Study on the Application of Economic Valuation Techniques for Determining Transfer Prices of Cross Border Transactions between Members of Multinational Enterprise Groups in the EU

Specific contract no. 6 under Framework contract TAXUD/2014/CC/126

Final Report

Deloitte.

Date **03.10.2016**
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Version **Final Report**

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ISBN: 978-92-79-55024-9
Doi: 10.2778/478527
Catalogue number: KP0116145ENN

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Abstract (EN)

This document provides a view on how valuation techniques can practically and most efficiently be used for transfer pricing purposes in the EU. The information to support the study was gathered through desk research and interviews with transfer pricing and corporate finance valuation specialists from all EU Member States and nine of the EU's main trade partners. The study investigates the differences between valuations for transfer pricing purposes and valuations for other purposes, and the state of play in terms of experience of the EU Member States and trade partners. This was conducted through four aspects: 1) a SWOT analysis of economic valuation techniques applied in the context of transfer pricing, 2) the practical application of these techniques in the EU Member States and trade partners, 3) the identification of potential legislative measures, and 4) capacity building approaches for tax administrations. The report concludes with considerations of potential policy actions that could offer helpful guidance to both tax administrations and taxpayers regarding the valuation of intangibles for transfer pricing purposes in the EU.

Abstract (FR)

Le présent rapport décrit la manière dont les techniques de valorisation peuvent être mises en œuvre en pratique et utilisées le plus efficacement en prix de transfert dans l'UE. Les informations reprises dans cette étude ont été recueillies par des recherches documentaires et interviews avec des spécialistes en prix de transfert et finance d'entreprises de tous les états membres de l'UE et neuf de ses partenaires commerciaux principaux. Le rapport analyse les différences entre les valorisations effectuées en prix de transfert, d'une part, et celles effectuées à d'autres fins, d'autre part, ainsi que l'expérience des différents états membres de l'UE et de ses principaux partenaires commerciaux en la matière. L'étude s'articule autour de quatre aspects: 1) une analyse SWOT des techniques de valorisation économique appliquées en prix de transfert, 2) l'application pratique de ces techniques dans les états membres de l'UE et chez ses partenaires commerciaux, 3) l'identification de mesures législatives potentielles, et 4) les approches de renforcement des capacités au sein des administrations fiscales. Le rapport conclut par des considérations d'actions potentielles qui pourraient fournir une guidance utile tant aux administrations fiscales qu'aux contribuables en matière de valorisation des actifs incorporels en prix de transfert dans l'UE.

Executive Summary (EN)

- **Premises**

Significant changes in the economic environment, driven by the evolution of global markets and international trade, as well as by rapid technological progress, have led to the emergence of new complex business models, including company value chains becoming more integrated and intangible sources of value increasingly driving business success.

Recent years have also been characterised by increased political attention on harmful tax competition and profit shifting, urging governments to address aggressive tax planning and manipulation of prices through intra-group transactions. Intangible assets have been especially viewed as an important means of shifting profit. By nature, intangibles are the assets that do not have any physical or financial embodiment, making it difficult to identify them and determine their value at the time of the transaction. Moreover, again due to their nature, intangibles are easily movable between jurisdictions. Thus, much of the current political discourse centres on transfers of intangible assets and the correct approach to value these assets in transfer pricing terms.

- **Study objectives and methodology**

The purpose of this current study is to support the efforts of the European Commission in exploring options to tackle these issues. Accordingly, it will explore the most practical and efficient valuation techniques be used for transfer pricing purposes in the EU. This includes identifying advantages, obstacles and pitfalls of the practical application of various valuation technique already used in the EU and internationally.

The information to support the study was gathered through desk research and interviews with transfer pricing and corporate finance valuation specialists from all EU Member States and nine of the EU's main trade partners, namely Australia, Canada, China, India, Japan, Norway, South Korea, Switzerland and the United States. The answers received were incorporated in the report after careful analysis and interpretation accompanied by extensive discussions between transfer pricing and corporate finance experts.

- **Approach and factors to consider when performing valuation for transfer pricing purposes**

The report starts by investigating the background for performing a valuation for transfer pricing purposes as opposed to a valuation exercise for other purposes. In this respect, special focus is given to the purpose of valuation and its main stakeholders, the standards and concepts of value governing the valuation, and to the definition and the scope of intangibles in a valuation study.

The effect that these factors may have on the approach to the valuation and on the type of results achieved was investigated both theoretically and in practice. The study confirms that these factors may have a significant effect on the practical outcome of the transaction. Valuations in transfer pricing can be different from valuations for other purposes in terms of the purpose, stakes and perspectives of the valuators. Similarly, differences can be noted regarding the evidence needed for documentation

purposes, the background of the transactions, the standards used, the definition of intangibles, the scope of the valuation itself (having the possibility of aggregating transactions for transfer pricing purposes) and other factors.

The survey investigated the importance of various factors on the valuation for transfer pricing purposes. In this respect, it should be first noted that the practice of intangibles valuation for the purposes of transfer pricing is relatively underdeveloped in many of EU Member States, with only 13 Member States confirming relatively significant experience with such valuations, ten countries recording limited or extremely limited experience and five indicating no such experience at all. On the other hand, by surveying nine main trade partners of the EU, it was observed that the practice of IP valuation for the purposes of transfer pricing is also developed only in a handful of countries.

- **Valuation methodologies and standards**

In Section 3, the report investigates the use of various valuation methodologies for transfer pricing purposes. It was observed that the most used methods among the EU member are the residual value method and the relief from royalty method. It was found that the most important factor considered when choosing the most appropriate method to apply is the availability of data.

The study provides a "strengths, weaknesses, opportunities and threats" ("SWOT") analysis of the main valuation methods identified for valuation of IP for transfer pricing purposes. Strengths and weaknesses of the methods were identified by reviewing them based on their level of economic relevance, objectivity, relative ease of use, appropriate benchmarks found, market connection and extent of data required for their application. The analysis identified that there are potential weaknesses for each method and each of them should be used in accordance with the facts and circumstances of the valuation. Ideally, the right method to use is the one that gives the lowest probability of a bias or error, subject to practical considerations (regarding data availability, timing and budget.) Furthermore, opportunities and threats of using each of the methods were noted by pinpointing situations where their use is considered suitable or not.

Potential solutions to identified weaknesses were also identified, such as use of more than one method in a valuation. It was found that the use of more than one method (or similarly, a valuation from two-party perspectives) is not widely spread and are certainly not a norm in the EU (or among trade partners'). For dealing with intangibles for which valuation is highly uncertain at the moment of the transaction, a remedy may be also the use of price adjustment clauses. Although most of the EU Member States do not appear to commonly use these clauses in practice, the vast majority of the respondents seem to be almost unanimous in attributing at least some importance to them.

As a related topic, the valuation standards are addressed, focusing particularly on the use of these standards in valuations of intangibles. A SWOT analysis of standards was carried out. Strengths and weaknesses were analysed in accordance with nine criteria: global applicability, range of the intangible assets covered, consistency with other standards, provision of guidelines on ethical behaviour and quality focus, binding force, technical guidance, clear definitions, guidance on valuation report content, and identification of factors important to consider. In the context of this analysis, the OECD guidance has been considered as one of the standards. It was identified that only few standards such as IVS (International Valuation Standards), ISO standards and the OECD TPG have a global reach. The standards also differ greatly in respect of

their consistency with each other and amount of guidance given on the ethical behaviour and quality. In addition, only a few standards, including IVS, IFRS and USGAAP provide detailed technical guidance whereas the other standards include only a high-level guidance on valuation methods and approaches without providing detailed technical directions. In valuations for transfer pricing purposes, it is not compulsory to refer to certain valuation standards (with some exceptions). In this respect, opportunities and threats of using the surveyed valuation standards in the context of transfer pricing were illustrated. The OECD guidance was found to be applied rather uniformly in practice across OECD members and observer countries. Adherence to the OECD guidance is reflected in the national rules on transfer pricing and intangibles.

- **Building blocks for building a valuation model**

In Section 4, the report produces results of the investigation into the practical application of the valuation techniques in transfer pricing. Five main building blocks of valuation models were analysed, namely financial projections, royalties, routine return, discount rates and useful life of intangibles. From a theoretical background perspective, it was found that these parameters are generally the same in any valuation. Based on surveys and interviews in the Member states and trade partner countries, it was found that in practice, some parameters are documented in a different manner or with differing degree of detail, depending on the purpose of the valuation. The findings with respect to these parameters, including the ways to objectivise them are found in supporting tables in appendix.

- **Legislative measures**

Section 5 of the report produces results of the investigation of the implementation of valuation methodologies into the domestic law of the trade partners of the EU. The potential changes to legislation/administrative guidance on transfer pricing within the EU was also explored. Further, an overview of any existing legal or administrative obstacles to the implementation of such changes in the Member States is provided.

It was found that only the US transfer pricing regulations provide a detailed legal framework for the valuation of intangible assets for transfer pricing purposes. This covers especially the choice of the right methodology, guidance on the use of financial projections and on the calculation of the discount rate, accompanied by detailed examples illustrating the practical application of the methods.

Within the EU, Germany was also found to have implemented specific legislative measures in relation to the valuation of intangibles. Some aspects of the German regulations are considered as valuable examples of important legislative measures to be taken, particularly with regards to the implementation of the two-sided approach, the treatment of synergies and location savings and the guidance provided on the calculation of the discount rate.

- **Capacity building**

Section 6 of the report produces results of the investigation into the capacity building for Member State tax administrations in IP valuation based on the experiences of the trade partners' countries. It also looks at the estimated costs for valuing a transfer of intangibles.

In the EU, just five out of 28 Member State respondents noted that their country's tax administration has the same level of resources available to them as taxpayers. Even if there is a sufficient number of personnel focusing in transfer pricing, the available specialists typically lack expertise and experience precisely in valuations in the transfer pricing context. Among the surveyed trade partners, only two countries

mentioned sufficient resources. It transpires that insufficient resources is a problem present to more or less an equal degree in the Member States and among the main trade partners.

- **Conclusions and potential policy actions**

Based on the information gathered on analysis of legislative measures regulating valuations of intangibles and on the differences encountered throughout the EU in performing valuations of intangibles for transfer pricing purposes, the report draws conclusions and outlines several potential policy actions that would offer guidance to both tax administrations and taxpayers, making the valuation exercise more straightforward:

- Understanding the general background of a valuation as a starting point of the valuation exercise, as it is important to acknowledge and understand that the transfer pricing discipline is based on the detailed analysis of facts and circumstances, as well as on the functional and risk profile of the parties relevant to the transaction.
- With regards to the general valuation techniques, it is important to understand the methodologies well, in order to select the most appropriate methodology. This includes understanding the assumptions retained and the relevant building blocks for each of the technique. Such an understanding is a key factor to defending the valuation successfully from a transfer pricing perspective.
- With regards to the building blocks, consideration should be given to the parametrisation of the valuation model and a proper justification is needed to defend all the parameters. In this respect, good practices exist (with respect to routine return, royalties, verification of financial data and proper discount rate studies) and should be further promulgated among transfer pricing practitioners.
- With regards to legislative measures, it is considered that the transfer pricing laws in the US and Germany are a useful starting point in terms of the extent of guidance provided on the choice and application of valuation methodologies. More guidance with respect to the building blocks and factors to consider are recommended, together with practical examples on the application of the methods.
- With regards to resources, there is a need for more resources within the tax administrations to promulgate a correct understanding and use of economic valuation techniques. This applies to the number of specialists in tax authority administration as well the skill level of these specialists in valuations of intangibles for transfer pricing purposes.

Résumé (FR)

- Introduction

D'importants changements dans l'environnement économique, résultant de l'évolution des marchés mondiaux, et du commerce international et par les progrès technologiques rapides ont conduit à l'émergence de nouveaux modèles commerciaux complexes avec, au niveau des entreprises, des chaînes de valeur de plus en plus intégrées et des sources de valeur intangibles agissant de plus en plus comme le moteur du succès commercial.

Ces dernières années ont également été caractérisées par une attention politique accrue envers la concurrence fiscale dommageable et le transfert de bénéfices, poussant les gouvernements à prendre des actions afin de lutter contre la planification fiscale agressive et la manipulation des prix de transfert. Les actifs incorporels ont tout spécifiquement été identifiés comme un moyen de transfert de profit. Par nature, les actifs incorporels sont des actifs sans représentation physique ou financière, ce qui rend parfois difficile leur identification et la détermination de leur valeur au moment de la transaction. En outre, une nouvelle fois en raison de leur nature, les actifs incorporels sont facilement transférables entre les juridictions. Ainsi, l'attention du politique a été attirée sur leurs transferts et sur les approches de valorisation, dans un contexte de prix de transfert.

- Méthodes de valorisation et normes

Dans sa Section 3, le rapport étudie l'utilisation des diverses méthodes de valorisation en prix de transfert. Il a été observé que les méthodes les plus utilisées parmi les états membres de l'UE sont les méthodes de valeurs résiduelles et la méthode « relief from royalty ». Le facteur le plus important remarqué par les répondants pour le choix de la méthode appliquée est la disponibilité des données.

L'étude fournit une analyse SWOT[1] des principales méthodes de valorisation de propriétés intellectuelles utilisables dans un contexte de prix de transfert. Les forces et faiblesses des méthodes ont été examinées en fonction de leur niveau de pertinence économique, de leur objectivité, de leur relative simplicité d'utilisation, de la disponibilité de références adéquates, de leur lien avec le marché et du volume de données nécessaires à leur application. L'analyse a identifié qu'il existait des faiblesses potentielles pour chaque méthode et que chacune d'entre elles devrait être utilisée en fonction des faits et circonstances. Idéalement, la méthode appropriée est celle qui est la moins sujette à biais ou erreurs, après toutes considérations pratiques (concernant les données disponibles, le timing et le budget). De plus, des opportunités et risques dans l'utilisation de chaque méthode ont été relevés en identifiant des situations où leur utilisation est appropriée ou non.

Des solutions possibles pour les faiblesses potentielles des méthodes ont été étudiées, telles que l'utilisation de plus d'une méthode de valorisation. Il a été constaté que l'utilisation de plus d'une méthode (ou, alternativement, l'utilisation d'une méthode de la perspective des deux parties) n'est pas très répandue et ne constitue pas la norme dans l'UE (ou ses principaux partenaires commerciaux). Pour traiter les actifs incorporels dont la valorisation est peu certaine au moment de la transaction, un recours peut être d'utiliser des clauses d'ajustement des prix. Bien que la plupart des

[1] Strength, Weaknesses, Opportunities and Threats ou Forces, Faiblesses, Opportunités et Menaces.

états membres de l'UE semble ne pas utiliser ces clauses en pratique, la grande majorité des répondants veut leur attribuer une certaine importance.

A titre corollaire l'utilisation des normes de valorisation a été abordée, dans le contexte particulier des valorisations d'actifs incorporels. Une analyse SWOT des normes a été effectuée. Les forces et faiblesses ont été analysées sur base de neuf critères : l'applicabilité globale, l'étendue des actifs incorporels, la cohérence avec les autres normes, les recommandations sur le comportement éthique et la qualité, le caractère obligatoire, les recommandations techniques, les définitions claires, les recommandations concernant le contenu du rapport de valorisation, et l'identification de facteurs importants à considérer. À la lumière de cette analyse, les principes directeurs publiés par l'OCDE ont été considérées comme l'une des normes. Il a été constaté que seules certaines normes, telles que les normes IVS (« International Valuation Standards »), les normes ISA and les recommandations OCDE en matière de prix de transfert ont une portée globale. Les normes diffèrent également de manière significative de par leur cohérence respective ainsi que par le volume de recommandations émises en ce qui concerne le comportement éthique et la qualité. Par ailleurs, seules quelques normes, en ce inclus les normes IVS, IFRS et USGAAP, décrivent de façon détaillée la guidance technique, les autres normes ne fournissant que des recommandations basiques sur les méthodes et approches de valorisation. En ce qui concerne les valorisations à des fins de prix de transfert, il n'est pas requis de faire référence à certaines normes de valorisation (avec certaines exceptions). À ce propos, les opportunités et risques d'utilisation des normes de valorisation examinées dans le cadre des prix de transfert ont été illustrées. Les guidances fournies par l'OCDE sont en effet utilisées de façon assez uniforme par les états membres de l'OCDE et par les pays «observateurs». L'adhésion aux recommandations de l'OCDE est généralement reflétée dans les règles nationales sur les prix de transfert et les actifs incorporels.

- **Objectifs du rapport et méthodologie**

L'objectif du présent rapport est de soutenir les efforts de la Commission Européenne dans l'exploration de solutions permettant de résoudre ces problèmes. À cette fin, l'étude déterminera les techniques de valorisation les plus pratiques et efficaces en prix de transfert dans l'UE. Ceci comprend l'identification des avantages, des obstacles et des difficultés dans l'application pratique des techniques de valorisation utilisées au niveau européen et mondial.

Les informations reprises dans cette étude ont été recueillies au travers de recherches documentaires, suivie par des interviews avec des spécialistes prix de transfert et en finance d'entreprises de tous les états membres de l'UE et neuf des principaux partenaires commerciaux de l'UE, à savoir l'Australie, le Canada, la Chine, l'Inde, le Japon, la Norvège, la Corée du Sud, la Suisse et les Etats-Unis. Les réponses reçues ont été incorporées dans le rapport après analyse détaillée et interprétation, ainsi que des discussions approfondies entre les experts en prix de transfert et financement d'entreprise.

- **Approche et facteurs à considérer dans le cadre des valorisations effectuées à des fins de prix de transfert**

Le rapport examine d'abord le contexte dans lequel une valorisation à des fins de prix de transfert doit être réalisée par opposition aux valorisations préparées à d'autres fins. En effet, dans une valorisation, une attention particulière est accordée à ses objectifs et ceux de ses principaux protagonistes, aux normes et concepts de valeurs retenus et à la nature et l'étendue des actifs incorporels.

L'impact que ces facteurs peuvent avoir sur l'approche et sur les résultats a été étudié tant en théorie qu'en pratique. L'étude confirme que ces facteurs peuvent avoir un effet significatif sur les résultats de la transaction. Les valorisations pour les prix de transfert peuvent être différentes des valorisations à d'autres fins en termes d'objectifs, d'enjeux et de perspectives des experts. De même, des différences peuvent exister en ce qui concerne les éléments de preuve nécessaires à des fins de documentation, de contexte des transactions, de normes utilisées, de définition des actifs incorporels, de portée de la valorisation même (en ayant la possibilité d'agréger les transactions en prix de transfert) et d'autres facteurs.

L'enquête a examiné l'importance des différents facteurs sur la valorisation en prix de transfert. A cet égard, il convient tout d'abord de souligner que la pratique de valorisation des actifs incorporels en prix de transfert est relativement sous-développée dans la plupart des états membres de l'UE, avec seulement treize états confirmant une expérience relativement importante en la matière, dix états enregistrant une expérience limitée ou extrêmement limitée et cinq états indiquant ne pas avoir d'expérience. D'autre part, sur interrogation des neuf principaux partenaires commerciaux de l'UE, il apparaît que la pratique de valorisation de la propriété intellectuelle en prix de transfert est seulement développée dans une poignée de pays.

- **Paramètres principaux d'un modèle de valorisation**

Dans sa Section 4, le rapport décrit les résultats de l'enquête sur l'application pratique des techniques de valorisation en prix de transfert. Cinq paramètres principaux d'un modèle de valorisation ont été analysés, à savoir les projections financières, les redevances, le rendement de routine, les taux d'actualisation et la durée de vie utile des actifs incorporels. D'un point de vue théorique, il a été constaté que ces paramètres sont généralement les mêmes pour chaque modèle de valorisation. Sur base des enquêtes et entrevues menées, il a été constaté qu'en pratique certains paramètres sont documentés de manières différentes ou avec des niveaux de détail différents, en fonction de l'objectif de la valorisation. Les conclusions concernant ces paramètres, en ce inclus la manière de les objectiver, sont fournis dans les tableaux en annexe.

- **Mesures législatives**

La Section 5 du rapport examine la transposition des méthodes de valorisation dans le droit national des partenaires commerciaux de l'UE et explore tout changement potentiel dans la législation ou directives administratives sur les prix de transfert au sein de l'UE, ainsi que tout obstacle légal ou administratif à la mise en œuvre de ces changements dans les états membres.

Il a été constaté que seule la réglementation prix de transfert des Etats-Unis fournit un cadre légal pour la valorisation d'actifs incorporels à des fins de prix de transfert. Cela couvre notamment le choix de la méthodologie la plus appropriée, la guidance sur l'utilisation des projections financières et sur le calcul du taux d'actualisation, accompagnés d'exemples détaillés illustrant l'application pratique des méthodes.

Au sein de l'UE, il a été constaté que l'Allemagne a mis en œuvre des mesures législatives spécifiques en ce que concerne la valorisation des actifs incorporels. Certains aspects de la réglementation allemande sont considérés comme de bons exemples de mesure législative, plus particulièrement au niveau de la mise en œuvre d'une approche bilatérale au traitement des synergies et des économies de localisation, ainsi qu'au niveau des recommandations spécifiques fournies sur le calcul des taux d'actualisation.

- **Renforcement des capacités**

La Section 6 du rapport examine le renforcement des capacités des administrations fiscales des états membres en matière de valorisation d'actifs incorporels, sur base de l'expérience des pays partenaires commerciaux. Cette section estime également les coûts relatifs à l'évaluation d'un transfert d'actifs incorporels.

Dans l'UE, seuls cinq des 28 états membres ont indiqué que l'administration fiscale de leur pays disposait du même niveau de ressources que les contribuables. Cependant, bien qu'il y ait un nombre suffisant de personnes spécialisées en prix de transfert, ces spécialistes semblent manquer parfois d'expertise et d'expérience en matière de valorisation dans un cadre de prix de transfert. Parmi les partenaires commerciaux interrogés, deux pays seulement ont fait mention des ressources suffisantes, suggérant que le problème de ressources était présent à un degré plus moins égal auprès des états membres de l'UE et ses partenaires commerciaux.

- **Conclusions et actions possibles**

Sur base des informations recueillies concernant l'analyse des mesures législatives en matière de valorisations d'actifs incorporels et les différences identifiées au sein de l'UE à ce propos, le rapport conclut et suggère plusieurs actions potentielles qui permettraient d'offrir des considérations utile aux administrations fiscales et aux contribuables et de rendre l'exercice de valorisation plus simple:

- Prendre le contexte général d'une valorisation comme point de départ de l'exercice, étant donné qu'il est important de reconnaître que la discipline des prix de transfert est basée sur une analyse détaillée des faits et circonstances, ainsi que sur le profil fonctionnel et de risques des parties participant à la transaction.
- Concernant les techniques générales de valorisation, il est crucial de bien comprendre les méthodes, en vue de sélectionner la méthodologie la plus appropriée. Ceci comprend la compréhension des hypothèses et des paramètres dans chacune de ces techniques. De fait, une telle compréhension est un facteur clé pour arriver à une valorisation en prix de transfert fiable.
- Concernant les éléments constitutifs, une attention particulière doit être portée au paramétrage du modèle de valorisation et au support desdits paramètres. A cet égard, il existe des bonnes pratiques (en ce qui concerne le rendement de routine, les redevances, la vérification des données financières et les déterminations de taux d'actualisation). Celles-ci sont davantage divulgués parmi les praticiens prix de transfert.
- Concernant les mesures législatives, les règlementations des prix de transfert aux Etats-Unis et en Allemagne peuvent être considérées comme point de départ utile en termes de guidance sur le choix et l'application des méthodes de valorisation. Davantage de guidance en ce qui concerne les paramètres à prendre en considération serait recommandée, ainsi que des exemples pratiques sur l'application des méthodes.
- En ce qui concerne les ressources, il est nécessaire d'accroître celles-ci au sein des administrations fiscales afin de divulguer une compréhension et une utilisation correcte des techniques de valorisation économiques. Cela s'applique tant pour le nombre de spécialistes au niveau des autorités fiscales que pour leur niveau de connaissance en la matière.

1. Introduction

1.1 Context

1.1.1 Intangibles and transfer pricing

The taxation of multinational companies has come under scrutiny by tax administrations, tax experts and the general public in recent years. More and more evidence suggests that considerable amounts of corporate income from cross-border activities can avoid taxation. In a world of increasingly integrated national economies, rapidly progressing technology, and growing transportation and communication, Multinational Enterprises' (MNEs) role in international cross-border trade has become ever more important, intra-group transactions have multiplied and multinationals' integrated value chains make it more difficult to determine where profits are created.

Intra-group transactions have brought attention to "transfer pricing" methods applied in "controlled" transactions between associated enterprises, as opposed to pricing methods that would apply in "uncontrolled" transactions (i.e. established between unrelated parties who act independently and whose transaction price is assumed to be set on an open-market). A transfer price is a price of an intra-group cross-border transfer of goods, intangibles or services.[2] Due to the fact that the parties to the transaction are related, the transfer price is not inherently a market price. Setting a transfer price too high or too low may impact the tax base of the companies which are parties to transaction, in their respective countries. As such, the importance of the transfer price initially stems from the necessity to establish income and expenses and therefore a company's taxable profits.

Tax administrations now struggle to determine within the current set of international tax rules, the extent of taxable income and where these monies should be taxed. The interaction between different sets of domestic rules leads to gaps and mis-matches that allow multinationals to take advantage of methods to eliminate or significantly reduce taxation.[3] As the corporate tax rate is generally imposed on the net profits obtained by the company in one jurisdiction, one of the most significant methods of base erosion is profit shifting.

In order to deal with transfer pricing taxation issues, the Organisation for Economic Cooperation and Development (OECD) has established the "arm's length principle" as an international standard for setting the price in controlled transactions. The arm's length principle works effectively in the majority of cases, but there are significant situations in which the application of this principle is more complicated and difficult, for instance when a comparable "uncontrolled" transaction does not exist. This is the case when the companies are dealing with highly specialised goods, unique intangibles or the provision of specialised services.[4]

[2] UN (2011), at 2.
[3] OECD, *Addressing* BEPS, at 4.
[4] See OECD TPG, paragraphs 1.9-1.11, where the OECD states that this is the case when the companies are dealing with highly specialised goods, unique intangibles or the provision of specialised services; see also OECD, *Scope of work for guidance on the transactional profit split method*, para. 1-2, where the OECD states that the transactional profit split method could be the most appropriate method in cases where the parties to the transaction make unique and valuable contributions.

Certain economic developments have created additional challenges for transfer pricing and enforcement of the arm's length principle – among them, the emergence of "virtual" business models[5] and the dematerialisation of certain goods, services and economic activities[6]. In this context, the treatment of intangibles is even more significant. The current business landscape is based more and more on intangible assets as an important source of economic growth and innovation. At the corporate level, particularly in the case of multinationals, there has been a steep increase in the importance of intangibles in the overall business. Therefore, enterprises are now compelled to focus on growth through innovation which implies heavy investments in intangible assets. In fact, intangibles may be regarded as representing the main element of competitiveness and acting as an important value driver for enterprises. In addition, in attempts to stay competitive, enterprises seek solutions in their business models for optimising the tax benefits associated with intangible assets and thus, reducing the corporate tax burden.[7]

At the governmental level, originally, tax regimes were predominantly designed to deal with physical flows of goods, with products being manufactured and distributed in physical locations. The shift to an increasingly digitalised environment and the growing importance of intangibles in recent years has reduced the relevance of traditional tax systems.[8]

Transfer pricing of intangibles has always been considered a complex issue due to the specifics of transactions involving intangibles. Intangibles are assets that do not have any physical or financial embodiment.[9] Thus, this "special character" makes it difficult to determine their value at the time of a transaction.[10] Moreover, the (re)location of intangible assets is easier than for tangible (e.g. machinery, factories) assets.[11] This situation strengthens the likelihood that assets are transferred for less than their full (or market) value or that there is a contractual allocation of intangibles to low-tax environments in transactions that would be unlikely to occur between unrelated parties.[12]

1.1.2 BEPS and valuation of intangibles

As explained above (Section 1.1.1), transfer pricing of intangibles is a topic of interest in relation to profit shifting. For this reason, the OECD identified transfer pricing of intangibles as a key area of concern for governments as well as for taxpayers. Due to the lack of international guidance on the matter, especially on the definition of intangible assets, identification and valuation of intangibles for transfer pricing, the OECD has embarked on designing a framework of guidelines to put at the disposal of tax authorities and taxpayers.[13]

[5] Refers to business models adopted by groups operating in the digital world.
[6] Refers to cross-border transactions of digital goods and services.
[7] Ibid.
[8] European Parliament, *Tax policy in the EU. Issues and challenges*, February 2015, at 4.
[9] OECD, New sources of growth: intangible assets, at 1.
[10] OECD TPG, para. 6.13.
[11] European Commission, COMMISSION STAFF WORKING DOCUMENT, SWD (2015) 302 final, at 8.
[12] OECD, *Action Plan on Base Erosion and Profit Shifting*, at 19-20.
[13] OECD, *Action Plan on Base Erosion and Profit Shifting*, at 10-11.

With international tax issues gaining significant political attention worldwide, in addition to the efforts of the OECD, individual governments across the world have also increased their focus on this issue. In Europe, the Action Plan of the EU Commission recognises the following challenges:[14]

- Significant tax revenue losses for the Member States;
- Economic double taxation[15] for multinational corporations, resulting from disputes between two countries on the determination of the arm's length remuneration for their cross-border transactions with associated enterprises;
- Heavier taxes for European citizens and local companies;
- Competitive distortions for businesses not engaged in aggressive tax planning; and
- A perceived lack of fairness, which in turn may have an impact on overall tax compliance.

As a result, there is a growing focus on strengthening the rules and guidance on corporate taxation by improving regulation and enforcement of transfer pricing both at an international and European level. This has resulted in the launch of the following initiatives:

- OECD Base Erosion and Profit Shifting ("BEPS") Action Plan;[16] and
- EU Commission's Action Plan.[17]

BEPS is the main result of aggressive tax planning, a practice that the OECD is actively trying to combat. In the field of transfer pricing, BEPS is achieved mainly through shifting risks and intangibles, artificially splitting the ownership of assets between legal entities and entering into transactions that would not take place between independent parties.[18]

BEPS has become the centre of the OECD's concerns because of its multiple implications. BEPS leads to lower tax revenue in high-tax jurisdictions, distorts competition among businesses and raises questions of tax fairness. The international tax system is considered to no longer reflect the way MNEs operate, as the distribution of the global profits is fictional and driven by tax purposes.[19]

Intangible assets play a prominent role in transfer pricing strategies as their unique characteristics make it more difficult to find comparable transactions on the open market, an issue which leads to a greater scope for manipulation of values than in the case of tangible assets.[20] Recent econometric evidence illustrates the importance of

[14] European Commission, *Communication from the Commission to the European Parliament and the Council*, COM (2015) 302 Final.
[15] Economic double taxation refers to the taxation of two different taxpayers with respect to the same income (or capital). On the other hand, juridical double taxation refers to circumstances where one taxpayer is subject to tax on the same income (or capital) in more than one jurisdiction.
[16] OECD, *Action Plan on Base Erosion and Profit Shifting.*
[17] European Commission, *Communication from the Commission to the European Parliament and the Council*, COM (2015) 302 Final.
[18] Van den Brekel (2013).
[19] UN (2011), page 2; See also European Parliament, *Tax policy in the EU. Issues and challenges*, at 4.
[20] Lohse et al. (2013), at 8-9.

profit shifting through the strategic location of intangibles. For instance, Karkinsky and Riedel (2012)[21] find that an increase of 1 percentage point of the corporate tax rate reduces the number of patent holdings by about 3.5%. The estimates in Böhm et al. (2012)[22] for Europe indicate that the probability of patent relocation to a tax haven is increasing with the value of the patent and that controlled foreign company (CFC) - legislation may be effective in reducing this form of profit shifting. Subsequent to these results, OECD's BEPS Action Plan devoted special attention to transactions with intangibles.

A specific part of the BEPS Action Plan (Action 8) focuses on changing the OECD Transfer Pricing Guidelines ("TPG")[23] and possibly the OECD Model Tax Convention[24] to prevent BEPS when multinational groups move intangibles among the group members, in order to ensure that transfer pricing outcomes are aligned with value creation.

A concrete accomplishment of Action 8 was the revision of Section VI of the TPG "Intangibles", which contains guidance focused on ensuring that the profits associated with the transfer and use of intangibles are appropriately allocated in accordance with value creation, as well as a new approach to address transfers of hard-to-value intangibles. The targeted changes to the OECD TPG include the following:[25]

- Clarify the definition of intangibles;
- Provide guidance on identifying transactions involving intangibles;
- Provide supplemental guidance for determining arm's length conditions for transactions involving intangibles; and
- Clarify the treatment of local market features and corporate synergies.

Therefore, an important aspect of the BEPS Action Plan was represented by the valuation of intangibles for transfer pricing purposes. This has been reflected in the new Section VI through a framework for establishing appropriate arm's length prices for intra-group transactions of intangibles.[26] Among the recommendations of the revised Section VI, there is a reference to economic valuation techniques based on the discounted value of projected income streams or cash flows derived from exploitation of the intangibles being valued, as "particularly useful" tools.[27]

1.2 Objectives and Scope of the Study

The purpose of the present study is to support the efforts of the European Commission in exploring options to tackle the issues associated with transfer pricing in the EU. The study objectives are to evaluate the practical application of various transfer pricing valuation techniques and to conclude on the most efficient and practical application of these techniques for the EU. This includes identifying the advantages, obstacles and

[21] Karkinsky et al (2012), at 176–185.
[22] Böhm et al (2012).
[23] OECD, *OECD Transfer Pricing Guidelines for Multinational enterprises and Tax Administrations.*
[24] OECD, *Model Convention with respect to Taxes on Income and on Capital.*
[25] Deloitte, United States Tax Alert. OECD Releases Final BEPS Reports, October 6, 2015.
[26] OECD, *Aligning transfer pricing outcomes with value creation*, page 63
[27] OECD, *Aligning transfer pricing outcomes with value creation*, section D.2.6.3 – D.2.6.4.

pitfalls in the practical application of the various valuation techniques for intangibles in the transfer pricing context.

Intangible assets (i.e. "intangibles" or "IP"), refer to intangible assets and/or property not limited to Intellectual Property (IP). Whereas IP is a result of conscious human creative activity (e.g. patents, brands, designs, logos, etc.), intangible property can be a result of business activities (such as, for instance, contractual arrangements and rights, or arguably simply favourable economic circumstances (access to local market)). As such, intangible property is wider in scope than IP: all types of IP are intangible property whereas the opposite is not true. In this respect, the study addressed the transfers of intangible assets in general, as inter-company transactions are not limited to transfers of IP. More information on the definition of intangible assets can be found in Section 2.2.5.

The present study's objective and activities were based on and aligned with the conclusions of the Expert group on Intellectual Property Valuation, created by the EU Commission Directorate-General for Research and Innovation. In the present report, the conclusions and observations of the expert group's final report ("hereinafter, the "RTD report") are referenced where relevant.

The key activities of the study are as follows:

- Identifying key differences in the general approach, basis of value, stakeholders and stakes at hand in the case of the valuation of intangibles for transfer pricing purposes as opposed to general valuation practice;
- Providing an overview of the economic valuation techniques applied in the context of transfer pricing within the 28 EU Member States, analysing their strengths and weaknesses, opportunities and threats ("SWOT") and exploring and reviewing the different standards available both at European and international level, illustrated by examples and cases;
- Studying the practical application of valuation techniques in transfer pricing including identification of the various parameters under each of the key building blocks of such valuations (projections of future cash flows including growth rates, determining a discount rate, the useful life of intangibles and terminal values of the valuation techniques, etc.) and elaborating on the information, which is needed for estimating the parameters of these building blocks;
- Identifying legislative measures implemented into domestic law of major non-EU States and exploring any potential changes to legislation/administrative guidance on transfer pricing within EU, as well as existing legal or administrative obstacles to the implementation of such changes in the specific Member States; and
- Commenting on the capacity building of tax administration based on the situations in non-EU Member States' and estimating the costs to be expected for valuing a transfer or use of intangibles.
- Providing high-level considerations with respect to the aspects addressed above that could help support the use of economic valuation techniques in the EU Member States.

1.3 Work performed and methodology

The study was performed through the following steps:

1. Data Collection & Analysis:
    - Desk research and literature review;
    - Design and drafting of the survey addressing the study's objectives;
    - Face-to-face or phone interviews with experts in transfer pricing and / or corporate finance at the level of the Deloitte offices in the EU Member States and in the EU Main Tarde Partners;
    - Analysis and conclusions from the survey responses, interviews and desk research;
2. Expert Discussion:
    - The study team engaged in extensive discussions with experts in transfer pricing and corporate finance with respect to the issues covered and preliminary findings of the study;
    - The study team partook in discussions with key experts / quality reviewers on several aspects of the report (US TP regulations, German TP regulations, overall structure and scope of the report, key findings of the report);
    - Refinement of the analysis and findings based on expert input.
3. Final report drafting: including reviews by two experts in transfer pricing and valuation techniques;
4. Thorough discussion with the Commission on the findings and structure of the study, including cooperation with finalisation of the report.

In order to collect information and prepare an overview of the theoretical framework, desk research was performed focusing on the specific topics covered by the study. This included the detailed review of the TPG, the relevant US and German rules and regulations, overview of regulations in other countries, various valuation standards as well as economic literature on the topic including several valuation manuals, valuation research, and opinion articles, etc.

For the collection of data in the Member States and third countries, a 100-question detailed survey (found in *Appendix 1 – Survey*) aimed at experts covering all topics required for successful completion of this study. The survey was completed by legal professionals of the Deloitte network.

The aim of the survey was to identify the legislative framework and existing practice with respect to valuations of intangibles for transfer pricing purposes. More precisely, the survey focused on the following items:

(i) Background information - overall experience in respect of valuations of intangibles for transfer pricing and the experts involved in such project;

(ii) Intangibles covered - focusing on the experience of the countries with respect to various types of intangibles and the position taken regarding special items such as goodwill, location savings, and workforce;

(iii) Practice of reconciling transfer pricing valuations with the valuations for other purposes - the extent of the use of valuations for other purposes (such as Purchase Price Allocation studies or PPAs) in transfer pricing. This section also included questions on the minimum background information collected for a valuation study;

(iv) Approach to selecting the method for valuation in transfer pricing, including the important factors to consider in this respect and the use of main types of methodologies;

(v) Practice of the countries with the two-sided approach and importance assigned to this approach;

(vi) Parameterisation of the five identified building blocks or parameters: financial and forecast, royalty, routine return, time horizon and useful life of intangible, and discount rate;

(vii) Standards - the use of valuation standards in studies for transfer pricing purposes;

(viii) Capacity building, including the information on the existing resources and their competencies at the level of taxpayers and local tax administrations;

(ix) Legislative background, rules and regulations in the country.

The surveys were circulated to the heads of the TP practices in each of 28 Member state and each identified non-EU trade partner country.

The answers to the survey were collected through interviews (face-to-face or via call) with Transfer Pricing and/or Corporate Finance valuation specialists from the 28 EU Member States and from identified non-EU's main trade partners. The respondents were encouraged to provide examples to illustrate their answers and points. The drafted written answers were then sent to the countries to be reviewed and supplemented with additional details from both TP and valuation specialists. The collected responses were analysed and interpreted by the project team to be reflected in the current report. In this respect, where deemed useful, a visual illustration of results is presented.

1.4 Limitations of the study

The main goal of the study is to understand the way and to what extent the economic valuation methods and techniques are currently being used for transfer pricing valuations and what can be done in order to make their use more wide-spread without jeopardising the quality of the transfer pricing analysis. In this respect, at least in the overview of the practical experience, the study does not focus on or explore fully the general valuation practice in respect of valuation for other purposes.

Related to this, purchases of entire businesses or valuation of the shares in companies were not directly addressed, as they generally do not qualify as a transaction from the transfer pricing perspective. Experience shows that a valuation of shares is rarely performed or analysed by transfer pricing specialists nor performed in line with the TPG and the local transfer pricing rules or regulations.

However, to the extent that valuations of intangibles for transfer pricing purposes were a part of or involved a valuation of a business activity or full business, the study has covered these aspects.

As with any research project, there are practical limitations regarding data collection. The key data collection tools employed for this study were desk research by the core study team and the completion of an extensive survey by the Deloitte network of transfer pricing and valuation practitioners in the Member States and relevant third countries. In the context of the survey, Deloitte practitioners were asked to comment not only on their direct experience, but also on any other relevant experiences they

may be aware of in their respective countries, with the aim of reducing and eliminating (to the extent this is possible) potential biases related to specific experience of one or several persons. Even if the report is believed to be fairly representative of the current EU transfer pricing landscape, it cannot be construed as exhaustive.

While this study is based on research undertaken by a Deloitte project team and survey responses from the Deloitte network, its intention is not to provide a Deloitte-only view on the topics in the scope. Instead, the research and survey methodology have been specifically set up in order to obtain a fair representation of the transfer pricing landscape in the EU and in the EU's main trade partners, to the best of the knowledge of the writers of this report and the interviewees. In certain areas, the project team has performed additional analysis in addition to the views expressed by the survey respondents or set out in the literature reviewed. Where this concerns key aspects in the report, it has been clearly identified in the report (for example, by prefacing such comments with "The study team's analysis" or similar wording).

2. Similarities and differences in valuation approach and basis of value

2.1 Introduction

The section aims to introduce the practice of valuation of intangibles in transfer pricing by first analysing the common points and the differences between valuations for other purposes and valuations for transfer pricing purposes. In this respect, the study presents the theoretical premises on which valuations are based and, in particular, first attempts to clarify the impact of 'valuation cause' and main stakeholders involved. In addition, the scope and concepts of value used in the context of transfer pricing compared to valuation for other purposes are explained. The similarities and differences of these elements are analysed.

In the second part of the section, practical observations collected through surveys are presented to illustrate the degree of experience registered in the EU Member States with valuations for transfer pricing and the observed similarities and specific differences between valuations for transfer pricing purposes vis-à-vis valuations prepared for other purposes.

2.2 Theoretical premises

As stated in Section 1 above, the purpose of this study is to investigate the practice of valuation of intangibles for transfer pricing purposes. The RTD report states that "*concrete valuation cause (which means the concrete reason why the Intellectual Property valuation is performed) predetermines the information to be considered in the valuation and the addressee of the value information. The valuation purpose also defines the role of the valuer as a consultant, an arbitrator or a neutral expert.*" [28] As a result, *"each case for valuation requires investigation rather than having an automated approach to IP valuation*."[29]

Understanding this premise and why purpose of valuation appears to be of ultimate importance provides an important framework for guiding the objectives of the present study. This is a topic that has caught the attention of many authors and is addressed in business, tax and economic literature. Therefore, the main reason why purpose of valuation, i.e. transfer pricing, is important according to principal literature[30] is set out below. It appears that the key reasons for a difference between valuations for the purpose of transfer pricing and general valuations stem from the following main aspects:

(1) Differences in context/situation arising and hence in the scope of the valuation exercise;

(2) Differences in the interest of the stakeholders (of the valuation exercise) and, also the audience to which the valuation study is addressed to. For instance, the (ultimate) audience of the study are the tax authorities in the case of a valuation for transfer pricing purposes and the financial regulatory authorities – for valuations for financial statements. The stakeholders that referred to are

[28] The RTD report, at 81.
[29] The RTD report, at 5.
[30] Primarily based on the RTD report, Finan et al (2011), Dembitz (2003) and Wittendorff (2010).

the company's management which gives a mandate to perform the study (such as tax management in case of transfer pricing valuations and financial management requesting a study for financial statements);

(3) Differences in the concepts / bases of value (i.e. Fair / Market Value and Arm's Length) that the valuers adhere to;

(4) Closely related to the aspects above, adoption of the two-sided approach by a valuer;

(5) Differences in scope of intangibles to be valued and special items (such as workforce, location savings, business synergies and goodwill).

These aspects are explored in detail below.

As a general comment, in any valuation, independent of its precise purpose, a valuer attempts to estimate an appropriate value. In general valuations, this exercise, by its set up, typically takes place already in a third party context (i.e. a valuation of assets of a potential acquisition target, or valuation of patents in the context of infringement claim, etc.). In transfer pricing, a key underlying premise is to establish pricing that would be adopted by third parties. Thus, adhering to this principle, a transfer pricing specialist, performing a valuation or determining the pricing for an intra-group transaction, including a transfer of intangibles, would use reasonable efforts to seek adequate references to similar transactions between unrelated parties, and the pricing thereof. In essence, any valuation, independent of its purpose, should be carried out in a similar manner. Accordingly, in the study team's analysis of literature and survey responses, key similarities in theoretical and practical aspects of valuations for general purposes and valuation for transfer pricing are underlined.

In this context, it is also crucial to note that "valuations for other purposes" do not reflect a monolithic approach in terms of valuation methods, inputs, analysis etc. Valuation standards provide an increasingly structured approach to prepare such valuations, but, as discussed later (in Section 3), they are not necessarily prescriptive or highly detailed, which leaves considerable room for varying practical applications depending on jurisdiction, context, etc.

2.2.1 Situation-specific cause

Valuations of both businesses and intangible assets are in general performed for a wide variety of purposes, including Mergers & Acquisitions (M&A), disputes and litigation, financial reporting, non-transfer pricing tax purposes and other statutory regulations.

The RTD report presents a grouping of the key causes for valuation of intangibles, including internal or management-related causes, enterprise-related causes, transfer-oriented causes or conflict-oriented causes. The main features of these causes are commented upon however reference is made to the RTD report for more detail.

Depending on the situation, the valuation may have a "voluntary"[31] character (such as for instance, a valuation of IP portfolio made by the internal IP department inform management), or "involuntary" (such as valuation of IP for the claim of infringement or litigation). (This terminology is used by the RTD report; an alternative but

[31] The RTD report at 13.

equivalent terminology is to look at valuations that are "optional" and valuations that are "required by law"). Another distinction stemming from the situation or the context of the valuation is the requirement for an external third-party view to be adopted to perform a valuation (which is a statutory requirement in many cases), and related to that, the rigour and approach to objectivising the inputs for analysis that, ultimately, result in a higher or lower degree of subjectivity of a valuation analysis.

As an example, some of the most detailed guidance on valuation of intangible assets has been developed for the purpose of, or is used in the context of purchase price allocations and impairment tests under various financial reporting frameworks (in particular International Financial Reporting Standards (IFRS and US Generally Accepted Accounting Principles (GAAP)), which themselves aim at reflecting values and prices obtainable in an open market. There are however significant transactions in which intangible property is valued and priced, which do not fall under the scope of financial reporting technical guidance, such as unrelated party transactions in portfolios of patents, disputes regarding the value of IP in the context of infringement cases, joint ventures focused on technologies in development, etc.

According to the RTD, transfer pricing belongs to the "transfer-oriented" causes. The transfer pricing purpose of a valuation differentiates itself from the general transfer purpose through the fact that the buyer and the seller of the transaction are already known and they are related parties. This, firstly, implies that "the IP owner is not acting alone any longer in his decisions concerning the economic conversion of the IP." The IP owner, the seller, is not independent of the second party of the transaction, i.e. the buyer. Thus, "high yardsticks are set" to the objectivizing the values.[32]

In practice, as reflected in the findings below, the objectivizing the parameters and assumptions is reflected in the detailed factual, function and risk analysis that is provided as part of a transfer pricing study. Since it is a good practice to justify assumptions for any valuation, it seems that a solution to reconcile differences stemming from different situations may be to adopt the most scrupulous approach to documenting and objectivizing the assumptions and analysis behind them.

2.2.2 Stakeholders of valuation[33]

In addition to the situation and context of the valuation, the stakeholders who will be interpreting and applying the results of valuation may also have an influence on the valuation analysis. Such stakeholders include the audience for whom the valuation is intended, as well as the company's responsible giving a mandate for such valuation. For instance, a valuation for financial statement purposes is performed under a mandate from financial management and is intended to pass a check of a financial regulatory agency, such as SEC in the US and Financial Services Authority in the UK, and Financial Supervisory Authority in Sweden. In case of valuations for transfer pricing purposes, it is typically tax management of the company who gives a mandate and the valuation is intended to be presented to country's local tax administration.

Due to different stakeholders, an approach and a result of valuation performed for financial reporting purposes may be not the same as the valuation for transfer pricing purposes that is prepared by the same company's corporate tax department.

[32] The RTD report, at 13.
[33] Based on Dembitz (2003).

To take one example of how the conflicting interests matter, assume that the valuation for financial statements is performed following a "business combination" (i.e. acquisition of a company), under IFRS or US GAAP. In this case, the price paid for the acquired business must be allocated to the fair values of its assets and liabilities, including tangible assets, working capital, net debt, identifiable intangible assets and goodwill. Goodwill represents the residual asset representing the difference between price paid and the fair value of all intangible asset and liabilities acquired.[34]

As goodwill is not amortised under US GAAP or IFRS, allocating a higher proportion of acquisition value to goodwill would result in lower amortisation, and hence higher earnings per share. Accordingly, "there may be a bias to find a higher value in goodwill than in other tangible or intangible assets, since this will maximize reported future earnings."[35] If a stakeholder is the company's investor, he or she may be interested in the valuation resulting in a higher value of intangibles.

On the other hand, the purchased intangibles in the same company may lead to a transfer pricing issue.[36] A higher or lower value of intangibles may be preferred by the company's tax management, depending on the effective tax rates the multinational company is subject to in different jurisdictions. Thus, it could be that, from the tax perspective, it is cash maximizing for the company to have a higher or lower value of intangible than identified in the valuation performed for financial reporting purposes.

In the example above, a professional preparing a valuation for financial reporting purposes may make different assumptions and use different methodologies than a transfer pricing professional performing a valuation for the purposes of a transfer pricing study. Both valuations will be, in practice, subjective, and thus possibly biased exercises in the framework of recognized and well accepted methodologies in the country(ies) of the valuer(s), subject to local rules and regulations. One possible solution would be to understand if there are differences in methodologies required by the purpose of valuation and, next, to assess the differences in assumptions adopted by valuers involved in both valuations.

2.2.3 Basis of value:[37] the arm's length principle and the fair / market value

- Introduction

Many professionals use the terms Market Value and Arm's Length Price interchangeably and often assume that they are synonymous with 'Fair Value' as determined for accounting purposes. However, they are not – each definition of value can and often does give quite different values for the same asset. Furthermore,

[34] See for instance Deloitte (2015) at 29 or KPMG (2009) at 11.
[35] Dembitz (2003).
[36] In the cases when, for instance, an acquisition is followed by a subsequent migration of the acquired intangibles to another jurisdiction different from the country of the legacy ownership or, alternatively, a license of the purchased intangibles to related companies for the use in other operations abroad.
[37] IVS defines "basis of value" as "a statement of the fundamental measurement assumptions of a valuation". Various other standards and technical literature may use different terminology to describe the same concept: definition of value, principle of value, concept of value or standard of value. In this section, for consistency purposes and to avoid confusion with "valuation standards" analysed in Section 3 of the report, "basis of value" is referred to, except in direct quotes or direct references to sources using different terminology.

valuation standards used in non-transfer pricing contexts also use several bases of value, which themselves can result in different values, as set out further below in the present section.

A comparison of the arm's length principle and the valuation bases of corporate finance and financial reporting is noteworthy as income-based methods rely on corporate finance approaches. Furthermore, valuation experts with limited knowledge of taxation and the arm's length principle are often involved in the valuation of intangibles prepared for transfer pricing purposes. Equally, transfer pricing experts may lack knowledge about economic valuation techniques when undertaking valuation studies of intangibles for transfer pricing purposes. It is therefore critical to ensure that valuation approaches deviating from the arm's length principle reconcile with it when used in transfer pricing analyses.

Speciality literature has tackled the topic of differences encountered between the two bases, being the arm's length principle and fair value standard. Jens Wittendorff, in his article on *Valuation of intangibles under income-based methods – Part I*,[38] performed a comparison highlighting the most relevant differences between valuations for transfer pricing and general valuations. An overview of the main ideas expressed in this article are presented below, as well as additional comments based on analysis of the definitions / bases of value found in valuation standards by the study team.

- **The arm's length principle**

The authoritative international definition of the arm's length principle used in transfer pricing is set out in Art. 9(1) of the OECD Model:

Where

(a) An enterprise of a Contracting State participates directly or indirectly in the management, control or capital of an Enterprise of the other Contracting State, or

(b) the same persons participate directly or indirectly in the management, control or capital of an enterprise of a Contracting State and an enterprise of the other Contracting State,

and in either case conditions are made or imposed between the two enterprises in their commercial or financial relations which differ from those which would be made between independent enterprises, then any profits which would, but for those conditions, have accrued to one of the enterprises, but, by reason of those conditions, have not so accrued, may be included in the profits of that enterprise and taxed accordingly.

The arm's-length standard is achieved if the results of the transaction are consistent with the results that would have been realized if uncontrolled taxpayers had engaged in the same transaction under the same circumstances (arm's length result).

The interpretation of the arm's length principle is provided in the OECD TPG. The domestic transfer pricing laws of many countries rely on the arm's length principle of Art. 9(1) and the OECD TPG.

[38] Wittendorff (2010) at 323-328.

- **Market value**

The International Valuation Standards Council (IVSC) uses the following definition of the market value basis:[39]

> *Market value is the estimated amount for which a property should exchange on the date of valuation between a willing buyer and a willing seller in an arm's-length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently, and without compulsion.*

It is noted that this definition, although it defines market value, also uses the arm's length concept as a reference.

The IVSC has also adopted two other valuation bases, which are different from the market value basis:[40]

> ***Investment Value, or Worth**: The value of property to a particular investor, or a class of investors, for identified investment or operational objectives. This subjective concept relates specific property to a specific investor, group of investors, or entity with identifiable investment objectives and/or criteria.*
>
> ***Special Value**: An amount above the Market Value that reflects particular attributes of an asset that are only of value to a Special Purchaser.*

According to Wittendorff, the differences between these three bases (market-, investment-, and special value) rest largely on whether a one-sided or two-sided perspective is adopted and whether the reference transaction is deemed to take place between the actual parties or hypothetical parties.

- **Fair value (financial reporting)**

For financial reporting purposes, the author refers to definition of fair value by the International Accounting Standards Board (IASB):[41]

> *Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.*

The key feature of the definition is the reference to the market participants.

Fair value continues to be an important measurement basis in financial reporting. It provides information about what an entity could realise if it sold an asset or what they could pay to transfer a liability. In recent years, the use of fair value as a measurement basis for financial reporting has been expanded, even as the debate over its usefulness to stakeholders continues.

- **Comparison of the Arm's length principle with Fair value (market value) basis**

Jens Wittendorff performed a detailed comparison of these two bases of value reflecting on their three main elements, namely: (1) the controlled transaction, (2) the reference transaction and (3) implications on value:[42]

[39] International Valuation Standards 1 (2007) para. 3.1.
[40] International Valuation Standard 2 (2007) para. 3.3 and 3.5.
[41] See e.g. International Accounting Standard 16, Property, Plant and Equipment.

(1) **The Controlled Transaction:** as cited by Wittendorff, according to the OECD guidelines, both bases treat the controlled transaction in the same form and structure as adopted by the parties by transactions.[43]

(2) **The Reference Transaction:** Furthermore, both bases require that the reference transaction be concluded between independent parties. "The arm's length principle also establishes a comparability requirement under which the reference transaction should be a perfect mirror image of the controlled transaction in terms of all the factors that may affect price formation", hence requiring the object and other aspects of the transactions to be comparable. "This means a subjective valuation which must be made on an *ex ante* basis." Moreover, the arm's length principle "is based on an assumption of profit maximisation and arguably also a premise of information symmetry."[44]

The author finds that fair value is similar as it also establishes a comparability requirement in relation to the object of the valuation and necessitates the valuation to be made on an ex-ante basis. It also assumes information symmetry and profit maximisation. However, it is important that fair value is based on a hypothetical market (e.g. most advantageous market, i.e. the market where the highest price is quoted), a hypothetical transaction ("orderly transaction"[45]) and hypothetical market participants.

Thus, Wittendorff concludes that the fair value basis (due to hypothetical market assumptions) does not allow "any element of entity-specific value or any element of value that would not be available in a typical market transaction," such as, for example, economies of integration, the relative bargaining powers, legal rights, tax benefits and location savings.

(3) **Implications on value:** With regard to the third element, both bases are transactional and price-based and require an aggregation approach when the value of an asset in use with other assets exceeds the value of the asset on a stand-alone basis. However, linked to the discussion of a hypothetical market above, fair value is based on a highest-and-best-use principle. This principle is rejected in the OECD Guidelines because it implies a one-sided perspective. According to the OECD Guidelines, the arm's length principle thus considers the perspective of both parties. Furthermore, the author finds it important that the transfer pricing practitioner, governed by the arm's length principle, determines the appropriate price on a pre-tax basis, whereas the valuation techniques used in valuations other than transfer pricing, "may result in prices being determined on a post-tax basis".

Based on this analysis, it can be concluded that differences between the "fair value / market value" and the "arm's length" principle may lead to different values of the same asset. As stated by the author: "*the outcome of valuations performed under the two standards, will not necessarily coincide. This should be seen in light of the fact that the two standards pursue different objectives, and that the arm's length principle*

[42] Wittendorff (2010) at 325.
[43] That is, without challenging the form of transaction based on substance or the form adopted by independent parties. See TPG, para. 1.64.
[44] Wittendorff (2010) at 325.
[45] Transaction that assumes exposure to the market for a period before the measurement date to allow for marketing activities that are usual and customary for transactions involving such assets or liabilities; it is not a forced transaction (e.g. a forced liquidation or distressed sale).

is applied with respect to an actual transaction between actual parties, whereas fair value is often applied without any actual transaction".[46]

- Additional comment

It is interesting that the fair value basis adopted by valuers for financial reporting purposes (based on IASB) is not the fair value definition adopted elsewhere. For instance, the IVSC definition is the following.

> "*Fair value is the estimated price for the transfer of an asset or liability between identified knowledgeable and willing parties that reflects the respective interests of those parties.*"[47]

As defined above, the fair value requires the assessment of the price that is fair between two identified parties taking into account the respective advantages or disadvantages that each will gain from the transaction. Such a definition is commonly applied in judicial contexts.

This basis of value is clearly different to market value. Therefore, in a valuation prepared under the IVSC, the values estimated under these two bases of value (market or fair value bases) may diverge, depending on the specific facts and circumstances of the transaction. According to the study team, the fair value basis defined under IVS is more closely aligned to the arm's length principle under TPG than with market value basis. This further supports the conclusion that the basis of value used may have important consequences on valuation performed.

- Conclusion

As set out above, the fact that the basis of value may affect the assessed value is not specific to transfer pricing. In other business contexts, value can also justifiably be different when differing bases of values are applied. This is relevant with regards to the distinctive IVS definitions of fair value and market value, but also for other bases of value such as 'fair value less costs to sell', 'value in use', 'value to a specific buyer' etc.

Nevertheless, based on the points set out above and on complementary research by the study team, significant similarities between the fair value / market value standard and the arm's length standard of value are apparent; hence, there are many situations where valuations would not need to be conducted differently under these two standards, such as, for example:

- In cases where the seller and particularly the buyer can be considered as "normal" market participants (from the point of view of size, geography, activities, etc.)

- In cases where the relative bargaining power[48] of the two parties is broadly in line with that of typical participants to the market

- In cases where the assets transferred are similar to those transferred in third party transactions

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46 Wittendorff (2010) at 326.
47 IVS Framework para 38 – 41.
48 The bargaining power is the relative ability of parties in a situation to exert influence over each other.

- In cases where the tax regimes of the buyer and seller are broadly aligned to "normal" tax regimes for other market participants.

It is generally very infrequent that a valuer performing a valuation for transfer pricing purposes will have in front of her also a valuation of the same asset(s) performed for other purposes.[49] If this is however the case, a transfer pricing valuation analysis should take into account the results of such a valuation and its premises, and material differences in value assessed should be explained by specific references to the differences in the bases used (or to the perimeter of assets valued).

2.2.4 Two-sided versus one-sided approach

The two-sided approach is a fundamental principle of transfer pricing valuation. This means that the valuation must be prepared from the perspective of each party to the transaction. As stated by the TPG (revised Section 6):

"*In applying the principles of the Guidelines related to the content and process of a comparability analysis to a transaction involving intangibles, a transfer pricing analysis must consider the options realistically available to each of the parties to the transaction.*" [50]

And

"*In considering the options realistically available to the parties, the perspectives of each of the parties to the transaction must be considered. A comparability analysis focusing only on one side of a transaction generally does not provide a sufficient basis for evaluating a transaction involving intangibles (including in those situations for which a one-sided transfer pricing method is ultimately determined).*"[51]

In general, the two-sided approach to valuation is not followed by valuers other than transfer pricing practitioners. Instead, the valuer typically represents only one party of the transaction, (i.e. a buyer or a seller), and/or refers to hypothetical buyers or sellers in a transaction, and uses market values benchmarks to objectivise the assumptions behind its valuation. As such, the valuation performed for purposes other than transfer pricing is typically one-sided.

Understanding the difference between the bases of value and, also, the two-sided approach in valuations for transfer pricing purposes, may build up a solid bridge between valuations for transfer pricing and other purposes.

2.2.5 Scope of intangibles subject to a valuation

The current analysis focused on valuation techniques to be performed for the most common categories of intangibles identified by the OECD TPG (i.e. patents, know-how and trade secrets, trademarks, trade names and brands, rights under contracts and government licences, licences and similar rights in intangibles and for the application of such techniques to the transfer of a business or a part of a business). However, valuations of intangibles for other purposes, should also be considered. The list below

[49] Such situation may occur if, for instance, shortly after an acquisition of an independent company, an intercompany transfer of assets takes place and a transfer pricing valuer is provided with the valuation made for purchase price allocation (PPA).
[50] OECD, *Aligning transfer pricing outcomes with value creation*, para. 6.111
[51] OECD, *Aligning transfer pricing outcomes with value creation*, para. 6.112

provides a definition of intangibles used for accounting and financial purposes. Key similarities and differences between these definitions and the definitions of the OECD BEPS Action Plan are highlighted.

- **Definition of intangibles for accounting and financial reporting purposes**

Under IFRS (IAS 38 – Key definitions), an intangible asset is defined as '*an identifiable non-monetary asset without physical substance'*.

Furthermore, *"An asset is a resource that is controlled by the entity as a result of past events (for example, purchase or self-creation) and from which future economic benefits (inflows of cash or other assets) are expected". [IAS 38.8]*

The definition of intangibles under IFRS and US GAAP (used for accounting and financial reporting purposes) focuses on the following three points[52]:

(i) The identifiable intangible assets reported must fall under the definition of an asset;

(ii) The intangible must satisfy one of the following criteria: it should be either separable from the business or arise from a legal or contractual right; and

(iii) There is a rebuttable presumption that the value of intangible identified under the framework above can be measured reliably.

- **Transfer Pricing definition of intangibles**

Under Action 8-10 final deliverable of the BEPS project, the OECD has identified the word "intangible" as "intended to address:

- something which is not a physical asset or a financial asset,
- which is capable of being owned or controlled for use in commercial activities, and
- whose use or transfer would be compensated had it occurred in a transaction between independent parties in comparable circumstances."[53]

The OECD also recognises a special category of "unique and valuable" intangibles as those intangibles "(i) *that are not comparable to intangibles used by or available to parties to potentially comparable transactions, and* (ii) *whose use in business operations (e.g. manufacturing, provision of services, marketing, sales or*

[52] FAS 141 in US GAAP and IFRS 3.

[53] OECD, *Aligning transfer pricing outcomes with value creation*, para. 6.6.
The BEPS deliverable further divide intangibles into two categories, namely marketing intangibles and trade intangibles. A marketing intangible is "an intangible (within the meaning of paragraph 6.6) that relates to marketing activities, aids in the commercial exploitation of a product or service, and/or has an important promotional value for the product concerned. Depending on the context, marketing intangibles may include, for example, trademarks, trade names, customer lists, customer relationships, and proprietary market and customer data that is used or aids in marketing and selling goods or services to customers." (Final report, Para. 6.16) Accordingly, trade intangibles are all other intangibles (within the meaning of paragraph 6.6) that do not fall under the category of marketing intangibles, such as patents, know-how and trade secrets, unpatented technology, software, databases, copyrights, music/video recordings, rights under contracts and government licenses, etc.

administration) is expected to yield greater future economic benefits than would be expected in the absence of the intangible."[54]

- Similarities and differences in definition

Unsurprisingly, there are key similarities between the definitions of intangible assets for financial reporting and for transfer pricing. In both cases, there is:

- A requirement for ownership or control,
- A clarification that intangible assets are non-physical and non-monetary/financial, and
- A reference to economic benefits / compensation.

