

CONCEPTUAL FRAMEWORK FOR DETERMINING THE TRANSFER PRICE OF THE LOANS

^aDAGMAR KALOVA

*Brno University of Technology, Faculty of Business and Management, Kolejní 2906/4, 612 00 Brno, Czech Republic
email: dagmar.kalova@vut.cz*

The article was written with the support of the Technology Agency of the Czech Republic in the framework of project No. TL05000328 (Setting the market price for financial transactions while using the arm's length principle) and also with the support of the Internal Grant Agency of the Brno University of Technology, Grant No. FP-S-22-7935 (Developmental Trends in Selected Aspects of Corporate Financial Management).

Abstract: Associated enterprises integrated into business groups may use the capital resources of the group. When setting the remuneration for their use, they must ensure that prices between them are set according to the rules of the Organisation for Economic Co-operation and Development (OECD). The core document is the Transfer Pricing Guidance on Financial Transactions. Based on the results of a qualitative analysis (content and contextual analysis of the document), the aim of the article is to systematize the procedures used to determine the transfer price in financial transactions such as loans and borrowings where the parties are related parties (hereinafter referred to as "intra-group loans"). The decision-making process is illustrated by means of a flow chart that establishes the basic decision framework, or the individual steps leading to the selection of an appropriate transfer pricing method for intra-group loans.

Keywords: Cost of debt, credit rating, cup method, debt, economic models, interest rate, transfer price.

1 Introduction

The integration of an enterprise into a business group brings significant competitive advantages. Business groups are better able to cope with the imperfections of the external capital market, which are the limited availability of capital and the high cost of corporate financing (1). Hence, unlike independent enterprises, associated enterprises can share common resources within the group (2, 3, 4), take loans from related parties, take bank loans guaranteed by related parties (3), etc. The sharing of the group's capital resources takes place in the so-called internal capital markets. It is particularly used in situations where external financing is unavailable or involves high costs (5). Associated enterprises can also draw financial guarantees from other group members and more easily raise funds in external capital markets, i.e. from unrelated and independent lenders. Some businesses use internal capital markets to reduce costs, for others it may be a means of raising any funds at all. In all cases, the merged companies have to deal with the issue of setting the interest rate correctly. The Organisation for Economic Co-operation and Development (hereinafter referred to as the "OECD") is also looking into the accuracy of the valuation, with the aim of preventing profit shifting to other countries. The outcome of its work is the Base Erosion and Profit Shifting (hereinafter referred to as the "BEPS") project, which makes recommendations against tax avoidance. In this regard, the OECD has issued guidelines on transfer pricing in debt financing (6). The OECD's initiative contributes not only to avoiding profit outflows to other countries, but also to reducing capital outflows to countries with lower capital taxation (7).

As such, the issue of transfer pricing is regulated by the OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations (hereinafter referred to as the "OECD Transfer Pricing Guidelines") and requires associated enterprises to determine remuneration in accordance with the arm's length principle. The guidelines are the main methodological material for setting transfer pricing (8) and are a comprehensive and globally recognised standard (9). In the case of loans, the arm's length principle is applied to determine the amount of interest, which must correspond to a price agreed between independent parties. The key in this context is the determination of the credit rating. An assessment of the borrower's creditworthiness by an independent lender or rating agency. For some companies, credit ratings are publicly available, but most companies have to carry out multiple assessments to determine or estimate them. The importance of debt financing in the context of the international environment is evidenced by the inclusion of related standards in

the OECD Action Plan against BEPS. This project aims to prevent the shifting of profits to other countries - including in the context of abusive debt financing. Transfer prices, which are used to value transactions between related parties, are an area of tax risk that is subject to tax audits. Through international data exchange, tax administrations can identify risky businesses at minimal cost (10). A proper understanding of the rules contributes to reducing the number of tax disputes and increasing legal certainty in resolving these tax matters (11).

2 Literature review

In some countries, the OECD rules on transfer pricing are directly incorporated into national tax laws. However, this is not the case in the Czech Republic. Here, the statutory regulation of transfer pricing is regulated in only one statutory provision, namely Section 23(7) of Act No. 586/1992 Coll., on Income Taxes, as amended (12, 13). The Czech Tax Administration publishes information on the OECD guidelines, in particular provides their translation into the national language. Basic definitions and concepts on transfer pricing must be sought in European legislation. The main idea of transfer pricing is to negotiate a price between associated enterprises in accordance with the arm's length principle. The price agreed shall not differ from the price agreed between independent enterprises.

