

Switzerland / International

Intra-Group IP Transfers Following International M&A Transactions – Challenges and Best Practice from a (Swiss) Transfer Pricing Perspective

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The post-M&A transfer of intellectual property raises a number of challenging questions from a transfer pricing perspective. By means of a case study, the author illustrates the use of international valuation standards in the context of intellectual property and transfer pricing (fair value versus arm's length principle) as well as the treatment of pricing premiums and milestone payments.

1. Introduction and Outline of Case Study

The importance of intangible assets (such as intellectual property (IP)) as central value drivers for sustained business success has been growing since the 1970s across industries.^[1] Given their central importance for the value of multinational enterprises (MNEs), the international allocation of tax base heavily depends on an appropriate identification,^[2] attribution,^[3] and valuation^[4] of IP.^[5] The transfer pricing (TP) treatment of IP has thus been a source of conflict for many years. A particular challenge relates to the fact that IP often has unique characteristics, which results in a potential for generating returns and creating future benefits that could differ widely, complicating the search for comparables.^[6] The strong dynamics of cross-border M&A activity^[7] have only heightened TP concerns as MNEs undertake global planning, structuring and restructuring of mobile IP, which often includes shifting (or centralizing) ownership of acquired IP across jurisdictions and legal entities.^[8] Given that IP is both a main driver of value creation and a mobile asset, MNEs have implemented structures to ensure that IP-related income is subject to

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Opinions expressed in this article are the author's own and do not express the views or opinions of his employer.

1. M. Greinert & A. Leonhardt, *Immaterielle Werte*, in *Verrechnungspreise international verbundener Unternehmen* ch. 6, para. 6.557 (F. Wassermeyer, H. Baumhoff & X. Ditz eds., Verlag Dr. Otto Schmidt KG, 2nd ed.); O. Kost & F. Weidlich, *Möglichkeiten zur Operationalisierung einer DEMPE-Analyse*, TPI, at 234 (2020); M. Lagarden, *Immaterielle Wirtschaftsgüter und Verrechnungspreise: "Same procedure as every year?"*, IWB 18, at 689 (2014); M. Lagarden, *Intangibles in a Transfer Pricing Context: Where Does the Road Lead?*, 21 Intl. Transfer Pricing J. 5, p. 331 (2014), Journal Articles & Opinion Pieces IBFD; S. Stein, C. Schwarz & M. Freudenberg, *Bewertung schwer bewertbarer immaterieller Werte*, TPI 5, at 247 (2017).
2. OECD, *Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations* [hereinafter *OECD Guidelines*], para. 6.5 ff, Primary Sources IBFD.
3. Id., para. 6.32 ff.
4. Id., para. 6.136 ff. "Valuing intangible properties is one of the most interesting, yet challenging exercises in transfer pricing for multinational companies worldwide", according to J. Beebe & B. Spiller, *INSIGHT: Multinationals Face Formidable Challenges in Valuing Intangibles: Part I – Purchase Price Allocation*, The Bureau of National Affairs, Inc., at 1 (2018).
5. A. Oestereicher, *Transfer Pricing of Intangibles in Case of Post-merger Reorganization: Lessons from the Revised OECD Draft*, 42 Intertax 8&9, at 509 (2014).
6. According to the *OECD Guidelines*, para. 6.116 ff, it is therefore critical to assess whether potential comparables in fact exhibit similar profit potential based on factors such as exclusivity; extent and duration of protection; geographic scope; useful life; stage of development; rights to enhancements, revisions, and updates; or expectation of future benefits. R.S. Collier & J.L. Andrus, *Transfer Pricing and the Arm's Length Principle After BEPS*, Oxford University Press, para. 6.54 (2017).
7. Key motives for M&A include synergies, growth, diversification, standardization and focus, elimination of competition and increase of supply-chain pricing power. S. Hubscher & J. Houlie, *Migration of Intellectual Property from Israeli Technology Companies*, 26 Intl. Transfer Pricing J. 3, at 215 (2019), Journal Articles & Opinion Pieces IBFD; K.G. Ray & S.G. Ray, *Cross-border Merger and Acquisitions: Modelling Synergy for Value Creation*, Advances in Mergers and Acquisitions 12, at 219 (2013).
8. Greinert & Leonhardt, *supra* n. 1, at para. 6.557; N. Harbeke, T. Hug & P. Scherrer, *Verrechnungspreisrecht der Schweiz: Grundlagen und Praxis*, Dike Verlag AG para. 1140 (2022); I. Manatschal & H. U. Meuter, *Funktionsanalysen bei internationalen Umstrukturierungen*, ZStP 1 at 18 (2020); A. Sadang, *Creating the Bridge Between Transfer Pricing and the Valuation of Intangibles*, QR, at 1 (2016); R. Vlasceanu, *Intellectual Property Structuring in the Context of the OECD BEPS Action Plan in International Tax Structures in the BEPS Era: An Analysis of Anti-Abuse Measures*, at 220 (M. Cotrut ed., IBFD 2015), Books IBFD.