These definitions are in fact much closer together than some broad definitions of intangible sources of value used elsewhere. For instance, definitions of intangibles in economic literature may compass assets such as management know-how, organisational structure, first-mover advantage, etc., which may not qualify under the definitions above.

The OECD broadens the definition of an intangible property by not explicitly requiring an item to (1) enjoy legal protection or (2) be separately transferable in order to be considered an intangible property[55]. at least one of which is a required characteristic of identifiable intangible assets from an accounting / financial reporting perspective. By comparing the financial reporting definition of intangible property provided above to the OECD deliverables definition, it can be seen how items that do not qualify as identifiable intangible assets under financial reporting could be included as an intangible property for tax-related intercompany transfer pricing purposes.[56] The most important differences are represented by the definition of goodwill, which will be discussed in more detail below.[57]

However, in line with the comments above, the OECD also underlines that it is crucial to distinguish between intangibles and market conditions or local market circumstances. These items may affect and must be taken into account for the determination of the arm's length price but they are not intangibles falling under the above definition.[58] [cfa *Special items* below].

- Differences in practice[59]

Book value may not reflect market value

The OECD (in the Final report) specifically indicates that the intangibles that are significant for transfer pricing purposes may not always be recognised as intangibles for accounting purposes. This is mainly due to accounting and financial reporting standards in general (i.e. except for acquisition accounting), under which few intangibles generated internally can be recognised. As supported by the OECD, there may be valuable intangibles that are transacted inter-company "even though they

[54] OECD, *Aligning transfer pricing outcomes with value creation*, para. 6.17.
[55] OECD, *Aligning transfer pricing outcomes with value creation*, para. 6.8.
[56] Rostowski (2015).
[57] Sadang (2015)
[58] OECD, *Aligning transfer pricing outcomes with value creation*, para. 6.9.
[59] This section discussed the differences in practice stemming from the definitions of certain items in transfer pricing; other differences such as the use and calculation of parameters will be discussed in the following sections.

may have no book value in the company's balance sheet".[60] Accordingly, even when an item does not qualify as an intangible for accounting purposes, it may still be appropriate to assign it a transfer price in the context of a controlled transaction.

Under acquisition accounting, the purchasing company must assign a fair value to most of the tangible and intangible assets purchased and record these asset values on its balance sheet. This reduces the likelihood that an intangible asset considered to have value for TP purposes would not be recognised for book purposes. However, due to differing definitions and classifications of intangible assets, as well as due to the different scope and standard of valuation for PPA and TP purposes, the value of intangibles for transfer pricing purposes may be different from the PPA. This is explored right below.

Intercompany character determining uniqueness of intangible scope

Besides the differences between book values and transfer pricing values, there are two other significant differences in scoping intangibles in practice. First, transfer pricing valuations frequently involve transactions for unique intangibles that would not be transacted between unrelated parties.[61] Besides the fact that (many of) the intangibles are unique and thus may not have market comparables, in transfer pricing in particular, the situations are frequently unique due to the nature of multinational enterprise acting as one business with several entities in different jurisdictions. This aspect is addressed in economic literature, pointing out the fact that "multinational enterprises can and do enter into certain transactions that third parties operating in the open market could not, or would not, enter into. For example, a parent company rich in valuable IP would have a strong incentive to transfer rights to use and possibly further develop all of its IP to an affiliated foreign entity if that transfer of rights increases value to its shareholders. Clearly, this would not necessarily be the case in a third party context."[62]

The uniqueness of inter-company transactions may also be reflected in the specific terms of the inter-company transaction as structured. For example, "the transfer pricing analysis may evaluate a 20-year license in which the licensor, rather than licensee, incurs future R&D expenses"[63] which is a situation that is arguably difficult to find between two independent enterprises.

Aggregation or bundling

Related to the specific scope of the intangible to be valued, it is frequently the case that a transfer pricing valuation is carried out for a piece of business or a set of identified intangibles. That is, it is not necessary for transfer pricing to value separate intangibles transferred but instead, it is important to consider a "package deal." The OECD Guidelines specifically support the view that "an MNE may package as a single transaction and establish a single price for a number of benefits such as licenses for patents, know-how, and trademarks, the provision of technical and administrative services and the lease of production facilities". Note that in the example of the OECD the transfer of intangibles is bundled together with provision of services and a lease

[60] OECD, *Aligning transfer pricing outcomes with value creation*, para. 6.7.
[61] Finan et al (2011).
[62] Henshall et al (2016).
[63] Chandler et al (2010).

payment.[64] The reason for allowing aggregation or bundling of several transactions lies in the fact that these transactions are viewed as closely linked.

This aggregation or bundling approach differs from valuations for other purposes, in many of which (in particular but not only in valuations for financial reporting) assets are identified and valued separately.[65]

2.2.6 Special items

Under the BEPS definition of intangibles, special items such as location savings and other local market conditions, assembled workforce and group synergies would be excluded. This is because they do not fulfil the condition of "capable of being owned or controlled". Similarly, the OECD special item examples would fall outside this scope: higher purchasing power of households in certain market, low prevailing labour costs, proximity to markets, streamlined management, integrated systems, other synergies, etc.[66]

There is a difference between Section VI of the OECD TPG tackling the transfer pricing of intangibles and Section I which deals with comparability analyses. In this respect, the OECD mentions that factors such as location savings, workforce and group synergies will need to be taken into account when performing a comparability analysis. These factors can influence the arm's length price of a transaction and they might lead to comparability adjustments. However, as they cannot be owned or controlled by a party, these are not intangibles under the definition of the OECD. A more detailed discussion of these items is provided below.

- **Workforce**

Assembled workforce represents the success of a business in assembling a uniquely qualified or experienced collective of employees. The OECD TPG clearly situates this item in the list of factors to be considered when performing a comparability analysis and not under the intangibles definition. While workforce may not be intangible as it does not fulfil the condition of being capable of being owned or controlled for commercial purposes, it can nevertheless have important effects on arm's length prices in matters involving the use of intangibles. It is recognised that the transfer or secondment of employees may in some circumstance results in the transfer of valuable know-how or other intangibles from one enterprise to another.[67]

- **Location savings**

Location savings are those location-specific market features and/or factors of production that enable a business to achieve an improved financial outcome from the provision of the same product or service compared to alternative locations. It may include access to skilled labour, incentives, market premiums, access to growing markets, superior infrastructure, and cost savings.[68]

Similarly to workforce, this item must also be considered in the process of a comparability analysis, but it does not fulfil the condition of being owned, necessary

[64] OECD TPG, para. 3.11; see also OECD, *Aligning transfer pricing outcomes with value creation*, para. 6.12.
[65] Finan et al (2011).
[66] OECD, *Aligning transfer pricing outcomes with value creation*, para. 6.31.
[67] OECD, *Aligning transfer pricing outcomes with value creation*, para. 1.152-1.156.
[68] Ghosh et al (2013).

for characterisation as an intangible. However, some tax authorities in newly industrialised countries, such as India and China, take the position that their unique market features deserve separate recognition and compensation through appropriate transfer prices.

- **Business synergies**

Business synergies represent the interactions among group members that would not generally be available to similarly situated independent enterprises. Such group synergies can arise, for example, as a result of combined purchasing power or economies of scale, combined and integrated computer and communication systems, integrated management, elimination of duplication, increased borrowing capacity, and numerous similar factors.[69] Although these synergies may contribute to the level of income earned by a group, they cannot be owned or controlled and thus they are not intangibles.[70]

- **Goodwill**

The term "goodwill" has different definitions depending on the purpose of the valuation. For financial reporting purposes, goodwill is a residual concept that reflects the difference between the aggregate value of an operating business and the sum of the values of all separately identifiable tangible and intangible assets. In transfer pricing, a goodwill which is a part of residual goodwill value in financial reporting, may not be a separate asset or item – rather, the underlying value may be embedded in the intangibles value and consists of buyer specific synergies, future customer relationships, future technology and all future opportunities.[71]

The BEPS deliverable does not precisely define goodwill and ongoing concern value. Moreover it notes that financial accounting or business valuation definitions of goodwill do not correspond to the goodwill definition used in transfer pricing analyses. The qualities attributed to goodwill and ongoing concern value includes qualities such as a reputation for producing high quality products that enables a company to charge higher prices.[72]

The BEPS deliverable concludes that depending on facts and circumstances, goodwill may or may not be an intangible, taxpayers being advised to consider whether independent enterprises would provide compensation for such intangibles in comparable circumstances.[73]

2.2.7 Summary comments, observations and practical implications

The analysis presented at points 2.2.1 – 2.2.6 above has shown that there are both key similarities and important differences between valuations for general purposes and valuations for TP purposes, starting from the underlying principles and basis of value and including the context or situation of the valuation, stakeholders of the valuation, potential adoption of two-sided approach and scope of intangibles subject to the valuation.

In practice, a first important point is to recognise that the situations in which intangibles transferred intra-group and requiring a valuation for TP purposes have

[69] OECD, *Aligning transfer pricing outcomes with value creation*, para. 1.157.
[70] OECD, *Aligning transfer pricing outcomes with value creation*, para. 6.30.
[71] Sadang (2015).
[72] Rostowski (2015).
[73] OECD, *Aligning transfer pricing outcomes with value creation*, para. 6.29.

already been valued for another purpose (PPA, dispute, M&A, internal analyses, etc.) are likely to be a minority of cases. Accordingly, in most situations there is no direct comparison possible between the actual values of intangibles for TP and for other purposes.

In such cases, a valuer will need to assess to what extent the methods and inputs that would be used in a valuation for other purposes are relevant for a TP valuation.

However, the key aspects to consider are broadly the same whether or not a previous valuation exists and values can be directly compared. To consider these aspects one should seek answers to the following questions:

- Are the two parties to the transaction studied broadly similar to typical market participants or not? (This may have impact on financial forecasts for the two parties, on tax rates considered, etc.)

- Are the assets (to be transferred) comparable to assets transferred in unrelated party transactions (with reference to perimeter, scope, treatment of goodwill etc.)?

- Are there specific transfer pricing principles that are different from general valuation approaches to take into account (in particular, is the two-sided approach likely to result in a different value)?

- Are the stakeholders' interests likely to bias the valuation and how can the valuation inputs be objectivised (and what level of objective support has been provided in the existing TP / non-TP valuation)

- What is the level of documentation is required, both in terms of providing a sufficient background on the transaction and documenting the chosen methodology(ies) as the most appropriate as well as the assumptions made for application of such methodology(ies).

In the study team's analysis, there cannot be an automatic conclusion that a valuation process and methods for TP purposes, and its results, are necessarily different than a valuation (and its results) for other purposes, but neither an automatic conclusion that they should be the same. Just like in any other valuations, the valuer should always consider all available information and should justify specific departures from methods, inputs and results of the previous valuations.

The next section proceeds to practical observations registered in the EU Member States in terms of experience in valuations of intangibles for TP purposes, treatment of certain items in this context, and information used to perform such studies.

2.3 Practical observations

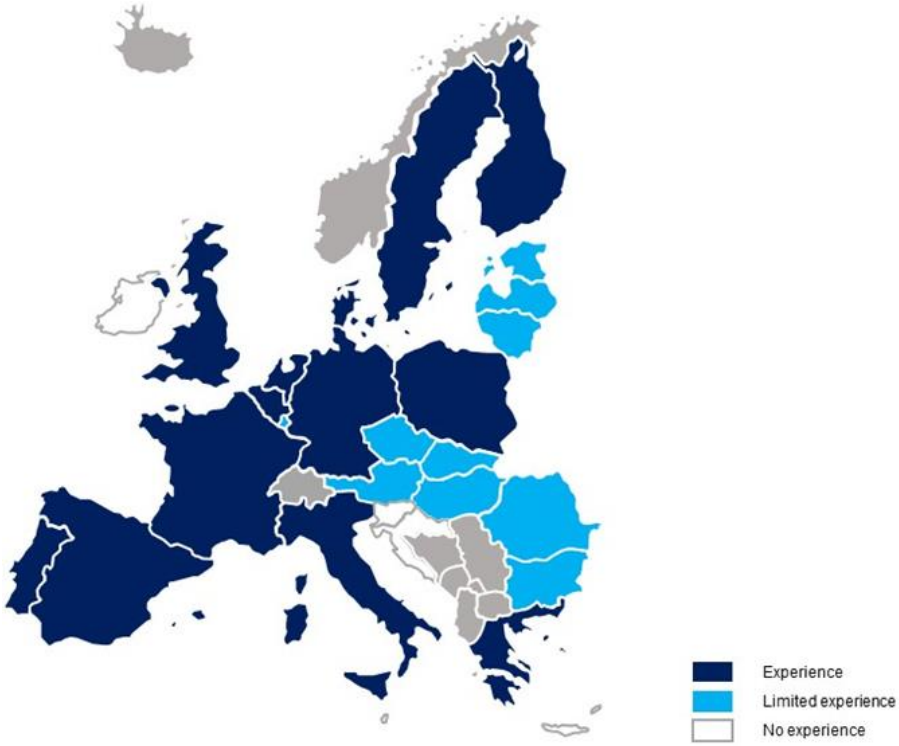
In the remainder of Section 2, we explore the practical experiences in the 28 Member states based on the interview of the experts in Deloitte network. In particular, to support the theoretical premises explored in section 2.2 above, we investigated the general experience with valuations of IP for transfer pricing purposes in the Member states as well as nine main trade partners countries, the types of intangibles valued in the transfer pricing context, the factors to be considered important by transfer pricing valuers and the degree they accept valuations performed for other purposes, to be used for transfer pricing analyses. The respondents were also requested to comment whether or not they special items: workforce, location savings, goodwill and business synergies as intangibles or not.

2.3.1 Degree of experience with IP valuations for TP purposes

- EU Member States

The practice of valuing intangibles for the purposes of transfer pricing is relatively under-developed. In this respect, many of the surveyed respondents in 28 Member States commented on their limited experience in the field. The figure below observes the current state of the play among Member States.

Figure 1. State of play – Experience in IP valuation for TP purposes



Five out of 28 Member States respondents (i.e. Croatia, Cyprus, Ireland, Malta and Slovenia) note that they are unaware of the existence of local experience with performing an IP valuation for TP purposes specifically. Malta and Cyprus do not have transfer pricing regulations (the law in Cyprus is limited in acknowledging the arm's length standard), whereas Irish law covers only trading transactions (and thus, not intangibles). Croatian and Slovenian respondents note a limited development of the transfer pricing discipline in general following only recent adoption of transfer pricing rules and regulations. Furthermore, 10 Member States respondents note (extremely) limited experience with IP valuations for TP purposes, i.e. Austria, Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Luxembourg, Romania and Slovakia. This means that just 13 Member States out of 28 have accumulated somewhat significant and thus meaningful experience in valuing IP for TP purposes.

For the purpose of the survey, the study team identified and listed the types of intangibles, based on three classifications:

1. categories that are typical for general valuation studies (for purposes other than financial reporting or transfer pricing),

2. categories for financial reporting purposes, and

3. categories that are common in transfer pricing studies.

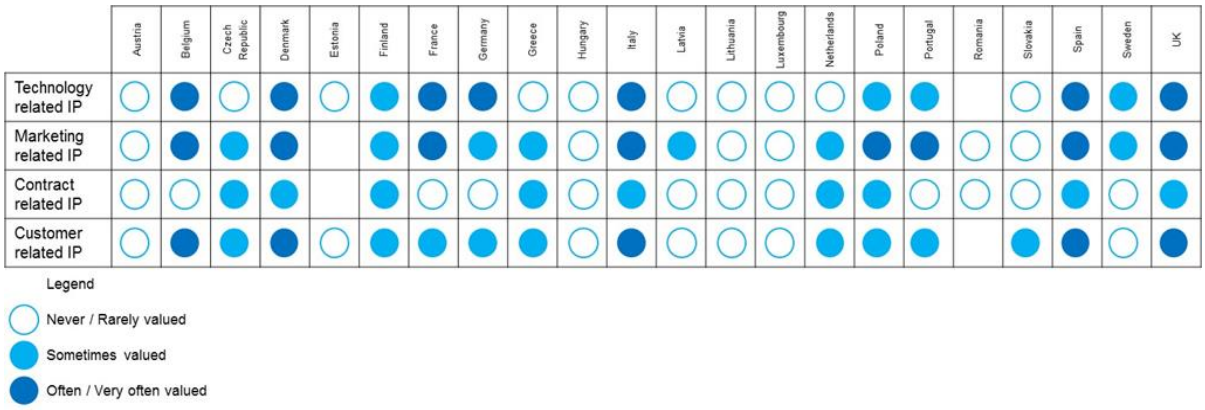
Table 1. Types of intangibles

No.	Various type of intangibles in Valuation studies	Categories for financial reporting valuations	Categories / grouping for the purpose of TP approach
1	Patented technology	**Technology-based intangible assets**	**Patents**
2	Trade secrets		**Non Patented technology**
3	In-process research and development		
4	Computer software		
5	Unpatented technology		
6	Trademarks	**Marketing-related intangible assets**	**Trademark, tradenames, brands**
7	Trade names		
8	Service marks		
9	Collective marks		
10	Certification marks		
11	Trade dress		
12	Newspaper mastheads		
13	Copyrights (esp. for media companies)	**Artistic-related intangible assets**	**Rights under contracts/ (government) licenses**
14	Non-competition agreements	**Contract-based intangible assets**	
15	Customer contracts		
16	Concessions, permits		
17	Order or production backlog		
18	Other contract-based intangible assets (e.g. lease agreements, advertising contracts)		
19	Customer lists	**Customer-related intangible assets**	**Customer related intangibles such as customer-related goodwill**
20	Related customer relationships (customer contracts & related customer relationships)		
21	Internet domain names		
22	Customer base	***Not an identifiable intangible asset if not linked to a customer contract***	
24	Workforce	***Not an identifiable intangible (no control)***	***Specifically excluded by the OECD from the definition of intangibles (suggested to consider as comparability factors)***
25	Location savings	***Not an identifiable intangible (not separable from the business, not arising from a contract / legal right)***	
26	Goodwill / ongoing concern (may or may not be intangible depending on the context)	**not an identifiable intangible BUT a significant intangible asset (difference between business value and value of all identifiable assets)**	

In the survey, respondents were offered a choice between the type of categorisation to use.

Out of the 23 Member States that have some experience (both limited and significant experience) with valuations of IP for TP purposes, their experience differs in terms of which types of intangibles are most often valued. The figure below provides and illustration of the experience registered in the 22 Member States (Bulgaria has not provided any input on this matter citing insufficient experience on the subject) on four categories of intangibles: technology-related, marketing-related, contract-related and customer-related.[74]

Figure 2. State of play – Experience in valuing specific types of intangibles



Survey results indicate that marketing-related IP appears to be the most often valued intangibles. Eight Member States respondents answered that they valued marketing IP "often" or "very often" and another seven valued it "sometimes". With regards to technology-related intangibles, seven Member States respondents indicated that they valued it "often" or "very often" and four valued it "sometimes". With regards to customer-related IP, five Member States respondents indicated that they valued it "often" or "very often" and nine valued it "sometimes". Finally, contract-related intangibles seem to be least frequently addressed in transfer pricing valuations, with nine respondents indicating that they sometimes value this kind of intangible and the remaining respondents noting none or very limited experience.

- EU Trade Partners

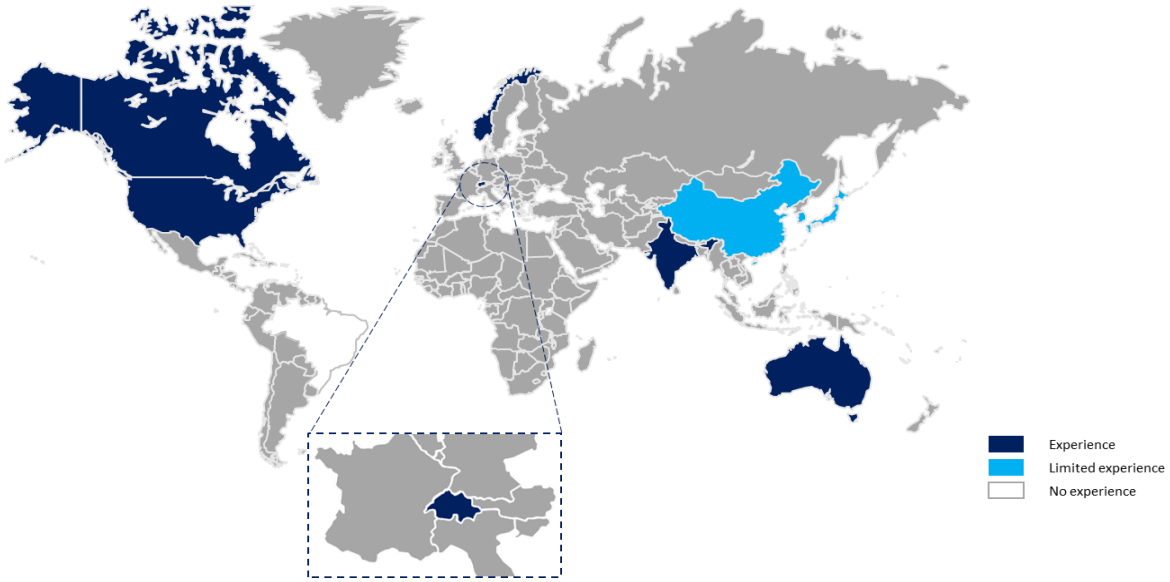
The study also surveyed experts in the ten main trade partners of the EU, namely Australia, Brazil, Canada, China, India, Japan, Norway, South Korea, Switzerland and the United States. It was observed that the practice of IP valuation for the purposes of transfer pricing is relatively developed in general among the main trade partners of the EU, with the exception of Brazil which did not record any experience due to very specific transfer pricing legislation.[75] Due to the specifics of Brazilian practice, Brazil is not included in the discussion of the trade partners experience hereafter.

[74] If the respondents gave more detailed information (i.e. on separate intangibles under each of the four category), a general rating was computed by the authors of the present paper.

[75] The respondent from Brazil confirmed that the local transfer pricing rules do not follow the OECD guidelines. When applying the Brazilian transfer pricing rules to intangible property, Brazilian practitioners do not use any valuation methods described in the present study. The Brazilian transfer pricing rules merely require the Brazilian seller of the intellectual property to earn a minimum return on the sale of the IP of 15% (where the return is calculated over the development costs of the IP).

Chinese and Japanese respondents noted somewhat limited experience with regards to the valuations for the purposes of IP transfer and also Korean respondents indicated that the country's experience is very limited. The figure below sets out the state of the play among the main EU trade partners. The discussion that follows thus refers to nine trade partners.

Figure 3. State of play – Experience in IP valuation for transfer pricing purposes – main trade partners



Similar to the situation among EU Member States, the degree of valuation experience among the survey trade partners is uneven with respect to the different types of intangibles (see Figure 4 below). The most frequently valued intangibles are marketing-based intangibles (with six out of nine respondents valuing them "often" or "very often" and two valuing them "sometimes") followed by technology-based intangibles (with three respondents valuing them "often" or "very often" and five valuing them "sometimes"). Following this, five respondents indicated that they value customer-related IP "often" or "very often". Contract-related intangibles were the least valued type of intangible with four respondents out of nine valuing them "often" or "very often".

Conversely, in an inbound transaction, whereby Brazil acquires IP, the Brazilian transfer pricing rules will test the level of profitability earned by the foreign seller of the IP. If the level is below 20%, it will be conclude that the transactions was conducted at "a market price."

Figure 4. State of play – Experience in valuing specific types of intangibles

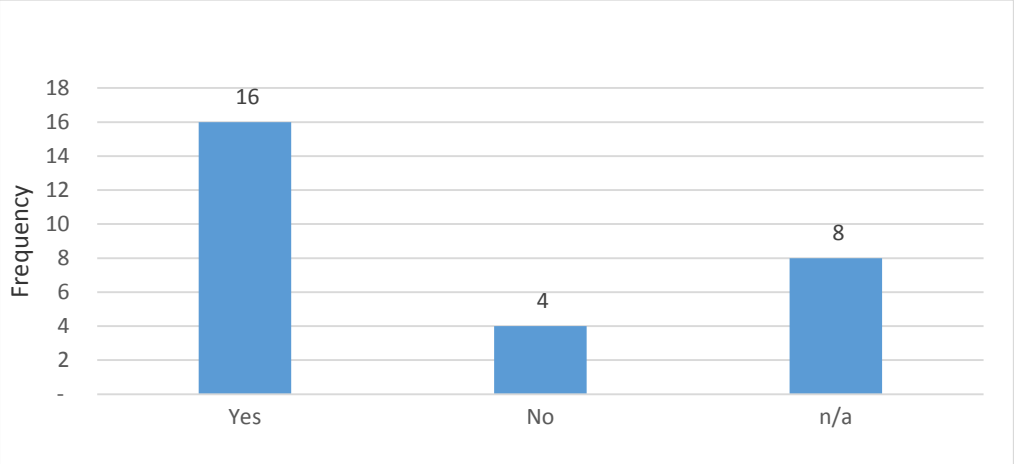
In general, according to survey results, Canada, India, Switzerland and United States can be regarded as the countries with more advanced experience in valuing intangibles for transfer pricing purposes than other surveyed countries. China, Japan, and especially South Korea were found to have rather limited experience.

2.3.2 Importance of Transfer Pricing aspects to performing IP valuation

- **EU Member States**

Consistent with the observations in Section 2.2 and the findings in the RTD paper, the purpose of the valuation exercise (being TP in this case) is found important by most respondents.

Figure 5. Is the purpose of valuation (being TP) important?



Out of the 22 Member States that responded to the question (non-respondents being Member States with none or very limited experience with IP valuations for TP purposes[76]), 16 noted that keeping the purpose of the valuation (TP in this case) in mind when performing the valuation exercise is important. Four (Austria, France, Hungary, and Latvia) Member States respondents indicated that it is not important.

[76] Namely, Bulgaria, Croatia, Cyprus, Malta, Ireland and Slovenia.

However, among the 13 Member States with substantial experience in the field (identified in the beginning of section 2.3.1 above), all but one of the respondents note that the purpose of valuation is important. For France, the only outlier, the respondent mentions that the OECD methodologies are so widely defined that any valuation technique could be put in the framework of an OECD method. German respondent notes that the purpose of a valuation (being transfer pricing) is not important in terms of the principles of the valuation methodologies applied but that it does matter in terms of how this methodology is implemented.

Member State respondents were further asked to comment on the minimum background information to collect in performing a valuation for transfer pricing purposes. All 22 Member States respondents to the question note that the information to be analysed includes functional and risk analyses[77] of the parties to the transaction before and after the transaction. All but one Member State respondent also include the contracts and the understanding of business (and other) reasons for restructuring leading to a transfer of IP in the minimum information required.

Figure 6. Important information to consider before selecting valuation approach in transfer pricing, (besides financial data)

	Austria	Belgium	Czech Republic	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Italy	Latvia	Lithuania	Luxembourg	Netherlands	Poland	Portugal	Romania	Slovakia	Spain	Sweden	UK
Functional and risk profile of parties "before" and "after"	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Contracts	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x
Business (and all other reasons) for restructuring	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x

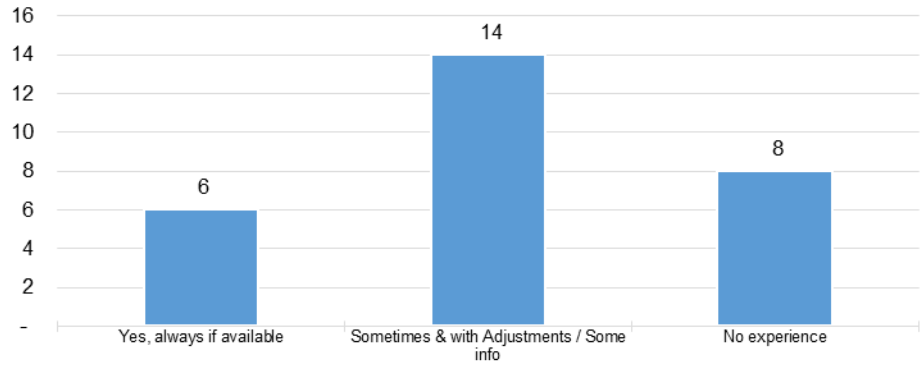
Member States respondents also noted some other information that is especially important, such as understanding of the business plan, business strategy, operational structure, value drivers, and the background information on the intangibles valued (including, for example, any studies regarding the perception of the intangibles by consumers, any differentiation of brands/trademarks, background on how the R&D was conducted and what were the costs involved, the level of IP protection and what value it brings to the user).

All Member State respondents supported the view that the collected information analysis should be provided in the form of the transfer pricing study and more particularly the section devoted to the description of the business and factual, functional and risk analyses. Some Member States explicitly noted in this respect, that

[77] It is common understanding in Deloitte network (including TP professionals surveyed) that the factual, functional and risk analysis will contain such items, description of supply chain, value drivers, markets and industry, functional contributions by relevant entities (parties of transaction) to value creation, etc. These are the elements that are typically addressed by transfer pricing documentation. In this respect, see OECD, Transfer Pricing Documentation and Country-by-Country Reporting, Action 13 – 2015 Final Report (2015).

such extensive documentation of business background is not required for valuations for other purposes and, as such, is not contained in valuation reports for other purposes. If a TP practitioner uses a valuation study to document the value of the IP, he or she will typically supplement the report with the full factual, functional and risk analyses.

Figure 7. Use of PPA studies for TP purposes.



Source: Survey Valuation of IP in TP

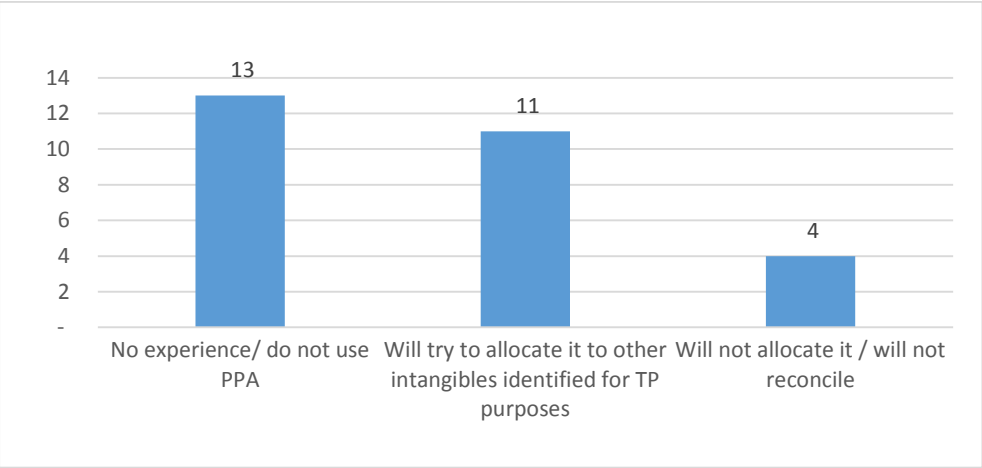
Existing PPA does not necessarily mean that it is accepted in full for use in transfer pricing. In fact, 14 Member States respondents note that they will normally use the PPA only to some extent – i.e. as a starting point for valuation and as a source of important financial data such as financial forecast, assuming that little time has elapsed since the date of PPA preparation. Only six Member States respondents indicated that they will rely on the PPA as the analysis for transfer pricing purposes (with implications that they will not make adjustments or such adjustments will be limited). It should be noted also that these six Member States are ones indicating limited or no experience in performing IP valuations for TP purposes. The remaining eight countries respondents note that they have no experience with using the PPAs.

One of the (conceptual) difficulties of reconciling PPA value with valuations for transfer pricing lies in the value of goodwill obtained in PPA. The goodwill in PPA is calculated as a difference between a full value of the business and the value of the separate identifiable (tangible and intangible) assets. As explored above, the definitions of separate assets could be different in transfer pricing to those used by valuations experts performing a PPA valuation. Often, a definition of intangible assets used in a transfer pricing analysis may be defined under less strict criteria and in wider scope than definitions adopted by valuation experts performing a PPA exercise. This seems to suggest that the value of the goodwill should be allocated to other assets (at least partially), in order to obtain a "fully loaded" value of intangibles that correspond to the transfer pricing purpose. However, goodwill value – by way of its calculation[78] - is influenced by short-term fluctuations in the market value and hence assigning goodwill to assets may lead to higher or lower values of the intangibles than the arm's length value.

[78] As mentioned, goodwill is estimated as a difference of the value of the full business and value of identifiable assets. The value of business obtained typically reflect market value which could be affected by market fluctuations. As such, the resulting goodwill value will be affected by the same fluctuations on the market.

The Figure below illustrates that adjusting the PPA values by allocating goodwill is at least attempted by a majority of Member States respondents with experience of dealing with PPAs for transfer pricing purposes.[79] Eleven Member States respondents note that they attempt such an allocation.[80] Only four Member States respondents (France, Romania, Czech Republic and the UK) note that they will not attempt to allocate goodwill. In the case of Czech Republic, this is dictated by accounting rules, which permit classifying goodwill as a separate asset subject to depreciation on the balance sheet. With regards to this question, the UK respondent refers to the OECD view that the values received in a PPA exercise are not automatically equivalent to transfer pricing values[8182]: *"in particular, valuations of intangibles contained in purchase price allocations performed for accounting purposes 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."* [83]

Figure 8. Dealing with goodwill part of PPA – EU Member States



Section 2.2 above provides a more detailed discussion on the scope of intangibles valued in transfer pricing opposed to valuations for other purposes.

- **EU Main Trade Partners**

The respondents in trade partners countries were also asked whether the purpose of valuation (being transfer pricing) is important to consider, to make a corresponding choice of methodology and its modalities. Eight of the nine respondents confirmed that the purpose of the valuation is important. Only one respondent (India) responded

[79] Five countries with no experience with performing valuations for TP purposes were counted as "no experience" as they explicitly answered the question.
[80] In such case, the allocation will be performed in proportion to the value of types of intangible assets identified in the PPA.
[81] An even stricter view was expressed (in the Bloomberg BNA / Baker & McKenzie Global Transfer pricing conference in March-April 2014 in Paris) by Michael McDonald, that the approach of using the results of a PPA as a starting point for a valuation of IP for TP, and especially taking the results of a PPA and reallocating the value of goodwill to other identified assets is not a correct approach.
[82] For examples, see discussion below dealing with goodwill part of PPA for Trade partners.
[83] OECD, Aligning transfer pricing outcomes with value creation, para. 6.155. See also Finan et al (2011).

negatively to the question, explaining that the valuations are done based on fair market value standard and independently of the purpose of the valuation exercise.

With regards to the minimum background to consider for the analysis before committing to the valuation approach, all nine respondents indicated that they consider the functional and risk profiles of the parties "before" and "after", relevant contracts between the entities of the group and the business reasons behind the restructuring. …

Other factors were also mentioned by respondents as important (additional) information to consider:

- Business and market strategy (how the company plans to sell its products, its market penetration strategy), together with a complete understanding of the industry;
- All factual details surrounding the transaction;
- All information that is important to determine the transferred IP correctly and all historical quantitative information behind these assets (costs to develop, former acquisition value if assets were acquired even if long time ago, etc.);
- Options realistically available.

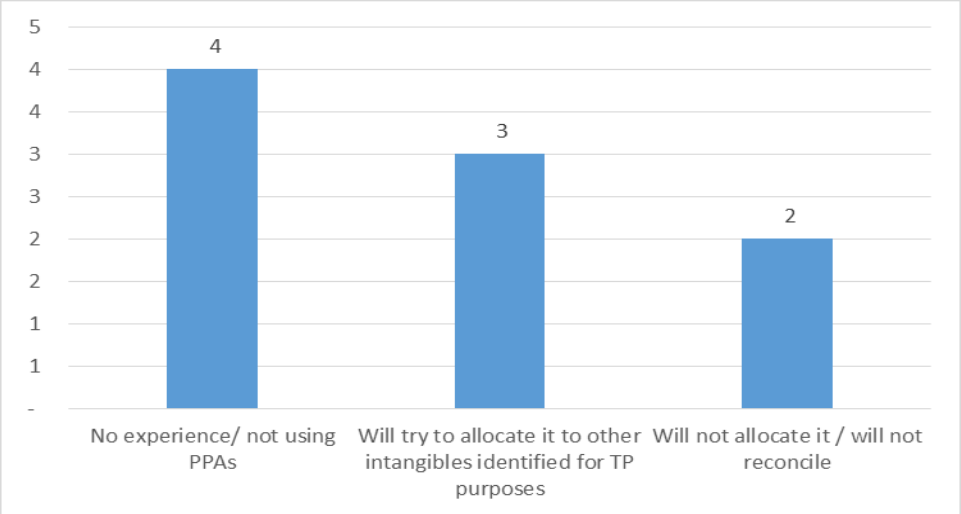
The nine surveyed trade partners respondents confirmed that the collected information is fully reflected in prepared factual, functional and risk analyses that are part of a transfer pricing study.

In terms of the usefulness of PPA analysis, all countries respondents note that they review it, if it is available. The general comment from surveyed trade partners respondents that the financial data may be useful and it is important to understand the approach (and the difference with this approach) with a potential transfer pricing approach. As such, the specialists in the trade partners' countries are consistent with the specialists in the Member States.

In terms of the issue of the goodwill identified in the PPA, respondents were divided. As the Figure below illustrates, some respondents try to allocate the goodwill value to the identified assets whereas others (India and Norway) will not. In this respect, Norway respondent notes that because of the singularity of the tax law in Norway, they avoid the inclusion of goodwill in intangible assets value. Indian respondent notes that goodwill is left as a separate asset in the valuation. Japan, Switzerland, and US experts[84] note that indeed, because of the difference in the definition of intangibles in transfer pricing versus other purposes, the goodwill may to some extent be allocated to other intangible assets.

[84] See discussion below.

Figure 9. Dealing with the goodwill part of PPA – Trade partners



US Regulations note that valuations done for accounting purposes "*may provide a useful starting point but will not be conclusive for purposes of the best method analysis in evaluating the arm's length charge*"[85] in determining payment of transferred intangible (in the US regulations, PCT or platform contribution transaction), and particularly where the accounting treatment of an asset is inconsistent with its economic value. The US regulations proceed with the corresponding examples.[86] Example (1) provides a situation where goodwill might be allocated to other identified intangible assets and Example (3) illustrates a different situation where the transfer value of the intangible is not reconcilable to the value of the same intangible determined in a valuation for accounting purposes.

Study analysis has found, in line with the comments made under point 2.2 above, key differences between PPA valuations and TP valuations:

- Different definition / perimeter / bundling of intangible assets: for instance UK tax legislation does not recognise a "brand" asset, or, as set out above, for TP purposes part or all of what would be defined as goodwill for financial reporting would be included in the value of other specific intangible assets;

- Bias created by the interests of stakeholders (such as for instance, financial management that may be interested in attributing high value to non-depreciable intangibles such as goodwill versus tax management which may be interested in the opposite);

- Differences between perspectives taken: the actual seller's and buyer's perspectives assumed in a TP analysis and a hypothetical market participant assumed under the FVLCTS approach in a PPA (which could impact choice of methodology, financial forecasts, synergies, negotiation power, tax, etc.);

- Related to that, adopting or not the two-sided approach required by TP and the FVLCTS approach under a PPA;

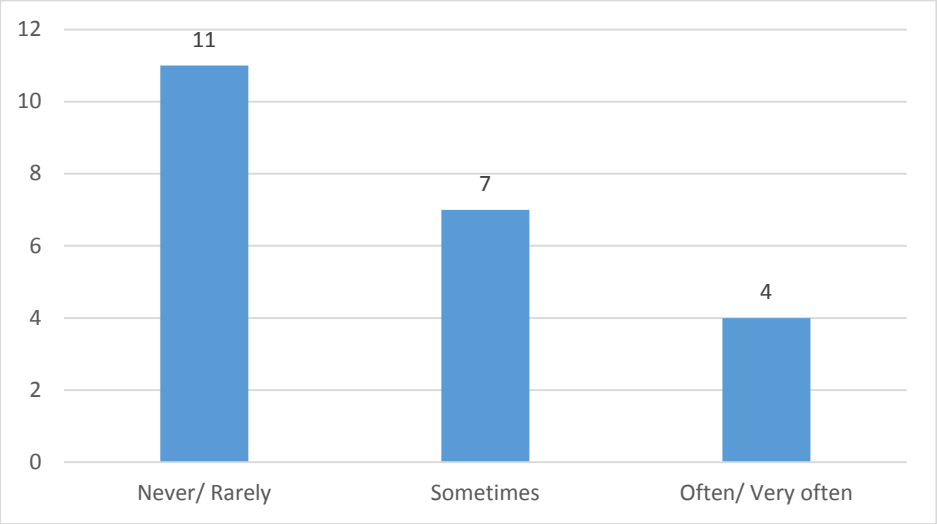
[85] US Treas. Reg. §1.482-7 (g) (2) (vii) Accounting principles, (A).
[86] See US Treas. Reg. §1.482-7 (g) (2) (vii) Accounting principles, (B) Examples (1) and (3).

2.3.3 Valuations from both parties' perspective

- **EU Member States**

Respondents were asked to comment on how often in practice they perform a valuation from both parties' perspective.

Figure 10. Frequency of valuation from both parties' perspectives in practice – EU Member States



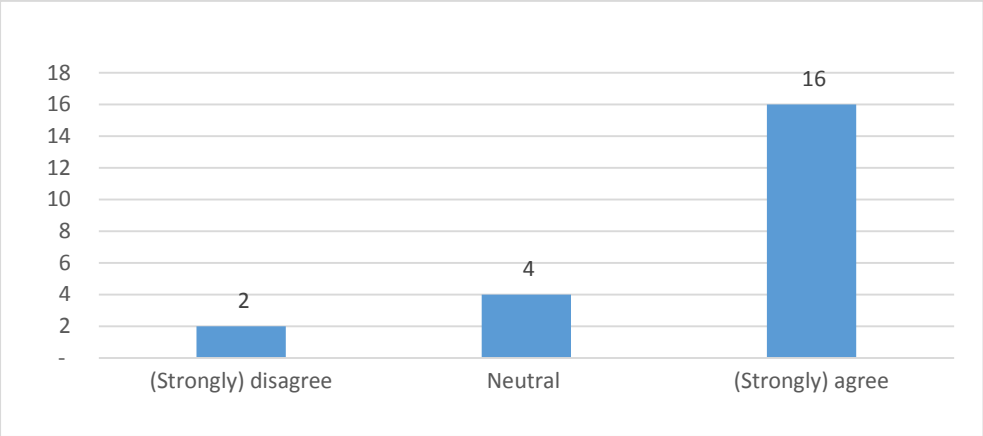
Only four Member States respondents (i.e. Denmark, France, Germany, and the UK) indicated that valuations are performed from both parties' perspectives "often" or "very often". The reasons for not performing the valuations from both parties' perspective may include the following:

- General limited experience with the IP valuation for TP purposes as a whole;
- Data availability – and especially absence of the second forecast that reflects the perspective of the second party;
- Resource limitations (budget/fees and time constraints);
- Absence of the requirement to perform the valuation from both parties' perspective.

The respondents also note that they frequently represent strictly one certain party of the transaction (buyer or seller) – and thus they are not required to look into a valuation from the second party's perspective.

At the same time, the importance of both parties' approach appears to be more significant in theory than in practice, as observed in the figure below.

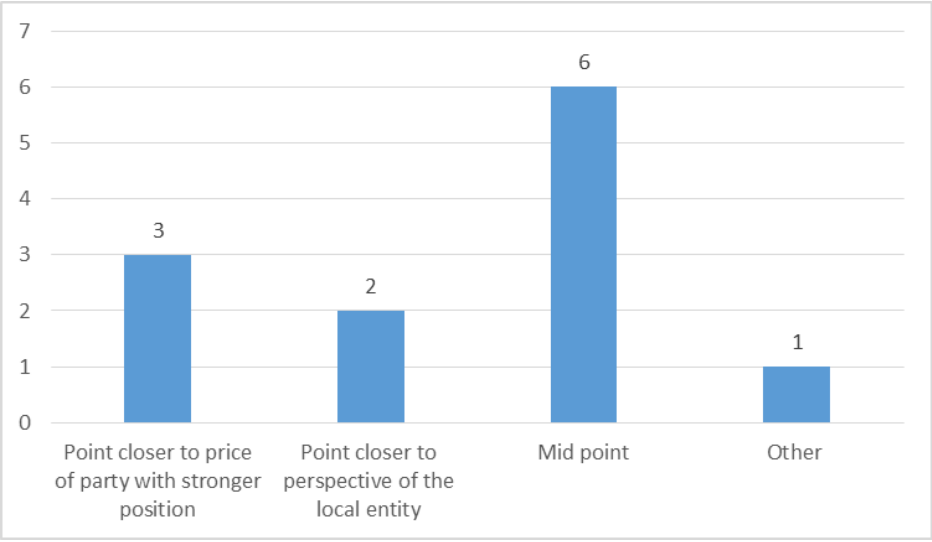
Figure 11. Do you agree that valuations from both parties' perspectives are important? – EU Member States



The survey found that 16 Member States respondents agree with the importance of both parties approach. These countries are: Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Latvia, Lithuania, Luxembourg, Poland, Portugal, Spain, Sweden, and the UK. Only two disagree (Romania and Slovakia).[87] Six Member States respondents did not answer this question.

Next, respondents were asked to comment on the most common approach to selecting a value in the range of values received from buyer's and seller's perspectives (when applying this approach). The answers are summarised in the following figure:

Figure 12. Most common approach to select a value in the range? – EU Member States



[87] Malta was another country which disagreed with importance of both sided valuations but, due to the absence of valuations for TP purposes and to be consistent with the analysis above, it was not accounted for in the Figure.

Only 11 Member States respondents answered this question, due to insufficient experience of most of the countries. Out of these 11:

- Three Member States respondents (i.e. Belgium, the Netherlands and the UK) indicated that they will choose the point that is closest to the price of the party which is stronger (as opposed to the second party who is a price taker). The UK respondent, in this respect gave an example that is it is connected with the use of different methods for each party's side valuation. For instance, a buyer may not want to pay more than replacement value, i.e. it is a maximum price to be paid; in this case, it would not matter what seller wants for the IP based on residual value approach.

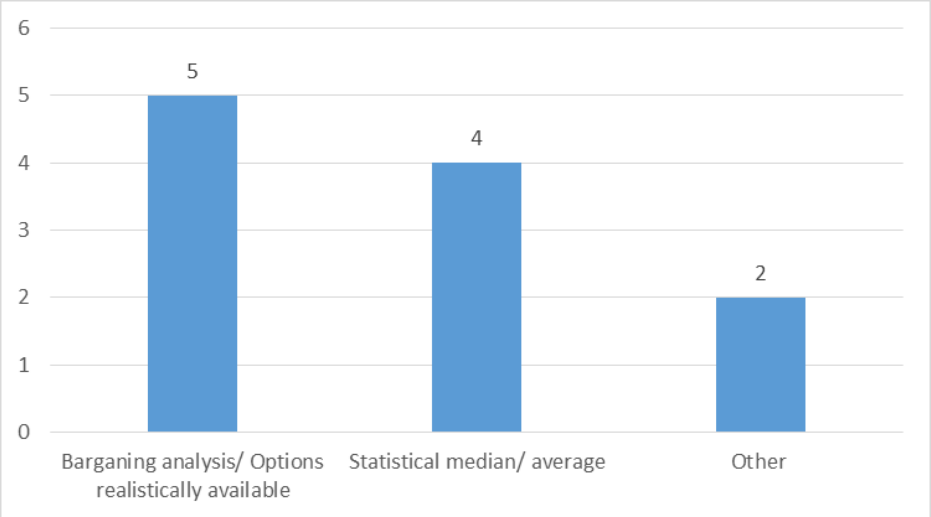
- Two Member States respondents (i.e. France and Finland) indicated that the value selected will be close or equal to the value received for a valuation from the party in the local Member State.

- Six Member States respondents (i.e. Denmark, Germany, Italy, Poland, Romania and Sweden) note that they are most likely to select a mid-point, for the lack of a better analysis.

- One Member State respondent (Spain, noted as "Other" in the figure above) pointed out that there is a range of value for each perspective – i.e. a range for seller and a range for buyer – thus they will try to find an overlap and pick up a value that lies in this range.

Respondents were also asked about the type of analysis that would be used to establish the chosen value:

Figure 13. Analysis used to determine a value in two-sided valuation – EU Member States



- Five Member States respondents (i.e. Belgium, the Netherlands, the UK, Italy and Finland) noted that they attempt bargaining analysis/analysis of options realistically available to the parties.

- Four Member States respondents (i.e. Denmark, Sweden, Germany, and Greece) noted that it is a simple statistical median/ average between two values, and

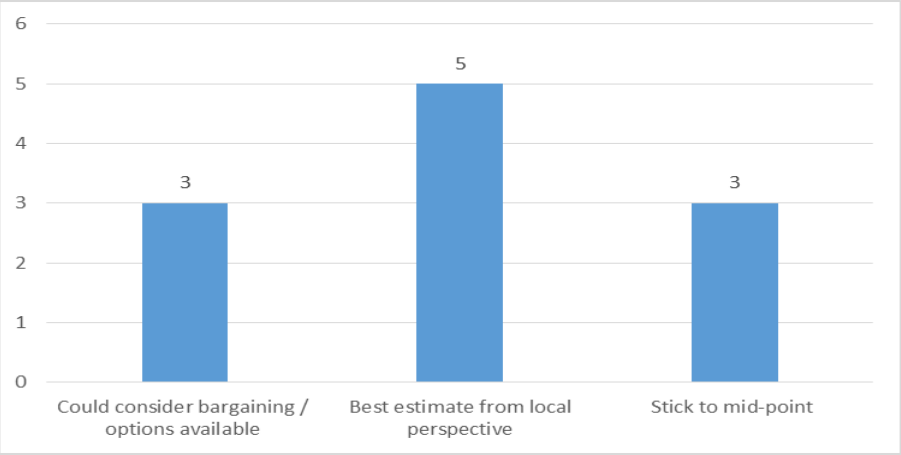
- Two Member States respondents (i.e. Spain and Portugal) indicated that they use another type of analysis (noted as other on figure above):

    - In case of Spain, the respondent commented that they use a point in the overlapping portion of two ranges (as per question above)

    - In the case of Portugal, the external valuer will not be allowed to pick a value in the range and this will be left to the client. However, it is considered in Portugal that any point in the range should be acceptable from the legal perspective.

Finally, the respondents were asked to comment on what approach a tax administration may undertake for choosing a value in the range, if not simply settling on a mid-point value. Respondents' answers are summarised below.

Figure 14. Analysis possibly undertaken by Tax Administration – EU Member States



- Three Member States respondents (i.e. Belgium, Germany, the Netherlands) noted that the tax authorities in this case could consider bargaining argumentation or consideration of the options realistically available;

- Five Member States respondents (i.e. Finland, France, Italy, Spain, and the UK) warn that it is likely that the tax administration will be leaning towards the value that is best from the local perspective.

- Finally, three Member States respondents (i.e. Poland, Portugal and Romania) noted that it is most likely that the tax administration will stick to the mid-point.

- EU Trade partners

With regards to performing the valuation from both parties' perspective, most (five) of the surveyed EU trade partners respondents indicated that they do this "sometimes." The US respondent notes that it carried out valuations from both perspectives "often" and Japanese respondent indicates that it does this "rarely". Two countries respondents (Korea and India) explain that although the concept is familiar in their

respective markets, it is usually one particular party of the transaction that is considered.

All countries but one respondent (Japan) agree that this is important or very important however to consider both perspectives. The US respondent mentions that it is not a matter of choice, but is required by US regulations. Japanese respondent notes that it does not have a strong opinion on the question.

Similar to the respondents in the EU Member States, the trade partners' respondents were asked to comment on the most common approach to select a value, if the two sided approach is used. The responses received can be summed up as follows (due to their diversity and the limited number of respondents, they are not presented graphically):

- Chinese respondent mentioned that the selected figure will be close to the value for valuation from the perspective of the party with the stronger bargaining position.
- Swiss respondent noted that this will be a mid-point.
- The other four countries respondents to the question gave somewhat unique answers:
    - In Australia, according to respondent, only one valuation is done but accounting for both parties' perspectives (the price that a transferor accepts and the transferee is willing to pay),
    - In Canada, it is left to the client to select a number in the range,
    - Norwegian respondent mentions no rules in this respect,
    - The US respondent mentions the cost sharing regulations which need to be taken into account by the valuer.
- Respondents in India, Japan and Korea did not answer due to the lack of experience with the two-sided valuations.

Respondents were further asked about the kind of analysis that is carried out to establish and support the value. The answers of the countries vary:

- Respondent in Australia commented that it is commercial and market analysis that is conducted;
- Respondent in Canada indicated that mid-point is likely to be chosen;
- Respondent in China referred to the functional analysis of the parties;
- Respondent in Norway, similarly, referred to a contribution analysis or a similar analysis;
- The US respondent referred to bargaining analysis/ analysis of options realistically available to the parties;
- Respondent in Switzerland noted that, according to its experience, no special analysis is performed (and mid-point is chosen).

Finally, with respect to experience with the tax authorities' position, it was noted that:

- Four countries respondents (i.e. Australia, Canada, India and the US) noted (similarly to several Member States for this question) that it is likely that the tax authority will select a value which is most in its favour.

- One country respondent (i.e. Norway) noted that it is expected that contribution analysis or alike may be attempted by the tax authority.

2.3.4 Special issues: Workforce, Location Savings, Synergies, Goodwill

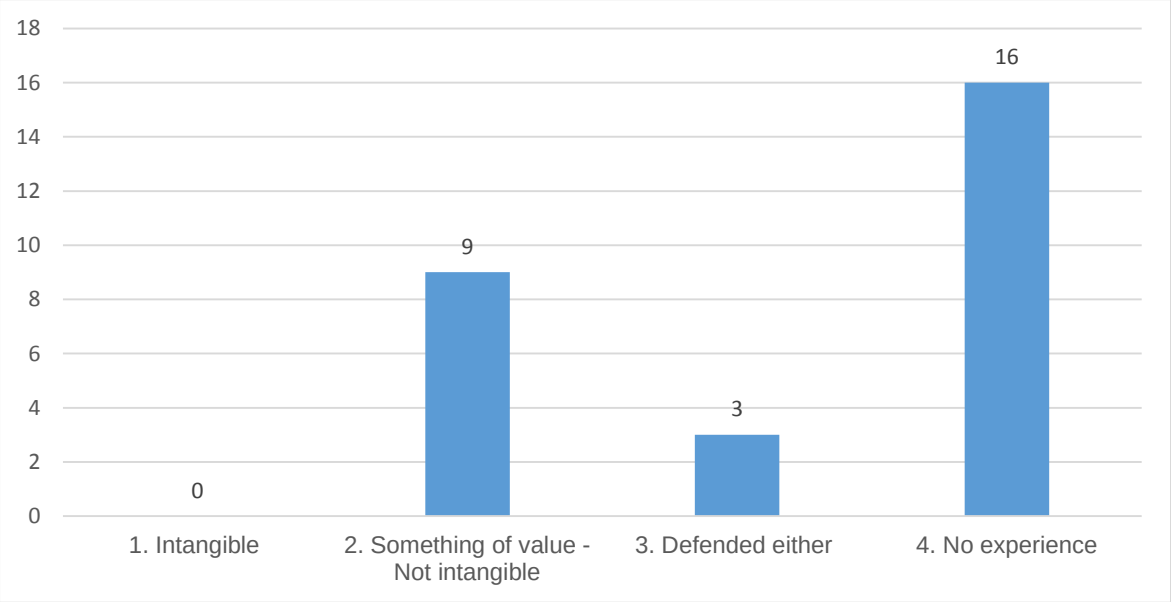
This section summarises the experience observed in the EU and among EU trade partners with regards to the special cases that stem from the definition of IP, such as treatment of workforce, location savings, synergies and goodwill. For this purpose, information collected from all 28 Member States including the countries with no or very limited valuation experience in transfer pricing has been analysed, since it is possible that the legal position or practicalities in their Member State may be relevant for some of these aspects.

- EU Member States

Workforce

EU Member States respondents were asked about the treatment of workforce from the standpoint of a valuation for transfer pricing purposes. The responses of all 28 Member States respondents are summarised below. The majority of respondents (16) indicate no experience with regards to the treatment of workforce in this context. Nine of respondents (i.e. Austria, Belgium, Estonia, Finland, Germany, Greece, the Netherlands, Poland, and the UK) consider workforce "something of value" – in this respect, some Member States respondents refer to the OECD view that workforce is a comparability factor, while others simply recognise that workforce has a value though it is never valued separately. No Member State respondent mentioned that workforce is viewed exclusively as a standalone intangible asset. However three countries respondents (Denmark, Italy and Spain) mark that they have taken opposing positions, i.e. defending that it is either an intangible or not an intangible in different cases. Denmark's expert mentioned that this choice depended on particular facts and circumstances. Italian respondent noted that workforce was characterised as an intangible asset but only in the situation of a full business exit and Spanish respondent stated that workforce was defended as an intangible in the sense of being viewed as a transfer of technology (knowledge and expertise, present in the workforce). The survey results are summarised in the Figure below.

Figure 15. Treatment of workforce – EU Member States

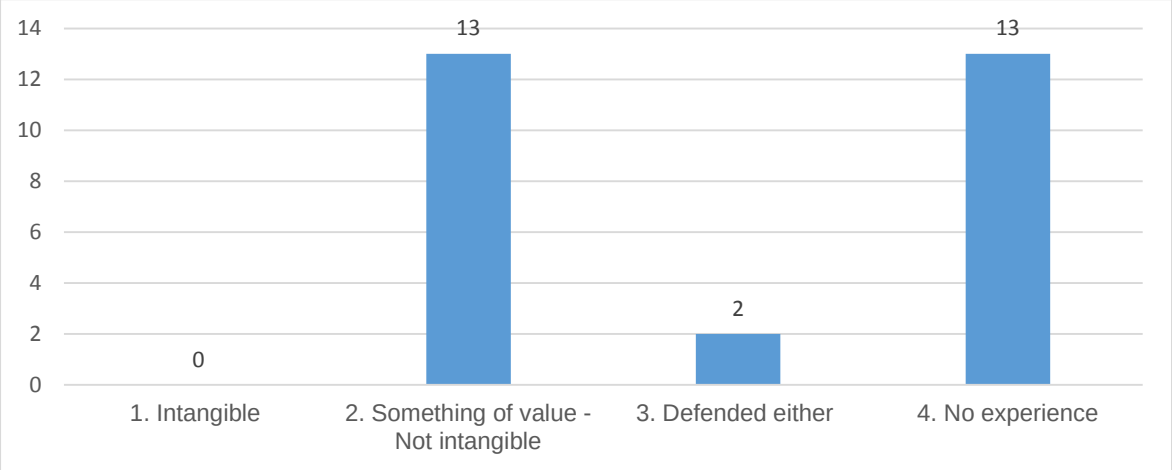


Location savings

The practical observations in the EU show again that many countries do not have experience with this item. The majority of the Member States respondents with experience adhere to the OECD approach that location savings represent a comparability factor and or something of value which is never valued separately but needs to be considered in the valuation[88,89]. Only two Member States respondents mentioned that this item may be an intangible depending on facts and circumstances[90]. The results are illustrated in the figure below.

[88] In Finland, even the Supreme Administrative Court decided in ruling KHO 2013:36 that location savings are a comparability factor.
[89] German experience notes that location savings are part of the valuation pre- and post-restructuring, being split normally 50/50, at mid-point.
[90] In Italy, location savings are linked to going concern value, similar to goodwill. Other country answering that it "could be either" is Czech Republic.

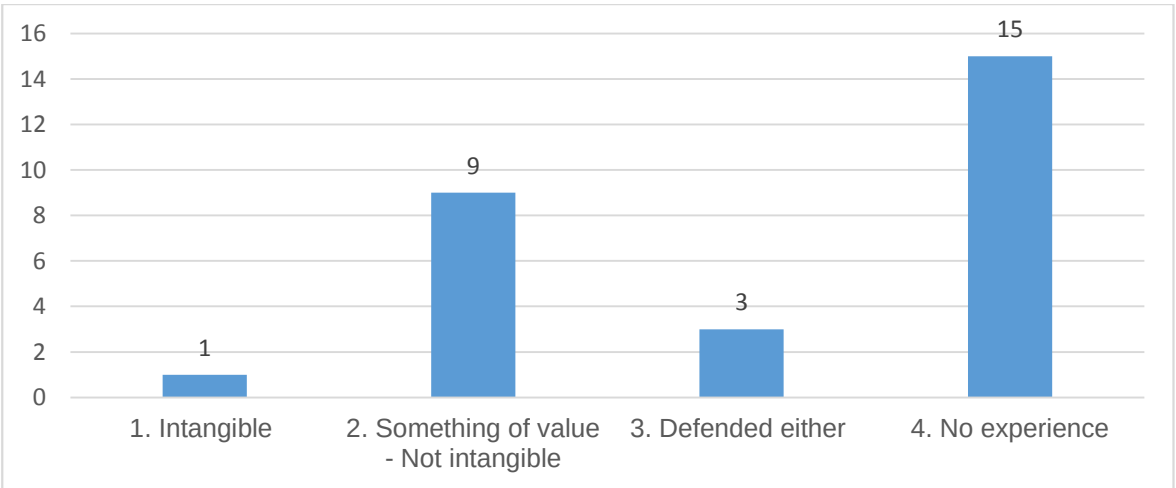
Figure 16. Treatment of location savings – EU Member States



Business synergies[91]

The practical observations in the EU show that, among the Member States with experience on this issue, most Member States respondents again support the OECD view that business synergies are something of value and something to consider in valuations, but are not a separate intangible asset. Respondents in Denmark, France and Italy indicated that they had experience taking both sides of the argument. The Member State respondent that views business synergies (in many cases) as an intangible is Belgium. Member States respondents that indicated that they view business synergies as something of value but not an intangible are: Austria, Finland, Germany, the Netherlands, Poland, Romania, Spain, Sweden and the UK.

Figure 17. Treatment of business synergies – EU Member States



[91] It is interesting to note that inherently different treatment of synergies in PPA and in transfer pricing is already analyzed in the literature on the subject. According to Chandler et al (2010), the fair value in PPAs reflects the synergies that will be realized by a typical market participant but exclude the synergies specific to a buyer. In contrast to that, in transfer pricing, the two-sided approach by definition implies that the valuation (for either party) should include party-specific synergies.

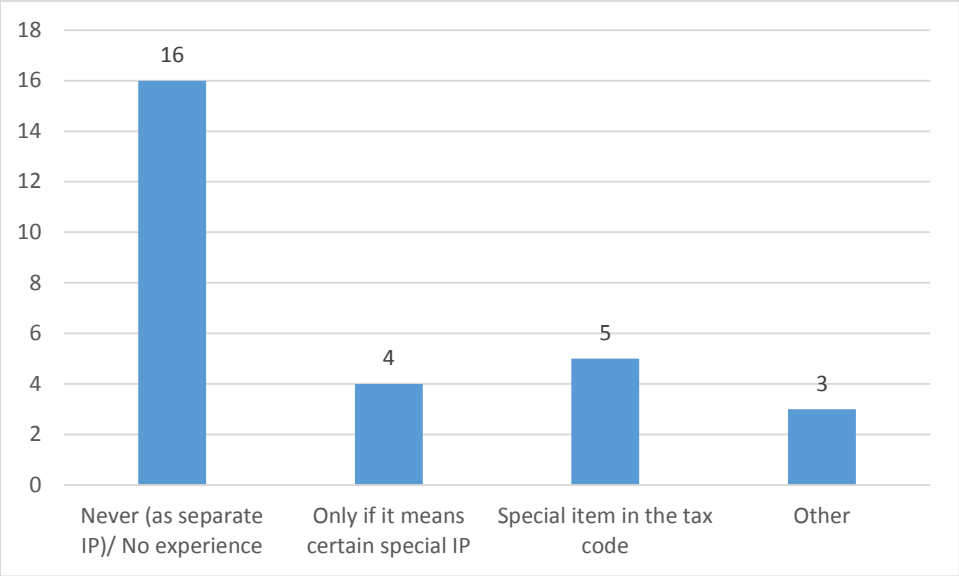
Goodwill

The treatment of goodwill differs significantly from Member State to Member State. A summary of survey results is provided below:

- 16 Member States respondents mention no experience with the treatment of goodwill. In this respect, it is noted that goodwill is never valued separately (Estonia, Finland, Hungary, Italy, Sweden), or the value of goodwill may be allocated between other identified intangibles (Germany) and that goodwill is not an intangible, but it is something of value in case of a transfer (Netherlands).
- Four Member States respondents note that "goodwill" is referred to as a special hard-to-value intangible, such as:
    - know-how to run the business and having a well-functioning mechanism in place (Belgium),
    - the business reputation of the client/ ability to increase profits of business in the future (Greece), or
    - the emotional connection of consumer with the product or services (the UK and Sweden).
- Five Member States respondents note that they do identify goodwill as a separate intangible due to the requirements in the national tax code. Respondents in Austria, Denmark, Poland and Romania note existing special tax statutory rules that characterise goodwill as IP. Czech respondent refers to accounting legislature noting that transfer pricing practitioners will adhere to this legislature in such issues as goodwill.
- Respondents in Malta and Cyprus note that they will treat goodwill as IP. In this respect, it is important to note that these Member States respondents identified themselves as not having any experience of valuing IP for transfer pricing purposes due to the lack of transfer pricing rules and regulations.
- Spanish respondent notes that it sometimes qualifies goodwill as intangibles.[92]

[92] French respondent also notes that it could be the case that goodwill is an intangible for transfer pricing purposes, but this position will be avoided as much as possible; hence France was recorded in the figure as "never."

Figure 18. Have you treated goodwill as intangible from the transfer pricing perspective? – EU Member States

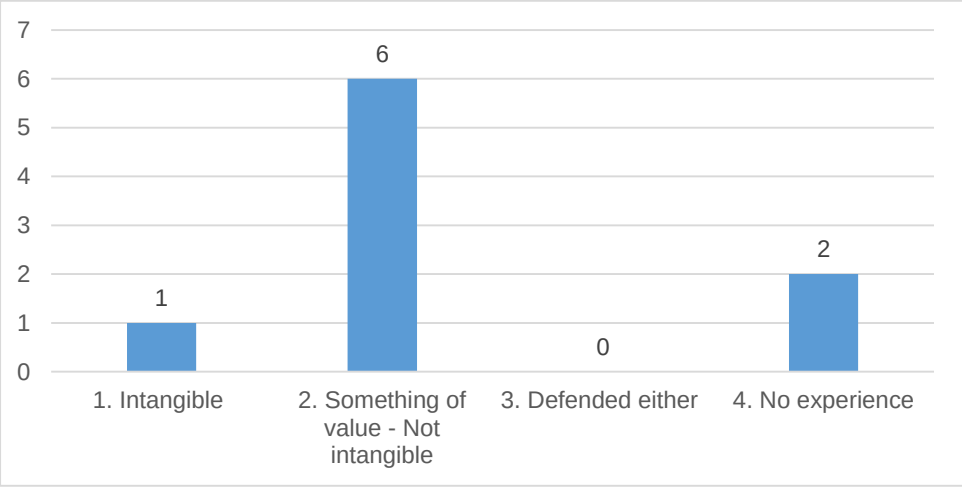


- **EU Main Trade partners**

Workforce

The trade partners respondents were asked the same question as the EU Member States, with similar findings. The only country considering the workforce as an intangible is the respondent in India. Respondents in Australia and Korea indicate that they do not have any experiences in this area.

Figure 19. Treatment of workforce – Trade partners

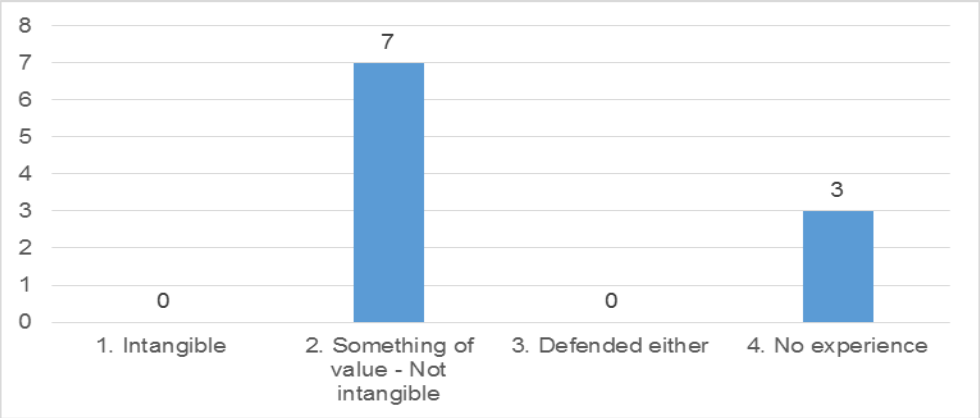


Location Savings

Similar results were found with respect to the treatment of location savings, with all countries respondents with relevant experience in the area indicating that they do not treat it as an intangible. The respondent for India commented that, according to the

United Nations manual, and location savings are not an intangible but something of value where the compensation to India is due.[93]

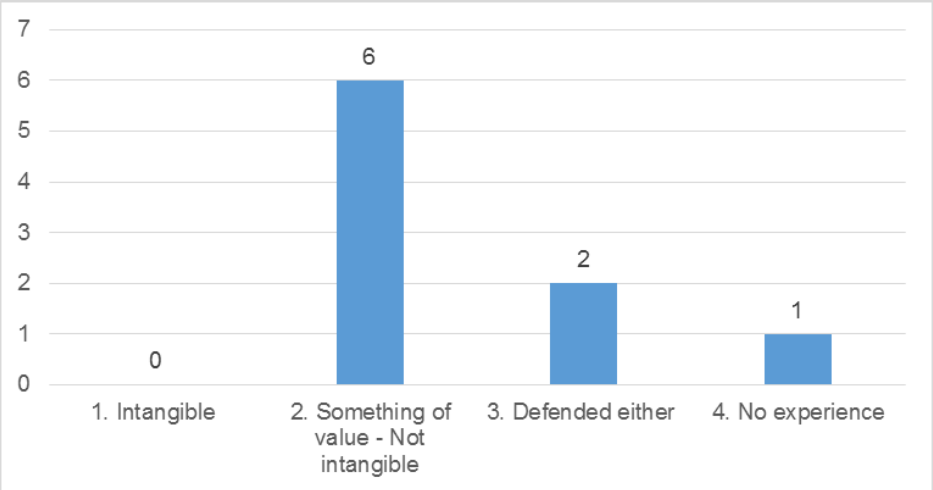
Figure 20. Treatment of location savings – Trade partners



Business Synergies

With regards to business synergies, opinion among surveyed EU trade partners respondents is more controversial with two countries respondents (Australia and the United States) noting that both positions can be defended, depending on the situation. One respondents (in Norway) noted no experience in respect to this issue. The remaining six EU trade partners respondents agree that business synergies is something of value but not an intangible asset.

Figure 21. Treatment of business synergies – Trade partners



[93] The respondent provided an example of one of the recent cases concerning an Indian taxpayer providing contract manufacturing and contract R&D services to its affiliated entities. The tax authorities made an adjustment on account of location savings in determining the arm's length price of the transactions, claiming that the taxpayer's affiliated entities enjoyed locational advantages by shifting contract manufacturing and contract R&D activities from the USA to India, a low-cost jurisdiction. The Transfer Pricing Officer (of the Tax Authority) attributed 50% of the overall cost savings of the affiliates from putting these activities in India to the taxpayer.

Goodwill

Results regarding the treatment of goodwill among trade partners are similar to those among Member States. The comments received in this respect are the following:

- Goodwill is not valued separately but it is part of the overall business value in case of the transfer of a business and it needs to be attached to something (respondents in India, Japan, Norway and Switzerland).
- Respondents in Canada, China and Korea note that it would rather not be valued as a separate asset.
- The US respondent notes that although it is not a stand-alone intangible, it needs to be explicitly considered, based on the US regulations that address this issue.[94]
- Australian respondent notes that it is valued in the sense that it stands for a special intangible such as business reputation and customer base.

[94] See discussion under Section 2.3.2 when dealing with goodwill part of PPA for Trade Partners and corresponding examples in US Treas. Reg. §1.482-7 (g) (2) (vii) Accounting principles, (B).

3. Intangibles valuation methods used in TP

3.1 Introduction

Building on the previous analysis (in Section 2), it can be concluded that, it is not (broadly defined) valuation approaches and methods that are different when used in transfer pricing (vis-à-vis other applications) but the fact that "the use of methods is highly context-specific. The context of the particular valuation will determine which method, or methods, is most appropriate for valuing a specific asset in a particular situation.[95]" In addition, the valuation involves assumptions and judgement by the valuer which, in practice, are translated into how the valuation model is assembled in terms of its building blocks and underlying financial data and how parameters are calibrated and quantified.[96]

The OECD's TPG recognise economic valuation techniques as "a useful tool for determining the arm's length price for transactions involving the transfer of intangibles or rights in intangibles." However, under the TPG, the most appropriate transfer pricing (i.e. OECD endorsed) method must be selected and hence, transfer pricing specialists (usually) present economic valuation techniques chosen for analysis as consistent with an OECD method(s).

The follow elements are contained in this section:

(1) An overview of general valuation approaches, namely, market-, income- and cost-, and the specific valuation methods under these approaches

(2) Description on how these approaches fit in the framework of the OECD methods for transfer pricing

(3) Explanations, based on the survey performed, of the state of play in the EU Member States in terms of valuation techniques used currently for transfer pricing valuations of IP

(4) A SWOT analysis of these methods, in theory and based on the survey.

(5) Indication of potential solutions that are especially appropriate for transfer pricing purposes that may address some of the shortcomings of valuation methodologies in a transfer pricing context. The main two solutions investigated are the use of more than one method to perform a valuation and the use of price adjustment clauses.

3.2 Valuation approaches and methods

3.2.1 Specific issues in valuing intangibles

The valuation of intangible assets is generally made more complex by the heterogeneous nature of these intangibles. The uniqueness of intangible assets makes comparisons with other assets more difficult, thereby limiting the usefulness of comparison based pricing. As stated in the RTD report, as a result of this uniqueness, "*valuations are often based on assumptions about the asset's future use, what*

[95] The RTD report at 12.
[96] The RTD report at 5-6.

important milestones are to be met and what management decisions will be taken."[97] This conclusion is not limited to a particular field (e.g. accounting, financial reporting, etc.) but is equally true for transfer pricing.

The economic characteristics of intangible assets are rather well-known, and are significantly different to tangible assets[98]:

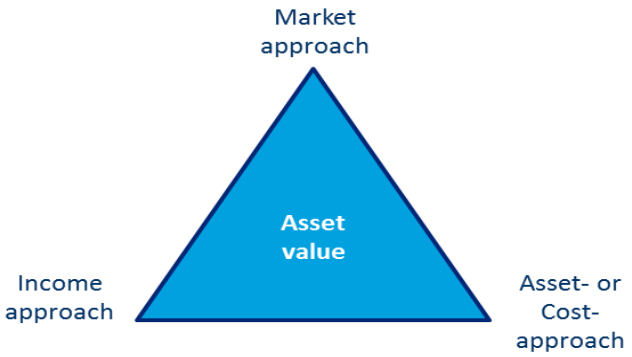
- Intangible assets are in general not diminished by use, and can typically be used simultaneously by more than one party (from an economic point of view, although this may of course be subject to legal / contractual limitations);
- There is seldom a linear relationship between the cost of creating the asset and its value. The risk of wasted investment is high and variable, but this is usually countered by a high upside potential;
- The value of intangibles often results from linkages with other assets; and
- Most companies have inadequate metrics regarding the strength, performance and value of their intangibles.

This does not mean that valuations for intangibles cannot be prepared reliably, but the approaches used, although based on similar principles, are often more complex than for tangible assets, and additional information and support may be required for a robust valuation.

3.2.2 General valuation approaches: market-, cost-, and income

The valuation methodologies in general can be divided into three main approaches:

Figure 22.Valuation approaches



Although nearly all valuation methods fall under one (or more) of these three approaches, it is sometimes arguable[99] to determine which particular approach is selected.

[97] Ibid, at 5.
[98] See for instance, Baruch (2001) at 2-4.
[99] One method can be considered both market and income approach, e.g. the Relief from royalty method.

While the broad principles of these approaches are similar when applied to different asset classes and to businesses, the practical application and appropriate methodology can be more complex for intangible assets.

(1) The Income Approach *quantifies* the net present value of future benefits associated with ownership of the business or asset. The estimated future benefits that accrue to the owner are typically the future expected "income", i.e. earnings or cash flows obtained from exploitation of the asset. A key aspect of this approach as applied to intangible assets is the method by which earnings or cash flows related to a specific intangible asset are estimated / derived, starting from the earnings or cash flows of the business as a whole. This forms the subject of several specific methods analysed below.

Next, the forecast of the earnings is discounted or capitalised at a rate appropriate for the risks associated with those future benefits. Discounting is a standard approach in the application of the income approach (but also relevant in several cases under the other approaches below).

(2) The Market Approach estimates the value of an asset by a reference to "market" prices. In respect of valuations of businesses, both M&A activity and stock market activity are considered in deriving various "benchmarks" (such as multiples of financial or non-financial indicators). On the other hand, for valuations of intangible assets, there may not be an available (or disclosed) market price for the full transfer of such assets, due both to the less frequent nature of such outright transfers between unrelated parties, and to the uniqueness of such assets. The market approach may also be based on identification of a "market" price (such a royalty for rights to use an intangible or a price premium enjoyed by the products containing the valued IP), which is then translated into a future earnings stream and discounted to calculate an overall value. However, such a methodology (relief from royalty or price premium methods) may be referred to, based on focus and preference of the valuer, as both a market and an income approach.

(3) The Cost-based Approach connects a value of an individual asset with a measure of its cost. The cost-based approach has certain limitations in the valuation of intangible assets, as the value generated by an intangible may have no or limited connection to the costs incurred in its development, but may remain relevant in the case of intangible assets that can be (quickly) re-created or re-acquired to a similar standard. One can further expect that in a world of perfect competition, where intangibles can be developed in many competing forms, intangible values would converge towards a fair return on investments, i.e. costs incurred.

A subset of the cost-based approach, used in the valuation of businesses, is the asset-based approach. This is consistent with the notion that a business is worth the sum of its parts, i.e. its individual assets (which in turn may be valued by one of the three main approaches). This approach is less common in transfer pricing, as it concerns the value of an entire business rather than of a specific asset. For general valuation purposes, it is mainly used for specific asset-heavy sectors (real estate, financial institutions, etc.) or in specific circumstances (business closure or restructuring, etc.).

3.2.3 Main Valuation methodologies

Under the general valuation approaches, there are specific valuation techniques. For the purposes of the present study, the following main techniques have been defined

(and presented for the review by survey respondents) as potential methods for valuing intangibles for transfer pricing purposes. These techniques are presented in the table below and the detailed description of these valuation methodologies is provided in *Appendix 2.A – Description of valuation methodologies*.

Table 2. Valuation methodologies for IP

Valuation Method	Approach	Description
Relief from royalty method	Market due to royalty as a market price. (However, could be considered Income approach since it involves a simulation of Income flow)	The "relief from royalty" method states that the income attributable to the intangible can be estimated based on a "deemed royalty" payable for the rights to use the subject intangible asset. The estimated income (or cash flows) are then included in a DCF framework by discounting them to arrive at a present value estimate. The basis for estimating royalties estimation can vary: typically based on license agreements for comparable IP, and less commonly on various "rules of thumb" (such as a certain profit split or a certain % of sales), "industry norms", etc.
Premium price/ profit method	Market, due to market price used in chosen version of the model. However, could be classified Income approach since it involves a simulation of income flow.	Under this method the income attributable to the intangible asset is given by the profit differential arising from a price premium of products using certain IP over usual substitute products (e.g. branded products over non-branded). The application of the DCF technique is similar to that described above.
Historical costs method	Cost (based on historic costs incurred)	Value is obtained by capitalisation of historical costs incurred for the development of the intangible asset.
Replacement costs method	Cost (based on the estimate of the costs needed)	Value is obtained by capitalisation of forecast costs to be incurred for the replacement of intangible asset. Replacement cost measures the total cost, in current prices, to develop a new intangible asset having the same functionality or utility as the intangible asset. As a variation of this method, the obtained value may include "opportunity costs" (profits lost during the period during which IP is (re) developed.
Residual value method	Income (based on the estimate of income cash flow attributable to intangible)	Based on the forecast future free cash flow (relevant for IP-containing products and services). The cash flows are discounted to arrive at a present value estimate. To determine the IP component, [at least in TP], the total cash flows may be adjusted for "routine return(s)" to account for profits from normal economic activity rather than intangible-generated. The resulting "residual profit" cash flow is considered to be attributable to the subject intangible(s) and is further discounted and summed up.
Excess Earnings Method	Income (based on the estimate of income cash flow attributable to intangible)	Similar to above, with the exception that the routine returns are estimated as asset return(s) on contributory assets (tangibles, other intangibles, financial assets). It is a method that is often used for valuations in financial reporting for purchase price allocation purposes.

3.2.4 Other valuation methods (for valuation of business)

For completeness of data, additional methods were included in the survey. The remainder of the methods present ways to obtain a full value of a going concern business rather than an (intangible) asset. However, since intangible assets are often valued in the context of full business relocation or restructuring, they could be potentially used in transfer pricing. These methods are described in the following table:

Table 3. Additional Valuation methodologies

Valuation Method	Approach	Description
Net asset value methodology	Asset (since based on balance sheet items)	A type of business valuation that focuses on a company's net asset value, or the fair-market value of its total assets minus its total liabilities. The asset-based approach basically asks what it would cost to recreate the business as a collection of its assets, where this is possible.
Comparable multiples	Market	The method looks at comparable (peer) businesses for which independent market value information exists (based on stock market listings) in order to determine the value of the subject business. Common market multiples include the following: enterprise value to sales (EV/S), enterprise value to EBIT (EV/EBIT) and enterprise value to EBITDA (EV/EBITDA), price to earnings (P/E), price to book (P/B) and price to free cash flow (P/FCF). To get a better indication of how a firm compares to rivals, valuers need to take into consideration the relative performance of the firm compared to a peer group in terms of i) the growth, ii) margin levels and iii) capital intensity.
Transaction multiples	Market	Similar method as below but market value indications and multiples come from transactions with entire companies rather than from quoted shares. The difficulty with this approach is the limited availability of financial data regarding past transactions between private companies. Secondly, acquirers usually consider certain strategic motives when acquiring a target, e.g. synergy benefits or access to a new market/clientele. Transaction multiples, therefore, can differ greatly on a case by case basis. A comparable transaction approach is generally used in conjunction with other valuation techniques including the discounted cash flow and other comparable company analysis techniques.
Market capitalisation method	Market	The market capitalisation of a company is simply its share price multiplied by the number of shares a company has outstanding. Enterprise value is calculated as the market capitalisation plus debt, minority interest and preferred shares, minus total cash and cash equivalents.
Discounted dividend model ("DDM")	Income	This approach is similar to the DCF model, the only difference being that instead of the unlevered free cash flows one discounts the expected / potential stream of dividends, attributable to the equity holders. The appropriate discount rate used under the DDM is the levered cost of equity.
Real Option Valuation	Other (option)	An approach to managing projects under uncertainty that implicitly accounts for the ability of managers to alter and improve these projects as technological and market conditions change. For example, by purchasing a plot of land near its factory now, a firm gains the real option of expanding its factory later. In determining whether or not to purchase the land, the firm should account for this real option value.

3.2.5 Discounting technique

Discounting is the mathematical / financial approach of estimating the present value of a payment or a stream of payments that is to be received in the future. Given the time value of money, a euro is worth more today than it would be worth tomorrow given its capacity to earn interest, and separately a euro in hand is worth more than one to be received in the future, taking into account the risk of not receiving it. Discounting is the method used to estimate how much these future payments are worth today.

Accordingly, "discounted cash flow" ("DCF") refers to the technique that allows for expressing future forecasted cash flow or income in today's "euros", accounting for the time value of money and for risk factors. All of the methodologies expressed in Table 2

above may employ discounting techniques, except a historic cost approach which would rather involve "capitalising".[100]

The OECD confirms this view, noting that there are multiple valuation techniques using discounting of cash flows: "Valuation 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. There are many variations of these valuation techniques."[101]

3.3 Alignment of valuation methodologies with the OECD - authorised TP methods

3.3.1 OECD methodologies

In general, OECD valuation methodologies aim to be applicable to various types of transactions, including intra-group transactions with goods and services, in the normal course of business of the relevant entities, as well as one-off transactions with tangible or intangible assets of such entities. Accordingly, the overall categorisation and description of these methodologies does not reconcile automatically with methods used in the valuations of intangibles. In the remainder of this subsection the standard OECD methodologies are set out, and under Section 3.3.2 (Table 4) suggested reconciliation between these standard methodologies and intangible asset valuation methodologies is provided.

In transfer pricing, the main five methods are distinguished on the basis of being able to establish a "direct" comparison between the tested transfer price and the price established by application of the method. These five methods are summarised as follows and are described in detail in *Appendix 3 – Description of OECD methodologies*:

- Comparable uncontrolled price ("CUP") method: provides the most direct comparison by comparing prices (including royalties as a "price" for the use of an intangible) in the related party transactions with prices in the comparable transactions. Therefore, due to such direct comparison, the CUP method has the strictest comparability conditions.
- Cost plus method: evaluates the gross margin / mark up earned in the tested transaction by comparison on the same type of margin in the comparable transaction. There is one level of separation from the CUP methodology in the way that methodology compares margins rather than absolute prices. Cost plus method, as such, is rarely used in connection with the intangibles given the fact that gross (production) prices are often difficult to establish for intangibles, but also based on the fact that it has been argued by some – among which the OECD - that there may be disconnect between the value of intangibles and the underlying costs of their development.
- Resale price method: looks at gross margin earned at a reseller side instead of mark-up on the selling party (typically manufacturer or service provider). Again, the same type of comparison is pursued with the margins in unrelated transactions of similar type. The resale price method appears to be most applicable for testing resellers that do not significantly change the product – or the intangible. Situations

[100] Compounding is a technique that is opposite of discounting which translates yesterday's values in today's euros or the present values in tomorrow's euro terms.
[101] OECD, *Aligning transfer pricing outcomes with value creation*, para. 6.157

whereby a party would re-sell an intangible, or a license to an intangible, if technically not impossible, tend not to be common, making the resale price method a less used approach for intangibles.

- Transactional net margin method (TNMM): by construction is similar to cost plus and resale price methodologies but has less strict standards of comparability, and implies looking at the net operating profits earned in (aggregated) transactions. In practice, the TNMM proves to be most used method as it allows comparing overall operating profit of the tested (i.e. related) entity with the operating profit of generally comparable companies observed in similar markets and industry. Due to the abstraction of separate / individual transactions, the method allows a transfer pricing practitioner to look at annual profitability and compare it with identified benchmarks. By its definition, the TNMM method is applied only to test a "routine" activity, i.e. the activity for which benchmarks could exist. In application to the transactions involving a transfer or license of an intangible, the TNMM method typically implies that the profitability remaining after deducting a routine margin (established by comparing the comparable companies' profitability) is attributable to an excess profit capacity generally attributable to intangibles. In this way, TNMM is an indirect method for intangibles pricing.
- The transactional profit split methodology: looks at the overall (net) profit earned by parties at the both end of the transaction. The allocation of this profit is then pursued by the methodology, either directly, based on the contribution of the parties (contribution analysis), or after deducting "routine" returns to the parties for their regular business activities (such as routine manufacturing, distribution, service, etc.). As such, profit split method can derive an arm's length remuneration to the parties – presumably parties on both sides of transactions own and/or develop intangibles. If this is not a case (and only one party owns intangibles), the method appears to converge to the TNMM methodology described above (testing the party with no intangible as an entity with routine functions).

In their "classical" application, the OECD methodologies aim to establish a price for regularly occurring transactions that do not have a long-lasting effect. This is not a case of a transfer of intangible assets which generally has a long-lasting effect. However, nothing in design of the OECD methodologies precludes their use in combination with the discounted cash flow / discounted income techniques. To the contrary, the OECD makes explicit reference to cash flow technique in its Action 8-10 report.[102] In practice, this will mean that the relevant financial result from one-year price or margin will be forecast into the future and the present value can be obtained by a discounting technique.

3.3.2 Fitting the two together

Establishing a link between a valuation technique and approach and an OECD methodology is, to some extent, a subjective decision of a transfer pricing practitioner. In the same way as the valuation expert can describe a royalty relief method as an income approach or a market approach, depending on his/her focus of the various elements of the methodology, a transfer pricing practitioner may qualify a particular valuation model/approach under a different transfer pricing methodology. The possible "fit" of the surveyed methodology and the OECD methodologies is explored in the table below.

[102] OECD, *Aligning transfer pricing outcomes with value creation*, sections D.2.6.3 – D.2.6.4.

Table 4. OECD characterisation of valuation methods

Valuation methods for intangible assets	Possible characterisation from OECD perspective	Brief reasoning
Relief from royalty	CUP	The deemed royalty is typically based on the royalty rates observed in the market based on the search under the CUP method
Premium profits /price	CUP	The premium profits stem from comparison of prices for products containing the intangible vis-à-vis prices for generic product
Historic/ replacement cost	Cost plus	Similar to the cost plus methodology which accounts for underlying costs; especially if the historic/ replacement costs are accounted with inclusion of a (limited) profit element (mark-up)
Residual value method	TNMM	The full forecast of operating profits/ cash flows is typically adjusted for a routine profit from regular business activity. The routine profit is benchmarked based on the principles of the TNMM.
Excess earnings	TNMM	Similar to the method above, but instead of deducting a routine profit on other activities, under this method a return on contributory assets is deducted. These returns on identifiable assets may be subject to a benchmarking study.

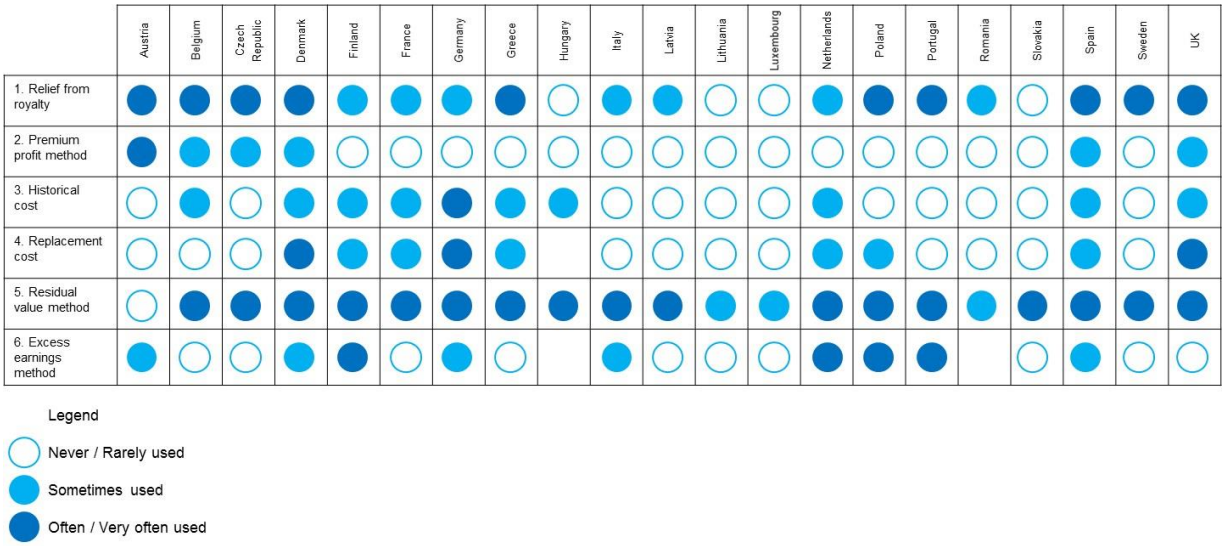
The table above provides only one possibility of merging the methods and it should be kept it mind that the precise characterisation will depend on the details of the studied transfer. An example provided by one survey respondent involved a case of a contract manufacturer in the local country which acquires the rights to a trademark from a related foreign entity. To determine the value for the trademark, the profitability of the contract manufacturer was estimated, after deducting a routine return for manufacturing activities from overall forecast profitability. The "residual profit", i.e. profit remaining after a routine return deduction (and after summing up and discounting) was considered to be an arm's length value of the trademark. The methodology was described as a profit split methodology.

3.4 Use of valuation methods in transfer pricing

3.4.1 EU Member States

In respect of surveyed methods, the respondents from each Member State were asked to rank the usage of each method in valuation of IP for transfer pricing purposes. Responses to this question were provided by 21 Member States respondents. Seven countries which identified no cases of valuation for transfer pricing purposes were omitted (Croatia, Cyprus, Malta, Ireland, and Slovenia, Bulgaria and Estonia).

Figure 23. Usage of main IP valuation methods for TP purposes

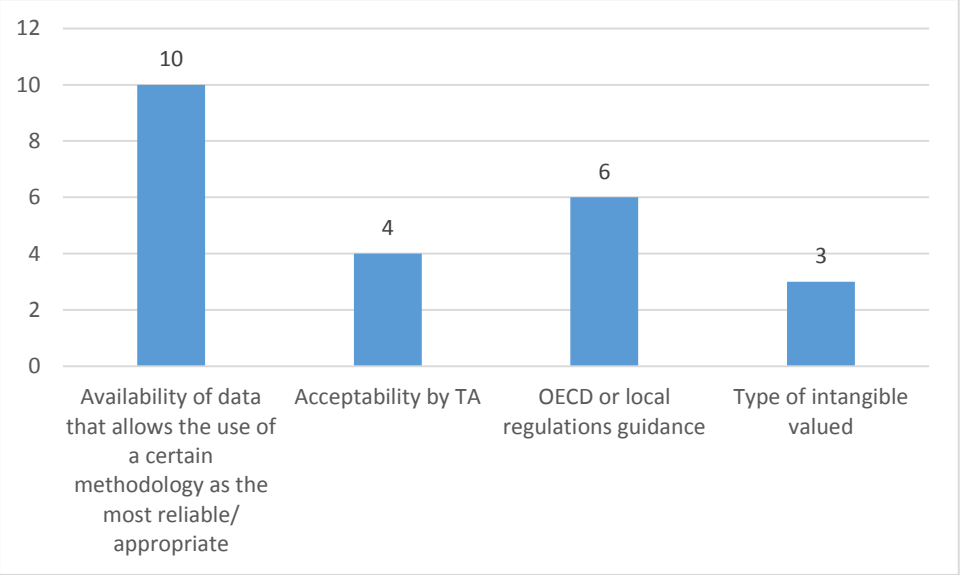


It is observed that method 5, defined as "Residual value method" is ranked as the most popular by respondents. Only one country noted that it is rarely used (Austria) whereas three countries noted it is used sometimes (Lithuania, Luxembourg, and Romania). It is important to note that, in these three countries, the valuation of intangibles for TP purposes appears to be limited.

The second method in popularity is method 1, "Relief from royalty" with 10 Member States respondents indicating that they use it frequently while seven others note that it is sometimes used.

With regards to the approach for selecting the (valuation) method, Member States respondents were asked to identify the most important factors driving the decision to use a specific valuation method(s) to value an intangible asset, e.g. OECD historical hierarchy of methods, acceptability by local tax administration, availability of (reliable) information on parameters, availability of reliable forecast, or any other factor.

Figure 24. Most important factors in selecting the valuation method

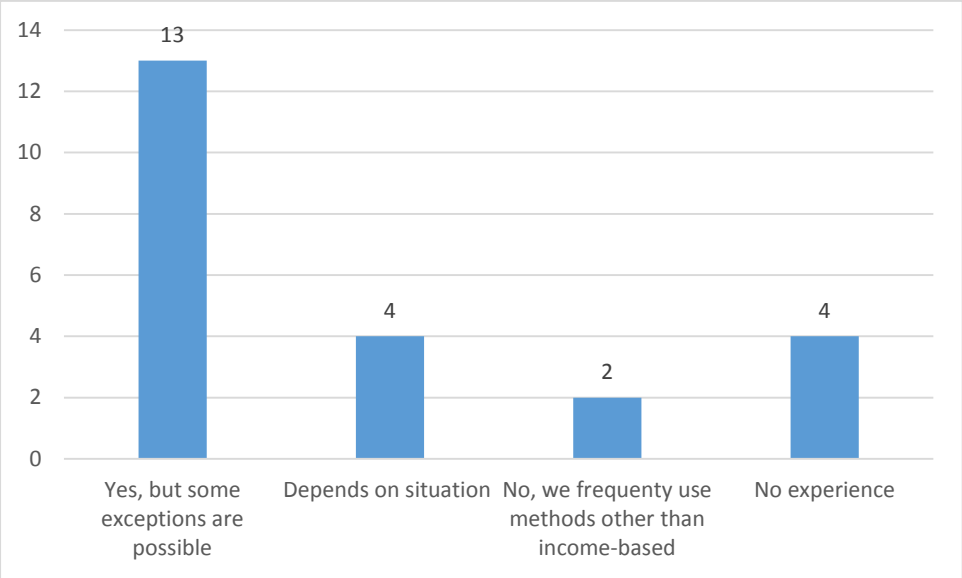


For this question, 18 Member State respondents answered. Out of 18 responses, five provided more than one answer as the first and second priorities. In this case, both answers were included in the analysis; thus the total number of responses accounted for in the graph is 23. One responded answered "all" factors and thus the most important factor could not be differentiated from each other. This response was discounted from the sample. Other Member States respondent noted that they lack experience with valuations of IP for transfer pricing purposes, and therefore had no input.

As illustrated from the figure above, availability of (internal and market) data that makes a certain method the most reliable was indicated as the most important factor. Consistency with the OECD and/or local regulations was indicated six times; the other reasons indicated as most important were acceptability / experience with the local tax administration and type of intangible valued.

A related question in the survey inquired whether a Member State respondent agreed with the OECD finding that the income-based methods may be most useful than cost-based or market-based approaches and to what degree the use of income-based methods is a common practice.

Figure 25. Are the income-based methods a common practice? – EU Member States



As with other questions, five Member States were not accounted for in the summary figure due to the limited occurrence of valuations for transfer pricing purposes. Out of 23 Member States responses accounted for, 13 responded that use income methods are most often used, with some exceptions being possible. Four Member States respondents (i.e. Belgium, France, Poland and Portugal) provided an answer "this depended on situation," whereas two respondents (Romania and the UK[103]) responded that income-based methodologies are not a commonly accepted national practice. Finally, four Member States respondents indicated that they were unaware of experiences in their respective market.

The next question inquired as to which valuation approaches were generally accepted by the tax authorities. Out of 20 Member States respondents answering this question, 19 answered that all approaches (i.e. income-, cost- and market-) are generally accepted. One Member State respondent (Italy) commented on acceptance of only CUP-consistent (market approach) and profit split (income-based approach) methods. Out of the 19 Member States respondents where all methods are accepted, three commented on preference for income-approach and another two – on preference for market- or income approaches.

Lastly, the respondents were asked about times they would consider market-based methods (in terms royalty relief and price premium methods) and cost-methods to be more appropriate than the residual value method or excess earnings method.

The examples cited for situations when market-based methods (relief from royalty or premium profit /price methods) were selected as more appropriate included the following:

- In situations where internal comparables (quoting similar royalty rates for instance) are available (mentioned by Belgium respondent);

[103] The UK uses relief from royalty (under market approach) and cost-based methods most often.

- When there is no business plan and thus not possible to use an income method (like the residual value method) but broadly comparable prices can be identified (Italy);
- When there is a third party price available for the full bundle of intangibles acquired (for instance, the IP is acquired from a third party and subsequently transferred intercompany) (quoted by Romanian respondent);
- For trademarks and trade names (if comparable royalty arrangements are possible to identify), mentioned by Swedish respondent;

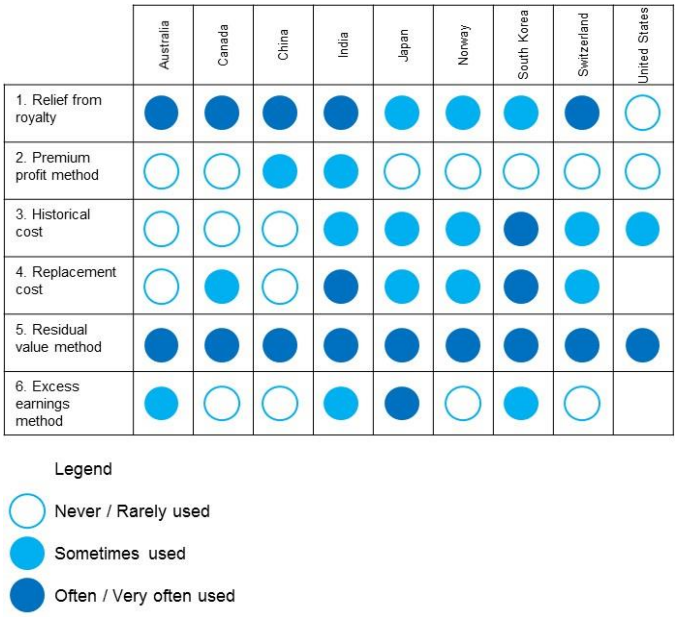
The cost based methods (historical costs or replacement costs) were found more appropriate by respondents in the following situations:

- When the final product is not fully developed, for example pharmaceuticals up to a certain phase of development (when there is high degree of uncertainty in financial forecast to use discounted cash flow / residual profit method). Four countries respondents provided the example of pharma-type situation (Belgium, Poland, Sweden, and the UK);
- When valuation concerns a software (e.g. computer games) or simple / copyrighted IP which can be replicated (six countries respondents provided an example of the software-type product, these are from Belgium, Cyprus, Germany, Latvia, Netherlands, and Poland);
- When valuated IP may be of limited / not significant value (mentioned by Spain).

3.4.2 EU trade partners

The experience of the trade partners with respect to methods is similar to EU Member States. Overall, respondents also ranked method 5 (residual value method) as the most popular. Modelling based on the projected free cash flows and adjusting for routine return is ranked as often used among the nine trade partners surveyed.

Figure 26. Usage of main IP valuation methods for TP purposes – Trade partners

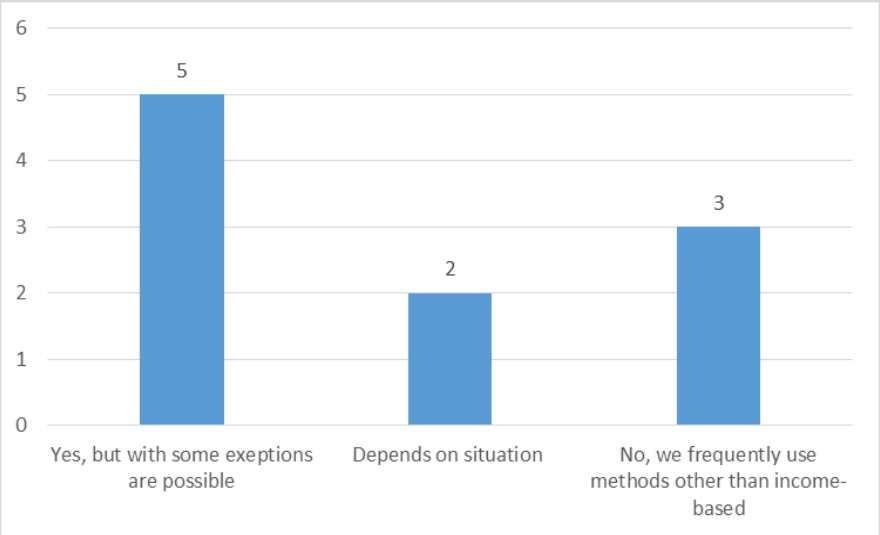


With regards to the factors most important for determining a valuation approach, the countries provided slightly different answers (similar to the EU Member States responses):

- Respondents from Korea and Norway mentioned that, indeed, the availability of data is probably the most important factor.
- Respondents from China, India and Switzerland identified the acceptability by the tax administration, given that data is available, as the most important factor.
- Australian respondent responded that its focus is on identifying the most appropriate and reliable method in line with what third parties would choose, taking into account available data and experience with the tax administration.
- Canadian respondent mentioned that it is typically income-based methods that are used; Japanese respondent echoes the answer noting that TNMM-based or profit-based methodology is typically used in valuations of IP for transfer pricing purposes
- Finally, the US respondent stressed that the most important step is to correctly identify the rights that are to be valued, with the next priority being the guidance in the US regulations, and the use of "the best method" approach.

With respect to the common use of the income-based methods in practice, the answers of trade partners' specialists were predominately affirmative, as illustrated below.

Figure 27. Are the income-based methods a common practice? – Trade partners



3.5 SWOT analysis of valuation methods

An analysis of the Strengths, Weaknesses, Opportunities and Threats (SWOT) of the valuation methods was carried out. The SWOT analysis was conducted in accordance with the following criteria:

(1) Economic Relevance – this feature measures to what degree the methodology reflects the economic value of the intangible studied;

(2) Objectivity – to what degree the main parameters can be objectivised based on the comparable or taxpayer-specific data. A higher objectivity, in a way, may narrow the range of the values obtained through application of the methodology;

(3) Relative ease of use – this feature attempts to measure the how simple the methodology is to understand and ease of adoption for use by a valuer (TP practitioner who acts as a valuer);

(4) Appropriate benchmarks – this feature looks at the degree to which (appropriate) market benchmarks are available. For instance, most intangibles will not have exact comparables – e.g. it is not possible to find a comparable to "Coca Cola" brand and trademark. Similarly, customer relationships in a particular business or industry and territory may not have any "comparables";

(5) Market connection – this measures to what degree the key inputs can be observed directly on the market (i.e. to what degree the methodology measures the price directly based on market price); and

(6) Amount of data required – this feature measures the amount and extent of data required for applying the methodology.

3.5.1 SWOT analysis

The figure below summarises the analysis of strengths and weaknesses of the methods. The level of strength or weakness in illustrated by the coloured circles:

- A dark blue coloured circle indicates that the method ranks highly (strongly) with respect to the aspect studied;
- A medium blue coloured circle indicates that the method ranks medium with respect to the aspect studied;
- A white coloured circle indicates that the method ranks low (weak) with respect to the aspect studied.

Figure 28. Strength and weaknesses analysis of the valuation methods

	Economic relevance	Objectivity	Relative ease of use	Appropriate benchmarks	Market connection	Extent of data required
1. Relief from royalty	●	●	●	○	●	●
2. Premium profit method	●	●	●	○	●	●
3. Historical cost	○	●	●	●	○	●
4. Replacement cost	●	●	●	●	●	●
5. DCF / as residual profit	●	○	○	●	○	○
6. Excess earnings method	●	○	○	●	○	○

From the graphic presentation above, the following strengths and weaknesses can be observed:

- In terms of economic relevance, the residual value and excess earnings methods seem to be strongest as they reflect the full potential of the assessed intangible. This is also true for relief from royalty and premium profits techniques, provided that the valuer is able to find appropriate (comparable) transactions to determine royalty rate in relief from royalty and correctly estimate price premium enjoyed by the product using a valued IP.[104] The cost-based methods seem to be less connected to the economic value of the intangible, especially the historic costs approach measuring the actual incurred costs, which may have no link to the value of intangible.
- In terms of objectivity, the historical cost approach seems to be most objective as it is based on the measure of actual costs. The least objective methods appear to be Method 5 (Residual value method) and Method 6 (Excess earnings method) since they are based on the forecasted profits which cannot necessarily be objectivised, if it is not by historical data. In the middle are methods 1 and 2 (relief from royalty and premium price/profit methods respectively) as they require fewer inputs (i.e. volume and price of products forecast) that are easier to substantiate.
- With respect to the relative ease of use, the first methods appear to be most simple; premium profit method appears slightly more difficult due to possible difference in interpretation of "premium profits". The residual value and excess earnings methods require a construction of more detailed financial models and thus are deemed to be more complex by default.
- Appropriate benchmarks is strongest for Method 5 (Residual value method) and Method 6 (Excess earnings method), as well as historical cost. Although appealing to use for other reasons, relief from royalty and premium price methods prove difficult when it comes to finding appropriate benchmarks for some intangible assets. For instance, the valuation could concern a unique intangible that does not have any suitable comparable on the open market (due to its extraordinary character as a "super" intangible (for instance, the Coca-Cola trademark) or due to its scope (e.g. specific customer base in a specific business in a specific territory). Similarly, the study could involve the products for which no generic substitute goods are available, precluding the use of the premium profit method. With respect to the available benchmarks, it is easier to apply all other four methodologies, with the only exception being replacement costs (which may need some benchmarks measuring the price of labour to develop a replacement and / or time required to reproduce the intangible).
- Market connection – according to this aspect, the relief from royalty and premium price method provide the most direct measure of market value by their construction. Other methods provide indirect measures.
- Amount of data required – this feature measures the amount of financial (quantitative) information required from the taxpayer to apply the method. As with the general ease of the model (aspect 3), the highest amount of data is required in methods 5 (residual value method) and 6 (excess earnings method). The lowest amount of financial data is required in application of the method 1, relief from royalty.

[104] For instance, if the substitute products used to determine a price premium contain products of other (valuable) brands, the price premium may be undervalued.

Next, the analysis of opportunities and threats was performed. This analysis approached each method in respect to its potential application for a valuation for transfer pricing purpose.

Table 5. Opportunities and threats of valuation methods

Method	Opportunities	Threats
1. Relief from royalty	• potentially to use for intangibles with "me too" features, for which reliable comparables can be found • potentially to use for intangibles where comparability can be justified by strong references	• typically not used for intangibles with unique features, for which reliable comparables do not exist
2. Premium profit method	• potentially to use for marketing intangibles (brands, trademarks), e.g. for trademarks, where a branded product is priced clearly differently than a non-branded product (or more generally there is clear distinction between forecast for product containing the intangible and one without). • potentially to use for intangibles that will save costs in the future	• typically not used when price premium assessment involves subjectivity (e.g. when there are no clear generic alternatives to branded products, etc.)
3. Historical cost	• potentially to use for internally generated intangibles with no identifiable income streams (e.g. self-developed software, websites) • potentially to use for intangibles in early stages of development, that have not yet resulted in a final product (e.g. early stage pharmaceuticals)	• typically not used for complex intangibles • typically not used for fully developed intangibles that are already generating income streams • typically not used for high-valued marketing intangibles whose value rely on popularity with consumers
4. Replacement cost	• potentially to use for intangibles that can be replaced with quantifiable resources (e.g. software) • potentially to use for intangibles in early stages of development, that have not yet resulted in a final product (e.g. pharmaceuticals)	• typically not used for complex intangibles • typically not used for fully developed intangibles (that are already generating income streams) • typically not used for high-valued marketing intangibles whose value rely on popularity with consumers
5. Residual value method	• potentially to use for intangibles with unique features • potentially to use when reliable financial projections are available • potentially to use for unpatented technology or customer relations (for which cost- and market- based approaches deem irrelevant)	• typically not used when definition of "routine function" is not clear • typically not used when it is difficult to identify all routine functions and to find reliable comparables in order to asses profitability for each of them - high possibility of overlap • difficult to use reliably when the forecast is highly uncertain

6. Excess earnings method	• potentially to use for customer contracts, customer relationships and in process research and development projects	• typically not used when definition of "contributory assets" is not clear • typically not used when it is difficult to identify all assets and the return attributable to each of them - high possibility of overlap • Typically very limited use in valuation for transfer pricing purposes due to a disconnect with functional and risk analysis (return on contributory assets and not economic returns on functions)

3.5.2 Detailed discussion of survey responses related to SWOT

The performed SWOT analysis above reflects (in an organised structure) the various answers of respondents to the survey. The respondents were asked to list the (first coming to mind) advantages and disadvantages of the methods that they most used. Most of respondents commented on only one or two methods as requested (out of six main methods as described above) which are used more frequently in their practice and others commenting on more methods. Below, the responses are summarised based on two key methods that have enjoyed the greatest response, these methods being Relief from royalty and Residual value methods.[105]

- **Relief from royalty:**

In terms of relief from royalty method, 12 respondents noted specific advantages of the method:

- Eight respondents note that the main advantage is that the method is simple and easy to use.
- Three other respondents note that the advantage of the method is that it is preferred by the local tax administration since they consider it directly linked to the market.
- Two additional advantages (each mentioned once) are the fact that there are less inputs needed, and that the method is "well-established" (i.e. being used for a long time).

[105] Since the countries could select on which methods they should comment, in the discussion of the respondents' answers below we did not mark which countries provided which responses. In opinion of the authors of this study, the main benefit of the survey in respect to SWOT analysis was to confirm the most used methodologies applied for valuation of intangibles in transfer pricing and obtain a picture which factors are considered to be the most obvious advantages and disadvantages of the methods. The responses of the main trade partners' respondents were consistent with the conclusions and comments of EU Member States respondents and are therefore not included in this section.

Seven countries respondents commented on disadvantages of the relief from royalty method:

- Six of them quote the comparability of the identified royalty rates as the most serious disadvantage.
- The other disadvantage quoted is the lack of benchmarks (e.g. the benchmarks are not specific for Eastern European countries).

- Residual value method

For the residual value method, in total, eight respondents commented on the advantages of the method:

- Six out of the eight respondents highlighted that the main advantage is the ability of the method to reflect a full potential value of the IP.
- The three other advantages noted are: no need to find comparables (as in the relief from royalty method), possibility to aggregate (e.g. over several type of intangibles), and wider acceptance by the tax administration.

In terms of disadvantages, 12 countries respondents commented:

- The most frequent disadvantage mentioned is a great number of parameters and assumptions that a valuer has to make to apply the method. This is mentioned by four respondents. Two other respondents mention related disadvantages: subjectivity of parameters, and sensitivity of valuation results to parameters.
- Six respondents mentioned reliability of the forecast as a disadvantage (including objectivity of forecast and related to that, the frequent challenge of the forecast by the tax administration).
- Other disadvantages mentioned in general: amount of data required, the fact that this method is not explicitly mentioned either by OECD or local regulations, and that it may give a value for a bundle of IP transferred, making it challenging to distinguish between different types of IP.

- Other methods

- Only three respondents in total commented at least partially on cost-based and premium profit methods. No respondents separately commented on method 6, excess earnings.
- For premium profit method, an advantage noted was that it is a method with fewer inputs (than residual value or excess earnings methods) and also, that it could be very appropriate to use in some circumstances. The disadvantages mentioned were the fact that the method can be rarely used and that the data (used to calculate price premium) could be subjective.
- For the cost-based methods, an advantage noted was that that the method may in some cases be adequate to use. The main disadvantage is the fact that the costs rarely reflect the value of the intangible. In terms of the replacement cost method, one respondent also noted that it may be difficult to estimate costs under replacement cost method.

3.6 Potential remedies to weaknesses of income-based methods

The SWOT analysis identified that there are potential weaknesses for each method and each of them should be used depending on facts and circumstances. Ideally, the right

method to use is the one that gives the lowest probability of a bias or error, subject to practical considerations.

One of the potential approaches to address the shortcomings of specific valuation methods, which is also a widely used approach in valuations for other purposes, could be a potential use of more than one method. Examples of this approach would include:

- Valuing a brand using both the relief from royalty approach and a premium profit or residual value approach**;**
- Valuing software based both on a replacement cost approach (and/or a historical cost approach) and a residual value approach**.**

Alternatively, the valuer could start from the requirements in the TPG to perform a valuation from both parties' perspective and to assess the intangible asset value based on the range provided by the two valuations. In some cases, this approach could be equivalent to the approach set out above, since looking at the value from another party's perspective may involve a different method and vice versa.

As an example of this approach, in the situation of a valuation of technology (for instance software that performs certain automation) from the seller's perspective, a residual value methodology may be used (method 5 above), calculating the present value of profits generated by the business after deducting a routine return. However, from the buyer's perspective, the value obtained by seller may appear too high. The buyer may consider performing its own R&D and developing the same technology/ software. Under this approach, the buyer may estimate its own value under a replacement cost methodology. In this situation, the buyer's valuation represents a use of an alternative method as well as a valuation from the second party perspective.

In some other cases a valuation from both parties' perspective would use the same methods, and the difference in results would arise from different inputs used. For instance, a technology may be valued by both seller and buyer using a premium profits approach (e.g. estimating production cost differences for a process improvement technology). However, if the buyer is a significantly larger company than the seller, the value obtained would be correspondingly much higher. In this example, one of the relatively weaker points of the selected method, objectivity, is addressed directly, by estimating inputs from more than one source.

Another approach to address a shortcoming of chosen methodology could be potentially the use of price adjustment clauses. As discussed above, the residual value method is considered not objective since the result of its application highly depends on the reliability of financial forecast which is typically uncertain at the time of the valuation. Therefore, in theory, price adjustment clauses could create a mechanism to account for deviations of actual results with the forecasts used in the valuation.

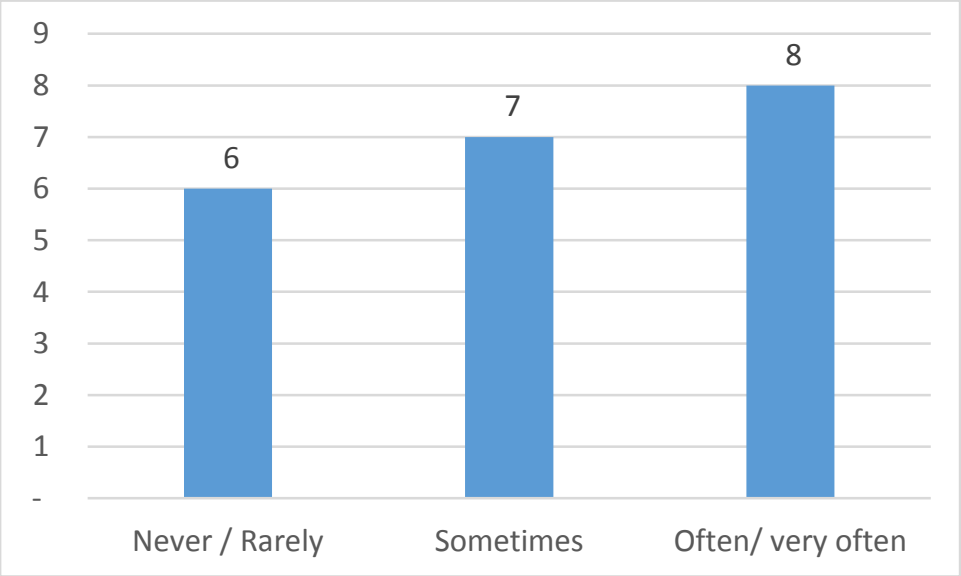
3.6.1 Use of more than one method

- EU Member States

The figure below presents how often more than one method is used in valuation for TP purposes by respondents to the survey. Out of the 28 Member States, seven countries

respondents did not provide any answer, including five countries respondents that are not aware of IP valuations cases for TP purposes in their respective markets.[106]

Figure 29. How often more than one method is used for valuation of IP for TP purposes? – EU Member States

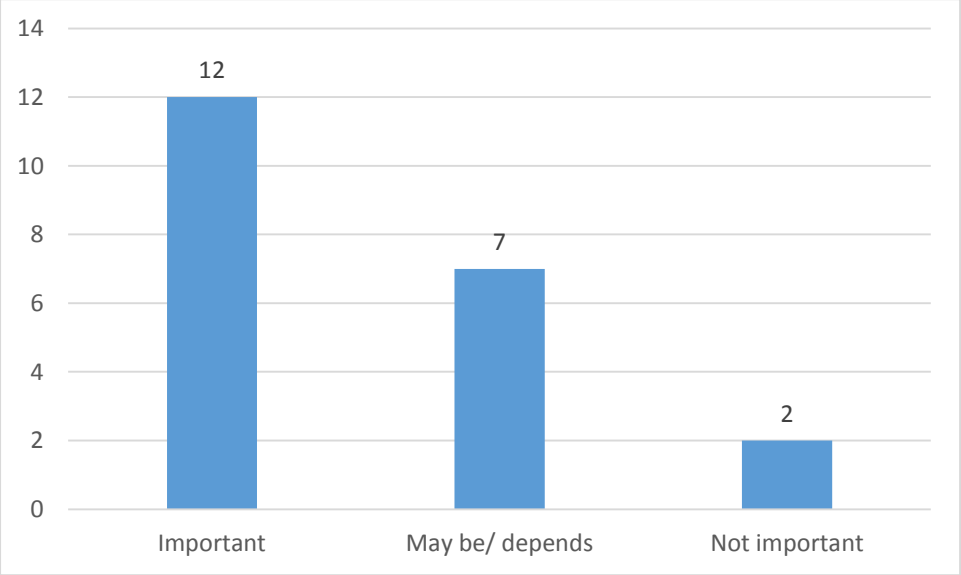


Out of 21 Member State respondents, eight record that they perform secondary calculation "often" or "very often" (Austria, Belgium, Denmark, France, Greece, Latvia and Portugal, and the UK); seven indicated "sometimes", and six indicated "never" or "very rarely". Member State respondents note that performing the secondary valuation is the question of a risk (how big is the issue at stake and the risk associated with the underlying transfer), ability to secure funding (fees) for the second valuation, (reliable) data available for the secondary methodology, and a general difficulty with finding a secondary method to defend the result.

Based on observations from the survey, the use of more than one method for valuations of IP in transfer pricing, seems to be more important in theory than in practice. When asked whether they found the use of more than one method for valuation of IP in transfer pricing important, 12 respondents out of 21 indicated that they did. A further seven indicated that it may be important and that it can depend on the strength of the first method.

[106] Cyprus, Ireland and Malta have provided an answer (which was, in all three cases "rarely") but are the countries with no experience with IP valuation for TP purposes and thus their answer refers to experience with general valuations. Their answers were not considered in the Figure below (were recorded as "n/a").

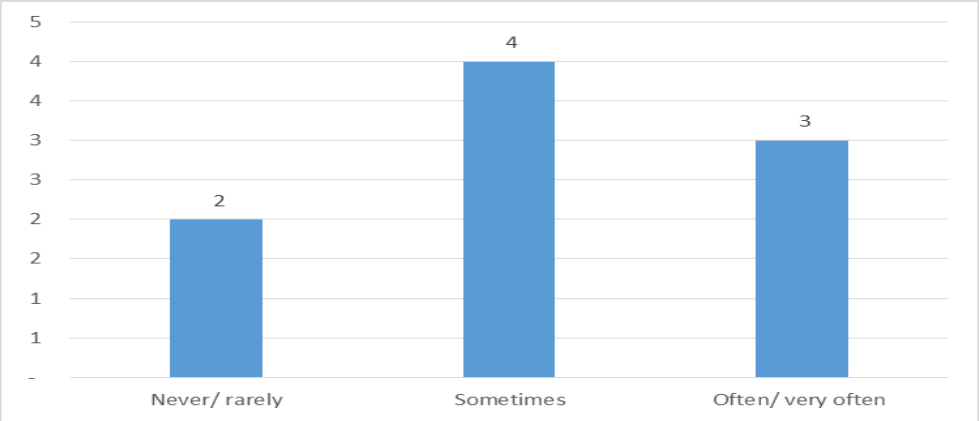
Figure 30. Importance of using more than one method – EU Member States



- **EU Trade partners**

The trade partner respondents have similar (diverse) experiences with respect to using more than one method in practice.

Figure 31. Use of more than one method for valuation of IP for TP purposes – Trade partners



When asked about the frequency of use of more than one method for valuation of IP for TP purposes, the majority of respondents indicated that they do this "sometimes" (Australia, China, India, and Korea). Respondents in Canada, Switzerland and the US use more than one method "often" or "very often". Japan and Norway responded that they "never/rarely" use more than one method.

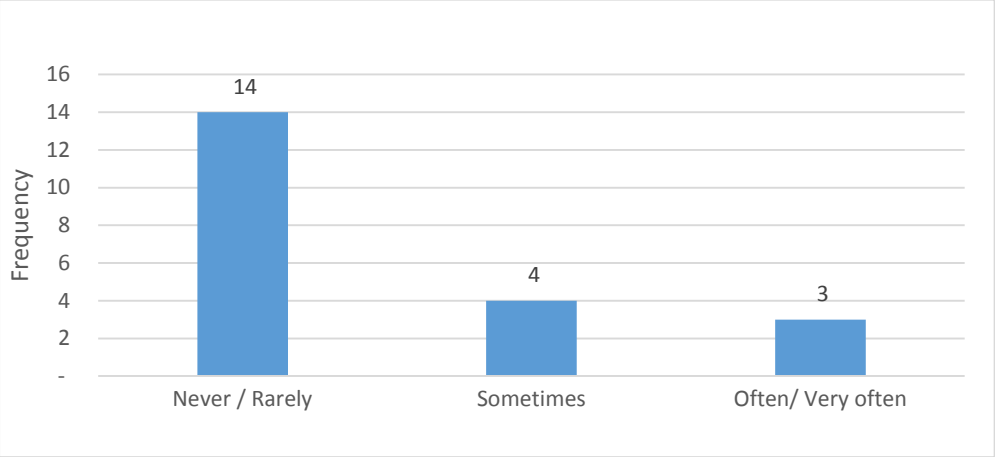
Furthermore, with regards to the importance of using more than one method, most (six) of the trade partners respondents commented that they deem it be important. The remaining three respondents (China, India and Korea) commented that the level of importance depends (typically, on the reliability of the primary method of the analysis).

3.6.2 Price adjustment clauses

- EU Member States

Another issue that is connected with the fact that the forecast financial data is uncertain and may be unreliable is the use of the price adjustment clauses. The OECD suggests the use of price adjustment clauses in cases where the valuation of an IP is highly uncertain. In cases where "*independent enterprises might find that pricing based on anticipated benefits alone does not provide adequate protection against the risks posed by the high uncertainty in valuing the intangible", they "might include price adjustment clauses in the terms of the agreement, or adopt a payment structure involving contingent payments*[107] *to protect against subsequent developments that might not be sufficiently predictable."*[108] The respondents were asked to reflect on the practice in the country in terms of use of these clauses:

Figure 32. How often do you use price adjustment clauses in practice? – EU Member States



Only three Member States respondents (Germany, the Netherlands and Portugal) indicate that price adjustment clauses are often or very often used. The respondents in the Netherlands and Germany note that it is an obligation to use such clauses, based on the local TP rules and regulations.

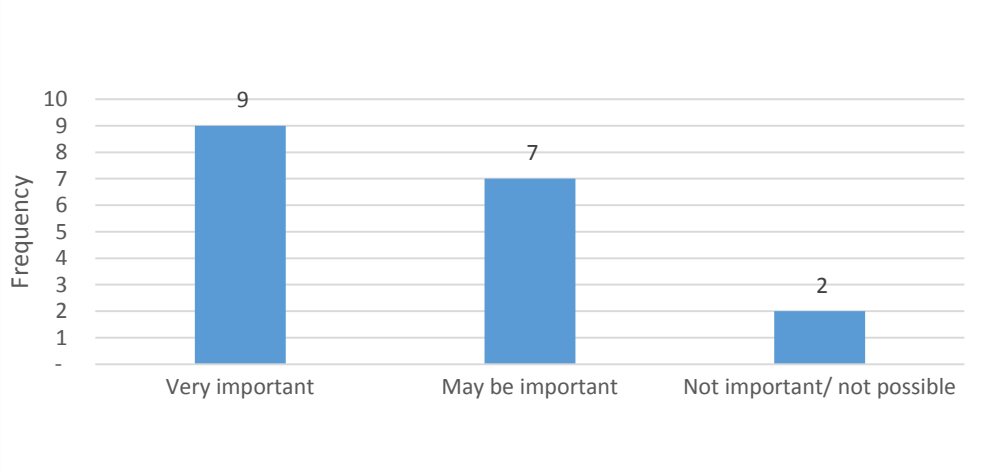
Despite the limited practical use of these clauses at present (as illustrated in the Figure above), the respondents seem to be almost uniform in attributing some or large importance to these clauses. As observed from the Figure below, nine Member States respondents find these clauses very important and another seven – as potentially important. Only one Member State respondent (Sweden) notes that it is not possible to implement such clauses and these clauses may not be important for treating uncertainty. In addition, several Member States respondents provide two additional related comments. One, the fact that such clauses are typically absent between third

[107] According to para. 6.183 of OECD report "*Aligning transfer pricing outcomes with value creation*", "*… a contingent pricing arrangement is any 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 (e.g. royalty or periodic milestone payments)*."

