

Таким чином, на основі проведеного дослідження підходів до економічної оцінки природних ресурсів були зроблені наступні висновки. По-перше, проведений аналіз дозволив зробити висновок, що пошук єдиної теоретичної основи, а відповідно й критерію і показника оцінки не в змозі вирішити усіх завдань, що стоять перед економічною оцінкою. Тому справедливо говорити про систему економічних оцінок природних ресурсів. По-друге, у роботах різних авторів зустрічаємо досить багато різноманітних підходів до економічної оцінки природних ресурсів, які іноді дублюються. Це може призвести до отримання необ'єктивної оцінки природного ресурсу, що, в свою чергу, може стати причиною нераціонального їх використання. Тому для отримання адекватної оцінки важливим є правильна систематизація підходів до економічної оцінки природних ресурсів і чітке окреслення сфери застосування кожного з них, що і намагався в рамках цієї статті зробити автор.

Література.

1. Маркс К., Энгельс Ф. Соч. Т. 25, ч II, с. 172.
2. Лукьянчиков Н.Н., Потравный И.М. Экономика и организация природопользования: –

2-е изд, перераб. и доп. – М.:ЮНИТИ – ДАНА, 2002 – 454 с.

3. Природно-ресурсный аспект розвитку України / Проект „Програма сприяння сталому розвитку в Україні”; кер. розд.: І.Д. Андрієвський, Ю.Р. Шеляг-Сосонко. – К.: Вид. Дім „KM Academia”, 2001. – 112с.

4. Моніторинг виконання зведеного бюджету 2005 року <http://www.minfin.gov.ua>.

5. Шимова О.С., Соколовский Н.К. Основы экологии и экономики природопользования. Изд. 3-е перераб. И доп. – Мн.: БГЭУ, 2002.

6. Мельник Л.Г. Экологічна економіка. – Суми: ВТД „Університетська книга”, 2002. – 436 с.

7. Струмилин С.Г. О цене «даровых» благ природы // Вопросы экономики. – 1967. – №8.

8. Гофман К.Г. Основные положения методики экономической оценки природных ресурсов в массовых планово-проектных расчетах // Экономические проблемы оптимизации природопользования: Сб. тр. – М.: Наука, 1973. – 158с.

9. Пінчук Н.М. Економічна оцінка природних ресурсів // Фінанси України – 2005. – №5 – с. 20-28.

Статья поступила в редакцию 12.01.2007

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LABOR PRODUCTIVITY AND HUMAN CAPITAL IN THE FIRMS OPERATING IN THE PROCESSING INDUSTRY IN THE CZECH REPUBLIC (THE FINDINGS OF THE PRIMARY RESEARCH)¹

1. Brief Development of Lisbon Strategy

The causes of the unfavorable development of the EU economy in the end of the 20th century are related mainly to the unrealized economic reforms and to the low rate of investment to R&D and human capital. The fact that there was a need of economic policy coordination was becoming more obvious. In 1997 European Strategy of Employment (so-called Luxembourg process) was initiated. Two other followed in 1998 and 1999: first the so-called Cardiff process which was focused on the structural policy and second the so-called Koln process which was aimed at the mac-

roeconomic problems and the dialogue with economic and social partners. At the meeting of European Council in Lisbon in 2000 these three strategies gave rise to Lisbon strategy. The key target of the EU member states and the EU economy as a whole was to become „the most competitive and dynamic knowledge-based economy capable of economic growth with more and better work places and social coherence“² by 2010. However, due to the unsystematic agenda and a large number of obscure objectives, Lisbon strategy did not come up to the expectations. Therefore, there was a working

¹ The paper was prepared within the research program MSM 6138439905, project GAČR 402/05/2509 and project GAČR 402/06/0249

² <http://wtd.vlada.cz/scripts/detail.php?id=8957>, pg. 1

group set up at the meeting of European Council in March 2004 whose task was to collect data for the upcoming assessment of Lisbon strategy. The result became known as so-called Kok's report which set objectives and measures so as to support economic growth and employment with respect to the concept of sustainable growth. On the grounds of this report Lisbon Strategy was revised at the meeting of European Council in 2005. National Lisbon Programs are based on this revision. The two basic objectives of this mid-term Strategy of economic growth – National Lisbon Program 2005 – 2008 (National Program of Reforms of the Czech Republic) are the effective support of economic growth and employment and fiscal consolidation.

