# Specifics of accounting in the agricultural sector

#### Irena Honková

University of Pardubice, Faculty of Economics and Administration, Institute of Business Economics and Management, Studentská 95, Pardubice, email: irena.honkova@upce.cz

#### **Abstract**

The subject of this article is in the area of accounting for private companies - legal entities operating in the agricultural sector. A questionnaire survey was carried out covering four areas of accounting - forms of accounting, workers in accounting, the function of accounting and the individual areas of accounting. The data obtained was analysed and processed in the software Statistica using methods of statistical analysis. Two hypotheses were tested and confirmed. H1: The number of accountants is not dependent on the legal form of business. H2: The companies studied conduct their bookkeeping in the same accounting areas. Other information was also acquired: the form of bookkeeping most often used is separate accounting software. Accountants are mostly persons with secondary school education. Companies also to a large extent use the services of external accountants and tax advisors. Conversely, audit services are used mainly because of obligations imposed by law. Two final areas are somewhat in disagreement, as the main function of accounting has been reported as the obligation to keep accounts under the Accounting Act, while the analysis of various areas of accounting (such as the method of inventory accounting, the use of Analytic accounts, departmental and order accounting) has shown that companies use accounting as a basis for decision making.

# **Key words**

accounting forms of bookkeeping; accountant; tax advisor; audit; accounting functions; analytic accounts; departments; orders

#### 1 Introduction

The term accounting can be understood in three distinct and to some extent close meanings. It can be understood as the name of a type of mathematical science, the practical implementation of business (accounting) or as the name of a file of results of practically implemented business activities, in the form of entries in accounting books. (Janhuba, 2005)

This article focuses on accounting as the practical implementation of an activity which is charged, or accounted. The aim is to analyse the current situation and to test possible dependencies of accounting areas for the purpose of drawing general conclusions and final recommendations.

Historically, three basic accounting systems have developed: simple accounting, cameral accounting and double-entry bookkeeping. (Strouhal, 2012)

This article deals with the double-entry accounting system, which is based on collecting accounting information using a double entry method. Property is viewed both in terms of form and in terms of the sources of its coverage and the financial results are the difference between revenues and costs.

The subject of the research was forms of accounting, accountants, and tax advisors and auditors, as well as individual accounting areas: a method of inventory accounting and also accounting for exports, imports, VAT, accounting for Analytic accounts, departmental and order accounting and, last but not least, the function of accounting, as perceived by the respondents.

#### 2 Literature Review

The article is divided into four areas, namely forms of accounting, accounting workers, individual areas of billing and the function of accounting.

# 2.1 Forms of Accounting

Transactions or accounting events are always recorded as an accounting entry in two different accounts, on opposite sides. The initial account balance is written on the side on which the relevant item appears on the balance sheet with a positive value. Increases are written on the side of the initial balance, decreases on the opposite side. (Janhuba 2005)

The accounting record of the event is generally given on the basis of a financial document.

The form of an accounting record is a specific way of recording content, while an accounting record may have: (Strouhal 2012)

- paper form,
- technical (i.e., digital) form,

#### mixed form.

All forms of accounting records are viewed the same; i.e., the forms are equal. The content and its changes in the accounting records have in both cases the same results. In proceedings in accounting matters or arising from the accounting, conclusive accounting records can be used as evidence regardless of whether they are in paper or technical form. (Ryneš 2013)

Janhuba (2005) distinguishes the paper form of the elementary entries, accounting in bound books of accounts and accounting on loose pages.

The research tested bookkeeping manually in books, in separate accounting software and an accounting program which was part of a company's information system.

# 2.2 Workers in Accounting

Professional accountants, i.e., accountants, auditors, internal auditors, financial managers, tax advisors and management consultants, play an important role in a company-wide context, as the accounting users (see below) rely on the principle that professional accountants will provide accurate financial accounting and reporting statements, effective financial management and competent advice for the entire spectrum of business and tax matters. The attitude and behaviour of professional accountants in the provision of such services has an impact on a company's economic well-being. (Strouhal 2012)

Professional accountants should meet the following requirements: credibility, professionalism, quality of service and confidence in accounting.

