THE SPECIFICS OF VALUATING A BUSINESS WITH A LIMITED LIFESPAN

[a]MAREK VOCHOZKA, [b]ZUZANA ROWLAND, [C]PETR ŠULEŘ

Institute of Technology and Business, School of Expertness and Valuation, Okružní 517/10, 37001 České Budějovice, Czech Republic
email: [a]vochozka@mail.vstecb.cz, [b]rowland@mail.vstecb.cz, [c]petr.suler@cez.cz

Abstract: For business valuation purposes, three distinct approaches, earnings-based valuation, assets-based valuation, and market value-based valuation can be used. In the case of the earnings-based valuation, which is the most widespread in the Czech Republic, the valued businesses are generally upheld to the principle of going concern company, which implies the endless sustainability of the company. The present article deals with the situation of non-compliance with the principle of the going concern company, where the valuation is still profitable but with a limited lifespan, which is determined by the external conditions already known at the time of valuation. This article then deals with the valuation of a selected limited-lifespan business. In conclusion, the value of the selected business should be established, with an emphasis on the limited lifetime of the business.

Keywords: business valuation, earnings based valuation methods, businesses with limited lifespan, going concern principle.

1 Introduction

Business valuation is one of the most complex cases of valuation, as it deals with valuation of tangible and intangible assets, as well as valuation of assets not recorded in the accounting, which can be know-how, goodwill, customer base, etc. The contemporary literature of the business valuation distinguishes methods of valuation in three groups, namely earnings, assets and market value methods (Hrdý and Ducháčková, 2010). Business valuation experts generally prefer one of the earnings valuation methods in their practice, but it is desirable to be fully aware of all the pitfalls and inaccuracies of its use.

The earnings valuation methods perceive the valued entity as a functioning system (a set of tangible and intangible components) of profits with an endless lifespan. The element of infinity can be expressed in many ways, such as perpetuity until infinity, Gordon's growth model, and others.

On the contrary, assets methods assume the sale of individual components of the company's assets, and therefore the disappearance of its business activity.

The third group of methods is the market analogy whereby the price of the company is searched for through transactions with comparable businesses on the market. However, the evaluators are not usually aware of what factors were considered in the pricing process and under what circumstances the whole transaction took place (timing, extraordinary influences, etc.).

However, a problem may arise when the evaluator's task is to set the price of a business that does not meet the requirement of going concern and can not simulate the sale of its individual assets too reliably. In particular, they are businesses with a limited life expectancy, ie businesses where there is a presumption of future operation for a certain period of time, and then they are most likely to become extinct or will be forced to rethink significantly in their business activity, basically building a new business altogether.

The aim of the paper is to set out the proposed valuation procedure for a business with a limited lifespan on the example of a particular business.

2 Literary research

Business valuation is becoming more and more prevalent these days. Assets methods are based on the assumption that the value of a business is equal to the sum of the market values of its components. Under this method, the business' assets and liabilities are adjusted from their accounting value to their market value. The adjusted net asset method is usually best suited to the valuation of a capital-intensive business or holding company, and when losses are continuously generated by a business (Saari, 2018). This means that investment in real estate should be part of every investment strategy (Bartková and Stefanová, 2016). This method is used to measure a business on the basis of the actual value of its assets and liabilities and assumes the termination of its business activities.

The earnings approach of business valuation is based on the underlying premise that each business has a certain potential to generate a certain income for its owners for the future. The earnings approach is one of the most important investment assessment methods. This method is one of the most popular valuation approaches and is usually used in valuating commercial real estate and valuating businesses. Basic mathematics is similar to the methods used for financial valuation, securities analysis or securities creation (Čibera and Krabec, 2015).

When using the earnings method, when buying assets with potential and earning expectations, the investor considers the amount of earnings and other factors that determine the revenue generating risks for owners under current market conditions and under the conditions foreseen for the future (Zhang and Chang, 2007). There are two earnings-based approaches that are primarily used in the valuation of a business: the discounted cash flow method and the capitalizing cash flow method. These methods are used to measure a business based on the amount of revenue the company expects in the future (Saari, 2018). The market value approach is a business valuation method that can be used to calculate the value of an asset or as part of a valuation process. Regardless of which property is valued, the market value approach explores the recent sale of similar assets and adjusts for differences in size, quantity or quality (Svobodová, 2015).

The Market approach is a valuation method where the evaluator determines the fair market value of the target company by examining actual transactions of orders or comparable companies. Both in mergers and acquisitions, as well as in the stock market, we are considering obtaining different value measures that apply to the target company (Krch and Kubica, 2014).