The priority of the Czech Republic within the macroeconomic area is the continuing reform of public finance; within the microeconomic sphere it is the stimulation of such an environment which is supportive of R&D and innovations. The measures targeted at the labor market will be focused mainly on the flexibility of labor market and education development which will result in higher quality of work force. To increase the flexibility of the labor market the following priority measures are stated: „to widen the liberty of contract of labor-law relations, to lower the law non-salary costs of labor, to enhance the stimulative effect of assessed taxes and social benefits with the aim to lower unemployment and higher the work motivation of low-income social groups, to increase the territorial mobility, to modernize the employment policy.“³

As far as the integration to the labor market is concerned, the following priority measures were adopted: „to lower the unemployment of people up to 25 years of age, to enforce the equal opportunities of men and women, to increase the participation of older people, to increase the professional mobility through an effective system of re-qualification, to improve the accessibility of the labor market to the foreigners.“⁴

The priority measures in the system of education: „to realize reform, to open the advance vocational training and university education to more people, to support the cooperation of employers, employees and educational and professional institutions, to strengthen the link between primary and further education, to support penetrability within the particular stages of tertiary education, to support further education within firms, to increase the IT education“.⁵

³ National Lisbon Program 2005-2008, MIT (Ministry of Industry and Trade), October 2005, pg. 30

⁴ *ibid.*, pg. 33

⁵ *ibid.*, pg. 37

Let's have a look at the economic circumstances under which these principles will be realized.

2.The Current Economic Position of the Czech Republic

The situation of the economy is best characterized by the basic economic measures: development of gross domestic product, rate of inflation, rate of employment or rate of unemployment and indicators of foreign balance, especially the ratio of deficit of the current account to gross domestic product.

According to the prediction of macroeconomic development by MoFCR⁶ (Ministry of Finance, Czech Republic) the negative production gap was eliminated already in the first half of 2005 and in the fourth quarter of 2005 the positive production gap of about 1 per cent came up. The production gap describes the position of the economy within the cycle and expresses the relation between GDP and potential product. Here, potential product is defined as such a level of GDP which relates to the average utilization of factors of production and is specified by Cobb-Douglas production function. With respect to the rise of potential product there was a rate of growth of GDP of more than 6 per cent in the end of 2005. Therefore, the Czech economy is growing a little above the growth of potential product. The main factor of this result is the faster growth of total factor productivity and a positive contribution of labor which is based on higher labor rate of participation.

The average rate of inflation was 1,9 per cent in 2005. In 2006 it is expected at 2,6 per cent.

The rate of unemployment was 7,9 per cent on average in 2005 and it is expected to be at 7,9 per cent in 2006. At the same time there was an increase in employment in 2005. This indicator rose by 1,2 percentage points. According to the prediction further increase in employment is expected. This is due to the expected growth of the economy and various reforms of the active support of work places.

As far as the foreign balance is concerned – the ratio of the current account to GDP is improving. In 2005 the deficit reached 2,1 per cent of GDP, especially thanks to the positive development of trade balance. In 2006 the deficit is expected to be at 2,3 per cent of GDP.

Thus, it is possible to claim that the condition of the Czech economy is relatively positive. Let's have a look at how the situation of the Czech economy influenced the conditions of firms.

3.The Results of Primary Research

⁶ <http://www.mfcr.cz/makropree>

We dealt with the problems of the competitiveness of firms in the processing industry before the EU accession and with the expected impact of the EU accession in our research projects. At this time the second phase of the research is under way.

We created a questionnaire and sent it to the firms operating in the processing industry.

We received answers from 108 firms, of which 93 were domestic and 15 foreign. The basic characterization of the firms is in the table below.

Table 1.

