ACTUAL PAID COST OF EQUITY CAPITAL IN THE ACCOMMODATION AND FOOD SERVICES ACTIVITIES SECTOR 2015-2019

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Abstract: The aim of the paper is to determine the actual cost of equity capital in the accommodation and food service activities sector in the Czech Republic between 2015 and 2019. The data was collected from the Albertina database and processed based on changes in retained earnings from previous years and the current financial year's profit. The results show the resulting cost of equity capital, which in the years under consideration averaged between 32.40 - 67.25% and the median values ranged between 11.78 - 22.72%. The contribution of this paper can be seen in bringing the resulting value of the actual cost of equity capital in the selected industry on which subsequent predictions for the future can be based. The limitation of the research can be seen in the use of older data.

Keywords: Cost of equity, profit, profit sharing, dividends, average, median

1 Introduction

Accommodation, catering and food service activities providing short-stay accommodation and catering for immediate consumption fall under the tertiary sector, i.e. the service sector and can be classified as a smaller sector in the Czech Republic according to the Czech Statistical Office (ČSÚ, 2017). The sector is essential for developing human capital, improving the quality of life and, if local deficiencies are addressed, can also support the economic development of the country (Serafica et al., 2021). In the period 2017 to 2019, there was an average of nearly 59 thousand active enterprises, both legal and natural persons (ČSÚ, 2022). Of some interest is that, according to the ČSÚ (2017), this sector in the Czech Republic is characterized by low wage levels, which ranged from 14,641 CZK to 20,722 CZK per person in the period 2017 to 2019 (ČSÚ, 2022). This sector was chosen because it is an important, usually competitive and dynamic industry (Gheribi & Bonadonna, 2019) and is one of the most important sectors in the Czech Republic in terms of the number of business entities (Sejkora & Mlazovsky, 2022). Moreover, Kubíčková and Nullček (2018) argue that this sector is associated with the highest cost of equity capital in the Czech Republic and therefore, in our opinion, has great potential to provide us with an interesting opportunity to explore it.

The reason why we should address this topic is that it affects every business, as the cost of equity is linked to the return on equity that the business owner demands as a reward for the investment or project (Kruticky et al., 2022). Thus, the cost of equity capital is also a very important component of investment decisions and business performance evaluation (Hu et al., 2018). The society-wide demand of this topic is that the majority of today's approaches focus on determining the opportunity cost of equity capital based on the risks and the amount of payment for its tolerance. Unfortunately, because of this, the approaches mentioned are limited in relation to the actual cost of equity paid. The limitations are attempted to be overcome by this paper, which by its existence draws attention to the reality of the actual cost of equity capital paid across the chosen industry.

The purpose of this paper is to determine the true cost of equity in the accommodation and food service activities sector for the period from 2015 to 2019. The period was chosen because it is the last few years for which all the data relevant to the calculations are available. For example, if we wanted to look further into 2020, we would find that this is not possible as the calculation for this year includes data from 2021 which is not yet available.

2 Literary research

The accommodation and food service activities sector is an important and extremely competitive and dynamic industry characterised by constant transformation and contributing significantly to the European economy (Gheribi & Bonadonna, 2019). The activity of this sector is often considered as a cause of potential adverse environmental impacts (Della Volpi & Paulino, 2018). This is echoed by e.g. Bux et al. (2022) who believe that this sector is starting to come under pressure precisely because of the consumption of resources such as food, water and energy and because of the production of waste. According to Gretzel et al. (2019), waste is behind this serious environmental and social problem because, in conjunction with tourism, food enhances the experience and serves as an attraction for visitors. There is also a positive trend towards the increasing importance of information and communication technology (ICT) in the sector, which shows a significant difference in its use between EU countries (Kozlowski et al., 2021). The use of ICT can be seen, for example, in the area of electronic sales records.

The latter is a relatively new project in the Czech Republic, introduced in order to improve tax collection and reduce the share of the grey economy, which is one of the most problematic issues in this sector (Sejkora & Mlazovsky, 2021).

Profit is the fundamental reason for doing business (Straková, 2020) and is the result of the way unique resources are managed and used (Stoelhorst, 2021). For profit, according to Robson (2018), it is required by business ethics and economics to be maximised thereby contributing in some way to general social welfare, but according to Robson (2018) this is not necessary. This philosophy is also supported by, for example, Lee et al. (2017) who believe that a profit orientation undermines consumer support as consumers interpret this orientation as an expression of greed. In contrast, Zhou and Park (2020) evaluate profit-oriented strategy as a better alternative because it tends to outperform growth-oriented strategy in the long run due to the fact that growth-oriented strategy overburdens management, which in turn leads to inefficiency and a decline in firm performance. Munzhelele et al. (2021) also agree with this conclusion according to which growth-oriented companies also pay less dividends and are more aggressive due to their pursuit of growth.