[108] OECD, *Aligning transfer pricing outcomes with value creation*, para. 6.183.

parties. If, however, it appears that in some industries or types of transactions, price clauses are a common practice between unrelated parties, this could make their use more justified. Second, it is noted that it is difficult to avoid using hindsight when there is a price adjustment clause. After a period of time elapses, new circumstances may rise changing the value of the intangibles. Some of these circumstances could possibly have been foreseen in the original valuation whereas others, objectively speaking, could not have been foreseen. However, because it is difficult to establish whether or not the change of circumstances could be foreseen, the use of price adjustment clauses may increase the risk of using hindsight inappropriately.

Figure 33. How important do you consider the use of price adjustment clauses? – EU Member States



A good practice with respect to the use of price adjustment clauses (supported by the OECD) is to refer to the behaviour between third parties. In some industries and sometimes, the third parties fix a price for an intangible even if information available to them is limited and the future profit potential is uncertain. In other cases, they agree on an "earn out" which depends on the future profits derived from the invention.

In this respect, the OECD guidelines suggest to consider, in some cases, "ex-post outcomes" as a "presumptive evidence about the appropriateness of the ex-ante arrangements."[109] However, this consideration applies only if necessary to assess the reliability of information on which ex-ante pricing is based. Such approach (reassessment based on ex post outcomes does not apply if the taxpayer provides details on ex ante projects, including consideration of risks and "reasonably foreseeable events" as well as probability of occurrence, and reliable evidence that any differences between ex ante projections and actual outcomes is a result of unforeseeable developments or the probability of occurrence of foreseeable outcomes considered ex ante were not significantly overestimated or overestimated.[110]

In addition, the consideration of ex-post outcomes does not apply if the difference between financial projections and actual outcomes does not have an effect on calculated compensation of over 20% of the value at the time of valuation, or when, over a period of commercialisation of five years starting from first generated

[109] OECD, *Aligning transfer pricing outcomes with value creation,* para. 6.192.
[110] OECD, *Aligning transfer pricing outcomes with value creation*, para. 6.193.

(unrelated) revenue, the difference between projections and actual outcomes was not greater than 20%.[111]

Evidence from commercial court cases seem to mirror the OECD recommendation.[112] For example, one interesting case is the French Supreme Court decision of July 9, 2013 (Case No. 12-22157) regarding a compensation of inventor Mr Audibert, by its employer, Sollac (now Arcelor Mittal France). The decision implied that it is possible to take into account the events which occurred after the transfer of rights, to confirm the initial assessment of the economic prospects of the invention. Another such case is the UK Court case, Gorne v. Scales (2006), where the judge of Appeal rejected the value of expert witness and the method used on the ground that the method involved hindsight.[113]

- **EU Trade partners**

The opinions of the EU trade partner respondents on price adjustment clauses are also diverse, with a general consensus that these clauses are not very frequently observed in practice. Only respondents in Australia and Canada note that these clauses are used sometimes in practice. The US comments that the use of these clauses is governed by a taxpayer's Treasury motivation, i.e. to minimise the movement of cash flows rather than by transfer pricing considerations; and that these clauses are difficult to implement in practice because certain formalities have to be satisfied. All other six respondents (China, Japan, India, Korea, Norway and Switzerland) indicate that the use of these clauses is rare or not observed.

With respect to the importance of price adjustment clauses as a counter-measure of uncertainty, five trade partners' respondents confirm that they may be an important measure. Two countries find them assertively important (Australia and Canada), one (Norway) finds them not important at all. Finally, the US had no marked opinion on the issue[114].

3.7 Valuation standards and their application in transfer pricing valuations

3.7.1 General valuation standards

- **Introduction**

Standards have a significant role to play in helping to regulate professional practice at global, national and regional level. Standards promote professional ethics, integrity, impartiality and trust. Many governments and professional bodies are responding to international pressures to restore confidence in the financial and economic system by reviewing the regulatory environment and the standards applicable in many areas, including various professional services in the business sector.

[111] OECD, *Aligning transfer pricing outcomes with value creation*, para. 6193.
[112] References to the court cases of Mr. Audibert v. Sollac and First India Formula One is provided by the UK respondent.
[113] Cited in Judgement text, Force India Formula One Team Limited, where the judge made a reference to the case establishing that the value of the intangible determined should be determined at the date of the event (in the case of Formula India Formula One, on the day of breach of confidentiality agreement).
[114] The neutrality of the US on the issue perhaps is due to price adjustment mechanism built in the US regulations. The latter prescribe an adjustment in case of certain thresholds being met (i.e. result being less than 80% than the target arm's length result or over 120% of the value).

As mentioned previously, valuations of both businesses and intangible assets are in general performed for a wide variety of purposes, including M&A, disputes and litigation, financial reporting, non-transfer pricing tax purposes, other statutory regulations, etc. Practical valuation approaches have often emerged on a country by country basis, or depending on the specific valuation context. As a result, while there is broad agreement between valuers on many key principles and approaches / methods of valuation, and while some valuation standards have been around for decades, specific standards with wide applicability have been relatively slow to emerge and are still relevant only in certain contexts and geographic areas. This contrasts with transfer pricing valuation guidance, which, as it is issued by the OECD, has a more uniform application in practice across OECD members and all countries who are "observers" to the OECD.

- **Key valuation standards**

Today, there is a multitude of business and intangible asset valuation standards set by different standardisation bodies. The guidance contained in the standards for different valuation causes may differ significantly. These different interpretations of concepts and differing valuation approaches continue to represent major challenges. However, so far, the contents and recommendations of these different standards and guidelines are not contradictory in themselves. When the concrete recommendations are different, this is because of the different purposes and fields of application (e.g. valuation causes / contexts) of these standards.

The key valuation standards which have international acceptance are as follows:

- International Valuation Standards ('IVS'), issued by the International Valuation Standards Council, an independent, not-for-profit organisation that produces and implements universally accepted standards for the valuation of assets across the world in the public interest
- ISO 10668:2010 (issued by International Organisation for Standards or ISO) which specifies a framework for brand valuation, including objectives, bases of valuation, approaches to valuation, methods of valuation and sourcing of quality data and assumptions. It also specifies methods for reporting the results of such valuation.
- International Financial Reporting Standards ('IFRS') and US Generally Accepted Accounting Principles ('GAAP') include valuation guidance with respect to businesses and other assets, including intangible assets. This guidance is compulsory for financial reporting under these standards. Moreover, the specific requirements for the valuation of intangible assets in financial reporting contexts have been extensively developed by the Financial & Accounting Standards Board ('FASB'), in Statement of Financial & Accounting Standard ('SFAS') 157, Fair Value Measurements and by the International Accounting Standards Board ('IASB') in IFRS 13.

In addition, the valuation standards originally generated for US and UK purposes have gained a widespread acceptance in many countries:

- Uniform Standards of Professional Appraisal Practice ('USPAP'), the US standards issued by the US Appraisal Foundation / Appraisers Association. These are quality control standards applicable for real property, personal property, intangible assets, and business valuation appraisal analysis and reports in the United States. The US Financial Institutions Reform, Recovery and Enforcement Act of 1989 recognized USPAP as the generally accepted appraisal standards and has required USPAP compliance for appraisers in federal-related transactions in the United States.

- RICS Valuation standards- Professional Standards (so called "Red Book") in the UK. The Red Book is issued by the Royal Institute of Chartered Surveyors ('RICS') with the purpose of promoting and supporting high standards in valuation delivery worldwide. The publication details mandatory practices for RICS members undertaking valuation services. It also offers a useful reference resource for valuation users and other stakeholders.
- DIN77100 - DIN (German Institute for Standardisation) develops norms and standards as a service to industry, state and society as a whole. Ninety percent of the standards carried out by DIN are international in nature. DIN 77100 specifies requirements for procedures and methods of monetary patent value measurement as well as their interdependent value drivers. The norm specifies a framework for patent valuation, including objectives, bases of valuation, approaches to valuation, methods of valuation, sourcing of quality data and assumptions including the reporting of results of such a valuation.
- European valuation standards – the European Group of Valuer's association is a pan-European association of professional bodies working for standards, ethics and quality in the real estate valuation market. Besides setting standards for valuers, TEGoVA provides a conduit for business.

Other standards are generated for and applied on a national level (e.g):

- The Institute of Public Auditors in Germany, Incorporated Association (IDW) is a privately run organisation established to serve the interests of its members who comprise German Public Auditors and German Public Audit firms. The purpose of IDW S5 is to offer a general framework along with guidance on the valuation of brands, while its format strongly resembles that of business valuations, i.e. a process open driven standard.

3.7.2 Issue of valuation standards alignment

As noted above, the broad agreement between valuers on many key principles and approaches / methods of valuation has translated only partially into the standardisation of these approaches and methods across the world (or across the EU Member States). This may be due, among others, to long-established methodological history in each country, but also to legal differences in various countries using specific standards.

However, efforts are currently under way to align standards. For instance, the US-based Appraisal Foundation and the International Valuation Standards Council have published in June 2016 "A bridge from USPAP to IVS (A guide to providing IVS-compliant appraisals"). While this is not a two-way bridge (it does not cover a bridge from IVS-compliant to USPAP-compliant appraisals), the document makes several key points:

- The use of the International Valuation Standards (IVS) published by the International Valuation Standards Council (IVSC) is currently growing;
- Many differences between the standards are superficial and are simply due to different presentational and organisational aspects. Some differences are unavoidable due to IVS being global and USPAP reflecting US law and practice;
- The standards are "remarkably similar":
    - Both address the development of a valuation opinion based on an appropriate scope of work,

- Both address report content and file documentation,
- Both address the competency and independence of the appraiser.

With regards to incorporating IVS, the RICS Valuation Standards incorporate IVS from 2011, and the "Red Book" has been extensively revised since 2013 to become better aligned with IVS. RICS valuation standards have been described as providing additional detail to the high-level approach used by IVS (although a significant part of this additional detail concerns real estate valuations).

In this context, whether or not the valuation profession needs additional standards for valuation of intangibles is a reasonable question. It can be argued that it is in the valuation practices' interest and more generally in the public interest that, despite the existence of international and local valuation standards, these different tiers of standards complement each other in both content and practical influence. Local level standards can operationalise the international standards in terms of content and practical influence. While IVS provide the underpinning valuation principles to be followed, the local standards can add to these through illustrating practical application.

However, a convergence of standards operating at the same level, or at least a bridge of such standards (such as USPAP and IVS, as set out above) appears to be in the interest of the profession as well as public interest, in order to enhance the applicability, relevance and comparability of valuations across several jurisdictions and types of assets.

3.7.3 SWOT analysis of valuation standards

This subsections contains a "SWOT" (i.e. Strengths, Weaknesses, Opportunities and Treats) analysis of the various valuation standards covered in this report, scored on several relevant criteria.

A full list of the standards reviewed and a brief description of their key characteristics is included in *Appendix 4 – Valuation standards*.

The remainder of this subsection focuses specifically, first on analysis of strengths and weaknesses of valuation standards, and next, on opportunities of threats of using valuation standards (not OECD TPG) for valuations for transfer pricing purposes.

The study team selected nine key criteria based on which the standards of valuation were assessed by using ranking. The list below sets out these criteria and an explanation of the meaning of each assessment ranking. A key point is that a "c" rank (represented in the graph by a light blue ball) does not necessarily indicate that the respective standard has a deficiency in that area – it may be that the standard is adequate for its specific purposes but when compared to other standards provides less information, guidance or detail on specific areas.

(1) Global applicability – this criterion measures to what degree the standards are adhered to and applied on a geographical scale:

   a. Global reach
   b. Regional reach
   c. Local reach (national);

(2) Range of intangible assets covered – to what degree the different types of intangibles are covered in the standard:

a. All intangible asset categories covered
b. A selection of intangible assets categories covered, or a single asset category
c. Standard does not cover intangible assets;

(3) Consistency with other standards – this criterion attempts to measure how different standards include content and/or guidance that is consistent with other standards:

a. Standard exhibits significant similarities with other(s) standards, or incorporates other standards
b. Standard has overlap with other standards
c. Standard has limited overlap and/or shows inconsistencies with other standards

This is a relative rating, as there may be "groups" of standards that may be similar to each other, with different such groups being less similar. The assessment aimed at scoring I or II for standards that overlap with other widely applicable standards.

(4) Guidelines on ethical behaviour and quality focus – this criterion evaluates to what degree guidance is provided on how to deliver a qualitative, independent and objective product:

a. The standard includes extensive guidance on ethical behaviour and requirements for an objective and independent valuation
b. The standard only includes limited guidance on the subject
c. No guidance is provided or the standard was not assessed for this criterion ("n/a" - IFRS / US GAAP);

(5) Binding force – this measures to what degree the standard is binding and mainly depends on the standard setting organisation and its legitimation to professionals:

a. Compliance with standards is imposed by laws/ regulations (obligatory)
b. The standard is binding for the members of the standard setting body
c. The standard is voluntary

(6) Technical guidance – this criterion measures the amount and extent of guidance that is provided on valuation approaches and/or whether detailed guidance on implementation of valuation methods and techniques is included:

a. Extensive high-level and detailed technical guidance provided
b. Only high-level guidance provided
c. Limited guidance included in the standard;

(7) Clear definitions – this criterion measures to what degree concepts and language are defined and explained in the standard:

a. All-inclusive glossary
b. Glossary defining most important concepts
c. No definitions included;

(8) Guidance on report content – to what degree the standard covers and provides guidance on the elements to be included in a valuation report:

   a. Extensive guidance on all elements to be included in the report
   b. Limited guidance
   c. No guidance;

(9) Clear identification of factors relevant to valuation – to what degree the standard covers context, purpose, parties and basis and standard of value, providing a contextual framework in which the valuation is prepared:

   a. Extensive guidance
   b. Limited guidance
   c. No guidance.

Figure 34. Strengths and Weaknesses analysis of valuation standards

	Global applicability	Range of intangible assets covered	Consistency w/ other standards	Ethics / objectivity focus	Binding force	Technical guidance	Clear definitions	Guidance on report contents	Identification. of factors relevant to valuation
International Valuation Standards (IVS)	●	●	●	◐	○	●	◐	●	●
ISO 10668:2010 Standards	●	◐	◐	◐	◐	◐	◐	●	●
European Valuation Standards	◐	●	○	◐	○	◐	●	●	●
IFRS	●	●	●	n/a	●	●	●	●	●
OECD TPG	●	●	○	●	●	◐	◐	◐	●
USGAAP	●	●	●	n/a	●	●	●	●	●
RICS	◐	●	●	●	◐	●	●	●	●
USPAP	◐	●	●	●	◐	◐	◐	●	◐
IDW S5	○	◐	○	○	○	◐	●	●	◐
DIN77100	◐	◐	○	○	●	◐	◐	○	●
IBA Professional Standards	○	●	◐	◐	◐	○	●	●	●
AICPA SSVS	○	●	◐	●	◐	◐	●	●	◐
ASA Business Valuation Standards	○	●	●	◐	◐	◐	●	◐	◐

Based on the analysis above, the following key points are observed:

- As a general comment, standards discussed in the figure above vary greatly as they provide valuation guidance for different purposes, under different regulatory and legal systems, etc. In essence, standards may provide valuation guidance in the specific context of transfer pricing or financial reporting, or in a more general context of taking informed business decisions.
- A relatively high number of standards exist, mainly due to parallel evolution in different jurisdictions and professional bodies.

- Most of the standards were quite well structured, with the exception of the OECD Transfer Pricing Guidelines, which were less so.[115]
- Global applicability - it is observed that besides the IVS and ISO standards, only the financial reporting standard IFRS and the transfer pricing standard OECD TPG have a clear global reach. It seems that the other standards are organised and adhered to on a local (mostly national) level.
- Range of the intangibles covered - most of the standards provide at least a framework for intangible asset valuation, which can be applied to all intangible assets (although the level of detail provided varies, as analysed below under the technical guidance criterion). The ISO 10668 Standard, IDW S5 Standard and DIN77100 however, have a particular focus on a subset of the intangible assets.
- Consistency of the standards - this is a relative rating, as there may be "groups" of standards that may be similar to each other, with different such groups being less similar. The assessment aimed at scoring I or II for standards that overlap with other widely applicable standards. A standard that exhibits significant similarities with another standard, is considered to be consistent. A significant level of consistency was found between the financial reporting standards, IFRS and USGAAP, as well as between IVS, RICS, ASA and USPAP, and to a lesser extent between IBA, SSVS (AICPA) and USPAP. In that respect, it can be said that these different standards are making efforts towards convergence. Others were not necessarily found to be inconsistent with each other, but showed generally much less overlap.
- Guidelines on ethical behaviour and quality focus –A strong focus across all standards on objectivity, ethics and quality was observed (within the standard or within the overall framework – e.g. IFRS, US GAAP). As a note for the financial reporting standards: while the standard-setting bodies endorse the significant requirements in terms of objectivity, ethical focus and competence in a financial reporting context, the standards themselves do not specifically contain these. The financial reporting standards, have therefore been excluded from the analysis. It is observed that RICS, USPAP, SVSS (AICPA) and OECD TPG provide explicit and extensive guidance on the subject matter. The German standards on the other hand provide little or no guidance (IDW S5 and DIN77100) on ethical behaviour. The other standards include limited guidance.
- Binding force - four standards are legally enforced: IFRS & USGAAP, the OECD Transfer Pricing Guidelines and the German DIN77100 Standards. However, for most of the other standards, it was found that adoption was obligatory for members of the standard setting body. In cases were no membership community is organised (IVSC, European Valuation Standards and IDW), adoption of the standards was assigned voluntarily. It is noted that there is a significant growth in importance of IVS.
- Judging the amount and extent of guidance that is provided on valuation approaches and/or whether detailed guidance on implementation of valuation methods and techniques is included in the standard, it was found that only the IBA Professional Standard provides limited guidance on the matter. IVS, RICS (in reference to IVS), IFRS and USGAAP provide detailed technical guidance in their standards. The other standards include high-level guidance on valuation methods

[115] This comment is made on evaluating the OECD TPG in the capacity of valuation standards. The study authors do not have the same opinion on the OECD TPG as a overall guidelines on transfer pricing.

and approaches, however, do not include detailed technical direction. As such, a strong variation in level of technical guidance detail was found.

- With respect to the availability of clear definitions, all standards include a section on specific concepts and language, although some standards provide less detail.
- Guidance on report content - all standards (except for one, DIN77100) include a section on report contents, although some standards provide less detail.
- Clear identification of factors relevant to valuation – it is observed that all standards include guidance on this, although some standards provide less detail.

Based on the analysis of valuation standards (but not including the OECD TPG), the following opportunities and threats are identified in respect to the use of the above described standards in valuations for transfer pricing purposes specifically.

Table 6. Opportunities and threats of valuation standards

	Opportunities	Threats
Valuation standards (not written for TP purposes, i.e. excluding OECD TPG)	• More extensive technical guidance - some valuation standards provide detailed technical guidance (exceeding that of the OECD TPG) The examples of such guidance could be determination of the appropriate discount rates (adjusted for risk) and the terminal value computation (considering the economically useful life of the assets). • Global reach – there is an opportunity to develop global comprehensive valuation technical framework that is principle-based and can be used in the transfer pricing context; this would improve consistency of valuations performed and allow for better comparability across markets and increase confidence in valuations.	• Valuation standards typically do not account for all circumstances of the transaction • Valuation standards do not specify (and do not imply) the use of two-sided approach, i.e. a valuation from both parties' perspective. • Valuation standards in present form are not uniform and have different definitions for the "special items" (workforce, location savings, synergies). • Using valuation standards typically implies searching for hypothetical buyers/sellers on the market which does not take into account the specific entities under consideration (e.g. sometimes group entities enter into transactions that independent entities would not). • The use of valuation standards in their present form for valuations TP purposes instead of the OECD TPG might lead to approaches not consistent with the OECD TPG and may be challenged by the tax authorities.

3.7.4 Use of valuation standards in valuations for transfer pricing purposes

Next, we summarized our analysis in respect to the use of valuation standards in practice for valuations of intangibles in transfer pricing, based on the survey of experts in the 28 Member States and nine EU trade partners. Among the Member States respondents, only two (respondents Germany and Austria) mention that, in case of the valuation for transfer pricing purposes, there is a certain legislative guidance to refer to certain valuation standards. In both Germany and Austria there are special

valuation standards which are referred to in the context of transfer pricing regulations or related guidance issued by the government. In Germany, the Administration Principles – Business Restructurings make a reference to IDW S1 and IDW S5, Principles for the Valuation of Intangible Assets and Principles for the Valuation of Companies. All other Member States confirm that the only standard applicable to valuations for transfer pricing purposes are the OECD TPG and the local laws and regulations that are based on or refer to the OECD guidelines.[116]

To the degree that the transfer pricing experts refer to the help of general valuation experts outside of transfer pricing practice, the local valuation standards are used. However, only six countries note the practice of such standards, with three of the six noting that these are international valuation standards.

[116] Another exception, based on the survey results, is potentially Denmark. In 2009, the Danish tax authorities published valuation guidelines on transfer of ownership of intangibles and businesses. The legal status of the guidelines means that they are not binding for taxpayers or courts. The guidelines are based on corporate finance approaches and generally adhere on guidelines on the valuation of businesses issued by the Institute of State Authorized Public Accounts in Denmark.

4. Practical application of economic valuation methods

4.1 Introduction

As explored in Section 3, from the transfer pricing perspective, the most important condition to observe when using the economic valuation techniques is the consistency with the arm's length principle.[117] In this respect, Section 3 explored some of important considerations for a valuation from the transfer pricing perspective that are a consequence of the arm's length standard (e.g., considerations from both parties' perspective, importance of functional and risk analysis, etc.). This Section will explore the impact of the purpose of the valuation (being transfer pricing) and of the arm's length standard criterion on the assumptions and parametrisation made in the course of a valuation exercise. In respect of the difference between inputs and assumptions used in valuations for transfer pricing as opposed to other purposes, the TPG notes, for instance: "*for sound accounting purposes, some valuation assumptions may sometimes reflect conservative assumptions and estimates of the value of assets reflected in a company's balance sheet. This inherent conservatism can lead to definitions that are too narrow for transfer pricing purposes and valuation approaches that are not necessarily consistent with the arm's length principle. Caution should therefore be exercised in accepting valuations performed for accounting purposes as necessary reflecting arm's length prices or valued for transfer pricing purposes without a thorough examination of underlying assumptions.*"[118]

The ensuing sub-sections focus on exploring the main principles of the main building blocks (i.e. parameters) of a valuation made for transfer pricing purposes. These are divided into five main blocks:

(1) Financial projections

(2) Royalty

(3) Routine return

(4) Discount rate

(5) Useful life and terminal value

The relevance of each parameter for the surveyed main valuation methodologies is described in the following table:

[117] OECD, *Aligning transfer pricing outcomes with value creation*, para. 6.154.
[118] OECD, *Aligning transfer pricing outcomes with value creation*, para. 6.155.

Table 7. Relevance of parameters

	Financial projections	Royalty	Routine return	Discount rate	Useful life and terminal value
1. Relief from royalty	Limited (sales/ turnover only)	Required	n.a.	Required	Required
2. Premium profit method	Limited (sales /turnover)	n.a.	n.a.	Required	Required
3. Historical cost	n.a.	n.a.	n.a.	Required (Capitalisation rate)	n.a.
4. Replacement cost	Limited (costs only)	n.a.	n.a.	Required	n.a.
5. Residual value	Full detailed forecast	n.a.	Required (based on functional returns)	Required	Required
6. Excess earnings method	Full forecast	n.a.	Required (asset returns are used instead)	Required	Required

Appendix 2.A describe the methodologies and Appendix 2.B provides examples showing the use of parameters and financial data.

In the first part of the present section, the guidance, principles, standards and practice regarding each of these building blocks from the perspective of general valuation expertise are addressed. Next, these issues are investigated from the perspective of transfer pricing based on the TPG. Subsequently, analysis is made on the extent to which the requirements under general valuation standards and under TPG overlap, and specific situations where they may differ.

In the second part of this section, focus is placed on the state of play observed with respect to these building blocks in practice, based on the survey results. An overview of practices in respect of the same parameters in major trade partners' countries is also provided. Finally, the issue of similarities and specific differences between the application of valuation methods for general valuation purposes and for TP purposes is revisited from a practical perspective.

4.2 Theoretical premises

4.2.1 Financial projections

The reliability of a valuation of intangibles using DCF valuation techniques depends on the robustness and reasonableness of financial projections on which the valuation is based. Below, the guidance governing the transfer pricing practice as well as the general valuation principles regarding this building block is described.

- **General valuation perspective**

Generally, it is preferable when applying a valuation technique based on financial projections of cash flows to carefully examine the likely pattern of revenue and expense growth. In this context, in addition to the transfer pricing experts and literature quoted above, a list is provided below of general practices on assessing and challenging financial projections, based on well-known literature in valuations for non-TP purposes, including M&A, tax, and dispute valuations, which may be useful as additional guidance in the framework of a TP valuation:

- In practice, analysts should carefully review the information they are provided and make adjustments to income statements projections; [119]
- "To build a revenue forecast, you can use a top down forecast, in which you estimate the revenues by sizing the total market, determining market share, and forecasting prices". Likewise, "a bottom-up approach using company's own forecasts of demand from existing customers, customer turnover, and potential for new customers can be used";[120]
- Once the necessary adjustments are performed, analysts can compare the financial projections to: "a historical period which should encompass an operating cycle of the entity's industry, this period will often equal five years, beyond this period data can become "stale";"[121]
- In some circumstances, past is not indicative of the future and "analysts must exercise care in analysing projected performance in these situation. Adequate support must exist for the assumptions that the projections are based upon;"[122]
- Focusing on key economic and financial indicators is more important than detailed forecasting: "While you are building a forecast, it is easy to become engrossed in the details of individual line items, you must rather place your aggregate result in the proper context. As such, matching future ROIC[123] against a company's competitive advantage will much more improve your valuation than precisely (but perhaps inaccurately) forecasting account receivables 10 years out."[124]

A good practice is considered to perform a combination of some or all of the following cross-checks:

- the performance of a selected peer group of comparable companies (historical and forecast by market analysts) in terms of growth, margins, etc.;
- the industry forecasts as per public sources;
- the comparison of the financial projections provided with historical performance of the business / asset in question;
- the management's / company's record of achieving previous forecasts;
- the industry and company experience with similar products.

All these checks, combined, should provide an objective basis for assessing and challenging the reasonableness of the forecast provided.

[119] Hitchner (2011) at 127-129.
[120] Koller et al (2010) at 325.
[121] Hitchner (2011) at 134.
[122] Hitchner (2011) at 138-139.
[123] Return on Invested Capital.
[124] Koller et al (2010) at 229.

With regards to the use of cash flows or (operating) profits to value intangible assets, a distinction needs to be made between theory and practice. Valuation theory. in general, recommends the use of cash flows to value businesses or assets, and this is indeed the case in the vast majority of "income method" valuations for businesses (although methods such as capitalisation of profits rely usually on operating or net profit measures, and the market methods most usually rely on multiples of profits). Thus, when goodwill is valued through an income method, since this practically always requires a full business valuation, a cash-flow approach is also often used. By contrast, there are more complex practical issues regarding estimating cash flows related to a specific intangible – a general issue being that the working capital position and capex intensity of a business are often driven primarily by the business model, and not by a specific intangible (or the effect of that specific intangible is difficult to estimate separately), and to that extent these elements should not impact the value of the intangible. Accordingly, in practice, valuations of identifiable intangibles take into account mainly profit measures (often operating profit) or profit differentials, as proxies for the cash flow generation of the intangible in many more cases.

- **Transfer pricing perspective**

In transfer pricing, the TPG urges that, given the fact that the accuracy of this data is dependent on developments in the marketplace that are both unknown and impossible to know at the time of the valuation, it is essential for valuers to examine carefully the assumptions underlying the projections of both future revenue and future expense.[125] Although the guidance of the TPG is not of a prescriptive character, it provides the following recommendations regarding factors to consider for formulation of financial projections:

- *Source and purpose of projections:* The OECD recognises that the source and purpose of the financial projections are particularly important, generally the situation being that projections prepared for non-tax business planning purposes are more reliable than projections prepared exclusively for tax purposes, or exclusively for purposes of a transfer pricing analysis.[126]
- *Time horizon increasing the uncertainty of projections:* When evaluating the reliability of financial projections, it is important to consider the length of time covered by the projections, keeping in mind that the further into the future the intangible in question can be expected to produce positive cash flows, the less reliable projections of income and expense are likely to be. [127]

  In this respect, a key element in financial projections that needs careful examination is the projected *growth rate*. Often financial projections are based on current cash flows (or short-term forecasts) that are extended by reference to a steady growth rate.

  In cases where such growth rates are used, the basis for the assumed growth rate needs to be considered. More particularly, it is unusual for revenues derived from a specific product to grow at a steady rate over a long period of time. Therefore, simple models containing linear growth rates should be justified on the basis of either experience with similar products and markets or of a reasonable evaluation of likely future market conditions.

[125] OECD, *Aligning transfer pricing outcomes with value creation*, para. 6.163
[126] Ibid, para. 6.164.
[127] Ibid, para. 6.165.

- *Use of past financial indicators for new products or services:* The use of past performance indicators in the preparation of financial projections must be done with caution given that many factors are subject to change, especially with respect to products or services that have not been introduced to the market or that are still in development.[128]
- *Inclusion of development costs:* Another aspect relevant to financial projections is the inclusion of development costs, which mainly depends on the nature of the transferred intangible. If the intangible is still in the development phase, it seems reasonable to include also future development costs in projections. However, if the intangible is fully developed and will not provide a platform for development of other intangibles, no development costs should be included in the forecast of the transferred intangible. [129]

The OECD underlines the necessity of valuers verifying the reliability and degree of speculation of financial projections and of paying special attention to cases where the valuation is highly uncertain at the time of the transaction and to hard-to-value intangibles.[130] In the first case, the evaluation should be performed by taking into account what independent enterprises would decide in similar circumstances given the valuation uncertainty.[131] Possibilities include the use of anticipated benefits, accounting for foreseeable and predictable developments, or adopting short-term agreements, including price adjustment clauses in the terms of the agreement or adopting a payment structure with contingent payments.[132] The second case, of hard-to-value intangibles, includes intangibles or rights in intangibles in respect of which either comparables do not exist, or the projections or future cash flows or income to be expected to be derived therefrom, or the assumptions used in the valuation, are highly uncertain.[133] The TPG notes that, in this case, it may prove difficult to establish and verify the relevant information for the performance of valuation studies.[134] Remedies for the two types of intangibles have also been discussed in previous section 3.6 where the advantages of valuations from both parties' perspective, of using more than one method in a valuation and of price adjustment clauses were presented.

Even in the latest draft of section 6 issued in December 2015, the TPG does not give a precise guidance on the level of profit to consider in applying the discounted cash flow method. Although, from the name of the method and general valuation practice, it should be "free cash flows," the TPG refers to "income" or "cash flow" as the level of income to consider. It notes that "*accrual based measures of income, such as those determined for accounting or tax purposes, may not properly reflect the timing of cash flows which can create a difference in outcome between and income and a cash flow based approach. However, in light of a number of considerations, the use of income projections rather than cash flow projections may, in some cases, yield a more reliable result in a transfer pricing context as a practical matter*."[135] Furthermore, it is noted that the references to cash flows in the TPG should "*be read broadly to include both cash flow and income measures*."

[128] Ibid, para. 6.166.
[129] Ibid, para. 6.167.
[130] Ibid, para. 6.168
[131] Ibid, para. 6.181.
[132] Ibid, para. 8.182-6.183.
[133] Ibid, para. 6.190.
[134] Ibid, para. 6.186.
[135] Ibid, note 19 to para. 6.157.

In terms of tax considerations, the revised TPG notes that it often becomes "necessary to evaluate and quantify the effect of projected future income taxes on projected cash flows. Tax effects to be considered include (i) taxes projected to be imposed on future cash flows, (ii) tax amortisation benefits projected to be available to the transferee, if any and (iii) taxes projected to be imposed on the transferor as a result of the transfer, if any."[136]

- **Key similarities / differences**

It appears that the two approaches (general valuation and transfer pricing) regarding the use of financial projections in the valuation exercise are broadly similar. In this regard, both perspectives require special attention to be paid to the procedure used for forecasting (e.g. past performance might not be used as purpose of transaction needs to be taken into account) and to perform various cross-checks.

However, it is notable that the OECD TPG goes a step further in requirements for valuations of intangibles for TP purposes, such as by advising the use of management projections for non-tax purposes as being more reliable than projections performed for tax purposes or by mentioning the importance of including development costs in the calculations.

4.2.2 Royalty rate

As explained in Section 3, the royalty rate serves as a building block for the relief from royalty method – which estimates the value of a transferred intangible by viewing the future "deemed" (saved) royalty payments as a future income stream representing the intangible and calculating the present value of this income stream. However, the royalty rate is also often addressed in transfer pricing as a recurring payment for the rights to use intangible assets. In this respect, the royalty rate and the approach to estimate that rate are the same from the transfer pricing perspective.

Furthermore, the same principles apply to guide a determination of royalty for purpose of a valuation of the fully transferred intangible asset or for the purpose of recurring license payments that do not involve an asset transfer. It is important to understand that both the value and the royalty rate are "flip sides of the same coin",[137] as they are both driven by the earnings capability of the asset.

Finally, the royalty could be a way to implement the compensation for the transferred IP. For instance, the value could be determined by a cost or income approach as deemed appropriate (any of methods 2, 3, 4, 5, or 6 explored in the analysis) but then expressed as a royalty. In order to do so, the obtained value is simply re-calculated /expressed as percent of sales (or other appropriate base). Based on the example below, the present value of IP is divided by present value of sales, to arrive to an annual royalty for the period of 5 years.

[136] Ibid, para. 6.178.
[137] Heberden (2011) at 3.

Table 8. Example determination royalty rate

Discount rate		8.00%				
		Year 1	*Year 2*	*Year 3*	*Year 4*	*Year 5*
Sales forecast		100,000	110,000	120,000	130,000	140,000
Sales, PV		96,225	98,007	98,997	99,303	99,020
Total Sales, 5 years	A	491,551				
IP value (PV)	B	25,000				
Royalty for 5 years	B/A	5%				

- **General valuation perspective**

In general, valuation practice for financial purposes or in the context of M&A transactions, relief from royalty method[138] is a common method to value for instance, trademarks / trade name or technology patents.

Determining a royalty rate is a key building block for this method and actual licensing agreements for the same or similar intangibles generally provide the best basis for determining an appropriate royalty rate. In general, the valuation literature also refers to the "arm's length" licensing agreements covering identical or similar intangible assets that should therefore be considered in all valuations.[139]

In practice, determining a comparable royalty rate can be done through different sources of information:

- In-depth discussion with the management of the company covering aspects such as the existence of license agreements with third parties, or intra-group. Common practice is also used to inquire from Company's management about recent licensing transactions in the industry covering comparable assets. The discussion also covers the investigation on the nature of the asset licensed and industry, for instance, whether or not it is used in connection to business-to-business or business-to-consumer products or services, and the understanding of the strength of the intangibles (brand awareness etc.)
- In practice, existing intra-group royalties used by the subject company for the same or similar IP, or used by other companies in the group (and available publicly), are also relevant, in particular as a cross-check and in cases where too few or no third-party agreements for sufficiently similar property are available. However, in the majority of cases, such intra-group royalties are not considered as the main assumption sources in the valuation.
- An external source of information (in addition to internal company information) which is commonly used to determine comparable royalty rates for any valuation exercise are publicly available databases such as the Royaltystat or Royalty Source databases: "The hypothetical royalty rate is *hence usually derived from market-based royalty rates for guideline or similar transactions. A prerequisite for this method is the existence of comparable assets that are licensed at arm's length on*

[138] *Appendix 2.A – Description of valuation methodologies*, 1.1 relief from royalty method.
[139] Grant Thornton, 2008, page 40.

a regular basis"[140]. The search is typically run by focusing on industry codes similar to those of the company analysed.

Comparability of the intangible assets found in agreements on public databases is commonly assessed through criteria such as the industry sector, sub-sector and the specific type and description of the asset. Besides, it is important to consider the company's revenues as royalty base: *"The royalty rate and corresponding financial parameters, such as revenues that would hypothetically be paid in an arm's length transaction by a willing licensee to a willing licensor for the rights to use the subject intangible asset;"*[141]

A final step in royalty benchmarking in valuations is a check for reasonableness of the royalty in agreements found. It is important to note that, from a valuation perspective: *"Royalty rates can often vary significantly in the market for apparently similar assets. It could be useful to cross-check the assumed royalty input by reference to the operating margin that a typical operator would require from sales generated from use of the asset."*[142] In practice, this means that the results are filtered and the rates that are considered to be outliers, and / or those that result in royalties that are unreasonably high or low by reference to the profits of the notional licensee are excluded in order to select the most similar licensing agreement for the valuation.

- **Transfer pricing perspective**

In transfer pricing, determination of a royalty rate applicable for a specific IP, falls under the principles of the CUP method in the TPG. As the OECD states, "*where reliable comparable uncontrolled transactions can be identified, the CUP method can be applied to determine the arm's length conditions for a transfer of intangibles or rights in intangibles.*"

As encountered in any application of the CUP method, the most important aspect to consider is the comparability analysis. The TPG notes the five factors important in any comparability analysis, being characteristics of the property or service, functional analysis, contractual terms, economic circumstances, and business strategy. These factors need to be similar in tested transactions (e.g. a transfer of intangible property) in the controlled transaction and in the potential comparable uncontrolled transactions. The first factor, characteristics of the property, is especially important for analysis of the intangibles or rights in intangibles.[143] In this respect, the OECD openly recognises that finding reliable comparables may prove difficult or even impossible in some cases.[144]

For determining the comparability of intangibles, it is essential to consider the unique features that they might have. Some of the features that need to be taken into account in this regard are the following:

- Exclusivity – parties that have the right to exclude others from using the intangibles do not have the same degree of market power or influence as parties holding non-exclusive rights;

[140] Guidance Note No. 4, para. 12-13.
[141] Ibid.
[142] Ibid.
[143] OECD TPG, para.1.40.
[144] OECD, *Aligning transfer pricing outcomes with value creation*, para. 6.146.

- Extent and duration of legal protection – for some intangibles that have limited useful life (such as patents), the duration of the legal protection affects the expectation of the parties of the future benefits;
- Geographic scope – global rights may prove more valuable than geographically limited rights;
- Useful life – the useful life is affected by rate of technological change in a certain industry and by the development of similar or potentially improved products; the extent of useful life is also linked to expected future benefits from the use intangibles, hence proving the intangibles with longer useful life to be more valuable;
- Stage of development – generally intangibles relating to products with established commercial viability are more valuable than those related to products whose commercial viability is not yet established; for partially developed intangibles, the likelihood that the development will lead to future benefits must be evaluated;
- Rights to enhancements, revisions, updates – having access to updates, enhancements can make the difference between deriving short- or long-term advantages from the intangibles;
- Expectation of future benefit – in cases where a significant discrepancy is observed between the anticipated future benefit of using one intangible as opposed to another, it is difficult to consider the intangibles as being sufficiently comparable in the absence of reliable comparability adjustments; moreover, actual and potential profitability of products or potential products must be considered.

Furthermore, in performing a comparability analysis, the existence of risks related to the likelihood of obtaining future benefits from the intangibles must be considered, especially taking into account especially the following types of risks:[145]

- Risks related to the future development of the intangibles;
- Risks related to product obsolescence and depreciation in the value of the intangibles;
- Risks related to infringement of the intangible rights; and
- Product liability and similar risks related to the future use of the intangibles.

It may prove necessary from the results of a comparability analysis to perform comparability adjustments. The OECD makes reference to the specific principles laid down by the OECD Guidelines with regards to such procedures, and it expresses concern relating to performing such adjustments in situations where they represent a large percentage of the compensation for the intangible. [146]

In practice, a transfer pricing practitioner performing such comparability analyses relies on the information drawn from external databases or proprietary compilations of publicly available licence or similar agreements.[147] It is important, first, to verify if such data is sufficiently detailed in order to permit an evaluation of the specific features of comparability analysis presented above.[148]

[145] OECD, *Aligning transfer pricing outcomes with value creation*, para. 6.128.
[146] OECD, *Aligning transfer pricing outcomes with value creation*, para. 6.129.
[147] OECD, *Aligning transfer pricing outcomes with value creation*, para. 6.130.
[148] Ibid.

In evaluating the comparable licence arrangements identified from databases, the objective must be finding the most reliable data, keeping in mind that this will not always be perfect.[149] In this respect, the OECD points to the fact that sometimes pragmatic solutions need to be found, without giving any specific guidance on the actual level of pragmatism one can have while still respecting the comparability standards. Examples are provided, such as the broadening of the search with regards to other geographical markets, industries or even to different economic circumstances. However, the choice between these options must be made on a case-by-case basis, depending on the facts and circumstances and on the significance of the expected effects of comparability defects on the reliability of the analysis.

- **Key similarities / differences**

From comparing the general valuation practice and the transfer pricing one, it appears that although they are broadly similar, due to the strict comparability requirement of the CUP method and to the extensive guidance of the TPG in this respect (reflected also in the local laws and regulations in different countries), the royalty search is a more detailed and rigorous exercise in the transfer pricing field than in valuations for other purposes.

4.2.3 Routine return

Routine returns are used in the application of the Discounted Cash Flow and the Excess Earnings Method as described in Section 3.

- **General valuation perspective**

In general, there are several approaches in valuation that aim at assessing the value of an intangible by reference to the residual profits / cash flows and / or residual value after taking into account the contribution to total profits or total value of all other assets / activities of the business:

- One variation of the premium profits method used in valuations for other purposes derives a value of an IP asset by comparing an estimate of the profits or cash flows that would be earned by a business using the asset with "normal profit" i.e. profits that would be earned by a business that does not use the asset (that is, it is based on the difference of the profits 'with and without' an asset).[150] The method deducts a "normal profit" from a peer company(ies) in the same sector which does not own the same intangible. The valuer will prepare a forecast of periodic profit or cash flows expected to be generated (or costs expected to be incurred) by a market participant not using the IP. In this respect, it is common valuation practice to search for quoted companies, looking specifically for listed peer companies that do not own such an intangible. Typically, quoted company data is readily available on publicly available databases (e.g. on Bloomberg, CapitalIQ or Infinancials). In case no listed company matches the search criteria, it is possible to use non-quoted companies (and hence to get data from Amadeus). In general, valuers prefer to use quoted companies over non-quoted companies as more and transparent data is readily available.

[149] OECD TPG, para. 3.38.

[150] Another variation of the method which is defined in Section 3 is estimating the difference between the price of the products containing intangible with the price of a generic product, and estimating the difference in cash flows linked to this price difference.

The method is used in PPA valuations infrequently, but this approach may come closest to the "routine return" concept used in transfer pricing.

- Excess earnings method determines the value of IP as the present value of the profits attributable to the subject IP after excluding the proportion of the profits that are attributable to other assets. The method deducts a "contributory asset" charge based on a 'fair return" on all other assets contributing to that income stream, including other intangibles. In practice, the fair return on all other assets are established based on available literature and on the experience of the valuer. Typically, the fair return calculation builds up from the risk free rate, Weighted Average Cost of Capital ('WACC') or Cost of equity, depending on the type of asset (fixed assets, working capital, etc.).
- One variation of the 'residual profit method' is the so called "Greenfield" method [referred to in Section 3.2.3 main valuation methodologies (method 5) and *Appendix 3 – Description of OECD methodologies*, point 4 – residual methods]. Under this method, the value of the subject intangible is determined using cash flow projections that assume the only asset of the business at the valuation date is the subject intangible. All other tangible and intangible assets must be bought, built or rented. The Greenfield method deducts the total cost of buying or renting all other assets. In this respect, the valuer will need to estimate the timing and amount of expenditures related to the acquisition, creation or rental of all other assets needed to operate the subject business.

- Transfer pricing perspective

In transfer pricing, "routine return(s)" account for profits from normal economic activity earned by an entity using or owning the IP. That is, this return needs to correspond to the profits performed by comparable companies which do not have the specific intangible assets that are being examined. For the purposes of the application of the Discounted Cash Method, these estimates are deducted from total cash-flows in order to arrive to the residual profits, which are considered to reflect a value of the intangibles.[151]

According to the transfer pricing principles and practice, identifying routine functions and their respective returns falls under requirements of the TNMM method of TPG. Similarly to the application of the CUP method, when performing a TNMM analysis, a transfer pricing practitioner should first perform a comparability analysis in order to comply with the arm's length standard. However, for an application of the TNMM, the functional similarity may be more important than the product / property similarity.[152] Hence, a functional analysis is of a "must" to perform, in order "to identify and compare the economically significant activities and responsibilities undertaken, assets used and risks assumed by the parties to the transactions."[153] In this respect, the TPG suggests to focus on the "principal functions performed by the party under examination," assessing "the economic significance of the functions performed in terms of their frequency, nature, and value to the respective parties to the

[151] With respect to this approach, it is important to note that one should not simply assume that all residual profit, after a limited return to those providing routine functions, should necessarily be allocated to the owner of intangibles. The transfer pricing method selected should take into account all of the relevant factors materially contributing to the creation of value, not only intangibles and routine functions (OECD TPG, para. 6.133).
[152] OECD TPG, para.1.41.
[153] Ibid, para. 1.42.

transactions"[154] and considering the type and the nature of assets, and the risks assumed. Adjustments should be considered, both for any material differences in the functions undertaken[155] (by an independent enterprise with which the tested party is compared to) as well as for the differences in the risks assumed.[156]

In practice, the routine return is established by a search for comparable companies that perform functions that are comparable (based on the functional analysis) to the functions performed by the tested company (i.e. in the case of the discussed DCF, by the company of which the forecast is considered for determining the value of the intangibles), and their financial analysis. The search is in practice done on publicly available database (e.g. BvD Amadeus, etc.) containing financial information on companies for a number of years. Based on well-formulated search process and qualitative and quantitative criteria (industry codes, size of operations, certain financial rations, etc.),[157] a transfer pricing specialist selects a set of comparable companies and estimates certain financial indicators (net profit margin, etc.) based on the sample of the selected companies and a number of years of financial data available for such set. The TPG provides detailed advice with respect to the number of years, the statistical range to calculate the financial return, etc. It is especially of high importance for the sake of the arm's length standard that the comparable companies are independent entities and are not impacted by intercompany transactions that may possibly not be priced at arm's length.

For determining a set of the comparable companies, the reference to "pragmatic solutions" of TPG is still valid (and based on the lighter comparability requirements is arguably easier to implement with respect to routine returns benchmarks than to royalty benchmarks).

- **Key similarities / differences**

As can be seen, the general valuation and the transfer pricing approaches regarding routine / normal return are in principle rather similar. The transfer pricing concept of routine returns seems to be stricter as it falls under the TNMM where there is extensive TP practice, which cannot be said by the general valuation approach. Accordingly, the transfer pricing notion is much more structured both in terms of definition and the concept and very detailed in terms of the approach to concretely determine the routine return than a similar concept used in general valuation practice. The differences include:

(i) By virtue of using comparable companies' financial information, the routine return used in transfer pricing may incorporate a certain amount of normal goodwill and going-concern value, which may not be the case in a valuation performed for other purpose.[158]

In this respect, identifying the routine return is a more precise and prescribed process in transfer pricing which is subject to a high level of scrutiny. This does not seem to be the case with the general valuation practice which seems to be, more simply, relying on publicly available peers in the same industry (without a step-by-step search process required by the TNMM of the TPG).

[154] Ibid, para. 1.43.
[155] Ibid.
[156] Ibid.
[157] Ibid, para. 3.43.
[158] Chandler et al (2010).

(ii) A transfer pricing analysis may take industry-specific and business-cycle attributes into account in a different way than in a PPA (e.g., assets that are trapped in a declining industry could theoretically have a negative return [considered in the PPA] while routine profits during a boom year may reflect a specific point in the business cycle.[159]

With respect to the latter, transfer pricing practitioners may be governed by multi-year analysis[160] and weighted average calculations of profit margins to determine appropriate routine return, as well as special considerations – based on factual, functional and risk analysis – on what point in the range of routine returns[161] to select for applying a discounted cash flow/ residual profit method. Such regimented approach is unlikely to be in case in general valuation practice, where valuer's judgment and experience often play a more significant role.

4.2.4 Discount rate

A key element of a valuation model is the discount rate or rates used in converting a stream of projected cash flows into a present value. The final value of an asset valued changes significantly based on the value of this parameter.

- General Valuation perspective

In the context of valuations of intangible assets and IP for purposes other than transfer pricing (e.g. M&A purposes, for capital investment decision-making and / or for dispute and litigation purposes), a certain body of research, practice and opinions / guidance have evolved in respect of relevant factors affecting the estimation of discount rates. The following are extracts found in valuation literature:

- Since return requirements increase as risk increases and since intangible assets are usually riskier for a company than are tangible assets, it is reasonable to conclude that the returns expected on intangible assets typically will be at or above the average rate of return (discount rate) for the company as a whole;[162]
- *"A comparative study of the uncertainty associated with R&D and that of property, plant and equipment confirms the large risk differentials: The earnings volatility (a measurement of risk) associated with R&D is, on average, three times larger than the earnings volatility associated with physical investment";*[163]
- In the specific context of litigation or disputes, the appropriate cost of capital is often a significant aspect when valuing the lost profit of the plaintiff. As an example, *"in lost profits cases relating to intellectual property rights the law strives to compensate the plaintiff for the cash flow it lost, and the law recognise time value of money,* hence the need for a rate of return discounting the IP cash flows.[164] As simplification, in many lost profit cases, the proper discount rate which will be used in calculating the plaintiff's lost profits will be its costs of capital of the latter;[165]

[159] Ibid.
[160] OECD TPG, para. 3.175-3.179.
[161] OECD TPG, para. 3.60-3.62.
[162] Hitchner (2011).
[163] Lev (2001), at 39.
[164] Pratt et al (2011) at 109.
[165] Ibid, at 110.

- Although for specific cases of IP rights valuation, discount rates can have a significant explicit impact on the outcome of a dispute, *"there is relatively little guidance in case law regarding which specific discount rates apply in intellectual property damages matters." "Courts have allowed several methods to develop a discount rate, including the CAPM[166] method and the build-up method. For intellectual property assets, the basic CAPM and the build-up method may be expanded to include an additional intellectual property-related risk premium".*[167]

- Transfer pricing perspective

The TPG stresses the importance of the discount rate for the transfer pricing practitioners performing a valuation. It notes that "*the discount rate takes into account the time value of money and the risk or uncertainty of the anticipated cash flows. As small variations in selected discount rates can generate large variations in the calculated value of intangibles using these techniques, it is essential for taxpayers and tax administrations to give close attention to the analysis performed and the assumptions made in selecting the discount rate or rates utilised in the valuation model.*"[168]

The OECD underlines that "*there is no single measure for a discount rate that is appropriate for transfer pricing purposes in all instances.*"[169] Valuers should not assume that there is a pre-determined formula or that the WACC approach should always be used when determining discount rates for transfer pricing purposes – "*instead specific conditions and risks associated with the facts of a given case and the particular cash flows in question should be evaluated in determining the appropriate discount rate*."[170]

It is important to account for risk when calculating discount rates; for instance, intangibles still in the development phase may be the riskier elements of a taxpayer's business.[171] However, not all businesses have the same level of risk and some cash flow streams are inherently more volatile than others, such as the likelihood of expenses is higher than the likelihood of revenues to be generated from an intangible. The discount rate(s) needs to reflect the level of risk in the overall business as well as the expected volatility of the various projected cash flows taking into consideration the circumstances of each individual case, with care to avoid double discounting for risk.[172]

- Key similarities / differences

As illustrated above, the theory on discount rates is basically the same for general valuations as well as for transfer pricing ones. The two practices register some differences, supported also by transfer pricing literature. In this sense, it is mentioned that that the discount rate determination in transfer pricing practice may be not as thorough or complete as in the valuation practice for other purposes. For instance, one author comments that, historically in the context of transfer pricing, relatively straightforward approaches relating to discount rates have been taken, often only analysing / estimating the WACC of the business as a whole or similar sources of discount rates. *[The author explains a reason behind this being that transfer pricing*

[166] Capital Asset Pricing Model.
[167] Pratt et al, 2011, at 132-134.
[168] OECD, *Aligning transfer pricing outcomes with value creation*, para. 6.170.
[169] OECD, *Aligning transfer pricing outcomes with value creation,* para. 6.171.
[170] Ibid.
[171] OECD, *Aligning transfer pricing outcomes with value creation*, para. 6.172.
[172] OECD, *Aligning transfer pricing outcomes with value creation*, para. 6.173.

analyses have focused on determining correct taxable income for a specific year, rather than determining present value, which is not the case for transfer pricing valuations of transferred IP].

In PPA analyses, more attention is given to discount rate issues, especially by (i) comparing the internal rate-of-return (IRR) implied by the financial forecasts used to price the acquisition with the WACC as a way of assessing consistency between these forecasts and the price that was paid as part of the acquisition and (ii) developing a weighted-average return, which is used to evaluate whether or not the specific discount rates applied to the cash flows derived from different assets are consistent with the overall WACC.[173]

4.2.5 Useful life

- General Valuation perspective

International Valuation Standards address the issue of useful life of intangible assets: "An important consideration is the remaining useful life ('RUL') of an intangible asset. This may be a finite period limited by either contract or typical life cycles in the sector; other assets may effectively have an indefinite or even infinite life. Estimating the RUL will include consideration of legal, technological or functional and economic factors. For instance, an asset comprising a drug patent may have a remaining legal life of five years before expiry of the patent, but a competitor drug with expected improved efficacy may be expected to reach the market in three years. This might cause the RUL of the first product to be assessed as only three years"[174].

- Transfer pricing perspective

The TPG also gives special attention to the useful life. It is stated that "to determine the projected useful life of specific intangibles, all relevant facts and circumstances must be taken into consideration. As mentioned before under the comparability analysis factors, the useful life of a particular intangible can be affected by the nature and duration of the legal protections afforded the intangible, by the rate of technological change in the industry, and by other factors affecting competition in the relevant economic environment."[175]

The OECD recognises that intangibles might contribute to the generation of cash flows even after the legal protection have expired or the products related the intangibles have ceased to be marketed. On the other hand, the TPG notes that even though "*some intangibles have an indeterminate useful life at the time of valuation, this does not imply that non-routine returns are attributable to such intangibles in perpetuity.*"[176] However, the TPG does not elaborate however, on this statement any further.

When intangibles contribute to revenues beyond the period for which financial projections exist, usually a terminal value for the intangible related cash flows is calculated. "*Where terminal values are used in valuation calculations, the assumptions*

[173] Chandler et al (2010).
[174] Guidance note no. 4, at 26.
[175] OECD, *Aligning transfer pricing outcomes with value creation*, para. 6.175.
[176] OECD, *Aligning transfer pricing outcomes with value creation*, para. 6.176.

underlying their calculation should be clearly set out and the underlying assumptions thoroughly examined, particularly the assumed growth rates."[177]

- Key similarities / differences

From the above, it appears that the intangible useful life definition is similar or the same for transfer pricing and for valuations for other purposes. Differences between the approaches stem from transfer pricing being a separate discipline which looks at the transactions from perspectives of two specific parties, while general valuations consider hypothetical buyers or sellers on the open market. This means that the transfer pricing experts will focus on the useful life of the intangible assets in the hands of the two particular parties rather than a useful life of the same intangible asset in the hands of a hypothetical market participant.

Some authors note that there are differences in practice for determining useful noting that the corporate finance valuations or PPA will come up with a useful life different from a transfer pricing valuation"[178] It is however observed in the literature that the life of an intangible is an aspect where it may be especially important to coordinate PPA and transfer pricing analyses. This is because the analyses and decisions that are made about life for financial statement purposes are likely to carry a certain amount of weight in the cases of transfer pricing controversy.[179]

4.2.6 Conclusion

Based on the analysis in section 3, it was evident that the definition of the methods and theoretical framework is different in transfer pricing compared to general valuation practice, governed by the OECD's TPG and the degree the TPG is implemented in the local laws and regulations. Based on the investigation in the present section, it seems that the parameters (building blocks) used for building a valuation model are broadly similar, however there are differences registered between the two practices mainly caused by transfer pricing being a particular discipline.

Besides the differences listed above at both levels, it is important to note that the degree and scope of the documentation of valuation may also be different. This difference stems from the specifics of the audience to the valuation exercise. In case of transfer pricing in particular, it is important to note that the valuation report (transfer pricing report) may often be reviewed by the tax authorities in the course of a transfer pricing audit only several years after its preparation. "Tax authorities often have a high level of scepticism about the forecasts and assumptions and underlying the analysis, and are willing to second guess both methods and data."[180] In this respect, the full documentation of factual background, of functional and risk analyses of the parties involved in the transactions becomes of ultimate importance as a proper justification of the valuation approach and results obtained years before the audit.

4.3 Parametrisation of main building blocks in practice

For the presentation of the results on analysis of the building blocks, answers provided to the study team in response to the survey sent to practitioners in all EU Member States is used as the main basis for analysis, as described in Section 1. For the

[177] OECD, *Aligning transfer pricing outcomes with value creation*, para. 6.177.
[178] Se for instance Chandler et al, 2010, or Finan et al, 2011.
[179] Chandler et al, 2010.
[180] Ibid.

purposes of consistency, unless noted otherwise, the input of 22 Member States [181] that have been exposed to valuations of IP in the context of transfer pricing. For the answers of the main trade partners of the EU, nine respondent inputs have been used.[182]

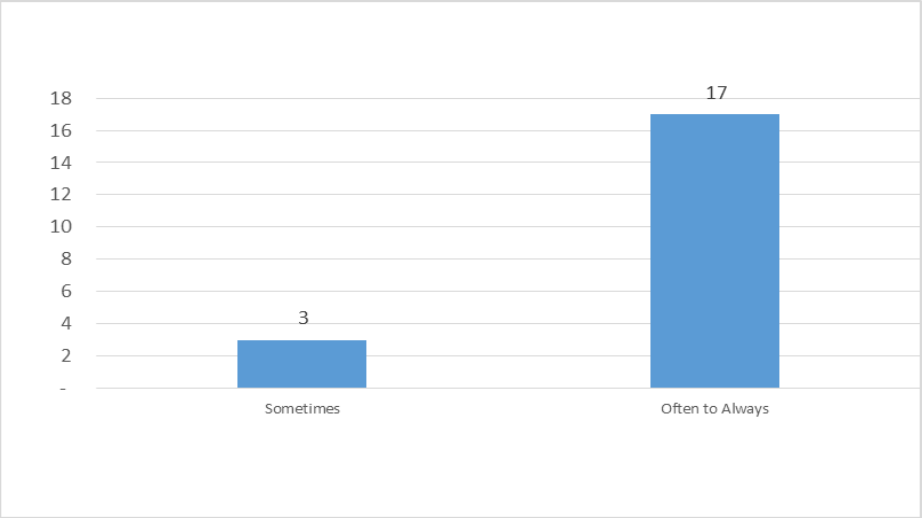
4.3.1 Financial Data

- **EU Member States**

Financial forecast validation

The first question related to financial data inquired as to how frequently the experts performing valuations for transfer pricing purposes perform a reasonability check of financial data provided to them by the taxpayer. In this respect, besides five Member States respondents having observed little activity on valuations for transfer pricing purposes, three additional Member States respondents did not provide an answer to this question.[183] All responding countries agreed that they perform some kind of reasonability analysis, with 17 Member States respondents noting valuations are often or always performed and only three countries answering that valuations are only "sometimes" performed.

Figure 35. Frequency of reasonability check on financial data provided – EU Member States



Following the previous question, the respondents were asked to indicate which data are used in order to perform such a reasonability check of the financial data provided for valuation purposes and in what way they are used. The following choices were provided:

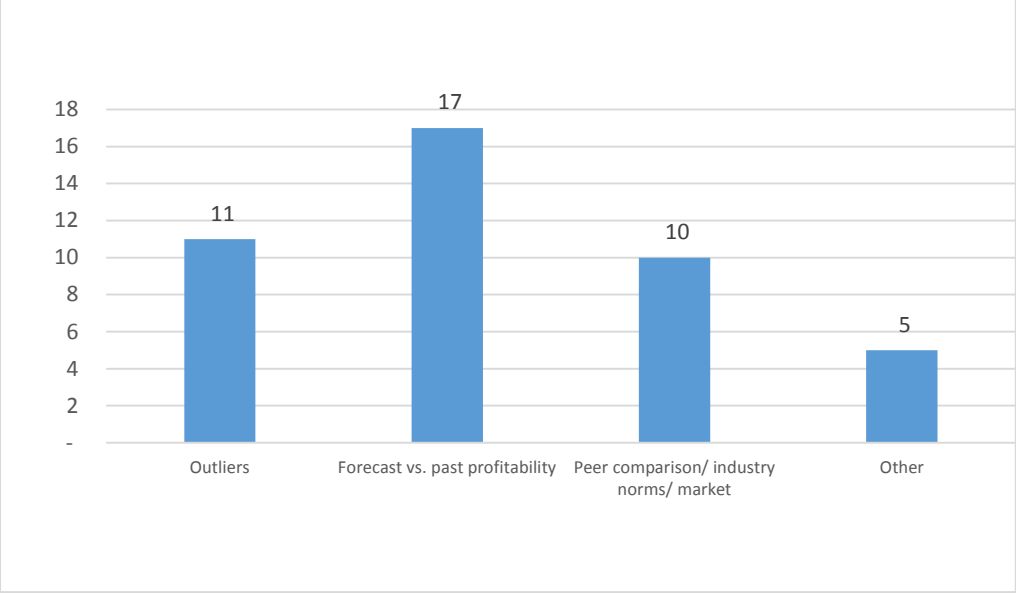
- No data, just checking for obvious outliers ("jumps" in sales / profitability, etc.);

[181] Missing countries that did not have experience are Bulgaria, Croatia, Cyprus, Ireland, Malta and Slovenia.
[182] Brazil does not have experience with valuations of intangibles for transfer pricing purposes.
[183] These are Bulgaria, Estonia, and Luxembourg.

- Compare the forecast or projected growth with the past profitability (historical data) of the company;
- Other (please explain).

The results are illustrated in the figure below.

Figure 36. Ways to perform reasonability check of the forecast – EU Member States



Member States respondents were requested to mark all answers that apply to their market. Among 20 respondents that responded to this question, the most frequently indicated answer was a comparison of the forecast with the past profitability (with 17 Member States noting indicating this). Checking for outliers was marked by 11 respondents. Also, 10 Member States respondents noted that they will do some kind of comparison with the market or with competitors or peer companies. From five additional responses, respondents from Member States cited checks concerning working capital, reinvestment levels and relevant ratios. Among these five, one Member State respondent[184] also quoted that it is important to compare the past actuals with the past forecasts (to determine whether or not the forecasts in the past overstated the past performance) and another Member State respondent noted that perform an interview with the management may be performed, particularly to discuss the forecast and all assumptions behind it.[185]

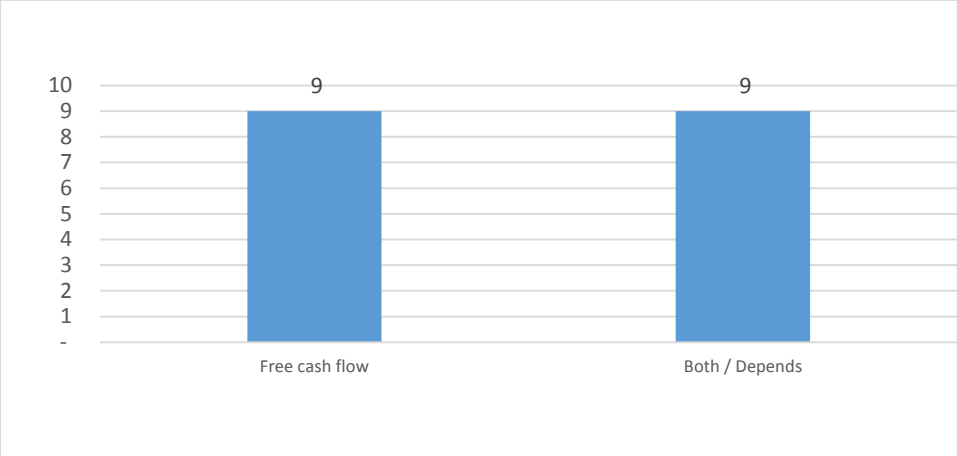
It is important to note the survey inquired about the practice with respect to price adjustment clauses and their frequency since those may serve as potential remedies for the financial data being uncertain. This part of the survey results is addressed in Section 3.

[184] UK.
[185] Italy.

Level of profit and taxes

One of the rather controversial questions in transfer pricing is whether to use free cash flows or operating profit for the purposes of valuation. As mentioned in Section 4.1, the OECD leaves this question open in the TPG. Practice in this respect was investigated in the survey.

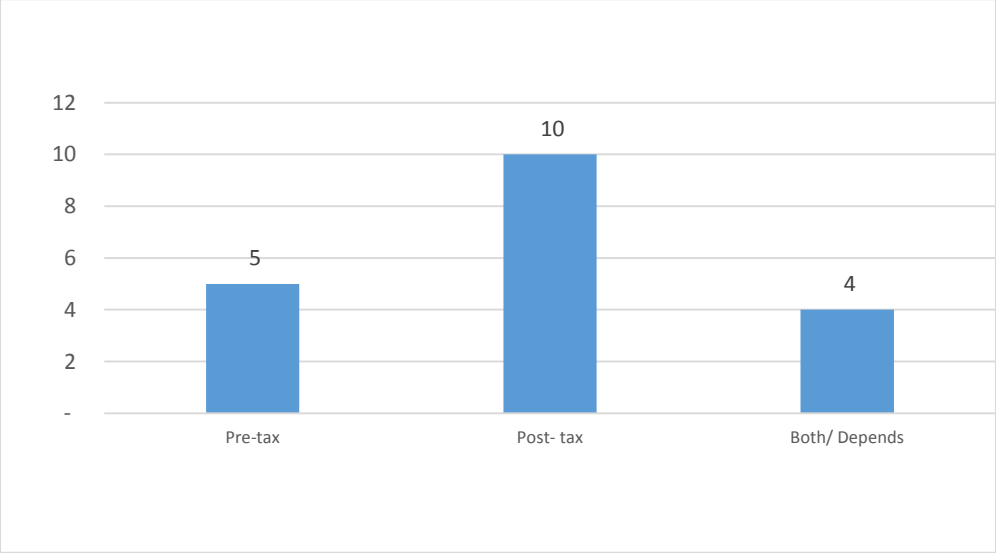
Figure 37. Use of operating profit or free cash flow to determine IP value – EU Member States



Only 18 Member States specialists responded to the question, with others observing no relevant use of valuations for transfer pricing purposes in their respective markets. It is interesting that the respondents are divided on whether free cash flows will be exclusively used or either free cash flows or operating profit will be chosen, depending on the approach, method, or the case in hand. There is no Member State respondents which states that operating profit will be exclusively used, although two Member States respondents (UK and Greece) out of nine answering "Both / Depends" indicate that the operating profit is used as often as possible. The UK expert notes in this respect that using operating profits allows avoiding the issue of differences in tax amortisation benefits and tax rates when performing a valuation.

Another interesting question in this regard, is whether a final value of intangible asset obtained through the valuation is a value on pre-tax or post-tax basis. Presumably, since the transfer pricing focuses on determining taxpayers' tax base, the value should be obtained on a pre-tax basis. However, the answers to this question were somewhat divided.

Figure 38. Pre-tax or post-tax value of IP obtained – EU Member States



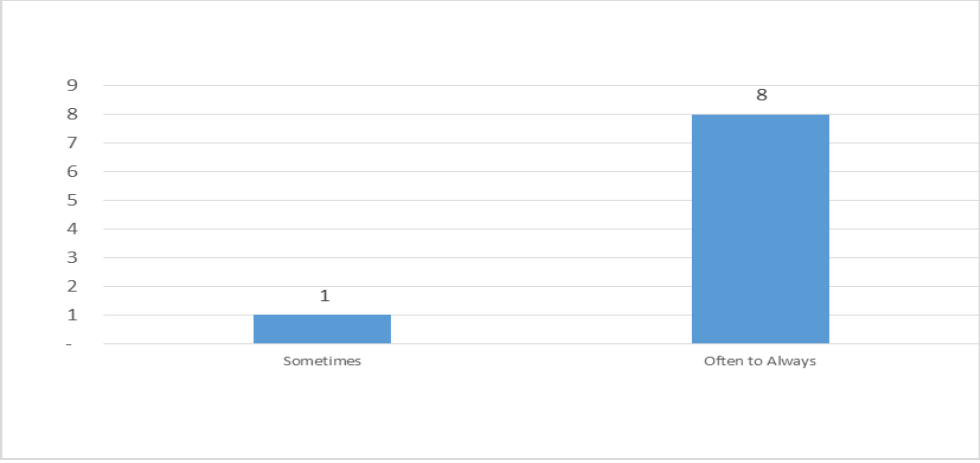
Out of 19 responses to this question, ten respondents report that post-tax basis is used. Five respondents report that pre-tax value is used (it may involve making calculations on a post-tax basis but then grossing up the result to arrive at a pre-taxed value). Four other respondents report that both types of valuations may occur, some with post-tax or others with post-tax values. Furthermore, respondents in Denmark, Germany, Sweden and the Netherlands have a relatively high level of experience in transfer pricing valuations.

- **EU Main trade members**

Financial forecast validation

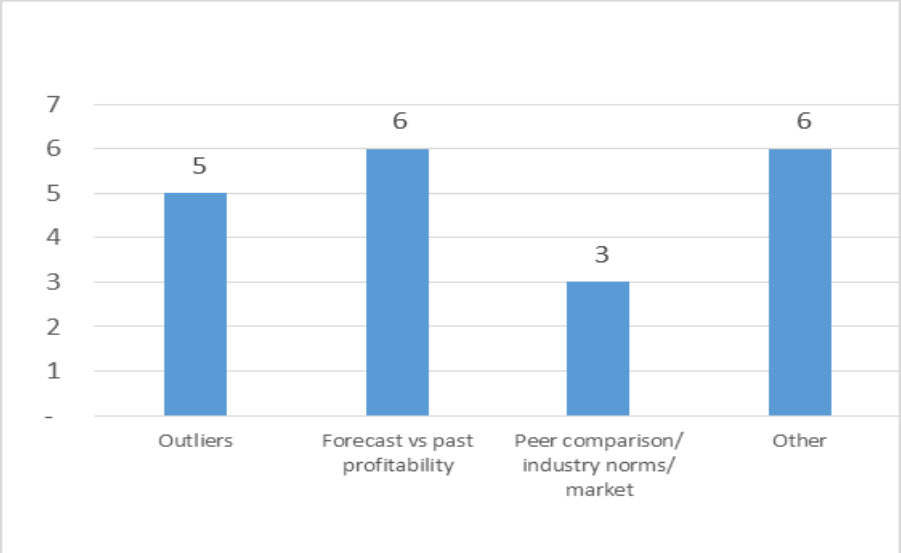
Similarly to EU Member States, checking financial forecasts that serve as a basis of the valuation exercise is important in trade partners' countries. Of nine trade partner respondents, eight perform a reasonability analysis "often" to "always". Only one country (Australia) puts this frequency at "sometimes."

Figure 39. Frequency of reasonability check on financial data provided – Trade partners



In terms of the types of checks and the type of data used for such checks (in the Figure below), the observations are also similar to the Member States. The most "popular" check is the check of the forecast against the past profitability (noted by six out of nine respondents). Attention on outliers is specifically noted by five countries. Three countries respondents replied that they would look at industry performance or peer companies with respect to forecasted performance. Out of the six countries respondents quoting "other" checks, four indicate that they would scrutinise growth rate(s).[186] The US respondent noted only the "other" option in their response, explaining that US practice is to investigate what type of forecast the company has provided in detail. A similar answer was also indicated by respondent in China – the Chinese respondent stated that a check of assumptions and the rationale behind the forecast will be performed.

Figure 40. Ways to perform reasonability check of the forecast – Trade partners

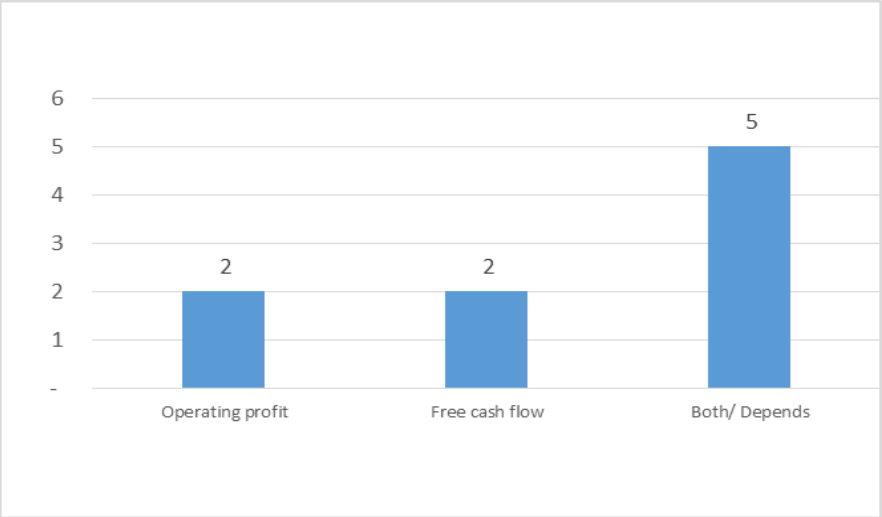


Level of profit and taxes

With regards to the level of income accounted for in a valuation – being operating income or free cash flow – the respondents in the trade partners' countries indicated that the use of the operating profit may be a more frequent choice (relative to the analysis in the Member States). This is reflected in the Figure below. Two respondents (China and Japan) indicated that their general practice is to always use income at the operating profit level (no Member State provided such an answer). Five respondents stated that "it depends" and they would consider both options; however, among these five respondents, two (Korea and Norway) note that most likely it will be operating profit. Only two respondents (Canada and Switzerland) noted that the level of profit will be the free cash flows as the only option they will choose.

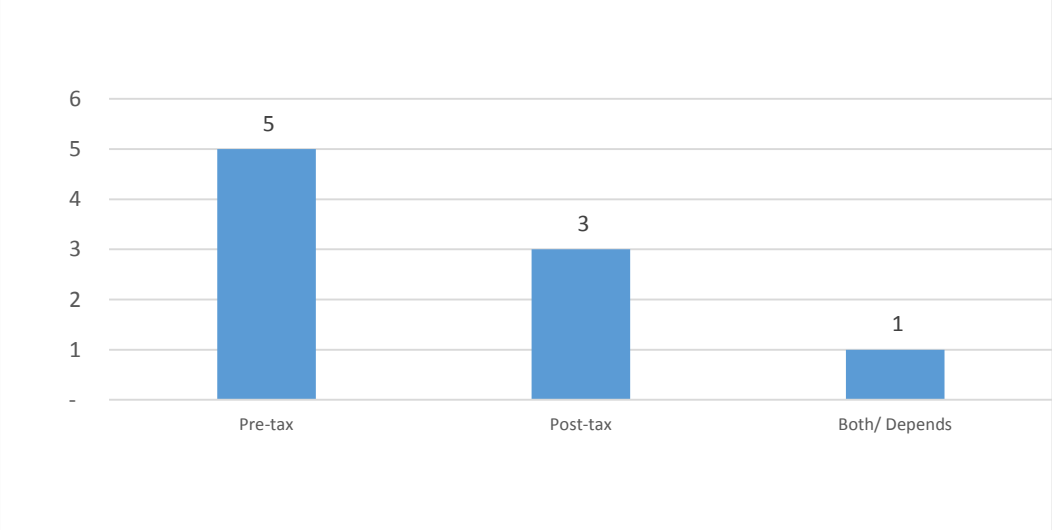
[186] The OECD has a subsection on growth rates especially in OECD, *Aligning transfer pricing outcomes with value creation,* para. 6.169.

Figure 41. Use of operating profit of free cash flow to determine IP value – Trade partners



Finally, regarding the valuation result being reported on a post-tax or pre-tax basis (see Figure below), most trade partners' respondents agreed that it should ultimately be a pre-tax number (and thus the value obtained by summing up discounted cash flows would need to be grossed up). One respondent (Australia) that answered that both options are possible and noted that, in most cases, the pre-tax value is used. The three respondents that mention post-tax values used are from Canada, India and Japan. The US expert noted that the US Cost sharing regulations require obtaining post-tax cash flows and gross them up, thus arriving at pre-tax value.[187]

Figure 42. Pre-tax or post-tax value of IP obtained – Trade partners



[187] US Treas. Reg. 1.482-7(g)(4)(i)(G) state that "In principle, the present values … should be determined by applying post-tax discount rates to post-tax income…"

4.3.2 Royalty rate

- EU Member States

Approach

Member States respondents were requested to comment on their practice with regards to the determination of a royalty rate. Whereas it is viewed as a building block for the "relief from royalty" method, the approach for finding an appropriate royalty is the same whether or not it is also a study to determine an on-going royalty payment for a right to use intangibles (i.e. for the transactions not involving a transfer of IP.

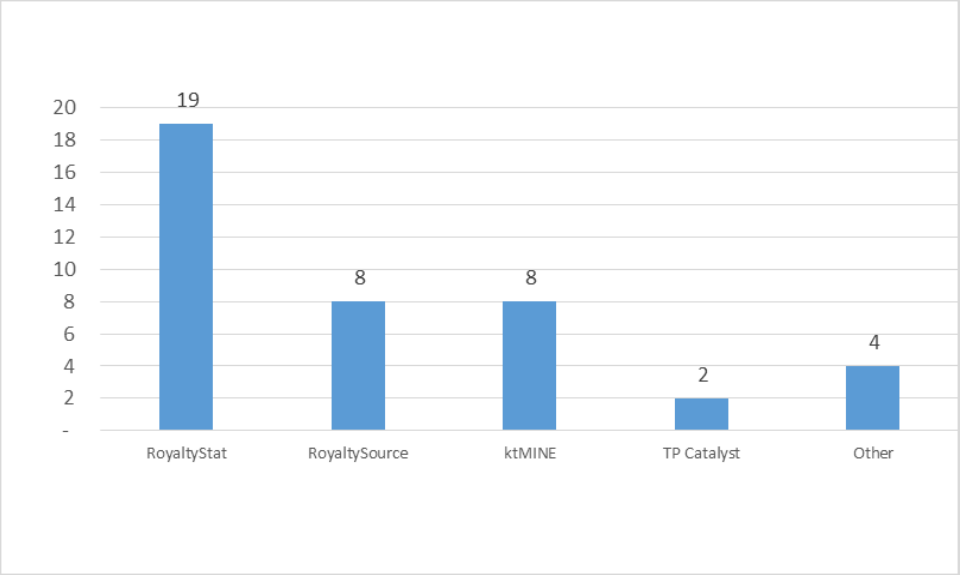
All surveyed Member States respondents agreed that they follow the principles of the CUP method of the TPG when estimating a royalty. In this respect, as a first step, the transfer pricing practitioners in all countries look for internal CUPs, whereby they try to obtain information about the transactions in terms of the same or similar IP entered by any company of the group with a third party. These are typically license arrangements concluded with unrelated parties covering the same or similar intangibles as the ones being valued. In a second step, the transfer pricing practitioners attempt a search for external license agreements for the same or similar IP, after gathering the necessary information about the intangibles on its use and popularity, functional profile of the company, business activities, geographical scope and any related information.

Databases

Member States respondents were asked to comment on the database used for the external searches. The most often used databases for royalty rate CUP searches are illustrated in the figure below. It can be seen that RoyaltyStat seems to be the most popular database among transfer pricing specialists (19 out of 20[188] Member States respondents to this question), sometimes used in parallel with RoyaltySource, ktMINE or TP Catalyst.

[188] Estonia registered no experience in performing external CUP searches as these are outsourced to Lithuania or Latvia. Finland also outsources searches within Deloitte. Other six countries with no experience with valuations for TP purposes (Bulgaria, Croatia, Cyprus, Ireland, Malta and Slovenia).

Figure 43. Databases used in searches for royalty rates[189]



Main difficulties

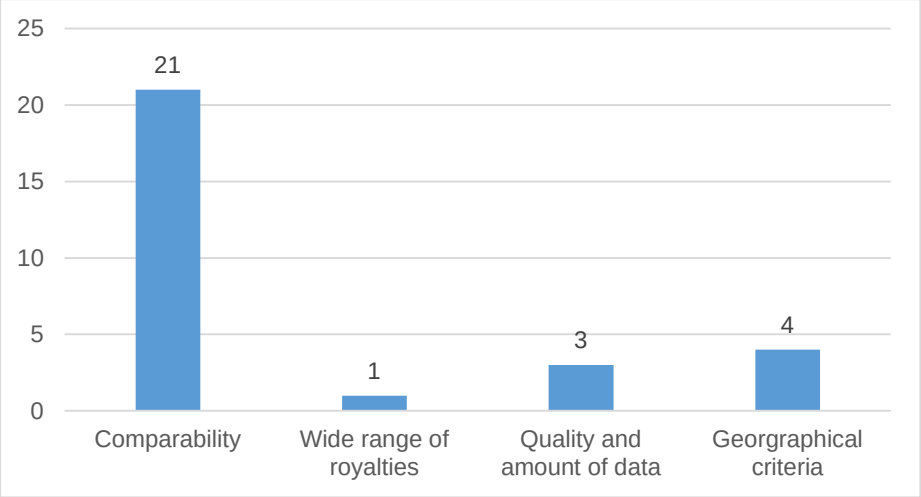
Next, the Member States respondents were requested to comment on the main difficulties when performing a royalty search. Comparability factor was cited as the biggest difficulty in this respect by 21[190] Member States respondents, be it related to the uniqueness of the intangible or to the terms and conditions of the contractual relationship.

Regarding comparability, Member States respondents pointed out the subjectivity and hassle of making decisions on the degree of comparability. In this respect, the UK interviewed experts note that, on the onset of the potential comparable search, it is important to evaluate whether or not the intangibles at stake are "me too" intangibles, that is, if they may have substitutes performing the same function. In this respect, although all intangibles are unique, they do not necessarily provide unique services or value and may have substitutes. For example, with respect to software technology, there may be comparable technologies performing the same function (i.e. enabling a use of a keyboard), hence finding comparables may be possible. However, this is not true for all intangibles – for instance the Coca-Cola brand is unlikely to have comparables that perform the same function or which have similar value creation characteristics in the same industry.

Other difficulties encountered are illustrated and described below.

[189] Countries were allowed to list more than one database used if relevant for them.
[190] Finland has answered this question, in contrast to the previous question on the databases. Countries were allowed to mention more than one difficulty when answering the question. However all countries that provided at least one response to this question mentioned comparability as the main issue.

Figure 44. Difficulties in finding appropriate royalty rates – EU Member States



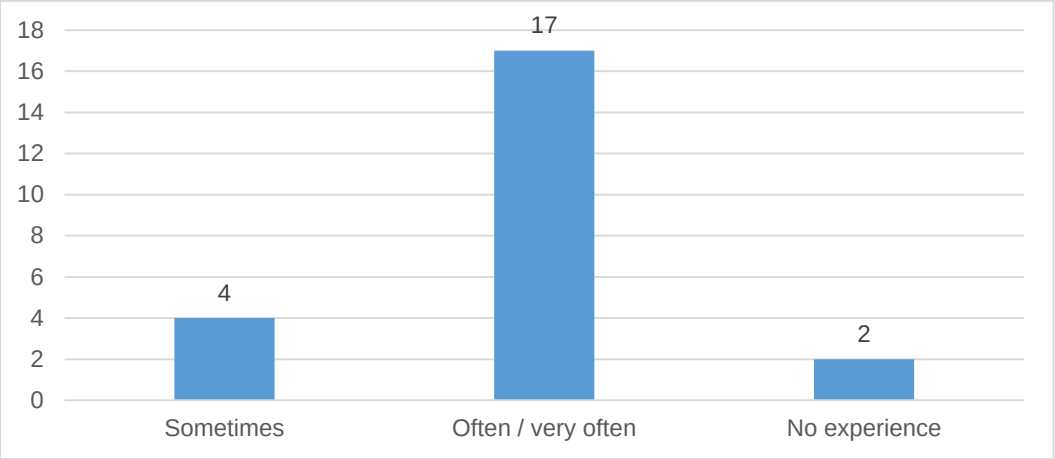
In addition to comparability, one Member State respondent mentioned that occasionally the range calculated for the royalties is too wide and it is difficult to choose and justify a certain point within the range. Another three Member States respondents have observed that the quality and amount of data are not sufficiently reliable due to the limited number of transactions found in databases and to the outdated character of many of the agreements. Four countries respondents have pointed out that an important problem in comparability is the fact that the databases used for searching for royalty agreements contain mainly the US agreements and that the conditions are not comparable and applicable to European cases.

Acceptability of external benchmarks

The benchmarked royalty rates seem to be rather accepted by the tax administrations in the EU Member States, as illustrated in the chart below. Sixteen Member States respondents (out of 23[191] answering the question) noted that royalty rates are often or very often accepted, sometimes due to lack of experience at the level of tax authorities or due to limited access to databases. Four of the Member States respondents are aware of occasional challenges from the tax authorities. Member States respondents noted that the most frequent reason of challenging the royalty rate is a lack of comparability or the quality of work and aggressiveness of the royalty rate. Two Member States respondents out of 23 providing an answer noted no experience with regards to this question.

[191] Estonia answered this question in comparison with the question above. The only five countries with no experience with valuations for TP did not respond to this question.

Figure 45. Acceptability of royalty rates by tax authorities – EU Member States



- **EU Main Trade Partners**

Approach

Similar to the professionals in the EU countries, practices in trade partners countries, appear to be starting benchmarking the royalty with first checking whether or not an internal CUP exists before proceeding to perform an external search. In Japan and in the US, the Comparable Uncontrolled Transaction ("CUT") method is used in this respect, a method very similar to the OECD's CUP method. The Indian experts note that, besides external comparable agreements search, the practice is also to look at the royalty rates of competitors and or to apply the rule of thumb of the royalty being equal to 25%-33% of EBIT.

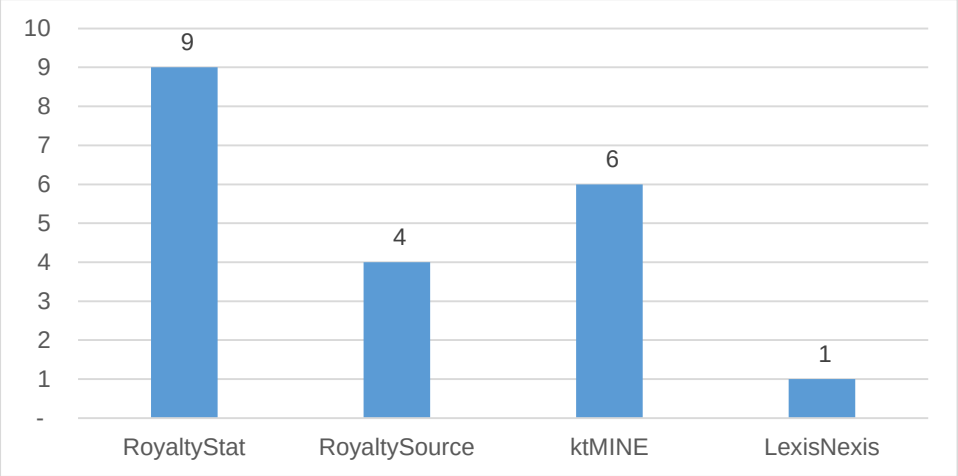
In proceeding with the external comparables search, the US expert especially stressed that a highly important step is to clearly delineate the extent and nature of the right(s) that need to be measured before proceeding with any kind of search – internal or external. For instance, if the project concerns a "right to further develop an intangible", such specific right will be hard to match in a comparables' search since there are rarely agreements that license out a right to further develop an intangible to an external party. The same consideration occurs with respect to the exclusivity of the license. When "the right" to the intangible is so difficult to match, it may be the case that the CUP / CUT method is not the most appropriate one; or, if the circumstances allow, there is a need to perform adjustments.[192]

Databases

The databases mostly used by the EU's main trade partners are illustrated below. It can be observed that all of them use the RoyaltyStat database and that the second most popular one is ktMINE, third being RoyaltySource. In the US, the LexisNexis database is also used, which contains data extracted from the SEC filing reports.

[192] This is similar to the OECD TPG in this respect. The US TP Regulations in addition lay down rules for performing adjustments.

Figure 46. Databases used in searches for royalty rates – Trade partners



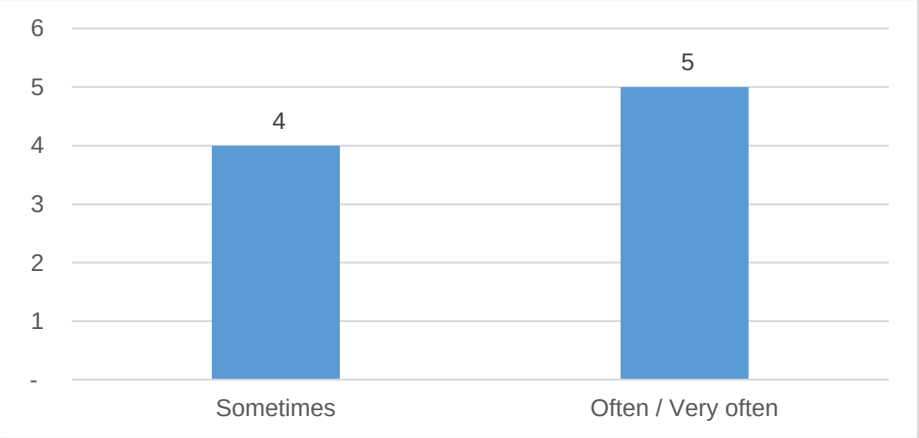
Difficulties

All trade partner respondents recognise that the biggest difficulty in finding appropriate royalty rates stands in the comparability factor. This can be related to the intangible itself, the industry, the specific extent and nature of the right, or to the other terms and conditions of the agreement. One country respondent also notes that the disclosure of sufficient information in order to enable reliable comparability assessments is an issue, next to the difference in timing between comparable and tested agreements.

Acceptability of external benchmarks

The degree of acceptability of benchmarked royalty rates by the tax authorities in the trade partner countries seems rather high, as in the EU Member States (see Figure below). Five countries respondents note that royalty rates are often or very often accepted, while in the four countries royalty rates are only sometimes accepted. In terms of comments on this question, one respondent also noted that tax authorities always challenge the rates. However, they cannot sustain this challenge given that they do not offer a better methodology for the search. Another two respondents made the observation that royalty rates are accepted in their jurisdiction as long as comparables are reliable in terms of matching the right of the tested transaction, the business activities of the parties, and the profit potential.

Figure 47. Acceptability of royalty rates by tax authorities – Trade partners



In terms of reasons for the challenge, one respondent[193] explained that tax authorities may try to re-characterise the transactions involving the payment of royalties into service provision agreements. The same respondent notes that in the cases of internal CUPs, tax authorities reconsider the royalty rate taking into account the fact that local IP-related expenses were incurred to develop the intangible; in this respect, they may argue that for instance a trademark would not be worth the royalty payment. This respondent also mentioned that most of challenges are regarding "soft" intangibles, and that "hard" intangibles, whereby the IP is developed outside of the country and then licensed to this jurisdiction, are usually accepted.

The rest of the respondents noted that the most frequent challenge from the tax authorities is the comparability of the intangibles and rights under consideration. One country specifically mentioned that tax authorities look at the profitability of the party abroad and only then decide on the acceptability of the royalty rate.

4.3.3 Routine return

- **EU Member States**

Approach

For the determination of routine returns (for the purposes of DCF / residual profit method), all 20[194] Member States specialists responding to the question indicated that first the routine functions would be identified, and then a benchmarking search under the principles TNMM would be performed. Two respondents also expressed reservation in the application of the residual profit methodology, one being more inclined to apply full profit split instead due to court favouring in such a direction.[195] [196] On the general

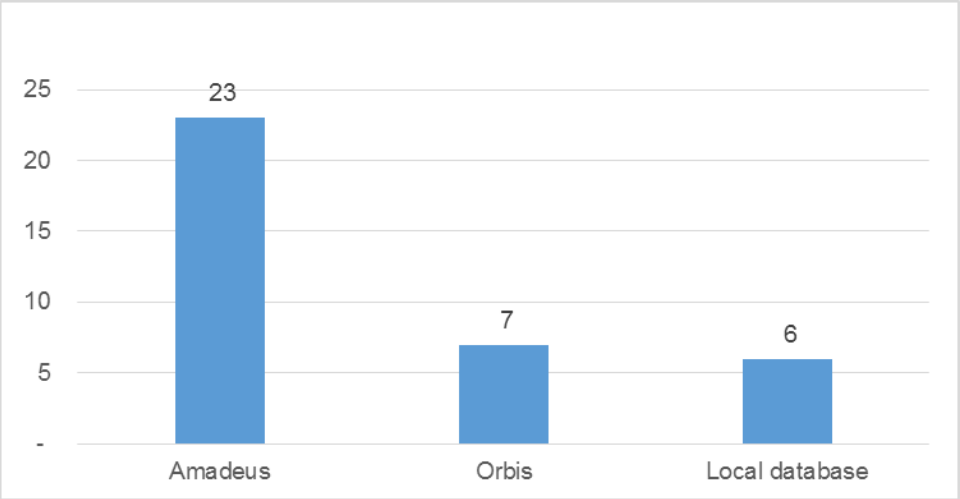
[193] Canada.
[194] Estonia outsources such searches to Lithuania or Latvia and Luxembourg has no experience in this respect. Austria did not answer this question; plus other five countries as before are not accounted for (Croatia, Cyprus, Ireland, Malta and Slovenia).
[195] The UK.
[196] Second country, Austria mentioned that the residual profit split model was rejected during a recent audit; however not due to the TNMM *per se* but the (high) value of the routine return rate.

question of whether the TNMM is a well-accepted methodology, 24[197] Member States respondents confirmed that this is the case.

Databases

For benchmarking routine returns, the most used databases are illustrated in the figure below. It can be seen that the Bureau van Dijk's ("BvD") Amadeus database is by far the most used, with some Member States respondents also using Orbis (a BvD's worldwide database) and the local databases. The local databases are often the databases of BvD limited to a certain country or region and containing more companies in these areas rather than Amadeus which has Pan-European (regional) coverage. An explicit limitation of Amadeus appears to be that it does not provide enough information in order to make an informed decision relating to comparability of functions. In contrast, the US SEC Reports used in the US and Canadian practices for selecting local comparables allow for this.

Figure 48. Databases used in benchmarking routine returns [198]

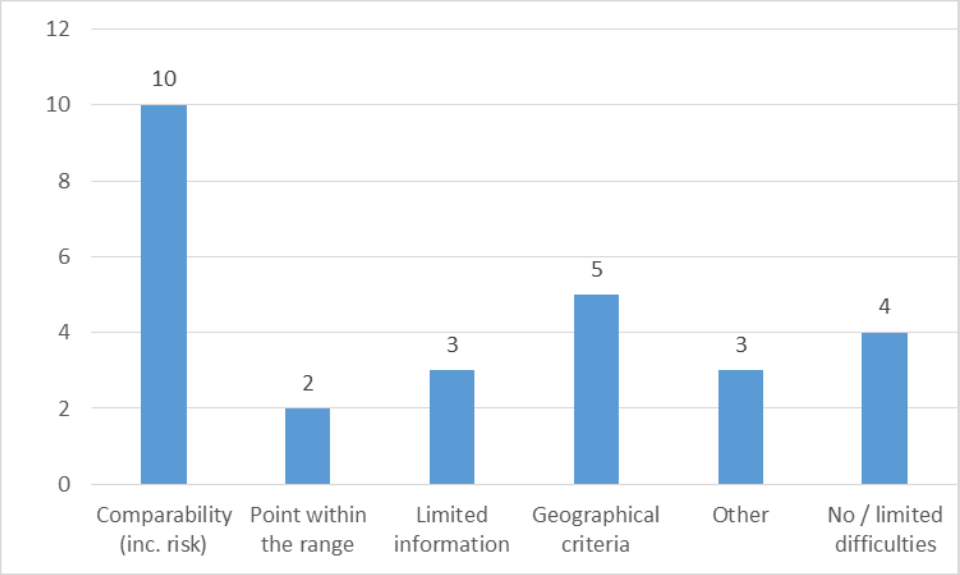


Difficulties

In practice, some difficulties appear when applying the TNMM for determining routine returns. However, whereas all Member States specialists responding to a similar question regarding royalties cited at least one difficulty (being comparability), the routine return exercise appears to raise fewer difficulties. The figure below illustrates the most frequent difficulties encountered by the 21[199] Member State professionals responding to the question. Respondents could indicate more than one factor in their response.

[197] Croatia, Cyprus, Estonia Luxemburg did not provide a response to this question.
[198] Four countries did not answer the question as they cited no experience with performing, reviewing or defending benchmarking searches .These are Cyprus, Croatia, Luxemburg and Malta.
[199] Austria, Cyprus, Croatia, Estonia, Malta, Luxemburg, and Slovenia did not provide an answer to this question.

Figure 49. Difficulties in determining routine returns – EU Member States



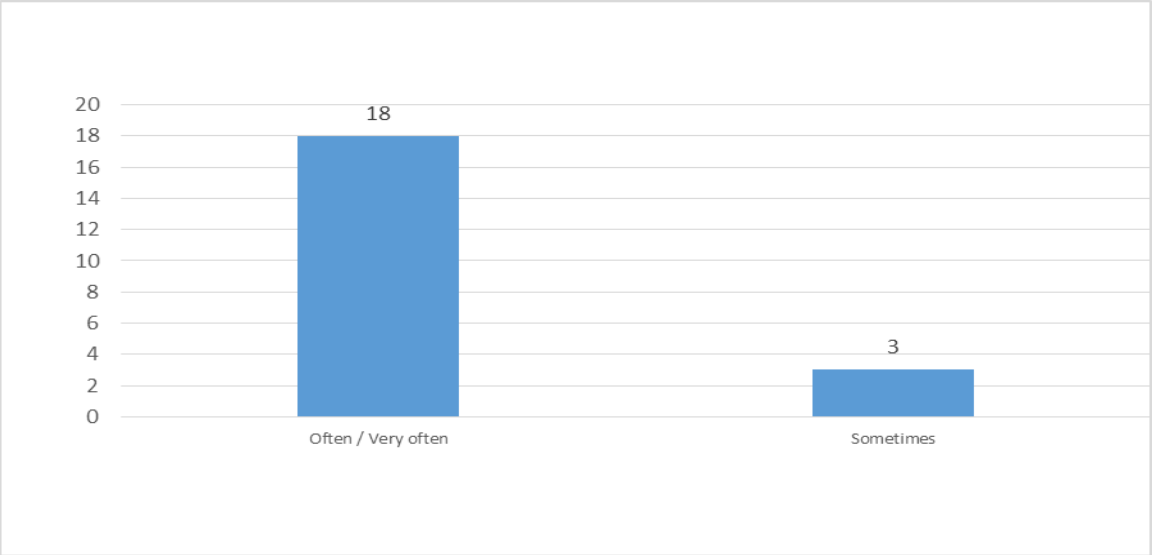
Mentioned by 10 Member States respondents, comparability appears to be the biggest difficulty in finding appropriate routine returns. This was frequently accompanied by a comment on the potential differences in risks between the tested entities and the comparables. The second most frequent answer was the importance of geography, as the Member States respondents experienced a better acceptance of the local comparables. Two Member States respondents mentioned that it is difficult to select a point in the range of the comparables' results. Among the "other" reasons, respondents mentioned: subjectivity of the screening criteria, strict independence criteria in the law, and definition of the scope of the routine functions.

However, four respondents noted that in general there are none or limited difficulties with finding the routine returns (which appears to be a reasonable comment given that the TNMM-based analyses are widely accepted, as mentioned above).

Acceptability of external benchmarks

From the surveys it has been observed that tax authorities usually accept benchmarked routine returns under the TNMM, as can be seen in the figure below. In this respect, 18 out of 21 respondents who answered the questions, indicated that the routine returns benchmarks are "often" or "very often" accepted by the tax authorities, while only three respondents indicating that tax authorities may challenge them from time to time.

Figure 50. Acceptability of routine benchmarks by tax authorities – EU Member States



The main reasons why tax authorities challenge benchmarked routine returns are the following:

- Comparability – geography may be an important aspect where local comparables are required; also the routine character of the comparables is questioned by tax authorities;
- The choice of method – some tax authorities argue that there was another more appropriate method to determine routine returns; or there may exist a hierarchy of methods in place.

It is noted that the tax authority may also focus on "cherry picking" the comparable companies thus leaving in the set the companies that give a more favourable result.

- EU Main Trade partners

Approach

Out of the nine trade partners' respondents considered for this summary, all agreed that for determining routine returns they would perform a TNMM analysis. In some countries (Canada and the US), the Comparable profits method ("CPM") is used, which is the correspondent of the OECD method TNMM. Japanese respondent explained that, in Japan, the law specifies that, in order to determine the routine returns, the transfer pricing analysis should adhere to the principles of the TNMM, with consideration of any adjustments if needed.

The US respondent noted that two methods could be used for this purpose, CUT (similar to the OECD's CUP) and CPM (similar to the TNMM). In this respect, the CUT analysis may be used in the case when the studied intangibles are more extensive in scope than the intangibles in the comparable agreements. For instance, a CUT analysis may be used to benchmark the "make and sell" rights only, whereas the full profit potential may represents the rights to "make, sell and develop." Hence, the profit potential remaining after deduction of the benchmarked right "to make and sell" will represent the value of the right to further develop (which is a typical tested transaction in this jurisdiction).

Databases

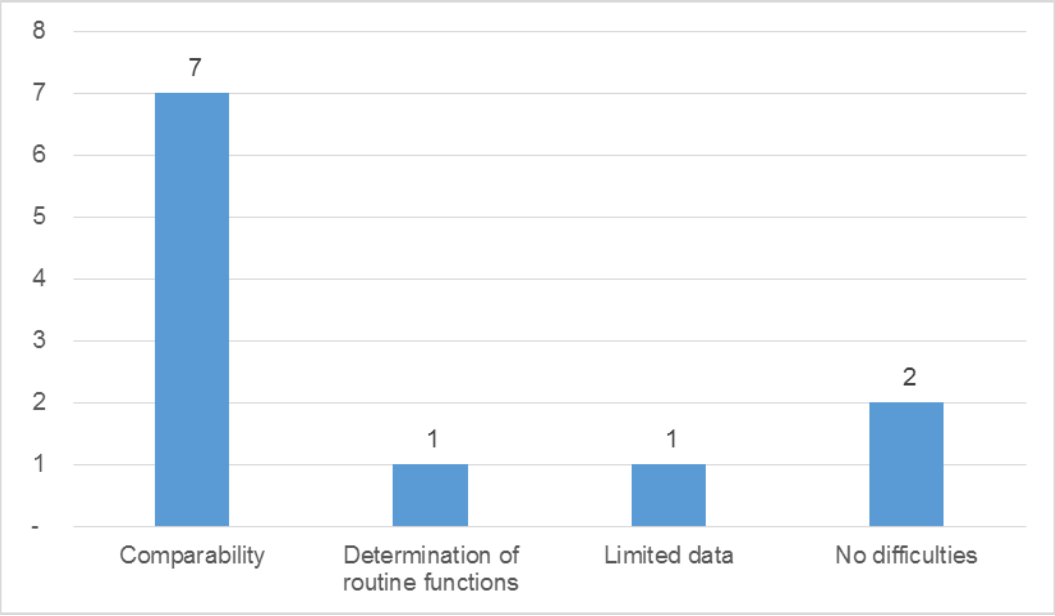
The variety of databases used for benchmarking routine returns is much broader among the EU trade partner respondents. However, comparing the sources is not a fruitful exercise since the databases cover different regions where the selected trade partners are located. For example, there is little reason to expect that Asian countries use the US databases or vice-versa.

This is different from the databases used for royalty benchmarks since these are fed with one unique underlying source of the royalty agreements - being SEC filings of the US corporations. Therefore, independent of his or her region, any transfer pricing analyst can potentially use the same database.

Difficulties

The most frequent difficulties encountered in benchmarking routine returns are illustrated in the figure below. As also observed between EU Member States respondents, comparability (geography, risk profile) is registered as the biggest difficulty in this respect, with seven respondents indicating this. One respondent also observed that the distinction between routine and non-routine functions represents another difficulty, as there are market factors that can affect profitability and it is difficult to determine whether this is part of a routine return or not. Two respondents (i.e. Canada and the US) state that there are not many difficulties in finding routine returns. One country (i.e. Australia) also notes that there is no sufficient information publicly available to make an informed decision on comparability.

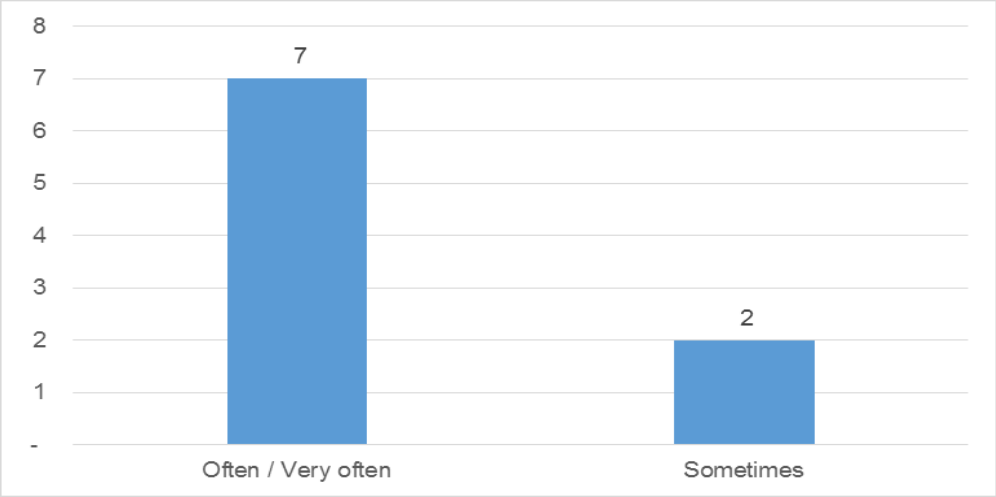
Figure 51. Difficulties in determining routine returns – Trade partners



Acceptability of external benchmarks

The rate of acceptability of routine returns by the tax authorities in trade partner countries is also high, similar to what was observed among Member State respondents. The figure below illustrates that in seven countries benchmarked routine returns are "often" or very "often accepted", while in two countries this is only sometimes accepted by the tax authorities.

Figure 52. Acceptability of routine returns by tax authorities – Trade partners



The most frequent reason cited in challenging the routine returns by tax authorities seems to be a lack of comparability. The practitioners also mentioned that cases have been observed where tax authorities challenged the appropriateness of some comparables in a set, depending on their interest in the result. In Japan, as previously mentioned, tax authorities always look at the profitability registered abroad. If the profitability is higher than that in Japan, they may challenge the analysis of routine returns. If they see that the results are reasonable from Japanese perspective (i.e. the routine returns benchmarks in Japan are no lower than abroad), the routine returns analyses are generally accepted. One respondent (i.e. India) also mentioned that tax authorities may prefer the CUP method over the TNMM or that they might challenge the chosen profit level indicator. Finally, in the US, the IRS sometimes challenges routine returns depending on level of aggressiveness of the position from the US perspective.

4.3.4 Useful life and terminal value

- **EU Member States**

Finite or Indefinite life

With respect to "useful life", Member State respondents were requested to comment on what basis they decide whether or not an intangible asset in the scope of analysis has a finite or indefinite life.

Due to the nature of the question asked (being an open question), the extent and scope of the answers differ greatly. In total, 16 Member States respondents commented on the issue. Comments can be summarised as follows:

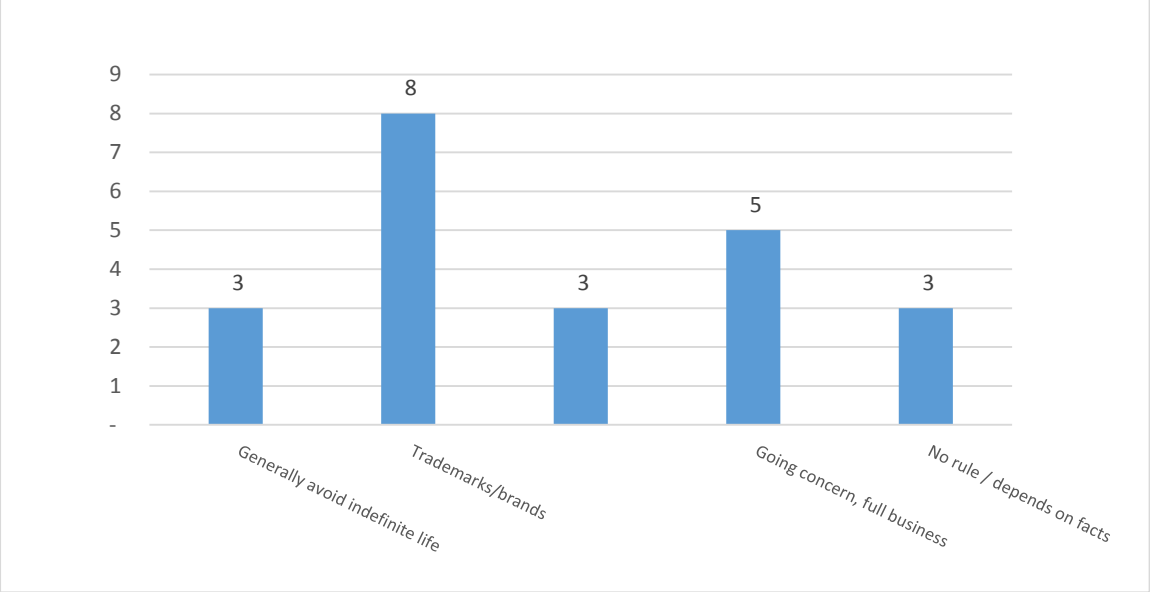
- Four Member States respondents comment that deciding on whether or not an intangible asset has a finite or indefinite life depends on whether or not the situation at hand is the full business exit or a valuation of a certain intangible asset – in the former case, the life is usually indefinite and in the latter case, the life is usually finite.
- Six Member States respondents comment that they are largely governed by factual, functional and risk analysis including information on the type of intangible asset at issue; perhaps, a related answer (provided an additional six times)

consists of a reference to economic and legal circumstances (i.e. a rate of product replacement, technological development, etc.).

- One additional answer provided (by respondent in Portugal) refers to accounting rules in respect of specific IP in the scope of the analysis as a possible reference source for determining the useful life of the asset.
- Finally, one respondent simply noted that the useful life in the analysis for transfer pricing purposes would be different from an analysis for other purposes.

Next, the survey contained a more specific question about the kind of intangible assets that most commonly have an indefinite life. The answers among the 19 respondents[200] to this question vary greatly. Eight respondents (i.e. Austria, France, Germany, Poland, Portugal, Romania, Spain, and the UK) commented that brands and trademarks typically have indefinite lives. Three others (Denmark, France, Spain) mentioned that an indefinite life could be also the case for certain technologies or customer related intangibles. Five respondents (Denmark, Germany, Italy, the Netherlands, Sweden) commented that indefinite life is typically applied with respect to the full business exit / going concern valuations in their Member State. Finally, three Member States respondents (Finland, Latvia and Lithuania) stated that there are no precise rules and this decision depends on facts and circumstances. Another three respondents (in Belgium, Hungary, Slovakia) mentioned that they generally avoid using indefinite life for intangible assets valuations for transfer pricing purposes. In addition (not depicted on the graph), one Member State respondent (Greece) mentioned that for any asset it is common in their jurisdiction to use indefinite life.

Figure 53. For which types of intangibles is indefinite life applied – EU Member States[201]



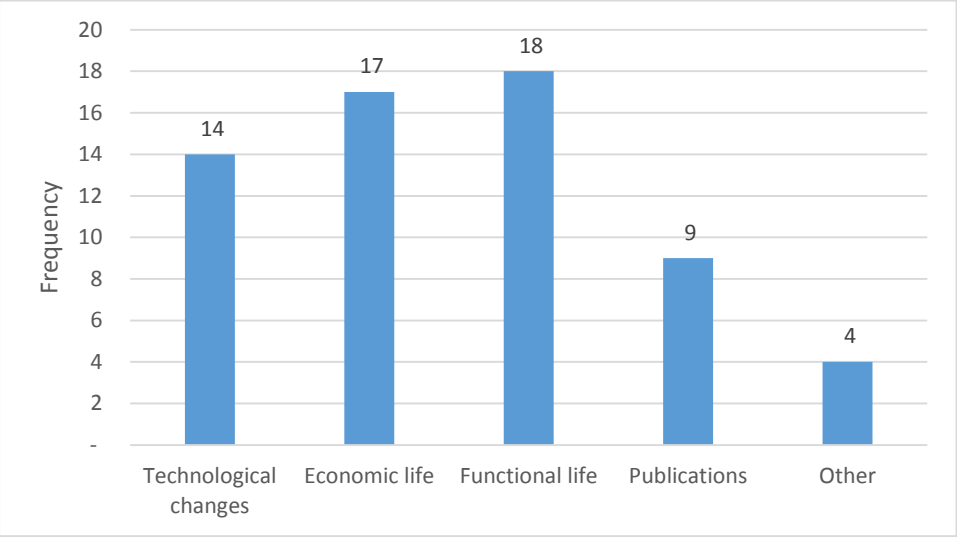
[200] Besides six countries that do not have experience with valuations for TP purposes (Bulgaria, Croatia, Cyprus, Ireland, Malta and Slovenia), Czech Republic, Estonia, and Luxembourg did not provide any answer to the question.
[201] Three countries provided more than one answer (two answers).

Factors to determine finite useful life

Next, the survey asked respondents to indicate all important factors that determine the number of years constituting the (finite) life. In this respect 19 responses were accounted for.[202] It is important to note that the respondents were offered the following choices of the answer and they could choose more than one answer:

- Technological change (i.e. the speed with which better new products are developed),
- Economic life (how long there are profits that are not washed out by the market),
- Functional life (the period when the products are replaced with completely new products)
- Publications
- Other (please indicate)

Figure 54. Factors determining useful life – EU Member States



As observed in the figure above,[203] most respondents commented that all of the factors such as technological change, economic life, and functional life are all very important in considering the useful life.

In addition, four Member States respondents noted some additional ways that are common to use:

- Use of attrition rate analysis (constant rate attrition analysis or actuarial attrition analysis) or churn rate (mentioned by respondents in Austria and Romania respectively);

[202] Besides five countries with no exposure to IP valuation for transfer pricing purposes in their markets, Estonia, Luxembourg and Bulgaria did not provide an answer to this question. In addition, Greece indicated that it is most common to use indefinite life.
[203] Countries experts were requested to mark all factors that they thought would apply.

- Legal protection period in the case a pattern (mentioned by respondents in Portugal and Romania),
- Taxpayer providing studies on the useful life (Lithuania)

With respect to publications, only nine Member States respondents noted that their common practice is to search for industry references to determine useful life. These Member States respondents noted that they run google searches to find some indications of life period for certain types of intangibles (Belgium, Poland), or use some well-known experts – such as, for example, Valente, Quatri, and University professors in Italy.

However, for this question, the UK expert commented that the industry average data should not be used because OECD prohibits its use;[204] however, it could be used as a reasonability check. In this respect, see the discussion of the feedback of the Member States below.

Considerations

The survey asked whether the respondents have any views on what can be done with respect to this parameter (time horizon) for transfer pricing purposes (in terms of databases, approach of tax administration, etc.). The following answers were obtained:

- Four Member States respondents commented that it would be good to have more guidance or even some sort of common approach in terms of how to approach this parameter for different types of intangibles (i.e. some possible standardisation of the parameter)
- Four Member States respondents commented that a database or data source with the average information on the useful life for several type of intangibles or of R&D activity or some sort of relevant market data would be desirable.

Five Member States respondents however, deliver a warning that determining the life depends on understanding the facts and circumstances of the valuation and any attempt to standardise the approach is dangerous (Finland, France, Hungary, Sweden and the UK). In this respect, the UK practitioner provided an example of valuation that explains why industry type data would not help (if taken out of context). The example concerns a purchase of a variety of patents by a taxpayer with a certain specific purpose to have a defence in case of an infringement claim from a competitor (that is, if a competitor claims an infringement, the taxpayer may find a patent among the ones purchased as a defence or a counter infringement). The case also concerns the electronics industry which is characterised by a high number of patented technologies. Besides a potential defence, the taxpayer was not planning to actively use the patents and did not fully know what type of technologies they covered. In the case, there was no point to determine economic life of patents or run industry analysis. The useful life of IP in this case is equal to the legal life, because the purpose of the intangibles transfer was to use them only as a defence from lawsuit.

[204] Reference is made to OECD TPG, para. 1.40.

- **EU Main trade partners**

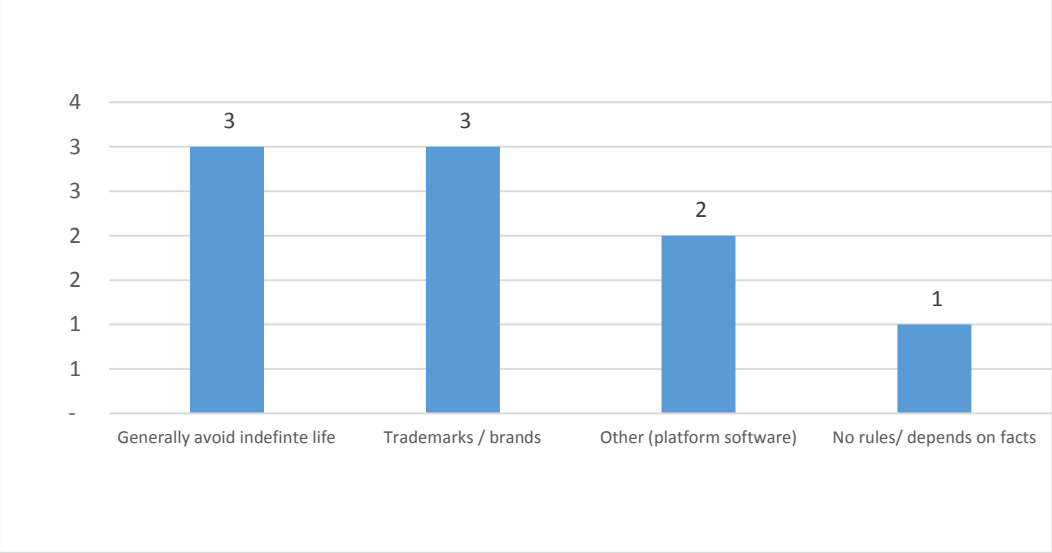
Finite or indefinite life

The open question regarding the approach to determine whether or not the useful life is finite, received generally similar responses from the respondents of the nine main trade partners as those received from the respondents from the Member States. With regards to determining the useful life, the main findings are as follows:

- Eight respondents comment that they generally investigate the nature and type of the IP in question and its economic and technological characteristics.
- Again, one respondent questions whether or not the issue is the full business exit or a useful life of a certain intangible asset. However, in this case the conclusion is the opposite to the comment of a member state giving similar answer – that is, in the case of a full business exit the useful life applied in the valuation will be finite. This comes from Canadian experts.
- One respondent refers to the accounting rules with respect to specific IP in the scope of analysis as a possible source of a reference (Australia).
- Korean respondent answers that in general the expectation is of a finite life – i.e. that the value of IP does not last forever.

With respect the types of IP for which typically an indefinite life is used, many answers mirror the observations of the Member States respondents:

Figure 55. For which types of intangibles is indefinite life applied – Trade partners

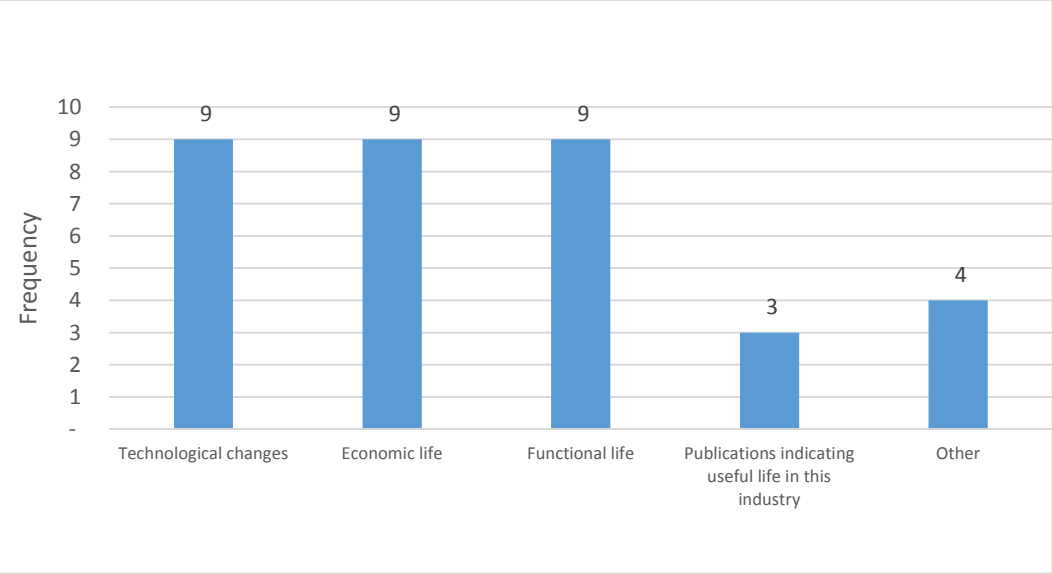


Three of the nine trade partner respondents (China, Japan and Korea) indicate that they generally avoid using indefinite useful life, three (Australia, Norway and Switzerland) indicate that it may be a case for trademark or brands. Another two respondents (the US and Canada) state that indefinite life could be applied for other types of IP such as software platform (in the case of the Member States, the other IP that could be of indefinite life was non-patented technology or customer-related IP). One respondent (India) notes that there are no common approaches or rules regarding determination of the useful life.

Factors to determine finite useful life

All nine trade partner respondents commented on the factors important for determining useful finite life.

Figure 56. Factors determining useful life – Trade partners



Similar to the EU Member States, the nine responding trade partners practicioners indicate that technological changes, economic and functional lives are important factors for considerations. Three of the nine respondents (Australia, India and the US) indicate that they have had experience using publications indicating the useful life. In this respect, the US practitioner in particular comments on the references found in economic literature (academic articles found with the help of Econlit database).

Four of the countries also identify the following factors as being important:

- Terms of useful life for tax depreciation purposes that could sometimes be considered (Australia);
- Past studies that may have determined useful life for similar IP (India);
- Taxpayer's studies about useful life (Norway);
- Terms of contract that may indicate remaining useful life (Switzerland).

Considerations

The main trade partner respondents volunteered the following suggestions in respect of determination useful life:

- Additional rules or guidance with respect to each category of intangibles (respondent in Norway). However the same respondent notes that this might be difficult in practice since lifetime is very case-by-case dependent. Case-by-case consideration is also noted by Japanese respondent. The same factor is stressed for its importance by the US.
- Determination of useful life should be based on the commercial rationale/ business (Canada and Australia).

- Taxpayer's advice and knowledge should be of ultimate priority since the taxpayer knows their IP the best (China).
- There could be a potential benefit from having a database regarding the useful life (Switzerland).

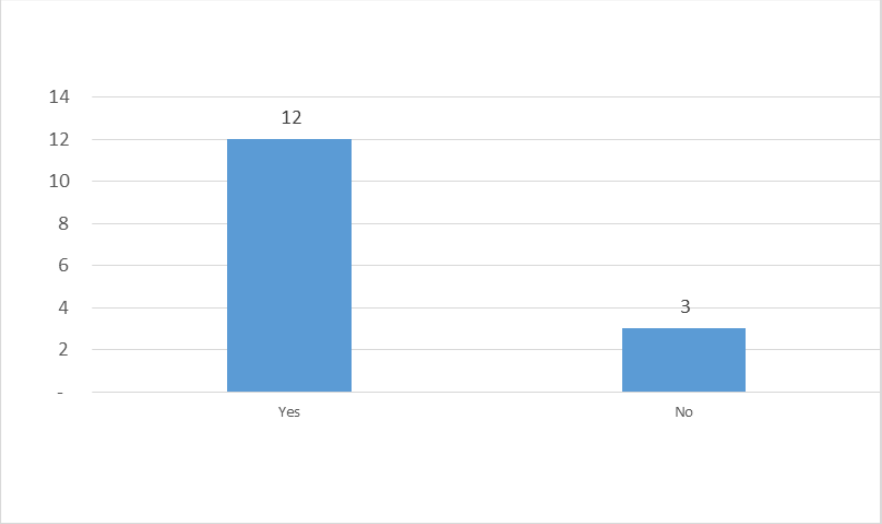
- Decay schedule applied to a measure of profits

Next, respondents were asked whether there is a practice in their country to apply some kind of decay schedule (perhaps in the form of a depreciation schedule) when obtaining a residual profit under a residual profit method. That is, not a full residual profit in the future years will be accounted for in determining the full value of IP but, perhaps, only part of it, as one considers future years further away from valuation date.

EU Member States

There were 16 responses to this question. Out of 16 answers, 13 respondents confirmed that they were aware of cases where decay rates were used in the application of residual profit.

Figure 57. Use of decay schedule – EU Member States



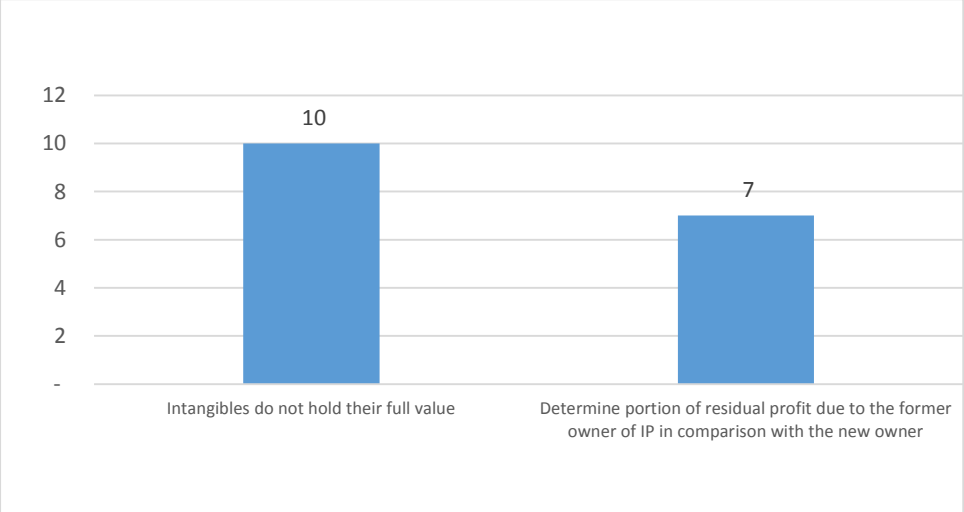
Regarding the use of depreciation, Member State respondents were asked to explain for what purpose this is performed:

1) To account that intangibles do not hold their full value in terms of generating economic returns over time;

2) To determine the appropriate value of initial IP in the cases when the development of the intangibles has been continued by another party (purpose 2);

3) Other reasons.

Figure 58. Reason for decay schedule – EU Member States



As illustrated in the figure above (Figure 58), 10 respondents[205] (out of 15) used the decay schedule to account for the fact that intangibles do not hold their full value into the future, and seven[206] used it to determine the proportion of residual profit attributable to intangibles generated up to and before the date of valuation. [207]

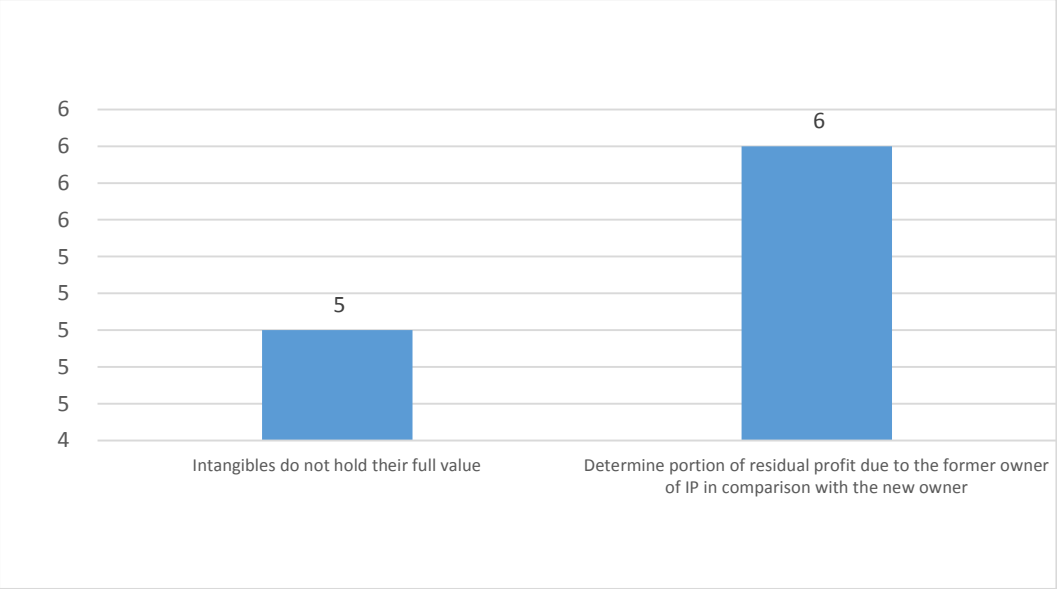
EU Trade partners

All main trade partner respondents apply decay schedules, except for the ones in Australia and India, who do not use it.

