

# Social information in managerial accounting and managerial information system

## *Sociálne informácie v manažérskom účtovníctve a manažérskom informačnom systéme*

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**Abstract:** Research and historical development showed that market economy with social orientation is more effective than without it. Emerging from these facts, the paper is focused on the need of monitoring the social information in managerial accounting and in managerial information systems in enterprises. Since the social situation and the living standard of agriculture in the Slovak Republic are lagging behind, the above mentioned issues are documented in comparison with other branches of national economy. The method of Balanced Scorecard is characterized in brief as well as a new model of economy, called the Economy of Communion that draw attention towards the social aspect of entrepreneuring. The main spheres of social information are mentioned that are necessary for operating at the level of an enterprise and at a broader level. Measures in the field of operating and its information assurance are offered in order to improve the social situation and living standard in agriculture.

**Key words:** agriculture, employment, average wage, living standard, the method of Balanced Scorecard, Economy of communion

**Abstrakt:** Výskumy i historický vývoj ukázali, že trhová ekonomika so sociálnou orientáciou je efektívnejšia ako bez nej. Vychádzajúc z toho je príspevok zameraný na potrebu sledovania sociálnych informácií v manažérskom účtovníctve a v manažérskych informačných systémoch podnikov. Dokumentovaná je zaostávajúca sociálna situácia a životná úroveň poľnohospodárstva SR v porovnaní s ostatnými odvetvami národného hospodárstva. Stručne je charakterizovaná metóda riadenia Balanced Scorecard a nový model ekonomiky s názvom Ekonomika spoločenstva, ktoré kladú dôraz na sociálny aspekt podnikania. Uvedené sú najdôležitejšie okruhy sociálnych informácií potrebných pre riadenie na podnikovej i nadpodnikovej úrovni. S cieľom zlepšenia sociálnej situácie a životnej úrovne v poľnohospodárstve sú formulované opatrenia v oblasti riadenia i jeho informačného zabezpečenia.

**Kľúčové slová:** poľnohospodárstvo, zamestnanosť, priemerná mzda, životná úroveň, metóda Balanced Scorecard, ekonomika spoločenstva

### INTRODUCTION AND THE AIM

The decisive role of globalization processes and development tendencies has many positive and negative effects in the economic (foreign-trade), environmental, and (bio) technological areas (Svatoš 2007).

One of the negative effects accompanying the transition process in the Slovak Republic presents the deepening poverty and the growth of unemployment. After 1999, the poverty across Slovakia occurs to be apparent, long-lasting and it affects more and more inhabitants. The development of consumer's prices of goods and

services reflects in the household's costs of living. In spite of the low level of relative poverty in major parts of Slovakia, isolated areas with deep absolute poverty do exist. The population's social situation led to an improvement in numbers of inhabitants in material need demanding social help (Bartová 2004).

Sensible unsatisfactory social impacts may be felt in the sphere of agriculture.

Vavrejnova, Lúpsik (2007) point out the significant decrease in both production and employment in agriculture as well as in other rural sectors (hunting, forestry and fishing) during the transition period in the

countries of Central and Eastern Europe – the Czech Republic, Slovakia, Hungary, Estonia, Latvia, Lithuania, Poland, Slovenia, Bulgaria and Romania. Together with low wages and the unfavorable development of the relation between the purchase and producer prices, this situation causes the retardation in the growth of the living standard of the rural population, in comparison with other sectors of the national economy.

The low productivity and efficiency of the labour, the low effectiveness of agricultural production, the low profitability as well as the low earnings parity of farmers and rural households belong to the weak side of the Slovak agricultural farms (Bielik 2004).

Lošťák (2006) claims that there are many research work demonstrating that social relations have a great influence on human activities as for efficient achievement of the actor's goals. In his paper, he outlines the possibilities how to utilize social capital for an efficient work of an enterprise.

Based on the findings of a survey among a sample of 62 farms by adopting the factor and multiple regression analysis, Wolz et al. (2006) deduct that social capital is indeed a significant factor determining farm income.