a reduced tax rate (which goes hand in hand with a reduced overall tax burden at the group level).^[9] The tax-efficient transfer of IP to favourable (low-tax) jurisdictions is therefore a prerequisite step in the implementation of such structures. The growing tendency among a number of tax authorities to qualify mere profit drivers as IP and to expand the scope of what has to be paid for when IP is transferred across borders reflects these concerns.^[10]

From a TP perspective, intra-group IP transfers following international M&A transactions^[11] raise a number of challenging questions^[12] – the following three shall be addressed in this article:

- *First*, the question arises whether a post-M&A transfer^[13] of IP should be considered as the sale of an entire business and whether the IP value should therefore be aligned with the initial acquisition price.^[14] A related question is whether valuation studies performed for business/accounting purposes may be used for determining an arm's length remuneration for IP transfers from a TP perspective.^[15] To manage costs, reduce duplicative procedures and to avoid using inconsistent data/assumptions across analyses, taxpayers would often like to use the fair value (FV) computed in the purchase price allocation (PPA) to determine the transfer price of IP.^[16]
- *Second*, the treatment of pricing premiums (in particular, synergies and control premiums) seems rather contested in practice. Critics of the arm's length principle (ALP^[17]) claim that existing transactional TP rules fail to properly account for and allocate the benefits of synergies.^[18] Also the term "control premium" has created confusion and disagreement among valuation/TP professionals and it seems unclear in which cases a control premium should be accounted for.^[19]
- *Third*, when valuation of IP is extremely uncertain at the time of the transaction, independent enterprises may take a variety of steps to deal with this uncertainty, for example, by adopting shorter-term agreements or including price adjustment clauses or milestone payments in the terms of the agreement.^[20] While milestone payments rarely exceeded 10% to 20% of the overall purchase price in the past, purchase prices today are regularly the same or even lower than potential milestone payments.^[21] This begs the question how such payments impact the value of transferred IP from a TP perspective.

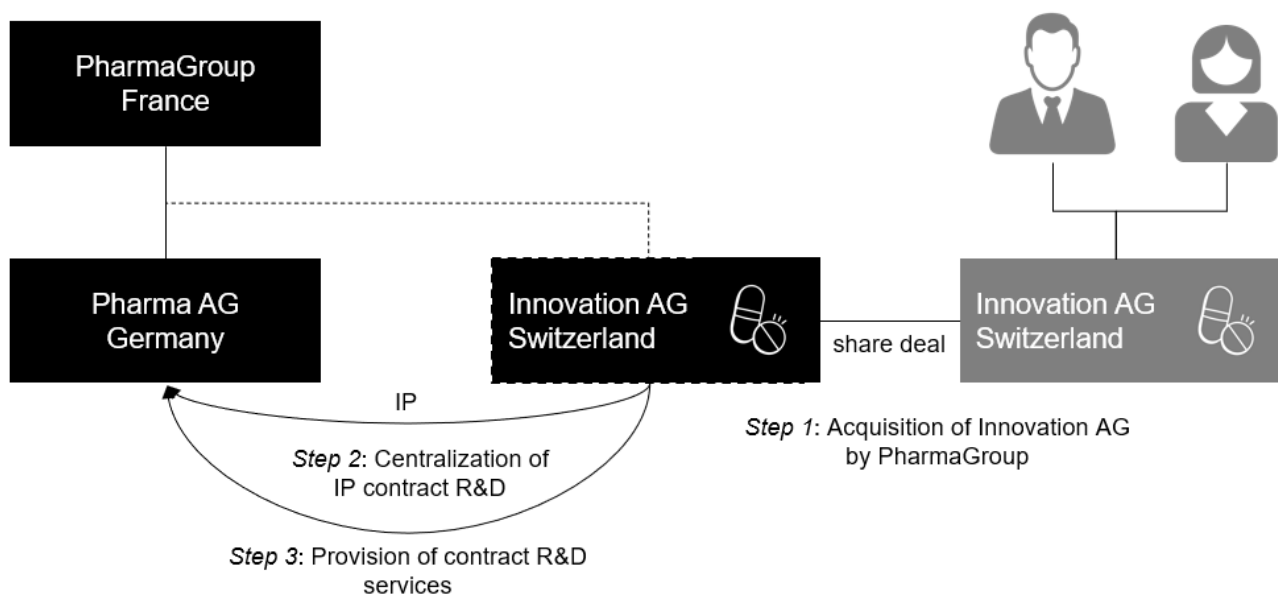
The case study^[22] below will illustrate how these challenging questions may be addressed in practice (see also Figure 1.). Where appropriate, particularities of Swiss law and TP practice will be highlighted. Sections 2.-4. will first discuss and

