Hard-to-Value Intangibles and the Pricing of Uncertainty

This article provides an overview of the development of chapter VI of the OECD Guidelines with respect to the specific addition of hard-to-value intangible (HTVI) as a new concept in the OECD’s transfer pricing guidance. Furthermore, it presents an approach to taking uncertainty into account when valuing HTVIs at best knowledge at the time such a transaction is entered into.

1. Introduction

1.1. BEPS background

In recent years, the Organisation for Economic Co-operation and Development (OECD) has put in place fifteen actions, together called the Action Plan on Base Erosion and Profit Shifting (BEPS).

The BEPS Action Plan meets various challenges in order to tackle tax avoidance. This OECD package “has largely dominated the global transfer pricing agenda.” Especially when transferring or using intangibles, it is typically hard to determine an objective value. Furthermore, the potential time gap between the taxpayer’s transferring or using an intangible within an intercompany transaction and the tax administration’s view on the same transaction, maybe years later during the tax audit, makes it even harder to reach a common understanding of the value of the transferred or used intangible.

“However, the arm’s length principle is not itself an anti-avoidance rule.” Therefore, the arm’s length principle is not challenged under the BEPS Project. Indeed, the arm’s length principle is strengthened by applying the technique of identifying transactions between affiliates and accurately delineating the relevant intercompany transaction, including the underlying circumstances, so that it can be compared to transactions and circumstances agreed upon by third parties.

Without doubt, value creation and, therefore, each transaction partner’s contribution to the value creation within an intercompany value chain when producing a good or providing a service is still the proper indicator for arm’s length transfer pricing, resulting in appropriate allocation of profits from a tax point of view. Furthermore, value creation is closely connected to performance measurement, which is the original idea of transfer pricing from a management control point of view.

1.2. Scope of this article

This article will provide an overview of the development of chapter VI of the OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations (OECD 2010) (OECD Guidelines (2010)), in relation to the prior version of 2010 (OECD Guidelines (2010)), and with respect to the specific addition of hard-to-value intangible (HTVI) as a new term and concept within the OECD’s transfer pricing guidance. Furthermore, it presents an approach to taking uncertainty into account when valuing HTVIs at best knowledge at the time the HTVI transaction is entered into. These valuation techniques are offered primarily from a financial theory point of view, as the OECD does not present a concrete solution for calculation methods.

As the German tax administration issued a directive in 2010 governing the transfer of functions, basic parallel statements are presented at the end of the article (see section 5.3.).

2. OECD BEPS Actions 8-10

The value contribution of intangibles was already a part of transfer pricing regulations before BEPS, but there were still gaps that allowed multinational enterprises (MNEs) to shift profits using intangibles, for instance by means of licensing agreements.

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7. See OECD/G20, Aligning Transfer Pricing Outcomes with Value Creation – Actions 8-10: 2015 Final Reports, Executive Summary (OECD 2015), Primary Sources IBFD, [hereinafter Actions 8-10 Final Reports].
With the launch in 2012 of the discussion draft on Revision of the Special Considerations for Intangibles in Chapter VI of the OECD Transfer Pricing Guidelines and Related Provisions, the OECD introduced the term “intangible-related returns”. Thus, intangibles had been a focus of attention even then.

Moreover, the BEPS Actions 8-10 Final Reports provide approaches to aligning transfer pricing with value creation. The considerations offered in these BEPS actions are of specific relevance for future perspectives on transfer pricing.

In particular, BEPS Actions 8-10 revise the whole of chapter VI of the OECD Guidelines (2010). The new chapter VI of the OECD Guidelines (2017) is presented within the Actions 8-10 Final Reports. As part of this, the new guidelines consider HTVIs.

Action 8, in particular, sets out the OECD approach to HTVIs, which is incorporated into the OECD Guidelines (2017) as section D.4 of chapter VI. The technical delineation of transactions involving HTVIs is also to be applied to intercompany transactions involving intangibles.

