ETHICAL DIMENSION OF ACCOUNTING

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Abstract: The paper analyses the current Czech methodology of accounting for experimental animals and animals sold as pets at retail pet stores while assessing whether the methodology is in line with ethical principles, as pets sold at retail are treated as goods in the accounts and experimental animals are accounted for as material. The paper proposes procedures for accounting for experimental animals and animals sold at retail.

Keywords: ethics, chart of accounts, accounting for experimental animals, accounting for animals at retail.

1 Introduction

Although it might seem that accounting and ethics have nothing in common, this is not true. The importance of ethics in accounting has been growing after several accounting scandals that took place at the turn of the century (Poje & Zaman Groff, 2023). The increasing importance of ethical behaviour in accounting is confirmed by the extensive literature review of Poje & Zaman Groff (2022), who present a growing number of papers published on this issue, as well as a growing number of research subareas. However, there are currently only a small number of accounting papers dealing with the nexus of animals, accountability, ethics, and power (Vinnari et al., 2022). There are still areas where the interlinking of these disciplines can be improved.

In general, the main purpose of accounting is to provide information applicable in making economic decisions (Sedláček, 2010; practical application Hašková & Fiala, 2022). It reflects society, expressing the principles and requirements of the social system, and recording its economic processes. Corporate accounting and budgeting in the Czechoslovak Socialistic Republic before the year 1990 was, as in other "Eastern Bloc" countries, fully and obligatorily unified by legislation (Jaruga, 1990). This was achieved through a unified system of accounts, a detailed accounting methodology, and a unified system of accounting reports, which primarily served the needs of the central authorities (Schroll, 1995). A true and fair view was introduced and reported in Czech accounting in the 1990s, following the changes in 1989 (Zárybnická & Žárová, 2022). This was associated with a greater emphasis on ethics in accounting and on adherence to its principles. A significant societal change in the first decade of the 21st century was also the decision on the admission of the CR to the European Union in 2004 and the resulting process of aligning the system of accounting regulation in the CR with EU legislation (Wagner et al, 2019). In many respects, society has made progress in the field of ethical principles, and this should be reflected in accounting as well.

In the Czech Republic, accounting as a profession is not formally regulated. However, there are professional accounting examinations at various levels for professional accountants, auditors, and tax advisors (Kubíčková & Jindřichovská, 2020). The function of accountants in the economic system depends on their ability to maintain the perception of high ethical standards (Caglio & Cameran, 2017). Accounting in the Czech Republic is regulated by a number of legal norms, particularly by Act No. 563/1991 Coll., on Accounting, and the Czech Accounting Standards, which differ slightly from the International Financial Reporting Standards.

Ethics is a philosophical discipline dealing with the moral dimension of reality (in terms of practical application, this is addressed, e.g., by Hašková (2017) or Maroušek et al. (2016)). Due to the sensitivity of data concerning corporate finance, accountants and auditors are required to study accounting ethics, as it is an essential aspect of the preparation of financial statements. In general, the term "ethics" refers to morality or a code that determines criteria for distinguishing between what is right and wrong (Banerjee & Ercetin, 2014). Here, ethics is a prerequisite for the smooth functioning of the accounting system. Recipients of financial statements expect information included in the financial statements to accurately reflect the economic reality, be reliable, accurate, prospective, and clear (Biadacz & Borowiec, 2017).

Nevertheless, there is another dimension that cannot be enforced by any legislation. It is respect for specific moral values, where there is legally enforceable, faithful, and honest accounting supported by reliable and proper accounting documents on one side, and other values that accounting does not reflect on the other side. An example could be accounting for experimental animals. Using animals in scientific experiments still attracts significant controversy (Hobson-West, 2012). Animal ethics is a significant extension of contemporary applied ethics, and its development now faces major challenges both in terms of theoretical background and social practice (Shih, 2022). Although thanks to advances in science, technology, and bioinformatics, there are new tools available that reduce the need for laboratory animals, those are still being used (Claude, 2009).

The objective of the paper was to examine whether the current Czech accounting reflects generally valid ethical principles. In order to achieve this objective, the authors try to answer the question of whether the methodology currently regulating accounting for experimental animals and animals sold at retail in the Czech Republic adheres to ethical principles.