In testing whether the arm's length principle has been respected, the nature of the transaction is assessed. A functional analysis is carried out to define the transaction, followed by a comparative analysis. Transactions are of two types, dependent and independent. For a dependent transaction, a comparable transaction is sought. A comparable transaction is a transaction of a similar nature entered into between independent enterprises. The meaning of each definition is as follows (14):

- i. Associated enterprises. Two enterprises shall be deemed to be associated if one of the enterprises of one State participates, directly or indirectly, in the management, control or assets of an enterprise of the other State, or if the same persons participate, directly or indirectly, in the management, control or assets of an enterprise of one State and of an enterprise of the other State.
- ii. Independent enterprises. Neither enterprise participates in the management, control or assets of the other enterprise. The enterprises do not have the same persons in management and control functions.
- iii. Dependent transaction. Transactions between associated enterprises.
- iv. Comparable transaction. There are no significant differences between the dependent and independent transactions or sufficiently precise adjustments can be made to eliminate the effects of such differences.
- v. Functional analysis. The objective is to accurately define the financial transaction, assessing functions and risks. In particular, the creditworthiness of the borrower is assessed.
- vi. Comparative analysis. Comparison of a dependent transaction with an independent transaction. The comparative analysis provides information for selecting an appropriate transfer pricing method (8).

The obligation to determine the arm's length price between related parties generally applies to debt instruments. The definition of debt instruments in the Czech Republic is contained in Act No. 89/2012 Coll., the Civil Code, as amended (hereinafter referred to as the "CCC"). Debt instruments may be a loan, a borrowing, a sale and a credit (15). This article focuses on the most common financial instruments, which are loans and borrowings. Loans are regulated by section 2395 et seq. CCC, the contracting parties are the lender and the borrower, the object is the funds, the remuneration is the interest (9). The loan is regulated in Section 2390 et seq. CCC. The contracting parties are the lender and the borrower, the object is the return of an item of the same kind, and interest may be agreed (9). A loan is a

very common type of transaction between related parties. Determining the normal level of interest is a very challenging task and is the result of a number of related analyses. A key aspect for the valuation of the interest rate between associated enterprises is the determination of the credit rating (6).

2.1. Interest rate and credit rating

The interest rate is determined from the lender's perspective, based on the borrower's credit rating. A borrower's credit rating reflects the likelihood that the borrower will not pay interest or principal when due (16). Currently, banks often use credit ratings from credit rating agencies, either directly or as a benchmarking tool for internal rating models (17). A credit rating reflects the creditworthiness of an enterprise. There are quite a few definitions of the creditworthiness of a borrower (18).

Credit rating tells about an enterprise's ability to obtain credit, and to properly repay it (18). With the growth of financial markets, modeling financial investments is becoming increasingly complex and finding a suitable model for interest rate is the biggest challenge (19). The reputation of credit rating agencies took a hit during the global financial crisis of 2007-2008, when it became clear that credit rating agencies were systematically mispricing risk (20). Moreover, rating SMEs is also a challenge for financial institutions (21). Their regression models used to predict default risk may not work well due to limited or missing data (21). The solution was the development of a long-term rating model by Moody's, but this focuses mainly on industrial and retail companies (22).

The factors determining creditworthiness vary across sectors (23). Researchers can focus on these industries to identify the factors determining their creditworthiness and can explore an exclusive technique for determining the credit rates applicable to the industry (23).

The creditworthiness of the borrower is crucial in determining the credit risk. An important indicator for assessing the creditworthiness of a borrower is the establishment of a credit rating (6). It is the most important factor in lending (16). There are three main rating agencies in the market, namely Moody's, Standard and Poor's and Fitch Ratings (20, 24). Information from public sources, but also obtained non-publicly, is used to determine ratings (22). Artificial intelligence can be used to determine credit ratings, which can work with large amounts of data (22). Moody's scale starts with Aaa (highest rating) and ends with C (worst rating (25, 22). Standard and Poor's uses ratings from AAA to D (25), as does Fitch (24). A limitation is that companies can obtain different ratings. For example, the methodologies of Standard and Poor's and Moody's do not match (25). Comparisons of these methodologies are described in more detail in, for example, Jiang (26), Solilová et al. (24).

3 Research problems and goal

The issue of transfer pricing in financial transactions is described in the OECD Transfer Pricing Guidelines. The document contains instructions and describes the different methods. Specifically, the issue of financial transactions is dealt with in Chapter X entitled Transfer pricing aspects of financial transactions. This chapter is in text form without visualizations. The graphical layout contributes to a clearer understanding of the rules. To date, no specific manual has been issued by the Czech tax administration on these guidelines. The only step was the publication of the Czech translation of the guidelines in February 2020. The issue affects a large number of taxpayers as sharing of capital resources between related parties is a common occurrence. At the same time, it is a complex and complicated subject.

The aim of this paper is to provide a comprehensive framework and to contribute to a better understanding of the rules using visualization of the results. Using a flow chart, the decision-making process is visualized, identifying the steps and procedures that lead to the selection of an appropriate method for

determining the transfer price for intra-group loans. It is therefore also an output with application potential.