It can be found out from the above-mentioned facts that for operating of a company, not only economic information is crucial, but also social information.

For operating needs, managerial accounting and managerial information system of the enterprise should provide them.

Information and informational services of a high quality have nowadays a strategic economic and social importance. On quality information, the management of small and large business entities as well as of the states is based (Kučera, Látečková 2005).

*The goal of the paper is to point out the:*

- development of employment and wages in agricultural sector in the Slovak Republic,
- necessity of considering social relations in the activities of an enterprise,
- new methods and approaches of operating, considering social relations,
- needs of monitoring social information about employees in the frames of managerial accounting and managerial information system of an enterprise.

## MATERIALS AND METHODS

As the basic material sources of the paper, there served:

- scientific and technical publications concerning employment and living standard in Slovakia and in other EU countries,

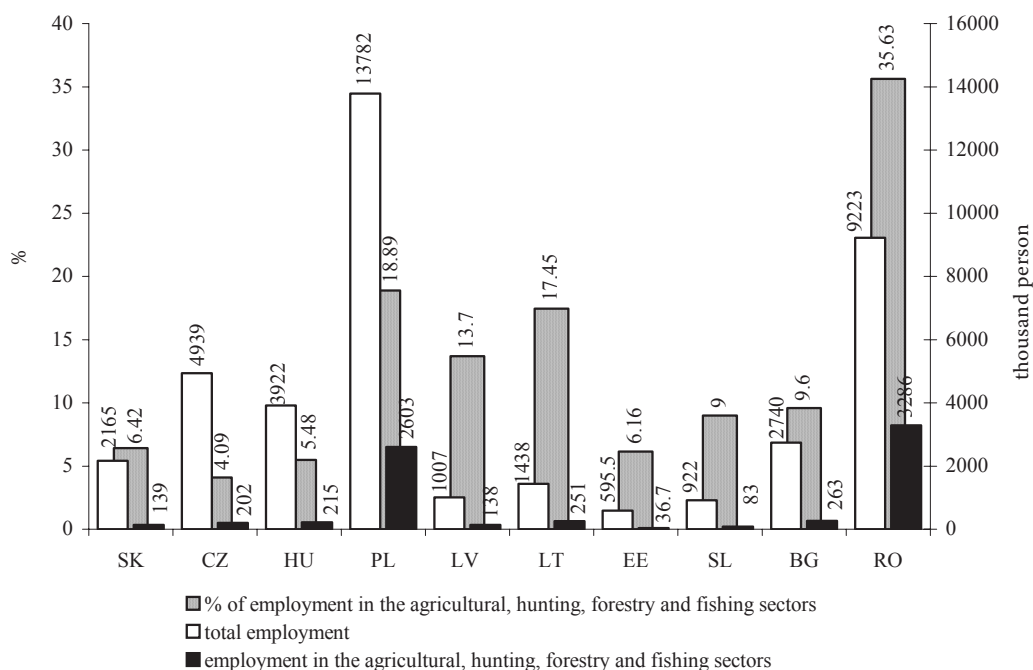


Figure 1. Employment in the agricultural, hunting, forestry and fishing sectors in the Central and Eastern European countries in the year 2003

SK = Slovakia, CZ = Czech Republic, HU = Hungary, PL = Poland, LV = Latvia, LT = Lithuania, EE = Estonia, SL = Slovenia, BG = Bulgaria, RO = Romania

Source: Statistic Annual of Candidate Countries EU 2003 (EUROSTAT)

- statistic data released on internet web sites of the Ministry of Agriculture of the Slovak Republic (SR), Ministry of Labour, Social Affairs and Families of the SR and the Research Institute of Agricultural and Food Economics of the SR,
- scientific papers denoted to new methods and approaches towards operating, considering social relations in economic activities,
- outcomes of research projects oriented towards accomplishment of managerial accounting and managerial information systems in the agricultural complex of enterprises.