Furthermore, the importance of HTVIs, following the implementation of the term by the OECD, can be judged from the reference made to it by the European Union, which addresses the cross-border transfer of an HTVI between related parties as a reportable transaction within the Directive on Administrative Cooperation (2018/822).

3. Definition of Intangibles

Intangibles are defined as “something which is not a physical asset or a financial asset”. In contrast to tangible or financial assets such as machinery, office equipment or a financial asset or a financial asset”.

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3.1. Intercompany transactions involving intangibles

Transfer pricing regulations make use of the arm’s length principle in order to appropriately allocate profits and losses. From a transfer pricing perspective, it is not always obvious (if and) what kind of intangible is involved in an intercompany transaction, as intangibles are often part of but not exclusively the subject of a transaction.

For instance, specific know-how within a manufacturing process might be part of the goods supplied in an intercompany transaction. However, in the event of a transfer of the manufacturing function, the relevant know-how might be transferred as well so that the intangible is potentially a significant part of the transfer. Assessment of the value of the know-how is difficult in an intercompany transaction, as there might not be a negotiation process over the purchase price of the manufacturing function. It may be concluded, therefore, that transactions involving intangibles are “the central problem of the arm’s length principle”.

3.2. Specific issues of HTVIs

Instead of rejecting the arm’s length principle in favour of other profit allocation mechanisms, such as formulaic apportionment of profits or cash flow as tax base, the OECD recommends focusing on comparability of transactions. Rather than focusing on accounting or legal definitions, the thrust of a transfer pricing analysis in a case involving intangibles should be the determination of the conditions that would be agreed upon between independent parties for a comparable transaction. Therefore, the intercompany transaction and its conditions are to be compared with a transaction between unrelated parties concerning the use or transfer of the relevant intangible.

This recommendation actually strengthens the arm’s length principle.
However, beyond the (general) complexity of handling intangible assets, HTVIs are specifically:

- intangibles for which, at the time of their transfer between associated enterprises,
  (i) no reliable comparables exist, and
  (ii) at the time the transactions [sic] was entered into, the projections of future cash flows or in-come expected to be derived from the transferred intangible, or the assumptions used in valuing the intangible are highly uncertain, making it difficult to predict the level of ultimate success of the intangible at the time of the transfer. 19

Examples of a HTVI are provided in the OECD Guidelines (2017) as follows: 20
- the intangible is only partially developed at the time of the transfer;
- the intangible is not expected to be exploited commercially until several years following the transaction;
- the intangible does not itself fall within the definition of HTVI in paragraph 6.189, but is integral to the development or enhancement of other intangibles which fall within that definition;
- the intangible is expected to be exploited in a manner that is novel at the time of the transfer, and the absence of a track record of development or exploitation of similar intangibles makes projections highly uncertain;
- the intangible, meeting the definition of HTVI under paragraph 6.189, has been transferred to an associated enterprise for a lump-sum payment; or
- the intangible is either used in connection with or developed under a CCA or similar arrangements.

The specificity of HTVIs becomes more and more important as new markets (including both digital business models and traditional business models engaged in digitalization) work differently in terms of value creation and application of solutions based on digital technology. 21

In addition, in this context HTVIs are often part of third-party acquisitions, where the acquirer is a risk-taker who knows if the transaction was a good deal only ex post. Therefore, there might arise “an inconsistency of ex post considerations with the arm’s length principle”. 22

Nevertheless, the OECD includes HTVIs when it recommends an analysis of intercompany transactions involving intangibles using a six-step process. 23 Those steps are based on the analysis conducted for commercial or financial relations, 24 and are undertaken “in order to accurately delineate the intercompany transaction”. 25

The first step of the analysis process is to identify the intangible involved in the intercompany transaction under review. 26

### 4. Legal versus Economic Ownership of Intangibles

After identification of the (hard-to-value) intangible, its ownership must be analysed. In general, there are two different perspectives to be taken into account when analysing the ownership of an intangible asset: the legal perspective and the accounting perspective.