2 Ethics in accounting – literature review

Ethical principles and responsible business should be an inseparable part of every industry and field, including accounting. Certain parallels can be found between accounting and ethics (Dolfsma, 2006). This is confirmed by Aifuwa et al. (2018), who, based on the analysis of questionnaires, found that there is a significant relationship between accounting ethics and the quality of financial reporting. The importance of ethics in accounting increased significantly after the corporate scandals at the turn of the century. These scandals mirrored a serious lack of ethics in financial reporting as well as in accountability to the general public (Poje & Groff, 2022). Unethical behaviour in accounting is often also due to the rapid evolution of technologies and increasingly more integrated nature of accounting information systems in business (Guragai et al., 2014). However, people may be unaware of their unethical behaviour. In their multi-stage theory of ethical accounting, Kim et al. (2021) describe how differential access to information may create an interrelated series of cognitive distortions in how people feel responsible for the same unethical behaviour. This model builds on the assumption that such distortions can make people consider themselves to be fair and consistent when in fact they are not.

The Code of Ethics plays an important role in addressing this problem, as it leads to a unification and awareness of ethical and moral rules. This results in reducing corruption, fraud, and unethical behaviour (Rogošic & Perica, 2023). According to the members of the International Federation of Accountants (IFAC), there are many serious ethical risks. These include failure to maintain objectivity and independence, improper leadership and poor organizational culture, lack of ethical courage and ethical sensitivity, as well as failure to exercise proper professional judgment. These problems occur also in the non-governmental and governmental sectors. Companies need to cooperate also with accounting academics to improve ethical knowledge. Appropriate ethics education should be included in the

accounting curriculum so that future accountants learn to critically consider possible consequences before making decisions with ethical implications (Jackling et al., 2007). This is also confirmed by Low et al. (2008), whose survey found that even accounting students perceive ethics education as an important factor influencing their ethical behaviour and believe it should be included in the study programme. Accounting ethics education is outlined by Uysal (2010) in a comprehensive bibliometric analysis of business ethics with a focus on accounting as one of three areas that have emerged in the literature on accounting ethics, along with moral cognitive development and implications of ethical decision-making models. A similar topic is addressed also by Armstrong (1993), who concludes that further moral development of students requires including ethics in curricula.

Recently, there have been many new demands and regulations that have reignited the discussion on ethics in animal research. Many ethical issues and problems arise in this field, which also concerns accounting (Gross & Tolba, 2015). Although animal-based experiments are criticized by the public, scientists involved in animal experimentation tend to defend their practices and refer to other scientists, farmers, and pet owners. This approach is negatively reflected in the relationship between science and the public (Michael & Birke, 1994). The number of animals used in research has grown with the advancement of research and development in medicine. Every year, millions of experimental animals are used globally. Besides the ethical aspect of this issue, there are several other negatives of animal experimentation, such as the requirement for qualified workers, time-consuming reports, complex accounting, and high costs (Doke & Dhawale, 2015). In contrast, Claude (2009) states that scientific and technological advances and advances in bioinformatics have provided new tools that enable reducing the need for laboratory animals, although they are not capable of replacing them completely. The use of animals for cosmetics testing has already been prohibited in the EU. Lewejohan et al. (2020) conclude that from the point of view of animal well-being, it is necessary to improve their living conditions outside the experiment. Folescu et al. (2013) deal with a new strategy based on alternative methods that replace laboratory animals with modern techniques. However, the defenders of animal experimentation argue that it is not possible to completely eliminate animal experimentation as long as the benefits to humans are of great importance.

According to Kouřilová & Drábková (2012), the society´s view of animals has changed dramatically in recent years. Czech law long considered animals to be things. This improved when the new Civil Code came into force, as the new Civil Code views animals as living creatures. However, in accounting, they are still considered as stock or tangible fixed assets. In contrast, according to the International Financial Reporting Standards, no biological assets can be included in stocks, nor they are considered inventories. They are subject to a separate standard, IAS 41 – Agriculture (Dvořáková, 2011).

There are many other differences between the Czech accounting regulations (MFČR, 2023) and the International Financial Reporting Standards (IFRS (2023), which are gradually erased by Czech experts in cooperation with legislators. The accounting system according to Czech law and both internationally recognised accounting systems are based on different fundamental requirements; therefore, the perception and accounting for animals in the Czech Republic and elsewhere in the world can differ as well.

