

Accounting of Internally Generated Intangible Assets at Public Universities in the Czech Republic

Marie Padrtová

Institute of Technology and Business in České Budějovice

Abstract

Public universities in the Czech Republic register every year hundreds of internally generated patents for inventions, utility models or industrial designs, prototypes or functional. Internally generated intangible assets are the subject of evaluation and accounting. As such, it should be recorded in the balance sheet of the entity in the category of intangible assets and depreciated progressively. The aim of this work is to determine whether the internally generated intangible assets are recognized in the balance sheets of universities. Executed comparison of the research' results of universities reported to the Council for Research, Development and Innovation with the balance sheet of universities in 2011, it was found that 95% of universities does not show in their balance sheets internally generated intangible assets, which are however presented to the Council for research, development and innovation as the research results of public universities. It is evident, that public universities dispose with large amount of intangible assets whose existence is not declared in the financial statements. Their accounting doesn't provide the true picture of the assets of these economic entities.

Keywords: intangible assets, universities, accounting, balance sheet

Introduction

Public universities in the Czech Republic register every year hundreds of internally generated patents for inventions, utility models or industrial designs, prototypes or functional. The universities report these intangible assets to the Ministry of education in the Information system of research, experimental development and innovations as the results of their research activities and their number has a direct impact on the amount of funds, which are universities receiving every year, to finance their activities.

Internally generated intangible assets are the subject of evaluation and accounting. As such, it should be recorded in the balance sheet of the entity in the category of intangible assets and depreciated progressively.

The aim of this paper is to find out whether these internally generated intangible assets are reported not only for the purpose of financing the universities research from public sources, but also in the balance sheets of universities, in order to respect the principle of significance and true and fair view of the assets of the entity.

Material and Methods

Intangible assets

For the purpose of this paper it is necessary to define intangible assets. Assets are embedded resources controlled by the entity, which are a result of the past events and which are expected to generate future economic benefits to the company, the future profits. Fixed assets are proprietary ingredients that are used in the company in the long-term and the majority of these assets wear and tear gradually. Long-term assets include fixed assets of long-term nature, intangible assets and financial assets (Kovanicová 2009). Intangible assets differ from tangible assets in that it has no physical substance, they are mainly the rights, which property results (or is expected to result) in economic benefit (Kovanicová 2003).

Intangible assets have the following characteristics:

- the intangible nature,
- operating time is longer than one year,
- reaches a certain level of appraisal (Kovanicová 2009).

Intangible assets should be classified according to their nature and by the way of acquisition. The method of the acquisition determines the content of acquisition costs. Depending on the nature of intangible assets it is possible to distinguish between identifiable and unidentifiable assets.

Specifically identifiable intangible assets:

- patents: are exclusive right to use the invention for a period of time;
- copyright: they are exclusive rights to reproduce and sell books, music, film and other similar cases;
- trademark: Is the exclusive right to use a particular symbol that is protected by law. It may take the form of names, symbols, slogans, logo or emblems;
- concession and licenses: Concessions privileges are transferred to the State or other public corporations for the use of certain equipment or to perform certain trades, occupations and activities. License means the right to use patents, trademarks, etc. in specific circumstances.

Identifiable asset is for example goodwill (Kovanicová 2003).

Intangible assets can be obtained and recognized in the balance following ways:

- purchase,
- acquisition of rights to results of intellectual activity,
- own activity,
- non-monetary contribution from any other person,
- transfer of the legal conversions / mergers,
- gratuitous transfer (gift), or transfer of personal use to business (Svačina 2010).

Evaluation of intangible assets

The most common reasons for the valuation of intangible assets include:

- non-monetary contribution of intangible assets to capital company,
- valuation for accounting purposes,
- the use of intangible assets as collateral subject,
- transformation of companies,
- sale of intangible assets,
- intangible assets of the company in the event of bankruptcy or liquidation,
- settlement of inheritance,
- rights owners often want to know the value of their property, only as an input to various subsequent business meetings (Mařík 2011).

For the purpose of this article is relevant reason for the valuation of intangible assets valuation for accounting purposes.

Accounting of public universities

Public universities are in the Czech Republic ranked among non-profit organizations, whose accounting is subject of Act No. 563/1991 Coll., About Accounting, Decree 504/2002 Coll., Implementing certain provisions of Act No. 563/1991 Coll., about accounting for non-profit entities and Czech accounting standards for entities that do their accounts according to Decree No. 504/2002 Coll., as amended.

From an accounting point of view, according to Decree 504/2002 Coll. Intangible assets are defined as:

- research and development, which were internally generated and held for trading or are acquired from other persons,
- software, that has been developed internally and used for trading or has been acquired from other persons,
- appreciable rights – to industrial property and similar property, to the results of intellectual creative activities and other Appreciable rights under specific legislation,
- other intangible assets – which by their nature can't be included in other items of fixed assets (e.g., emission allowances and preferential limits).