The main risk arising from both the legal and accounting perspectives is a lack of consideration of intangibles that cannot be legally protected or are not legally protected, but are nevertheless a value driver for the analysed intercompany transaction. Legally, ownership can often clearly be derived from facts such as a company’s registration of a patent. 27 However, such indications are limited to only certain types of intangibles, e.g. trademarks, copyrights and, as mentioned, patents. 28 The accounting perspective, likewise, does not consider all the intangibles that may drive value in an intercompany transaction, due to a tendency to conservative estimations. 29 In addition, from the accounting perspective, self-created intangibles may not be listed as an asset on the balance sheet. Therefore, the accounts would not show intangibles that are potentially involved in an intercompany transaction. As a result, then, “[i]ntangibles that are important to consider for transfer pricing purposes are not always recognised as intangible assets for accounting purposes.” 30 Moreover, either legal ownership or ownership from an accounting perspective might be deliberately chosen in order to affect and, perhaps, avoid taxation.

Thus, “legal rights and contractual arrangements form the starting point for any transfer pricing analysis”. 31 However, as intangibles are not always legally registered — e.g. in the case of recipes or certain kinds of know-how — and in such cases a legal owner cannot be identified, the OECD provides a new approach to analysing value creation of intangibles and each legal entity’s contribution to intangible-related returns, the so-called DEMPE approach, “to replace the distinction between legal and economic ownership”. 32 This was introduced by the OECD in the revised version of chapter VI of the OECD Guidelines (2017, as incorporated into the Actions 8–10 Final Reports.

26. Id.

27. Note that this is a mandatory aspect of the analysis. It does not apply for every sort of intangible that is to be considered for transfer pricing purposes; however, for those intangibles that are legally owned and identifiable, legal ownership serves as reference or starting point. See OECD Guidelines (2017), at paras. 6.34, 6.35, 6.42 and 6.43.


30. Id., at para. 6.7.

31. Id., at para. 6.35.

32. DEMPE stands for development, enhancement, maintenance, protection, and exploitation.

Consequently, the concept of “economic substance over legal form” became the official OECD approach and a key aspect of Actions 8-10, which aimed to ensure that transfer prices are aligned with value creation.34

4.1. The DEMPE approach

As outlined above, intangibles, especially those that are hard to value, are often not booked or purchased. On the contrary, hard-to-value intangibles are often self-created and thus not valued for booking or selling/purchasing purposes.

The OECD states that “rather than focusing on accounting or legal definitions, the thrust of a transfer pricing analysis in a case involving intangibles should be the determination of the conditions that would be agreed upon between independent parties for a comparable transaction.”35

In this context, the ownership of an intangible asset is to be analysed by examining the DEMPE functions, i.e. development, enhancement, maintenance, protection and exploitation, and the accompanying risks.36 These functions indicate whether and how a transaction partner is involved in the value chain creating intangible-related returns.

Thus, the transfer pricing perspective requires analysing economic ownership by taking a deeper view of the functions performed, risks assumed and (intangible) assets employed in an intercompany transaction involving HTVIs.

4.2. Ex-ante pricing vs. ex-post outcome

Furthermore, the level of uncertainty is a major problem for predicting/estimation of the outcome derived from the transfer or use of the HTVI. Neither the taxpayer nor the tax administration can foresee the developments that may affect the market situation over a certain period. However, although “[i]t is quite common that actual (ex-post) profitability is different than anticipated (ex-ante) profitability”,37 from a theoretical point of view there is nevertheless an information asymmetry that benefits the taxpayer.

This information asymmetry between the taxpayer and the tax administration is a basic issue related to transactions including HTVIs. It is in the nature of HTVIs that there may be no comparable HTVIs observable on the market. Thus, the determination of intercompany transfer prices is an estimation based on the information available. The OECD noticed that the tax administrations might be disadvantaged with respect to the availability of information on potential commercial return from the intangible transaction, resulting in transfer pricing risk.38 By addressing this issue within the BEPS Project, the OECD aims to make it possible for tax administrations to “tackle the problem of information asymmetry to assist in determining the appropriate pricing arrangements for intangibles.”39

To explain in more detail: when it comes to a transaction involving intangibles, the taxpayer is obliged to set a transfer price ex ante based on the information available. However, tax administrations audit the intercompany transaction involving the HTVIs years after the transaction was entered into. Therefore, as the OECD states, ex-post outcomes deviating from the transfer prices set ex ante by the taxpayer can indicate inappropriate transfer pricing. Consequently, the OECD tried to balance the information asymmetry by furnishing tax administrations with a tool to adjust transfer prices based on financial information gathered from an ex-post perspective. However, the OECD “does not support a use of the ex-post result alone as a basis for tax assessments and subsequent adjustments.”40

The taxpayer’s documentation obligations extend to documenting assumptions made and circumstances foreseeable at the time the transaction was entered into. Also included are options realistically available at that time. The match between the concept of options realistically available and an HTVI valuation based on conservative valuation methods such as discounted cash flows, and the application of royalty relief methods, combined with scenario techniques, might be an approach demonstrating reasonable efforts on the side of the taxpayer to analyse the valuation in relation to the transfer or use of HTVIs.

4.3. Exemptions from transfer pricing adjustments made by tax administrations based on ex-post outcomes

The risk of double taxation arises in relation to adjustments during a tax audit. That a taxpayer’s tax base is adjusted in one jurisdiction does not necessarily mean that the related taxpayer’s tax base is adjusted accordingly. Moreover, procedures to eliminate double taxation are expensive, at least in effort and time.

Therefore, from the taxpayer’s point of view an important question is how to prevent the application of ex-post outcomes as presumptive evidence in valuation, including of HTVIs. The exemptions41 include one requiring documentation of the taxpayer’s efforts to account for foreseeable occurrences, including the assignment of probabilities in order to calculate a probability-weighted price for the transferred intangible. This exemption, therefore, applies when calculating an expected value on the basis of different scenarios that could occur in the future. As there is, for now, a lack of practical experience, the use of scenarios including probability assignment could meet the provisions made by the OECD.42

The major challenge for the taxpayer will be to “satisfactorily demonstrate what was foreseeable at the time of the transaction and reflected in the pricing assumptions”; if

34. See Heggmair, supra n. 18, at sec. 2.
36. See Peng & Lagarden, supra n. 28, at sec. 2.2.1.
38. See OECD/G20, BEPS Actions 8-10 Final Reports, supra n. 7, at p. 109.
39. Id., at p. 63.
40. Hagelin, supra n. 22, at sec. 1.
42. Id., at paras. 6.189-6.193.
this is done successfully, then “tax administrations will not be entitled to make adjustments to the ex ante pricing arrangements based on ex post outcomes”. Only unforeseeable events or developments may lead to significant deviations between ex ante projections and ex post outcomes without the consequence of an adjustment made by the tax administration. Further guidance for tax administrations was subsequently published by the OECD in order to clarify that it should be taken into account “whether the information related to an outcome reasonably could or should have been known and considered by the taxpayer.”

The OECD allows a corridor of 20% above or below the calculated transfer price as a deviation corridor. If ex-post outcomes are outside this corridor, tax administrations are entitled to use them as presumptive evidence that transfer pricing was not at arm’s length. No explanation is given by the OECD for why a deviation of more than 20% is an indicator that transfer prices are not at arm’s length.

Furthermore, ex-post outcomes may not be used as evidence of inappropriate transfer pricing in the event that bilateral or multilateral advance pricing arrangements were in effect for the relevant fiscal years. Therefore, from a practical transfer pricing view, two aspects are important: protection from the application of ex-post outcomes as presumptive evidence, in order to avoid the risk of double taxation; and provision of documentation demonstrating that the HTVI valuation process was appropriate.

5. Valuation Techniques for Pricing HTVIs

From an accounting perspective, the appropriate approach to valuing intangible property is clear and straightforward. In third-party transactions, the purchase price is the market price and, thus, to be booked within the accounts. Otherwise, the manufacturing costs are taken into account in order to value the property. However, the legal and accounting rules for valuation of intangibles either do not consider self-created intangible property or “are not determinative for transfer pricing purposes and should be utilised in a transfer pricing analysis with caution and careful consideration of the underlying assumptions.” Therefore, the valuation procedures used for accounting purposes “are principally rejected.”

5.1. Applicable valuation techniques

Although the OECD clarifies that valuation techniques are to be selected in accordance with the OECD Guidelines, applicable valuation techniques may include “the discounted value of projected income or cash flows derived from the exploitation of the transferred intangible”. However, the OECD also makes clear that “[i]t is not the intention … to set out a comprehensive summary of the valuation techniques utilised by valuation professionals.”

Ultimately, a two-sided, bilateral valuation approach “may now be considered as the best practice for IP … on the OECD level”. This results from the lack of comparable transactions, as HTVIs are characterized by uniqueness.

Therefore, “[v]aluation techniques that estimate the discounted value of projected future cash flows derived from the exploitation of the transferred intangible or intangibles can be particularly useful when properly applied”. After application of valuation methods from two sides (transferor and transferee), a negotiation range is determined between the transferee’s maximum willingness to pay and the transferor’s minimum price expectation. The factors discussed in the following sections are to be seen in the light of each transaction partner’s rationale when entering into negotiations.

5.1.1. Discounted cash flow methods

The formula below is based on the present value (PV) in order to determine the value of future monetary flows at a specific point in time (here t=0).

\[ PV = \sum_{t=0}^{t=N} \frac{\text{net profit}_t}{(1+i)^t} \]

Legend:

- \( t \) index for fiscal year
- \( \text{net profit}_t \) value treated as tax base in fiscal year \( t \), i.e. earnings before taxes in the event that the company has no loss carry-forwards
- \( N \) last fiscal year for a budgeting phase
- \( N+1 \) after budgeting phase the formula considers a perpetual annual return
- \( i \) interest rate for discounting the net profit relating to the intercompany transaction involving the relevant intangible asset
- \( \text{net profit}_{N+1} \) approximation for a perpetual amount of net profit each year

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43. Id. at para. 6.194
44. Id. at para. 6.187.
45. See OECD Guidance for Tax Administrations, supra n. 11.
46. Hagelin, supra n. 22, at sec. 4.
47. See OECD Guidelines 2017, supra n. 4, at para. 6.193(ii) and (v).
48. Id. at para. 6.193(ii).
49. See Treidler, supra n. 1. Treidler refers to transfer pricing practitioners’ comments on the OECD’s discussion draft of BEPS Action 8.
50. Please note that this approach is appropriate for valuing internally produced tangible assets.
52. Riedl & Schwinger, supra n. 6, at sec. 2.3, with reference to OECD Guidelines (2017), supra n. 5, at para. 6.155.
56. Riedl & Schwinger, supra n. 6, at sec. 2.1. This approach to valuation has been established in the German transfer pricing regulations since the issuance of DE: Funktionsverlagerungsverordnung [Ordinance on the Transfer of Functions], 12 Aug. 2008. BGBl I 2008, at 1680.
58. See Riedl & Schwinger, supra n. 6, at sec. 2.7.
The formula is a discounted cash flow method and consists of two parts. The first part shows a calculation method to value projected net profits at a specific point in time (here: \( t=0 \)). Obviously, PV increases with increasing projected net profit, and decreases with increasing interest rate \( i \). Furthermore, projected net profit, and interest rate \( i \) can also assume negative values.

The second part shows a projected net profit, \( \pi_t \), as the basis for a perpetual annuity. The inclusion of this part depends on the achievability of net profits in the long term and whether those net profits are related to the intangible being valued. Typically, this term constitutes an average of net profits.

In addition, the second part of the valuation formula is a consequence of an assessment of what period should be considered for valuation, as "such techniques measure the value of an intangible by the estimated value of future cash flows it may generate over its expected remaining lifetime".61

The rationale is typical for valuing future monetary flows at the time when a decision must be made. In the case of HTVI valuation for transfer pricing purposes, this time is the transfer of the HTVI.

The appropriateness of this formula is not only approved in the OECD Guidelines, but is even considered as "as a part of one of the five OECD transfer pricing methods described in Chapter II, or as a tool that can be usefully applied in identifying an arm’s length price".62 However, projected net profits are highly uncertain, as they consist of income and expense projections derived from the exploitation of the HTVI. Furthermore, the specific interest rate applied for a given year within the valuation period is also uncertain. Even the period of exploitation and the time when future net profits can be realized is variable if not uncertain.

The list of factors to be considered is amended by the following:
- DEMPE-induced functional and risk profile of the economic owner;
- realistic alternatives, such as closing cost in the case of non-transfer,63 and
- future economic benefits and risks.

Both transferor and transferee might also continue to do business even without the transfer of the HTVI in question. Therefore, it is hard to separate the transaction from ongoing business. Future economic benefits and, especially, risks are hard to assess at the time of entering into the transaction. Therefore, the exemptions described in chapter IV are important for each of the transaction partners in order to avoid double taxation.

5.1.2. Key challenges in determining the factors to be considered

As this valuation technique is explicitly mentioned within the OECD Guidelines for (basic) intangibles, the challenging issue is how to adapt it to HTVIs and how to address the concerns around applying methods based on the discounted value of projected cash flows.64

The guidance on the application of the approach to HTVIs refers to an example of a patent on a partially developed drug that is yet to be capitalized or connected to a marketable product.65

The uncertain factors within the valuation process, looking at the formula in section 5.1.1., can be grouped into the following key concerns:

- volatility of the estimates:
  - net profits (projected income and expenses are affected);
  - start of commercialization (projected income and timing);
  - period (timing is affected, i.e. valuation date, economic lifetime of the HTVI); and
  - interest rate (timing is affected, i.e. valuation period, single years to be considered, especially the perpetual annuity term if applicable).

Moreover, small changes in the assumptions of the valuation model or in one or more valuation parameters can lead to huge differences in the value.

When applying valuation techniques (such as discounted cash flow methods) that take into account risk or uncertainty, the purpose of the calculated value often depends on the subjective perception of risk with regard to expectations of the future. In financial theory, the distinction among risk aversion, risk neutrality and risk seeking plays a major role. This is not considered in this BEPS HTVI approach.66

Tax administrations will collect as much information as possible in order to reduce information asymmetry.67

5.1.3. Transfer pricing for HTVIs using royalties within the comparable uncontrolled price method

Arm’s length royalty rates are used in applying comparable uncontrolled price (CUP) methods. As it might be arm’s length to “adopt a payment structure involving contingent payments to protect against subsequent developments that might not be sufficiently predictable”, an appropriate transfer pricing could consider different arm’s

60. See K. Dziwiński, Transfer Pricing and Intangibles: Report on the WU Transfer Pricing Symposium, 26 Intl. Transfer Pricing J. 3, sec. 5 (2019), Journal Articles & Papers IBFD, in which discounted cash flow methods are reported to have been named as appropriate methods during the first WU Transfer Pricing Symposium in 2018.
63. Riedl & Schwinger, supra n 6, at sec. 2.5.
64. See OECD Guidelines (2017), supra n 4, at para. 6.158.
67. As information asymmetry is addressed by the provisions, it can be stated that, before BEPS, the documentation requirement for HTVI transfers was low. In contrast to intercompany transactions, acquisitions in a third-party context, for example, are very well documented in order to prevent or provide for legal disputes after the transaction.
length royalty rates depending on the HTVI, e.g. taking into account the development level.