The basic characterization of the respondents of the 2nd phase of the primary research

Group description	Number of subjects	Average number of employees	Export to Slovakia	Export to EU countries	Majority foreign owner
total	108	385	70%	86%	14%
- number of employees					
1 to 49	29	25	55	62%	3%
50 to 249	40	130	73	93%	5%
250 and more	39	913	79	97%	31%
- owner					
domestic	93	316	71%	85%	0%
foreign	15	812	67%	93%	100%
- direction of production					
Czech republic and Slovakia	76	459	100%	93%	13%
to EU	93	426	76%	100%	15%

Source: Our own computations based on the results of the primary research

We ask the respondents the following questions (besides other):

How do you assess the impact of the following factors (quality of production, technical level of production, level of technology, quality of work force and social environment, labor organization and system of management) on the level of labor productivity in your firm? How important are employees of various qualifications and professions for the development of the firm? We used a judgement scale to evaluate the answers – the respondent picked one option from the following scale: 1 = high growth, 2 = considerable growth, 3 = medium growth, 4 = slight growth and 5 = no growth (stagnation). To be able to assess the changes the respondents expected, we asked them for estimates for 2008. We used the same scale.

3.1 The answer to the question: How do you assess the impact of the following factors (quality of production, technical level of production, level of technology, quality of work force and social environment, labor organization and system of management) on the level of labor productivity in your firm?

Looking at table 2 (and considering the average value of all answers based on the scale 1-5), the managers consider the labor organization and system of management to be the factors with biggest impact on labor productivity. They are followed by the level of technology, the quality of

work force and social environment, the quality of production, the prices of production. The least weight was attached to the technical level of production.

According to the estimates for 2008 the order of the factors is changed a little. The most important one is again the labor organization and system of management with the same parameter (the average of all answers is 1,72). They are followed by the quality of work force and social environment and the level of technology. The third place is occupied by the quality of production (2,14), followed by the technical level of production (2,27). The least weight was attached to the prices of production (2,46).

It is interesting to observe the importance of the factors from the point of view of an owner of the firm. While within domestic firms there was an increase in importance of all analyzed factors, in the case of foreign firms the importance of the factors hardly changed (the biggest change in importance should have occurred with the quality of production and the prices of production – an increase by 7 per cent in both cases, that is up to 60 per cent and 45 per cent). There are only two factors whose importance was assessed as high by domestic firms – the prices of production in 2005 and 2008 and the technical level of production in 2008 (64 per cent in comparison with 60 per cent).

Table 2

How much have the following factors influenced the labor productivity in your firm?

How do you assess the impact of the following factors on the level of labor productivity in your firm?	Quality of production		Technical level of production		Prices of production		Level of technology		Quality of work force and social environment (qualification, social relationships, ...)		Labor organization and system of management		
	2005	2008	2005	2008	2005	2008	2005	2008	2005	2008	2005	2008	
Average	2,34	2,14	2,44	2,27	2,62	2,46	1,84	1,72	1,91	1,72	1,81	1,63	
Frequency (%)	high	20	30	16	19	19	22	41	44	37	45	46	53
	considerable	40	37	36	44	26	30	40	37	42	34	31	28
	medium	29	21	39	29	32	26	16	12	17	16	19	15
	slight	7	6	6	4	13	10	2	3	3	0	2	0
	none	4	4	3	3	7	6	2	0	2	1	2	1
	no answer	0	3	0	3	2	6	0	4	0	4	0	4
Modus	2	2	3	2	3	2	1	1	2	1	1	1	

Source: Our own computations based on the results of the primary research

3.2 The answer to the question: How important are employees of various qualifications and professions for the development of the firm?

Table 3

The importance of various qualifications and professions for the development of the firm

How important are employees of the following qualifications and professions for the development of the firm?	Tertiary education								Secondary education						Secondary vocational education				
	economic professions		technical professions		IT professions		other		economic professions		technical professions		other		technical professions		other		
	now	2008	now	2008	now	2008	now	2008	now	2008	now	2008	now	2008	now	2008	now	2008	
Average	2,6	2,3	1,8	1,7	2,7	2,5	3,1	2,9	2,7	2,6	1,8	1,7	2,8	2,8	1,9	2,0	2,9	2,9	
Frequency (%)	very important	16	20	51	55	19	20	7	10	12	11	39	42	6	6	43	36	11	9
	rather important	30	32	27	21	29	30	19	18	29	28	43	35	24	23	30	31	21	20
	important	38	28	10	11	23	25	38	36	38	39	14	12	45	42	15	15	31	30
	rather unimportant	9	7	7	3	19	7	19	17	13	6	3	1	14	9	8	6	16	16
	unimportant	6	5	5	4	9	10	13	10	6	6	1	2	5	6	3	4	11	9
	no answer	1	7	0	6	1	7	4	9	2	9	1	8	6	14	2	8	9	16
Modus	3	2	1	1	2	2	3	3	3	3	2	1	3	3	1	1	3	3	