Profit sharing is often associated with an economic perspective and when used as a motivational tool for employees it reflects organisational practices and management characteristics (Hambly et al., 2017). In the context of corporate governance, the payment of profit-sharing tends to be classified as an alternative strategy to increase productivity (Lima & Silveira, 2021). Increased productivity could also be due to the fact that paying shares to regular employees increases the likelihood of innovative activities (Bellocc, 2022) and has a significant impact on reducing workplace conflicts (Fakhfakh et al., 2019). The productivity gains from paying shares are also agreed by Doucoulagos et al. (2019) who suggest that it works better when combined with capital investment and employee participation in decision-making.

Dividend payments are used by directors, among other things, to build reputation in the capital markets and to obtain external financing on favourable terms, and are more likely to resort to this method of financing when their businesses are underperforming and have high cash flow volatility (Sheikh, 2002). By paying dividends and disclosing corporate social responsibility information, they signal to the market and especially to institutional investors about the stable future performance of the company (Seth & Mahenthiran, 2022). According to Salman (2019), dividends are even the best source of information about a company's future. Kaplan and Pérez-Cavazos (2021) add that high dividends signal sustainable earnings, according to whom this applies mainly to companies
with insufficient investment opportunities. Here, the higher propensity to pay dividends for large and profitable firms with insufficient investment opportunities is also confirmed by Pahi and Yadav (2021).

The cost of capital is the most important factor for evaluating financing decisions, consisting of the cost of foreign and equity capital and representing the minimum rate of return that an investment or project must have to benefit the firm (Rowland et al., 2020). The cost of equity capital is then the portion of profit that its owners expect and receive for the contribution of their capital to the business, for example, in the case of joint stock companies through the payment of dividends (Martinovicova et al., 2019). Estimating it is not easy, as companies do not promise shareholders a rate of future investment appreciation, which is why opinions on its estimation vary widely and tend to be the subject of disputes (Růčková, 2019). The issue of determining the cost of equity is crucial for the development of organizations (Faiteh & Aasri, 2022). According to Mokhova and Zinecker (2019), the cost of equity can be classified as one of the basic elements of financial decision-making, which is influenced by internal and external factors. Important internal factors include dividend policy, stability of company earnings, ownership structure, flexibility in raising capital, and ability to predict financial performance. External factors include inflation, interest rates, financial market and sovereign debt, and risks associated with the banking system.

The cost of equity capital can also be reduced by disclosing environmental information as this reduces information asymmetry for investors (Yu et al., 2021). A similar conclusion is shared by Garzón-Jiménez and Zorio-Grima (2021) who suggest that capital providers penalize firms that pollute the environment. El Ghoul et al. (2018) and Gupta (2018) agree that more environmentally friendly practices can reduce the cost of equity, but Gupta (2018) argues that most of the benefits come from reducing emissions and unnecessary waste of resources. Investor protection also plays into the effect of CSR on the cost of equity. In countries with strong (weak) investor protection, the cost of equity falls (rises) when a firm invests in CSR (Breuer et al., 2018).

Investing in corporate environmental responsibility reduces the cost of equity financing worldwide (El Ghoul et al., 2018). However, how much impact these investments have depends on geography, as locating a company with better environmental conditions and a higher human development index reduces investors’ perception of risk, which in turn reduces the cost of equity (Yu et al., 2021). Other influences on the cost of equity capital include: labor rights (Chu et al., 2019), intellectual capital disclosure (Mondal & Ghosh, 2020), government investment (Boubaker et al., 2018), and the intensity of market competition (Sassi et al, 2019), corporate reputation (Pfister et al., 2019), investment efficiency (Majeed et al., 2018), degree of uncertainty avoidance and leniency (Góis et al., 2018), adoption of new standards such as the International Accounting and Reporting Standard (Habib et al., 2019), and others.