The basic material was processed by the methods of analysis, selection, comparison, synthesis, time series, indexes and the methods of controlled discussion.

## OUTCOMES AND DISCUSSION

Tables and figures demonstrate the development of employment and wages in agriculture in the Slovak Republic from the year 1989, mainly in the years 2003–2005.

Figure 1 indicates that based on the percentage of employment in rural sectors (hunting, forestry and fishing) in the total employment in national economy (in accordance with the data from the year 2003) in frames of ten countries of Central and Eastern Europe compared, Slovakia represents with 6.42% the 7th place on the scale. It is followed by Estonia (6.16%), Hungary (5.48%) and Czech Republic (4.09%).

The development of the employment rate in agriculture in the total employment in Slovakia from the year 1989 in intervals of two years is depicted in the Figure 2. In the year 2005, it represented the

rate 4.6%, what is lower, compared to the year 1989 (12.1%), the difference is 7.5%. In the year 2005, there was higher the proportion of agriculture in the gross domestic product in Slovakia than the proportion of total employment – for the first time within the analyzed period of time. It indicates an increasing intensification of agricultural production.

The average monthly wage in agriculture in the years 2003 until 2005 increased with the decrease of the number of employees (Table 1). In the long term, the average wage in agriculture fluctuates above around 70% of the level of national economy. From the Table 1, it is obvious that in the year 2005, when compared with the previous two years, the rate decreased by approx. 1%.

From the accessible information about the costs in agriculture, we chose personnel costs per 1 ha of agricultural land as representatives of social policy. Table 2 contains their comparison with the total costs, revenues and retained earning/loss. The proportion of personnel costs to total costs showed a decrease in the years 2003–2005.

The data shown in tables and figures used in this paper demonstrate that there is a clear evidence that the social situation in agriculture is disquieting. They should be paid an enhanced attention by all managers on every operating level.

In economic-developed countries, the higher attention has started to be devoted to social aspects of business in last two decades. Researches and historic development anyway pointed out that:

- market economy is not a space without social responsibility,
- only business competition will not bring the social justice,

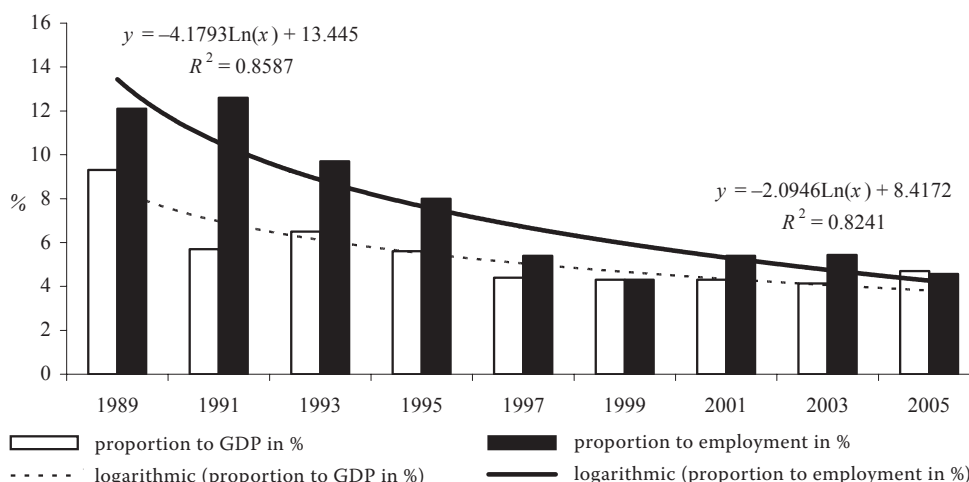


Figure 2. The development of proportion of agriculture to employment and GDP in Slovakia from the year 1989

Source: Green Report of the Ministry of Agriculture of the Slovak Republic

– market economy with social orientation is more effective than without it.

On these basics, the new-formed methods and ways of management give a considerable emphasis on social aspects of business. For example, we will show at least the method BSC – Balanced Scorecard – and the practical use of social oriented economy project by the name of Economy of Communion which is propagated in the world.