Accounting Act allows following valuation methods:

- purchase cost – it means the price at which the assets were acquired at the time of its acquisition (e.g. the price of a trade mark when buying from an independent third party)
- replacement cost – means here the price at which the assets were acquired at the time of record (e.g. a value determined by an expert in case of contribution of a utility model in the company)
- own expense – for internally generated intangible assets it means direct costs of production or other activity, and indirect costs that relate to production or other activity (e.g. internal development software designed for repeat business) (Svačina 2010).

Internally generated intangible assets can be under the Accounting Act only appreciated on the level of own expenses. Own expenses are direct costs of production or other activities, and indirect costs that relate to production or other activities, as defined in accordance with the accounting methods (Svobodová 2012).

Accounting can contain information about the valuation of intangible assets that is determined in the case of buying on market principles and for internally generated intangible assets on principles of Accounting Act, that means on own expenses, which in most cases represent different price levels (Čada 2007).

Methods

There are 26 public universities in the Czech Republic, one of them is not included among the research organizations of the Czech Republic and another one was accepted among research organizations first in 2012, therefore its research results are not disclosed for the previous period. Public universities, which are in the same time research organizations longer than since 2011, will be for the purposes of this article an examined sample. It is therefore 24 entities.

The research results of all research organizations in the Czech Republic for 2012 and 2011 are available on the website operated by the Council for Research, Development and Innovations. Results are listed for each organization according to the applicable evaluation methodology of research organizations and evaluation of completed programs (valid for the years 2010, 2011 and 2012). According to this methodology there are research results, which were applied by research organizations within last 5 years period. For 2012, therefore, there are research results presented since 1st January 2007 till 31st December 2011 and for 2011 research results presented since 1st January 2006 till 31st December 2010. As it isn't possible to determine exactly in which year within the five-year period these results incurred, it's necessary to use the difference between the sum of results presented in 2012 and the sum of results presented in 2011 for the purpose of this article. If the difference of these values will be positive it can be determined with certainty, that in 2011 the university produced at least this number of intangible assets. It is probably that the number of research results created in 2011 was even higher than considered difference, because our difference represents in the reality difference between number of research results created in 2011 and number of research results created in 2006. For the purposes of this study, however, this value is sufficient, because it is possible to verify whether there was recorded adequate increase in the value of the corresponding item among intangible assets in the balance sheet for the year 2011.

The results are classified according to the methodology by the type of result. For the purpose of this Article, will be used following types of results:

- P – patent
- F – utility model, industrial design
- G – functional prototype or sample (Information system of research, experimental development and inovations, 2013)

The reason, why those tree types were chosen, is that those types of results can be clearly classified for accounting purposes, and also it is evident that they belong to the group of long-term intangible assets, that their owner plans to sell or use for own activity in the future. This intention is proved by the act of legal protection of ownership of the property.

All selected types of results fall into accounting entries Assessable rights in the balance sheet. The balance sheet is part of the annual management report. Annual Financial Reports are posted on the universities websites.

Each research result should be evaluated by universities at the level of their own costs and recorded as an increase in fixed assets in 2011, as due to their nature it is not to be disputed that it they are internally generated intangible assets. The exception is the case when the valuation of a particular research outcome doesn't reach 60 thousand CZK, in which case the costs associated with the acquisition of intangible assets are considered as costs of actual accounting year.

A prerequisite for the verification of the financial records of internally generated intangible assets by universities is that the value of this property will in most cases exceed 60 thousand CZK.

Comparing changes of item assessable rights for 2011 and the number of research results registered by the Council for Research, Development and Innovation, will be verified that universities do accounting reports of internally generated intangible assets.

Results

Table 1 shows the difference in number of research results in selected categories reported in 2012 and 2011. It is evident that public universities reported substantial number of targeted species of research results to the Council of research, Development and Innovations. The total number of selected research results for all of the monitored institutions amounted to 1734 of which 1227 were functional prototypes or samples, 404 utility models and industrial designs and 104 patents. The difference in number of research results reported in 2012 and 2011 was zero for four of the monitored institutions. These institutions were therefore excluded from further verification. The research sample of monitored institutions decreased therefor at 20.