Professional accountants should therefore be honest, objective, respectful to the confidentiality of information, and, last but not least, competent.

Any accountant who is an employee of a company is caught between two disparate constraints, namely, loyalty to his/her employer and ethics in relation to the profession. From an ethical point of view, an employer does not have the right to force an employee to violate the law or professional regulations, lie to or mislead the person conducting a company audit or sign his/her name to a statement which may significantly distort the facts.

The objective of the research in this area was to determine how the companies monitored use internal accounting employees and to what extent they prefer to use external accountants. In connection with the requirements mentioned above, educational background in accounting was also examined as well as the means of their further education.

Hypothesis H1 was tested: The number of accountants is not dependent on the legal form of business.

As well, the research also focused on the use of tax consultants and auditors, whereby an audit was checked to determine whether the company conducted the audit compulsorily or voluntarily.

The requirement for ordinary and extraordinary audits of financial statements apply to joint stock companies if, as of the balance sheet date of the reporting period for which the financial statements are verified and the accounting period immediately preceding, at least one of the following three criteria has been reached or exceeded: (Ryneš 2013)

- Balance sheet total exceeds 40 million CZK (gross assets)
- Net turnover is greater than 80 million CZK,
- The average number of employees during the reporting period is more than 50.

For other commercial companies, cooperatives and business owners, an audit is mandatory if, as of the balance sheet date of the reporting period for which the financial statements are verified and the accounting period immediately preceding, at least two of the three given criteria have been met.

"Gross assets" refers to the total assets ascertained from the balance sheet in a valuation unadjusted for correction. (Strouhal 2012)

"Annual net turnover" refers to the amount of revenue less any sales discounts and done by the number of months commenced, for which the accounting period lasted, multiplied by twelve.

"Average number of employees" refers to the state identified by the methods laid down by special legislation (for statistical purposes).

The objective of an audit of financial statements is to provide a statement from an independent, qualified person (auditor) as to whether the financial statements published by an accounting entity accurately present a true and fair view of a company's assets and liabilities, financial position and results of operations in accordance with applicable accounting legislation.

# 2.3 Functions of Accounting

Every accounting system performs the following basic functions: it provides a means of fixing the events in the life of a company, evidence in court proceedings, a written overview for the owner, the basis for tax assessment, and information on the company's fitness and management. (Janhuba 2005)

The primary objective of financial reporting is to faithfully present the economic reality of the company such that external users of the financial information may establish a proper view of the current financial position of the company and be able to correctly estimate its future development. But accounting is not only for the related environment. It is also to serve the managers of the company and provide them with ready, quality information regarding the financial management of the company and the needs of internal management. This requires that the accounting provide data for both short-term decision-making tasks as well as for strategic management and forecasting. (Kovanicová 2008)

A company is not only described by a given accounting system, but is also evaluated on the basis of the accounting results, i.e., data from financial statements. (Ryneš 2013)

Accounting users (Strouhal 2012) are: the company management, owners (shareholders, partners), employees, banks, commercial creditors (suppliers), competitors, holders of debt securities and potential investors, and government authorities.

The research identified the main reason why the monitored companies keep accounts; namely what function in their business the accounting serves.

# 2.4 Individual Areas of Accounting

Czech accounting standards offer two methods of inventory accounting. A company may choose either regardless of the need for an audit. (Ryneš 2013)

A company may keep track of acquisitions and disposals of inventory by one of two methods: continuous – method A (with the common use of accounts in accounting class 1 Inventory), or periodically – method B. In this way, the accounting class 1 is accounted at the end of the balance sheet date on the basis of the inventory conclusively determined from the records kept. (Kovanicová 2008)

The accounting units have the ability to independently define Analytic accounts. (Ryneš 2013)

Analytic accounts are the decomposition of some synthetic accounts according to the needs of management (Kovanicová 2008).