4 Methods

Associated enterprises that take out or grant intra-group loans need to look carefully at transfer pricing issues and get the interest rate right. They have to work with a large amount of information, which they obtain using numerous analytical tools. The decision-making process is described in the OECD Transfer Pricing Guidelines in their in sub-provisions, see Table 1. Both the borrower and the creditor involved in the intra-group transaction evaluate the information. As each party has different objectives, their views on the evaluation of the transaction may not be identical. The objective of the lender is to provide financial resources to a borrower who will be able to repay the loan properly and on time. The borrower's objective is to obtain financial resources at the lowest cost. Both parties must be able to prove, in the event of a tax audit, that the interest rate has been determined in accordance with the rules of the OECD Transfer Pricing Guidelines. The correct determination of the interest rate is preceded by the selection of an appropriate valuation method.

Table 1: Assumptions for correct interest valuation

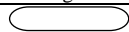




Point	Key provisions
10.51.	The transaction is evaluated from the perspective of the borrower and the lender. Their valuations need not be identical.
10.54.	The lender's objective is to prevent the risk of default on the amount owed. The lender's interest is in proper and timely repayment.
10.58.	The borrower's objective is to obtain credit at the lowest cost.
10.88.	The selection of an appropriate valuation method is a prerequisite.

Source: own elaboration (6)

The paper is designed as exploratory. Its objective is to describe and evaluate procedures to determine the appropriate method for determining the interest rate as a remuneration for the use of intra-group loans. The subject of the research was Chapter X of the OECD Transfer Pricing Guidelines. It was subjected to content and contextual analysis of the text. The paper does not deal with credit default swaps, which are used to value guarantees provided by related parties.

The aim is to graphically capture the decision-making process of selecting an appropriate interest rate valuation method, presenting a tool to better understand the linkages and context. The visualization of the individual steps undoubtedly contributes to a better understanding. The entire decision-making process in determining the interest rate is depicted in the form of a decision tree, which is classified as a flow chart. Decision trees are one of the most intuitive decision-making methods and are widely used in economic practice (27). The advantage of decision trees is the simplicity of their application. They are also clear and easy to understand. Table 2 shows the patterns used. Microsoft Visio software (28) was used to create flowcharts.

Table 2: Figures used

Figure	Meaning
	Beginning and end
	Decision
	Process
	Criterion
	Method

Source: own elaboration

The decision-making process was constructed by identifying individual decision steps, which were then analyzed and evaluated. Based on the analysis of Chapter X of the OECD Transfer Pricing Guidelines, the main criteria were identified and

the solution options were assigned to them. As part of the related evaluation, the problematic aspects that need to be addressed were described in the Discussion and Conclusions section. It should also be taken into account that the determination of the transfer price is a very demanding and holistic discipline, where the taxpayer must take into account not only macroeconomic factors, but also the situation in the borrower's business sector, the results of competitive analysis and the analysis of the companies participating in the transaction. In this respect, then, the output below is seen as an important, albeit still partial, input to the decision-making process.

5 Results

A priority issue that both the borrower and the lender must address is whether the intra-group loan is correctly classified. This is the subject of the functional analysis. It assesses whether the borrower is exposed to the risk of default and penalties for late payment. In particular, in situations where it is clear that the borrower will not be able to repay the funds raised, the resources should not be classified as a loan. The funds provided should be in the nature of an additional contribution to strengthen the equity of the enterprise (6, point 10.5). The debt capacity of an enterprise can be measured by the size of fixed assets (asset tangibility) and the financial capabilities of the enterprise (financial constraints) (29). Unused debt capacity is a reflection of the financial flexibility of the enterprise and enables the enterprise to obtain external sources of financing (30). In case the debt capacity is sufficient, external sources of financing are preferred (31), which are mainly loans.

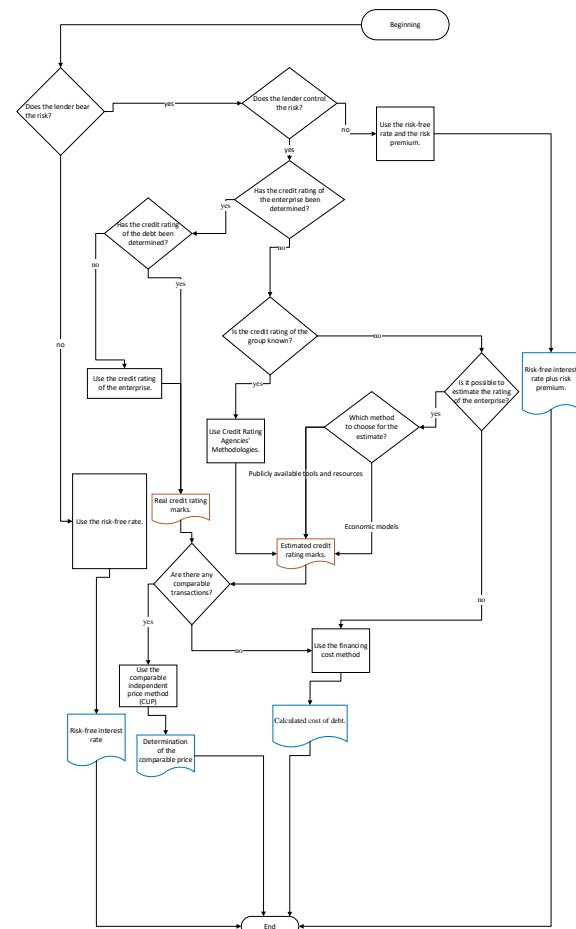
If the financing transaction is correctly classified as intragroup debt, the process of selecting an appropriate method for interest rate valuation can be proceeded with. This process consists of two steps. First, a functional analysis is carried out to define the financial transaction and clarify the contractual terms (6, point B.3.2.). At this stage, the borrower's situation is assessed, in particular its creditworthiness. In the next step, a benchmarking analysis is carried out (6, point 10.20.), which aims at finding a comparable financial transaction between independent entities. An analysis of the financial markets is carried out, in particular assessing the interest rates set for borrowers with different credit ratings. The sub-stages of the decision process are described in Table 3 and illustrated in Figure 1.