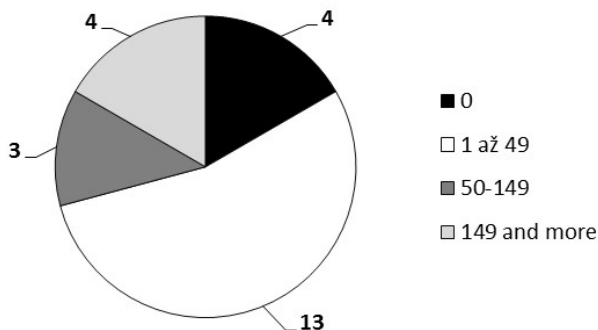
Tab. 1: Numbers of research results realized in 2011

Public university	Type of result		
	P	F	G
Academy of Performing Arts in Prague	0	0	4
Academy of Fine Arts in Prague	0	0	0
Czech Agricultural University in Prague	6	62	21
Czech Technical University in Prague	31	71	294
Janáček Academy of Music and Performing Arts in Brno	0	0	0
University of South Bohemia in České Budějovice	6	7	0
Masaryk University	5	2	5
Mendel University in Brno	1	22	4
University of Ostrava	0	2	0
Silesian University in Opava	0	0	0
Technical University of Liberec	11	43	56
University of Hradec Králové	0	2	0
Jan Evangelista Purkyně University in Ústí nad Labem	0	0	2
Charles University in Prague	5	8	4
Palacký University in Olomouc	13	7	6
University of Pardubice	1	1	12
Tomas Bata University in Zlin	4	67	36
University of veterinary and pharmaceutical sciences Brno	0	0	0
VŠB - Technical University of Ostrava	5	28	253
University of Economics in Prague	0	2	1
Institute of chemical technology Prague	7	11	23
Academy of Arts, Architecture and Design in Prague	0	0	2
Technical University Brno	7	28	370
University of West Bohemia	1	42	134

Source: Office of the government 2013

In Figure 1 are the surveyed institutions divided by the total number of research results registered in 2011.

Figure 1: Institutions classified according to the total number of research results



Source: Own

Tab. 2: The increments of appreciable rights in balance sheet in 2011

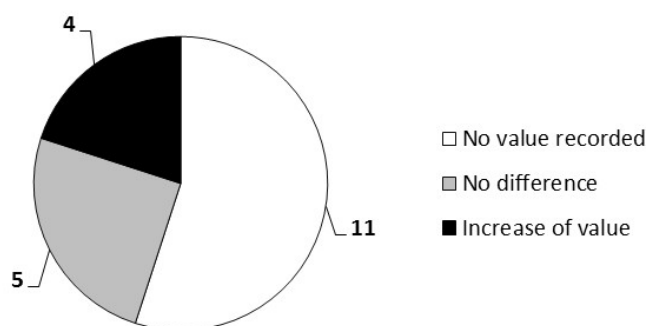
Public university	2011	2010	Difference
Academy of Performing Arts in Prague	1223.15	1223.15	0
Academy of Fine Arts in Prague			
Czech Agricultural University in Prague	0	0	0
Czech Technical University in Prague	0	0	0
Janáček Academy of Music and Performing Arts in Brno			
University of South Bohemia in České Budějovice	0	0	0
Masaryk University	8611.94	7377.1	1234.84
Mendel University in Brno	250	250	0
University of Ostrava	0	0	0
Silesian University in Opava			
Technical University of Liberec	0	0	0
University of Hradec Králové	0	0	0
Jan Evangelista Purkyně University in Ústí nad Labem	0	0	0
Charles University in Prague	97	97	0
Palacký University in Olomouc	0	0	0
University of Pardubice	7600	440	7160
Tomas Bata University in Zlín	5382	4670	712
University of veterinary and pharmaceutical sciences Brno			
VŠB - Technical University of Ostrava	13200.88	12085.82	1115.06
University of Economics in Prague	0	0	0
Institute of chemical technology Prague	0	0	0
Academy of Arts, Architecture and Design in Prague	0	0	0
Technical University Brno	0	100	-100
University of West Bohemia	504.63	504.63	0

Source: Own

There are the increments of appreciable rights in balance sheets in 2011 in Table 2. Of the monitored institution that demonstrably registered in year 2011 patents, utility models or industrial or functional prototypes or samples only four institutions recorded in the same year growth of appreciable rights in the balance sheet.

Figure 2 shows the results listed in Table 2. The monitored organizations are grouped according to changes in the value of the item appreciable rights in balance sheet in year 2011.

Figure 2: Monitored institutions grouped according to changes in the value of item appreciable rights



Source: Own

From figure 2 it is clear that from total number of monitored institutions more than half records no appreciable rights, five institutions did not change state of appreciable rights during 2011 and only four institutions increased state of item appreciable rights in 2011.

Discussion

From the total number of monitored universities, which reported chosen types of research results, 11 institutions doesn't record in their accounting any intangible assets of this kind, five institutions records some intangible assets, but its state didn't change within the year 2011, although those institutions reported this type of research results.

Only four from the monitored institutions has increased value of monitored item. Detailed analysis of the annual accounting reports of these four institutions shows, that only in one case this increase represents internally generated intangible assets.