Professional valuation standards require all these approaches to be taken into account in the valuation, even if the available information does not allow them to be trusted. Often, multiple approaches and techniques can be used. The results of multiple techniques often do not overlap, and the analyst's very important task is to reconcile different valuation results or decide which outcome or results should be discarded (Blake, 2016).

One of the basic assumptions that a valued entity should meet when applying earnings methods is to meet the going concern principle. Going concern is an accounting term for a company that has the resources needed to continue to operate for an indefinite period until it provides evidence to the contrary. This term also refers to the ability of a company to earn enough money to remain on the surface or to avoid bankruptcy (Citron et al., 2008).

Going concern is the fundamental principle of financial reporting. Its adoption determines the method of valuation and presentation of the assets and liabilities of the entity (Kaczmarczyk, 2018). Going Concern is the basic principle for preparing financial statements resulting from current legislation. The auditor, like the evaluator, must also verify that the financial statements have been prepared in accordance with this principle. If there is a fact that leads to the assumption that the continuation of the uninterrupted activities is not met, the entity shall present that information in the financial statements. The disclosure or non-disclosure of such information has an impact on the auditor's opinion on the financial statements. International auditing standards define the auditor's capacity to respond in case of impending duration (Kříšková and Užík, 2016).

Modern approaches can also be used to valuate business. One is the principle of Artificial Neural Networks (in this paper used to predict the financial plan of the business). Artificial neural networks attempt to copy processes in the nervous system and the human brain through computer systems (Stehel et al., 2016). The use of artificial neural networks is very broad and is currently used predominantly to solve potential problems in the future (Pao, 2008). Artificial neural networks can be used mainly for function approximation, classification, and prediction of time series (Rowland and Vrbka, 2016). Time series analysis is an area in which neural networks can be widely used. Time series are defined as sequences of spatially and de facto comparable observations that are time-based (Sheikhan and Mohammadi, 2013). In terms of neural networks and time series, neural networks attempt to display time series behavior and predict individual data points in the best possible way. However, it is necessary to show the neural networks how to work properly with given time series (Vochozka and Machová, 2018).

The valuation of a business is usually based on the data of the financial statements (balance sheet, profit and loss account) which, given the principle of a fair and honest view give sufficient information about the business. The majority of the valuation methods are based on the financial plan created by the evaluator, who is upheld to the prospect of reality and the rationality of its fulfillment. In the creation of a financial plan, the items of the financial statements from the previous periods should be verified (Valášková, Klieštik and Kováčová, 2018).

3 Data and methods

The valuated business does not fulfill the presumption of the going concern principle and therefore it is not appropriate for its valuation to use only the earnings valuation methods, as its estimated lifespan is limited by the validity of the existing lease agreement. Similarly, it is not appropriate to apply assets-based methods, which essentially presuppose the termination of the business on the valuation date. The market value-based approach can not be used at all because of the unavailability of data.

Valuation of the business in question, that is to say, a limited lifespan business, will be done by a combination of an earnings and assets valuation methods that appropriately reflects the current specific situation in which the business believes that during the following periods, until July 31, 2019 – that is to say, until the date of the expected closure of the business activity, can generate revenues sufficient enough to cover all liabilities and, above those, make a profit. Expectation of coverage of existing liabilities from future revenues largely predetermines the appropriate valuation method – in this case, the combination of the earnings method will be based on free cash flows and the assets method on the principle of market prices. The earnings method will be applied to determine the predicted value of the expected cash generated for the period from July 1, 2017 until July 31, 2019.

One of the main inputs of the earnings valuation (Discounted Cash Flow Methods) is the financial plan for the future period. The financial plan for the company will be based on the 2012-2016 accounting data, based on which the accounting data for the period 2017-2019 will be predicted using neural networks.

The determination of the discount rate will be made using the modular method based on data specified for Czech conditions and published by the Ministry of Industry and Trade of the Czech Republic and the Czech National Bank to the valuation date.

The assets method will be used additionally to determine the amount of funds received from cashing out the assets of the valued entity after the termination of its business. The resulting value of an enterprise will then be determined as the sum of the present value of the estimated free cash flows and proceeds from the sale of the assets, taking into account the total amount of liabilities.

