volatility in stock returns for new EU member states: Markov regime switching model, *International Review of Financial Analysis* 16(3): 282–292. https://doi.org/10.1016/j.irfa.2007.03.006

Moussis, N. 2008. Access to European Union: law, economics, policies, *European Study Service* 17(1): 66–89.

Pagano, M.; Halvorsen, K. T. 1981. An algorithm for finding the exact significance levels of r × c contingency tables, *Journal of the American Statistical Association* 76(1): 931–934. https://doi.org/10.2307/2287590

Rodriguez L.; Jesus, T. Ch; Jose, L. 2007. Following the yellow brick road to the Euro? Czech Republic, Hungary, and Poland, *Eastern European Economics* 45(6): 46–79. https://doi.org/10.2753/EEE0012–8775450603

Roman, A.; Sargu, A. C. 2013. Modelling bank efficiency of the new EU member states: a non-parametric frontier approach, *Transformations in Business and Economics* 12(2): 480–500.

Strielkowski, W.; Filipec, P.; Stefanik, M.; Kowalska, K. 2013. Outward labour migration in the Czech Republic, Poland and Slovakia after the EU enlargement in 2004, *AUCO Czech Economic Review* 7(1): 42–54.

Toth, P. 2014. To what extent can Czech exporters cushion exchange rate shocks through imported inputs?, *Focus on European Economic Integration* 11(1): 74–93.

Vasicek, B. 2011. Inflation dynamics and the new Keynesian Philips curve in four central European countries, *Emerging Markets Finance and Trade* 47(5): 71–100. https://doi.org/10.2753/REE1540–496X470504

World Bank. 1999. *Czech Republic: toward EU accession: main report*. World Bank Country Studies, Washington, D.C.

Zar, J. H. 2010. *Biostatistical analysis*. Pearson Prentice-Hall.

Zdarek, V. 2011. An empirical analysis of the process of price convergence of the Czech Republic and new EU member states towards the euro area, *Politicka Ekonomie* 59(4): 454–474.

APPENDIX

Table 27. Binomial testing statistics overview

Question	p (H_0 = 0.5)	np (1 – p) > 10	Z statistic (approximation without correction)	$z_{1-\alpha/2} = z_{0.975}$	Confidence interval
1	0.798	18.360	6.369	1.96	(0.725; 0.872)
2	0.844	16.041	7.605	1.96	(0.779; 0.908)
3	0.0810	15.390	6.200	1.96	(0.733; 0.887)
4	0.856	14.551	7.773	1.96	(0.793; 0.919)
5	0.659	19.106	2.929	1.96	(0.558; 0.760)
6	0.123	11.407	–7.770	1.96	(0.060; 0.185)
7	0.279	20.913	–4.511	1.96	(0.193; 0.365)

End of Table 1

Question	p (H_0 = 0.5)	np(1 − p) > 10	Z statistic (approximation without correction)	$z_{1-\alpha/2} = z_{0.975}$	Confidence interval
8	0.494	31.198	−0.106	1.96	(0.390; 0.598)
9	0.217	18.009	−5.828	1.96	(0.139; 0.295)
10	0.622	24.907	2.525	1.96	(0.530; 0.715)
11	0.179	31.198	11.487	1.96	(0.094; 0.265)
14	0.435	31.198	−1.500	1.96	0.350; 0.520

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