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9. R.E. Ackermann, *Transfer Pricing and Intangible Planning*, 14 Asia-Pac. Tax Bull. 6, at 437 (2008), Journal Articles & Opinion Pieces IBFD; Vlasceanu, *supra* n. 8, at 220 f. and 231.
 10. C. Chandler, S. Blough & W. Williams, *Reconciliation of Purchase Price Allocation and Transfer Pricing*, 18 In Practice 23, at 1236 (2010); Collier & Andrus, *supra* n. 6, at para. 3.47 and 6.54; I. Verlinden & Y. Mondelaers, *Transfer Pricing Aspects of Intangibles: At the Crossroads between Legal, Valuation and Transfer Pricing Issues*, 17 Intl. Transfer Pricing J. 1, at 49 (2010), Journal Articles & Opinion Pieces IBFD; Vlasceanu, *supra* n. 8, at 221.
 11. A typical M&A transaction consists of three main phases: (i) preparation phase, (ii) transaction phase, and (iii) integration phase (which may involve intra-group IP transfers). Post-M&A integration (PMI) "is the process of unifying two entities and their assets, people, tasks, and resources in a manner that creates the most value for the future of the enterprise by realizing efficiencies and synergies". M. Zwysig, *Post-merger Integration. Was ist wichtig, damit eine M&A Transaktion die Erwartungen erfüllt?*, EXPERTsuisse seminar from 22 Nov. 2022, at 7.
 12. Regrettably, such TP matters are often overlooked or only lightly treated in M&A-related due diligence work. In a recent M&A seminar by EXPERTsuisse, Switzerland's expert association for audit, taxes and fiduciary, TP aspects of M&A transactions have not been mentioned at all, for example.
 13. Cross-border transactions of IP within MNEs can generally be grouped into three major categories: (i) acquisition or sale, (ii) licensing, and (iii) R&D cost sharing. This article focuses on the first category. See Lagarden, *supra* n. 1 (*Intangibles*), at 333.
 14. S. Hubscher & J. Houllie, *Revisiting Business Restructuring in Light of Israeli Court Decisions and Circulars*, 27 Intl. Transfer Pricing J. 6, at 476 (2020), Journal Articles & Opinion Pieces IBFD; Manatschal & Meuter, *supra* n. 8, at 19.
 15. R. Schmidtke, *IP-Strukturierung nach M&A Deals – aktuelle Entwicklungen unter Berücksichtigung von BEPS*, in WCLF Tax und IP (W. W. Kraft und A. Striegel eds., Springer Fachmedien Wiesbaden GmbH 2017), Gesprächsband 2016, at 249; J.Y.M. Zhao & V. Zhang, *Transfer Pricing Valuation on the Shoulders of Business Appraisal*, 19 In Practice 21, at 1144 (2011).
 16. Beebe & Spiller, *supra* n. 4, at 2; Chandler, Blough & Williams, *supra* n. 10, at 1235.
 17. The ALP as the fundamental standard based on which transfer prices between associated enterprises are to be set is codified in the vast majority of national tax laws. Switzerland, however, has not yet enacted any specific TP regulations. According to art. 58(1) of the Federal Act on Direct Federal Taxation (FDTA) and art. 24(1) of the Federal Act on the Harmonization of Direct Taxes of Cantons and Municipalities (FTHA), transactions between shareholders or related parties and a company are to be determined based on the "arm's length principle". Although the Swiss legislator has not yet included specific legal provisions on TP in tax law, there are a number of administrative directives (including circulars) that implicitly or explicitly refer to the determination of intra-group transfer prices. Given the lack of specific guidance with regard to both the interpretation and application of the ALP in cases of business restructurings, the Swiss tax authorities typically follow the *OECD Guidelines*. See R. Stocker & C. D. Studer, *Bestimmung von Verrechnungspreisen. Ausgewählte Aspekte der schweizerischen Praxis*, Der Schweizer Treuhänder 5, at 386 ff. (2009) for more details. K.A. Honold & R. Stocker, *Cross-border business restructurings: IFA Branch Reports: Switzerland*, Cahiers de droit fiscal international 96a (2011), at 702; C. (X.) Peng, *The Application of the Arm's Length Principle to the Allocation of Joint Efficiencies within MNEs*, 23 Intl. Transfer Pricing J. 5, at 378 (2016), Journal Articles & Opinion Pieces IBFD; Schmidtke, *supra* n. 15, at 252.
 18. Collier & Andrus, *supra* n. 6, at para. 6.61.
 19. B. Cornell, *Guideline Public Company Valuation and Control Premiums: An Economic Analysis*, 8 JBVELA 1, at 53 (2013); K. Reams et al., *Acquisition premiums and cost sharing analysis*, International Tax Review 86, at 43 (2014).
 20. L. Helderman & C.J.E.A. Sporken, *Revision of the Special Considerations for Intangibles in Chapter VI of the OECD Transfer Pricing Guidelines and Related Provisions*, 19 Intl. Transfer Pricing J. 6, at 389 (2012), Journal Articles & Opinion Pieces IBFD.
 21. M. Baumgartner & R. Keller, *Aktuelle Entwicklungen im Bereich M&A*, IFF seminar USTR from 23/24 Aug. 2022.
 22. The case study is based on N. Burkhalter et al., *Funktionsverlagerungen nach STAF*, IFF seminar ISTR from 23/24 Nov. 2020, at 37 ff. Please note that this case study does not comment on how the GloBE rules may impact cross-border transfers of IP. These aspects are discussed in detail in M. Bertschinger & A. Horat, *Grenzüberschreitender Transfer von Immaterialgütern unter den GloBE-Regeln*, IFF Forum für Steuerrecht special issue, at 405 ff. (2022).