3.1 Valuation example

Below will be an example of a valuation of the selected limited lifespan business. The subject of the valuation is a business establishment – XYZ, s.r.o. Company registration number 12345678 (hereinafter referred to as the "Valuated business"), which deals with the operation of a cafeteria (the trade name "Elektra Cafeteria") in the industrial area in Prague 8. The subject business of the valuated establishment is the operation of the public catering cafeteria, the delivery of ordered meals and the purchase and sale of goods.

3.2 Business description

XYZ, s.r.o. was registered in the business register on November 1, 1995, from the beginning it focused on catering. To the valuation day, the valuated business operated a cafeteria – public catering in the industrial area in Prague 8. The operating premises are used on the basis of a lease agreement with the site owner. In addition to the sale of own meals and selected goods (mainly beverages) in the cafeteria itself, the company provides free delivery of its own meals in selected parts of Prague on the basis of an order. As a result of staff misconduct, according to representatives of the valued business, there has been a diversion of a portion of the monetary funds in the past outside of the valued business, resulting in an increase in liabilities for suppliers of input products and the landlord. Such a shift is also apparent from available accounting data. At present, the valued business is in the remedial phase – after the revealed diversion, the valued establishment tries to fully cover all its liabilities. As of the valuation date, the outstanding liability due to non-standard business activity remained at CZK 363,597.

The delivery of lunches was carried out using two Škoda Felicie Pick-up vehicles. Most of the cafeteries facilities in the eating area were owned by the landlord of the rented premises. Part of the kitchen equipment was, according to the representatives of the Valuated business, their personal property and will not be part of the valuation.

The activity of the Valuated business is firmly linked to the place of business of the cafeteria, where it is rented. Caftereia clients are, for the most part, employees of companies based in the industrial area and the surrounding area. The possibilities of moving the cafeteria to other areas are thus considerably reduced, as the target group of clients (eaters) will be changed, as well as the suppression of most of the intangible components of business, reputation, goodwill, etc., when moving to a different location (even within one city).

The organizational structure of the Valuated business is fairly simple. The full-time employed staff based on an employment contract is made up of two managers and three other employees. One manager runs and operates the business as a whole, the other then focuses on the operation of the kitchen where he manages the three employees. In the case of a short-term need, the staff team is supplemented by other workers on the basis of a short-term employment agreement and limited work agreements.

3.3 Suppliers and customers

The suppliers of meat and vegetables can be considered key suppliers. In general, there are enough suppliers of raw materials for gastronomy on the market and therefore their negotiating power is not the most significant. Input raw materials (especially meat and vegetables) are a general product, with little interdependence only with a selected supplier, in case of non-compliance, it is possible to change the supplier without significant complications and an impact on the final product. The Valuated business has no long-term contractual contracts obligations with its suppliers, deliveries are based on mutual trust and long-term cooperation.

Another situation occurs with the lessee of the premises of the Valuated business. As mentioned above, the activity of the Valuated business is strongly related to the place of operation – in the production site of the former Elektra company. The negotiating power of the landlord is therefore essential to the entire Valuated business. In the spring of 2017, an unnamed developer became the new owner of the production site of the former Elektra. In the opinion of the representatives of the Valuated business, it is a question of a short time horizon before the new owner's demolition work on the existing building begins and the subsequent development occurs. It is to be expected that the commencement of building modifications in the complex will cause the need to vacate the existing rented premises, which would de facto terminate the business or the entire existing activities of the Valuated business. The existing lease agreement of the Valuated business was signed for a fixed time period until July 31, 2019. The subsequent renewal of the lease is highly uncertain, almost unlikely. The negotiating power of the landlord can be regarded as very important.

Clients of the Valuated business are mostly employees and workers of companies located in the industrial area. It is therefore an individual clientel which is not contractually bound to use Elektra's cafeteria services. The Valuted business has no ordering system for meals (eg 24 hours in advance). Clients on-site decide to choose the desired food and the actual purchase. When delivering ready-made meals to contractual facilities (businesses, offices, ...), advance ordering of meals is a necessity. Payment for meals in the cafeteria takes place on the spot when the food is served, and one-off billing for a longer period of time (so-called "invoice") is also possible. It can be stated that most of the eaters visit the Elektra cafeteria regularly.

3.4 Market environment

In the immediate vicinity of Elektra's cafeteria there are several potential competitors providing public catering services.

The Fraji cantina is located about 250 m from the Elektra cafeteria, offering a comparable range of dishes (5 kinds of meals) in a similar price range.