Hinke et al. (2007) state that accounting according to Czech legal norms is regulated in the opposite direction than the world accounting standards. The accounting legislation of the Czech Republic primarily determines the methods, defines the correlations, and presents the chart of accounts based on which individual transactions are to be accounted for. Hines (2007) argues that International Financial Reporting Standards are becoming increasingly important in the global economy. In recent years, there has been pressure to adopt a unified set of financial accounting standards to replace the myriad of standards specific to individual countries that are currently still in use. According to Abdul-Baki & Haniffa (2019), the effectiveness of International Financial Reporting Standards primarily depends on the enforcement of accounting standards in a given country. Sucher & Jindřichovská (2011) deal with the implementation of International Financial Reporting Standards in the Czech Republic. Based on a review of legislation, institutional framework, and conducted interviews, the authors point out problems that are related to the differences and implementation of internationally recognised accounting systems. Žárová and Mejzlík (2009) believe that the aim of the Ministry of Finance is to implement some of the globally recognised accounting practices into Czech accounting standards. However, this effort often brings very complicated situations and may cause the collapse of the accounting system. Jindřichovská and Kubíčková (2017) argue that the implementation of IFRS elements into Czech accounting standards is only partial now; therefore, the ethical approach to accounting may differ compared to countries that use international recognised accounting systems.

3 Methodology

First, it is necessary to define the legal framework for the use of experimental animals in the Czech Republic (CR) and the term "experimental animal". Next, there will be presented an overview of selected species and heads of experimental animals that were used for experiments in the Czech Republic in 2021. Moreover, a procedural analysis of the current Czech methodology for accounting for animals – Decree 500/2002 Coll., Section 9, will be performed in order to analyse the prescribed accounts and accounting procedures stipulated in this area by the Czech Accounting Standards – Czech Accounting Standard No. 015 – Inventories. There will be analysed the negative effects of the current approach to experimental animals, as well as the ethical dimension of the current accounting for experimental animals. The output should be a proposal of new accounts that would be appropriate to include in the guideline chart of accounts for the accounting for experimental animals and animals sold as pets at retail, and account assignments for selected accounting cases will be proposed.

4 Results

In the Czech Republic, animal protection is mainly the responsibility of the Ministry of Agriculture and the State Veterinary Administration of the Czech Republic. The Ministry of Agriculture approves the statute and rules of procedure of the Central Commission for Animal Protection and the Committee for Protection of Animals used for scientific purposes. Moreover, it carries out tasks arising directly from the regulations of the European Union on the protection of animals against cruelty, keeps central records of the number of experimental animals used, grants and withdraws authorisation for the keeping, supply, and use of experimental animals.

The Committee for Protection of Animals used for scientific purposes provides consultancy on the acquisition, breeding, housing, care, and use of experimental animals. It ensures the sharing of best practices.

Committees for protection of animals used for scientific purposes of the EU Member States exchange information about the functioning of expert committees and on the conduct of the evaluation of experiments and share best practices. The purpose of information exchange is to prevent the repetition of the same experiments in the EU countries. The State Veterinary Administration establishes veterinary conditions for the conduct of animal experiments and based on the results of inspections, it may issue a decision on a binding instruction to remedy the deficiencies identified.

The definition of an experimental animal in accordance with Section 3 j) of the Act No. 246/1992 Coll., on the protection of animals against cruelty states that "experimental animal" is:

1. A living vertebrate animal that is or is to be used for experiments, except for human beings, but including self-feeding larval forms and mammalian foetus from the last third of their normal development, or
2. A living cephalopod that is or is to be used for experiments; an experimental animal is also an animal that is at an earlier stage of its development than the stage specified in point 1 if it is to be allowed to live beyond that stage of development and is likely to experience pain, suffering, distress, or lasting harm as a result of the experiments carried out when it reaches that stage of development.

Under this Act, experiment means any invasive or non-invasive use of an animal for experimental or any other scientific purposes with a known or unknown outcome or use of an animal for educational purposes that is likely to cause pain, suffering, distress, or lasting harm to the animal of at least the intensity of the introduction of a needle according to the normal veterinary practice. Experimentation also refers to any course of action that has or may result in the birth or hatching of an animal or the creation and maintenance of a genetically modified animal line in any such condition. The killing of an animal solely for the purposes of using its organs or tissues shall not be considered experimentation.

The provisions of this Act governing the protection of experimental animals do not apply to cases where experimental animals are used for the following purposes:

a) Non-experimental agricultural practices,
b) Non-experimental clinical veterinary practices,
c) Veterinary clinical trials required for the marketing authorisation of a veterinary medical product,
d) Practices carried out for the purposes of recognised animal husbandry practices,
e) Practices carried out for the purposes of animal identification,
f) Practices not likely to cause pain, suffering, distress, or lasting harm caused by the introduction of a needle in accordance with the normal veterinary practice.

Tables 1 and 2 in the Appendix present data from the Czech Republic for the year 2021 concerning the use of selected animal species for experimentation and the number of heads of animals used for experimentation by the purpose of experiment.

The attitude to animals is reflected in the method of accounting for them. From an accounting point of view, livestock in the Czech Republic are divided into fixed tangible assets and current assets.