In case it is yet not clear how to commercialize the HTVI – e.g. as a tangible product, a software or a service – the arrangement could be designed to take into account these possible future occurrences, including the appropriate transfer pricing.\(^{69}\) These royalty rates could refer to profit level indicators or a contingent pricing arrangement, “in which the quantum or timing of payments is dependent on contingent events, including the achievement of predetermined financial thresholds such as sales or profits, or of predetermined development stages.”\(^{70}\)

If the beginning of commercialization is the primary factor creating uncertainty regarding the HTVI, then the product or service is more certain and could be identified. In this case, the use of royalty rates for a limited comparable product or service could serve as an accompanying measure and mentioned as such in the documentation. This should at least document the effort made to identify foreseeable developments and events.\(^{71}\)

5.2. Consideration of scenarios

In the event that a HTVI is to be transferred, valuation techniques are supposed to be utilized in appropriately valuing the intangible in question. The level of uncertainty due to the factors described above can be addressed by applying different scenarios. In such a case, for protection purposes if nothing else, a comprehensive analysis including multiple calculations, each based on different possible scenarios, is advisable. The OECD leaves significant space for coming up with ideas for valuation techniques, as transfer pricing is not an “exact science”.\(^{72}\)

Thus, the listed valuation techniques are not exhaustive, and the OECD’s only limitation is to say that any approach has to be in line with the arm’s length principle.\(^{73}\)

A key challenge in valuing intangibles, especially those that are hard to value, is predicting future events and developments, as the OECD presumes that independent enterprises consider future events and developments.\(^{74}\)

The above-mentioned difficulties in applying appropriate mathematical models for calculating future cash flows as present value is the uncertainty regarding the amounts of net profit (as a result of income and expense predictions); the period’s starting point; the length of the period; and the interest rate in each of the period’s fiscal years.\(^{75}\) Therefore, scenarios can be used in order to take into account these future events and developments.

The assumptions made are to be documented, which increases the taxpayer’s documentation effort, as each scenario basically amounts to a separate valuation approach. Therefore, it can be appropriate to use scenarios to consider different future occurrences and assign reasonable probabilities to each.\(^{76}\) This should result in one expected value\(^{77}\) derived from the probabilities for each scenario being assessed.

5.3. German regulations governing the transfer of functions

On 12 August 2008, Germany issued the regulation governing the transfer of functions (Funktionsverlagerungsverordnung, FVerlV; amended on 26 June 2013),\(^{78}\) with reference to cross-border intercompany transactions transferring functions and risks from one related legal entity to another. As accompanying guideline for tax audit purposes, German tax authorities issued administrative guidelines governing the transfer of functions on 13 October 2010.\(^{79}\)

From a practical point of view in Germany, CUPs are understood to be the best method for valuation. However, CUPs cannot be found in most cases, as they are not observable or not comparable. Thus, valuation techniques are to be applied in order to achieve a hypothetical arm’s length pricing.

The FktVerlV therefore recommend a two-sided valuation approach, taking into account the transferor’s and the transferee’s perspective. In addition, the valuation should include any profit potential\(^{80}\) derived from the transferred function. Therefore, projected profits are also used in this approach. However, the VWG-FVerl also refers to paragraph 1.13 of the OECD Guidelines,\(^{81}\) where it is stated that transfer pricing is not an “exact science”.\(^{82}\)

The two-sided valuation approach determines a range between the transferor’s minimum demand and the transferee’s maximum willingness to pay.\(^{83}\) Both values consider hypothetical circumstances. The chosen value should be the most likely value, i.e. one falling in the range.\(^{84}\) If the taxpayer cannot satisfactorily prove that the chosen value is appropriate, the average value of the range is to be considered as value for the function in question.\(^{85}\)

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69. In case of a tangible product, there could be a royalty on the use of the production intangible.
71. Id., at para. 6.186 et seq.
72. Id., at para. 6.184.
73. Id., at para. 6.156.
74. Id., at para. 6.182.
75. Id., at para. 9.56.
76. \textit{Id.}, at para. 6.184.
77. This expected value is referred to as the “probability-weighted” average value; see \textit{id.}, at para. 6.193.
80. \textit{See para. 3 German foreign tax act, 3 FktVerlV, para. 13 VWG-FVerl.}
83. \textit{See para. 3 German foreign tax act, para. 1 and para. 4 FktVerlV, para. 128 VWG-FVerl. Note that both the minimum demand and the maximum willingness to pay derives economically from the difference between the status quo, i.e. before transfer and the budgeted situation after transfer of the function in question.
84. \textit{See para. 3 German foreign tax act, para. 128 VWG-FVerl.
85. \textit{Id.}, at para. 129 in connection with \textit{1} German foreign tax act.
6. Summary and Conclusion

In most transactions involving intangibles, transfer pricing methods are difficult to apply. In particular, comparable transactions may not be found between independent enterprises in the case of restructurings or any extraordinary transaction such as the transfer of (hard-to-value) intangibles. Furthermore, the efficient provision of intangibles in order to enable a work force to continue developing, for instance, a partially developed drug, is a business-driven and reasonable step in the process of innovation. Cross-border work forces and global networks are a consequence of a globalized economy.

According to the OECD, the “lack of comparables does not mean that the implementation of such global business models is not arm’s length.” For transfer pricing purposes, the comparability of transactions remains precious, especially as the arm’s length principle has been further strengthened by the OECD.

The OECD implemented the DEMPE approach in order to accurately delineate such transactions. However, DEMPE and the substance-over-form concept should not be the standard procedure to assess the risks and opportunities of a transaction by completely rejecting the valid legal agreement underlying that transaction.

Furthermore, the degree of uncertainty is a special circumstance when valuing HTVIs. The OECD, therefore, provides for a price adjustment mechanism where this would also have been used by third parties. Provision for an adjustment can also be made by means of a contractual arrangement to renegotiate in the event that cash flows from exploitation of the HTVI develop sufficiently differently to expectations; this indicates that, even in a third-party relationship, uncertainty plays a major role in the valuation of HTVIs. The proactive implementation of a price adjustment clause or the inclusion of the calculation procedure in the agreement can be a useful gesture to the tax authorities when entering into the transaction.

However, determination of the HTVI’s value in an intercompany context by application of the above valuation technique still depends on a fictional negotiation about purchase prices (within the range determined by applying budgeted/expected profit and loss calculations). Thus, the two-sided approach provides for two extreme values (a maximum value on the side of the purchaser/transferee and a minimum value on the side of the seller/transferor), with the specific value being the result of negotiation. However, the nature of the fictional negotiation remains unspecified. The OECD states only that “the arm’s length amount between the two limits of the negotiation range” is appropriate.

Nevertheless, a comprehensive analysis should be performed in order to meet the requirements and to protect against adjustments made by the tax authorities based on ex-post outcomes, as this will most likely lead to double taxation.

Practical experience will reveal the problems of this vague approach. Until then, appropriate transfer pricing of a transaction involving HTVIs requires, besides the calculations themselves, a lot of documentation of reasonable valuation methods and of the assumptions made.

86. OECD Guidelines (2017), supra n. 4, at para. 9.35.
87. With reference to example 1 in the OECD Guidance for Tax Administrations, supra n. 11, at para. 21 et seqq.
88. OECD Guidelines (2017), supra n. 4, at para. 9.35.
89. Heggmair, supra n. 18, at sec. 4.
90. OECD Guidelines (2017), supra n. 4, at para. 3.73.
91. Id., at para. 6.184.
92. This technique may, of course, vary in the design of the formula, i.e. consideration of different factors, etc.
93. Note that there are four values to be calculated. Calculation of before and after the transfer of the function from the perspective of the transferor and transferee.
94. Riedl & Schwinger, supra n. 6, at sec. 2.7.