Table 3: Factors determining the choice of method

Point	Key factors
1.108.	Does the lender bear and control the risk?
10.71.	Has the credit rating of the enterprise been determined?
10.70.	Has the credit rating of the debt been determined?
10.82.	Is the credit rating of the group known?
10.97.	Is it possible to estimate the rating of the enterprise?
10.72.	Will publicly available financial tools be used to calculate credit ratings?
10.104.	Will economic models be used to value credit?
10.97.	Are there comparable transactions?
10.89.	Can the CUP method be used?
10.97.	Is it possible to estimate the cost of financing?
10.98.	Are the financing costs reasonable?

Source: own elaboration (6)

Figure 1: Decision-making flow chart



In determining the transfer price, the associated enterprise evaluates the circumstances listed in Table 3. The individual factors are evaluated in order:

- i. Does the lender bear and control the risk? If the lender does not bear and control the risk, it is entitled to an interest rate at the risk-free rate (6, point 1.108.).
- ii. Has the credit rating of the enterprise been determined? This rating is indicative of the creditworthiness of the enterprise, the independent perception of the enterprise's creditworthiness (6, point 10.71.).
- iii. Has a debt issue rating been established? If there is both an enterprise issue rating and a debt issue rating, it is preferable to choose a debt issue rating that takes into account the specific features of the debt (6, point 10.70.).
- iv. Has the group's credit rating been established? A group credit rating may be used if the creditworthiness of the enterprise does not differ from the creditworthiness of the group. It can also be used to derive the credit rating of the enterprise, provided that the rating agency process (6, point 10.82.) is repeated.
- v. Is it possible to estimate the credit rating of an enterprise? If it is not possible to estimate the rating of the enterprise, the transfer price must be derived on the basis of the lender's financing costs (6, point 10.97.).
- vi. Which method to choose for the estimate? A variety of economic models and publicly available tools can be used (6, points 10.72. and 10.104.).
- vii. Are there comparable transactions? If there is a comparable transaction, the most appropriate method for determining the price is the comparable arm's length price method, known as CUP (6, point 10.89.). If there are no comparable transactions, the cost can be determined at the level of the cost of financing (6, point 10.97.).

- viii. Are the borrower's financial costs the same or lower than those of other lenders? The financing costs of a lender cannot be claimed at any amount. Account must be taken of the fact that lenders seek to secure the cheapest method of financing in a competitive market (6, point 10.98.).

A key determinant of the interest rate is whether a credit rating has been established for the borrower. This is an indicator that is the result of an assessment of not only quantitative but also qualitative indicators. Most often the credit rating is determined at the level of the business group or not at all. If the credit rating is determined at group level, the credit rating of the enterprise can be derived from it (6, point 10.82.). In this case, the effect of the enterprise's group membership is assessed and the implicit support provided is evaluated (6, point 10.78.). If the credit rating of the enterprise is not established and the credit rating of the group cannot be used, the credit rating can be established on the basis of publicly available instruments (6, point 10.72.). However, if a method other than those used by credit rating agencies is used to estimate the rating, the enterprise must be able to demonstrate to the tax authorities that it has estimated the credit rating correctly.

In summary, the following types of credit ratings can be distinguished:

- i. Issue credit rating, which is an opinion on the creditworthiness of the borrower (issuer) with respect to a particular debt. It takes into account its specific features such as collateral, security and seniority level.
- ii. Enterprise credit rating, which is an opinion on the creditworthiness of the borrower. If the borrower has a publicly available credit rating published by an independent credit rating agency, this rating may be informative for the analysis of the arm's length principle.
- iii. Group credit rating, which assesses the creditworthiness of the business group. A borrower may have a better creditworthiness due to its affiliation with a business group.

Table 4 describes the key provisions for determining credit ratings and the role of multinational enterprises (hereinafter referred to as the "MNE").

Table 4: Credit rating

Arrangements	Type of rating
C.1.1.2.1.	Credit rating of the enterprise (The credit rating of an MNE)
C.1.1.2.2.	Issue credit rating (The credit rating of a specific debt issuance)
C.1.1.2.3.	Group credit rating (The credit rating of an MNE group)

Source: own elaboration (6)

If the credit rating of the enterprise is known or estimated, the comparable independent price (CUP) method is recommended, with a preference for an internal CUP if available. However, if there is no comparable transaction, the borrower must determine the cost of financing in order to value the interest rate. If no risk is assumed, the interest rate shall be set at the risk-free rate. The risk-free interest rate is also used when the lender takes the risk but does not control it. In this case, various rewards are added to the risk-free rate as risk premiums. The methods are described in more detail in the OECD Transfer Pricing Guidelines, see Table 5.

Table 5: Valuation methods.

Arrangements	Method
C.1.2.1.	CUP method (Comparable uncontrolled price method)
C.1.2.3.	Financing costs (Cost of funds)
F.1.	Risk-free interest rate
F.2.	Risk-free interest rate plus risk premium

Source: own elaboration (6)

5.1 Risk-free interest rate

If the lender does not bear or control the risks associated with the granting of the loan or borrowing, the interest rate is set at the

risk-free rate of return (6, point 1.108.). This is a hypothetical indicator as there is no zero-risk investment (6, point 1.109.). The risk-free interest rate is an important economic variable that reflects the time value of money for risk-free assets (32). In this respect, the risk-free interest rate can be used to value the returns on investments with low default risk (6, point 1.110.). To determine the risk-free interest rate, a security should be chosen that was issued by the government in the same period, in the same currency, with the same maturity as the financial transaction being executed (6, point 1.111.). The risk-free rate of return can be considered the rate of return on government bonds (24). The risk-free rate of return can also be determined in other ways, e.g. according to interbank rates, interest rate swap rates, etc. (6, point 1.115.). The disadvantage of using the risk-free interest rate is that it is affected by financial crises (33).

5.2 Risk-free interest rate plus risk premium

The interest rate is made up of two components. The first component is the amount of the risk-free interest rate and the second is the rewards associated with the granting of the loan (6, point 10.96.). Various methods can be used. The most commonly used are the risk-free interest rate and the risk premium (33). Other methods related to the rate of return on alternative comparable investments, the cost of capital, etc. can also be used. The risk premium can also be determined based on the rating of the enterprise. If the rating of an enterprise is not determined, various economic models can be used. In this case, the interest rate is set at the risk-free rate and includes a number of rewards: default risk, liquidity risk, expected inflation risk, etc. (6, point 10.105.). The problem is that the results of economic models do not represent real financial transactions. The OECD Transfer Pricing Guidelines accept that these models can be used, but adjustments need to be made for comparability.

5.3 Financing costs

Financing costs include the lender's borrowing costs, the costs associated with servicing the loan, risk premium fees and a profit margin that includes the lender's incremental cost of the equity required to support the loan (6, point 10.97.). The most challenging task is to determine the cost of equity (24).

A lender must compare its cost of a financial transaction with the cost of other lenders. Consideration must be given to the fact that the borrower would act rationally and would not choose the more expensive financing (6, point 10.99.). The lender must minimize the cost of financing. If there is a competitor in the market that can provide the funds more cheaply, the lender cannot claim higher reimbursement (6, point 10.98.). The disadvantage of financing costs is that this only sets an upper bound on the interest rate valuation (33).

5.4 Comparable Independent Price (CUP)

The comparable arm's length price (CUP) method is a transfer pricing method that compares the price of a dependent transaction with the price of a comparable arm's length transaction conducted under comparable conditions (14). This method is most commonly used (24, 33). The basic assumptions are that i) the credit rating of the borrower or the rating of the issue is established or estimated, ii) comparable entities exist, and iii) comparable transactions can be found. To determine comparable transactions, not only prices but also other pricing terms provided by related parties must be considered in a manner similar to independent parties (34). The method is well suited to the existence of a sufficiently large financial market, the frequency of transactions and the availability of information. Information on the characteristics of individual loans with respect to the credit rating of the borrower or the credit rating of the issue can be retrieved. Lenders must take into account factors that reduce or increase risks (6, point 10.90.). The risk is mitigated by the guarantees and findings provided. The risk increases with the riskiness of the project, longer maturity, lack of collateral, etc. The OECD Transfer Pricing Guidelines accept that there may be a spread of market rates for a given financial

transaction (6, point 10.91.). To determine the market rate, the currency of the transaction, maturity, etc. must be taken into account. The comparable transaction should not be linked only to the borrower's business. A borrower that is a member of a group should be compared with other borrowers that are also members of the group.

The comparable price need not be determined solely by the credit rating of the enterprise, but may also be based on the return on alternative comparable investments. It may also use internal methods of determining a comparable independent price that are based on analysis of internal data. Internal methods are used when the loan is granted by a third independent party (33), i.e. different from the borrower and the lender. The advantage is that the method is easy to use when a comparable transaction between independent lenders is known (33).

The disadvantage of the comparable arm's length price (CUP) method is that it relies on the valuation of a comparable entity for which all information may not be publicly known (24). Also, the question of using the results of the benchmarking analysis based on annual reports is debatable (35). This is because the lack of uniform legislation across different countries may affect the selection of comparable data in the comparative analysis (35).

5.5 Internal comparable price, bank offer, expert's report

Enterprises that undertake both comparable dependent and independent transactions may use internal comparable prices (36). However, this price cannot be applied to financial transactions, due to the fact that financial transactions assess the riskiness of a particular borrower. It is also not possible to use the Valuation Law (37) and the banks' opinion (6, points 10.107. and 10.108.) to price interest.

6 Discussion and Conclusion

The funds provided by the related party may take the form of a capital surcharge or a debt instrument. A basic prerequisite for the valuation of interest is the correct classification of the financial transaction. If the loan is correctly classified, it is possible to proceed to the selection of an appropriate method for valuing the interest. The valuation methods are i) the CUP method, ii) cost of funding valuation, iii) risk-free interest rate valuation and iv) risk-free interest rate plus risk premium valuation. The key is to determine whether the enterprise has a credit rating determined by an independent entity.

There are different methods of assessing the creditworthiness of a borrower. First of all, they are based on the evaluation of selected financial ratios, which are assigned weights of their significance (18). Many commercial banks use complex methods to assess the creditworthiness of borrowers (18). According to Verster et al. (17), banks take into account other parameters besides credit ratings when determining credit risk, such as their internal risk attitude, their internal corporate data, etc.

The OECD's established standard requires associated enterprises to follow a similar approach in estimating credit ratings and to conduct multi-factor analyses. However, credit specialists' decisions are often based on their intuition and experience (18) and are burdened with subjective assessments. The OECD Transfer Pricing Guidelines do not take this into account in the context of the rules for estimating credit ratings.

Enterprises face a number of challenges when estimating a corporate credit rating. Rating agencies work mostly with data from companies in relatively large economies and do not take into account conditions in the Czech Republic (24). Enterprises do not have a sufficient data base. A solution for the future and a challenge could be the creation of a suitable database or a more detailed guide (methodology) for determining the interest rate for selected basic types of transactions (e.g. the creation of a safe harbour).

Some authors point out that CRA ratings should not be considered accurate. They are opinions about the riskiness of entities (17, 22) and do not serve to predict gains and losses (22).

For many enterprises, determining credit ratings is a complicated task. There are many definitions and actual methods to determine credit rating. The rating process involves a number of sub-processes, evaluating multi-factor analyses (e.g. enterprise, group, industry), making comparisons with other companies, etc. However, ratings are normally set by major financial institutions or rating agencies that have in-house data and their staff has expertise. Valuation should be carried out by experts. Enterprises that are financially strong enough can outsource these services or hire qualified staff. For other enterprises, rating will be a costly affair. It would therefore be advisable, especially for smaller enterprises, to set simplified rules, so-called safe harbours. This institute is not established in the Czech Republic. Iřtok et al. (38) identified twelve countries that use simplification of rules in this respect and derived rules for its creation. The author of the article believes that for certain defined standard types of transactions, which will not be burdened with certain specifics (existence of an international element, absence of guarantees, etc.), the instrument would be suitable for the Czech Republic. Setting simplified rules that would be accepted by the tax administration would (i) reduce costs for enterprises themselves, (ii) increase legal certainty in tax administration and (iii) simplify the implementation of tax audits.

The issue of the valuation of financial transactions is a complex one and the rules introduced so far are very general. The OECD itself has published discussion drafts on the issue. The proposals set out different approaches and suggestions for solutions. All this suggests that there is a need to seek simplification, introduce methodological tools and provide guidance to businesses. This article, which focuses on a selected area, contributes to the above by presenting a guidance tool for selecting an appropriate interest valuation method and highlighting problematic aspects.

Acknowledgements

The article was written with the support of the Technology Agency of the Czech Republic in the framework of the project No. TL05000328 "Setting the market price for financial transactions while using the arm's length principle". This paper was supported by the Internal Grant Agency of the Brno University of Technology, Grant No. FP-S-22-7935 (Developmental Trends in Selected Aspects of Corporate Financial Management).

Literature:

- Holmes, R. M., Hoskisson, R. E., Kim, H., Wan, W. P., & Holcomb, T. R.: International strategy and business groups: A review and future research agenda. *Journal of world business*, 2018, 53(2), pp. 134-150. ISSN 1090-9516. doi:10.1016/j.jwb.2016.11.003.
- Aguilera, R. V., Crespi-Cladera, R., Infantes, P. M. & Pascual-Fuster, B.: Business groups and internationalization: Effective identification and future agenda. *Journal of world business*, 2020, 55(4), pp. 101050. ISSN 1090-9516. doi:10.1016/j.jwb.2019.101050.
- Lin, J. J., & Yeh, Y. H.: Internal capital markets, ownership structure, and investment efficiency: Evidence from Taiwanese business groups. *Pacific-Basin finance journal*, 2020, 60. ISSN 0927-538X. doi:10.1016/j.pacfin.2020.101284.
- Min, Y., Liao, Y. Ch. & Chen, Z.: The side effect of business group membership: How do business group isomorphic pressures affect organizational innovation in affiliated firms?. *Journal of business research*, 2022, 141, pp. 380-392. ISSN 0148-2963. doi:10.1016/j.jbusres.2021.11.036.
- Cooper, M., & Nguyen, Q. T. K.: Multinational enterprises and corporate tax planning: A review of literature and suggestions for a future research agenda. *International business review*, 2020, 29(3). ISSN 0969-5931. Doi:10.1016/j.ibusrev.2020.101692.
- OECD: *Transfer Pricing Guidance on Financial Transactions: Inclusive Framework on BEPS Actions 4,8,10*.