For the seven trade partner respondents that make use of depreciation, five respondents[208] do so because the intangibles do not hold their full value. Six[209] respondents further state that depreciation is done to divide the residual profit between new and old owners of IP. Four of the seven respondents cited both reasons.

[205] Belgium, France, Germany, Greece, Italy, the Netherlands, Poland, Slovakia, Spain and the UK.
[206] Belgium, Czech Republic, Greece, Germany, Italy, Poland, Spain.
[207] Six countries out of 15 marked both answers.
[208] Canada, China, Japan, Korea, Switzerland.
[209] Canada, China, Japan, Norway, Switzerland, and the US.

Figure 59. Purpose of depreciation - Trading Partners



4.3.5 Discount rate

- EU Member States

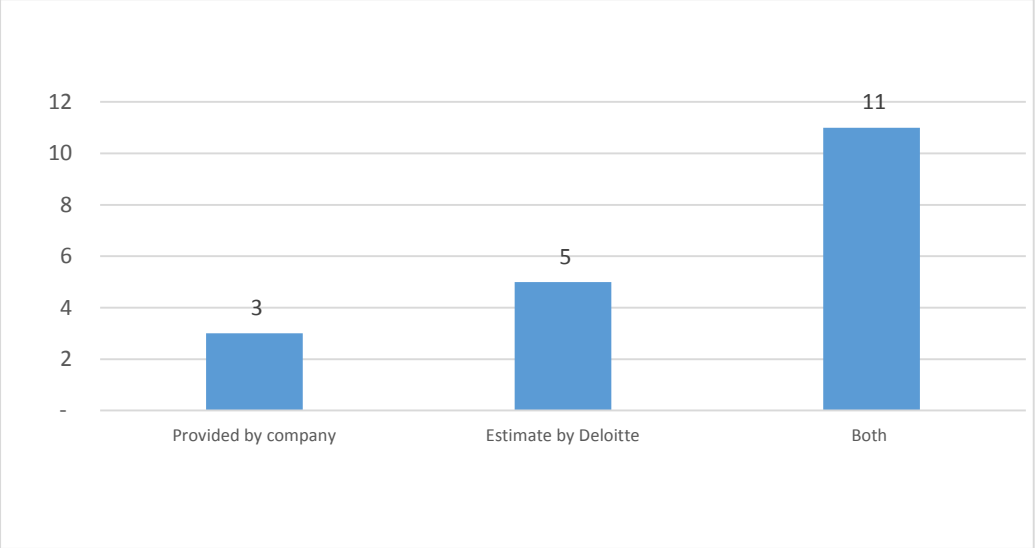
With respect to discount rates used in intangible asset valuation, respondents were asked about the basis they used to determine the discount rate. Two main options were provided as a potential answer:

- Supplied by the company (i.e. rate used by the company in own forecasting);
- Determined by valuer using parameters from public information;

Out of the 28 Member States, 19 responded to this question. Only three Member States respondents (Denmark, Greece, and Finland) out of these 19 usually use a company-provided discount rate. Danish respondent noted that typically asset-specific discount rates are needed and Greek respondent noted that the discount rate will be checked by valuation specialists. Five[210] Member States respondents note that they primarily use their own estimates based on some kind of publically available information and 11 Member States respondents[211] concluded that they would try both options (with a note that frequently company's rate is not sufficient to use alone without further support).

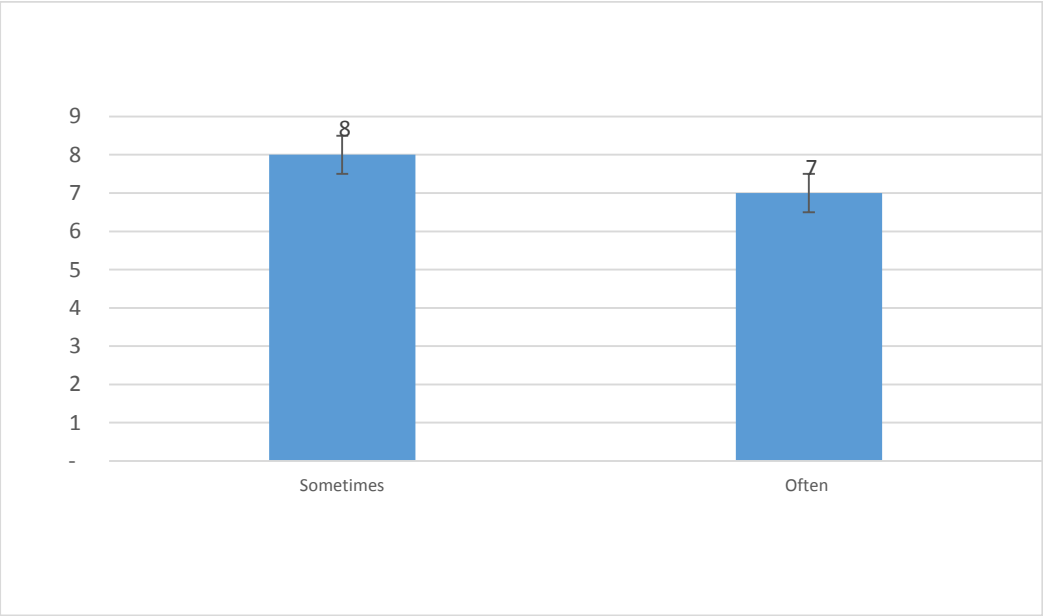
[210] Austria, Czech Republic, Hungary, Lithuania, Slovakia.
[211] Belgium, France, Germany, Italy, Latvia, the Netherlands, Poland, Portugal, Spain, Sweden and the UK.

Figure 60. Source of discount rate – EU Member States



In addition, in the case where the discount rate provided by the taxpayer was used, the survey inquired as to the frequency this rate would be challenged by a specialist responsible for the valuation. As shown in the Figure below, out of 17 respondents who answered this question, seven[212] responded that they will do so often or very often and eight[213] responded "sometimes." Other respondents did not answer the question either because they have no experience with valuations for transfer pricing purposes or because they do not use the discount rates provided by the taxpayers in the valuations for transfer pricing purposes.

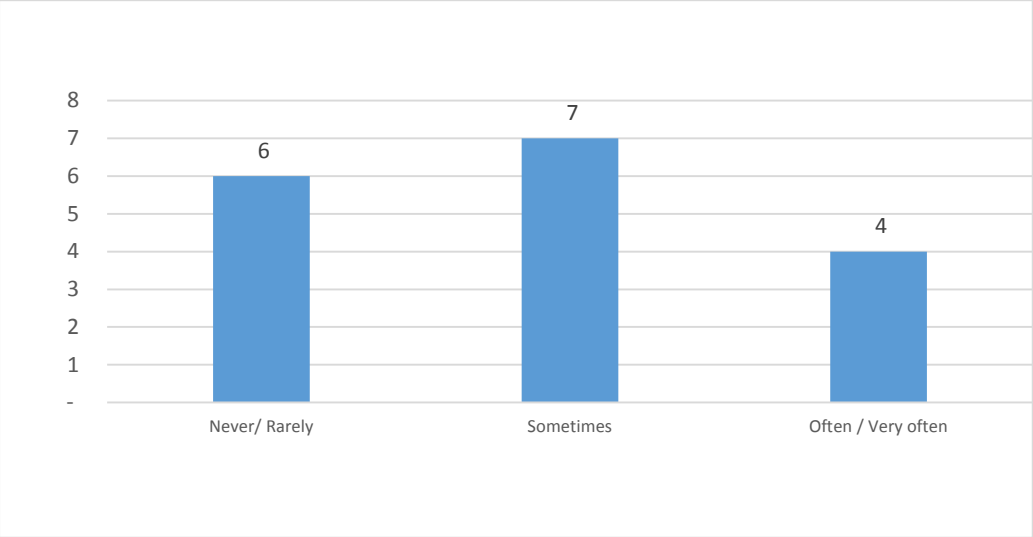
Figure 61. Frequency of challenging the taxpayer-sourced discount rates by valuers – EU Member States



[212] Finland, France, Hungary, Latvia, Poland, Portugal, and the UK.
[213] Belgium, Denmark, Germany, Greece, Italy, the Netherlands, Spain and Sweden.

Respondents were also asked about the frequency of potential challenges posed by the tax authorities. It is however important to note that countries answered this question in the view of a potential challenge of any discount rate by the tax authorities (not just with respect to the discount rate provided by the taxpayer). Out 17 Member States respondents to this question, six reported that the challenge is infrequent, with seven reporting "sometimes" and four "often" or "very often." The Member States respondents that indicated to never or rarely have had a challenge in this respect are from Belgium, Latvia, Lithuania, Luxemburg, Portugal and the UK.

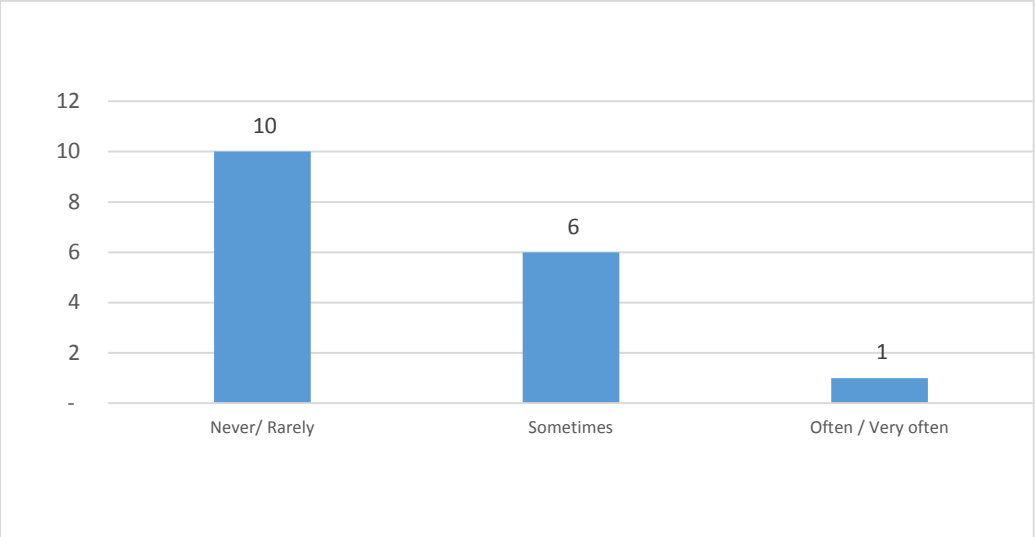
Figure 62. Frequency of challenging discount rates (by tax administration) – EU Member States



To go deeper into estimating the discounts rates using public information, respondents were asked how often publicly available full discount rates are used (e.g. industry-wide estimated rates), rather than discount rate computed using corporate finance theory. From a total of 17 answers, ten Member States respondents[214] stated that an industry-wide rate would never or very rarely be used. Six Member States respondents confirmed that it can be the case sometimes (Belgium, France, Italy, Netherlands, Portugal and Sweden) and one Member States respondent (Poland) acknowledged this being done regularly.

[214] Austria, Czech Republic, Finland, Germany, Hungary, Latvia, Romania, Slovakia, Spain and the UK.

Figure 63. Frequency of using industry-wide rates as discount rate in valuation – EU Member States



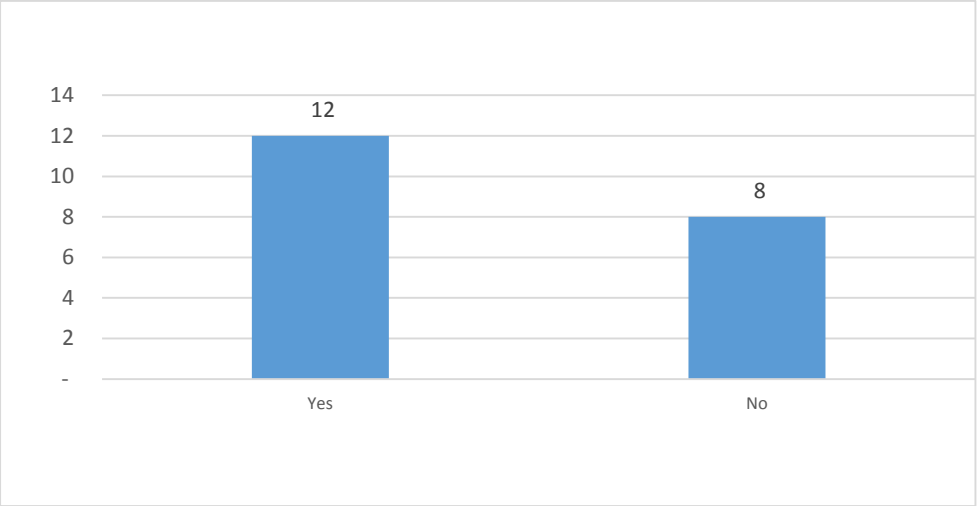
Among seven Member States respondents that reported usage of industry-wide rates, Damodaran was quoted as being used most often. In addition, Bloomberg, Capital IQ and Thomson Reuters were also mentioned as sources of data.

Respondents indicating that they may estimate the discount rate themselves (i.e. related to the question in the beginning of this section (whether or not the rate is estimated by specialist or obtained from the taxpayer), were further asked to confirm whether or not they would use a financial formula from corporate finance to evaluate the discount rate, such as weighted average cost of capital ("WACC") or weighted average return on assets ("WARA"). All respondents confirmed that they use these formulas for their estimate of the rate.

Input of the respondents from Member States with regards to the WACC formula are provided in *Appendix 5 – Discount rate inputs*. Due to the technicalities of this question, this information is absent from the main report.

The survey also inquired whether or not the respondents apply different discount rates for different types of IP valued (for the same company). Out of 20 respondents providing an answer to this a question, 12 indicated that they would use different rates.

Figure 64. Use of different discount rates depending on type of IP – EU Member States

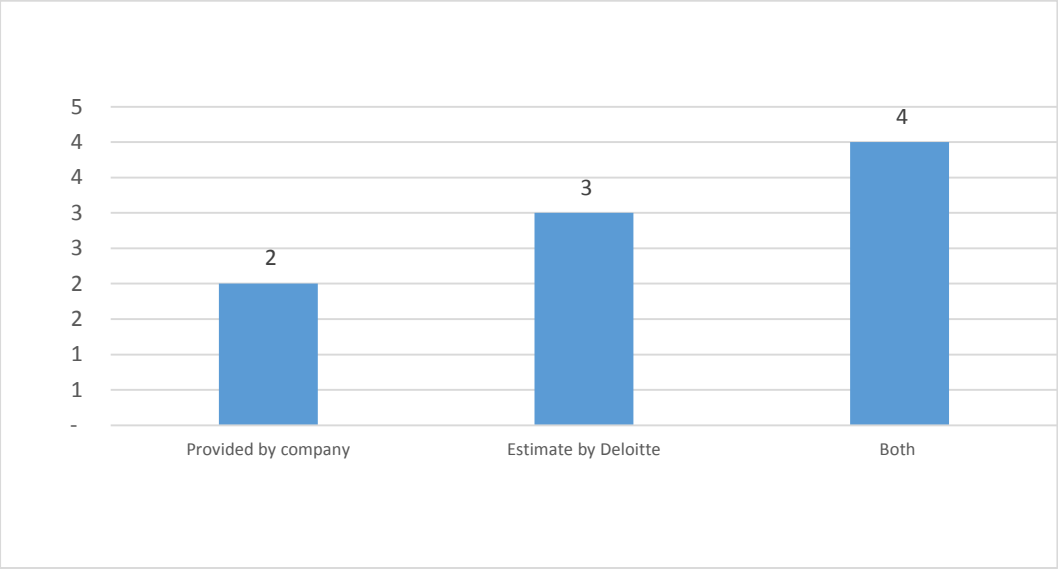


When asked to explain on what basis the discount rates vary for different types of IP, most of the respondents using such a differentiation explained that it will be based on the risk – i.e. a certain intangible could be riskier than another intangible of the same business.

- **EU Main Trade partners**

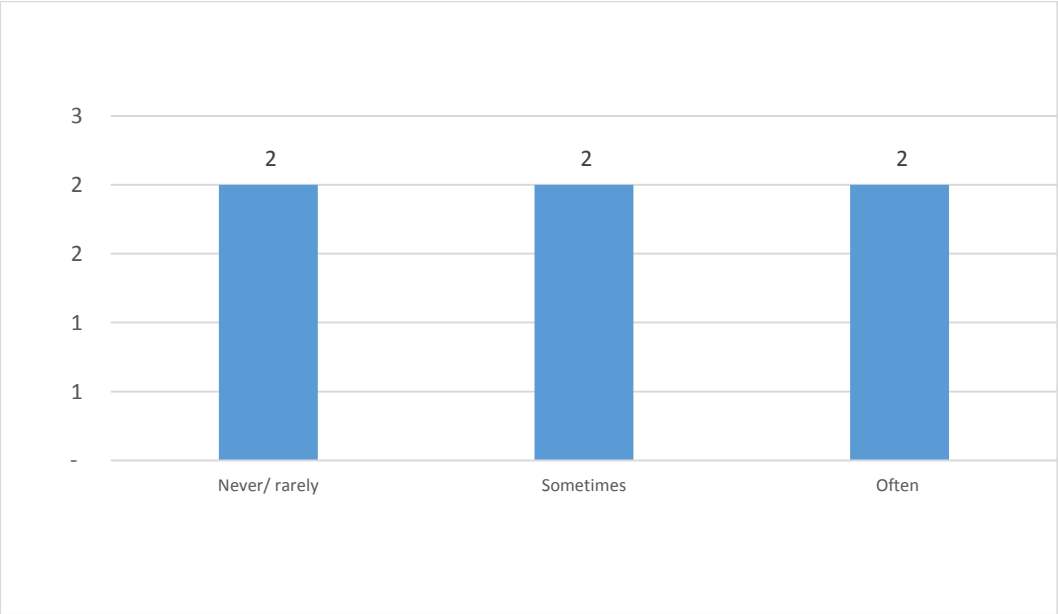
In terms of the source for discount rate, a picture similar to the Member States respondents is observed among the main trade partners. Four out of nine trade partner respondents (Australia, Japan, Norway and Switzerland) use both sources. Only two respondents (China and Korea) typically stop at the discount rate obtained from the taxpayer. Three respondents (Canada, India and the US) report that they normally estimate the rate based on publicly available information. In this respect, the US respondent mentioned that although the discount provided by a taxpayer may be a starting point, it would never be used without its own estimate.

Figure 65. Source of discount rate – Trade partners



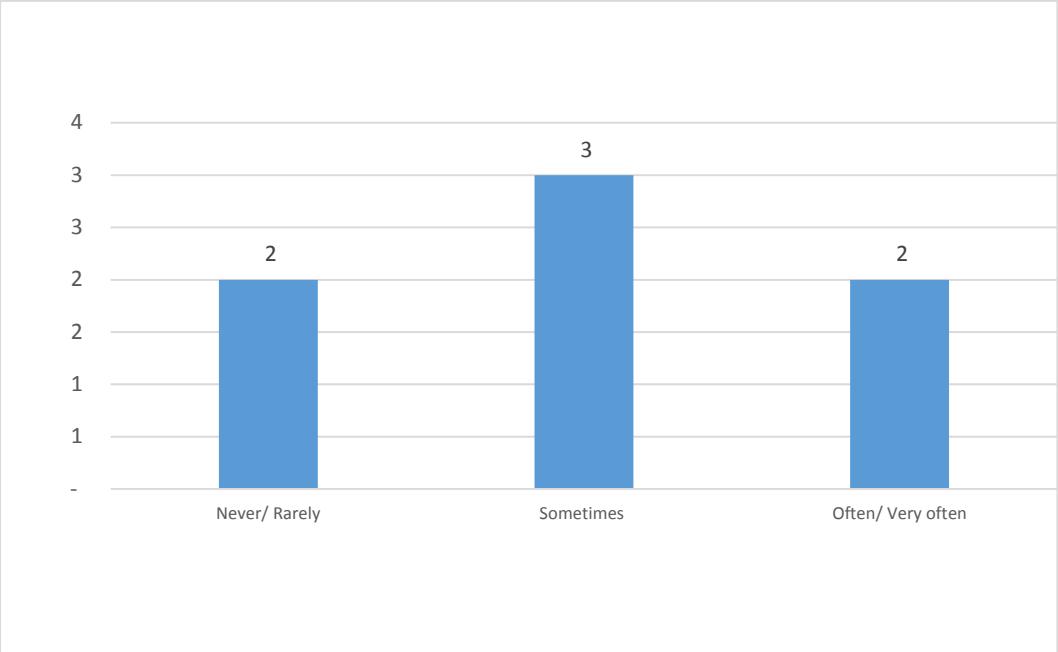
The frequency of challenging the rate provided by the client (if used by Deloitte expert for valuation purpose) is different among the countries. Two respondents state that they never challenge such a rate (Japan and Korea). Two respondents challenge it sometimes (Austria and China) and two respondents (Norway and Switzerland) do it often.

Figure 66. Frequency of challenging the taxpayer-sourced discount rates (by Deloitte) – Trade partners



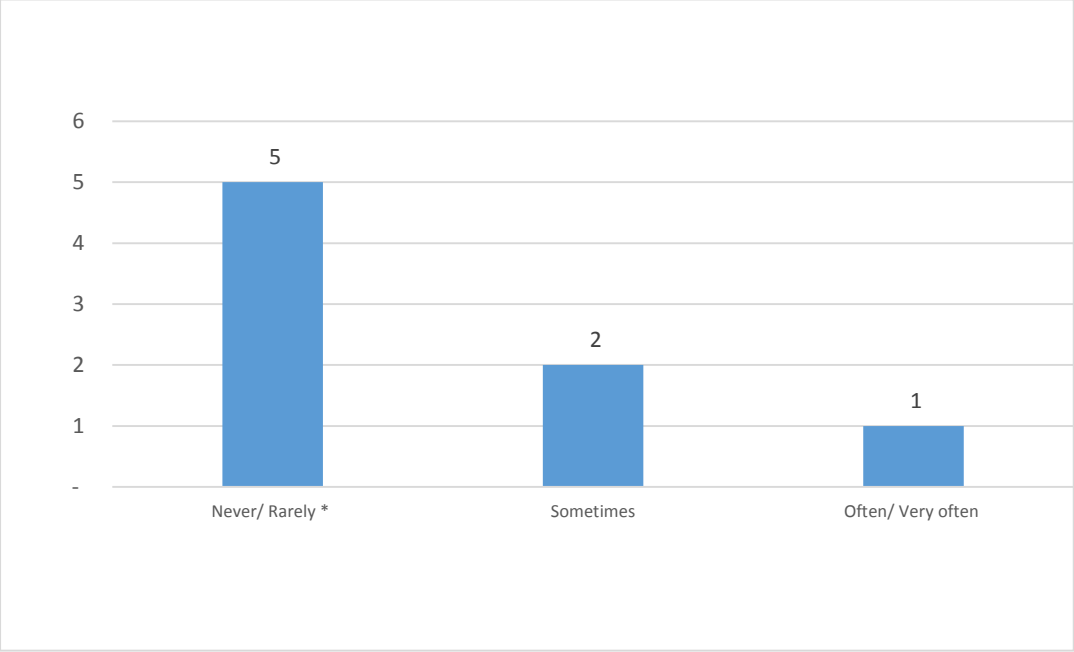
Two respondents stated that they rarely get face a challenge from tax administration regarding the discount rates provided by the clients (Australia and Korea). Three respondents sometimes get such a challenge (Japan, China and Switzerland) and two respondents frequently face a challenge (Norway and Canada). Respondents in India and the US did not answer the question since they never use internal discount rates provided by the client.

Figure 67. Frequency of challenging discount rates (by tax administration) – Trade partners



In terms of the rates that are estimated by experts, they are infrequently based on the industry-wide benchmarks. Five respondents (Canada, India, Japan, Korea and the US) note that they would never use such a rate but two out of them note that they may consider such rates for supporting reference (Canada and India). Two respondents may use it sometimes (China and Switzerland) and one respondent may use it often (Norway).

Figure 68. Frequency of using industry-wide rates as discount rates in valuation – Trade partners



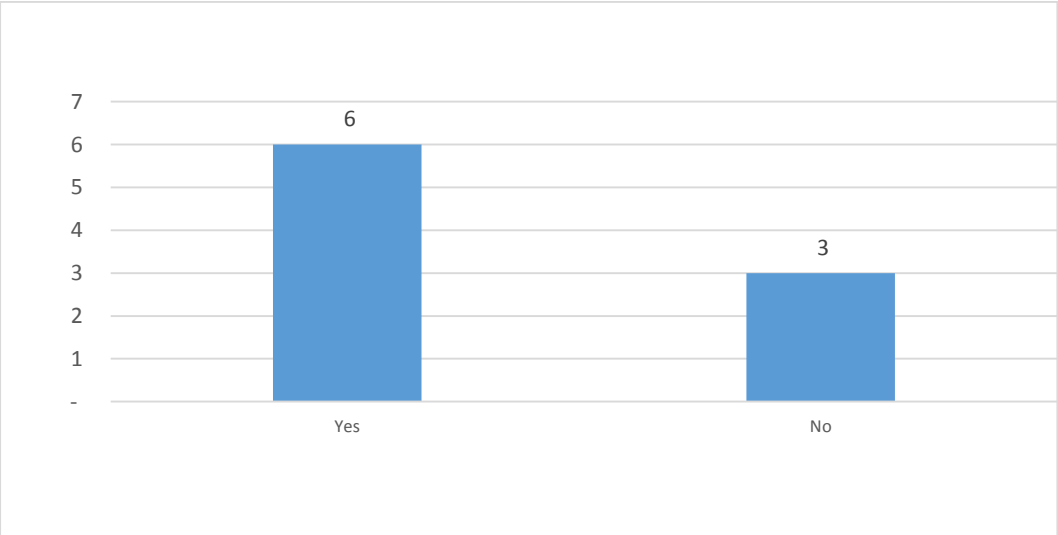
In terms of databases for industry-wide rates, Thomson Reuters, Bloomberg, Duff & Phelps are used (Switzerland). Norwegian practitioners may use a standard rate (a rate in the range of 8% – 10%) or rates obtained from Bloomberg.

If respondents answered that they may estimate the rate themselves rather than using the rate provided by the taxpayer, they were asked to comment if they use financial formula such as WACC or WARA to evaluate the rate. Six of the trade partner respondents confirm that they do. Chinese specialists note that they never do so, and respondent in Norway has explained that they do not evaluate the discount rates (but rather uses industry-wide rates or client-provided rates). In cases when it is needed, the study is passed to the valuation team. Australian respondents did not provide the answer to this question as they explained they most often use the rates provided by the taxpayer by default.

The inputs to the financial estimation of a discount rate is similarly provided in *Appendix 5 – Discount rate inputs*.

Similarly to the findings regarding the Member States respondents, most of the countries do apply different rates with respect to different intangibles. Three respondents noted that it is typically not the case (China, Korea and Norway)[215].

Figure 69. Use of different discount rates depending on type of IP – Trade partners



In terms of explanations for the use of different rates, most respondents using the rate reported that different intangible assets are exposed to different risks. This must be accounted for in the selected discount rate. The US expert further explains that systemic risk needs to be properly measured and included in the discount rate.

4.3.6 Sources of information, challenges and potential solutions for objectivisation

Appendix 6 – Parameters internal sources provides information on the potential sources of information located at the individual company level, identifies the main

[215] i.e. China noted that this may be done but it is rare.

challenges encountered in the practical application of the parameters and provides potential solutions for how these challenges could be addressed.

Appendix 7 – Parameters external sources provides information on the potential public sources of information (e.g. databases) and identifies possibilities to objectivise the underlying assumptions of each of the building blocks.

With regards to discount rate inputs, similar information is provided in *Appendix 5 – Discount rate inputs*.

5. Legislative measures

5.1 Introduction

It has been observed that most of the countries surveyed, except for Brazil, do have the arm's length principle specifically mentioned in their domestic law. However, only one country's regulations, i.e. the US, actually lay down detailed rules on the application of valuation methods to intangibles for transfer pricing purposes. The other countries' laws may contain corporate finance valuation guidelines, but not specific to transfer pricing purposes. Similarly, the transfer pricing regulations in the nine trade partners do not explicitly concern valuation of intangible assets (besides the reference and acceptance of the OECD guidelines). Same, for exception of Germany, can be said about 28 Member States.

The overview of the transfer pricing rules for other trade partners and for EU Member States can be found in *Appendix 9 – Overview of transfer pricing legislation*.

In the following sections, the main characteristics of the US regulations on valuation methods for transfer pricing are presented. The German regulations on the same matter are also presented.

5.2 US Transfer Pricing rules and regulations

5.2.1 General methods for valuation of intangibles

The methods prescribed under the US Transfer Pricing Regulations for testing intercompany transfers of intangible property are similar to those prescribed by the OECD Transfer Pricing Guidelines, which are summarized in the figure below.[216]

Figure 70. Applicable Methods for Testing Intercompany Transfers of Intangible Property

Methods Applicable Under the US Transfer Pricing Regulations	*Methods Applicable Under the OECD Transfer Pricing Guidelines*
1. *Comparable uncontrolled transaction ("CUT") method*[217]	2. CUP method
3. *Profit split method*[218]	4. Profit split method
5. *CPM*[219]	6. TNMM

The US Transfer Pricing Regulations also allow for the use of unspecified methods, provided certain conditions are met. Below each method is described.

[216] The OECD TPG do not distinguish between the methods for tangible and intangible property. The RPM and the cost plus method under the OECD TPG are generally not applicable to a license of intangible property. Therefore, only the methods under the OECD TPG that are analogous to the methods applicable to intangible property under the US Transfer Pricing Regulations were considered.
[217] US Treas. Reg. §1.482-4(c).
[218] US Treas. Reg. §1.482-6.
[219] US Treas. Reg. §1.482-5.

- **CUT Method**

The application of the CUT method to transfers of intangible property is essentially the same as the application of the CUP method to the transfer of tangible property. The US Transfer Pricing Regulations state that the results derived from applying the CUT method generally will be the most direct and reliable measure of an arm's length price for the controlled transaction if uncontrolled transactions exist that have no differences from the controlled transaction that would materially affect the price. Such uncontrolled transactions might be observed between a controlled seller and an uncontrolled buyer (internal CUT), between an uncontrolled seller and a controlled buyer (internal CUT), or between an uncontrolled seller and an uncontrolled buyer (external CUT). The use of this method is dependent upon the controlled transaction being similar to the uncontrolled transaction with respect to a number of factors, including similarity in products or intangibles, contractual terms, level of the market, and geographic market. The principles for selection of this method under the OECD Transfer Pricing Guidelines are similar.

- **Profit Split Method**

The profit split methods specified in the US Transfer Pricing Regulations and the OECD Transfer Pricing Guidelines allocate operating profits or losses from controlled transactions in proportion to the relative contributions made by each party in creating the combined profits or losses. Relative contributions may be determined by functions performed, risks assumed, resources employed, and costs incurred.

The US Transfer Pricing Regulations specifically include the following two specified profit split methods:

- Comparable Profit Split Method – Transfer prices are based on the division of combined operating profit between uncontrolled taxpayers whose transactions and activities are similar to those of the controlled taxpayers in the relevant business activity. Under this method, the uncontrolled parties' percentage shares of the combined operating profit or loss is used to allocate the combined operating profit or loss of the relevant business activity between the related parties.
- Residual Profit Split Method – This method involves two steps. First, operating income is allocated to each party in the controlled transactions to provide a market return for their routine contributions to the relevant business activity. Second, any residual profit is divided among the controlled taxpayers based on the relative value of their contributions of any valuable intangible property to the relevant business activity. This method is best suited for analyzing the transfer of highly profitable intangibles.

- **CPM**

The CPM specified in the US Transfer Pricing Regulations and the TNMM specified in the OECD Transfer Pricing Guidelines both evaluate whether the amount charged in a controlled transaction is arm's length by comparing the profitability of one of the parties involved in the controlled transaction (the "tested party") to that of companies that are similar to the tested party. In most cases, the tested party is chosen to be the simpler of the two parties involved in the controlled transactions. In particular, the tested party should not use intangible property or unique assets that distinguish it from unrelated comparable companies.

The degree of comparability between the tested party and the comparable companies affects the reliability of the CPM/TNMM analysis. Reliability may be adversely affected by varying cost structures, differences in business experience, or differences in

management efficiency. However, less functional comparability is required for reliable results than under the transactional methods (e.g., the CUP method, the RPM, or the cost plus method). In addition, less product similarity is required for reliable results than under the transactional methods. Adjustments that may be required include those for differences in accounting classifications, credit terms, inventory, currency risk, and business circumstances.

Based on the example cited in the US regulations, evaluating the intangibles by building a projection of overall profitability and deducting a routine return falls under the principles of the CPM method.

5.2.2 Methods for Valuation of Platform Contribution Transactions

Final cost-sharing regulations (Final Regulations) were issued on 16 December 2011, providing guidance on the treatment of cost-sharing arrangements ("CSAs"). IRS and Treasury Department also issued proposed regulations (2011 Proposed Regulations), which propose to include a new specified application of the income method based on the use of the 'differential income stream' as temporary regulations. The later were finalized without change in the 2013 Final Cost Sharing Regulations.

Cost-sharing buy-ins that are also referred to as Platform Contribution Transactions ("PCTs") can be valued under the US Regulations based on five specified methods, and the specified method, chosen under the best method rule. However, the section on PCT only applies when the arrangement satisfies the definition of CSA, i.e., if the participant's "costs of developing the intangible significantly exceeds its share of reasonably anticipated benefits," the arrangement would not be in substance a CSA. In order to be a CSA, the arrangement has to meet substantive and administrative requirements described in U.S. Treas. Reg. § 1.482-7(b) and § 1.482-7(k).

The methods used to evaluate the amount charged for a PCT are:

- The comparable uncontrolled transaction ("CUT") method;[220]
- The income method;[221]
- The acquisition price method ("APM");[222]
- The market capitalization method ("MCM");[223]
- The residual profit split method ("RPSM");[224] and
- Unspecified methods.[225]

Each method must be applied in accordance with the best method rule and the general requirements in Treas. Reg. § 1.482-1, except as modified by Treas. Reg. § 1.482-7. An unspecified method could be applied if such method provides a more reliable measure of the PCT than the specified methods. However, in order to use an unspecified method, a taxpayer must maintain documentation to describe and explain the method selected to determine the arm's length payment due in a PCT.

[220] US Treas. Reg. § 1.482-7(g)(3).
[221] US Treas. Reg. § 1.482-7(g)(4).
[222] US Treas. Reg. § 1.482-7(g)(5).
[223] US Treas. Reg. § 1.482-7(g)(6).
[224] US Treas. Reg. § 1.482-7(g)(7).
[225] US Treas. Reg. § 1.482-7(g)(8).

- **CUT Method**

The CUT method may be applied to evaluate whether the amount charged in a PCT is arm's length by reference to the amount charged in a comparable uncontrolled transaction. The requirements of the CUT method stay the same as for a transfer of intangibles that is not in the framework of CSA.

- **Income Method**

The income method evaluates whether the amount charged in a PCT is arm's length by reference to a controlled participant's best alternative to entering into a CSA.

Under this method, the arm's length charge for a PCT payment will be an amount such that a controlled participant's present value, as of the date of the PCT, of its cost sharing alternative of entering into a CSA equals the present value of its "best realistic alternative." According to the regulations, the best realistic alternative of the PCT Payor (i.e., the buyer) to entering into the CSA would be to license the intangibles instead of entering a CSA. In this alternative, the intangibles are developed by an uncontrolled licensor that undertakes the commitment to bear the entire risk of intangible development (that would otherwise have been shared under the CSA).

The present value of the PCT Payor's licensing alternative may be determined using the CUT method as described above or using the CPM as described above. The CUT method is applied to determine what the license payments would be under the licensing alternative by reference to the amount charged in a comparable uncontrolled transaction. The CPM evaluates the amount charged in a controlled transaction based on objective measures of profitability derived from uncontrolled taxpayers that engage in similar business activities under similar circumstances.

In general, the Income method using CUT is broadly similar to the Relief from Royalty method reviewed in the present study[226] and the Income method using CPM – to the residual value method.

- **Acquisition Price Method**

The acquisition price method determines the value of a contributed intangible by reference to the acquisition price of a contemporaneous acquisition of that intangible in an asset or stock acquisition from an uncontrolled party.

The acquisition price method is ordinarily used where substantially all of the acquisition target's non-routine contributions made to the PCT payee's business activities are covered by a PCT or group of PCTs. That is, if the acquired company's activities exceed the scope of the PCT / buy-in payment that is being determined, its acquisition price does not only cover the buy-in payment but also other assets (and thus other methods may be more reliable if the carve-outs for such other assets cannot be precisely quantified).

Under this method, the arm's length charge for a PCT is equal to the adjusted acquisition price, as divided among the controlled participants according to their

[226] The use of CUT method for the purposes of income method application under the US regulations is arguably a more specific approach than the use of CUP under the defined "relief from royalty method." For instance, the US regulations require a more careful considerations of the rights granted in the comparable (license transactions) – under the US rules, these need to be "make-or-sell" rights to a resource or capabilities combined with the right to further develop such item (US regulations, 1.482-7(c)(4).

respective reasonable anticipated benefit ("RAB") shares. The adjusted acquisition price is the acquisition price of the target increased by the value of the target's liabilities and decreased by the value of the target's assets on the date of the acquisition.

In order to apply the method, the CSA should follow an acquisition of a third-party company to obtain its price.

- **Market Capitalization Method**

The market capitalization method evaluates whether the amount charged in a PCT is arm's length by reference to the average market capitalization of a controlled participant (i.e., the PCT payee) whose stock is regularly traded on an established securities market. Under the market capitalization method, the arm's length charge for a PCT is equal to the adjusted average market capitalization, as divided among the controlled participants according to their respective RAB shares. The adjusted average market capitalization is the average market capitalization of the PCT Payee (i.e., the seller) increased by the value of the PCT Payee's liabilities on the date of the PCT and decreased by the value on such date of the PCT Payee's tangible property and any other resources, capabilities, or rights of the PCT Payee not covered by the PCT.

In turn, the average market capitalization is the average of the daily market capitalizations of the PCT Payee over a period of time beginning 60 days before the date of the PCT and ending on the date of the PCT. The daily market capitalization of the PCT Payee is calculated on each day as the total number of shares outstanding multiplied by the adjusted closing price of the stock on that day. The adjusted closing price is the daily closing price of the stock, after adjustments for stock-based transactions (e.g., dividends and stock splits) and other pending corporate (e.g., combination and spin-off) restructuring transactions for which reliable adjustments can be made.

Application of the method thus requires that the participant of CSA is a publicly traded company. In addition, similarly to the acquisition price method above, it is used when substantially all of the PCT payee's non routine contributions to the PCT Payee's business are covered by a PCT. That is, if the PCT Payee had another business or assets that would not be cost shared (and thus, for which no payment is due), the full market capitalization value will include also a value of this business / assets and thus should be adjusted for these "significant non routine contributions."

- **RPSM**

The RPSM evaluates whether the allocation of combined operating profit or loss attributable to one or more platform contributions subject to a PCT is arm's length by reference to the relative value of each controlled participant's contribution to that combined operating profit or loss. Under the RPSM, the present value of each controlled participant's residual divisional profit or loss attributable to non-routine contributions is allocated between the controlled participants that each furnish significant non-routine contributions to the relevant business activity in that division.

The RPSM may not be used where only one controlled participant makes significant non-routine contributions (including platform or operating contributions) to the CSA activity and is only used in cases where more than one party makes significant non-routine platform contributions.

The RPSM specified in the 2011 Final Cost Sharing Regulations at U.S. Treas. Reg. § 1.482-7(g)(7) is a modified version of the RPSM of Section 1.482-6. The former

(RPSM in section 7) is actually more of a two-pronged income method (meaning that it involves two-sided projections and includes a selection of the result obtained by calculating the PCT payment based on both projections). The former RPSM in U.S. Treas. Reg. § 1.482-6 is de-specified for purposes of calculating PCT Payments under the 2011 Final Cost Sharing Regulations (that is, the method in section § 1.482-6 is no longer supposed to be used for determining the value of PCT payments since the date Temporary Regulations were issued on January 5, 2009) Guidance on selected topics

Best method rule

The choice of the most appropriate methodology must be subject to the "best method rule", a condition that the arm's length result should be determined under the method that, given facts and circumstances, provides the most reliable measure of an arm's length result, based on two primary factors, namely the degree of comparability between the controlled transaction (or taxpayer) and any uncontrolled comparables, and the data and assumptions used in the analysis.[227]

Periodic adjustments

The US regulations note that in cases when an intangible is transferred for a lump sum, the amount has to be "commensurate" with the income attributable to the intangible (the "CWI principle"). In this respect, a payment is "commensurate with income in a taxable year if the equivalent royalty amount for that taxable year is equal to the arm's length royalty."[228] Determining equivalent royalty requires "a present value calculations based on a lump sum, an appropriate discount rate and the projected sales over the relevant period." However, the CWI principle is subject to many exceptions (e.g., CWI adjustment may not be made where the income in question was not reasonably anticipated and the events leading to such unanticipated income were beyond the control of the controlled taxpayers in the transaction) and threshold barriers (the income in questions has to pertain to 936(h)(3)(B)[229] intangibles, and it cannot apply to income attributable to services) that will often limit its usefulness to the IRS. Moreover, as a practical matter, the CWI principle has never been used by the IRS to make an adjustment in the thirty years since it was added as the second sentence to section 482 in the 1986 Tax Reform Act.

[227] US Treas. Regs. Section 1.482-1(c).
[228] US Treas Regs Section 1.482-4(f)(6).
[229] US. Code §936 covers Puerto Rico and possession tax credit regulations. Its subsection (h)(3)(B) contains a definition of intangible property which is arguably not exhaustive.

In terms of price adjustment approach, these are in principle allowed and described in 1.482-7(h), "Payment rules." This section contains theoretical Examples 4, 5, 6, 7 that demonstrate the use of the price adjustment clauses. However, the use of the price adjustment clauses is only allowed under the following conditions: (i) there should be a price/ payment determined for the price adjustment possibility itself and it should have clearly specified trigger (i.e. deviation of a certain amount), (ii) mandatory for both downwards and upwards adjustments, (iii) the process of adjustment needs to be clearly specified ("occurrence or nonoccurrence" is "unambiguous and determinable") *a priori*, when formulating the price adjustment clause. All these conditions are in practice may be very difficult to comply with and thus, possibly as a result of these difficulties, the price adjustments are not often use in the US transfer pricing practice (as validated by our survey).

Discount rate

The discount rate "should be used that most reliably reflect the market-correlated risks of activities or transactions and should be applied to the best estimates of the relevant projected results, based on all the information potentially available at the time for which the present value calculation is to be performed."[230] Therefore, the US regulations provide that discount rates can be checked against market evidence of discount rates as a way of evaluating the reliability of the income method.

The US Regulations distinguish between realistic alternatives in the analysis of the discount rate, as this involves different risk exposure. For instance, there is potentially lower risk for licensees of intangibles, corresponding to lower discount rates, compared to the additional risk assumed when entering a CSA. The discount rate may vary also between the forms of payment, noting that a royalty computed on a profits base would be more volatile (hence require higher discount rate) than a royalty computed on a sales base.

For certain activities or transactions, implied discount rates may exist; however, the facts and circumstances of each case must be analysed in detail and evidence must be provided on the reliability of such implied rate. In cases where the implied discount rate is unreliable, so will be the results of the income method using such rate. The 2013 Final Cost Sharing Regulations add examples and discussion pertaining to the "implied discount rate" approach to applying the income method.

Financial projections

The financial projections should estimate best the items projected and the approach for the calculation should be decided based on which provides the best result taking into account the facts and circumstances in light of the completeness and accuracy of the underlying data, the reliability of assumptions and sensitivity of results. In that sense, projections prepared for non-tax purposes are more reliable than projections prepared for tax purposes. Financial projections must be a probability-weighted average of all different scenarios for future income projections.

Accounting principles

Similar to the OECD Guidelines, the US Regulations acknowledge that valuations of intangibles for other purposes may provide a starting point for valuations in a transfer

[230] US Treas. Regs. § 1.482-7(g)(2).

pricing context, but they should not be conclusive in determining the arm's length range for a transaction.

Two sided approach

The US regulations do not explicitly address the issue of the two-sided approach besides in the instances where the residual profit split method (by definition, a two-sided method) is discussed.

In general, it appears that the perspective taken is from the side of "PCT Payor" (i.e. the party entering a cost sharing arrangement, acquiring the rights to intangibles and thus making a payment for such arrangement). For instance, the income method discussion talks about the "best realistic alternative" of PCT Payor. The payment acceptable from perspective PCT Payee is not discussed in this content.

In the instances where the PCT Payee perspective is taken, the methodology applied becomes "unspecified."

5.3 German domestic law

A main source for transfer pricing guidance in Germany is contained in the Foreign Tax Act or *Außensteuergesetz* (AStG). Among principles on transfer pricing, Section 1(3) of the Act introduces how the transfer pricing should be set in cases of business restructuring such as a transfer of functions.

In addition to the Foreign Tax Act, the authorities in Germany can be authorised by law to issue "decree law" or "ordinance" (*Rechtsverordnungen*) on specific matters that have statutory character that are binding upon taxpayers and tax authorities. With respect to Section 1(3) of the Act, the authorities issued an ordinance specifying further details on the transfer pricing rules on cross-border transfer of functions (F*unktionsverlagerungsverordnung or* "FVerlV*")*. This ordinance also covers the principles of valuation to be used with the respect of "transfer of functions."

In addition, the German Ministry of Finance has issued the "Principles for the Audit of the Allocation of Income between Related Persons in Cases of Cross-Border Transfers of Business Functions (Administration Principles – Business Restructurings)" (hereinafter, "Administrative Principles"). These principles are binding to the tax authorities but not to the taxpayers or courts.

FVerlV and the Administrative Principles provide clarification and guidance on many aspects of the valuation that relevant to the current study. Below, a summary understanding of the most relevant topics addressed in the German regulations including Administrative Principles is provided.

5.3.1 Overview

Based on the German law it may be required to evaluate "transfer package". A transfer package consists of:

- a function and its associated opportunities and risks
- the assets and advantages that the transferring enterprise transfers or concedes to the receiving enterprise (together with the function and the services which are performed in this regard).

Valuating a transfer package implies finding one price for a bundle of elements. There are three "escape clauses" which allow for the use of individual (asset) prices for

different elements rather than determining one price of the assets being transferred. These clauses may be used:[231]

- if the taxpayer shows credibly that no "material intangible assets and advantages" were object of the business transfer; or
- if the sum of the individual prices for the elements of the transfer package, as measured by the valuation of the transfer package as a whole, complies with the arm's length principle; or
- if the taxpayer shows credibly that at least one material intangible asset[232] is subject to the relocation of functions and he defines it accurately.

5.3.2 Two-sided approach

According to the AStG, depending on the availability of (at least) limited transactional comparables, a hypothetical arm's length test may be applied.

By the virtue of its construction, the hypothetical arm's length test is a two-sided approach. The taxpayer has to determine the minimum price of the supplier and the maximum price of the recipient (range of potential agreement) as a result of a functional analysis and internal financial planning. The range of potential agreement will be determined by the profit expectations (profit potentials) of the supplier and the recipient. The price, which complies with the arm´s length principle with the utmost probability shall be used. If no other price is substantiated, the mean amount shall be used.

5.3.3 Main Methodologies

The Administrative Principles which are binding upon the tax authorities but not on the taxpayers distinguish two approaches:

- Direct approach – the expected future benefits associated with a transfer package.
- Indirect approach – the assessment of value of both the transferring and the receiving enterprise takes place before and after the restructuring, based on certain principles.

Further, the Administrative Principles note that "when performing the hypothetical arm's length comparison, in principle, an evaluation method (net present value oriented method, e.g. following IDW Standard 1 or IDW Standard 5) has to be applied"[233] thus referring to "Principles for the valuation of the enterprises," and "the Principles for the valuation of Intangible Assets", respectively.[234]

It is also stated: "whether or not a method of valuation should be applied that corresponds to IDW Standard 1 or IDW Standard 5 […], or corresponds to another economically accepted method and is to be accepted fiscally for the respective case,

[231] Administrative principles, note 2.2.3.1 para. 71, note 2.2.3.2. para. 72 and note 2.2.3.3. para 74.
[232] Exceeding in value 25% of the transfer package (Administrative principles, para. 75).
[233] Administrative principles, note 2.3.2.1 para. 87.
[234] IDW Standards contain requirements relevant to services provided by German Public Auditors other than with respect to audit engagements and accounting matters.

depends on the character and meaning of the business restructuring. If the restructuring comprises mainly intangible assets, the application of an evaluation method that corresponds to IDW Standard 5 suggests itself. If, on the other hand, a business restructuring consists mainly of a relocation of an enterprise or a business unit with its own viability, then an evaluation method corresponding to IDW Standard 1 is appropriate"[235].

In turn, the IDW Standard 5 defines four methods for valuating intangibles under the income approach:

(1) Direct cash flow projection method (assuming that one can identify cash flows directly attributable to the intangible assets)

(2) Relief from royalty method

(3) Incremental cash flow method, and

(4) Multi-period excess earnings method.

The cost approach and market approach are also discussed in the IDW.

5.3.4 Building blocks

Financial data

The Administrative Principles note that in terms of the financial data, the documents on which the enterprise bases its decision to restructure provide the ideal point for the valuation. The rational being that "these documents supply the assumptions made and in particular the information which revenues and expenses will cease to exist for the transferring enterprise and which revenues and expenses will be generated by the receiving enterprise due to the business restructuring"[236].

For the determination of the net profit after tax, essentially only those "financial surpluses after cost of debt and tax" are relevant for the valuation. These financial surpluses are regularly derived from the prospectively planned annual results. The underlying forecast can be calculated following commercial law, tax law or other provisions (i.e. IFRS, US-GAAP), depending on the customary practice of the respective enterprise. The annual result is to be adjusted by non-cash contributions. A proper deduction of the value-relevant cash-flows demands coordinated projected balance sheets, profit-and loss statements as well as financial planning for the following years (No. 27 IDW S 1). If required, additional calculations to determine the tax base can be necessary. Whether the financial surpluses can be distributed under consideration of the corporate circumstances, however, is not important.[237]

Royalty

In general according to the German regulations, the valuation in the framework of business restructuring implies a use of hypothetical arm's length test. The hypothetical arm's length test implies a two-sided approach where the range of potential prices is determined by the profit expectations. By its construction, the hypothetical arm's length test assumes that no (or at least limited) transactional comparables exist. As

[235] Administrative Principles, note 2.3.2.1 para 87.
[236] Administrative Principles note 2.3.2.1, para. 90.
[237] Administrative Principles, note 2.1.4.1, para 31.

such, the regulations for business restructuring do not make a direct link with the use of market comparables such as royalties for the rights to use intangibles.

However, outside the business restructuring, German rules are in many ways consistent with the OECD TPG – thus the guidance with respect to the CUP method is relevant.

Routine return

The hypothetical arm's length is based on evaluation of profit potential (of a transfer package, i.e. a combination of function(s), assets and other elements). Evaluation of the profit potential implies a comparison of "before" and "after", e.g. profits before the transfer using all elements of a transfer package, and profits after the transfer, without the transfer package (when taking the view of the transferring entity). In the latter case, depending on the transfer price approach applied after the business transaction, the transferring enterprise could only earn routine returns, i.e. the cash flows of "the fictitious comparable entity without the intangible assets."[238]

In this respect, there is a disconnection with the Valuation standards IDW Standard 5 – the latter touch upon only "contributory asset charges" in the form of the reasonable return on the contributory assets.

Discount rate

It is important to note that the German ordinance explicitly mentions that the discount rates should reflect the actual risk profile of the function. In order to determine the respective appropriate discount rate, the interest for a risk-free investment shall be applied in consideration of the tax charge; a functional and risk adequate surcharge shall be applied. The term of the risk-free investment depends on how long the transferred function will presumably be exercised. The surcharge shall be determined taking into account the respective risk assessment for the transferring and the receiving enterprise that would be common for enterprises in comparable cases.[239]

Useful life

In terms of useful life (referred to as "capitalisation period"), an infinite life should be applied unless a shorter useful life can be proven. The latter can be the case for intangibles with limited duration of legal protection. In practice, IDW S5 may be used as a reference for listing factors that could serve as indicators of the economic life.[240]

5.4 Potential application to EU Member States

The transfer pricing laws in the US and Germany are a useful starting point in terms of the extent of guidance they provide on the choice and application of valuation methodologies.

In this respect, more guidance should be considered to be included in the transfer pricing regulations (either on international basis such as for instance, the OECD Guidelines) or on a national basis. This guidance should ideally cover the following aspects:

[238] IDW S 5, para. 36.
[239] FVerlV, Section 5.
[240] IDW S 5, para. 99.

1) Guidance on the application of the economic valuation techniques, possibly in line or under the framework of the OECD transfer pricing methodologies. In this respect, a (fuller) overview of the possible economic techniques is necessary including indication to what extent they correspond to the OECD TPG methods. Assuring this correspondence will allow more consistency in application of the certain methods and in evaluation of their appropriateness. Additionally, it will allow a use of the existing OECD methods framework for valuations (i.e. consideration of comparability requirements in the conjunction of potential application of Relief from Royalty method, etc.)

2) Guidance on the "best method" or "most appropriate method" approach including the factors and circumstances to consider when selecting the appropriate economic technique for valuation of intangibles in the transfer pricing context.

3) Guidance on the building blocks and parameters for each of economic technique to consider, including guidance (more extensive than in the OECD TPG including the revised Chapter 9):

   - Financial forecasts and practical ways to justify the forecasted used data (e.g. use of sensitivity analysis, explanations for extra-high profitability forecast, history of the company of achieving forecasts, and other good practices to objectivize the data);

   - Discount rate including the conceptual construction and the ways to evaluate the discount rate. This should cover the important factors for consideration such as accounting for and adjusting for a difference in risk.

   - Useful life including consideration of the most important factors to consider when determining a useful life. In this respect, it may be important to include in the guidance a principle of taking a position of the specific parties of transaction on the useful life on the intangibles, i.e. to estimate useful life in the context of their specific application and use of such intangibles.

6. Capacity building in tax administrations

6.1 Introduction

It has been established by the EU Commission that there are deficiencies in current IP valuation practice, lack of valuation experience and of IP valuation related knowledge. In this respect, it is desirable that fill up in knowledge and quantity of resources at the level of tax administration and taxpayers.

The present section investigates the costs to be expected for preparing a valuation of IP study in the transfer pricing context, based on the survey of Deloitte experts in 28 Member states and nine trade partners.

Further, based on the survey results, it is investigated how the Member States and ten partners respondents assess their capacity in respect to resources (experts) available at the tax administration and taxpayer's level, to conduct valuation studies for transfer pricing purposes. Additional commentary was included investigating the recent and present measures taken in the Member States and trade partners in respect to building capacity, especially focusing on the US experience.

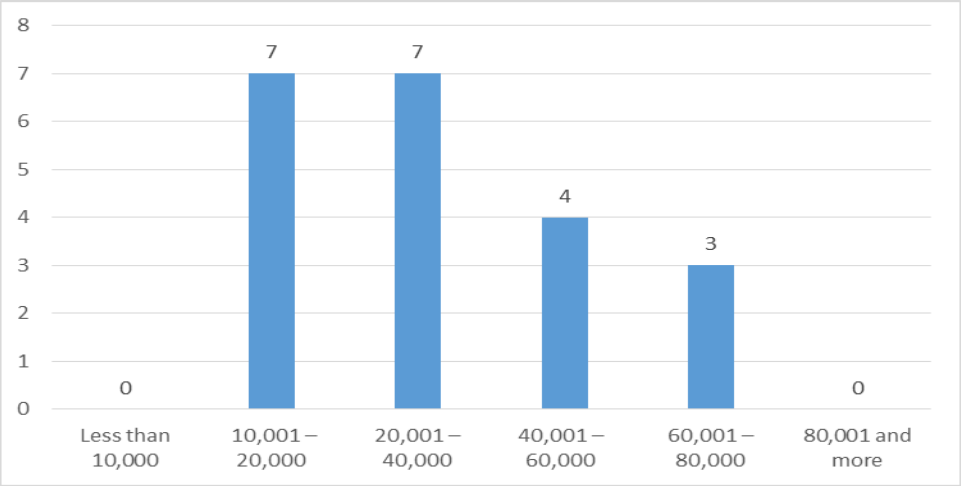
6.2 Estimated costs of valuation study

- **EU Member States**

The costs of performing a study involving valuation of intangibles for transfer pricing purposes were investigated through posing the respective question in the survey to Member State experts. First, the question was asked irrespective of the number of types of intangible assets in a study but simply based on the representative experience in the country's practice and based on respondents' experience.

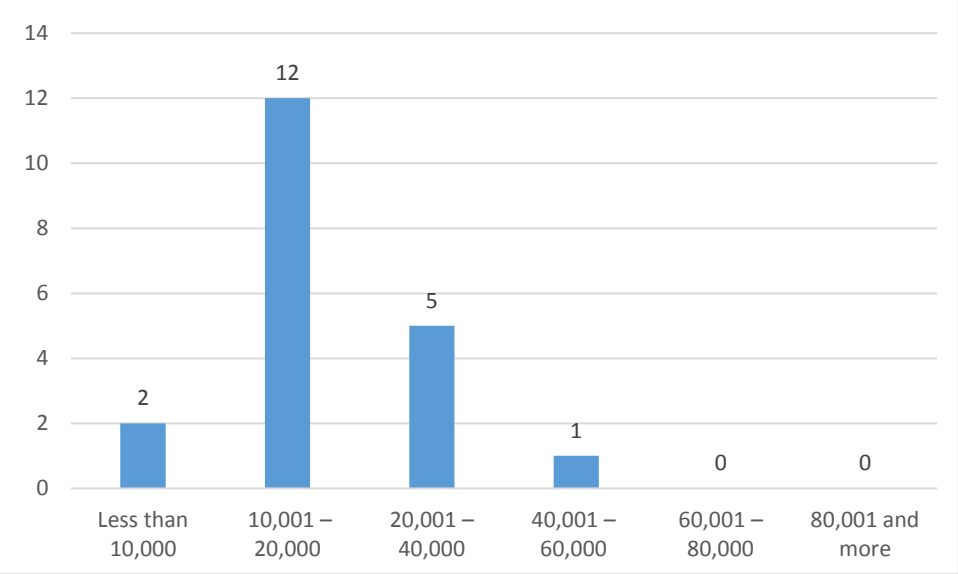
The respondents have found the question very difficult and noted that, because of the unique nature of intangible assets, the analysis and its cost vary, from situation to situation. In general, most of the respondents made a caveat that the range of the costs for a project involving valuation of intangibles is very high. Among the 21 respondents to this question, the majority (14 out of 21) think that the costs of such a valuation exercise lie below EUR 40,000. More particularly, seven respondents indicated that the costs are between EUR 10,000 – 20,000 and seven – between EUR 20,000 – 40,000.

Figure 71. Median costs of valuation study for intangibles from transfer pricing perspective for tax authorities – EU Member States



Next, the respondents were asked to comment on the estimate of costs in cases where the study involves only one defined intangible is single. Presumably it will be a case in smaller scope projects, than an average study which may involve more than one intangible asset valued. Based on the answers, the costs of studies with one intangible asset being valued are estimated to be generally lower, with 17 respondents out of 20[241] respondents estimating the costs below EUR 40,000 in their respective markets. The responses are presented below.

Figure 72. Median costs of valuation study involving a single intangible, from transfer pricing perspective – EU Member States.



Member State respondents also commented that the cost estimate for a valuation study is based on the assumption that the full factual, functional and risk analyses are

[241] The UK did not respond to the second question about the estimate citing that the spread of the costs for such study is too wide, based on the UK experience.

completed. One respondent also noted that the spread of the fees/costs may be extensive, due to the unique nature of intangibles and the difficulty of their valuation; hence, the estimate of a median cost bracket may be of limited use.

- **EU Trade partners**

Similar questions were also posed to the nine trade partners respondents. Their detailed answers are found below. It is important to note that the respondents found the question of estimating the average cost extremely difficult because the intangibles are unique and it is difficult to predict average costs of their valuation.

Table 9. Median costs for IP valuation study

	Median costs in EUR for IP valuation study	Median costs in EUR of a study with one intangible
Australia	40,000 - 60,000	10,000 - 20,000
Canada	40,000 - over 100,000	40,000 – 60,000
China	30,000 - 50,000	20,000 - 40,000
India	-	Less than 10,000
Japan	-	60,000 - 80,000
Korea	20,000 - 40,000	10,000-40,000
Norway	40,000 - 60,000	40,000 - 60,000
Switzerland	40,000 - 60,000	20,000 - 40,000
United States	Over 100,000	20,000- 40,000.[242]

6.3 Resources at tax administration and taxpayer's side

- **EU Member States**

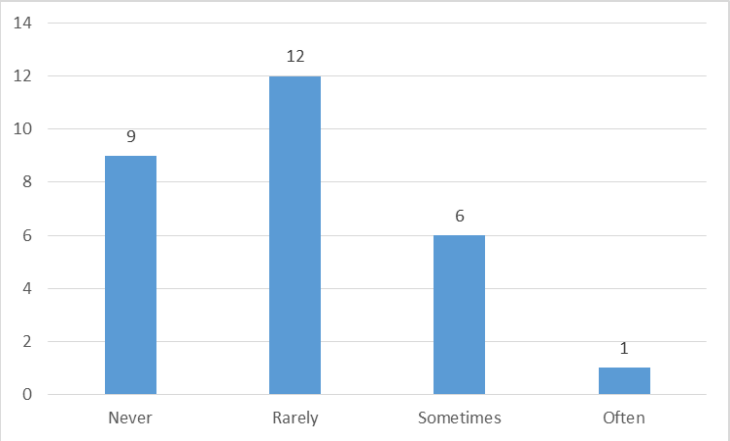
Only five (Belgium, Finland, Germany, Netherlands and Spain) out of 28 Member States respondents confirmed the presence of adequate transfer pricing resources in their country's tax administration. However, respondents noted (except being Finland) that these specialists may either be in insufficient numbers or lacking expertise and experience precisely in valuations in the transfer pricing context.

Eleven Member states respondents noted that the taxpayers (multinationals) sometimes have internal resources to perform valuation for transfer pricing purposes with ten Member States (out of 11) noting that these resources are very rare.

As shown by the Figure below, only six Member States respondents (Germany, Hungary, the Netherlands, Poland, Romania and Spain) noted that the taxpayer would sometimes attempt to perform a valuation study internally. However, in these cases, it is expected that they would request an advisor to review such a study. One Member State respondents (France) indicated that it is frequently the case that a taxpayer will attempt a valuation internally however this valuation would be a first draft to be further reviewed by a third party specialist.

[242] The estimate refers to the valuation of "make or sell" rights of a trademark. However, if the rights are more complex (and include rights to develop), the costs could be higher.

Figure 73. Frequency of a taxpayer preparing valuation of intangibles for transfer pricing purposes internally – Member States



The survey respondents were requested to comment on any developments and measures observed at the level of tax authorities and taxpayers in respect to their capacity building. The finding (responses received in this respect) are summarized below.