Breeding animals, such as cattle, horses, pigs, sheep, goats, flocks of breeding geese, racehorses, sport horses, and draft animals are accounted for in the category of tangible fixed assets, balance sheet asset account 026 – adult animals and their groups. At the discretion of the accounting unit, there can be included also herds of other farm animals, e.g., mouflons, fallow deer, red deer, or ostriches.

Valuation represents one of the most important elements of accounting. The valuation method significantly influences the amount of the reported profit or loss and the transparency of financial statements. The valuation of acquired fixed assets in the CR is based on Decree No. 500/2002 Coll., which, unlike IFRS, presents an exemplary list of items to be included in the acquisition costs rather than a general rule. Most of these items comply with the general rule stipulated by IFRS.

Czech Accounting Standard for Entrepreneurs no. 013 Fixed tangible and intangible assets state that depreciation of adult animals and their groups can be applied by expressing depreciation as a proportion of the acquisition price less the expected revenue at culling (numerator) and the expected number of years in breeding (denominator). Draft animals, racehorses, and breeding horses are depreciated individually, other adult animals and their groups can be depreciated in groups. In the case of these categories of animals, technical evaluation is not included.

Young animals, slaughter animals, flocks of hens, ducks, turkeys, guinea fowl, fish, bee colonies, and fur skin animals are included in the category of current assets, balance sheet asset account 124 – young and other animals and their groups. According to the accounting standard no. 015 – Inventories are reported at cost; raised breeding animals at cost or at replacement cost if cost cannot be determined. Newborn animals are reported at cost in account 124 – Young and other animals and their groups in conjunction with the account in group 58x – Change in inventories of own activity and their capitalization.

However, experimental animals are not accounted for in account 124, as in accounting, they are considered material, account 112 – material inventory. It is recommended to distinguish these animals through analytics for account 112 (Decree No. 500/2002 Coll., Section 9).

As for accounting for the sale of animals classified as current assets and recorded in account 124 – Young and other animals and their groups, account 311 – Customers is used in conjunction with income account 601 – Sales of own products.

Retail outlets account for animals they sell as goods. Decree No. 500/2002 Coll, Section 9 defines that animals acquired for the purpose of sale are considered goods if the entity trades in such animals. Retail outlets therefore account for animals sold as pets using either method a in account 132 – Goods or method b in account 504 – Goods sold. The revenues are accounted for in revenue account 604 – Sales of goods.

As in the case of any other assets, it is necessary to take inventory of animals as well. Section 29 of the Act No. 563/1991 Coll., on Accounting, instructs accounting units to determine the actual state of assets and liabilities by taking inventory. This is carried out at the time when the financial statements are drawn up. Accounting units are obliged to prove that inventory was carried out for a period of 5 years after inventory. For each type of asset, inventory-taking must be performed at least once in each accounting period.

In the physical inventory of foundation herd and draft animals, it is appropriate to proceed by taking an individual inventory of adult beef cattle, draft animals, brood sows and boards, and animals with breeding value and other animals. In the case of animals included in stock, the inventory is taken based on inventory numbers or other characteristics. The results are always recorded in the inventory lists.

According to the authors, the current Czech accounting methodology is proof of cynicism, indifference, contempt for creatures without which our medicines, medical procedures, cleaning products, cosmetics etc. would not exist. Experimental animals, to which we owe our progress and comfort are recorded as inanimate things that do not feel fear or pain. People in general are not educated to respect animals (Feinberg, 2017). Considering an animal as a material or commodity means denying them the right to feel fear, pain, or joy (Singer, 2016).

The authors thus believe that the chart of accounts should be extended to include new accounts that would be used to account for experimental animals and animals sold at retail. Obviously, this change will probably not solve the ethical problems but is at least a small step towards correction from the side of accounting bodies and food for thought.

According to the authors´ proposal, experimental animals would continue to be accounted for as inventories but a separate balance sheet asset account (account 125 – Experimental animals) would be created for them. The death of an experimental animal would be reported in a separate expense account 503 – Death of experimental animal. Animals purchased for retail sale could have a separate balance sheet asset account

126 – Animals at retail. The sale of an experimental animal or animal at retail would be reported as an expense in account 547 – experimental animal sold and animal at retail sold when removing the animal from inventory. Proceeds from the sale of a young, slaughter, experimental animal or animal at retail could be reported as income in account 603 – Proceeds from animal sold – current assets. The change in the stock of animals – current assets – is currently illogically accounted for alongside expense accounts in group 58 – Change in inventories of own activity and capitalization. The authors propose that experimental animals could be accounted for in account 587 – Change in experimental animals.