The fundamental incentive to design the BSC-method was the finding that the traditional approaches to determine business performance based on value (financial) indicators are not sufficient. BSC-method brought the enlargement and convertibility of measurement business activities performance just from financial indicators at other areas: customer area, internal processes and the area of learning and growth of company – employee area. The employee area is oriented at measurement of employee satisfaction, fluctuation of employees, monitoring of profit, costs

and yields per employee, qualification and age structure of employees, motivation and the rate of interest of employees at the future development of a company etc. BSC-method is important in long-term view of company future subsistence, and so its application is appropriate mainly in the firms, which face a powerful pressure of competitive area. The detailed characteristic of this method and its application in practice is conducted by Vysušil (2004).

The project of the Economy of Communion was established in Brazil as the answer to huge social-economic differences between the rich and the poor, in the year 1991. Its typical characteristics are enterprises performed in market area, and the emphasis is placed not only at profit, but mainly at its partition: the first part attends to company growth, the second one attends to help the destitute and the third one serves for human resources development and formation. A great attention is devoted to social aspects of company, its internal relationships and its relationship to external surroundings.

Table 1. The proportion of the agricultural sector in the Slovak Republic to the chosen economic indicators in the years 2003–2005

Indicator	Years			Yearly change		Index (%)	
	2003	2004	2005	2004–2003	2005–2004	2004/2003	2005/2004
Number of employees in agriculture (thousands)	59.818	51.000	49.641	–8.818	–1.359	85.26	97.34
Average monthly wage in SKK in agriculture	10 958	12 441	13 320	1 483	879	113.53	107.07
The proportion of agriculture in % in:							
GDP (a.l.)	4.14	4.70	4.70	0.56	0.00	–	–
employment	5.43	4.93	4.57	–0.50	–0.36	–	–
average wage	73.30	73.40	2.40	0.10	–1.00	–	–

Source: Green Reports of the Ministry of Agriculture of the Slovak Republic

Table 2. The comparison of personnel costs of agricultural production in Slovakia with total costs, revenues and retained earning/loss in agriculture in the years 2003–2005 (SKK/ha agricultural land, %)

Indicator	Years			Yearly change		Index (%)	
	2003	2004	2005	2004–2003	2005–2004	2004/2003	2005/2004
Personnel costs in total	9 247	7 900	8 207	–1 347	307	85.43	103.89
From that wages and salaries	6 708	5 777	5 976	–931	199	86.12	103.44
Total costs	48 739	42 876	46 351	–5 863	3 475	87.97	108.10
% personnel costs from total costs	18.97	18.43	17.71	–0.54	–0.72	–	–
Revenues	46 874	43 846	46 606	–3 028	2 760	93.54	106.30
Retained earning/loss	–1 865	970	255	2 835	–715	152.01	26.29

Source: The Research Institute of Agricultural and Food Economics of the Slovak Republic

The project has been enlarged along the world, nowadays on principle of the Economy of Communion, there are based activities of more than 770 enterprises (many of them are oriented at agricultural production). There are 4 enterprises of the Economy of Communion in Slovakia: the Jozef firm which is situated in Kurim and pursues the production of wooden toys, the Ecodico firm situated in Žilina and oriented at enforcement of claims and dealing with the solution of disputes between creditors and debtors, the atelier and shop In Vivo situated in Bratislava and the Betula firm situated in Bratislava and oriented at horticultural services. There are 10 enterprises of Economy of Communion, in the Czech Republic, from which two enterprises are oriented at agriculture. According to the Economy of Communion, there are 5 industrial complexes and shopping centers, and 2 others are under construction.