Value added tax is imposed by a company on the completed deliveries of goods, provision of services, and imports of goods. A business owner is subject to this tax regime by being legally required to meet certain set requirements (see below) or voluntarily filing for registration. (Křemen 2014)

A payer is a taxable person established within the country whose turnover for the immediately preceding maximum of 12 consecutive calendar months exceeds 1,000,000 CZK, with the exception of a person who carries out only tax-exempt transactions without the right to tax deductions. (Ryneš 2013)

In relation to the VAT tax return, a taxpayer is required to keep in his/her records all information needed to correctly determine tax liability. Detailed records must also be kept for the delivery of "goods" transacted with other EU countries (see below) in order to be able to prepare a "summary report". (Kovanicová 2008)

Since the time that the Czech Republic entered the EU, for the purposes of VAT, a distinction must be made between purchases/sales made with EU Member States and those made with any other third country, whereby the terms import/export refer only to trade with "outside" third countries. Deliveries between the Czech Republic and other EU countries are considered to be "intra-community trade" (Kovanicová 2008).

For the purpose of this article, it is not important whether a transaction took place and thus whether it was accounted as for a third country or whether it is intra-community trade.

Accounting by departmental centre is used by companies which apply the system of "line management of responsibility centres".

Responsibility accounting primarily deals with questions such as how the individual responsibility centres contribute to the financial results of the company or how to manage the responsibility centres so that their activities aim towards the optimum fulfilment of the company's objectives as a whole. (Strouhal 2012).

In some companies, process oriented accounting plays a significant role.

The significance of process accounting is based on the response to the question "what is the cost effectiveness or the value added by the company's activities, operations and processes (or more simply the "order" - author), which the company engages in. (Strouhal 2012)

This article aims to analyse the accounting in these selected areas to explore and examine the proposed dependencies. We also tested hypothesis H2: The companies studied conduct their bookkeeping in the same accounting areas.

#### 3 Methods

#### 3.1 Determining the basic and sample sets

The obligation of bookkeeping applies to: (Ryneš 2013)

- Legal entities based in the Czech Republic
- Foreign legal entities if they conduct business in the Czech Republic,
- Organisational units of the State under special legislation,
- Natural persons.
  - who are recorded in the commercial registry,
  - whose turnover for the previous calendar year exceeded 25 million CZK,
  - who conduct their bookkeeping on the basis of their sole discretion,
  - who are members of an association, if at least one of the members of this association is a person or entity who is obligated to keep accounts,
  - who keep their accounting under special legislation.

The basic set was defined as a legal person based in the Czech Republic. Then there was the requirement for uniformity in the accounting, thus a selection was made in one field of operation. Farming companies were selected.

The basic set was modified to the sample set (Kozel 2011) with the number of respondents at 262.

#### 3.2 Data Collection Methods

A questionnaire was chosen as the data collection method. The reason for this was that it allowed the simultaneous collection of data from a large number of respondents across the country.

# 3.3 Methods used in the statistical analysis of the data

To verify the normality of the probability distribution, a chi-square was used (Kubanová 2004).

The determination index and the Spearman test were used for detecting dependencies (Kubanová 2004).

The Friedman test was used to test the compliance of variances (Kubanová 2004).

Statistical analysis was done using the Statistica software.

#### 4 Results and discussion

Results from the area of forms of accounting show that most companies use a separate accounting program (58.8%). In contrast, manual bookkeeping is negligible at 2%.

Hypothesis H1: "There is no dependence of the number of accountants on a company's turnover" has been confirmed. Determination index R has a value of 0.017.

24 % of the companies monitored have an external accountant. Most businesses (37%) have 2 internal accountants. 5% of the companies have more than 10 internal accountants.

Regarding the education of accountants, secondary education is dominant (category 3 - ...). 4% of accountants have a Master's level of post-secondary education.

For further education, internal accountants primarily make use of training (92%).

55% of the companies monitored use the services of a tax consultant.

While more than half of the companies use the services of a tax consultant, companies generally do not conduct voluntary financial audits (13 %).

In connection with what was written above concerning the functions of accounting, practice has verified that businesses do their accounting (theoretically quite incorrectly) mainly in order to meet their legal obligations (68.7 %).

The companies make more use of inventory accounting method "A" (77 %), which is more demanding but allows the current state of the inventory to be determined directly from the accounting.

The agricultural companies which took part in our survey are not primarily focused on foreign trade. This is attested by the fact that only 38 % of the companies deal with exports. 43 % of the companies deal with imports.

The vast majority of the companies monitored (96%) are registered for VAT. Most of them primarily due to exceeding the annual turnover; see Act No. 235/2004 Coll., as amended, § 6, paragraph 1.

Analytic accounts are used by 83% of the companies surveyed in their accounting.

Centres are used quite a bit by agricultural companies, as evidenced by the fact that 71% of the companies use them in their accounting. 63% of companies surveyed account on orders.

The largest correlation can be observed in the mutual dependence of accounting of imports and exports (value of 0.86). Significant correlations also appear for centres and Analytic accounts (value of 0.39) and the correlation of inventory accounting and centres (value 0.37). (Fig. 4.1)

Fig. 4.1: The largest correlation

	Spearman correlation (database.sta)								
	Marked correlations are significant. p <,05000								
Variable	Inventories, Method "A"	Export	Import	VAT	Analytic Accounts	Units	Orders		
Inventories, Method "A"	1,000000	-0,057949	-0,034685	0,270695	0,241139	0,372214	-0,225938		
Export	-0,057949	1,000000	0,863507	0,074499	0,058722	-0,017181	0,173518		
Import	-0,034685	0,863507	1,000000	0,094471	0,064772	0,085991	0,124167		
VAT	0,270695	0,074499	0,094471	1,000000	0,230246	0,223843	0,013886		
Analytic Accounts	0,241139	0,058722	0,064772	0,230246	1,000000	0,387825	0,082177		
Units	0,372214	-0,017181	0,085991	0,223843	0,387825	1,000000	0,177227		
Orders	-0,225938	0,173518	0,124167	0,013886	0,082177	0,177227	1,000000		

Source: author

In testing hypothesis H2 on the uniformity of accounting among companies in the monitored sector, it was found that most companies account with VAT, Analytic accounts and inventory accounting as per method "A". The least number account with imports and exports. The ambivalence, however, is low.

The Friedman test then confirmed hypothesis H2, that: The companies monitored keep their books in the same areas of accounting. (Fig. 4.2)

Fig. 4. 2: Testing hypothesis H2

	Friedman test and Kendall coefficient (database.sta) chí-kv. (N = 262, sv = 6) = 345,4818 p =0,00000 Coefficient of concordance = ,21977 r = ,21678						
	Average	Sum of	Average	Standard			
Variable	order	order		deviation			
Inventories, Method "A"	3,664122	960,000	0,229008	0,420998			
Export	5,026718	1317,000	0,618321	0,486728			
Import	4,839695	1268,000	0,564885	0,496721			
VAT	2,996183	785,000	0,038168	0,191968			
Analytic Accounts	3,450382	904,000	0,167939	0,374527			
Units	3,877863	1016,000	0,290076	0,454666			
Orders	4,145038	1086,000	0,366412	0,482746			

Source: author

#### **5** Conclusion

The companies should connect their accounting programs more with their company-wide software in order to be able to connect items such as orders issued and received with the accounting. This would greatly improve, accelerate and reduce the costs of internal communication. Company-wide software streamlines communications.

When deciding on the number of accountants, company managers must take into consideration the number of accounting entries (records) rather than the volume of turnover.

Many people still remember the time when large companies had three floors of offices filled with accountants. The development of computer technology reduced the complexity of accounting and decreased the number of accountants in the companies. Almost a quarter of the companies even do without their own accounts.