Source: Our own computations based on the results of the primary research

Again, we will base our conclusion on average values. It is obvious that the importance of various professions differs with respect to the size of the firm and its owner. At the moment the firms consider technical professions on all levels of education the most important. Within technical education the firms prefer secondary education followed by tertiary education and secondary vocational education. Within economic professions the university graduates are evaluated higher than secondary school graduates. The estimates for 2008 show that the firms expect an increase in importance of education in all professions.

4. Conclusion

If we compare the results of our research with the data which are published in the official studies, we can state that the managers' evaluation and their estimates for the future are not different. This supports the priorities of Lisbon strategy concerning the importance of the rise of labor qualification and innovations for the increase of the competitiveness of our economy.

Sources

1. NEČADOVÁ, M., PRŮCHA, Š., BREŇOVÁ, L., SOUKUPOVÁ, J.: Primární výzkum ve zpracovatelském průmyslu. In: Sborník GAČR 402/03/1315 Vliv ekonomického prostředí na podniky v procesu připojování ekonomiky do EU. Melandrium 2005, str. 1-21. ISBN 80-86175-43-X.
2. Operační program podnikání a inovace na léta 2007-2013. Ministerstvo průmyslu a obchodu České republiky. Praha, květen 2006
3. Národní Lisabonský program 2005-2008. Ministerstvo průmyslu a obchodu České republiky. Praha, říjen 2005
4. Makroekonomická predikce České republiky. Ministerstvo financí České republiky. Praha, duben 2006
5. The questionnaires of the firms operating in the processing industry.

Статья поступила в редакцию 12.01.2007

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ОБОСНОВАНИЕ НЕОБХОДИМОСТИ ИСПОЛЬЗОВАНИЯ МАТЕМАТИЧЕСКИХ МЕТОДОВ ПРИ ОЦЕНКЕ ЭКОНОМИЧЕСКОЙ ЭФФЕКТИВНОСТИ РЕКЛАМНОЙ ДЕЯТЕЛЬНОСТИ

Реклама является важным, но не всегда единственным методом продвижения товара, и поэтому оценка ее роли в увеличении объема сбыта представляется затруднительной. Но в силу многих факторов, оценка эффективности рекламы просто необходима.

Прежде, чем говорить об экономических аспектах эффективности рекламной деятельности, необходимо четко определиться с основными понятиями рекламы и рекламной деятельности. В специализированной литературе встречается множество определений терминов «реклама» и «рекламная кампания». Но наиболее полно отвечает цели нашего исследования следующее определение. Рекламная кампания – это сочетание творчества, маркетинговых исследований и экономической окупаемости рекламных площадей или времени в средствах массовой информации [1].

Практикой доказано, что на рекламу можно тратить любые суммы денег, в пределах возможностей фирмы, но эти расходы станут

оправданными, только если реклама эффективна и экономична.

Таким образом, определение эффективности рекламных кампаний является важным контролирующим элементом рекламной деятельности, что и определяет актуальность проблемы.

Теоретические аспекты рекламной деятельности рассматривались в исследованиях таких авторов, как Картер Г., Беклешов Д.В., Батра Р., Бове Л. и др. [2 – 5]. Особенности применения теории в реальных условиях деятельности предприятия исследуют крупные рекламные агентства (Preview, SIMS-group, IPTV, Saatchi&Saatchi (бывшее D'Arcy Ukraine) и др.), которые непосредственно связаны с реальными условиями рекламной деятельности. При достаточном количестве зарубежной и отечественной литературы по рекламе, исследованиям ее экономической эффективности

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