The project of the Economy of Communion gained focus of the expert public by its attractive paragon and different essays, doctorates, conferences and seminars started write about it. Professional guarantors of the Economy of Communion project and its theoretical component are well-known academic professors such as Luigino Bruni from Milano, accepted economist Stefano Zamagni from Bologna, experienced sociologist Vera Arauj from Brazil, Tommaso Sorgi from Rome and the others. The project of the Economy of Communion has become favorable also among politicians such as former chairman and present Italian prime minister Romano Prodi, many political representatives in Brazil, Korea, Portugal, in many European cities etc. On the basis of the experiences of the Economy of Communion companies were written a lot of thesis, one of them also at the Slovak Agricultural University in Nitra.

Detailed information are accessible in many world languages on the internet web page [www.edc-online.org](http://www.edc-online.org), where there is also possibility to reach the journal *Economia di comunione* in English language by the name of the Economy of Communion. You can find there up to the present written thesis, dissertations, speeches, publications etc. Slovak version of this web page is under construction.

New forms, methods and ways of management require adequate information, which must be the part of company and supra-company managerial information systems. It is necessary to assign the long-term prosperity of the company in order that informational systems include also social information. Firstly that information which are necessary for the management at company level, also that information which are necessary for management of social situation from the level of ministry.

The Ministry of Labour, Social Affairs and Family of the Slovak Republic in cooperation with the Statistical Office of the Slovak Republic, the Association of Employer Federations and Unions, the Confederation of Trade Unions, the Republic Union of Employers organize informational system about labour price from the year 1992, in which there are monitored wage situation, labour conditions and cost for company social policy. The most important spheres of information which are included in the system are the subsequent information:

- evidentiary number of employees and other natural entities,
- contracts between employer and employees,
- cooperation of contractors and grants of Trade Union,
- wage claims, compensations, severance pays,
- agreed wage schedules,
- wage advantages, compensation for emergency service, other financial fulfillment,
- additional pensioner savings, special-purpose savings and life insurance of employee,
- working hours, rest time, wage compensation,
- security and protection of health during the work,
- other forms of the company social policy utilization,
- employer grants for its employees,
- characteristic of social fund formation,
- intended use of the Social Fund.

It is possible obtain the actual view about company social policy, level of costs at security and protection of health during the work and other benefits for employees through the initiate information areas.

Managerial accounting and managerial informational system would tape social information in the company information systems. They would include mainly the information which is necessary for the Slovak informational system about labour price, possibly other information about specified by company workers. Each unit of account, which annual accounts must be verified by an auditor, is compulsory to show the information about company influence at employment in annual report with emphasis at the relevant data initiated in the final accounts from 1. 1. 2005, in order to § 20 of the Act No. 431/2002, Coll. about accounting.

## CONCLUSION

Just human potential by its decision-making and activities can influence companies and the country in certain orientation in the long run and assure the



continually-sustainable development of society. It requires a sufficient education and adequately appropriate living conditions for this purpose. The company profit is made in a consequence activities of human potential. Human potential represents some kind of asset, which is not monitored in accounting but certainly it influences economic profit of company. It logically follows that it is necessary to give human potential, social conditions and social relationships such attention as the material and financial arrangement of the company activities (machine appliances, new technologies, sources of property financing, profit creation etc.) The situation is optimal when economic and social progress is parallel.

It is necessary for improvement of social situation and living standard in agriculture:

- to accelerate the restructuring process of agriculture; multi-functional character of agriculture and development of non-agricultural activities in rural regions must be supported (mainly by local autonomy),
- to eliminate gradually the weaknesses of Slovak agricultural enterprises; (low labour productivity and production efficiency, low revenues of agricultural employees and farmers, unsuitable capital structure, inaccessibility and cost level of capital, weak marketing strategy, insufficient research and development, insufficient language readiness, insufficient using of informational and communications technology, remaining problems by processing of the projects for the use of financial sources from the structural funds of the EU etc.)
- in the area of managerial accounting and company managerial information systems, to reassess the content of social character data from the viewpoint of its requirement for internal management also for the whole-socially informational system about labour price;
- for better analysis and high-quality decision-making, to compare the company information with the global and department information and also with the information on the comparable enterprises,
- to use periodically the analysis of social information in management to reach the concurrency of economic and social development.

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