Table 10. Capacity building measures at the level of tax authorities – EU Member States

Belgium	Recent years the tax administration in Belgium has grown significantly. The number of tax inspectors has at least doubled by 2015 from the 10 auditors team registered in 2009; the TP audit cell is still looking to grow by recruiting new personnel. One of the important developments was the establishment of a Centre for Large Enterprises. The Central TP team also took the initiative to train the local tax inspectors in the TP issues.
Bulgaria	No. In 2015, there was a public procurement call to train the tax administration and it was Deloitte who has won the work. The training covered 160 tax inspectors who were split in 7 groups and each group trained for 3 days. The training covered all important topics on a basic level, as far as services and also IP transactions but the latter were covered also on a high level. It also covered developments at the OECD level and BEPS initiatives. So it is clear that the TA want to develop their technical skills.
Croatia	The team performing audits is about 20 people, and within this there is a 5 person teams who are top intelligence in TP in the tax administration. This team was formed at the end of 2012, and it has been operating now successfully for these years while auditing big taxpayers in Croatia (i.e. companies with turnover of over 20 mio EUR). However, this team is not particularly specialized in IP or valuations.
Hungary	The Central APA team has economists and lawyers but has limited practical experience. These personnel educate themselves by studying valuations from APAs that Deloitte and other tax advisors and taxpayers submit to them, this is their way of education with technical matters like valuation of IP.

Poland	The tax administration has TP specialists. It includes three central teams (Ministry of Finance team deals with APA, MAPs, and CA; it has just been merged with the team engaged in detecting GAAR (General Anti-Avoidance Rules) violations): small team that deals with regulations (coordinating with Ministry of Finance), and two specialized teams, one in Tax Chamber in Lodz supporting tax audit teams throughout country; and a specialized Audit team In Warsaw. The process of centralization has been implemented for the last 2 years – this reorganization is considered impressive. The Ministry of Finance team is responsible for providing trainings for the tax auditors engaged in TP.
Slovenia	The tax administration has a TP group which is part of Corporate Income Tax group of personnel. It is known that the tax administration has not been allowed to hire new people for the past 5 years or so. As such, a big percentage of tax administration specialists are getting close to retirement. Each of them has estimated 6-7 open audit cases, thus they are overloaded.
Spain	There are TP specialists in the Tax Administration, in ONFI (*Oficina Nacional de Fiscalidad Internacional*). They are currently building the team so they are growing in numbers.
Sweden	Insufficient resources at tax administration with only a few (2-3) focusing on valuations of IP for TP purposes. One of such persons has a background in a Big 4. Generally the tax administration positions have very low salaries in comparison with Consulting so it is not attractive career option.
UK	The Tax Administration tends to use Capital Gain Valuators for assessing valuations, who are not TP specialists. The tax administration has many TP specialists but they are not specialized in IP valuations for TP purposes.

- **EU Trade partners**

Among surveyed trade partners, only two respondents (Canada and Norway) indicated that there are sufficient resources for handling cases involving transfer pricing valuations with others noting that either in the number of specialists at tax administration or their level of familiarity with the economic valuations is insufficient. The similar situation is at the multinationals in trade partners' (with only four countries noting that such specialists are sometimes present in the multinationals and others commenting that this happens rarely or never).

Thus, it seems that the problem of insufficient resources is more or less consistent with the situation in the Member States. It was found that this is mainly due to the specificity of the technical issues encountered in valuations for transfer pricing purposes, the evolution of the valuation exercise and the growing importance of transfer pricing accompanied by increased scrutiny as the discipline and the industries mature. In this sense, there seems to be a general need for strengthening resources at the level of tax administrations by engaging specialists with experience in transfer pricing and / or valuations.

Similarly to the interviews with the Member States experts, the survey respondents in nine trade partner countries were requested to comment on any developments and measured observed at the level of tax authorities and taxpayers in respect to their

capacity building. The finding (responses received in this respect) are summarized below. The feedback received from the US is presented separately below.

Table 11. Capacity building measures at the level of tax authorities – Trade Partners

Australia	No sufficient qualified resources at the tax authorities. However the ATO is in the process of increasing its resources in the transfer pricing field, so an increase in the quality and amount of these resources is expected.
Canada	The Local Tax Services Office generally has a valuator on staff, usually someone that is a Chartered Business Valuator (CBV). Valuations are generally performed by such a person. To the extent issues arise that cannot be resolved with a local TSO, cases are often referred to or reviewed by the Head Office, which has senior valuators with a lot of experience.
Japan	The tax authority typically hires lawyers and not economists and this could be a challenge (to assess a valuation). Sometimes they are good specialists. They are trained on the job. NTA assigns the best (most experienced) specialists to technically challenging cases.
Norway	A considerable team in Norwegian tax administration has been established. This Centralized Valuation team is there to assist in APAs and in Audit in terms of questions regarding valuations for tax. People in the team are specialized by industry. There is a sub-team that deals with valuation of technology (includes 4-5 engineers in this sub-team). In the oil industry, there are many transactions involving transfers of IP – hence, a focus of the tax authorities on this industry. Since technology in this field is rather complex, they need to be engineers.

- **US experience**[243]

The US tax authority (IRS) has actually faced severe constraints on its budgets and resources for the past six years since the Republicans took over Congress in 2010.

Since that time, the IRS has imposed strict budget controls on travel and any non-case related expenses. So there have been numerous hiring freezes since that time.

That being said, the LBI (Large Business and International division of IRS) is always trying to reallocate resources to transfer pricing. So this was part of the 2010 realignment to consolidate APA and Competent Authority to cut down on duplication and allow for same people to work both APA and CA matters.

The U.S. transfer pricing (including cost sharing) regulations are written by academics and people highly trained and highly specialized in economics and transfer pricing. It is however a challenge to apply the rules and regulations in practice as most of transfer pricing practitioners (not only taxpayers but also including resources of the Big 4 consulting companies) are not as skilled as the authors of the regulations and it is difficult to correctly understand and interpret the methods.

The IRS is always trying to obtain PhD economists for transfer pricing for its APMA (Advanced Pricing and Mutual Agreement Program) and Competent Authority

[243] Information received from Deloitte US in the interview and the following correspondence.

programs and for transfer pricing field economists. However, they have a very difficult time hiring PhD economists because they cannot compete in salary offers with the private sectors. So the IRS tends to only be able to get economists with Bachelor's degrees or at most a Master's degree.

Faced with budget constraints, LBI has tried to focus its strategy on applying its "best resources to its best cases." So instead of going after everyone, they are going after the most influential targets. They are trying to get a great deal of public attention with what they hope will be some big wins against big taxpayers.[244]

6.4 Conclusions

The findings of the research of the capacities available in the tax administration and taxpayers can be summarized as follows:

- The survey has confirmed insufficiency of resources as well as particularly the skills of the staff, both at tax administrations as well as at tax payer levels.
- The costs of performing a valuation for transfer pricing purposes vary greatly, from less than EUR 10,000 in simple cases involving one intangible to over EUR 100,000 in complex cases.
- Several countries have positive experience in recent years expanding the staff of transfer pricing specialists to address a growing need in such specialists and performing necessary training, either using external resources (e.g. Bulgaria) or internal resources (e.g. Belgium and Poland)
- Other interesting positive observations in respect to the organization of resources include:
    - Experience of Norwegian tax authorities employing engineers for valuation of IP in oil industry
    - Experience of finding internal resources by refocusing personnel on big cases and large taxpayers (US and Japan)
    - Use of valuators by the Canadian tax authorities that are made available to local / regional tax auditing team
- The negative observations in respect to resources at the tax authorities and taxpayers include:
    - Observations of budget limitations that prevent from hiring new specialists at tax authorities (e.g. Slovenia)
    - Low salaries for such specialists at the tax administration level that prevent them from attracting new hires (e.g. Sweden and the US).
    - Complexity of the national regulations (prepared by academics) and the difficulty to fully understand and apply such regulations at a level of taxpayers and possibly their advisers (the US).

[244] Information received from Deloitte US in the interview and the following correspondence.

7. Considerations for possible policy actions

7.1 Understanding general background for a valuation

It is important to acknowledge and understand that the transfer pricing discipline is based on the detailed analysis of facts and circumstances, as well as functional and risk profile of the parties relevant to transaction. In practice, the analysis is developed in a specific transfer pricing report documenting, among other, the full business model, value change, the extent of business transformation and the economic functions and risks of the parties. Considering "before" and "after" business circumstances of the analysed transaction are of a higher importance for a transfer pricing specialist than to a general valuation expert.

Furthermore, the standard of value for transfer pricing, being the arm's length standard, warrants certain differences in a valuation for transfer pricing purposes as opposed to valuation for other purposes. Among others, these differences include a requirement to consider the perspectives of both parties of the transaction in the analysis. This two-sided approach is typically absent from a valuation for other purposes where a valuer presents only one side of the transaction be it as a buyer or a seller.

It is further important to acknowledge and understand that the stakeholders, readers, and stakes/risks are considerably different depending on the purpose of the valuation (*cfa* Section 2 of the present document).

7.2 General valuation techniques

The principles of the valuation models and techniques remain similarly independent from the valuation purpose and context. Based on the general background, and the personal judgement, the choice of the methodology may be different.

It is important to understand the methodologies and the amount of the assumptions and building blocks in each of them in order to select the most appropriate methodology. In fact, such an understanding is a key factor to defend the valuation successfully from the transfer pricing perspective.

In this respect, certain valuation standards may represent a useful reference point for a transfer pricing practitioner attempting a valuation exercise. The valuation standards (such as IDW S 5 in Germany) may provide useful insights on the methodology and parameters of a valuation model.

7.3 Building blocks

Care should be given to the parametrisation of the valuation model including each of the parameters. From a transfer pricing perspective, a proper justification is needed to defend all the parameters. This matters even more considering that the valuation may be challenged by a tax administration a few years after the inter-company transfer. In this respect, good practices exist (with regards to routine return, royalties, verification of financial data and proper discount rate studies) and should be further promulgated among transfer pricing practitioners.

7.4 Legislative measures

The transfer pricing laws in the US and Germany are a useful starting point in terms of the extent of guidance they provide on the choice and application of valuation methodologies.

In addition, the commercial court experience may provide useful evidence regarding third party behaviour when addressing the issue of the IP value, including the approach to take to value and parameters to use. The presence or awareness of the commercial court cases however, seem to vary greatly from one Member State to another.

In this respect, the development of more guidance regarding the factors to consider in choosing the most appropriate methodology as well as the ways to objectivise the assumptions and parameters of the models employed should be considered. This guidance may be accompanied by practical examples (contained in legislature) on building a full valuation, including the use of financial data and parameterisation, and examples of reconciling the valuation for transfer pricing purposes with valuation for other (accounting) purposes.

7.5 Resources

More resources are needed to promulgate a correct understanding and use of economic valuation techniques. This applies both to the number of specialists at tax authority administrations as well skill level of these specialists in valuations of intangibles for transfer pricing purposes. Attracting specialists by some countries' administration may mean reconsidering their budgets and salaries, to be able to compete for qualified resources.

In respect for more immediate actions, positive observations at several tax authorities may be considered as a good practice, including internal trainings provided by most specialized central teams to the local and regional professionals, external training using the resources of specialists in consulting and/or industry, and focusing best country tax administration experts only on the large taxpayers and difficult cases.

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Appendix 1 – Survey

Section I. Background

This section provides a background on the TP practitioners who are our respondents

	Question	Answer
1	Please describe the composition of your team when performing a valuation study for Transfer Pricing purposes (e.g. strictly TP experts, Valuation Experts, both).	Open question
2	Do you have different teams / departments dealing with intangibles valuation / exit issues for transfer pricing purposes and with valuation of intangibles for other purposes (Accounting, M&A, reporting, general corporate tax)?	Yes / No

Section II. Intangibles in Transfer Pricing

This section gives us a framework for position of Respondents to what are intangibles for TP purposes

3	Please indicate what kind of intangibles you have valued in your country (based on your practice) for Transfer Pricing purposes. - Please refer to Table 1 and identify the relevant categorization - For each of the selected categories, please indicate the frequency of valuation for TP purposes	1. Never 2. Rarely 3. Sometimes 4. Often 5. Very often
4	Please indicate what approach (in terms of deciding whether or not it is an intangible) you have taken for the item "workforce". Please provide a brief explanation to your answer (e.g. why it was defended as an intangible).	1. Defended it is an intangible 2. Defended that it is not an intangible 3. Defended either depending on the situation 4. No experience dealing with the item Open for explanation of the answer above
5	Please indicate what approach (in terms of deciding whether or not it is an intangible) you have taken for the item "location savings". Please provide a brief explanation to your answer (e.g. why it was defended as an intangible)	1. Defended it is an intangible 2. Defended that it is not an intangible 3. Defended either depending on the situation 4. No experience dealing with the item Open for explanation of the answer above
6	Please indicate what approach (in terms of deciding whether or not it is an intangible) you have taken for the item "business synergies". Please provide a brief explanation to your answer (e.g. why it was defended as an intangible)	1. Defended it is an intangible 2. Defended that it is not an intangible 3. Defended either depending on the situation 4. No experience dealing with the item Open for explanation of the answer above
7	Have you identified and valued "goodwill" as an intangible asset for transfer pricing purposes? If so, how often? Please explain what you have meant and defined by "goodwill" in this case, to explain your answer.	1. Never 2. 1 or 2 special situations 3. 3-10 times 4. More than 10 times
8	In the situation of a business restructuring, when there are no identifiable intangibles from Table 1, how do you approach an issue of business closure (e.g. closure of the sales agent with no own customers, or shut-down of contract manufacturer whose only customer was a related entity, etc.)? Could you please explain your answer and / or provide a short example? If you think that there is more than one answer that applies, please explain the situations when each of them is appropriate in your experience.	1. There are always intangibles that are found 2. There are no intangibles but there is still an exit payment due. 3. There are no intangibles and no exit payment due 4. Other Open question

9	In respect to the previous question, what would be the approach of your country's tax administration to this issue? Please explain what would be their reasoning if you answered 1 or 2	1. They will likely argue that there is always a payment due 2. They agree that in some cases, no payment on business restructuring is warranted 3. No experience with reaction of TA on the matter
10	Has the use of certain definition of intangible assets in other fields (e.g. IFRS in Accounting) created issues for transfer pricing / tax purposes? If so, which definition and what was the related difficulty? Please provide a short example.	Open question

Section III: Reconciling with Valuations for other purposes and important pre-requisites for performing TP valuations

This section investigates to what extent the valuations for other purposes are used in TP practice

11	Do you use the valuations prepared for different purposes in your country (e.g. accounting, PPA, management reporting) in your practice for TP purposes?	1. Yes, always if available 2. Yes, but with corrections and validation (please explain) 3. Sometimes in certain circumstances (please explain when) 4. To some extent (I may use some parameters and financial data contained) 5. Usually, no (please explain why) 6. Never (please explain why) 7. No experience with Tax Administration applicability
12	Are valuation studies prepared for other purposes / accepted in your country by the tax administration (as Transfer Pricing study)? What would the tax administration challenge in particular in this respect?	1. Yes, quite often, with minimal explanation as to why this valuation is also useful for transfer pricing 2. Yes, but with corrections and validation (please explain) 3. Sometimes in certain circumstances (please explain when) 4. Usually, no (please explain why) 5. Never (please explain why) 6. No experience with tax administration applicability Open question
13	If you use these studies under question 11, how have you dealt with the issue of goodwill that is a part of PPA?	1. No experience (not used) 2. I would try to allocate it to other intangibles I identified for TP purposes 3. Other (please indicate
14	Please indicate cases when the results of the valuation for different purpose (e.g. PPA's values of certain assets) was challenged and disregarded by the tax administration. Please be detailed and concrete in your example. *(For instance, in France, in the case of a PPA valuation, the tax administration argued that a portion of the goodwill in a business needs to be allocated to a transfer of certain intangible assets, as goodwill cannot be separated from those assets).*	Open question
15	Please explain what is the minimum background you need to have (besides financial data) to perform a valuation for transfer pricing purposes. Please mark all that applies.	1. Functional and risk profile of parties before and after the transfer in question 2. Contracts 3. Business (and all other) reasons for restructuring 4. Other (please indicate)
16	How do you reflect the rationale & economic circumstances (i.e. "before" and "after" functional profile of the parties) behind a transaction into the valuation study?	1. Factual and functional analysis 2. Other (please indicate)

Section IV: Selecting appropriate methodology(ies) for TP valuation & their application (including techniques and parameterization)

In this section, we focus on selecting the most appropriate methodology and relevant techniques to valuating Intangible(s) (separate intangibles or a bundle of intangibles). The analysis investigated focuses on a transfer of intangibles (to distinguish between cases of evaluation of period royalty (cfa "Defining the purpose and scope"). Please note that the analysis of royalty is however addressed.

Section IV.a Selection of the method for Valuation in Transfer Pricing		
17	Which are most important factors driving your decision to use a specific valuation method(s) to value an intangible asset, e.g. OECD historical hierarchy of methods, acceptability by local tax administration, availability of (reliable) information on parameters, availability of reliable forecast, other?	Open question
18	Referring to the previous question, do you think / agree that the purpose of the valuation (i.e. Transfer Pricing) is important to the choice of methodology and its modalities? If yes, could you please explain to what degree you think it is influencing the choice of methodology?	Open question
19	Which valuation methods (market-, income-, and cost-) in the context of TP are generally accepted in your country by the tax administration?	Open question
20	The OECD considers income-based valuation techniques more useful when valuing intangibles than costs-based or market-based approaches. Is it a commonly accepted practice in your country?	1. Yes, but some exceptions are possible 2. Depends on situation (we see about 50:50 cases) 3. No, we frequently use methods other than income-based methods 4. No experience
21	Could you provide an example or situation when the market or cost method was deemed to be more appropriate to value an intangible asset?	Open question
Section IV.b Application of the method (technique behind)		
In the light of the present survey, we have described the most common valuation techniques used for TP purposes in the context of business restructuring (and their characterization in terms of OECD methodology) in provided listing (corresponding to Table 2) . Please refer to this listing when answering the following questions		
22	Could you please indicate which of the listed methods you applied (and how often) when addressing the valuation of IP in the context of business restructuring for TP purposes?	1. Never 2. Rarely 3. Sometimes 4. Often 5. Very often
23	Could you please indicate if you use any of the other valuation techniques (Table 3) for TP purposes? (The answer could be marked in provided listing if convenient)	1. Never 2. Rarely 3. Sometimes 4. Often 5. Very often
24	Are there other methodologies that you applied for the valuation of IP in a business restructuring context for TP purposes, that are not listed? In this case, could you please provide us with a brief explanation of the methodology applied?	Open question
25	Of the top three intangible assets which you valued most frequently (ref. to question 3) please indicate which of the methods have you applied in practice most often?	Open question
26	What are the methods and techniques that appear preferred by the tax administration in your country (during audits or suggested in the APA process)?	Open question
27	Are there other methods you would consider, but have not applied yet in practice? And if so, could you describe these methods and indicate why they are not currently used?	Open question
28	How important do you consider the use of more than one method for valuation of intangibles / exit payment in the light of business restructuring? If important, why ?	Open question

29	In practice, how often do you use more than one methods to estimate the value of intangible(s) / exit payment for one project? Why? Or why not?	1. (Almost) Never 2. Rarely 3. Sometimes 4. Often 5. Very often Open question
30	In respect to the methods that you use from provided listing (Tables 1 and 2) and any additional methods, could you please describe for us the advantages and disadvantages?	Open question
31	When performing a valuation for transfer pricing purposes, we understand that the purpose (i.e. TP) in practice needs to be considered. We are trying to identify what the important factors are that should be accounted for when performing the valuation for TP (in comparison with valuation for other purposes (PPA, etc.). Please mark all that applies. Please be as detailed as possible.	1. Different assumptions (please explain) 2. Different values of parameters (please explain) 3. Different type of financial data (please explain) 4. Different set up of methods used (please explain) 5. Other
32	How do you in practice account for the factors identified above? Why?	Open question

Section IV.c. Analysis from the perspective of transferee and transferor

In OECD Guidelines Chapter 9 (and para 6.157 of TPG), it is stressed that is important to have a valuation done from perspective of both parties, Transferee (Seller) and Transferor (buyer). In the following questions we inquire about applicability of this issue in your country

33	Is it mandatory in your country to perform a valuation from the perspective of both parties to the transaction? If so, when and under what circumstances?	Yes / No Open question
34	Are there any guidelines in your country (presumably issued by the tax administration), related to the preparation of valuation from the perspective of both parties in the transaction? In which cases do those apply? [e.g. Administrative Principles in Germany that make it necessary to prepare valuation from both parties' perspective in cases of a cross-border transfer of function. These apply]	Yes / No Open question
35	How often in practice do you perform valuations from the perspective of both parties (Transferee and Transferor) in your country?	1. Never 2. Rarely 3. Sometimes 4. Often 5. Very often/ Always
36	If you answered Never to Rarely, could you please explain why? What is the main impediment to performing valuations from perspective of both parties?	Open question
37	Do you think valuations from both parties' perspective should be applied more often in general? Why?	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree Open question

Please also see more on two-sides valuations questions (questions 68 - 70) below

Section V. Information Gathering/ Parameters ("Building Blocks")

We would like now to address the questions regarding the input needed for the application of the methods.

Section V.a. Royalty *-- Please note that the questions below also apply to a general analysis of royalty as arm's length payment for the use of intangibles*

38	If you selected a royalty relief method to value certain intangibles, could you please describe your approach to determining the appropriate royalty?	Open question
39	(in the absence of internal comparables or of the client providing you with an appropriate input for royalty), is doing a search for comparable license agreements covering the same / similar type of intangibles under the OECD standards of CUP method necessary for this approach?	1. Yes 2. No 3. No experience

40	In your practice & experience as TP practitioner, what has been the main difficulty in your opinion to find appropriate royalties?	Open question
41	Please indicate what databases you use in practice for benchmarking royalty rates?	
42	How would you describe the acceptability of the benchmarked royalties (on external databases indicated above) in your country? What is the main reason of non-acceptability, if applicable?	1. Never 2. Rarely 3. Sometimes 4. Often 5. Very often Please indicate
Section V.b. Routine returns		
43	If you selected a residual profit methodology, could you please describe your approach to determining the appropriate routine return?	Open question
44	(In the absence of internal comparables or of the client providing you with an appropriate input for the royalty) Is doing a search for comparable companies under the principles and standards of TNMM the most common and accepted approach?	1. Yes 2. No 3. No experience
45	In your practice & experience as TP practitioner, what has been the main difficulty in your opinion to find appropriate routine returns?	Open question
46	Please describe what databases you use in practice for benchmarking routine returns.	
47	How would you describe the acceptability of the benchmarked routine returns under TNMM method (on external databases indicated above) in your country? What is the main reason of non-acceptability, if applicable?	1. Never 2. Rarely 3. Sometimes 4. Often 5. Very often/ Always Please indicate
Section V.c Timing horizon, useful life and terminal value		
48	The timing horizon in the models utilizing the DCF technique usually implies a forecast of several years. Using indefinite life implies that DCF model will contain a terminal value. On what basis do you decide to apply an indefinite or a finite life for an intangible asset? [If it is required by regulations, please indicate so]	Open question
49	For which type of intangibles is it common practice in your country to apply an indefinite life? Reference to Table 1	Please mark all that are apply.
50	If you selected a finite life, could you please indicate what are the important facts and factors to determine the number of years constituting the life. Please mark all that applies. If you indicated answer 4, could you please indicate how often you find external references for useful life and what is the source of these references?	1. Technological changes (how fast the newer better products are developed and released) 2. Economic life (how long there are profits that are not washed out by new market entrants) 3. Functional life (the products are replaced by completely new products) 4. Publications indicating useful life in this industry. 5. Other (please explain) Open question
51	Do you have any recommendations on what can be done in respect to this parameter (time horizon) in transfer pricing (in terms of databases, approach of tax administration, etc.)?	Open question
52	Is there a practice in your country to apply a depreciation when using any of the methods applying DCF, especially Residual profit methodology (depreciation schedule is applied to (residual) profit?	Yes/ No
53	If yes, could you please explain with what purpose is this performed? Please indicate all that applies.	1. To account that intangibles do not hold their full value in terms of generating intangible-generating economic return over time 2. To determine the appropriate value of initial IP in the cases when the development of the intangibles has been continued by another party 3. Other (please indicate)
54	If yes, could you please indicate what is the common practice in respect to the depreciation schedule (and what type of analysis you use for this purpose)?	Open question (we mean is it straghtline/ linear constant decline, or something else?)

Section V.d Discount rate		
55	On what basis do you determine the discount rate for your valuation?	1. Internal rate (WACC) of taxpayer (which is used in internally in budgeting or other projects) 2. Estimate it based on the public information 3. Other
56	If you answered 1, could you please explain how often do you challenge the rate provided by the client?	1. Never 2. Rarely 3. Sometimes 4. Often 5. Very often/ Always
57	If you answered 1, could you please explain how often the Tax administration challenges the rate?	1. Never 2. Rarely 3. Sometimes 4. Often 5. Very often
58	If you answered 2 above (Estimate the rate based on public information), could you please explain how often you use publicly available rates for industries in different databases? If you answered from Rarely to Very Often in this question could you please indicate the databases you use?	1. Never 2. Rarely 3. Sometimes 4. Often 5. Very often/ Always
59	If you answered 2 above (Estimate the rate based on public information), could you please explain how often you estimate the discount rate using finance formulas (such as WACC, WARA, etc.)? Please indicate the most common techniques in this respect.	1. Never 2. Rarely 3. Sometimes 4. Often 5. Very often Open question
60	Could you please comment on the main parameters of the formula applied. For instance for WACC these are the following (modify as needed). Please insert what kind of data you commonly use for this valuation. * Debt/ Equity ratio * Return on debt * Return on equity (CAPM and its parameters, market premium, beta, risk-free rate, etc.) * tax rate	Open questions.
61	Do you use/ estimate different discount rates in relation to different types of IP in cases when the study covers more than one type of IP?	Yes/ No
62	If yes, on what basis would you calculate different discount rates (what is the factor in your calculations leading to different discount rates)?	Open question
63	Could you please recommend what, in your practice and from your country's perspective, is the best practice in respect to determining the discount rate for valuations in Transfer Pricing? [E.g. certain reasonability checks, etc.]	Open question
Section V.e Financial data *For applying the methods encompassing a use of DCF technique, a financial forecast is needed. Depending on the methodology used, the data needed could range from a forecast of sales only (e.g Relief from royalty) to a full P&L with identification of major costs forecasts for application of the residual profit method. This financial data is typically obtained from the taxpayer*		
64	Do you perform any reasonability analysis on the financial data provided?	1. Never 2. Rarely 3. Sometimes 4. Often 5. Very often/ Always
65	If yes, could you please indicate what kind of data you may use for checking the above?	1. No data, just checking for obvious outliers (jumps in sales/ profitability, etc.) 2. I will compare the forecast /projected growth with the past profitability of this company 3. Other (please explain)

66	The OECD TPG suggest the use of price adjustment clauses in cases where the valuation of an IP is highly uncertain. What is the practice in your country in respect to adopting price adjustments associated with transfer of IP?	1. Never 2. Rarely 3. Sometimes 4. Often 5. Very often/ Always
67	How important do you consider these adjustments as potential solution for data that is highly uncertain?	1. Very important 2. May be important 3. Not important at all 4. I do not have an opinion
68	When performing a valuation for transfer pricing purpose, do you use operating profit or free cash flow for determining an arm's length result?	Open question
69	When performing a valuation for transfer pricing purposes, do you determine the value of the intangible asset on a pre-tax or post-tax basis?	Open question
70	When performing a valuation from both parties perspective, what is the most common approach in determining which value (between Transferor's and Transferee's values) to use?	Open question
71	When performing a valuation of valuation from both parties' perspective, what kind of analysis / reasoning would you use to determine which point of the range?	Open question
72	When performing a valuation of valuation from both parties' perspective, if selecting a value other than the middle of the range, what kind of approach is the most common for the tax administration in your country?	Open question

Section VI. Standards

73	When performing a valuation for Transfer Pricing purposes, do you take into account a certain standard(s) (besides the OECD guidelines and the arm's length principle)?	Yes/ No
74	If so, which standard(s) do you apply (e.g. ISV, OECD, USPAP and or national standards)?	Open question
75	Are some of these standards compulsory in your country in respect to Transfer Pricing valuations and to what extent? *[E.g. for instance, the administrative principles in Germany ("Principles relating to the Examination of Income Allocation between Related Parties in case of Cross-Border Transfer of Functions") which set out the approach on valuation such as capitalization principles, discount rules, etc.). These principles build on the Ordinance for Cross border of functions which is binding for tax payers and tax courts. Although the Principles are not legally finding, the level of proof shifts to taxpayer in cases when it does not follow up the approach in the Principles]*	Open question
76	Which changes / improvements would you propose to the standards you use most often or are obliged to use for Valuation for Transfer Pricing purposes?	Open question
77	If not, why not?	Open question
78	Does a specific standard or any regulation in your country prohibit or advise against the use of certain valuation methods in relation to Transfer Pricing? And if so, which methods are these?	Open question
79	Has the use of certain valuation standards created issues for transfer pricing / tax purposes? Which standards? Please provide a short example.	Open question

Section VII. Capacity Building

80	What do you see as the median external costs (in Euro) for performing a Intangibles **V**aluation under an **income-based method** for the purposes of transfer pricing in your country? This question is independent from the scope of the intangibles in this case and is a measure of average pricing observed *is in euros but you can indicate your currency and bracket amount*	1. <10,000 2. 10,001 – 20,000 3. 20,001 – 40,000 4. 40,001 – 60,000 5. 60,001 – 80,000 6. 80,001 – 100,000 7. >100,000
81	How would your answer changes if the study is limited to a valuation of **one** rather well defined **intangible** (e.g. a particular Patent or Patent family, a Trademark or Brand, etc.) in the context of an income-based method used in a valuation for transfer pricing purposes *is in euro but you can indicate the amoutn in your currency*	1. <10,000 2. 10,001 – 20,000 3. 20,001 – 40,000 4. 40,001 – 60,000 5. 60,001 – 80,000 6. 80,001 – 100,000 7. >100,000
82	Would you consider that the tax administration in your country has specialists that are in their skill at par with the resources available for taxpayers (in this respect, consider that the tax payers could use external consulting firms such as Big 4's etc.)? If yes, do you think that they have these resources in sufficient numbers? Do you have any other comments about these specialists (their education, etc.)	Open question
83	Does your tax administration depend on external expertise when examining intangible asset valuation If often or very often, could you explain why and what kind of external expertise they use?	1. Never 2. Rarely 3. Sometimes 4. Often 5. Very often/ Always
84	Does the tax administration in your country has a special division dealing with valuations of intangible assets? Could you briefly describe how it is structured?	Open question
85	How often do you find that the taxpayer (i.e. personnel of MNC) in your country has internal personnel that is capable to perform Intangible Valuations for Transfer Pricing purposes? If yes (Rarely - Very Often), who are these specialists in terms of their job responsibility in the company	1. Never 2. Rarely 3. Sometimes 4. Often 5. Very often/ Always Open question
86	How often in practice do taxpayers in your country perform Intangible Valuations for Transfer Pricing purposes with own staff?	1. Never 2. Rarely 3. Sometimes, 4. Often 5. Very often/ Always
87	If you answered Rarely, Sometimes, Often or Very Often, please indicate how often these internally prepared studies will still be reviewed and corrected by external advisors	1. Never 2. Rarely 3. Sometimes, 4. Often 5. Very often/ Always
88	Do you expect any changes in respect to resources at both tax administration and MNC level ? (e.g. MNC hiring specialized personnel, etc.). Please comment what kind of changes you expect	Open question

Section VIII. Domestic Laws and Regulations		
89	Does domestic law in your country contain regulations and/or guidance on valuation techniques? Please indicate the names of the relevant regulation. ***Questions 90 - 94 need to be answered if you said yes to this question.***	Open question
90	- If yes (there are domestic regulations), which categories of valuation techniques are recognized, if any? Specifically, is the income-based valuation approach (such as DCF) specifically recognized and addressed?	Open question
91	-- If yes, are these regulations and their provisions applicable and used in Transfer Pricing? Please explain.	Open question
92	- If yes, what do these regulations indicate in respect to the subject and/or scope of Transfer Pricing valuation (e.g. transactions with individual intangibles, aggregated transaction, etc.)?	Open question
93	- If yes, to what extent the regulations are specific in terms of building blocks (parameters) and underlying input data?	Open question
94	- If yes (If there are domestic regulations), what do they indicate about data sources and the information obtained? what is acceptable? what is common practice?	Open question
95	In general (and in the absence of specific regulations as per question 87 above), how are the income-based valuation methods in the context of transfer pricing implemented in your country. E.g. required by standards, common practice? Are income-based methods (in any aspect of them) prohibited?	Open question
96	In the event that the income-based valuation approach is prohibited, what changes are required to allow the use of income based valuation techniques for transfer pricing purposes?	Open question
97	Are there (tax) court cases in your country that concern cases of IP valuation that are can be or are of use for Transfer Pricing purposes? Could you please indicate the names or references of these cases or give us examples of these cases?	Open question
98	Are these court cases actively used in practice -- i.e. are they accounted for when preparing the IP valuation for Transfer Pricing (in selecting the methodology, parameters)?	1. Never 2. Rarely 3. Sometimes, 4. Often 5. Very often
99	Are there Commercial law or Commercial court cases in your country that are used (or can be of use) in IP valuations for Transfer Pricing purposes? Can you please indicate for us the references of such commercial law and cases?	Open question
100	Are there many Rulings (i.e. Advanced Pricing agreements) in your country that use income-based methods for valuation of Intangibles in Transfer Pricing?	1. No 2. Few 3. Some 4. Many
101	In your opinion, are there important lessons/ approaches in respect to income-based IP valuation methods that are observed in Commercial law/ Court cases/ and/or Rulings that could be useful to be promulgated in the form of domestic TP rules and regulations? If yes, please indicate which lessons and approaches you mean (or give an example of the few if many).	Open question

Appendix 2.A – Description of valuation methodologies

This document provides a general overview of intangible valuation methodologies widely used for various purposes (financial reporting, M&A, disputes, etc.). This description is based on 'IVS 210: Intangible assets' (2011, IVSC) and 'IVS 210: Intangible assets exposure draft' (April 2016, IVSC) and the 'Final Report from the Expert Group on Intellectual Property Valuation' (2013, EC). While the description attempts to stay comprehensive and describe different variants of the same method, the variation of the valuation methods discussed in the study are also indicated throughout.

1 – Relief from royalty

Introduction to the methodology

The relief from royalty methodology is based on the economic theory of deprival value. Based on this theory, the value of the IP is equal to the capitalised amount of the royalties that would be payable if the IP was not owned but had to be licensed at arm's length from a third party. In other words, the Relief from Royalty approach posits intangible value based on a royalty savings hypothesis, essentially asking: "over the useful life of the intellectual property, what would a person or business save by owning, rather than licensing, the intellectual property under consideration?" The primary steps involved in applying this method are:

- Identifying the appropriate royalty rate;
- Calculating royalty cash flows (by applying the royalty rate to an appropriate 'royalty base' which is often projections of revenues derived from use of the IP); and
- Capitalising periodic royalty payments, generally on a post-tax basis (although for TP purposes this may be on a pre-tax basis), by discounting at a suitable discount rate.

Variations of the method

The relief from royalty method is generally used to measure the overall value of an IP asset, and so the calculation is usually based on royalty cash flows projected over the entire useful life of the asset (finite or indefinite lifetime). IP assets that are licensed for a period of time (often several years) in return for an upfront payment, have a clear finite useful lifetime. One advantage of the relief from royalty method is that it can also be used to consider the value of such a license (by capitalising projected cash flows over the license period only).

In general, there are two commonly used ways of establishing an appropriate royalty rate:

- Comparable royalty approach,
- Economic benefits analysis.

- **Comparable royalties approach**

The comparable royalties approach is often regarded as the best approach for establishing a suitable royalty rate. Negotiations between willing licensors and willing licensees, in like circumstances, will, at least in theory, provide the best available information about the level of an appropriate royalty for the IP in question.

In practice, however, it may not be possible to identify perfect comparables. In this case, it may be necessary to adjust the comparables available to reflect important differences, taking into consideration factors such as the IP being licensed, specific rights of use granted to the licensee, specific terms of the license, etc. In practice, it can be challenging to identify even imperfect comparables for many IP assets.

- **Economic benefits approach to determining an appropriate royalty rate**

This approach builds on the premise that IP generally provides, or is intended to provide, an economic benefit to the user and an appropriate royalty is a means to share this benefit between the user of the IP and its owner. This approach is most useful when it is possible to identify the specific economic benefits created through use of the IP. A royalty rate can then be derived by considering how these benefits should be shared between licensor and licensee.

The economic benefit created through use of the IP is the incremental benefit a business derives through using the IP, compared with using the next best alternative. In many cases, it is difficult to measure this incremental benefit. In such circumstances, it is possible instead to consider the overall profits a business derives from the operations that utilise the IP (the 'available profits'), and to consider how these are shared between licensor and licensee.

The appropriate split of incremental benefits, or overall profits, between licensor and licensee will depend on the costs incurred, assets contributed, risks borne, and the functions performed by each party. It is particularly important, when dividing overall available profits (as opposed to specific incremental benefits), to take into account the other assets that contribute to earning the profits of the business, and which party is providing these.

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In the present study, for a number of reasons, the focus is placed on the comparable royalties approach within the relief of royalty method. The economic benefit approach requires identification of the profits attributable to IP and then some kind of profit split of this profit. The methods based on identification of profits attributable to IP reviewed in this study are the premium profit and the residual value methods described below.

The selection of the appropriate royalty (necessary for the selected variant of the method) should consider the characteristics of the subject intangible asset and the environment in which it is utilised. The consideration of these characteristics form the basis for selection of a royalty rate within a range of observed transactions.

Factors that should be considered include the competitive environment, the importance of the subject intangible to the owner, and the life cycle of the subject intangible.

Data required

The following valuation inputs may be required in the relief from royalty method:

- Estimate of hypothetical royalty rate that would be paid if the assets were licensed from a third party;
- Projections for the royalty base, e.g. revenues that the royalty rate would be applied to over the life of the IP;
- An estimate of the remaining useful life of the IP (numbers of years or indefinite period);
- The cost of marketing and any other costs that would be borne by a licensee in utilising the asset;
- An appropriate discount rate (or weighted average cost of capital), taking risk into account, by which to obtain the present value of these future, hypothetical royalty savings;
- Rate at which tax deduction would be obtainable on hypothetical royalty payments;
- Calculation of the tax amortisation benefit ("TAB"). In most cases, the acquirer of individual intangible assets is able to offset the amortisation of the identifiable intangible assets against tax. This creates a tax amortisation benefit that increases the value of the intangible asset. Under the most usual interpretation of IFRS, TAB has to be added to the intangible asset valuation as if the asset was acquired on a stand-alone basis. As such, TAB can apply even when the actual transaction structure does not allow tax amortisation, on the basis that a sale of individual assets would generate amortisation.

Potential sources of input data

The following sources of data may be used in the relief-from-royalty method:

- Financial reports and data of the Company utilising the IP;
- Sales data, forecasted sales data of products and services with an IP component;
- Market research data and documents;
- Databases of license agreements;
- IP valuation professionals;
- IP transfer professionals.

Application and examples of intangible assets

Examples of intangibles that could be valued using premium profits (in valuations not limited to transfer pricing) are as follows:

- Brand and trademarks;
- Technology;
- Know-how.

Practical example

See Example 1 in Appendix 2.B.

2 – Premium Profit

Introduction

The premium profit, or incremental income, is a method which indicates the value of an IP asset by comparing an estimate of the profits or cash flows in two scenarios:

(i) profits that would be earned by a business using the asset; and

(ii) profits that would be earned by a business that does not use the asset ('with and without').

The forecast incremental profits or cash flows achievable through use of the asset are then calculated. Forecast periodic amounts are brought to a present value through use of either a suitable discount factor or suitable capitalisation multiple.

Variations of the method

The comparison of the two scenarios can be done in two ways:

- Calculating the value of the business under each scenario (with and without) and determining the value of the subject intangible asset as a difference between business value "with the asset" and "without the asset"; or
- Calculating, for each future period, the difference between the profits in the two scenarios. The present value of those amounts is then used to reach the value of the subject intangible asset.

In theory, either variation should reach a similar value for the intangible asset provided the valuer considers not only the impact on the entity's profit, but also additional factors such as differences between the two scenarios in working capital needs and capital expenditures.

Also, in both variants, the values may need to be probability-weighted. For example, when valuing a non-competition agreement, the value corresponding to the profits without the asset should account for probability that an individual or business subject to the agreement may choose not to compete.

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The present study focuses on the second variation of the method. More precisely, a particular version of the method is investigated which implies that difference in profits is driven by the difference in price between the products containing the intangible and their "generic" equivalent. In this respect, the effect of a lower price may also have implications on the volumes of the products forecasted for the purposes of estimating free cash flow.

Data required

The following valuation inputs may be required in the premium profits method:

- Forecast periodic profit, cost savings or cash flows expected to be generated by a market participant using the intangible asset (such as, for instance, prices and volumes for the products containing the intangible asset);

- Similarly, forecast of periodic profit, cost savings or cash flows expected to be generated by a market participant not using the IP (for the variation of the method reviewed in data, data on sales price and volumes of the products that do not contain an intangible asset, i.e. generic substitute);
- An appropriate capitalisation multiple or discount rate to capitalise forecast periodic profit, and;
- If appropriate and applicable, tax amortisation benefit.

Potential sources of input data

The following sources of data may be used in the premium profits method:

- Financial reports and data of the organisation utilising the IP;
- Sales data, forecasted sales (volumes and prices) and costs data of products and services with an IP component;
- Market research data and documents;
- Any entities using similar or identical intangible assets for which information is available publicly and;
- Proprietary databases of the valuer.

Application and examples of intangible assets

In practice, the premium profit method can be used in the context of valuation of intangible assets which correspond to the following criteria:

- No observable markets;
- The difference in cash flows (both revenue and costs) between the two scenarios, with or without the intangible asset, can be identified;

The following examples could correspond to the above criteria and hence would be valued using premium profits (in valuations not limited to transfer pricing):

- Processes and technologies;
- Brands and trademarks;
- Non-competition agreements;
- Franchises.

Practical example

See example 2 in the attached Appendix 2.B.

3 – Historical Costs and Replacement Costs

Introduction

Based on the cost approach, the value of the asset is based on the estimation of the costs that are either incurred in the past to create the asset or that would be incurred

today to re-create an asset. Both approaches seek to estimate the costs relevant for the development of the subject IP.

Generally, the cost approach should be used as the primary basis for the valuation of intangible assets only if the following criteria are met:

- It would be possible for market participants to recreate an intangible asset of similar utility to the subject asset;
- There are no legal protections (e.g., patents, trademarks) or other barriers to entry (e.g. trade secrets) preventing market participants from recreating an asset of similar utility or profiting from such a recreated asset; and
- The intangible asset could be recreated quickly enough that a market participant would not be willing to pay a significant premium for the ability to use the subject asset immediately.

Variations of the method

There are two main cost-based methodologies that can be applied to valuing IP:

- Historical cost method measures the actual cost incurred in creating the IP in the past, using the capitalisation factor to translate them in today's euros,
- Replacement cost method quantifies the estimated cost of replacing the IP or creating an equivalent asset, by projecting the costs to be incurred. The costs will be discounted to reflect today's value.

Data required

The following valuation inputs are required in the excess earning method:

- Either (i) all hypothetical costs needed to recreate the asset including materials and labour (for the replacement cost) or (ii) the actuals costs incurred (historical method);
- Adjustment factors to reduce the replacement cost to the functional, economic, and technological condition of the subject asset might be necessary as well;
- Both methods might include a discount factor, either to capitalise actual costs incurred in the past ('capitalisation rate') or to discount project cost incurred over a longer period (discount rate).

Data sources

- Company's data on costs / estimation of costs
- Market / industry research and documents

Application and examples of intangible assets

In valuations not limited to transfer pricing purposes, this method is commonly used with respect to the following intangibles:

- Certain licenses and permits;
- Certifications;
- Internally-generated software; and
- Workforce.

Practical example

See Example 3.A in Appendix 2.B to illustrate historical cost method and Example 3.B in Appendix 2.B to illustrate replacement cost method.

4 – Residual value

Introduction

The residual value method takes, as its starting point, the value of a business as a whole, and allocates it between the various assets employed in it proportionate to their contribution to the overall value. Once part of the value of the business has been allocated to its tangible assets, the residual value is considered relative to intangibles.

This approach is easier to apply where all the intangibles of the business are being valued collectively. Where an individual IP is to be valued, it is necessary to allocate the residual value identified among the various intangible assets employed in the business. Although there are some methods that can be used to make such an allocation, the data and techniques required to apply these methods reliably are often unavailable. The residual value method is therefore most suited to a valuation of all the intangible assets of a business.

Variations of the method

To obtain the residual value, the market value of tangible assets should, in theory, be deducted from enterprise value (i.e. cash flows of the business as a whole). In practice, the value of tangible assets is usually recorded in accounting statements which are often the only source of data available. The accounting statements value most assets at historical cost, which may result in the book value of assets being lower than the market value. In such circumstances, the residual value calculated will be overstated.

In the variation of this method that is reviewed in detail and included in the survey, the "routine returns" to the functions are deducted, instead of market value of the tangible assets. As such, a portion of the forecast profits is allocated to routine business operations. The residual profit, obtained by deducting routine returns from the total profit is deemed to represent a profit attributable to intangibles. As such, this variant of the method is similar to premium profit method in the sense that the routine return replaces the return of the business without any intangibles (the latter is obtained from the Company directly when applying the premium profit method).

The key steps in the selected variant of the method are to:

- Obtain a forecast of the whole business in which the studied IP is being used;

- Ascertain the market routine returns for the main functions of the business;
- Deduct the value of routine returns to obtain the value of intangible assets (the 'residual value/profit'); and
- If there are separate intangibles to be valued, allocate the residual value among the various intangibles (cfa below).

In this application of the method, market returns for the routine contributions should be determined (based on comparables).

A variation of this method is the 'Greenfield method'. Under the Greenfield method, the value of the subject intangible is determined using cash flow projections that assume the only asset of the business at the valuation date is the subject intangible. All other tangible and intangible assets must be bought, built or rented and thus their costs are inherently accounted for in obtained cash flow projections. As such, 'buy, built and rental costs' associated with the other assets need to be identified in order to apply the method appropriately.

Case of more than one intangible

Once the residual value has been estimated, it may be necessary to allocate it between intangibles. In general valuation practice, this is done in one of the following ways:

- Value chain analysis, or
- Market Reference points.

A value chain analysis requires an understanding of all the value-adding activities undertaken by the business. From this analysis, the intangible assets that contribute to the business (making profits) can be identified, and their relative importance is estimated using benchmark returns for comparable companies. Where it is possible to perform such an analysis, this method has the advantage of taking into account the specific circumstances in which the IP is being used. The difficulty, however, can be to perform this analysis in a quantitative rather than qualitative way.

An approach using market reference points is built on the assumption that other comparable, companies which have performed a similar allocation exercise can act as a reference point to allocate residual value. A situation in which companies often perform such an analysis is when they acquire assets in a business combination (M&A). However, the allocation of assets in an acquisition can be affected by accounting practice, which can vary over time and from one jurisdiction to another, and so care must be taken when interpreting the results of such an analysis.

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In transfer pricing, as mentioned, the residual profit is obtained after deducting the routine returns that are benchmarked based on the TNMM principles. The value of the residual profit (i.e. profit after routine returns) is deemed to represent the aggregate value of intangibles that are valued. (Exclusively) this variation of method is reviewed in the context of the survey in the present study.

Data required

- Forecast of profit or loss or cash flows for the business (or the full value of the enterprise);

- Market returns / routine returns based on the comparables search (or the value of identified assets);
- If appropriate and applicable, a calculation of tax amortisation benefits, tax rate and working capital changes;
- Appropriate discount rate;
- Benchmarks or appropriate ways to split the residual profit between separate assets (or different IP owners) if necessary.

Potential sources of input data

- Financial reports and data of the organisation utilising the IP;
- Forecast period profit, costs or cash flow of the business;
- Market research data and documents;
- Databases with companies data by industries and other classifications.
- Proprietary databases of the valuer.

Application and example of intangible assets

In practice, the residual method can be used in the context of valuation of intangible assets which correspond to the following criteria:

- No observable market data (preventing the use of relief from profits or premium profits method) or ability to replace independently (preventing the use of cost based methodologies);
- Cash flows or profits (related to the intangibles) and fair returns to other functions can be identified.

Several examples which may be valued using premium profits (in valuations not limited to transfer pricing purposes) are listed below:

- Customer relationship;
- Vendor relationship;
- Technology;
- IPR&D;
- Order Backlog;
- Licenses.

Practical example

See Example 4 in Appendix 2.B.

5 – Excess earnings

Introduction

The excess earnings method determines the value of IP as the present value of the cash flows attributable to the subject IP after excluding the proportion of the cash flows that are attributable to other assets. It is a method that is often used for valuations used in financial reporting when there is a requirement for the acquirer to allocate the overall price paid for a business between tangible assets, identifiable intangible assets, and goodwill.

The excess-earnings method should generally be applied only to a single intangible asset for any given stream of revenue and income (generally the primary or most important intangible asset). For example, in valuing the intangible assets of a company utilising both technology and a tradename in delivering a product or service (i.e. the revenue associated with the technology and the tradename is the same) the excess earnings method should only be used to value one of the intangible assets and an alternative method should be used to value the other. However, if the company had multiple product lines each using a different technology and each generating distinct revenue and profit, the excess earnings method could be applied in the valuation of the multiple different technologies.

Variations of the method

The excess earnings method can either be applied using several periods of forecast cash flows i.e. the "multi-period excess earnings method" or using a single period of forecast cash flows i.e. the "single-period excess earnings method". The single-period excess earnings method is only appropriate for intangibles that will be used/consumed in a single period. As most intangible assets have economic lives exceeding one period, frequently follow non-linear growth/decay patterns, and may require different levels of contributory assets over time, the multi-period excess earnings method or MPEEM is the most commonly used excess earnings method as it offers the most flexibility and allows valuers to explicitly forecast changes in such inputs.

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The method is similar to the residual value method addressed earlier. The main distinct feature is that instead of deducting a routine return to business functions, the returns to the contributory assets are deducted from overall business profits.

Data required

The following valuation inputs are required in the excess earning method:

- Forecast cash flows obtainable from the business to which the subject intangible asset contributes to cash flows – this will involve allocating both income and expenses appropriately to the pertinent business or group of assets of the entity that includes all the income derivable from the subject intangible asset;
- Fair returns / contributory asset charges in respect of all other assets in such business(es), including other intangible assets;
- An appropriate discount rate to enable expected cash flows attributable to the subject IP alone to be brought to a present value; and
- If appropriate and applicable, a calculation of tax amortisation benefits.

Potential sources of input data

The following sources of data may be used in the premium profits method:

- Sales data, forecasted sales data of products and services with an IP component;
- Market research data and documents;
- Financial reports and data of the organisation utilising the IP.

Application and examples of intangible assets.

As with the residual value methods, in practice, the excess earning method can be used in the context of valuation of intangible assets which correspond to the following criteria:

- No observable markets or ability to replace independently;
- Cash flows (related to that specific asset) and fair returns to other assets can be identified.

Examples which could correspond to the above criteria and hence may be valued using premium profits (in valuations not limited to transfer pricing purposes) are:

- Customer relationship;
- Vendor relationship;
- Technology;
- IPR&D;
- Order Backlog;
- Licenses.

Practical example

See example 5 in the attached Appendix 2.B

Appendix 2.B – Examples for valuation methodologies

The examples in this Appendix are provided for illustration purposes only. They are not intended to provide any guidance on the selection of the transfer pricing method or the values of parameters used for application of the method or their arm's length character, but only to illustrate a possible way of application of the valuation technique. The context of each example is based on a broad experience of valuations of IP in various cases not specific to transfer pricing. It has been modified in several cases to protect client confidentiality, and hence may not fully reflect an actual situation. Relevant figures have also been modified.

Abbreviations used in Examples 1 - 5

CAC	Contributory asset charge
COGS	Costs of goods sold
EBIT	Earnings before income taxes
EBITDA	Earnings before income taxes and depreciation
FA	Fixed assets
FCF	Free cash flows
FV	Fair value
G&A	General and administrative expenses (operating expenses)
LT growth rate	Long-term growth rate
NWC	Net working capital
RUL	Remaining useful life
ST growth rate	Short-term growth rate
TAB	Tax amortisation benefit (TAB) refers to the net present value of income tax savings resulting from the tax-deductible amortisation of intangible assets. Applying TAB results in an intangible value in between pre- and post-tax.
TV	Terminal value (TV) represents the present value of cash flows in perpetuity, growing at the long-term growth rate. It is calculated using the Gordon growth model (Expected cash flows in the year following detailed forecast divided by discount rate minus growth factor).
WC	Working capital

Example 1. Valuation of a Tradename with the Relief from Royalty Method

Context:

In the context of an audit review of a global food retailer, we reviewed several tradenames in use for US and Europe. The relief from royalty method is the most used method to value tradenames and was also the method selected by the client given that similar agreements could be found in databases.

The client provided a five year business plan to which we applied a royalty rate of 1.0%. The royalty rate was provided by the client and was based on review of similar agreements in databases such as Royaltysource and Royaltystat.

The cost method was not relevant given that the costs required to develop the tradenames could not be quantified. Residual value method and excess earnings methods were deemed too complex because we could not identify and value all other intangibles of the company and hence isolate the value to be attributed to the tradename. Premium profit was too complex because we were not able to estimate the company cash flows without its tradenames.

Model hypotheses

Discount rate	*7.0%*
Tax rate	*33.0%*
Royalty rate[2]	*1.0%*
IP life	*Indefinite*
LT growth rate	*1.0%*
Tax Amortisation Benefit (TAB)[1]	*1.00*

[1] *The TAB factor is 1 (multiplicative) since the remaining useful life is indefinite and hence we assume that the intangible cannot be*

[2] *Royalty rates can vary significantly depending on sector and type of brand (consumer or B2B brand). Materially higher and lower royalty rates may apply in different situations.*

	2016	2017	2018	2019	2020	TV[3]
Sales	1,000	1,050	1,103	1,158	1,216	
Royalty "savings"	10	11	11	12	12	
Taxes	(3)	(3)	(4)	(4)	(4)	
After-tax Royalty "savings"	**7**	**7**	**7**	**8**	**8**	
Terminal Value						**137**
Discount periods	*0.5*	*1.5*	*2.5*	*3.5*	*4.5*	*4.5*
Discount factor	0.97	0.90	0.84	0.79	0.74	0.74
Present value	**6**	**6**	**6**	**6**	**6**	**101**
Total present value	**132**					
TAB factor	1.00					
Total value	**132**					

3 Terminal value is calculated by dividing the cash flows in 2021 by discount rate minus growth factor).

The example is for illustration only and not intended to provide any guidance on the selection of model input values or hypotheses (or their arm's length character).

Example 2.Valuation of Technology with Premium Profits method

Context:

Our client was a company active in food processing sector and used technologies which were publicly known/ available. They further developed a new technology internally which aimed to increase product quality. To manage R&D more efficiently, they contributed the technology in a new entity and hence requested valuation advice.

No similar royalty license could be found in the market due to the uniqueness of the technology. We hence selected the premium profit method given the possible comparison between existing public technology and the newly developed technology. In practice, the comparison was carried out using different pricing for products with and w/o the new technology (provided by the client) leading to higher cash flows with the new technology.

The royalty saving method was not used because no comparable agreements were found. The cost method could not been used either as the client did not have detailed data on past spending / investment related to the new technology development.

Model hypotheses

Discount rate		*9.0%*
Tax rate		*25.0%*
LT Growth rate		*2.0%*
Avg. Pricing of products with Technology	€	*118*
Avg. Pricing of products w/o Technology	€	*100*
RUL[1]		*7*
TAB		1.23

[1] *RUL is set to 7 years for this example (within a reasonable range for technology assets)*

FCF with Technology	2016	2017	2018	2019	2020	2021	2022
Volume	10	11	11	12	12	13	13
Price	118	118	118	118	118	118	118
Sales	1,180	1,239	1,301	1,366	1,434	1,506	1,581
COGS	(708)	(743)	(781)	(820)	(861)	(904)	(949)
Gross margin	472	496	520	546	574	602	633
G&A	(236)	(248)	(260)	(273)	(287)	(301)	(316)
EBITDA	**236**	**248**	**260**	**273**	**287**	**301**	**316**
Depreciation	(59)	(62)	(65)	(68)	(72)	(75)	(79)
EBIT	**177**	**186**	**195**	**205**	**215**	**226**	**237**
Capex	(83)	(87)	(91)	(96)	(100)	(105)	(111)
Change in WC		(6)	(6)	(7)	(7)	(7)	(8)
Add back depreciation	59	62	65	68	72	75	79
Tax on EBIT	(44)	(46)	(49)	(51)	(54)	(56)	(59)
FCF	**109**	**109**	**114**	**120**	**126**	**132**	**139**

FCF without Technology	2016	2017	2018	2019	2020	2021	2022
[1]Volume	10	11	11	12	12	13	13
[2]Price	100	100	100	100	100	100	100
Sales	1,000	1,050	1,103	1,158	1,216	1,276	1,340
[3]COGS	(600)	(630)	(662)	(695)	(729)	(766)	(804)
Gross margin	400	420	441	463	486	511	536
[4]G&A	(200)	(210)	(221)	(232)	(243)	(255)	(268)
EBITDA	**200**	**210**	**221**	**232**	**243**	**255**	**268**
Depreciation	(50)	(53)	(55)	(58)	(61)	(64)	(67)
EBIT	**150**	**158**	**165**	**174**	**182**	**191**	**201**
[5]Capex	(70)	(74)	(77)	(81)	(85)	(89)	(94)
Change in WC		(5)	(5)	(6)	(6)	(6)	(6)
Add back depreciation	50	53	55	58	61	64	67
Tax on EBIT	(38)	(39)	(41)	(43)	(46)	(48)	(50)
FCF	**93**	**92**	**97**	**102**	**107**	**112**	**118**

[1]Volume is not deemed to be impacted by technology in the example (but may vary in other cases).
[2]Prices are impacted by technology in the example.
[3]COGS is the same.
[4]Marketing and sales costs are assumed to be similar in this example (but may vary in other cases).
[5]Capex are assumed to be similar in % of revenues (but may vary in other cases).

Technology value

	2016	2017	2018	2019	2020	2021	2022
FCF using Technology	109	109	114	120	126	132	139
FCF without Technology	93	92	97	102	107	112	118
Difference	**17**	**17**	**17**	**18**	**19**	**20**	**21**
Discount periods	0.5	1.5	2.5	3.5	4.5	5.5	6.5
Discount factor	0.96	0.88	0.81	0.74	0.68	0.62	0.57
Present value	**16**	**15**	**14**	**14**	**13**	**13**	**12**
Total Present value	**96**						
TAB	1.23						
Total value	**118**						

The example is for illustration only and not intended to provide any guidance on the selection of model input values or hypotheses (or their arm's length character).

Example 3.A Valuation of Developed Software with Historical Cost method

Context:

Our client was a leading publisher of print and online directories. The group companies operates in the local search and advertising market. For financial reporting purpose, management requested to value an internally developed software supporting the print and online directory business.

Management could provide the details of previously incurred costs for both externally purchased software and internally developed software. Management estimated a 10% annual obsolescence factor on costs incurred.

Given the information available and the specificities of the software features we selected the historical cost method.

Model hypotheses

Capitalization rate[1]	*2.0%*
RUL	*7*
Tax rate	*34.0%*
Discount rate	*7.0%*
TAB	1.37

[1] *Capitalisation rate is set equal to an inflation estimate for the period 2010 to 2015.*

	2010	2011	2012	2013	2014	2015
Costs incurred (after tax)	2,000	1,500	2,500	1,500	2,000	1,000
Capitalization periods	*-5.5*	*-4.5*	*-3.5*	*-2.5*	*-1.5*	*-0.5*
Capitalization factor	1.12	1.09	1.07	1.05	1.03	1.01
Present value	**2,230**	**1,640**	**2,679**	**1,576**	**2,060**	**1,010**
Obsolescence factor	0.50	0.60	0.70	0.80	0.90	1.00
Present value (adjusted)	**1,115**	**984**	**1,876**	**1,261**	**1,854**	**1,010**
Total present value	**8,100**					
TAB	1.37					
Total value	**11,107**					

The example is for illustration only and not intended to provide any guidance on the selection of model input values or hypotheses (or their arm's length character).

Example 3.B Valuation of Developed Software with Replacement Cost method

Context:

Our client was a company which owns, amongst others, a software used to run the fiber optic network of a commune. The network was operated by a third party.
For strategic purposes, the compnay intended to sell the software to, at the time, a related company.

In order to estimate the floor price of the software, our client asked us specifically to apply a replacement costs method. They provided us with estimated devopment hours as well as costs to incur if the software was to be redeveloped.

In the example, the client had no information about historical spend incurred to developed the software due to a lack of follow up, hence we could not use a historic cost method.

Model hypotheses

Discount rate	*7%*
RUL	*5*
Tax rate	*34.0%*
Discount rate	*7.0%*
TAB	1.41

	2016	2017
Development hours	300	400
Cost per hour (after tax)	200	200
Costs to incur[1]	60,000	80,000
Capitalization periods	*0.5*	*1.5*
Capitalization factor	0.97	0.90
Present value	**58,004**	**72,279**
Total present value	**130,284**	
TAB	1.41	
Total value	**183,087**	

[1] *If the asset takes a significant period to replace, opportunity costs may need to be factored in the valuation*

The example is for illustration only and not intended to provide any guidance on the selection of model input values or hypotheses (or their arm's length character).

Example 4. Example of Trademark and Know-How valuation with Residual Value method

Context:

The client was a company which had to value its intangible property consisting of a franchise that included a tradename and know-how concerning a mode of operation of the retail shops. The franchise was granted to the entities of the group that operated as retail shops.

The approach to value the intangible assets consisted in determining the return on operating non-intangible generating activities to be earned by the group entities which were to be deducted from combined profit at the EBIT level of these entities. The value of the IP would then be equal to the discounted present value of the residual profit (i..e total EBIT minus routine profit). The remaining useful life of the asset was set at 10 years.

Other valuation methods were not used due to the lack of relevant information. The relief from royalty method was not used since there were no agreements that could be identified covering the same scope of intangible (tradename in combination with know-how) in the relevant sector. The cost-based methods were considered not appropriate since the development costs did not reflect the value of the fully developed IP generating profits.

Model hypotheses

Discount rate	*9.0%*
Tax Rate	*33.0%*
LT Growth rate	*1.0%*
RUL[1]	*10*
Routine return (operating margin, i.e. return on sales)	*3.0%*
TAB	1.28

[1] *RUL is set to 10 years for this example (within a reasonable range for technology assets)*

	2016	2017	2018	2019	2020	2025
Sales	1,000	1,050	1,103	1,158	1,216	1,551
COGS	(600)	(630)	(662)	(695)	(729)	(931)
Gross margin	400	420	441	463	486	621
G&A	(200)	(210)	(221)	(232)	(243)	(310)
EBITDA	**200**	**210**	**221**	**232**	**243**	**310**
Depreciation	(40)	(42)	(44)	(46)	(49)	(62)
EBIT	**160**	**168**	**176**	**185**	**194**	**248**
EBIT as % of revenues	*16%*	*16%*	*16%*	*16%*	*16%*	*16%*
Routine return (for operating non-intangible generating activities)	**30**	**32**	**33**	**35**	**36**	**47**
Residual profit (attributable to Intangibles)	**130**	**137**	**143**	**150**	**158**	**202**
Capex	(30)	(32)	(33)	(35)	(36)	(47)
Change in WC	(10)	(10)	(11)	(11)	(12)	(15)
Add back depreciation	40	42	44	46	49	62
Tax (on EBIT)	(53)	(55)	(58)	(61)	(64)	(82)
Free Cash Flows	**77**	**82**	**86**	**90**	**94**	**121**
Discount periods	0.5	1.5	2.5	3.5	4.5	9.5
Discount factor	0.96	0.88	0.81	0.74	0.68	0.44
Present value	**74**	**72**	**69**	**67**	**64**	**53**
Total present value	**632**					
TAB	1.28					
Total present value	**811**					

The example is for illustration only and not intended to provide any guidance on the selection of model input values or hypotheses (or their arm's length character).

Example 5. Customer Contracts and Relationships valuation with Excess Earnings method

Context:

The client was a downstream oil company with a tank-stations network. The company was optimizing their operations and they wanted to value the fuel cards of the tank stations network in order to centralize the relevant intangibles in one locations. Fuel cards drive value and are considered intangible assets related to customer contracts and relationships.
In order to estimate the value of the fuel cards we used a excess earnings method. The approach to calculate the value of the fuel cards consisted in deducting the contributory assets charge from the EBIT of the company (and hence isolating the excess earnings representing the portion of total profits attributable to the fuel cards). The contributory charge of each tangible asset class was calculated based on a fair return on the asset converted in a percentage of sales.

Other valuation methods were not used due to the lack of relevant information (profit differential, historical cost incurred, etc).

Model hypotheses

Discount rate	*10.0%*		ST Growth	*5.0%*
Tax rate	*33.0%*		COGS / Revenues	*60.0%*
Customer attrition rate	*20.0%*		Operations / Exist. Cust. Rev.	*10.0%*
Remaining useful life	8.00		G&A / Exist. Cust. Rev.	*5.0%*
TAB	1.30		Depr. / Exist. Cust. Rev.	*9.0%*

CAC calculation

Cost of capital hypotheses

Discount rate	*10.0%*
Post tax cost of debt	*3.1%*
Additional return FA	*4.0%*
Additional return NWC	*1.0%*
% of sales due to CR[1]	*25.0%*

[1] *Customer relationships*

Assets	Return	Fair value	FV attribut. to CR	CAC	CAC (% of sales)
2016 Sales due to CR					*1,000*
Fixed assets	*7.1%*	2,500	625	44.3	*4.4%*
Brand	*10.0%*	1,000	250	25.0	*2.5%*
Net working capital	*4.1%*	950	238	9.7	*1.0%*
Workforce	*10.0%*	550	138	13.8	*1.4%*
Return on contributory assets					*9.3%*

Customer relationship	2016	2017	2018	2019	2020	2021	2022	2023
Total sales	4,000	4,200	4,410	4,631	4,862	5,105	5,360	5,628
Revenues attributed to CR	1,000	1,050	1,103	1,158	1,216	1,276	1,340	1,407
Annual customer attrition	*80%*	*64%*	*51%*	*41%*	*33%*	*26%*	*21%*	*17%*
Existing customer sales	800	672	564	474	398	335	281	236
COGS	(480)	(403)	(339)	(284)	(239)	(201)	(169)	(142)
Operations	(80)	(67)	(56)	(47)	(40)	(33)	(28)	(24)
G&A	(40)	(34)	(28)	(24)	(20)	(17)	(14)	(12)
EBITDA	**200**	**168**	**141**	**119**	**100**	**84**	**70**	**59**
Depreciation	(72)	(60)	(51)	(43)	(36)	(30)	(25)	(21)
EBIT	**128**	**108**	**90**	**76**	**64**	**54**	**45**	**38**
Tax	(42)	(35)	(30)	(25)	(21)	(18)	(15)	(12)
Contributory asset charge	74	62	52	44	37	31	26	22
Fixed assets	35	30	25	21	18	15	12	10
Brand	20	17	14	12	10	8	7	6
WC	8	7	5	5	4	3	3	2
Workforce	11	9	8	7	5	5	4	3
Earning after taxes and CAC	**12**	**10**	**8**	**7**	**6**	**5**	**4**	**3**
Discount periods	0.5	1.5	2.5	3.5	4.5	4.5	4.5	4.5
Discount factor	0.95	0.87	0.79	0.72	0.65	0.65	0.65	0.65
Present value	**11**	**8**	**6**	**5**	**4**	**3**	**3**	**2**
Total present value	**42**							
TAB factor	1.30							
Total Value	**55**							

The example is for illustration only and not intended to provide any guidance on the selection of model input values or hypotheses (or their arm's length character).

Appendix 3 – Description of OECD methodologies

The description contained in this document is based on the *Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations* issued by Organisation for Economic Cooperation and Development ("OECD") in 2010 as well as all consequent papers, discussion papers and final deliverables of the OECD pertaining to the "Base Erosion and Profit Shifting ("BEPS") initiative.

1 – Arm's length principle

The principles set forth by the OECD state that transactions between related parties should be consistent with the arm's length standard. In particular, the statement of the arm's length principle can be found in paragraph 1.6 of the 2010 OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations:

"*The authoritative statement of the arm's length principle is found in paragraph 1 of Article 9 of the OECD Model Tax Convention, which forms the basis of bilateral tax treaties involving OECD Member countries and an increasing number of non-Member countries. Article 9 provides:*

"[Where] conditions are made or imposed between two [associated] enterprises in their commercial or financial relations which differ from those which would be made between independent enterprises, then any profits which would, but for those conditions, have accrued to one of the enterprises, but, by reason of those conditions, have not so accrued, may be included in the profits of that enterprise and taxed accordingly."

"By seeking to adjust profits by reference to the conditions which would have obtained between independent enterprises in comparable transactions and comparable circumstances (i.e. in "comparable uncontrolled transactions"), the arm's length principle follows the approach of treating the members of an MNE group as operating as separate entities rather than as inseparable parts of a single unified business. Because the separate entity approach treats the members of an MNE group as if they were independent entities, attention is focused on the nature of the transactions between those members and on whether the conditions thereof differ from the conditions that would be obtained in comparable uncontrolled transactions. Such an analysis of the controlled and uncontrolled transactions, which is referred to as a "comparability analysis", is at the heart of the application of the arm's length principle."

In determining the most appropriate measure of an arm's length result, the following factors should be considered:

- Degree of comparability between controlled and uncontrolled transactions;
- Quality of data and assumptions.

The degree of comparability is assessed by:

- Functions;
- Contractual terms;
- Risks;

- Economic conditions;
- Nature of goods and services supplied.

The quality of data and assumptions is assessed by:

- Completeness and accuracy of data;
- Reliability of assumptions;
- Sensitivity of results to deficiencies in data and assumptions.

The arm's length amount charged in a controlled transaction must be tested under one of the following methods: comparable uncontrolled price method, resale price method, cost plus method, transactional net margin method, profit split method, or unspecified methods that are in line with the arm's length standard (e.g. modified resale price or cost plus method).

2 – Overview of transfer pricing methods

Comparable Uncontrolled Price ("CUP") method

According to paragraph 2.13 of the 2010 OECD report, the comparable uncontrolled price (hereafter: "CUP") method compares amounts charged in controlled transactions with amounts charged in comparable third party transactions. Comparable sales may be between two third parties or between one of the related parties and a third party. The CUP method is generally the most reliable measure of arm's length results if transactions are identical or if only minor, readily quantifiable differences exist. The CUP method requires a high degree of comparability of products and functions. Comparability can be achieved by a reasonable number of adjustments, which do not materially affect the comparable price. Adjustments likely to be required include those for differences in:

- Product quality;
- Contractual terms;
- Geographic market;
- Embedded intangibles;
- Foreign currency risks.

Resale Price method

The resale price method evaluates whether the amount charged in a controlled transaction is at arm's length by reference to the gross margin realised in comparable uncontrolled transactions.

According to paragraph 2.21 of the 2010 OECD report, "*The resale price method begins with the price at which a product that has been purchased from an associated enterprise is resold to an independent enterprise. This price (the resale price) is then reduced by an appropriate gross margin on this price (the "resale price margin") representing the amount out of which the reseller would seek to cover its selling and other operating expenses and, in the light of the functions performed (taking into*

account assets used and risks assumed), make an appropriate profit. What is left after subtracting the gross margin can be regarded, after adjustment for other costs associated with the purchase of the product (e.g. customs duties), as an arm's length price for the original transfer of property between the associated enterprises. This method is probably most useful where it is applied to marketing operations."

The resale price method is most often used for distributors that resell products without physically altering them or adding substantial value to them.

This method requires detailed comparisons of functions performed, risks borne, and contractual terms of controlled and uncontrolled transactions. As a result, a higher degree of comparability is more likely to exist between controlled and uncontrolled re-sales of property by the same reseller (i.e. internal resale price method). In the absence of comparable uncontrolled transactions involving the same reseller, an appropriate comparison may be derived from comparable uncontrolled transactions of other resellers (i.e. external resale price method).

The resale price method is unlikely to lead to accurate results if there are differences in:

- Level of market;
- Functions performed;
- Products.

A reasonable number of adjustments may be made to compensate for the lack of comparability between controlled and uncontrolled transactions in:

- Inventory turnover;
- Contractual terms;
- Transport costs; and
- Other measurable differences.

Cost Plus method

The cost plus method compares gross margins of controlled and uncontrolled transactions.

According to paragraph 2.39 of the 2010 OECD report, "the cost plus method begins with the costs incurred by the supplier of property (or services) in a controlled transaction for property transferred or services provided to an associated purchaser. An appropriate cost plus mark-up is then added to this cost, to make an appropriate profit in light of the functions performed and the market conditions. What is arrived at after adding the cost plus mark up to the above costs may be regarded as an arm's length price of the original controlled transaction."

The cost plus method is most often used to assess the mark-up earned by manufacturers selling to related parties.

This method requires detailed comparisons of products produced, functions performed, risks borne, manufacturing complexity, cost structures and intangibles between

controlled and uncontrolled transactions. Comparability is most likely found among controlled and uncontrolled sales of property by the same seller (i.e., internal cost plus method). In the absence of such sales, an appropriate comparison may be derived from comparable uncontrolled sales of other producers (i.e., external cost plus method).

The cost plus method is less likely to be reliable if material differences exist between the controlled and uncontrolled transactions with respect to:

- Intangibles;
- Cost structure;
- Business experience;
- Management efficiency;
- Functions performed;
- Products.

A reasonable number of adjustments may be made to compensate for the lack of comparability between controlled and uncontrolled transactions in:

- Inventory turnover;
- Contractual terms;
- Transport costs;
- Other measurable differences.

Transactional profit split method

The transactional profit split method allocates operating profits or losses from controlled transactions in proportion to the relative contributions made by each party in creating the combined profits or losses. Relative contributions may be determined by functions performed, risks assumed, resources employed, and costs incurred.

According to paragraph 2.108 of the 2010 OECD report: "*The transactional profit split method first identifies the profit to be split for the associated enterprises from the controlled transactions in which the associated enterprises are engaged (the "combined profits"). It then splits those combined profits between the associated enterprises on an economically valid basis that approximates the division of profits that would have been anticipated and reflected in an agreement made at arm's length.*"

The method is used where transactions are very interrelated and cannot be evaluated on a separate basis. The method generally does not rely on closely related comparable transactions and can therefore be used in cases when no such transactions can be identified. Since under this method both parties are evaluated, it is less likely that either party to the transaction is left with extreme and improbable profit results. Thus, the method is particularly useful when analysing the contributions by parties in respect of the intangible property employed or such issues as, for example, division of profits from economies of scale or other joint efficiencies achieved by two related parties.

In practice, the transactional profit split method is generally used when entities on both sides of the transaction contribute, to a large extent, to the creation of valuable intangibles. Applying the profit split would mean splitting any (residual) profit between the entities on both sides of the transaction.

The contribution of each party to the profit is determined by means of an analysis of the functions performed, assets used, and risks assumed by the enterprise, and valued to the extent possible by available reliable external market data (OECD Guidelines, paragraph 2.108).

There are two approaches most commonly taken to divide the combined profits:

- Contribution analysis; and
- Residual analysis.

Applying the contribution analysis, the combined profits are divided between the associated enterprises based on the relative value of the functions performed, assets used, and risks assumed by each enterprise, supplemented as much as possible by external market data that indicate how independent enterprises would have divided profits in similar circumstances (OECD Guidelines, paragraph 2.119).

Applying the residual analysis, the combined profits are divided in two stages. In the first stage, each participant is allocated sufficient profit to provide it with a basic return appropriate for the type of routine activities in which it is engaged. Ordinarily, this basic return would be determined by reference to the market returns achieved for similar types of activities by independent entities and would generally not account for the return that would be generated by any unique and valuable assets possessed by the participants.

In the second stage, any residual profit (or loss) remaining after the first stage division would be allocated among the parties based on an analysis of how this residual would have been divided between independent enterprises (OECD Guidelines, paragraph 2.121).

Transactional net margin method

According to paragraph 2.58 of the 2010 OECD report, *"The transactional net margin method examines the net profit relative to an appropriate base (e.g. costs, sales, and assets) that a taxpayer realises from a controlled transaction (or transactions that are appropriate to aggregate under the principles of paragraphs 3.9-3.12). Thus, a transactional net margin method operates in a manner similar to the cost plus and resale price methods. This similarity means that in order to be applied reliably, the transactional net margin method must be applied in a manner consistent with the manner in which the resale price or cost plus method is applied. This means in particular that the net profit indicator of the taxpayer from the controlled transaction (or transactions that are appropriate to aggregate under the principles of paragraphs 3.9-3.12) should ideally be established by reference to the net profit indicator that the same taxpayer earns in comparable uncontrolled transactions, i.e. by reference to "internal comparables" (see paragraphs 3.27-3.28). Where this is not possible, the net margin that would have been earned in comparable transactions by an independent enterprise ("external comparables") may serve as a guide (see paragraphs 3.29-3.35). A functional analysis of the controlled and uncontrolled transactions is required to determine whether the transactions are comparable and what adjustments may be*

necessary to obtain reliable results. Further, the other requirements for comparability, and in particular those of paragraphs 2.68-2.75, must be applied."

Appendix 4 – Valuation standards

Global Valuation Standards and Guidance

Standards	Issuer	Specific valuation cause	Description	Scope & perimeter	Binding force	Geography	Types of assets
International Valuation standards (IVS)**	IVSC	Broadly applicable across several valuation causes*	The IVS Framework includes generally accepted valuation concepts, principles and definitions upon which the International Valuation Standards are based.	The standards identify valuation methods that are commonly used. The current version of the standards provides more detailed technical guidance in separate commentary / technical information papers, but the draft 2017 version of the standards provides detailed technical guidance in the body of the standards (at least IVS 210 - Intangible Assets). IVS 101-102 General standards IVS 200-250 Asset standards IVS 300-310 Valuation applications	Voluntary adoption by its members. Where a statement is made that a valuation will be or has been undertaken in accordance with IVS, it is implicit that all relevant individual standards are complied with.	Global: 75 organisation in membership across 50+ countries.	All.
ISO standards on brand and patents valuation	ISO	Broadly applicable across several valuation causes*	ISO specifies a framework for brand valuation, including objectives, bases of valuation, approaches to valuation, methods of valuation and sourcing of quality data and assumptions. It also specifies methods for reporting the results of such valuation.	This International Standard provides a consistent, reliable approach to brand valuation, including financial, behavioural and legal aspects. ISO 10668:2010(en)	Voluntary adoption by its members.	Global reach.	Brand & Patent intangible assets.
European Valuation Standards and Applications (blue book)	TeGoVA	Broadly applicable across several valuation causes*	EVS 2016 provides harmonised European standards, guidance and technical information for use by all sectors of the European valuation profession. Corporate governance and ethical considerations are embedded within the standards, confirming, for instance, that a valuation produced in accordance with these standards is signed by a qualified professional whose experience, qualification, diligence and ethical behaviour are appropriate to the instruction.	The standards cover valuation methods without providing detailed technical guidance EVS (1-5) European Valuation Standards EVA (1-8) European Valuation Applications	Voluntary adoption by its members.	Mainly Europe: the members of 45 valuers' associations from 26 countries representing the membership of TEGoVA (The European group of valuer's associations).	Mainly real estate property
IFRS	IASB	Financial reporting	The International Financial Reporting Standards (IFRS) are a set of international accounting standards issued by the International Accounting Standards Board stating how particular types of transactions and other events should be reported in financial statements. IFRS were established in order to have a common accounting language, so business and accounts can be understood from company to company and country to country.	IFRS are not valuation standards *per se*, but several of the standards and interpretations address a wide range of technical valuation issues, including in respect of valuation methods for intangible assets. IFRS 1 - 16: International Financial Reporting Standards IAS 1 - 41: International Accounting Standards IFRIC 1 - 21: Interpretations SIC 1 - 33: Interpretations	Compliance with standards is imposed by government regulations (obligatory). Legally binding for member states which have adopted it E.g.: Binding in EU based on the Fourth Council Directive and Seventh Council Directive.	Global: currently, standards are adopted in 143 jurisdictions, including all the G20 jurisdictions.	All (where applicable, as set out below). IFRS 13 provides the guidance on the measurement of fair value. IFRS 13 applies when another IFRS requires or permits fair value measurements or disclosures about fair value measurements.
OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations.	OECD	Transfer pricing	The Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations provide guidance on the application of the "arm's length principle" for the valuation, for tax purposes, of cross-border transactions between associated enterprises.	Guidelines on transfer pricing methods including some valuation techniques. They do no prescribe a standard but rather refer to acceptable valuation techniques.	The OECD Guidelines for Multinational Enterprises are the most often used recommendations in transfer pricing. Their usage is strongly encouraged by the governing bodies of OECD member states. The OECD does not aim these Guidelines to be legally binding, rather to provide a useful framework and foundation for proper transfer pricing. However, effectively, the OECD Guidelines are effectively adopted by many countries laws and regulations.	34 Member countries span the globe, from North and South America to Europe and Asia-Pacific. They include many of the world's most advanced countries but also emerging countries like Mexico, Chile and Turkey. OECD also works closely with emerging economies like the People's Republic of China, India and Brazil and developing economies in Africa, Asia, Latin America and the Caribbean.	Intangible assets mainly.

*Other valuation purposes refers to commercial & strategic purposes (third party valuation), valuation for tax and transfer pricing, financial reporting, conflict related or other statutory & legal purposes.

**Note that IVSC is in the progress of updating its current standards.

Country Valuation Standards and Guidance

Name		Valuation cause	Description	Scope & perimeter	Binding force	Geography	Types of assets
USGAAP	FASB	Financial reporting	The FASB Accounting Standards Codification is the source of authoritative generally accepted accounting principles (USGAAP) recognized by the FASB to be applied to an assortment of entities which include privately held and publicly traded companies, non-profit organizations, and governments	USGAAP are not valuation standards per se, but several of the standards and interpretations address a wide range of technical valuation issues, including in respect of valuation methods for intangible assets. USGAAP 105: Generally accepted accounting principles USGAAP 205 - 280: Presentation USGAAP 305 - 480: Financial statement accounts USGAAP 505: Equity USGAAP 605 - 610: Revenue USGAAP 705 - 740: Expenses USGAAP 805 - 860: Broad transactions USGAAP 905 - 995: Industry	Compliance with standards is imposed by government regulations (obligatory).	United States	All. ASC 820, Fair Value Measurements and Disclosures, applies to U.S. GAAP that require or permit fair value measurements or disclosures and provides a single framework for measuring fair value and requires disclosures about fair value measurement.
RICS (red book)		Broadly applicable across several valuation causes*	The standards set out procedural rules and guidance for valuers. They not only cover matters relating to ethics and conduct, but also establish a framework for uniformity and best practice in the execution and delivery of valuations. The Red Book is a procedural manual and not a valuation text book setting out methodology.	VS 1 Compliance and ethical requirements VS 2 Agreement of terms of engagement VS 3 Basis of value VS 4 Applications VS 5 Investigations VS 6 Valuation reports	Voluntary adoption by its members.	Mainly UK.	All.
US PAP	ASB	Broadly applicable across several valuation causes*	Uniform Standards of Professional Appraisal Practice (USPAP) can be considered the quality control standards applicable for real property, personal property, intangible assets, and business valuation appraisal analysis and reports.	USPAP provides a minimum set of quality control standards for conduct, it does not attempt to prescribe specific methods to be used: 10 standards on real estate, personal property and business valuation	Voluntary adoption by its members.	Mainly United States.	Real estate, personal property and business valuation.
IDW S 5 Standard	IDW	Financial reporting	IDW S5 is one of the several standards published by the Institute of Public Auditors in Germany (IDW), a privately run organization which aims to serve the interests of its members, i.e. the German Public Auditors and German Public Audit firms.	IDW standards are not valuation standards per se, but several of the standards and interpretations address a wide range of technical valuation issues, including in respect of valuation methods for intangible assets. The purpose of IDW S 5 is to offer a general framework along with guidance on the valuation of brands, while its format strongly resembles that of business valuations, i.e. a process driven standard.	Voluntary adoption by its members: best practice.	Germany	Intangible assets.
DIN77100 Patent Valuation - General Principles for Monetary Patent Valuation	DIN	Broadly applicable across several valuation causes*	The standard regulating the monetary valuation of patents is published by the German Institute for Standardization (DIN), an organization entirely focused on the development of best practices and standards to be used across different industries.	The standard of DIN 77100 provides a process driven framework for patent valuation by specifying procedures, methods, additional factors and assumptions influencing the value, and assessment of data quality.	DIN is the sole national standardization body based on the agreement with the Government of the Federal Republic of Germany (legally binding).	Germany	Patent valuation.
Business Appraisal Standards	IBA	Broadly applicable across several valuation causes*	These principles-based Standards have been developed to provide guidance to members and other valuation professionals performing valuation services. The use of professional judgment is an essential component of estimating value.	- General and ethical standards - Development standards - Reporting standards - Review engagement development standards - Business valuation review - Review engagement reporting standards.	Voluntary adoption by its members.	United States	All.
AICPA SSVS	AICPA	Broadly applicable across several valuation causes*	AICPA standards and guidance apply to all members who perform consulting, litigation services, personal financial planning, tax and accounting as well as valuation services for various purposes.	-Audit & Attest Standards -Code of Professional Conduct -Compilation and Review Standards -Peer Review Standards -Tax Standards -Valuation services Standards (VS section 100)	Voluntary adoption by its members.	United States	All.
Principles of Appraisal Practice and Code of Ethics	ASA	Broadly applicable across several valuation causes*	The American Society of Appraisers, in its Principles of Appraisal Practice and Code of Ethics, and the Appraisal Foundation, in itsUniformStandards of Professional Appraisal Practice ("USPAP"), have established authoritative principles and a code of professional ethics. These Standards incorporate the Principles of Appraisal Practice and Code of Ethics and the relevant portions of USPAP, either explicitly or by reference, and are designed to clarify them and provide additional requirements specifically applicable to the valuation of businesses, business ownership interests, securities and intangible assets.	These Standards provide minimum criteria to be followed by business appraisers in developing and reporting the valuation of businesses, business ownership interests, securities and intangible assets. BVS I - IX: Business valuation standards SBVS I - II: Statements on ASA business valution standards AO I: Advisory opinions PG I -II: Policy guidelines	Voluntary adoption by its members.	United States	Valuation of businesses, business ownership interests, securities and intangible assets.

*Other valuation purposes refers to commercial & strategic purposes (third party valuation), valuation for tax and transfer pricing, financial reporting, conflict related or other statutory & legal purposes.

Appendix 5 – Discount rate inputs

Input of countries on the discount rate evaluated with the help of WACC formula *

where:

** Discount rate is equal to WACC = Debt/(Debt+Equity)*Return on debt + Equity/(Debt + Equity)*Return on Equity.*

** Return on equity is based on the CAPM formula (Return on equity = Risk-free rate + Beta * Market Premium*

	Belgium	Czech Republic	France	Germany	Greece	Hungary	Italy	Latvia
* Debt/ Equity ratio	From comparables, or from client / tested party.	Client or industry - Both are considered. Client may indicate if in the future moving towards peer group	Ask the Company to provide	Depends on (either company's or industry's average)	Client's ratio	To be consistent with FVM, we use industry average D/E ratio	Client normally provides; otherwise - industry	D/E - depends on the case. If client's ratio is very different from industry, then take its ratio. Peer group also possible. More often, peer groups
* Return on debt	Usually the interest charged to the group company (under Arm's length policy…) - we can also estimate it based on the rating of the company & subsidiaries	Margin paid by the company, added to the long-term risk free rate.	Interest on the external borrowing of the company	Company specific interest rate (borrowings)	From Bloomberg	Industry benchmark - difficult to collect so in practice, use the interest spread of the client.	Internal rate (client's interest rate on borrowings)	If capital structure very diffierent, then client's - otherwise, the avearge lending rates in the country
* Return on equity (CAPM and its main parameters)	We get it from the internet or Bloomberg, given specifics of (IP) activity considered. We also typically use group's information as a starting point.	Bloomberg, Reuters and Capital IQ. Bloomberg is discontinued now, so Reuters and Capital IQ. Capital IQ is cheaper than other two. Best practices is Bloomberg and Reuters. Risk-free rate is a long-term Czech bond rate.	Beta- Bloomberg, [incomplete answer]	Beta - from Bloomberg, risk free rate - government bond, market return - recommedation by Audit Association (IDW) in Germany which is published and available	Bloomberg is the source for CAPM parameters	Used Bloomberg - now switched to S&P database. Risk free rate - Hungarian bond yields. In some cases, we follow different approach - German bond and then adjust	Source is Bloomberg. For risk-free rate - Italian 10 year government bonds. Market premium is evaluated case by case (in the past, used Ibbotson database for estimation)	Databases: Bloomberg (publically available companies), S&P Capital IQ Rf - Latvian bond rate, or German bond rates.
* tax rate	Where the P&L is expected to be generated (could be seller's or buyer's depending on perspective). We may use statutory tax rate (sometimes) ETR (preferably). Ideally, marginal tax rate, when available	releveling beta - statutory rate; but in calculations we will consider items that are not tax deductable.	French tax rate for the industry. It is 15% if in a patent box regime, or 30% - if not in patent-box	Apply two-sided valuation , so both rates in each's party P&L	Deloitte database on statutory tax rates	Tax rate that is applicable (where cash flow was generated historically)		Local tax rate of the client

Input of countries on the discount rate evaluated with the help of WACC formula *

where:

** Discount rate is equal to WACC = Debt/(Debt+Equity)*Return on debt + Equity/(Debt + Equity)*Return on Equity.*

** Return on equity is based on the CAPM formula (Return on equity = Risk-free rate + Beta * Market Premium*

	Lithuania	Netherlands	Poland	Romania	Slovakia	Spain	Sweden	UK
* Debt/ Equity ratio	Based on Client's balance sheet	Either client or from comparables or both	Obtained from Damodoran database (not client), because we do not want to focus on client's few years, they could be deviations from long-term industry trend.	Based on the D/E ratio of a pool of comparable companies.	Industry-wide rate	From the Company but compare with comparables/ industry.	Beta - from Bloomberg; may adjust case to case.	Project specific D/E ratio is needed (relevant for IP valued). Therefore, need to see how it is financed (maybe too risky, and nobody will lend to you)
* Return on debt	Client's cost of borrowing	Return on debt - from client	Bonds/ or client	Cost of debt is calculated using the intest rate of any recent long-term loans taken by the Company or (in the absence thereof) as the average interest rate of long term loans as indicated by the National Bank of Romania statistics for the date of valuation.	Check on actual market situation, Bank of Slovakia. (lending rate), if they are very different from client	From the company/ check the borrowing rates in the industry	Rf - group or swedish free rate (gov 10 year bond)	
* Return on equity (CAPM and its main parameters)		Bloomberg	Beta - Damodaran. Market premium - also from Damodaran. Bloomberg for other data	Capital IQ inputs are used	Bloomberg or Capital IQ or Reuters.	Beta - Bloomberg/ Damodaram; Risk-free rate - depends, could be German bond (depends also on currency), Market premium - Boston Consulting or Damodaran .	Market premium - there is survey of Swedish market which is sometimes used in respect to this input	Bloomberg for risk free rate
* tax rate			Tax rate - typically Buyer (unless both sides)	Historical effective tax rate (preferably) or statutory tax rate are used.	statutory tax rate of client	Use both rates and compare re	tax rate - in Sweden (outbound cases)	Whether you do it pre-tax or post-tax, you should get the same answer because the discount rate should be adjusted. WACC need to be pre-tax or post tax rate. If valuation is done from both parties -- need to use tax rate depending on each party's country..

Appendix 6 – Parameters internal sources

Parameter	(Potential) internal source - data on individual company level	Main challenges	Potential solution(s) to challenges
Financial projections	Management projections / financial forecast	• Limited availability of projections for other purposes and, especially of relevant (segmented) financial projections. • Uncertainty of projections and, as a consequence, limited accuracy and questionable reasonability of projections. • Unreliability of projects based on linear growth rates and past performance due to uncertainty	• Preferred use of internal forecasts created for non-tax purposes • Challenge reasonability of projections: question growth rates including long-term growth, profitability each year. • Comparison with industry or competitors and comparables and request for explanations of deviations; finally, potential adjustments based on joint discussion • Focus on key economic and financial indicators for reasonability check. • Keep caution in using linear growth rates and past performance indicators.
Royalty rate	• Internal comparables: Agreements of a company in the same group with unrelated parties covering the same intangible, under the same conditions • External comparables: Information regarding or available third party agreements, known to the Company (such as agreements of competitors), which are in the same industry and are similar/ comparable.	• Limited availability of internal comparables or any information on third party agreements available to the Company. • If any agreements provided, comparability to the studied transaction and IP in the scope of this transaction.	• Assess comparability of identified agreements according to OECD TPG (geography, products & their profit potential, market level, applications, terms of agreements, etc.)
Routine return	"Internal" comparable companies (e.g. third party routine distribution/manufacturing entities performing functions for one entity of the Group, and possibly, their financial information allowing to assess their rate of return/ profitability)	• Unavailability of internal comparables and/or their information necessary to calculate routine return	• Perform functional and risk analysis of tested party • Perform comparability analysis according to OECD TPG
Discount rate (see Appendix 4 for practices in respect to inputs for Discount rate)	Information on the discount rate (or inputs used to calculate it) used by Company's management for internal financial management, on the company basis and/or, ideally, in respect to projects with intangibles; or information on different inputs that go into WACC calculations	• Appropriateness of the discount rate (other parameters of WACC) that is available from management (special risk of the IP being valued, etc.) and more widely, availability of the discount rate and ability of the company to justify it.	• Assessment of the full rate if provided by management (what is application of the rate provided, etc.) with the intangible valuation in hand. • Analysis and assessment of various inputs for WACC calculations, if provided by managements.
Useful life	• Information from the Company regarding the speed of replacement of products containing the IP valued/ speed of development of new technology and its updates. • Information on the planned use of the acquired IP by the "buyer"; • Information on the potential use of the IP by the seller, under the scenario of options realistically available.	• Level of judgement for finding factors affecting useful life, e.g. technological changes, economic life, functional life.	• Reasonability check with external data industry average data and with expert publications but preference to understanding better the specifics of the company, its products, markets, etc.

Appendix 7 – Parameters external sources

Parameter	Use of potential external source	Database	Challenges	Ways to objectivize the chosen value of parameter
Financial projections	Reasonability check or corroboration with competitors' data or with industry averages in terms of growth rate, etc.	Same potential sources as for comparables for Routine return	• Availability and applicability of competitors' and industry data • Applicability of data from competitors and/or industry averages specifically to the financial projections in question	• Challenge and assessment of projections based on economic and financial indicators (industry forecasts / industry expectations) • Cross-check of projections with competitors' data. • Cross-check and challenge of the forecast provided, based on Company's record of achievement of forecast. • Provide and document justifications of deviations of forecast from industry statistics / forecast, from competitors and from the historical statistics (past growth and profitability).
Royalty rate	Search and identification of agreements between unrelated parties covering the same type or similar intangibles, under the same or similar conditions, obtain the royalty rate.	Agreements databases: RoyaltyStat, RoyaltySource, ktMINE, TP Catalyst, LexisNexis	• Availability and reliability of third party agreements • Comparability of third party agreements in terms of characteristics of intangibles and of rights transferred, contractual conditions, geographical scope	• Assess and document the comparability analysis of external agreements (according to OECD TPG, i.e. geographical coverage, same applications of IP, etc.) • Cross-check of assumed royalty rate by reference to an operating margin required from sales generated from the use of the IP.
Discount rate (see Appendix 4 for practices in respect to inputs for Discount rate)	Search for relevant information for WACC parameters (company beta, market premium, and risk free rate (all for application of CAPM formula)). Possibly, search on industry-wide WACC's.	Financial databases: Bloomberg, Reuters, Capital IQ, S&P, Damodaran	• Identification of potential differences between parameters for the Company (i.e. relevant for IP project and reflecting additional risk) and industry-wide parameters.	• Sensitivity analysis (change in the value of analyzed IP) based on the change of parameters for calculation of discount rate. • Detailed justification of the chosen parameters (and their applicability to the analyzed transaction).
Routine return	Search and identification of external comparable companies (e.g. entities with same routine functional profile), to obtain a benchmark for routine return.	Company databases: Bureau van Dijk's Amadeus, Orbis, local databases (local editions of Amadeus)	• Definition of "routine" function • Comparability in terms of risks and performance of routine functions • Availability of local comparables • Availability of sufficient information for assessing comparability	• Perform functional and risk analysis of tested company (in respect to routine function(s) it performs). • Perform comparable search and comparability analysis according to OECD TPG. • Document the search and identification of the comparable companies (including all steps of the search and review of potential companies).
Useful life	Industry practices / external studies mentioning useful life for similar types of intangibles, similar products (for which the IP is used) and considering observations of useful life of intangibles in similar industries and markets	Econlit (database of economic academic literature) or search on google for other publically available publications studying useful life, product life cycle, etc.	• Limited information on the useful life of intangibles in the literature and absence of any specific databases to consult. • The characteristics of intangibles studied are unique and thus any industry-wide information (including information on speed of technological changes, product life cycle, etc.) may be inappropriate to use.	• Explanation and documentation of selected life including documentation any external sources and their applicability

Appendix 8 – Overview of transfer pricing legislation

EU Member State	Transfer pricing legislation
Austria	• Section 6 para. 6 Income Tax Act, Section 8 para 1 and 2 Corporate Income Tax Act. • Specific transfer pricing guidelines as a decree from October 2010, which is binding on the Austrian tax authorities but non-binding on taxpayers and the courts
Belgium	• Law of 21 June 2004 introduced transfer-pricing-specific crossborder rules and correlative adjustments under Articles 185, §2, and 235 ITC. For APAs, mutual agreement, or arbitration procedure, the OECD's arm's length standard, as introduced by article 185 §2 ITC, applies. • Administrative Transfer Pricing Circular Letter of 28.06.1999; Administrative Arbitration Convention Circular Letter of 07.07.2000 and Administrative Circular Letter of 25.05.2003 (addendum to Circular Letter of 07.07.2000); Administrative Circular Letter of 04.07.2006 regarding article 185 §2 ITC; Administrative Circular Letter of 14.11.2006 on transfer pricing documentation and transfer pricing audits.
Bulgaria	• Corporate Income Taxation Act (CITA) and Ordinance H-9/14 August 2006 on the procedure for application of transfer pricing methods. • Transfer Pricing Manual of 2010 that follows closely the 1995 OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations.
Croatia	• Croatian Corporate Income Tax Act, article 13, Croatian Corporate Income Tax Regulations, article 40; • General Tax Act, article 41 paragraph 2; Guidelines for auditing transfer prices for tax inspectors, issued in 2009 in the tax authorities' gazette.
Republic of Cyprus	-
Czech Republic	• Section 23 para. 7 of the Income Taxes Act (effective January 1, 1993). • Decree D-332 on the application of international standards to the taxation of transactions between related persons; Decree D-333 on binding ruling over the transfer pricing policy used in related-party transactions (APAs); Decree D-334 on the recommended scope of transfer pricing documentation (in accordance with EU transfer pricing documentation). Regarding intercompany services, new Decree D-10 on Low-Value-Adding Intragroup Services was adopted effective January 2013.
Denmark	• Tax Assessment Act Section 2 and Tax Control Act Section 3B. • Regulation no. 42 of January 24, 2006, on Transfer Pricing Documentation, Danish administrative guidelines 2014-1, section C.D.11 on Transfer Pricing; Danish guideline of 15 January 2013 on valuation.

Estonia	• Estonian Income Tax Act (Article 14 sections 7 and 8; Article 50 sections 4-8); Regulation No. 53 of the Minister of Finance of 10 November 2006, "Methods for determining values of transactions between related persons." • The Tax and Customs Board has issued guidelines on its website on the determination of arm's length prices for related-party transactions, but those guidelines are not binding on taxpayers.
Finland	• Sections 14 a-c and 31 Tax Procedure Act. • The Finnish Tax Administration issued a guidance letter on documentation on October 19, 2007. The English version, Transfer Pricing Documentation Requirements, was issued on April 16, 2009.
France	• General Tax Code: Article 57 – transfer of profits and arm's length principle, Articles 238 A and 209 B – CFC rules, Article 223 quinquies B – annual transfer pricing form to be filed with the tax authorities, Article 1729 F – penalties for failure to file country-by-country report, Article 1735 ter – penalties for lack of transfer pricing documentation; Tax Procedure Book: Article L.13 B – specific transfer pricing questions from tax authorities, Article L.13 AA – general contemporaneous transfer pricing documentation requirements, Article L.13AB – additional requirements for transactions with non-cooperative states and territories as defined in Article 238-0-A of the French Tax Code, Article L.80 B 7 – advance pricing agreements and Supreme Tax Court case law on Abnormal Act of Management, L.188 A – extension of statute of limitations when the FTA makes a request from foreign tax authorities. • Administrative Doctrine on Article 57 (BOI-BICBASE-80-20), Adopted Procedures L.13 AA and L.13 AB (22 December 2009), Administrative Instruction on the Mutual Agreement Procedure (BOI-INT-DG-20-30), Administrative Instructions on APAs (BOI-SJ-RES-20), OECD transfer pricing guidelines (generally accepted in practice).
Germany	• Section 8 para. 1 and 3 Corporate Income Tax Act (KStG); Section 4 para. 1 Income Tax Act (EStG); Section 1 Foreign Tax Code (AStG); Section 90 para. 3 and section 162 para. 3 and 4 General Tax Code (AO). Decree-law on the manner, content, and extent of documentation in the sense of section 90 para. 3 of the General Tax Code (GAufzV), decree-law on the relocation of business functions (FVerlV), decree-law on the profit allocation to permanent establishments (BsGaV). • Principles for the Examination of Income Allocation in the Case of Internationally Related Enterprises of Feb. 23, 1983; Principles for the Examination of Income Allocation by Cost Sharing Arrangements between Internationally Related Enterprises of Dec. 30, 1999; Principles for the Audit of Income Allocation between Internationally Affiliated Enterprises in Cases of Employee Secondments of November 9, 2001; Principles for the Audit of the Income Allocation Between Related Parties with Cross-Border Business Relations in Respect of the Duty of Determination, the Duty of Cooperation, adjustments, Mutual Agreement Procedures, and EU Arbitration Procedures of April 12, 2005; Principles for the Examination of Income Allocation between Affiliated Companies in the Case of International Relocation of Functions, dated October 13, 2010; Principles for the Application of Section 1 Foreign Tax Code to Cases of Marginal Amortizations and other Depreciations on Loans Issued to Foreign Related Entities, dated March 29, 2011.

Greece	• Law 4172/2013 (new Income Tax Code applicable from 1 January 2014), Law 4174/2013 (Tax Procedures Code, also applicable from 1 January 2014); Law 2238/2013, as amended by L.3775/2009, L.3842/2010 and L.4110/2013 for transactions entered into up until FY 2013; Law 3728/2008 for transactions entered into in FYs 2008, 2009, and 2010. • Ministerial Circular 1097/2014, amended by POL. 1144/2014 and 1284/2013, as well as the relevant guidelines released by the General Secretariat of Public Revenue with regard to advance pricing agreements.
Hungary	• Corporate Income Tax Act Article 18 (transfer pricing rules), Article 4/23 (definition of related parties) and Article 31/2 (reference to OECD transfer pricing guidelines); Tax Procedures Act Article 1 (8) on arm's length principle, Article 132/B-C on APAs. The Hungarian Ministry of Finance issued Decree no. 22/2009 on transfer pricing documentation requirements. • Decree no. 38/2006 on advance pricing agreements (modified as of January 1, 2012, and January 1, 2016 (the latter including solely administrative modifications))
Ireland	• Taxes Consolidation Act 1997 Section 835A -835H. Transfer pricing rules introduced into law in 2010 for trading transactions between associated persons. Effective for chargeable periods beginning on or after January 1, 2011. Taxes Consolidation Act 1997 Section 891H contains provisions introducing countryby-country Reporting into Irish law for companies within the scope for accounting periods beginning on or after January 1, 2016. The Taxes (Country-By-Country Reporting) Regulations 2015 contain provisions that give effect to the secondary filing mechanism for country-bycountry reporting as provided for under Action 13 of the OECD BEPS final report.
Italy	• Article 110 (7) of Presidential Decree n. 917/1986 (for corporate tax purposes – IRES); Legislative Decree n. 446/1997 (for regional tax purposes – IRAP); article 1, § 2-ter of Legislative Decree n.471/1997; Article 31-ter of Presidential Decree n. 600/1973 (APA regulations). • Circular Letter nos. 32/9/2267 (September 22, 1980), 42/12/1587 (December 12, 1981) and 271/E/1059 (October 21, 1997). Circular Letter nos. 141/E/86270 (June 4, 1998), 98/E/107570 (May 17, 2000) and 148/E/139500 (July 26, 2000) for IRAP purposes only; decision of the Commissioner of Italy Revenue Agency dated September 29, 2010; Circular Letter no. 58/E (December 15, 2010); Circular no. 21/E (June 5, 2012).
Latvia	• Taxes and Duties Act, articles 15.2 , 16.1 (from January 1, 2013); Taxes and Duties Act, articles 23.2 ; Income Tax Act, article 12. • Cabinet of Ministers Regulations No. 556, articles 83.-94; Cabinet of Ministers Regulations No. 981 and 16.

Lithuania	• Order No. 1K-123 of the Minister of Finance (transfer pricing rules), dated April 9, 2004; • Law on corporate income tax (No. IX-675), dated December 20, 2001; • Law on Tax Administration (No. IX-2112), dated April 13, 2004; • Order No. VA-27 of the head of STI regarding submission of the report on transactions and operations with associated parties, dated March 22, 2005; • Order No. VA-105 of the head of STI regarding APAs, dated October 19, 2011; • Order No. VA-49 of the head of STI regarding the recovery of tax overpayments by taxpayer, dated June 30, 2009; • Order No. VA-25 of the head of STI regarding the method of imposing penalties and the calculation of late payment interest, dated March 28, 2007.
Luxembourg	• Article 56 of the Income Tax Law. • Grand-Ducal Decree of December 23, 2014 – defining the process for advance tax agreements; Circular ITL NS No.164/1 dated June 9, 1993; Circular ITL No.164/1 dated March 23, 1998; Circular L.I.R. 164/2 dated January 28, 2010; and Circular 164/2 bis LITL issued April 8, 2011.
Malta	-
Netherlands	• Corporate Income Tax Act Article 8b and 8c. • Transfer Pricing Decree, November 26, 2013, IFZ 2013/184M • Decree on APAs, ATRs, Financial Service Entities, June 26, 2014, DGB 2014/296M • Decree on TP Coordination Group, August 11, 2004, DGB 2004/1339 • APA Decree, June 26, 2014, DGB 2014/3098 • ATR Decree, June 26, 2014, DGB 2014/3099 • Decree on Financial service companies, June 26, 2014, DGB 2014/3101 • Q&A Decree re financial service companies, June 26, 2014, DGB 2014/3102 • Decree on Attribution of Profits to Permanent Establishments, January 15, 2011 IFZ2010/457M
Poland	• Articles 9a, 11, 19, and 27 of Corporate Income Tax Act; articles 25, 25a, and 45 of Personal Income Tax Act; section IIa of Tax Ordinance of 29 August 1997 (APAs); Convention on the Elimination of Double Taxation in Connection with the Adjustment of Profits of Associated Enterprises (August 23, 2007). • Transfer Pricing Decree of September 10, 2009 (with further amendments), Decree on Tax Havens of April 23, 2015, Ordinance on APA Realization of May 31, 2006.
Portugal	• Article 63 and Article 138 of the Corporate Income Tax Code. • General guidance on transfer pricing - Ministerial Order ("Portaria") #1446-C/2001; advance pricing agreements - Ministerial Order ("Portaria") #620-A/2008.

Romania	• The Romanian Fiscal Code and its methodological norms; The Fiscal Procedure Code; Order no. 442/2016 regarding the values of transactions, the content, deadline for preparation, and conditions for the request of the transfer pricing file, and the procedures for adjustments/ estimates of transfer prices; • Government Decision no. 529/2007 regarding the approval of advance pricing agreements (APAs) and advance fiscal solutions, and Order no. 3736/2015 regarding the application procedure and forms for issuing and amending APAs; the OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations and the EU Code of Conduct on transfer pricing documentation.
Slovakia	• Section 2(n) and (r), Section 17(5), and Section 18 of the Income Tax Act (ITA). • ITA, MF/8120/2014-721, OECD transfer pricing guidelines
Slovenia	• Corporate Income Tax Act (Official Gazette of the Republic of Slovenia, no.117/06 to 50/14), articles 16-19, 32, 72; Tax Procedure Act (Official Gazette of the Republic of Slovenia, no. 13/11 to 90/14) article 382; amendment (Official Gazette of the Republic of Slovenia, no. 91/15) article 14.a to 14.g (APA); Financial Administration Act (Official Gazette of the Republic of Slovenia, no. 25/14) article 11. • Rules on transfer prices (Official Gazette of the Republic of Slovenia, no. 141/06 to 4/12).
Spain	• Article 18 of the Spanish Corporate Income Tax Law (CITL) (Law 27/2014 of November 27, 2014). • The Corporate Income Tax Regulations (Royal Decree 634/2015, of July 10, 2015)
Sweden	• Chapter 14 §§ 19-20 of the Swedish Income Tax Act. • Arm's length principle (SFS 1999:1229; 14:19-20); documentation requirements (SFS 2001:1227; 19:2a-2b); APAs (SFS 2009:1289); case law (RÅ 1991 ref. 107).
United Kingdom	• The UK transfer pricing legislation is found in Part 4 of the Taxation (International and Other Provisions) Act 2010 (TIOPA 2010) (S 146 et seq.). The mutual agreement procedure is set out in Part 2 of TIOPA 2010 (ss 124-125). APAs are in Part 5 of TIOPA 2010 (S 218 et seq.). • HMRC publishes guidance on its interpretation of transfer pricing legislation, OECD principles, and UK case law. This guidance is currently found in the International Manual at INTM410000 et seq., and includes guidance on thin capitalization. Statement of Practice SP1/11 provides guidance on mutual agreement procedures and arbitration in relation to transfer pricing matters.

Appendix 9 – Glossary & Abbreviations

Glossary	
Term	**Definition**
Accounts payables	Debts to suppliers and contractors (trade creditors).
Administrative Principles	Principles for the Audit of the Allocation of Income between Related Persons in Cases of Cross-Border Transfers of Business Functions (Administration Principles – Business Restructurings) issued by German Ministry of Finance
Arm's length principle	*Glossary OECD TPG*
Associated enterprises	*Glossary OECD TPG*
Asset	Asset is a resource controlled by the entity as a result of past events and from which future economic benefits are expected to flow to the entity [IASB Framework].
Benchmark	In transfer pricing, any (financial) indicator, price or royalties based on analysis of comparable companies or comparable transactions.
Building blocks	Grouping of inputs needed for the application of valuation methods.
Business combination	A transaction or other event in which an acquirer obtains control of one or more businesses. Transactions sometimes referred to as 'true mergers' or 'mergers of equals' are also business combinations [IFRS 3].
Business valuation	The act or process of determining the value of a business enterprise or ownership interest therein.
Capital intensity	The amount / level of capital (money, other financial resources, tangible assets) required to produce a good or a service. A business is considered capital intensive based on the ratio of the capital required to the amount of labor that is required.
Capitalisation (rate)	A variant of a discount rate that is usually used for cash flows of one year.
Cash & Liquidity	Detail of the other current assets, which typically include cash at bank and in hand of the company.
Cash flows	Cash that is generated over a period of time by an asset, group of assets, or business enterprise. This term may be used in a general sense to encompass various levels of specifically defined cash flows. When the term is used, it should be supplemented by a qualifier (for example, 'discretionary" or 'operating') and a specific definition in the given valuation context.
Comparability adjustment	An adjustment (to benchmarks) that arises from the differences identified through comparability analysis
Comparability analysis	*Glossary OECD TPG*

Comparable uncontrolled price ("CUP") Method	According to paragraph 2.13 of the 2010 OECD report, the comparable uncontrolled price ("CUP") method compares amounts charged in controlled transactions (between related parties) with amounts charged in comparable third party transactions (between a related party and a third party or between third parties).
Comparable uncontrolled transaction	*Glossary OECD TPG*
Comparables	Comparable companies, agreements, or prices that have been identified through a well-defined search for comparable uncontrolled transactions
Compounding	The addition of interest to the principal sum of a loan or deposit is called compounding. Compound interest is interest on interest. It is the result of reinvesting interest, rather than paying it out, so that interest in the next period is then earned on the principal sum plus previously-accumulated interest.
Corporate finance	Corporate finance is the area of finance dealing with the sources of funding and the capital structure of corporations and the actions that managers take to increase the value of the firm to the shareholders, as well as the tools and analysis used to allocate financial resources.
Cost approach	The cost approach seeks to determine the value of intangible assets by aggregating the costs involved in their development. There are two distinct cost approach methods: reproduction cost and replacement cost.
Cost of equity	The cost of equity is the required rate of return to the equity investor, given all other options available and the capital structure of the firm. The required rate of return on equity measures the return necessary to compensate investors for their investment risk.
Cost plus method	*Glossary OECD TPG*
Current assets	Balance sheet accounts that represent the value of all assets that can reasonably expect to be converted into cash within one year. Current assets include cash and cash equivalents, accounts receivable, inventory, marketable securities, prepaid expenses and other liquid assets that can be readily converted to cash.

Customer base	A customer base is a company's primary source of business. A client base consists of the current customers paying for the products, or services, as well as potential customers which have a high likelihood of becoming customers.
Customer relationship	A customer relationship exists between an entity and its customer if (a) the entity has information about the customer and has regular contact with the customer and (b) the customer has the ability to make direct contact with the entity. Customer relationship intangible assets may be either contractual or non-contractual [IFRS].
Decay schedule	Attrition rate (also referred to as churn rate), in its broadest sense, is a measure of the number of individuals or items moving out of a collective group over a specific period of time. It is one of two primary factors that determine the steady-state level of customers a business will support.
Discount rate	The discount rate refers to the interest rate used in discounted cash flow (DCF) analysis to determine the present value of future cash flows. The discount rate in DCF analysis takes into account not just the time value of money, but also the risk or uncertainty of future cash flows; the greater the uncertainty of future cash flows, the higher the discount rate.
Discounted cash flows	The discounted cash flow (DCF) is a method of valuing an asset or business using the concept of the time value of money and risk. Projected future cash flows are estimated and then discounted to present value using the relevant cost of capital. The sum of all discounted future cash flows, both incoming and outgoing, is the net present value (NPV), which is taken as the value or price of the cash flows in question.
Discounting (technique)	The discounting technique relies on reducing the values of future cash flows or returns to make it directly comparable to the values at present.
Dispute valuation	Valuations caused by a dispute. Disputes often include claims surrounding the value of an asset or group of assets, an ownership interest in a business, or intellectual property. If a dispute arises between shareholders, the value of the business or of its assets will often be a point of discussion.
Dividend	A dividend is a distribution of a portion of a company's earnings, decided by the board of directors, to a class of its shareholders. Dividends can be issued as cash payments, as shares of stock, or other property.

Earnings (with respect to income approach)	Earnings are the amount of profit that a company produces during a specific period, which is usually defined as a quarter (three calendar months) or a year.
Earnings volatility	Earnings volatility refers to how stable, or unstable, the earnings of a corporation are.
EBIT	Earnings Before Interest and Taxes or operating profit
Enterprise value	Enterprise value (EV), total enterprise value (TEV), or firm value (FV) is an economic measure reflecting the market value of a business. It is a sum of claims by all claimants: creditors (secured and unsecured) and shareholders (preferred and common). Enterprise value is one of the fundamental metrics used in business valuation, financial modelling, accounting, portfolio analysis, and risk analysis.
Excess earnings	Earnings or profits attributable to the intangible asset being valued, obtained after excluding the proportion of the cash flows attributable to other assets.
Excess earnings method	The excess earnings method determines the value of intangibles as the present value of earnings (or cash flows) attributable to the subject intangible after excluding the proportion of earnings (cash flows) that are attributable to other assets.
External comparables	Comparable transactions between two third parties external to the considered taxpayer (or another entity of its group)
External CUP ("ECUP")	An external CUP compares amounts charged in controlled transactions (between related parties) with amounts charged in comparable third party transactions *between third parties.*
Extraordinary profit	All extraordinary result not belonging to the 'ordinary' activities of the company.
Market value	IVSC defines market value as the estimated amount for which an asset or liability should exchange on the valuation date between a willing buyer and a willing seller in an arm's length transaction after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion.
Fair value	The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date [IFRS13].

Financial asset	Cash, equity or a contractual right to receive cash, equity, or another financial asset
Financial profit	Result from financial activities of the company (financial revenue-financial expenses).
Financial reporting (standards)	A key prerequisite for meaningful financial statements is that they be comparable to those for other companies, especially firms within the same industry. To meet that requirement, statements are prepared in accordance with Generally Accepted Accounting Principles (or, more commonly, GAAP), which "encompasses the conventions, rules and procedures, necessary to define accepted accounting practice at a particular time." Refer to IFRS or USGAAP.
Forecast	Projection regarding the financial position and the results of operations and cash flows based on expected conditions.
Functional and risk analysis	*Glossary OECD TPG*
Future benefit	Capability or potential of intangible to generate cash flows (in form of cash and cash equivalents) for the entity.
Going concern business	The going concern concept or going concern assumption states that businesses should be treated as if they will continue to operate indefinitely or at least long enough to accomplish their objectives & obligations. In other words, the company will not have to liquidate or be forced out of business in the foreseeable future. Companies that are expected to close in the near future are not a going concern. The significance of this principle becomes apparent when the value of a running business is compared with the value of one being liquidated.
Goodwill	(accounting) The difference between the aggregate value of an operating business and the sum of the values of all separately identifiable tangible and intangible assets; or the representation of the future economic benefits associated with business assets that are not individually identified and separately recognised; or the value of the assembled assets of an operating business over and above the sum of the separate values of the individual assets.
Gross margin	Gross profit divided by turnover
Gross profit	Operating revenue or turnover minus cost of goods sold.

Growth rate	Annual rate of increase of a company's revenues, earnings and other financial data.
Highest-and-best-use principle	Assumption that the price a buyer will pay or that a seller will accept for an asset is based on the most profitable use of the asset.
Historical cost	Refers to the costs incurred in the past
Historical cost method	Method that is based on the evaluation of the historical costs incurred in developing an asset
Hypothetical market participants	A typical market participant assuming the asset was offered in a market transaction (ie in a hypothetical market transaction).
Identifiable asset	An identifiable asset is an asset of an acquired company that can be assigned a fair value and can be reasonably expected to provide a benefit for the purchasing company in the future. Identifiable assets can be both tangible and intangible assets.
Income approach	The income approach estimates the value of an intangible asset by converting future benefits stemming from the intangible in question into a current value.
Intangible asset	An asset that is not physical (and not monetary) in nature.
Internal comparables	Comparable transactions between the considered taxpayer (or another entity of its group) and an unrelated party
Internal CUP ("ICUP")	An internal CUP compares amounts charged in controlled transactions (between related parties) with amounts charged in comparable third party transactions *between a related party and a third party.*
IP portfolio	A variety of intangible assets that are owned by one party or one group
License agreement	An agreement under which the licensor, owner of an intangible asset, allows a licensee to use or engage in an activity in relation to that intangible asset, against a certain consideration.
Licensor (licensee)	Owner of the intangible asset / of rights over the intangible asset; the party to a license agreement that transfers rights over intangible
M&A	Mergers and acquisitions (M&A) is a general term that refers to the consolidation of companies or assets. While there are several types of transactions classified under the notion of M&A, a merger means a combination of two companies to form a new company, while an acquisition is the purchase of one company by another in which no new company is formed.

Market approach	The market approach estimates the value of an intangible asset based on the selling price of similar items.
Market multiples (market approach)	The market value of a company's stock or invested capital divided by a company financial or operational metric (such as economic benefits or number of customers).
Market price (market approach)	The economic price for which a good or service is offered on the open market.
Market value	The amount for which something can be sold on a given market. Market value and market price are equal only under conditions of market efficiency, equilibrium, and rational expectations.
Net equity	Total equity (capital+ other shareholders funds).
Net present value	The value, as of a specified date, of future cash inflows less all cash outflows (including the cost of investments), calculated using an appropriate discount rate.
Net profit	Profit is a financial benefit that is realized when the amount of revenue gained from a business activity exceeds the expenses, costs and taxes needed to sustain the activity.
Normal profit	Measure of profits that would be earned by a business that does not use the intangible asset that is being valued.
Operating assets	Total assets – Long term financial assets - Short term financial assets
Operating cycle	The operating cycle is the average period of time required for a business to make an initial outlay of cash to produce goods, sell the goods, and receive cash from customers in exchange for the goods. This is useful for estimating the amount of working capital that a company will need in order to maintain or grow its business.
Operating profit	Operating profit is the EBIT. It is obtained by deducting costs of goods sold and all operating expenses from turnover/ income from operating activities
Opportunity cost	The New Oxford American Dictionary defines it as "the loss of potential gain from other alternatives when one alternative is chosen. Thus, opportunity costs are not restricted to monetary or financial costs: the real cost of output forgone, lost time, pleasure or any other benefit that provides utility should also be considered opportunity costs.
Package deal	Bundling of transactions involving intangibles and/or rights in intangibles that are closely linked, for the purpose of valuing them together in a transfer pricing context
Parameters	Set of inputs needed for the application of valuation methods

Patent	The exclusive right granted by a government to an inventor to manufacture, use, or sell an invention for a certain number of years.
Peer companies	A peer (or comparable) company is a company which shares similar characteristics, such as business model, size, type of products or services, geographic location, etc.
Premium profit	Refer to appendix valuation methods: premium profit method.
Premium profit method	Refer to appendix valuation methods: premium profit method.
Pre-tax basis	Calculated before taking into consideration taxes paid
Price premium (market approach)	The percentage by which a product's selling price exceeds (or falls short of) a benchmarked price.
Private company	A privately held company is a business company owned either by non-governmental organisations or by a relatively small number of shareholders or company members which does not offer or trade its company stock (shares) to the general public on the stock market exchanges, but rather the company's stock is offered, owned and traded or exchanged privately.
Profit margin	This is used to measure and compare profitability. It is calculated as a measure of profit (operating profit or net income, etc.) divided by revenue.
Profit split method	*Glossary OECD TPG*
Profitability	The ability of a company to earn a profit.
Purchase price allocation	Purchase price allocation (PPA) is an application of goodwill accounting whereby one company (the acquirer), when purchasing a second company (the target), allocates the purchase price to various assets and liabilities acquired from the transaction.
Quoted share	A share that can be bought or sold on a particular stock market
Reasonability analysis	High-level verification (of financial information in this case) based on logic and sound judgement
Relative bargaining power	Relative ability of parties at the moment of concluding a contract to exert influence over each other.
Relief from royalty method	Valuation method that estimates the value of an intangible based on a "deemed royalty" payable for the rights to use the subject intangible asset.
Replacement cost	The quantification of estimated cost of replacing an intangible asset or of creating an equivalent asset.
Replacement cost method	Valuation method that estimates the value of an intangible through the capitalisation of forecast costs to be incurred for the replacement of intangible asset.
Resale price method	*Glossary OECD TPG*
Residual method	*Glossary OECD TPG*, under 'residual analysis'

Residual profit	Cash flow of profits calculated by deducting "routine returns".
Return on contributory asset	Expected level of profit as percentage of the asset value earned during normal economic use of the asset.
Risk (systemic)	Market risk is the possibility for an investor to experience losses due to factors that affect the overall performance of the financial markets. Market risk, also called "systematic risk," cannot be eliminated through diversification, though it can be hedged against. The risk that a major natural disaster will cause a decline in the market as a whole is an example of market risk. Other sources of market risk include recessions, political turmoil, changes in interest rates and terrorist attacks.
Routine activity	Regular business activity for which comparables exist.
Routine margin	Margin established by comparing the comparable companies' profitability
Routine return	Remuneration attributable to a routine activity.
Royalty (deemed)	Compensation or portion of the proceeds paid to the owner of an intangible assets / of rights in an intangible asset, under a license agreement. A deemed royalty refers to the application of the royalty relief method, which implies the use of a "deemed royalty" - that would be paid should the intangible be licensed.
Share capital	Issued share capital.
Stakeholder (of the valuation exercise)	A stakeholder is a party that has an interest in an enterprise or project.
Stock market listing	A listed security is a financial instrument that is traded through an exchange, such as the NYSE or Nasdaq. When a private company decides to go public and issue shares, it will need to choose an exchange on which to be listed.
Substitute products	Substitute goods or substitutes are products that a consumer perceives as similar or comparable, so that having more of one product makes them desire less of the other product.
Tangible asset	A tangible asset is an asset that has a physical form. Tangible assets include both fixed assets, such as machinery, buildings and land, and current assets, such as inventory.
Tax amortisation	Cost recovery system for intangible assets (against taxable income).
Tax valuation	Valuation performed for tax purposes.
Time value of money	The time value of money (TVM) is the idea that money available at the present time is worth more than the same amount in the future due to its potential earning capacity. This core principle of finance holds that, provided money can earn interest, any amount of money is worth more the sooner it is received.

Trademark (tradename)	Distinctive design, graphics, logo, symbols, words, or any combination thereof that uniquely identifies a firm and/or its goods or services, guarantees the item's genuineness, and gives it owner the legal rights to prevent the trademark's unauthorized use.
Transactional net margin method ("TNMM")	*Glossary OECD TPG*
Transfer (of intangibles)	Transaction involving a transfer of all rights in the intangible in question.
Transfer pricing	The setting of prices for transfers of goods and/or services between associated (or related) enterprises.
Turnover	Total operating revenues (net sales + other operating revenues + stock variations). The figures do not include VAT.
Two-sided valuation	Valuation from both parties' perspective - from the perspective of the buyer and of the seller.
Unlevered free cash flow	A company's cash flow before interest payments are taken into account.
Useful life	The estimated lifespan of an intangible asset, during which it can be expected to contribute to company earnings.
Valuation approach	General methodology to determine the value of an intangible asset using either income, market or cost data.
Valuation method	Specific methodology falling under one of the three approaches (income, market or cost) prescribing a specific technique (or variations of techniques) and the inputs needed for its application.
Valuation model	Mathematical / financial model built according to certain valuation method
Valuation technique	(Mathematical) feature (or collection of features) used in a valuation method or valuation model
Valuer	A person / specialists engaged in the valuation exercise independent of its purpose
Weighted average cost of capital	Weighted average cost of capital (WACC) is a calculation of a firm's cost of capital in which each category of source of capital is proportionately weighted.
Working capital	Capital used for day-to-day activities equal to the sum of inventories, accounts receivables net of accounts payables
Working capital position	The working capital position can be positive working capital (current assets exceed current liabilities), neutral working capital (current assets are equal to current liabilities) or negative working capital (current assets are less than current liabilities)

Abbreviations

Term	Explanation
AStG	Außensteuergesetz, Foreign Tax Act, Germany
BEPS	Base Erosion and Profit Shifting
CAPM	Capital Asset Price Model
CPM	Comparable Profits Method
CUP	Comparable Uncontrolled Price
CUT	Comparable Uncontrolled Transaction
DCF	Discounted Cash Flow
DDM	Dividend Discount Model
EBIT	Earnings Before Interest and Tax
EBITDA	Earnings Before Interest, Tax and Amortisation
EV	Enterprise value
EU	European Union
FASB	Financial Accounting Standards Board
FVerlV	*Funktionsverlagerungsverordung*, German ordinance on relocation of functions
IASB	International Accounting Standards Board
IFRS	International Financial Reporting Standards
IP	Intellectual Property
IRR	Internal Rate of Return
IVS	International Valuation Standards
IVSC	International Valuation Standards Council
JTPF	Joint Transfer Pricing Forum
M&A	Mergers & Acquisitions
MNE	Multinational enterprises
MPEEM	Multi-period excess earnings method
NPV	Net present value
OECD	Organisation for Economic Co-operation and Development
OECD TPG	OECD Transfer Pricing Guidelines
P / B	Price to Book
P / FCF	Price to Free Cash Flow
PLI	Profit level indicator
PPA	Purchase Price Allocation
R&D	Research & Development
ROIC	Return on invested capital
RTD report	EU Commission Final report from the Expert Group on Intellectual Property Valuation, 29th November 2013
RUL	Residual useful life
SWOT	Strengths Weaknesses Opportunities Threats
TNMM	Transactional Net Margin Method
TAB	Tax amortisation benefits
TP	Transfer Pricing
TPG	OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administration
TVM	Time value of money
USGAAP	US Generally Accepted Accounting Standards
WACC	Weighted Average Cost of Capital
WARA	Weighted Average Return on Assets