With the progressive computerisation of documentary accounting (Strouhal 2012, Ryneš 2013), the complexity of accounting will continue to decrease.

The low percentage of university-educated accountants is most likely associated with an accounting routine. Manual accounting requiring a large number of accountants has been replaced by accounting software. Accounting, however, remains routine, even though computer technology has changed the character of the original routines. Accounting programs today watching certain control numbers have set mechanisms for checking, etc.

Companies prefer to employ accountants with secondary education, as it means lower labour costs for them.

It is also likely that accountants with post-secondary education work as external accountants or tax advisors and auditors. Many companies have economists with college or university education, who have merely an advisory function for the accountants.

Starting from the idea that the majority of accountants have secondary school education, and the work for them is routine, it is likely that these accounts will give priority to training, where they learn practical and fresh information. The literature intended for accounting practices should be up-to-date and clear. An interesting fact is that the Internet was not listed at all as an additional source of accounting information.

While companies most likely employ accountants with secondary school education in an effort to save money, they do not hesitate to invest money into tax consultants. The reason for this is to optimise the tax obligations, unclear tax legislation or delaying tax returns and thereby also the income tax from legal entities by 3 months.

On the contrary, companies do not generally use the services of auditors, unless the law specifies that they must. The reason is that they likely do not bring (relative to their cost) any real benefits. Penalties imposed because of incorrectly assessed tax or optimising their tax obligation is more important than the accuracy of the accounting.

The question is how businesses perceive the importance of accounting. The main reason for bookkeeping was given as being the fulfilment of their legal obligations, but the great popularity of the accounting centres or order accounting indicates that businesses use accounting as a basis for decision making. More often they conduct their accounting in more detail than necessary by law, such as using Analytic accounts or inventory accounting according to method A.

The survey found interesting correlations in inventory accounting using method "A", the use of Analytic accounts and simultaneous accounting through departmental centres. These areas of accounting require a higher level of detail, but they also have higher information value.

The Friedman test testing hypothesis H2 confirmed that the companies in this sector behave similarly when accounting in detail, which is optimistic. Thus in reality, accounting is not perceived only as a compulsory evil, but also as a management tool.

#### References

Brealey R (2000) Teorie a praxe firemních financí. Computer Press, Praha Brigham E, Houston J (2004) Fundamentals of Financial Management. Thomson South-Western, Ohio

Český statistický úřad (2012) http://www.czso.cz. Accessed 22 May 2014

Dluhošová D (2006) Finanční řízení a rozhodování podniku: analýza, investování, oceňování, riziko, flexibilita. Ekopress, Praha

Faboz EM, Brigham E (2011) Corporate finance. Financial economics 8-10

Janhuba M (2005) Základy teorie účetnictví. Oeconomica, Praha

Kislingerová E (2004) Manažerské finance. C.H.Beck, Praha

Kovanicová D (2008) Abeceda účetních znalostí pro každého. Bova Polygon, Praha

Kozel R Mynářová L, Svobodová H (2011) Moderní metody a techniky marketingového výzkumu. Grada Publishing, a. s., Praha

Kožená M (2007) Manažerská ekonomika. C.H. Beck, Praha

Křemen B (2014) 100 legálních daňových triků 2014. Grada Publishing, a. s., Praha

Kubanová J (2004) Statistické metody pro ekonomickou a technickou praxi. Statis, Bratislava.

Lasher W (2004) Practical financial management. South-Western, Ohio.

Myšková R (2009) Satisfaction of Financial Managers with Accounting Information System. Paper presented at 3rd International Conference on Management, Marketing and Finances, Houston 30 April – 2 May 2009

Ryneš P (2013) Podvojné účetnictví a účetní závěrka, průvodce podvojným účetnictví k 1.1.2013. Anag, Olomouc

Strouhal J, Židlická R, Knapová B et al (2012) Účetnictví 2012: Velká kniha příkladů. BizBooks, Brno