Only one university from four, which reported in 2011 the largest number of research results, recorded in the same time in its accounting the increase of item appreciable rights. The annual financial report of this university doesn't give any additional information, which would enable to identify this increase.

The result shows that only 5% of public universities record the internally generated intangible assets in their accounting.

Conclusion

Public universities in the Czech Republic register every year hundreds of internally generated patents for inventions, utility models, or industrial designs, prototypes of functional samples.

The executed research shows that almost every public university in the Czech Republic is the owner of this type of internally generated intangible assets, however, if we look at the balance sheets of those universities, there are no intangible assets to be found. Their accounting doesn't provide a true picture of property of those economic entities.

In conclusion, it is obvious that although the examined subjects routinely work with the concept of intangible assets, they are considering exclusively purchased intangible assets. In regards of internally generated intangible assets the performed research has proven that the examined subjects do not record the internally generated intangible assets in their accounting reports.

References

- ČADA, K., 2007. *Valuation of intangible assets*. Second revised edition. Prague: Publishing Oeconomica. ISBN 978-80-245-1157-0.
- INFORMATION SYSTEM OF RESEARCH, EXPERIMENTAL DEVELOPMENT AND INOVATIONS, 2013. *Evaluation of the results of research organizations in 2012* [online]. [cit. 2013-08-22]. Available at: <http://www.isvav.cz/h12/organizationVoDetail.do?rowId=VO>
- KOVANICOVÁ, D., 2003. *Financial accounting global concept*. IV. updated edition. Prague: Polygon. ISBN 80-7273-090-8.
- KOVANICOVÁ, D., 2009. *Alphabet accounting knowledge for everyone*. XIX. updated edition. Prague: Polygon. ISBN 978-80-7273-156-5.
- MAŘÍK, M., 2011. *Methods of valuation of the company, valuation process – basic methods and procedures*. 3rd a revised and expanded edition. Prague: Ekopress Ltd. ISBN 978-80-86929-67-5.
- OFFICE OF THE GOVERNMENT, 2013. *Methodology for evaluating the results of research and analyzes of the results of completed programs (valid for the years 2010 and 2011, and 2012)* [online]. [cit. 2013-08-22]. Available at: <http://www.vyzkum.cz/storage/att/D65C7CA66BD38389EE5638B8D55DFDC9/Metodika%20hodnocení%20výsledků%20výzkumných%20organizací%20a%20výsledků%20ukončených%20programů%202012.pdf>
- ŠVAČINA, P., 2010. *Valuation of intangible assets*. First edition. Prague: Ekopress Ltd. ISBN 978-80-86929-62-0.

SVOBODOVÁ, J. et al., 2012. *Chart of Accounts, Czech accounting standards for entities whose main activity is not business*. Olomouc: Anag. ISBN 978-80-7263-728-7.

Účetní evidence nehmotných aktiv vytvořených vlastní činností na veřejných vysokých školách v ČR

Veřejné vysoké školy v České republice každoročně registrují stovky patentů k vynálezům, užitečných nebo průmyslových vzorů, prototypů nebo funkčních vzorků vytvořených vlastní činností. Nehmotná aktiva vytvořená vlastní činností jsou předmětem ocenění a účtování. Jako taková by měla být evidována v rozvaze ekonomického subjektu v kategorii dlouhodobá nehmotná aktiva a postupně odepisována. Cílem této práce je zjistit zda jsou nehmotná aktiva vytvořená vlastní činností vykazována v rozvahách vysokých škol. Provedeným porovnáním výzkumných výsledků vykazovaných vysokými školami Radě pro výzkum, vývoj a inovace s rozvahami vysokých škol za rok 2011 bylo zjištěno, že 95 % vysokých škol v rozvahách nevykazuje nehmotná aktiva vytvořená vlastní činností, která jsou prezentována Radě pro výzkum, vývoj a inovace jako výsledky výzkumné činnosti veřejných vysokých škol. Veřejné vysoké školy prokazatelně disponují velkým množstvím dlouhodobých nehmotných aktiv, o jejichž existenci se nedozvíme z účetních výkazů. Jejich účetnictví tak neposkytuje věrný obraz hospodaření těchto ekonomických subjektů.

Klíčová slova: nehmotná aktiva, vysoké školy, účetnictví, rozvaha

Contact address:

Ing. Marie Padrtová, Institute of technology and business in České Budějovice, Okružní 10, 37001 České Budějovice, e-mail: padrtova@mail.vstecb.cz

PADRTOVÁ, M. Use of Accounting of Internally Generated Intangible Assets at Public Universities in the Czech Republic. *Littera Scripta*. 2013, 6(2), 104–113. ISSN 1805-9112.