Nowadays, a significant number of practitioners, analysts, investors, financial directors and academics use the capital asset pricing model (CAPM) to estimate the cost of equity even though there are many other alternative valuation models (Moyo & Mache, 2018). The CAPM method is internationally accepted, but it still contains many measurement errors and all parameters need to be estimated (Situm, 2020), while the estimation itself affects, for example, the composition of the market portfolio (Kamara & Young, 2018). Although the cost of equity estimates can be refined by including long-term averages of parameters and industry characteristics (McLemore, 2018), it is still a forward-looking estimation, which, moreover, can only be used for listed companies (Faiteh & Aasri, 2022). In practice, it is common for managers to determine the cost of equity capital using the CAPM model even retrospectively (Larocque et al., 2018), which highlights the need to start using methods other than those usually used to measure the cost of equity capital.

### 3 Materials and methods

All the data used for the calculations come from the Albertina database, which contains information on companies in the Czech and Slovak Republics. The data file was taken in excel format and contains a list of companies in the accommodation and food service activities sector in the Czech Republic, including data from the financial statements for the period 2015-2019.

As mentioned in the previous chapter, the CAPM model is most often used to determine the cost of equity capital. The model is suitable for identifying the cost of equity capital even though it has a number of limitations. However, it has no use for us due to the fact that it is used to estimate the opportunity cost of equity into the future and we are trying to find the actual costs that were actually paid in the past, which may be different. For this reason, we have chosen to use the methodology of finding the true cost of equity as in Krulicki et al. (2022).

The following methodology will therefore be used to determine the actual cost of equity capital for the period 2015-2019 in the Czech Republic in the accommodation and food service activities sector:

In order to determine the profit paid in the selected year, the profit for the current financial year will be added to the retained profit for the previous year for each company, and then the retained profit for the selected year will be deducted from that figure. The resulting value, which will represent the profit paid, will represent the actual cost of equity.

For the retained earnings from previous years, the values available for the period will be selected.

After the calculations have been performed, only the relevant data needs to be filtered. It is therefore necessary to delete minus items and items in percentage terms exceeding the value of 100. The final value will be divided by the equity of the selected year and converted into a percentage.

Statistical functions such as mean, median, variance and standard deviation will be used to evaluate the results.

### 4 Results

#### Table 1. Cost of equity values for the period 2015 - 2019

<table>
<thead>
<tr>
<th>Year</th>
<th>Average cost of equity</th>
<th>Median cost of equity</th>
<th>Total paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>40,08 %</td>
<td>18,84 %</td>
<td>112 982 000,00</td>
</tr>
<tr>
<td>2016</td>
<td>32,40 %</td>
<td>17,29 %</td>
<td>388 610 000,00</td>
</tr>
<tr>
<td>2017</td>
<td>67,25 %</td>
<td>22,72 %</td>
<td>155 445 000,00</td>
</tr>
<tr>
<td>2018</td>
<td>36,43 %</td>
<td>19,66 %</td>
<td>90 819 000,00</td>
</tr>
<tr>
<td>2019</td>
<td>40,42 %</td>
<td>11,78 %</td>
<td>27 975 000,00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>775 831 000,00</td>
</tr>
</tbody>
</table>

Source: the Albertina Database

Table 1 shows us the average and median percentage and total paid profit shares in monetary terms of the cost of equity capital value over the selected period 2015 - 2019. The results show that the average and median cost of equity capital values are significantly different. In most years, the difference in values is about half, with the median value being about one-third of the average in 2017 and almost one-quarter in 2019. The highest cost of equity values for both the mean and median were achieved in 2017 and for total distributions in 2016.

#### Table 2. Selected statistical indicators from the resulting cost of equity for the period 2015 - 2019

<table>
<thead>
<tr>
<th>Quantity</th>
<th>From the average cost of equity</th>
<th>From the median equity</th>
<th>From the total shares paid out</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</table>

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6 Conclusion

The objective of this paper was to determine the value of the true cost of equity in the accommodation and food services activities sector over the period 2015-2020. The objective was met by drawing data from financial statements downloaded from the Albertina database and using the methodology of Krulíček et al. (2022) to calculate the true cost of equity for the accommodation and food services activities sector.

The main findings of the paper are the mean and median values of the cost of equity in the accommodation and food service activities sector over the period 2015-2019. The mean values ranged between 32.40 – 67.25% and the median values ranged between 11.78 – 22.72% over the selected period. Thus, the paper confirmed the findings of Krulíček et al. (2022) on the necessity of choosing the right statistical indicator, as the differences between the two indicators mentioned can cause misleading results, even within a different industry.

The limitations of the research lie in the use of outdated data, which was used due to the fact that newer data is not yet available. Despite this limitation, the use of the results of the paper is great, as they can be used in practice to estimate the future cost of equity. This prediction will then be much more accurate than the standard methods used, as it will be based on historical data.

Literature:


