

# Certain Important Aspects of Cost Contribution Arrangements in Financial Management

Tomáš Brabenec

**Abstract**—Cost contribution arrangements (CCAs) and Cost sharing agreements (CCAs) belong to the tools of modern finance management. Costs spend by associated enterprises on developing producing or obtaining assets, services or rights (in general - benefits) are used for tax optimizing too. The main purpose of joint research and development, producing or obtaining benefits is to lower these costs as much as possible or to maximize the benefits. In this article is mentioned the problematic of transfer pricing and arm's length principle with connection of CCAs, CSAs. Next, there is mentioned how to settle participation shares of the total cost and benefits contributions with respect to the OECD Transfer pricing for MNEs Guidelines and with respect to other significant regulations.

**Keywords**—Arm's length principle, Cost contribution arrangements, Cost sharing agreements, Reasonable anticipated benefits, Relevant costs, Transfer prices.

## I. INTRODUCTION

THIS article called Cost Contribution Arrangements (hereinafter referred to as the "CCA" or "CCAs") in Financial Management aims at enlightening the issues related to the arrangements or cost sharing arrangements among others in connection with the phenomenon of transfer prices between associated enterprises. It is the proper time now to initiate a discussion about the transfer price accounting on the background of CCAs and the applicable tax legislation and publish the advantages/disadvantages of this tool implementation into the financial management in, for instance, the Czech Republic.

The fact the enterprises located currently by multinational groups to the states with cheaper work force are mostly contract manufacturers for multinational chains (i.e. not many units are full-fledged distributors) provides a chance to prepare a theoretically suitable and practically applicable argumentation how to handle the CCAs in the financial management of transactions within a group of associated enterprises (multinational group) so that they comply with the tax legislation, i.e. the arm's length principle and enable tax optimizations. It is expected the multinational groups to start establishing the shared service centres at large also in the Czech Republic in a few years. (Some efforts of certain groups can already be identified.). The centres provide

Ing. Tomáš Brabenec is now assistant, Department of Finance and Business Valuation, University of Economics in Prague, e-mail: tomas.brabenec@vse.cz

services or other activities to the group where the transactions are legally governed by service level agreements (known as SLA) being supplier - customer contracts or more typically cost sharing arrangements (hereinafter referred to as the "CSA" or "CSAs") and the cost contribution arrangements (CCAs) mentioned above.

## II. DEFINITION OF CCA AND CSA

In their definitions, the cost sharing arrangements (CSAs) and cost contribution arrangements (CCAs) are generally referred to and understood as arrangement under which the parties agree to share the costs and risks associated with developing, producing or acquiring assets, rights or services and in which the interests in the assets, rights or services are defined based on the individual expectations of the participants' benefit. Each share of a participant in the arrangement in the total costs should be comparable with an adequate share of this participant in the total expected benefit. It can be seen in practice the CCAs/CSAs are divided into two, or to be more precise, three basic groups:

- 1) CCAs/CSAs made to perform research and development or produce or acquire assets or rights: The purpose of the arrangements is typically a joint research and development (hereinafter referred to as the "R&D") expected by the participants to yield a common benefit, or in case of an ill success of the R&D the participants are capable of bearing their shares in the loss. This group of arrangements is characteristic with an exposure to a considerable overall risk which, thanks to the CCAs/CSAs, can be shared by several entities which otherwise would not invest their finance in such a venture on their own. In addition, the timeframe of the arrangement can be difficult to estimate at the arrangement execution time (if the termination of the "development-only" joint venture is not clearly defined in the arrangement). In this context it is to be noted the arrangements feature also a powerful financial leverage consisting in the participants' acquisition of considerable intangible assets at a relatively low cost (contributing only a part of the R&D costs) in case of a success of the CCA/CSA (a new product resulting from the R&D). The investment generates a very short payback period and high profit to capital employed ratio. The businesses are motivated to enter into the arrangements often by high costs or risk of the transaction, unavailability of certain

assets (e.g. due to administrative barriers) or required skills/knowledge or lack of finance. This arrangement type requires that the participants hold a real interest in the assets which have been or which are generated under the CCA/CSA in the respective proportion. The results are exploited by the participants to their own benefit rather than in the joint activities with other participants. Research arrangements are also applied in practice the provisions of which, however, generally do not match the cost sharing/contribution concept.

- 2) CCAs/CSAs made only to share services: The purpose of the arrangements is to share costs in order to derive common benefit by virtue of shared services which would normally be used by the participants separately. An established shared service centre enables to acquire the services of the same quality as of those purchased from third persons but at a lower cost than from the third persons. As a consequence, the results of the arrangements are not any tangible/intangible assets/rights. The centres are typically shared managerial, technical or administrative service centres. The arrangements are typically made between enterprises within a group, i.e. associated persons rather than independent companies because some intra-group services should be centralized to maximize the efficiency of their performance (e.g. the duplicity of services within the group is reduced, unified administrative procedures or identical technical solutions are applied, etc.). The shared services or operation of the activities then show little risk of commercial failure.
- 3) The combination of the two arrangement groups above can be regarded as the third group. The purpose of CCA/CSA is thus not only the joint R&D or acquisition of assets/rights but also centralized marketing of the assets acquired from the research or development, centralized purchasing of base materials for the manufacture of a new product, managerial services or shared technical support for the different participants in the arrangement.

However, the basic division above does not encompass all the variability of the arrangements. The CCA/CSA can apply to any joint creation of funds, cost and risk sharing, development and acquisition of assets or services (e.g. acquisition of central managerial services, advertising campaign development services, central human resources services, accounting services, etc.).

#### A. Differences between CCA and CSA

However, the definition above is rather simplifying. More exact definitions of the CCA/CSA were established, particularly in the United States of America (hereinafter referred to as the "USA"). For example, the CSA is defined as<sup>1</sup>: "Agreement under which the parties agree to share the costs of development of one or more intangibles in proportion to their shares of reasonably anticipated benefits from their

individual exploitation of the interests in the intangibles assigned to them under the arrangement." No CCA definition can be found in the U.S. regulatory rules but it is generally accepted as set out in [3]<sup>2</sup>: "A CCA is a contractual arrangement between business enterprises to share the costs and risks of developing, producing or obtaining assets, services or rights, and to define the interests of each participant in those assets, services or rights".

As indicated by the definitions above, the scope of CCAs is broader than that of the CSAs. The CCA is a kind of framework agreement whilst the CSA is defined clearly as an agreement proper. In USA, the "business enterprises" is a broader notion than the "parties". The CCA definition clearly shows the risk sharing whilst in case of CSA this is not clearly specified (the definition does not mention any "risks"); the CCA definition above does not suggest by whom and how are the risks shared. (The parties implicitly share the risks but the definition does not specify this.) There is a difference between the CCAs and CSAs established in practice consisting in the fact the CCAs are used to cover the development, production or acquisition of assets, services or rights while the CSAs are used to cover the development or research of intangible assets.

#### B. CCAs, CSAs and Joint Ventures

From the economic viewpoint the CCA/CSA can be described as a form of joint venture or, more precisely, "development-only" joint venture rather than a joint venture established to earn income which does not apply to the legal viewpoint. The difference between the CCA/CSA (i.e. development-only joint venture) and joint venture established to earn income lies in the fact the CCA/CSA is limited to share the costs and risks of the subject matter of the arrangement (i.e. research and development or acquisition of assets, rights or services), and does not extend to the income or benefit of the participants under the arrangement. The substance of CCA/CSA requires that it does not provide for any continued commercial exploitation of the results of the arrangement. This exploitation is generally covered by other arrangements such as the joint venture arrangements (hereinafter referred to as the "JVA") or similar arrangements. Nevertheless, there are CCAs/CSAs which are transformed to the JVA as soon as a specific term is met. Their limitation is thereby extended so that also the benefits are shared by the participants. It is to be noted that in some countries including Australia the CCA is described a form of joint venture. However, this description should not be applied generally. First and foremost, the participants in the CCA contribute their know-how, human and other (in particular financial) resources to the joint development of an intangible asset. The ownership of the results is shared, i.e. each participant has the right to exploit the results to earn its own benefit without being obliged to pay any royalties to other participants in the CCA for the exploitation. This is recognized also by OECD.

<sup>1</sup> United States Treasury Regulations, Treas. Reg. Sec. 1.482-7 (a)(1)

<sup>2</sup> OECD (1997), Chapter VIII, Article 3.

OECD<sup>3</sup> provides the following depiction of the principal difference between the CCA/CSA and licence agreement: *“Further, each participant in a CCA would be entitled to exploit its interest in the CCA separately as an effective owner thereof and not as a licensee, and so without paying a royalty or other consideration to any party for that interest. Conversely, any other party would be required to provide a participant proper consideration (e.g. a royalty), for exploiting some or all of that participant’s interest.”* This definition can simply be construed so that the share or expected future benefit from the CCA/CSA is saleable or rentable separately and any participant holding the share would have the right to receive the purchase price or royalty.

### III. OECD GUIDELINES AND COST SHARING ARRANGEMENTS

In the light of the importance of the OECD Guidelines<sup>4</sup> for the transactions between associated persons the OECD Guidelines references to the CCAs/CSAs have to be summarized.

Chapter VIII of the OECD Guidelines handling the arrangements related to cost sharing is relatively new. It was implemented into the OECD Guidelines in 1997 following Chapter VII<sup>5</sup> focused on special payments for intra-group services.

Chapter VIII is not intended to provide a description of all CCA/CSA variations and their tax implications. Instead, the authors tried to give certain: *“...guidance for determining whether the conditions established by associated enterprises for a CCA are consistent with the arm’s length principle.”*

Nevertheless, as concerns the CCA/CSA definition, the one used in the OECD Guidelines has no essential differences from that provided above. The OECD Guidelines also operates with adequacy and total benefit requiring (as a primary guidelines for taxation purposes) that a participant’s share of the total number of contributions relating to the CCA/CSA is comparable with its adequate interest in the expected total benefit and that its interest in the results is determined at the beginning and also where the share is interlinked with the shares of other participants in the CCA/CSA. The accord of the OECD Guidelines with the common CCA/CSA provisions regarding the effective ownership of interest in the results of the arrangements has a great importance. Neither from the OECD Guidelines viewpoint (taxation viewpoint) can any royalties under the CCA/CSA be considered. Conversely, the OECD Guidelines recommend that the effective owner of an interest in the results demands a payment (e.g. in the form of royalty) for its share (resulting beneficial interest from the involvement in the CCA/CSA or a part thereof) provided to other participant.

#### A. Application of Arm’s Length Principle

The OECD Guidelines take properly into account that the total expected benefit must not necessarily be only a short-

term benefit from the CCA/CSA results. It points out the fact the results of the arrangement must be assessed also in the long-term perspective or in terms of success as such (CCA/CSA can yield no profit if, for example, the R&D fails). Of importance is that the expected (mutual) profits are estimated independently as far as possible because only such estimate can comply with the OECD Guidelines recommendation for the determination of absolute level of cost contributions (shares in costs). The assumption underlying the arm’s length principle application in the CCAs/CSAs is formulated in Article 8 of Chapter VIII of the OECD Guidelines: *“...a participant’s contributions must be consistent with what an independent enterprise would have agreed to contribute under comparable circumstances given the benefits it reasonably expects to derive from the arrangement.”* Article 14 explains: *“...the value of each participant’s contribution should be consistent with the value that independent enterprises would have assigned to that contribution in comparable circumstances. ...the application of the arm’s length principle would take into account, inter alia, the contractual terms and economic circumstances particular to the CCA, e.g. the sharing of risks and costs.”*

Generally, the Guidelines do not exclude the in-kind cost contributions or shares of costs. It also notes the difficulties in measuring the contribution values where it is agreed the contribution is understood as, for instance, partial use of capital assets (buildings, machinery) or services (e.g. performance of supervisory or other administrative function) which are used by the participant also outside the arrangement.

The OECD Guidelines also do not exclude the use of the institute of public service compensation. The compensations should be treated as a supplement to the payer’s expenses and as a reimbursement (by way deduction) of the expenses in favour of the recipient in the CCAs/CSAs. The royalty for, for example, additional use of interest in the results of a participant by other participant which, although possessing the effective ownership of the same results, has provided its interest for a payment to other person, should generally not be understood as the public service compensation.

#### B. Share Allocation

There is generally accepted methodology for the calculation of participation shares of the total contributions and unlikely to be unified under the CCAs/CSAs. This fact is confirmed by the OECD Guidelines in Article 19 of Chapter VIII: *“There is no rule that could be universally applied to determine whether each participant’s proportionate share of the overall contributions to a CCA activity is consistent with the participant’s proportionate share of the overall benefits expected to be received under the arrangement.”*

The participants in the arrangements are faced with considerable difficulties in valuating the shares in the reasonably expected benefit. The OECD Guidelines recommend that the shares to be valuated using a preconsidered, additionally generated income or cost savings

<sup>3</sup> See References [3]

<sup>4</sup> See References [3]

<sup>5</sup> This Chapter was implemented into the OECD Guideline in 1996.

derived by each participant as a result of the arrangement. Other techniques may include the application of prices charged for sale of comparable assets and services according to the OECD Guidelines. The participants in the arrangements will usually use an allocation key. However, the allocation basis should reflect the nature of the activity related to the CCA/CSA or expected benefit. The OECD Guidelines do not exclude a future change of the allocation key in case the original one loses the causal connection. (It is not uncommon to construe the contributions and shares in steps where any change to the contributions or shares is subject to a successful or unsuccessful achievement of certain criterion. This construction should, however, be declared in the CCAs/CSAs in advance). The OECD Guidelines give an example in Article 22 of Chapter VIII: “...if there are five participants in a CCA, one of which cannot benefit from certain research activities undertaken within the CCA, then in the absence of some form of set-off or reduction in contribution the costs associated with those activities might be allocated only to the other four participants.”

#### C. Participation in the Cost Sharing Arrangement at the Entry and Withdrawal Times or in Case of Time Limitation

The cases where the parties are changed during the life of the original CCA/CSA are not uncommon in practice. The participants enter into and withdraw from the arrangement or their participation is limited in time.

The understanding of participation in the CCA/CSA presented in the OECD Guideline is noteworthy. The OECD Guideline determines that an entity which cannot reasonably expect a benefit from any own activity relating to the cost sharing arrangement cannot be a participant in the CCA/CSA. This approach is common because in the taxation sphere one can often see the assessment of transaction substance over its formal capture (the “substance over form” rule). According to the OECD Guideline a benefit share in assets or services (i.e. the subject matter of the CCA/CSA) must be allocated to the participant and the participant must reasonably expect the benefit share can be exploited by it (including licensing the share to other person being not a participant in the CCA/CSA).

#### IV. APPLICATION OF ARM’S LENGTH PRINCIPLE

The application of the arm’s length principle<sup>6</sup> to the transactions which are generated by the CCA/CSA where the participants are members of a group (associated persons) is difficult, indeed. The appropriate general guidelines for the construction of correct realized price in taxation terms can be seen in the following points found in the detailed analysis provided by the study of the Australian Taxation Office (2004) based on the recommendations found in OECD (1995, 1997).

- 1) The intra-group CCAs/CSAs should make business sense:  
If considering the fiction or assumption of how would

<sup>6</sup> The arm’s length principle interpretation is provided in Paragraph 1 of Article 9 of the OECD Model Tax Agreement on which the double taxation relief treaties of both OECD and non-OECD countries are based.

independent entities conduct in entering into the CCA/CSA, the basic requirement is a rational conduct of the independent party. The independent party would certainly enter the business (i) with the view of protecting its own economic interests, (ii) after thorough assessment of other options (i.e. entry into the CCA/CSA or acquisition of assets through the payments of royalties or rent), (iii) with the view of maximizing the benefit from the invested resources. The independent party conducting rationally is most likely not to enter into other businesses.

- 2) The CCAs/CSAs should accord with economic substance: Hardly can one imagine circumstances in which an independent party not acting in duress enters into arrangements the provisions of which do not reflect the economic substance.
- 3) Terms of the CCA/CSA should be agreed upfront: It can obviously be difficult or impossible to anticipate later events and project future benefits of the participants at the time of initially agreeing the CCA terms. Because of this fact the arrangements between the associated persons are sometimes not made before any reviews or clarification of any uncertainties with respect to the R&D. An independent person would likely enter into the arrangement at the outset of joint venture (e.g. in case of the R&D). Nevertheless, this depends on the business practices established in the respective country and experience in dealing with the other participants in past (in a positive case the launch of joint venture is preferred over formalities which are finalized later) which applies also to the independent transactions. Generally, the shares of and contributions to the costs should be known/identified at the project commencement, too.

Note: It should be pointed out that if it is proved that the shares and contributions under the CCA/CSA were determined in good faith but there is some worsening of the results during the arrangement life or the activity relating to the cost sharing arrangement is terminated several years before the expected results are obtained (or the benefit is reasonably foreseeable only in future), it may be advisable to reconsider the respective shares of the participants. However, the reconsideration should be made on a perspective basis which would ensure the changes made will be reflected on the interest in the expected benefit. It should be a “forward looking concept”, i.e. the history should not be reconsidered.

- 4) The participants should have a reasonable expectation of benefit: The benefit is implied by the above mentioned requirement of ownership of interest in the results of the activities under the CCA and the reasonableness is assessed in terms of the CCA execution date (based on estimations of future development). The expected benefit should be capable of reliable measurement and allow for a review (which requirement necessarily influences the definition of benefit as such). If, for example, three entities (‘A’, ‘B’ and ‘C’) enter into an arrangement covering a development of intangible assets where ‘A’ is

an enterprise performing development activities as a service for 'B' and 'C' the contractual relations between 'A' and the other two enterprises cannot be regarded as the CCA. 'A' performing the development activities as a service for other entity does not bear the risk of development failure and has no interest in the development results while the relation between 'B' and 'C' can be formalized using the CCA. If 'A' has any interest in the results and contributed to the development costs bearing the development risk it could be a party to the CCA.

Note: As concerns point d) above, the legal ownership of the results of, for example, development is unimportant for the CCA. For various reasons (e.g. due to the legal regulations and rules applicable to the protection of intangible R&D outputs in the respective country) circumstances may arise where only one participant (one contracting party) is the legal owner. This fact, however, has no effect on the economic ownership of the R&D outputs possessed by all participants and, despite the specific legal regulations; all participants should reasonably expect benefits from their economic ownerships of the CCA output. The necessary protection (e.g. by a patent) should be considered in the construction of shares of costs so that neither of the participants suffer any economic loss while the applicable legal regulations to protect the proprietary rights are complied with (e.g. obtaining a patent or other protection of intangible assets can cause additional costs of a participant which are not borne by other participants).

- 5) Sharing of contributions should be consistent with sharing of expected benefits: An explicit benefit quantification method should be adopted and what is understood as benefit should be selected with due respect to the general problem and relative impracticability of measuring the benefit. The participants in the arrangement can thus be expected to apply a highly definite definition of the benefit so that it is measurable (in an ideal case in financial units or in-kind units which are financially appraisable). Other effects such as benefits from the improvement of skills and knowledge of research personnel often cannot be appraised in financial terms (but can actually be the most valuable output of the joint project). With respect to any difference between the legal ownership and economic ownership of the benefits the economic ownership is of relevance for the calculation of the share of costs while the legal ownership should be taken into account in the technique of calculation of the share of costs.
- 6) Entry, withdrawal and termination as well as exploitation of benefits should be on arm's length terms: As mentioned above, if one of the participants in the CCA other than associated person cannot reasonably expect any benefit from the CCA, then, although being a signatory of the arrangement, it is not a its participant in taxation (arm's length principle) terms with all tax consequences associated with the reclassification. In economic terms, the entry must be understood as one

which constitutes a substantiated assumption of (assumption of share) of risks. In some circumstances the tax administrator can identify a fictitious entry of a participant due to the fact the participant has never borne any potential risks arising from the activity covered by the CCA.

#### V. ANTICIPATED BENEFITS, BORNE COSTS

A correct determination of, or determination of reasonably anticipated, benefits is alpha and omega of the CCA/CSA concept. The definition and calculation of relevant benefits tends to be rather complicated and is up to the participants in the CCAs/CSAs as taxpayers (bearing the burden of proof before the tax administrator). This section of the article lists the method of measuring benefits from the CCAs/CSAs commonly applied in practice regardless the theoretical approaches to the benefit measurement and summarizes the objectives of the controlled participants in the CCAs/CSAs.

Although the concept of defining and calculating the relevant costs is usually not looked upon as involving essential problems this section also indicates which costs could be relevant for the CCA/CSA.

This section of the article is sourced from the U.S. legislation, namely the Code of Federal Regulations<sup>7</sup>, Title 26 Internal Revenue (hereinafter referred to as the "IRS"). With respect to the longest operation in the capitalistic economy (with the longest history of the effort to tackle the evasions of tax revenues to other tax jurisdictions), this regulation can be considered as providing one of the most detailed description for the CSA issues. Unfortunately, the CCAs are not explicitly defined there.

##### A. Interest in Reasonably Anticipated Benefit

The "reasonably anticipated benefits" can best be defined using the definition provided in IRS § 1.482-7 (e) (1): "*Benefits are additional income generated or costs saved by the use of covered intangibles.*" Benefits are to be understood as an aggregated entirety, i.e. as all identifiable in an ideal case. The share of a controlled participant of the CCA/CSA costs is therefore determined using the following formula:

$$\begin{aligned}
 {}_iPU_t &= \frac{z_t U_t}{z U_t^{CCA, CSA}} + \frac{z_t U_{t+1}}{z U_{t+1}^{CCA, CSA}} + \frac{z_t U_{t+2}}{z U_{t+2}^{CCA, CSA}} + \dots + \\
 &+ \frac{z_t U_{n-1}}{z U_{n-1}^{CCA, CSA}} + \frac{z_t U_n}{z U_n^{CCA, CSA}} = \frac{\sum_t z_t U_t}{\sum_t z U_t^{CCA, CSA}} \Rightarrow {}_iPC_t = \frac{\sum_t z_t C_t}{\sum_t z C_t^{CCA, CSA}} \quad (1) \\
 {}_iPU_t &\Rightarrow {}_iPC_t; {}_iPU_t = {}_iPC_t
 \end{aligned}$$

where:

- ${}_iPU_t$  = interest of  $i^{\text{th}}$  controlled participant in total reasonably anticipated benefit of controlled participants from the CCA/CSA in year  $t$ ;
- ${}_iPC_t$  = share of  $i^{\text{th}}$  controlled participant of total anticipated costs borne by controlled participants under the CCA/CSA in year  $t$ ;
- $z_t U_t$  = reasonably anticipated benefit of  $i^{\text{th}}$  controlled participant from the results derived from the CCA/CSA in year  $t$ ;

<sup>7</sup> <http://law.justia.com/us/cfr/> - "Justia" web pages as of 1 April, 2010

$zU_t^{CCA, CSA}$  = total reasonably anticipated benefit of all controlled participants from the results derived from the CCA/CSA in year  $t$ ;  
 $z_t C_t$  = share of  $i^{th}$  controlled participant of total costs for deriving the results from the CCA/CSA borne by controlled participants in year  $t$ ;  
 $zC_t^{CCA, CSA}$  = total costs of all controlled participants for deriving the benefit from the CCA/CSA in year  $t$ .

$iPU$  must be determined regularly for each taxation period (typically 12 consecutive months) based on which the absolute amount of costs of the respective participant in year  $t$  must be calculated.

The calculation is more complicated if the participants in the CCA/CSA are not only the associated (controlled) parties as the participants in the CCA/CSA can include also unassociated (uncontrolled) parties. If assuming the unassociated party should conduct rationally, it would not enter into any arrangements which would be unprofitable to it. In addition, the uncontrolled party is generally irrelevant for the considerations regarding the tax optimization. For that reason (and also generally in the transfer pricing methodology as such) the treatment of unassociated persons in controlled transactions is not addressed (serving as a comparable transaction for the tax administrator in an ideal case and for a group of associated persons as an unchanging constant which cannot be used to optimize the group's tax position.) Consequently, the unassociated persons' interests must be excluded in the calculation of  $iPU^t$  or  $iPC^t$  to avoid the distortion of "controlled" interests under the controlled transaction as shown by the following formula:

$$z_i U_t = U_t^{CCA, CSA} - nU_t^{CCA, CSA}$$

$$\sum_t z U_t^{CCA, CSA} = \sum_t U_t^{CCA, CSA} - \sum_t nU_t^{CCA, CSA} \quad (2)$$

$$\sum_t z C_t^{CCA, CSA} = \sum_t C_t^{CCA, CSA} - \sum_t nC_t^{CCA, CSA}$$

where:

$zU_t^{CCA, CSA}$  = total reasonably anticipated benefit of all controlled participants from the results derived from the CCA/CSA in year  $t$ ;  
 $U_t^{CCA, CSA}$  = total reasonably anticipated benefit of all, i.e. controlled and uncontrolled, participants from the results derived from the CCA/CSA in year  $t$ ;  
 $nU_t^{CCA, CSA}$  = total reasonably anticipated benefit of all uncontrolled participants from the results derived from the CCA/CSA in year  $t$ ;  
 $zC_t^{CCA, CSA}$  = total costs of all controlled participants for deriving the benefit from the CCA/CSA in year  $t$ ;

$C_t^{CCA, CSA}$  = total costs of all, i.e. controlled and uncontrolled, participants for deriving the benefit from the CCA/CSA in year  $t$ ;  
 $nC_t^{CCA, CSA}$  = total costs of all uncontrolled participants for deriving the benefit from the CCA/CSA in year  $t$

Considering the fact the measuring of the reasonably anticipated benefits must be reliable there are several ways of estimating the benefits. However, the reliability is understood rather as the most reliable estimate based on data with maximized completeness and accuracy and using minimized number of assumptions. It should be borne in mind that the estimate is made based on data and information available, obvious and estimable at the time the estimate was made. The

length of the time period for which the benefits are anticipated (estimated) is also not negligible.

The first important point in estimating the future benefits is the application of bases and procedures which will be consistent for all the controlled participants in the arrangements. It will most likely never be practicable to estimate the benefits directly so an indirect measuring of benefits is usually applied. If referring to the definition of benefits the future benefits can be linked particularly to<sup>8</sup>:

1) *Units used, produced or sold.* This basis for measurement is recommended when each controlled participant is expected to have a similar increase in net profit or decrease in net loss attributable to the exploitation of a unit of the result of the CCA/CSA. The units should be identifiable and capable of separate use, exploitation or sale. (For example, the participants are going to enter into an arrangement covering the research and testing of a new production process which is to reduce the consumption of utilities (preferably in physical units) for the production of a piece of product. At present, the participants are able to quantify the utility consumption per one piece of product. The reduction of utility consumption per one piece of product resulting from a successful research and implementation of the new production process cannot be determined exactly at the CSA execution but to eliminate the tax risks the anticipation of the same reduction percentage by all the participants is sufficient. The production processes, equipment, etc. would, of course, have to be very similar. Nevertheless, the production processes and equipment applied by a group of associated persons can be expected to be similar so this procedure can be used to measure the reasonably anticipated future benefits.)

2) *Sales.* The sales may be used as an indirect basis for measuring benefits from the exploitation of the results of the CCA/CSA in cases where the benefit is attributable to the increase in profit or decrease in loss from each incoming financial unit. Generally, this indicator fits to the results of the CCA/CSA which are to increase the participants' revenues and is not recommended as a reliable indicator where the participants operate in other stages of the manufacturing or supplier-customer chain. (For example, the participants operate at the same market level selling the same or similar pharmaceutical type directly without any distributor. They are going to enter into the CSA covering the development of other form of the same pharmaceutical such as effervescent tablets in addition to the powder form already produced. Since, in geographical terms, each of them operates in other markets than the others the increase in sales due to the new form of the offered product can be applied as the indicator of future benefits. Any decrease in sales due to the replacement of powders by effervescent tablets should be also taken into account. In case one of the participants

<sup>8</sup> See also IRS § 1.482-7(f) (3) (iii).

sells indirectly through a distributor unlike the other participants the sales are not a suitable measure because the market level is not the same.)

- 3) *Operating profit.* The operating profit is generally recommended as a measure of reasonably anticipated benefits where the derived result from the CCA/CSA is integral to the core business of the participants and has a direct effect on the profitability of the business. If the result of the CCA/CSA is not involved in the business the profitability (or operating profit) would be considerably lower. (For example, the participants operate at the pharmaceutical market as manufacturers selling their products directly without any distributor. They are going to enter into the CCA/CSA covering the research of a new active substance and new pharmaceutical. The arrangement includes an agreement on sales licence allocation. One participant will obtain manufacturing and sales licence for a market subject to the pharmaceutical price regulation while the other will have manufacturing and sales licence for a market not subject to the pharmaceutical price regulation. Since they will derive different profits from the sales the operating profit can be applied as a reliable tool to measure the benefits.)
- 4) *Other bases for measuring anticipated benefits.* Although the three procedures outlined above can be used to measure a substantial number of the types of reasonably anticipated benefits, other methods prevail in practice. This is attributable to the fact the CCAs/CSAs are made mostly within a group of associated persons (without uncontrolled participants) and are specific to a great extent very often. It can be summarized the three procedures above are most likely to be used where one of the participants is an uncontrolled party which can more or less understand the tax optimization of the controlled parties. They are applied also as ones which can be readily reviewed by the tax administrator. (As an example the following can be considered: The controlled participants enter into the CCA/CSA providing for an issue of a new manual to standardize the document circulation within the company. The purpose is to eliminate any duplicate activities in document preparation, risks of not completing the documents or accounting errors. The number of documents circulating within the company would not be the reliable measure which should rather be seen in the savings of costs which have been generated by the duplicate activities, searching for documents or increased number of employees, i.e. personnel expenses.)

In addition to the procedures or variables suggested in IRS § 1.482-7(f) (3) (iii), there is another, rather theoretical, procedure to measure the reasonable benefits of the controlled participants in the CCA/CSA.

- 5) *General analysis based on valuation of the controlled participants' companies.* A cardinal question would be how will the company value be changed during/after the exploitation of the results of the CCA/CSA (e.g. receipt

of a service or exploitation of an intangible asset)? The standard enterprise valuation methods can be applied in this analysis. At least two valuations would be made on theoretical basis, i.e. assuming the arrangement results are exploited and assuming the arrangement results are not exploited. The residue between the two values would represent the benefit from the CCA/CSA. The change in free cash flow or enterprise substance would be expected in particular. However, this procedure being very difficult cannot be regarded as practicable (in use).

The consistence of the bases will cause difficulties also from the perspective of identification of the variables proposed. The procedures under points 2) to 5) above will suffer from the differences in the financial reporting standards applied (e.g. differences in revenue reporting according to U.S. GAAP and IAS/IFRS or even the Czech accounting standards and Act No. 563/1991 Coll., on Accounting). There is no doubt the accounting method cannot bear on the actual benefit of a controlled participant in the CCA/CSA. Theoretically, the actual amount of benefits should probably be measured based on the variables described above provided a single financial reporting basis. In taxation terms, the "tax benefits" should be measured on the tax accounting basis or on the background of the rules for recording leading to the tax base determination which is probably impracticable.

As indicated above, the application of any of the procedures will always involve a more or less accurate estimate of the benefits. Considering any future planning of the benefits they must be discounted, i.e. converted to actual values, because every participant can anticipate the benefits to be derived in other period than the other and the time must be reflected in this case. A noteworthy view of this issue is presented in IRS § 1.482-7 (f) (iv) (B) stating that in the event the divergence between the participant's projected benefit share and actual benefit share is higher than 20 % the projection (and the projection procedure applied) will be considered unreliable. In such cases an adjustment in favour of the actual benefit/cost shares must be made. An exception is granted only in case of events beyond the control of the participants which could not reasonably have been anticipated at the time at which the costs were shared. As this rule applies separately to each of the participants, if it is not met in case of any of the controlled participants the U.S. regulations require (provided one of the participants is not a U.S. person) that the tax bases are adjusted and the estimates are adjusted and replaced by new ones using more reliable procedures.

The reasonably anticipated benefits and  ${}_iPU_t$  can be estimated as relatively stable for all the time.

$$\begin{aligned} {}_iPU_t = {}_iPU_{t+1} = \dots = {}_iPU_{n-1} = {}_iPU_n &\Rightarrow \\ \Rightarrow {}_iPC_t = {}_iPC_{t+1} = \dots = {}_iPC_{n-1} = {}_iPC_n & \end{aligned} \quad (3)$$

In this case the formula should be tested for reliability of the results. This should be made the more frequently the:

- longer the CCA/CSA term;
- more of other intangible assets are anticipated to result from the CCA/CSA;

- higher probability of changes in the exploitation of intangible asset resulting from the CCA/CSA;
- higher probability the results of the CCA/CSA will generate an abnormal profitability;
- less stable market share of the participant in the CCA/CSA with respect to the development of competition.

The reasonably anticipated benefits and  $iPU_t$  can be estimated as variable in time.

$$\begin{aligned}
 & iPU_t \neq iPU_{t+1} \neq \dots \neq iPU_{n-1} \neq iPU_n \Rightarrow \\
 & \Rightarrow iPC_t \neq iPC_{t+1} \neq \dots \neq iPC_{n-1} \neq iPC_n
 \end{aligned}
 \quad (4)$$

In this case the controlled participants should use the present value of the anticipated future benefits to measure the shares in the different years on a common time basis.

The discount rate applied in the conversion to the present value must reflect the transaction risk. The discount rate should be determined using the procedure suggested in Valach (2006) p. 142: "It is necessary to distinguish between the company-wide profitability and required profitability of a single project." This relation can be described as follows:

$$V_p = V_F \pm R_p = {}^eWACC_t \pm {}^eR_t^k = {}^e d_t \quad (5)$$

where:

- $V_p$  = total reasonably anticipated benefit of all controlled participants from the results derived from the CCA/CSA in year t;
- $i^e d_t$  = anticipated discount rate of  $i^{th}$  controlled participant in year t;
- $V_F$  = required company-wide profitability (average cost of capital);
- $R_p$  = project risk mark-up;
- ${}^e R_t^k$  = anticipated risk premium falling on  $i^{th}$  controlled participant (or risk mark-down) by virtue of  $k^{th}$  CCA/CSA in year t;
- ${}^e WACC_t$  = anticipated average weighted cost of capital of  $i^{th}$  controlled participant (core business of the participant) in year t.

The CCA/CSA is to be looked upon as a separate project. Since typically the acquisition of an intangible asset is involved, the arrangements generate rather higher (or, in general, other) risk than the enterprises of controlled participants in their entireties. Because the arrangements as such are not traded at public markets the RP cannot be determined. It cannot be determined for the arrangement types (arrangements made to acquire a patent or right, build an asset, etc as classified according to the risk) either. It can generally be stated on largely qualitative basis that certain CCA/CSA type is more exposed to the risk than another. On the quantitative basis, anticipated risk premium can be addressed using the so-called complex modular method (see Maříková – Mařík, 2007 pp. 181 - 198) which can be modified if necessary to identify the CCA/CSA risk margin. The discount rate interval for a controlled participant in a year can be plotted as follows:

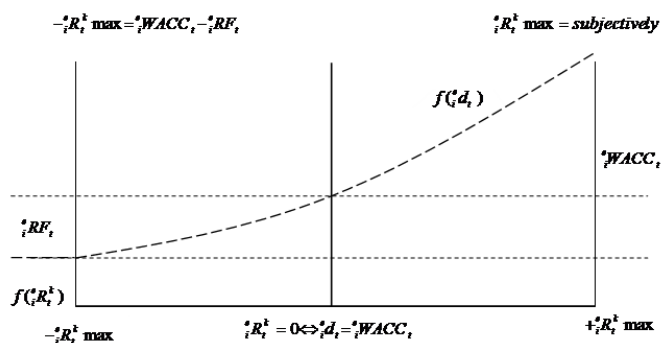


Fig. 1 Discount rate to determine the present values of benefits from CCA/CSA

where:

$i^e RF_t$  = anticipated alternative risk-free interest rate for  $i^{th}$  controlled participant in year t.

The graph above is based on an assumption the CCA/CSA can generate both the mark-up for additional risk borne and the mark-down as the CCA/CSA can expose the controlled participant to a lower risk than its core business in a year. It is also based on the risk aversion. The graph below illustrates a potential development of the risk mark-up/mark-down vs the identified risk degrees of the considered CCA/CSA risk factors which can be monitored.

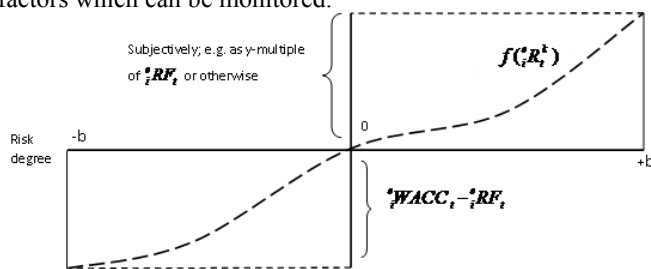


Fig. 1 Risk mark-up vs risk degrees of risk factors

As the third option of the development of reasonably anticipated benefits and  $iPU_t$ , the combination of stable and variable development in time can be defined.

$$\begin{aligned}
 & iPU_t = iPU_{t+1} \neq \dots \neq iPU_{n-1} = iPU_n \Rightarrow \\
 & \Rightarrow iPC_t = iPC_{t+1} \neq \dots \neq iPC_{n-1} = iPC_n
 \end{aligned}
 \quad (6)$$

Such circumstances can arise, for example, in case of arrangements encompassing multiple purposes each of which being measurable separately as to the benefits or any changes in the market situations are involved. For example, the controlled participants have stable market shares but the markets are changing. In this case the same procedure as in the case of anticipated variable interests in the benefits is more appropriate.

### B. Benefit Test

When conducting the reviews the tax administrator is likely to verify if the services or intangible assets under the CSA were actually provided (which is a kind of substance test). This implies it will be up to the controlled participants to prove the existence of tangible or other outcome of the service



provision including the cases of own consumption of the service.

If the existence is proved the tax administrator will verify whether the declared participant's benefit was accomplished and whether the costs spent are in accordance with the legal regulations, i.e. the arm's length principle. The benefit (and share of, or contribution to, the costs) declared at CCA/CSA execution which was based on estimates determinate by the facts and information known at the CCA/CSA execution will obviously not always be identical to the actual benefit. The tax administrator should approach the difference answering the following questions:

- 1) Is the difference so small that one can consider the  ${}^iPU_t$  reliable and the  ${}^iPC_t$  justified?
- 2) Is the difference so essential that the controlled participant's tax base should be adjusted and a modification of the  ${}^iPU_t$  calculation procedure should be recommended?

The tax administrator should follow some internal instruction specifying the magnitude of the difference which is to be accepted. The internal instruction should be known to the taxpayers. This would provide some "tax certainty" to the taxpayers and ensure a consistent approach of the tax administrators. This consistent procedure is not included in any regulation in the Czech Republic where the CCAs and CSAs have not been widely used and any issues would be settled based on general interpretations of the OECD Guidelines and/or D-series directions of the Ministry of Finance of the Czech Republic. This article describes above the approach adopted by the tax administrator in the USA by which a regulation fixing a 20 % threshold for the difference was issued.

Generally, if the difference is not insignificant the anticipated and predetermined  ${}^iPU_t$  should be replaced by the actual interest based on the last known information on the generated benefits which should lead to the adjustment of costs which have been recognized as tax effective. In a model,  ${}^ePU_t$  (anticipated interest of  $i^{\text{th}}$  controlled participant in benefit in year  $t$ ),  ${}^ePC_t$  (anticipated share of  $i^{\text{th}}$  controlled participant of costs in year  $t$ ),  ${}^aPU_t$  (actual interest of  $i^{\text{th}}$  controlled participant in benefit in year  $t$ ) and  ${}^aPC_t$  (actual share of  $i^{\text{th}}$  controlled participant of costs in year  $t$ ) variables as well as  ${}_iK_t$  (which may be called K.O. criterion for  $i^{\text{th}}$  controlled participant in year  $t$  applied by the tax administrator, i.e. difference threshold beyond which adjustments must be made) variable can therefore be introduced. The benefit test procedure and conclusions can be formalized as follows:

$$1) \quad \begin{aligned} & {}^ePU_t = {}^aPU_t \Rightarrow {}^ePC_t = {}^aPC_t \Leftrightarrow \\ & \Leftrightarrow {}^eTB_t = {}^aTB_t \Leftrightarrow {}^eT_t = {}^aT_t \end{aligned} \quad (7)$$

In an ideal case the tax administrator reviewed the actual benefits of the controlled participant from the arrangements identifying its actual interest in the total benefit is identical to the projected interest in the total benefit of all controlled participants. The anticipated taxation of the controlled

transaction is identical to the anticipated taxation plan (tax optimization). The anticipated tax base of the controlled participant in year  $t$  ( ${}^eTB_t$ ) is identical to its actual tax base after the review by the tax administrator ( ${}^aTB_t$ ). As the tax bases are identical the anticipated tax liability of the controlled participant ( ${}^eT_t$ ) is identical to its tax liability after the review by the tax administrator ( ${}^aT_t$ ).

$$2) \quad \begin{aligned} & ({}^ePU_t \neq {}^aPU_t) \wedge \Delta | {}^ePU_t - {}^aPU_t | \leq K \Rightarrow \\ & \Rightarrow {}^ePC_t = {}^aPC_t \Leftrightarrow {}^eTB_t = {}^aTB_t \Leftrightarrow {}^eT_t = {}^aT_t \end{aligned} \quad (8)$$

In this case the tax administrator reviewed the actual benefit of the controlled participant from the arrangements identifying its actual interest in the total benefit is identical to the projected interest in the total benefit of all controlled participants. Nevertheless, the difference between the actual and anticipated interests of the controlled participant in the benefit is insignificant because not beyond the K.O. threshold. The anticipated taxation of the controlled transaction is identical to the anticipated taxation plan (tax optimization).

$$3) \quad \begin{aligned} & ({}^ePU_t \neq {}^aPU_t) \wedge \Delta | {}^ePU_t - {}^aPU_t | > {}_iK_t \Rightarrow \\ & \Rightarrow {}^ePC_t \neq {}^aPC_t \Leftrightarrow {}^eTB_t \neq {}^aTB_t \Leftrightarrow {}^eT_t \neq {}^aT_t \end{aligned} \quad (9)$$

In this case being least favourable for the controlled participant the tax administrator reviewed the actual benefits of the controlled participant from the arrangements identifying its actual interest in the total benefit is not identical to the projected interest in the total benefit of all controlled participants with the difference between the actual and anticipated interests of the controlled participant in the benefit being so significant (beyond the K.O. threshold) that a tax base and tax liability adjustments shall be made in the respective taxable period and the projection of reasonably anticipated benefits of the controlled participant and total benefits derived by the controlled participants including the controlled transaction taxation plan shall be revised. The tax optimization has been unsuccessful; the tax administrator will impose an additional tax ( ${}^iT_t^{\text{Additional}}$ ) and penalty ( ${}^iF_t$ ) on one of the controlled participants which can be expressed as follows:

$${}^eT_t \neq {}^aT_t \wedge {}^iT_t > {}^eT_t \Rightarrow {}^aT_t = {}^eT_t + {}^iT_t^{\text{Additional}} + {}^iF_t \quad (10)$$

As indicated above, the tax optimization has not been achieved. The anticipated total taxation of  $k^{\text{th}}$  transaction ( $k^{\text{th}}$  intra-group CCA/CSA)  ${}^kT$  before the tax review by the tax administrator can be defined as follows:

$${}^kT = \sum_i^j \sum_t^n {}^eT_t \quad (11)$$

or reflecting the time:

$$PV_k^e T = \sum_i^j \sum_t^n \frac{{}_i^e T_t}{\prod_t (1+{}_i^e d_t)^t} \quad (12)$$

where:

$PV_k^e T$  = actual value of total CCA/CSA tax effect based on anticipations.

The taxation of the entire  $k^{\text{th}}$  transaction after the tax review by the tax administrator may seem to have the following form:

$${}^a T_k = \sum_i^j \sum_t^n {}_i^a T_t \quad (13)$$

or reflecting the time:

$$PV_k^a T = \sum_i^j \sum_t^n \frac{{}_i^a T_t}{\prod_t (1+{}_i^a d_t)^t} \quad (14)$$

where:

$PV_k^a T$  = actual value of total CCA/CSA tax effect based on actual/updated data;

${}_i^a d_t$  = actual/updated discount rate of  $i^{\text{th}}$  controlled participant in year  $t$ .

However this would not be fully correct. The following has also to be taken into consideration:

- Probability of review of the  $i^{\text{th}}$  individual controlled participant's financial statements by the tax administrator in year  $t$  [ $P(i, p_t)$ ]:

$$P(i, p_t) \in \langle 0; 1 \rangle \quad (15)$$

This can, in essence, be a kind of discrete random variable. Using a hyperbole it can be stated the random variables can become dependent over time. (The tax administrator will make the reviews the more often the more deficiencies are revealed so an adaptive review probability modelling will be required.)

- Probability with which the initiated review of the individual controlled participant's/ participants' financial statements by the tax administrator in year  $t$  reveals a deficiency:

$$P(\Delta | {}_i^e P U_t - {}_i^a P U_t | > {}_i K_t) \in \langle 0; 1 \rangle \quad (16)$$

- The fact if the  $i^{\text{th}}$  controlled participant's tax base adjustment resulting from the review by the tax administrator causes a "mirror" adjustment of tax base of the other participants in the CCA/CSA

The last of the three points above implies the transaction taxation model will be complicated after the review(s) conducted by the tax administrators(s) because there are double taxation conventions between some countries requiring that "mirror" tax base adjustments are made. If a tax liability of one controlled participant in the CCA/CSA is increased there is naturally a question how to reflect this on the other

side(s) of the relevant transaction. The tax administrator typically imposes an additional tax liability on the transaction party which benefited from a decrease in tax base or increase in tax loss as a result of the application of improperly fixed transfer price (i.e. share of costs or increase of tax-effective costs). The tax administrator generally does not consider any opposite adjustment of taxation of the other party(ies). An appropriate tool offered by the Czech tax system to make the adjustment also on the other side(s) of the transaction is filing additional tax return (mostly claiming lower tax liability) by which the mirror tax base adjustment is made in case an additional tax is imposed on the other controlled participant(s) in the arrangement by the local tax administrator.

Other complications arise if the transaction involves foreign partner(s). The cases where the views of the "right" transfer price ("right" share of, or contribution to, the costs) of all the involved tax administrations will differ can be expected to prevail. Viewed from the perspective of the Czech Republic, in most of the cases the foreign tax administration imposes an additional tax liability on the foreign partner of the Czech company believing improper transfer prices have been fixed for the transactions (e.g. the interests in benefits / shares of costs have been measured unreliably under the CCA/CSA). This results, in fact, in double taxation of income: the income reported based on the transfer price applied originally is taxed in the Czech Republic and then subjected to additional tax in the foreign partner's country up to the level which would correspond to a reliable estimate of interest in the future benefits from the CCA/CSA (generally correspond to fair market price or price considered fair by the respective foreign tax administration). There is a question how to resolve this issue.

Article 9 "Associated enterprises" of the Model Double Taxation Convention issued by OECD, apart from defining the authority of the signatory countries to adjust the tax base in case of transactions between associated enterprises if the prices for the transactions were not fixed based on the arm's length principle, requires (in second paragraph) that in case of a transfer price adjustment by one country the other signatory country adjusts the tax base to its taxpayer. However, in the double taxation conventions entered into by the Czech Republic this provision is generally very limited, if any. The Czech tax administration can in many cases be expected to be reluctant to accept the decision of foreign tax authorities without any corrections. Almost all double taxation conventions provide for the settlement of cases in dispute by "mutual agreement" (i.e. agreement between the competent tax authorities of the two signatory countries represented by the Ministry of Finance in case of the Czech Republic). However, this provision has a weakness in the absence of any tool motivating the signatory countries to reach the mutual agreement let alone reach the agreement in a reasonable time<sup>9</sup>.

<sup>9</sup> An improvement in the EU member countries should be provided by the Arbitration Convention which defines the rules for the resolution of disputes between the member countries if an agreement is not reached.

To finalize the reason showing the application of formula (12) is inappropriate, it is assumed no “mirror” adjustments of tax bases of other participants in the CCA/CSA are made. This means the increase (in accordance with formula (10)) does not cause any change with respect to the other controlled participants in the CCA/CSA. The taxation of  $k^{\text{th}}$  transaction, i.e. the CCA/CSA as a whole, can then be modelled as follows:

$${}^a_k T = \sum_i^j \sum_t^n \{ {}_i P_t * P(\Delta | {}_i^e P U_t - {}_i^a P U_t | > {}_i K_t) * ({}_i T_t^{\text{Additional}} + {}_i F_t) + {}_i^e T_t \} \quad (17)$$

or reflecting the time:

$${}^a_k T = \sum_i^j \sum_t^n \{ {}_i P_t * P(\Delta | {}_i^e P U_t - {}_i^a P U_t | > {}_i K_t) * \frac{({}_i T_t^{\text{Additional}} + {}_i F_t)}{\prod_i^n (1 + {}_i^e d_t)} + \frac{{}_i^e T_t}{\prod_i^n (1 + {}_i^e d_t)} \} \quad (18)$$

Due to the existence of the benefit tests which can be performed by the tax administrator a group of controlled participants will most likely try to adapt both the individual ( $k$ ) and all ( $z$ ) CCAs/CSAs in force made among them to minimize the total transaction tax burden. This effort can be formalized using the following formula:

$${}^a_k T \rightarrow \min \Leftrightarrow \sum_k^z {}^a_k T \rightarrow \min \quad (19)$$

To the end of this article’s part it should be stated, with respect to certain probability of success of tax administration control, thus retrospective assessment, that the goal of tax optimizing would not be  ${}^e T_t$ , but  ${}^a T_t$ .

### C. Relevant Costs

With respect to the fact the relevant costs to be borne by  $i^{\text{th}}$  controlled participant are based on estimated or actual (updated) interest in the benefit discussed above (see formula (1)) this section of the article is focused on the total relevant costs. The total relevant costs should be deemed to be the costs recognized as purposefully and effectively spent for acquiring, securing and maintaining of benefits derived by the controlled participants from the CCA/CSA.

It would be useful to register the relevant costs in a separate record keeping system; it should be borne in mind the CCA/CSA project can be managed by a company involved in another projects whose core business may be different. The costs which are not spent in connection with the development of, for example, intangible asset (in general, subject matter of the arrangement) must be excluded. For that reason the separate record keeping on, for instance, analytical accounts will be appropriate.

The costs which can be considered relevant from the taxation viewpoint are addressed quite efficiently by the United States Treasury Regulations, sec. 1.482-5 (d)(3) determining that the following can be classified as the relevant costs:

4) Operating expenses associated with the arrangement performance (except for sales of goods: The performance of the CCA/CSA consisting in acquiring of an intangible

asset is not expected to generate the sales of goods and cost of goods sold, domestic income taxes, etc.). The expenses can be supposed to include personnel expenses, utilities, cost of consulting services etc. They ordinarily include also expenses spent to derive the planned benefits, e.g. in the form of sales (such as cost of marketing of the subject matter of the arrangement and similar expenses).

- 5) Allowance for depreciation and amortization with respect to the assets which were allocated for the purposes of, and used in, the arrangement performance.
- 6) Other expenses associated particularly with the use of tangible assets which were not allocated directly for the purposes of, but had to be used in, the arrangement performance (e.g. leasing of special devices).

The share of  $i^{\text{th}}$  participant in the arrangement of the relevant costs must, however, be clear of the costs brought into the joint project by any uncontrolled participants (third parties) – see also formula [1] and example No. 1 above.

In addressing the relevant costs one cannot omit to mention the issue of so called “stock-based compensation”. Such incentive programs are mostly known as employee stock options<sup>10</sup>. The reason to include these costs into the relevant costs was based on the passionate debate in professional circles in US regarding the resolution of several legal disputes between the tax authorities (IRS) and the taxpayers whether to include the stock-based compensation<sup>11</sup> into the relevant costs for CSA contracts. The discussion also led to the topic how to report such compensation (e.g. to the employees) in the financial statements. The point, which raises controversial views, is whether it is possible that e.g. the value of employee stock option was perceived as a cost to the firm. And if so, whether the value can be reliably measured (appraised) for reporting purposes as an expense. Considering the fact that the staff carrying out e.g. research of intangible asset that is subject to the CCA/CSA, are actually carrying out a service to the object, so any possible transfer of the ownership of shares to these employees can be considered as an expense to achieve the future benefits from the CCA/CSA. Conversely, it is possible to assume that the transfer of the ownership of shares is only a transaction between the shareholders, and therefore such an operation cannot be considered as the expense of achieving the benefits of the CCA/CSA. Another counter-argument may be the uncertainty of the executed appraisal e.g. of the employee option.

This issue, however, now exceeds the scope of this article and will be the subject to a further investigation. The relevant sources for further studies, how to deal with these stock-based compensation issues, are e.g. the arrangements in reporting according to the Statement of Financial Accounting Standards number 123, or IFRS 2 and IAS 19 and the Czech legislative amendment e.g. § 158 and following Act No. 513/1992 Sb., commercial code. The next interesting act is United States Treasury Regulations, sec. 1.482-7 (d)(2), which generally

<sup>10</sup> Or in general stock option programs

<sup>11</sup> In USA known cases *Adaptec Inc. V. Commissioner*, nebo *Xilinx Inc. V. Commissioner*

allows to include into the relevant costs the expenses associated with the stock-based compensation (most likely as a result of the above mentioned legal disputes, respectively the decisions of local courts).

## VI. CONCLUSION

The aim of this article was to introduce and explain the issues regarding to the cost contribution arrangements (CCA) and the cost sharing agreements (CSA). Due to the expanding international cooperation, the pressure to increase efficiency, and eventually the search for competitive advantage, the merger of not only dependent entities in sphere of conducting the research and development, production, or acquisition of assets or rights, or sharing services, has become the object of the CCA/CSA. The aim is to achieve the expected benefits accruing to all stakeholders, with a lower share of risk than the individual entities would endure independently. This issue is in particular solved by Directive of OECD, which basically gives the CCA/CSA contracts, respectively to their matter, a frame and guidance for tax agencies, taxpayers. It is necessary to look at these contracts primarily from a tax perspective.

The purpose of the CCA/CSA is to determine the costs necessary to achieve the defined objectives, e.g. in sphere of research and development, and using appropriately chosen allocation base to allocate these costs to stakeholders. Important role in this mechanism has the potential, expected benefit, without which the transaction (expenditure) would not be rational (efficient). From the opposite perspective, if the benefit is actually realized, e.g. in the form of higher sales or cost savings, then it is necessary to assign to the positive effect also the costs incurred. In terms of significance the correctness of the allocation of shares on costs, respectively the contribution to the costs is substantial. The chosen methodology must sufficiently economically (not legally) capture, if you want to quantify the efficiently and according to their purpose incurred costs of the CCA/CSA participants and quantify the reasonably expected benefits. Given the fact that the participants in the CCA/CSA are usually dependent entities it is necessary to take into account the arm's length principle, i.e. act as if they were independent, rational subjects. Another factor which makes the issue of CCA/CSA more difficult, are possible changes in the arrangements relating to cost sharing, which lead to necessary revision of the previously set criteria and values. Last but not least it is necessary to mention the tax implications of the CCA/CSA contracts in an international scale, since the tax administrator proceed according to the established agreements on avoidance of double taxation, but which do not affect the implications of this issue globally and thus, paradoxically, the double taxation of either expected or actual achieved benefits happens. On the other hand, the tax administrators do not have a unified opinion and approach, and generally either an interest in a satisfactory solution from which both parties could benefit.

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## REFERENCES

- [1] J. Valach, "Investiční rozhodování a dlouhodobé financování." 2nd edition (revised), Prague, Ekopress, s.r.o., 2006.
- [2] P. Maříková, M. Mařík, "Diskontní míra pro výnosové oceňování podniku", Prague, Oeconomica, 2007.
- [3] OECD "Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations", OECD Publications, Paris, 1995, 1997, 2009.
- [4] M. Markham, "The Transfer Pricing of Intangibles", Hague, Kluwer Law International, 2005.
- [5] Australian Government – Australian Taxation Office "Taxation Ruling TR 2004/1 Income tax: international transfer pricing – cost contribution arrangements" 2004.
- [6] United States Treasury Regulations, sec. 1.482-7: <http://law.justia.com/us/>