About 480 meters from the Elektra cafeteria there is another public catering facility, Café Bar "Tři lípy", this café bar offers a selection of dishes (3 types of meals) and standard restaurant service.

Restaurant U Šebestů is located about 500 m east of Elektra's cafeteria, this is a full-service restaurant.

The Evaluated business is not in any direct competitive struggle with other businesses, especially thanks to a convenient location in the very heart of the industrial area, which employs several hundred (up to thousands) of employees and therefore potential customers.
Strong competition in the lunch delivery market in Prague means that lunch delivery is a supplementary affair based on traditional personal relationships and is not the result of any active business or marketing strategy for the Valuated business.

3.5 Description of business assets

On the basis of the presented list of fixed assets, it is possible to define items that were actively used to the valuation date:

- SERD Restaurant system,
- Škoda Pick UP,
- Škoda Felicia Van,
- Food packaging machine S 225,
- Nordline fridge.

By analyzing small assets, most of the small property was morally and technically obsolete as of valuation date, but still used for business activity.

Inventory of goods is virtually unmanaged and all delivered goods are immediately consumed, the inventory level is therefore constant and as minimal as possible.
The Valuated business collects most of its revenue from customers in cash directly in the cafeteria. When food is delivered, there may be a delay between food delivery and payment, these payments are usually made once a month on the basis of an invoice between the Valuated business and the customer. Payables of the Valuated business stem from standard business activity, as of the date of valuation they were received and unpaid invoices, invoices for external accounting, repairs and maintenance of kitchen appliances and payments for an internet connection. Other payables are to employee wages, social and health insurance payables, tax payables, etc. These items can be classified as standard payables directly related to the core business. Much more payables are recorded in respect to the Valuated business' shareholders who, from their own financial resources, covered the losses incurred in previous years. Payables to banks or other lending institutions were not recorded as of the valuation date.

4 Results

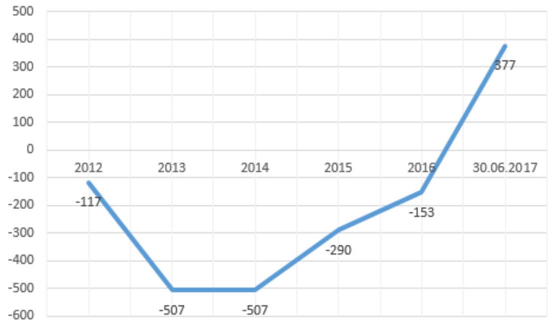
4.1 Analysis of the situation of the Valuated business

On a long-term basis, unemployment in the capital city of Prague is very low, almost to the level or even below the level of the natural rate of unemployment. Potential increase in the unemployment rate may impact the Valuated business in two ways. The first is the actual loss of potential clients in the cafeteria due to the dismissal of employees in nearby businesses, and then the drop in purchasing power of employees who would not receive lose their income, but the person close to them would lose it (especially a person living in a common household). According to the MoLSA forecast, the outlook for the unemployment rate for the years 2018 and 2019 is stable and will not directly or indirectly significantly affect the economic development of the Valuated enterprise.

The bottom line of the yearly growth of the Valuated business' earnings is determined by the expected inflation rate, if the price of the consumer is not adjusted to at least inflation, there would be a drop in the actual value of sales, which is difficult to imagine for a successful businessman. Long-term growth, on the other hand, is limited by the growth of the market as a whole. Besides taking into account the impact of the introduction of electronic revenue records on the growth of food sales in the first two quarters of 2017, the macroeconomic analysis makes it possible to assess the future growth of the Valuated business between 2% and 5%.

The figure below shows the development of the profit before tax for the accounting period of the Valuated business.

Figure 1: Profit or loss for the accounting period (CZK thousand)



Source: Authors

The figure above shows a jumpstart increase in the operating income in the first half of 2017, with a further doubling of the achieved value for the whole of 2017. A sharp increase in the operating income can be attributed to the consistent stabilization of the personnel base and to the operative efficiency of the whole company. The results achieved in this way can also be considered in future periods. Losses from previous periods were covered by shareholders' equity, total liabilities to shareholders at the date of valuation amounted to CZK 1,654,853.66. It can, however, be expected that over the next several periods the company will be able to generate a profit covering all existing liabilities and a reasonable profit. This is the main reason for staying in business despite negative performance in the future.

As of the valuation date, the Valuated business had no liabilities to banks or other lending entities.

The marketing and business activities of the Valuated business are greatly minimized; the number of clients for lunch delivery is rather historical, based on personal relationships with clients; the acquisition of new clients is rather sporadic given the total amount of meals sold per day.