summarize the relevant theoretical concepts before possible solutions will be presented in section 5. The facts of the case are as follows:

Two individuals^[23] own a Swiss start-up company, *Innovation AG*, which is active^[24] in the pharmaceutical industry and has developed an antiviral compound (IP) that successfully passed clinical phase II.^{[25][26]} *Innovation AG* was founded in 2016 and has failed to become profitable so far. Its equity shrunk from CHF 100 million to CHF 10 million. *PharmaGroup*, based in France, would like to acquire^[27] *Innovation AG* and has prepared the following valuation as part of a deal model: *Innovation AG* was valued at CHF 60 million (net asset value CHF 10 million and goodwill CHF 50 million). Further, *PharmaGroup* estimates that cost synergies in the amount of CHF 40 million and growth synergies in the amount of CHF 100 million could be realized. *PharmaGroup* then acquires *Innovation AG* for CHF 200 million (*step 1*). In the share purchase^[28] agreement, the parties agree that additional payments will be made to the sellers upon achievement of certain milestones. If the milestone of first regulatory approval of the compound in the European Union is reached (this milestone is expected to be reached within three years), a payment of CHF 30 million is due and once the milestone of a cumulative sales revenue of CHF 500 million within ten years is reached, another CHF 30 million is due. It is important to note that none of these milestone events could be reached without substantial further development and substantial further investment. These milestone payments do therefore not constitute a delayed purchase price that would once be paid anyway. According to the PPA (which was prepared for accounting purposes), the IP is worth CHF 20 million (estimation based on a DCF valuation), net tangible assets are CHF 40 million and goodwill is CHF 140 million. Two days after the acquisition, management decides to transfer the IP for CHF 20 million from *Innovation AG* to *Pharma AG* in Germany, the central IP owner within *PharmaGroup* (*step 2*). Let's assume that *Pharma AG* is in charge of or at least controls all development, enhancement, maintenance, protection and exploitation (DEMPE)-related activities. Going forward, *Innovation AG* will merely provide contract R&D services to *Pharma AG* and be in charge of low-risk distribution (LRD) in Switzerland (*step 3*). The Swiss management team has been laid off. The profit of *Innovation AG* after restructuring is expected to be CHF 1 million p.a. These three steps are illustrated in Figure 1.