If method b was used to account for the purchase of experimental animals and animals at retail, in the case of experimental animals, it would be appropriate to establish a new expense account 505 – Experimental animals, while in the case of animals at retail, expense account 506 – Animals at retail.

Appendix I provides a summary table (Table 3) with the proposed account assignment. The authors believe that extending the indicative chart of accounts would not be burdensome for accounting units. Moreover, it would certainly declare respect for living creatures. The requirement to provide a true and fair view of financial statements would not be influenced by this change; in contrast, balance sheets and profit and loss accounts would provide more accurate information.

5 Discussion of results

The authors found that according to the current Czech methodology, animals are accounted for as a fixed tangible asset or current asset.

Young animals, slaughter animals, flocks of hens, ducks, turkeys, guinea fowl, fish, bee colonies, and fur skin animals are considered current assets. In account for these animals, balance sheet asset account 124 – Young and other animals and their groups are used. However, experimental animals are accounted for in balance sheet asset account 112 – material inventory. It is quite unethical to refer to living creatures as material, inanimate things. Animals sold at retail as pets are accounted for using method a in account 132 – Goods, or using method b, account 504 – Goods sold.

As for the ethical dimension of accounting, the authors conclude that the current Czech methodology for accounting for experimental animals and animals at retail is not in line with ethical principles.

For this reason, new accounts and related account assignments are proposed to be used to account for experimental animals and animals sold at retail. The extension of the chart of accounts with these new accounts would express respect for living creatures and would not be burdensome for accounting units.

The proposed accounts are specified below:

- Balance sheet asset account 125 – Experimental animals
- Balance sheet asset account 126 – Animals at retail
- Profit and loss expense account 503 – Death of an experimental animal
- Profit and loss expense account 547 – Experimental animal and animal at retail sold
- Profit and loss expense account 587 – Change in experimental animals
- Profit and loss income account 603 – proceeds from the sale of an animal reported as a current asset
- Profit and loss expense account 505 – Experimental animals (purchase of experimental animal, method b)
- Profit and loss expense account 506 – Animals at retail (purchase of animals intended for retail sale, method b)

Obviously, this change in accounting would not change the situation of experimental animals. However, it would express the respect of society for living creatures without which the health of the population, the well-being and comfort of our civilisation would be threatened or not exist.

6 Conclusion

The objective of the paper was to analyse whether the current Czech methodology for accounting for experimental animals and animals sold at retail is consistent with ethical principles. It was found that this methodology is not ethical.

Animals sold at retail as pets are currently accounted for as goods. The paper recommends including new accounts in the chart of accounts that could be used in this case.

Experimental animals, to which we owe the advances in medicine, are accounted for as materials. The paper suggests new accounts to be included in the chart of accounts for the purpose of accounting for this type of animals.

When selling animals recorded as current assets, profit and loss income account 601 – Sales of own products is currently used. The authors suggest including a new income account in the chart of accounts that would replace account 601 and reflect the nature of these assets.

The paper proposed account assignments for selected accounting operations using the proposed accounts.

The extension of the chart of accounts and the revised methodology for accounting for experimental animals and animals sold at retail would not be burdensome for accounting units. Moreover, it would be an expression of our awareness of the debt we have to experimental animals and society´s attitude towards living creatures in general.

Appendix

Tab. 1: Overview of selected animal species and their use for experimental purposes in the Czech Republic in 2021

Species	Number of heads
Laboratory mouse	74 989
Guinea pig	1 999
Laboratory rat	17 375
Domestic rabbit	5 038
Domestic pig	1 619
Cattle	2 305
Domestic cat	115
Domestic dog	377
Chicken	22 033
Livebearers	74 305
Other fish species	30 185

Source: MZE (2022).

Tab. 2: Number of heads of animals used for experiments in the Czech Republic in 2021

By purpose of experiment	Number of heads
Fundamental research	78 953
Transplantation and applied research	32 008
Legislative purposes and production	36 128
Environmental protection for the purpose of protecting human or animal health or welfare	93 038

Source: MZE (2022).

Tab. 3: Accounting for experimental animals and animals at retail

Economic operation	Account assignment
Purchase of experimental animal – Method a	125/ 321
Death of experimental animal	503/125
Sale of experimental animal – removal	547/125

Sale of experimental, young, or slaughter animal – invoicing	311/603
Newborn experimental animals – raised breeding	125/587
Purchase of animal intended for sale at retail – Method a	126/321
Sale of animal at retail – removal	547/126
Sale of animal at retail – cash sales	211/603

Source: Authors.

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Primary Paper Section: A

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