- Paris: OECD Publishing. 2020. <https://www.oecd.org/tax/beps/transfer-pricing-guidance-on-financial-transactions-inclusive-framework-on-beps-actions-4-8-10.htm>.
7. Hakelberg, L. & Rixen, T.: Is neoliberalism still spreading? The impact of international cooperation on capital taxation. *Review of International Political Economy*, 2021. 28(5), pp. 1142-1168. ISSN 09692290. doi: 10.1080/09692290.2020.172769.
8. Kapoun, V.: Dopady krizí na transakce mezi spojenými osobami. *Bulletin Komory daňových poradců ČR*, 2022. 2022(4), pp. 47-51. ISSN 1211-9946.
9. Brychta, K., Svirák, P., Solilová, V. & Ištók, M.: Stanovení převodní ceny u finančních transakcí - část I. *E-Bulletin Komory daňových poradců České republiky*. 2021. 2021(11), pp. 36-41. ISSN 1211-9946.
10. Friedrich, M. & Tepperova, J.: Identification of base erosion and profit shifting using tax evasion rate. *Society and economy*. Budapest: Akademiai Kiado, 2021. 43(1), pp. 75-92. ISSN 1588-9726. doi:10.1556/204.2020.00026.
11. Mann, H.: The expanding universe of international tax disputes: a principled analysis of the OECD international tax dispute settlement proposals. *Asia Pacific law review*, 2023. 31(1), pp. 268-283. doi:10.1080/10192557.2022.2102593.
12. Act No. 586/1992 Coll., On Income Taxes, as amended.
13. Brychta, K.: Jinak spojené osoby dle § 23 odst. 7 písm. b) bodu 5 zákona o daních z příjmů v judikatuře správních soudů. *E-Bulletin Komory daňových poradců České republiky*, 2020. 2020(9), pp. 22-24. ISSN: 1211-9946.
14. OECD: *Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations 2017*. Paris: OECD Publishing. 2017. <https://doi.org/10.1787/tpg-2017-en>.
15. Act No. 89/2012 Coll., Civil Code, as amended.
16. Heidary Dahooie, J., Razavi Hajiagha, S. H., Farazmehr, S., Zavadskas, E. K. & Antucheviciene, J.: A novel dynamic credit risk evaluation method using data envelopment analysis with common weights and combination of multi-attribute decision-making methods. *Computers & operations research*. 2021. 129(105223), ISSN 0305-0548. doi:10.1016/j.cor.2021.105223.
17. Verster, T., De Jongh, R., Greenberg, S., Fourie E. & De Wet, D.: A motivation for banks in emerging economies to adapt agency ratings when assessing corporate credit. *South African journal of economic and management sciences*, 2019. 22(1), pp. 1-11. ISSN 1015-8812. doi:10.4102/sajems.v22i1.2818.
18. Caplinska, A. & Tvaronavičienė, M.: Creditworthiness place in credit theory and methods of its evaluation. *Entrepreneurship and Sustainability issues*, 2020. 7(3), pp. 2542-2555. ISSN 2345-0282. doi:10.9770/jesi.2020.7.3(72).
19. Mohamadinejad, R., Biazar, J. & Neisy, A.: Spread option pricing using two jump-diffusion interest rates. *U.P.B. Scientific bulletin., Series A*, 2020. 82(1), pp. 171-182. ISSN 1223-7027.
20. Chen, Z., Matousek, R., Stewart, Ch. & Webb, R.: Do rating agencies exhibit herding behaviour? Evidence from sovereign ratings. *International review of financial analysis*, 2019. 64, pp. 57-70. ISSN 1057-5219. doi:10.1016/j.irfa.2019.04.011.
21. Roy, P. K. & Shaw, K.: A credit scoring model for SMEs using AHP and TOPSIS. *International journal of finance and economics*, 2023. 28(1), pp. 372-391. ISSN 1076-9307. doi:10.1002/ijfe.2425.
22. Caridad y López del Río, L., García-Moreno García, M. de los B., Caro-barrera, J. R., Pérez-priego, M. A., & Caridad y López del Río, D.: Moody's Ratings Statistical Forecasting for Industrial and Retail Firms. *Economies*, 2021. 9(4), pp. 154. doi:10.3390/economies9040154.
23. Ubarhande, P. & Chandani, A.: Elements of Credit Rating: A Hybrid Review and Future Research Agenda. *Cogent business & management*, 2021. 8(1). ISSN 2331-1975. doi:10.1080/23311975.2021.1878977.
24. Solilová, V., Režňáková, M., Karas M. & Ištók, M.: Přístupy stanovení převodních cen u finančních transakcí a jejich využití v podmínkách České republiky. *Bulletin Komory daňových poradců ČR*. Praha: Impax, 2022. 2022(4), pp. 29-41. ISSN 1211-9946.
25. Caridad, L., Núñez-Tabales, J., Seda, P. & Orlando Arencibia, O.: Do Moody's and S&P firm's ratings differ?. *Economics & sociology*. Ternopil: Centre of Sociological Research (NGO), 2020. 13(4), pp. 173-186. ISSN 2071-789X. doi:10.14254/2071-789X.2020/13-4/11.
26. Jiang, Y.: Credit ratings, financial ratios, and equity risk: A decomposition analysis based on Moody's, Standard & Poor's and Fitch's ratings. *Finance research letters*. Elsevier, 2022. 46, p. 102512. ISSN 1544-6123. doi:10.1016/j.frl.2021.102512.
27. Podhorska, I., Vrbka, J., Lazaroiu, G. & Kovacova, M.: Innovations in financial management: recursive prediction model based on decision trees. *Marketing and Management of Innovations*, 2020. 2020(3), pp. 276-292. ISSN 2218-4511.
28. Microsoft Office. Microsoft Visio [online]. 2023. [Accessed 4th June 2023]. Available from: <https://www.microsoft.com/cs-cz/microsoft-365/visio/flowchart-software>
29. Almeida, H. & Campello, M.: Financial Constraints, Asset Tangibility, and Corporate Investment. *The Review of financial studies*. Oxford: Oxford University Press, 2007. 20(5), pp. 1429-1460. ISSN 0893-9454. doi:10.1093/rfs/hhm019.
30. Hess, D. & Immenkötter, P.: How Much Is Too Much? Debt Capacity and Financial Flexibility. CFR Working Paper, No. 14-03, University of Cologne, Centre for Financial Research (CFR), Cologne, 2014.
31. Lemmon, M. L., & Zender, J. F.: Debt Capacity and Tests of Capital Structure Theories. *Journal of financial and quantitative analysis*, 2010. 45(5), pp. 1161-1187. doi.org/10.1017/S0022109010000499.
32. Van Binsbergen, J. H., Diamond, W.F. & Grotteria, M.: Risk-free interest rates. *Journal of financial economics*, 2022. 143(1), pp. 1-29. ISSN 0304-405X. doi:10.1016/j.jfineco.2021.06.012
33. Ištók, M.: *Transférové oceňovanie úverov a pôžičiek v Českej a Slovenskej republike*, 2023. 238 p. ISBN 978-80-214-6147-5.
34. Brychta, K.: Užití interní srovnatelné ceny pro stanovení převodní ceny. *E-Bulletin Komory daňových poradců České republiky*, 2020. 2020(5), pp. 19-22. ISSN: 1211-9946.
35. Sulik-Górecka, A.: Dilemmas of Transfer Pricing Comparability Analysis in Manufacturing Entities. Polish-Czech Case Study. *Management systems in production engineering*, 2018. 26(2), pp. 76-82. ISSN 2299-0461.
36. Brychta, K.: Převodní ceny – interní srovnatelné údaje. *E-Bulletin Komory daňových poradců České republiky*, 2020. 2020(3), pp. 21-24. ISSN: 1211-9946.
37. (37). Brychta, K.: Stanovení převodních cen v oblasti vnitropodnikových finančních transakcí z pohledu znalce. *Bulletin Komory daňových poradců ČR*, 2022. 2022(4), pp. 41-46. ISSN 1211-9946.
38. Ištók, M., Solilová, V., & Brychta, K.: Challenges in transfer pricing: A concept of safe harbours for financial transactions. *Financial Internet Quarterly*, 2022. 18(4), pp. 23-34. ISSN: 2719-3454.

Primary Paper Section: A

Secondary Paper Section: AE, AG, AH