The promotion of the Valuated business takes place on two levels. In the real world, there are several advertising banners with the inscription "Jídelna Elektra" located on the premises of the cafeteria. When considering the composition of the target audience, this type of promotion appears to be the most appropriate.

In the valuation of the Valuated business, a determinant element of its future development is the lease agreement for the cafeteria in the production site of the former Elektra company in Prague 8. The above described development of the circumstances regarding the change of ownership rights to the rented premises and future expectations of representatives of the Valuated business. It is precisely future expectations that play an important role in determining the value of the subject of valuation. In the case of the Valuated business, its existence is determined by maintaining the existing rental space. The existing lease contract or, rather, amendment No. 6 to the lease contract between XYZ, s.r.o. as tenant and Elektra a.s. as landlord, dated October 2, 2014, is for a fixed term – with validity up until July 31, 2019. Another extension of the lease as mentioned above is not foreseen. For these reasons, it is possible to consider the future profitability potential and the expected life of an enterprise for valuation only until the expiry of the lease.

4.2 Valuation using the earnings method

100% of the business share of the Valuated business will be valued by the selected approach from the earnings methods group, namely the discounted cash flow method, which, as noted above, best describes the specific position of the valuated business. For the valuation purposes, a financial plan will be created on the basis of market data and expectations of current shareholders, from which they will be subsequently quantified and discounted to the present value of the expected free cash flow from the business to the shareholders (equity), by adding them together and adding the expected sale values of the movable assets, the value of the Valuated business as of the valuation date will be calculated.

All assets of the business are valued as operationally necessary and therefore vital for the economic activity of the enterprise.

The financial plan expresses the expected future development of the accounting value of the Valuated business until the termination of its activities, ie until 31 July 2019, it will be therefore created for the second half of 2017, 2018 and 2019. The financial plan processed using statistical methods is the content of Attachment 4 of this document.

The clearance of the rented premises is only assumed after the termination of the lease, ie during August 2019.

For reasons of caution, the implementation of only minimal marketing and business activities by the Valuated business, as well as a limited range of potential clients, the future yearly growth in accounting values is assumed at 2%.

The FCFE calculation is based on the adjusted operating income and is shown in the table below.

Tab. 1: FCFE Calculation

Mathematical operation	Item
	Adjusted operating profit or loss before tax
–	Interest expense
=	Adjusted operating income before tax
–	Adjusted tax on adjusted operating income
=	Adjusted operating profit after tax (ie adjusted operating income for owners)
+	Depreciation
+	Other costs that are not expenditures in a given period
–	Investment (in necessary operating capital, fixed assets)
–	Payments of interest-bearing foreign capital
+	Acceptance of new interest-bearing foreign capital
=	Free Cash Flow to Equity (FCFE)

Source: Authors

Adjusted Operating Income (AOI) is one of the basic variables in DCF business valuation. To the operating income of a business, one-off expenditure unrelated to operating assets, financial investment income and interest income arising from operating assets are added at this stage. It is therefore necessary to set the adjusted operating income in each year of the first phase, and in the first year of the second phase, as seen in the attached financial plan. The AOI calculation procedure is contained in the table below.

Tab. 2: AOI Calculation

Mathematical operation	Item
	Operating income
–	Operating revenues which are one-off and unrelated to operating assets
+	Operating costs which are one-off and unrelated to operating assets
+	Revenue from financial investments and interest income, if they come from necessary operating assets
–	Financial costs related to the necessary operation assets
=	AOI before tax

Source: Authors

In the case of interest expense, this is the sum of all interest expense attributable to the given period. The Valuated business does not use interest-bearing foreign funds, loans from shareholders are not interest-bearing. Thus, the interest rates will be zero in the calculation.

This is a case of corporate tax and the table below shows the development of this tax in the Czech Republic in the years preceding the valuation. As can be seen from the table, the corporate tax rate did not change in the previous years and will be considered at 19% for all future periods.

Tab. 3: Development of the corporate tax rate in the Czech Republic

	2012	2013	2014	2015	2016
Corporate tax rate	19%	19%	19%	19%	19%

Source: Edited according to the Tax advisors portal

In the past, the Valuated business has had negative operating income, which should be positively reflected in the defined tax obligation in the future (by applying the loss as deductible items from the tax base). For the purposes of valuation, zero tax obligation will be considered in the following periods.

This is the sum of tax depreciation of tangible and intangible assets in the respective year. The amount of depreciation was taken from the financial plan.

For the calculation of FCFE, annually renewed investments in the amount of annual tax depreciation – renewal investments are considered. In the absence of any investment, the technical condition of assets would deteriorate, become more defective, thereby losing the competitiveness of such a service. Maintenance and redevelopment investments in the amount of depreciation should be done despite the limited life of the business, in order to maintain the existing quality standard and meet legislative requirements.

Tab. 3: Plan of investments and depreciation (in CZK thousand)

	2017	2018	2019
Investments	15.0	30.6	18.2
Depreciation	15.0	30.6	18.2

Source: Authors

The Valuated business does not use interest-bearing foreign capital (bank loans and other bailouts). Payables to shareholders are not interest-bearing. The repayment schedule was submitted to the assessor between the Valuated business and the lessor, dated 10 April 2017, dealing with the repayment of the outstanding rent. In total, the rental debt was CZK 383,597 as of the date of issue under this document. The repayments were arranged in the amount of CZK 10,000 per month between May and December 2017, then from January 1, 2018, a monthly installment of CZK 20,000 to the full settlement of the outstanding amount was agreed upon.

Tab. 5: Repayment of foreign capital

	2017	2018	2019
Repayments of foreign capital	60,000 Kč	240,000 Kč	63,597 Kč

Source: Authors

As noted above, the first valuation step is the quantification of the adjusted operating income and then the free cash flow to equity (FCFE).

Tab. 6: Calculation of FCFE (in CZK thousand)

	2017	2018	2019*
Operating income	378.0	771.1	458.8
Financial operational result	–1.0	–2.0	–1.2
AOI before tax	377.0	769.1	457.6
Tax rate	71.6	146.1	86.9
AOI after tax	378.0	771.1	458.8
Depreciation	15.0	30.6	18.2
Investments	15.0	30.6	18.2
Repayments of foreign capital	60.0	240.0	63.5
Acceptance of foreign capital	0.0	0.0	0.0
FCFE	318.0	531.1	395.3

* Period from 1 January to 31 July
Source: Authors

The cost of equity (re) will be determined for the purposes of valuation by the modular method, for which the data published by the Ministry of Industry and Trade of the Czech Republic (2017, 2018) will be used as input data. The calculation is based on the identification of possible risks and the subsequent sum of several partial risk margins and the risk-free rate of long-term government bond yields.

The ten-year government bond yield, based on the Maastricht criterion, was 0,77% (Government bond yields, 2018) as of the date of the valuation according to data from the Czech National Bank.

The risk premium for business risk, for financial stability and for size was taken from data published by the Ministry of Industry and Trade (MPO).

$$re = 0.77\% + 3.0\% \; 2.38\% + 1.22\% \qquad (1)$$
$$re = 7.37\%$$

The table below shows the calculation of the current value / present value of the future cash flows of Valuated business.

Tab. 7: Determining the value of the Valuated business (in CZK thousand)

	2017	2018	2019
FCFE	318.0	531.1	395.3
Discount rate %	7.37	7.37	7.37
Business value			1,076

Source: Authors

The earnings value – the present value of the expected future earnings of the Valuated business as of the valuation date is CZK 1,076,000.

4.3 Valuation of selected items by the assets method

As mentioned above, the Valuated business is existentially linked to the lease agreement with the premises in which it operates the Elektra cafeterie. The current lease agreement is valid until July 31, 2019, and no further extension in respect of changes in the ownership of the rented premises is assumed. Upon the termination of the business, the revenue from the sale of its assets is expected to exceed the amount of the stated earnings value.

Small furniture (kitchen equipment, other furnishings, refrigerator, etc.) are morally and technically obsolete as of the date of valuation, and their use is only possible in the existing business or establishments with a similar focus with lower requirements on qualitative criteria for individual items. It is assumed that the proceeds from their partial sale will cover the costs of disposal of other items and thus the income for the shareholders of the Valuated business will be negligible, down to zero.

As of the day of valuation, the Valuated business held cash at the register and in bank accounts at the total amount of CZK 568,608.34.

The cashable assets were valued by the direct comparison method and their value was stated at CZK 61,825. However, as this is the expected future income from the sale of movable assets upon the termination of the business, it is necessary to convert this income to the present value by the formula:

$$61{,}825 \; CZK \,/\, (1 + 7.37\%) \; 2 = CZK \; 53{,}628.82 \qquad (2)$$

The current value of movable assets for valuation purposes will be considered at CZK 53,628.

According to the representatives of the Valuated business, the state of inventory is stable on a long-term basis and ranges at +/– CZK 20,000. The company restocks inventory daily for immediate consumption. Inventory contains only items such as the remaining amount of beverages in barrels, the remaining amount of flour, oil, etc. Inventory of this type has only limited tradability in the food market, and at the planned closure of the business, a minimum residual quantity of inventory can be expected. Therefore, inventory will enter the valuation at zero value.

Receivables and payables of the Valuated business will be measured at face value. A summary of the receivables was presented to the assessor in the form of an overview of outstanding invoices issued. From this list, three overdue receivables of 2 years and over, for which recovery of the outstanding amount is highly unlikely, and are derecognised, these are receivables from ABC Consulting s.r.o. in the amount of CZK 10,560, and Grenox a.s. in the amount of CZK 5,050. The amount of receivables after such adjustment as of the valuation date is CZK 178,710.

Payables from business activity of the Valuated business according to the list of unpaid invoices received on the valuation date amounted to CZK 17,101.61.

Another obligation is the payment of the outstanding rent, which, however, due to the repayment schedule submitted, has already been taken into account in determining the yield value and can not therefore be included in this step. The payables for due rent as of the date of valuation amounted to CZK 363,597.

Other payables to employees, state, social security, etc. amounted to CZK 97,577.46.

Liabilities to shareholders that financially covered the loss of past years as of the date of valuation are CZK 1,654,853.66.

The valuation of the Valuated business will include the difference between receivables and payables, determined from: 178,710 CZK – (17,101.61 + 97,577.46 + 1,654,853.66) CZK = –**1,590,822.73 CZK**

4.4 Own valuation

The own valuation will be calculated as the sum of the business' return value, the expected proceeds from the sale of the assets of the business, taking into account the collection of receivables and the settlement of all payables known to the evaluator.

Tab. 8: Own valuation of the Valuated business

Item	Amount
Yield value	1,076,000 CZK
Proceeds from the sale of mov. property	53,628 CZK
Cash	568,608 CZK
Inventory	0 CZK
Difference between receivables and payables	– 1,590,822 CZK
Total	107,414 CZK
Total after roundup	107,000 CZK

Source: Authors

5 Conclusion

The present contribution shows the possibility of valuation of a business with a limited lifespan if it does not meet the valuation conditions using earnings, assets or market value methods. The aim of the paper was fulfilled, the contribution outlined the valuation procedure of the company with a limited lifespan, using the combination of earnings and assets methods. The combination of these two methods, according to the authors, is not widely used by the Czech expert community, although it best describes the situation in which the Valuated business was as of the valuation date.

On the example of a particular business, a valuation of the business with a limited lifetime was calculated using a combination of earnings and assets valuation methods. The further life of the business is fully dependent to the existence of the right to use the existing premises in the production site of the former Elektra company, therefore the valuation considered the limited lifespan of the business, termination of operation and subsequent liquidation of the assets, the valuation also reflected the expected proceeds from the sale of movable equipment. The value of the business was therefore set at CZK 107,000 as the sum of the yield value – determined from the present value of future expected earnings over the projected lifespan and the assets value acquired by the projected sale of the movable assets of the business after its activity has been discontinued, taking into account the nominal amount of the liabilities.

The Valuated business was thus in a situation where it is obvious that it will operate for a certain period of time and will then cease to exist, or its relocation will mean essentially the creation of a new business, in a different industry, for new customers, etc. Analogically, it is possible to approach the valuation of the business with a clearly defined lifetime, where it is possible to create a financial plan for a business for its entire lifetime, as well as assume the situation on the market for movable and immovable assets to determine the expected proceeds from the sale of the property.

Mining businesses and businesses only focusing on one specific trend or deviation can appear in the same situation.

The difference between the Valuated business and these businesses lies in the time period where the lifetime of the Valuated business is strictly determined by a concluding lease agreement. This article could thus be followed by a focus on businesses with a less clearly defined lifetime in the future, alghough this lifetime is not unlimited or by a study of businesses that show high costs of liquidation after the end of their lifespan.

Literature:

1. Bartková, H., Stefanovová, Z.: Methodology Draft of Capitalization Rates for Commercial Real Estate Valuation of Businesses. *16th International Scientific Conference on Globalization and its Socio-Economic Consequences*. 2016, 111-118. ISBN 978-80-8154-191-9.
2. Blake, M.: Valuing Early Stage Technology Firms. *Technological Innovation: Generating Economic Results (2nd Edition)*. 2016, 311-340. ISBN 978-1-78635-238-5.
3. Čibera, R., Krabec, T.: Income Business Valuation and Private Equity Market in the Czech Republic: Empirical Study. *10th International Scientific Conference on Financial Management of Firms and Financial Institutions*. 2015, 166-173. ISBN 978-80-248-3865-6.
4. Citron, D. B., Taffler, R. J., Uang, J.: Delays in reporting price-sensitive information: The case of going concern. *Journal of Accounting and Public Policy*. 2008, 27(1), 19-37. ISSN 0278-4254.
5. Financial analysis of the corporate sector for the year 2017. *Czech Republic: Ministry of Industry and Trade* [online]. 2018. Available at: https://www.mpo.cz/cz/rozcestnik/analyticke-materialy-a-statistiky/analyticke-materialy/financni-analyza-podnikove-sfery-za-rok-2017--237570/
6. Government bond yields. *Czech National Bank* [online]. 2018, [2018-09-24]. Available at: https://www.cnb.cz/cnb/STAT.ARADY_PKG.VYSTUP?p_period=1&p_sort=2&p_des=50&p_sestuid=375&p_uka=1&p_strid=AEBA&p_od=200004&p_do=201808&p_lang=CS&p_format=0&p_decsep=%2C
7. Hrdý, M., Ducháčková, E.: Basic Principles of the Valuation of Insurance Agencies. *E & M Economy and Management*. 2010, 13(1), 47-59. ISSN 1212-3609.
8. Kaczmarczyk, A.: Business Restructuring in Light of the Going Concern Principle. Research Insight in the Selected Enterprises. *Transformations in Business & Economics*. 2018, 17(2), 466-480. ISSN 1648-4460.
9. Krch, P., Kubica, M.: The Market Approach Valuation and the Relevant Time Period. *International Conference on Current Problems of the Corporate Sector*. 2014, 237-242.
10. Křížková, P., Užík, J.: The going concern within the overall perspective of the auditor on the financial statements. *International Scientific Conference on Accounting and Auditing in the Process of International Harmonization*. 2016, 111-114. ISBN 978-80-245-2157-2.
11. Pao, H. T.: A comparison of neural network and multiple regression analysis in modeling capital structure. *Expert Systems with Applications*. 2008, 35(3), 720-727. ISSN 0957-4174.

12. Rowland, Z., Vrbka, J.: Using artificial neural networks for prediction of key indicators of a company in global world. *Proceedings of the 16th International Scientific Conference Globalization and its Socio-Economic Consequences*. 2016, 1896-1903. ISBN 978-80-8154-191-9.
13. Saari, S. R.: *How a Company is Valued: An Overview of Valuation Methods and Their Application*. 2018, 20.
14. Sheikhan, M., Mohammadi, N.: Time series prediction using PSO-optimized neural network and hybrid feature selection algorithm for IEEE load data. *Neural Computing and Applications*. 2013, 23(3-4), 1185-1194. ISSN 0941-0643.
15. Svobodová, Z.: Business Valuation of Telefonica Czech Republic, a.s. *9th International Conference on Applied Business Research (ICABR)*. 2015, 1096-1104. ISBN 978-80-7509-223-6.
16. Evolution of corporate tax rate. *Tax Adviser Portal* [online]. 2018, [2018-09-20]. Available at: https://www.dauc.cz/
17. Valášková, K., Klieštik, T., Kováčová, M.: Management of financial risks in Slovak enterprises using regression analysis. *Oeconomia Copernicana*. 2018, 9(1), 105-121. ISSN 2083-1277.
18. Vochozka, M.: Formation of complex company evaluation method through neural networks based on the example of construction companies´ collection. *AD ALTA – Journal of Interdisciplinary Research*. 2018, 7(2), 2332-239. ISSN 1804-7890.
19. Vochozka, M.: Enterprise evaluation determination by neural networks using of an example of a concrete company. *Smart and Efficient Economy: Preparation for the Future Innovative Economy*. 2016, 737-746. ISBN 978-80-214-5413-2.
20. Zhang, S. Y., Chang: Research on the calculation of capitalization rate in real estate evaluation. *Proceedings of 2007 International Conference on Construction & Real Estate Management*. 2007, 1139-1142. ISBN 978-7-112-09336-6.

Primary Paper Section: A

Secondary Paper Section: AH