Figure 1. Case study PharmaGroup and Innovation AG



23. Let's assume that both individuals have tax residency in Switzerland.
 24. R&D, management and distribution.
 25. See J.B. Vögele & F. Peters, *Pharma – Schadenersatzberechnung für Geistiges Eigentum bei Arbitration*, in *Intangibles Immaterielle Werte*, at para. 6 ff. (A. Vögele ed., Verlag C.H. Beck oHG 2021), for a general overview of the clinical development phases involved in drug development.
 26. Next to some marketable, antibacterial products, which are already distributed in the Swiss market.
 27. This is a strategic acquisition, i.e. the buyer is primarily interested in the IP rights of this compound as they represent a promising addition to its existing product portfolio. To this end, the buyer would like to transfer the relevant IP rights from the target to the German operating entity as quickly as possible in order to further develop the compound to market maturity.
 28. It is key to note that the transfer of shares (unlike in an asset acquisition) does not necessarily mean that the relevant IP has been transferred from the acquired to the acquiring entity. Zhao & Zhang, *supra* n. 15, at 1145.

In line with the research questions outlined above, the following aspects are addressed in this case study:

- *Question (1)*: Can the PPA IP value be used for determining an arm's length remuneration for the IP transfer (*step 2*) from a TP perspective?
- *Question (2)*: How should cost and growth synergies as well as goodwill be properly accounted for and allocated, and may a control premium be added in this context?
- *Question (3)*: How do the envisaged milestone payments impact the value of transferred IP?

2. Foundational IP Notions and Concepts

2.1. Definition and intercompany allocation of IP

The fact that IP is defined differently throughout the world is part of the reason why there is inconsistency in the tax treatment of IP.^[29] Subjective use of definitions may also facilitate aggressive attempts by tax authorities to mistreat routine activities as non-routine IP for tax purposes.^[30] A clear and narrow definition of IP would therefore be desirable (at least for taxpayers). However, the OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations [hereinafter "OECD Guidelines"] define the term "intangible assets" rather broadly^[31] as "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".^{[32][33]} As there is no definition of IP in Swiss tax law,^[34] this OECD definition of IP can also be used for Swiss TP purposes.^[35] The critical attributes of IP for TP purposes can be summarized as lack of physical substance, non-monetary character, identifiability, separability, controllability, and future economic relevance.^{[36][37]}

Depending on the degree of their immaterial character, intangible assets can be divided into three broad categories:^[38]

- intellectual capital;^[39]
- intangible assets;^[40] and
- intangible property.^[41]

29. Ackermann, *supra* n. 9, at 438.

30. Id.; Verlinden & Mondelaers, *supra* n. 10, at 49.

31. OECD Guidelines, para. 6.5 discusses the challenges relating to an overly narrow versus a too broad definition of IP.

32. OECD Guidelines, para. 6.6.

33. Collier & Andrus, *supra* n. 6, at para. 6.58; Helderma & Sporcken, *supra* n. 20, at 389; M. Lagarden, *Immaterielle Wirtschaftsgüter und Verrechnungspreise: "Im Westen nichts Neues ... ?!"*, IWB 19, at 720 (2014); Manatschal & Meuter, *supra* n. 8, at 11; M. Pankiv, *Post-BEPS Application of the Arm's Length Principle to Intangibles Structures*, 23 Intl. Transfer Pricing J. 6, at 464 (2016), Journal Articles & Opinion Pieces IBFD; A. Riedl & K. Schwinger, *How to Deal with Risks in the Context of Two-Sided IP Valuations after BEPS?*, 25 Intl. Transfer Pricing J. 6, at 455 (2018), Journal Articles & Opinion Pieces IBFD; Sadang, *supra* n. 8, at 4.

34. Not in judicial and administrative practice. As of 1 January 2020, the Swiss legislator has implemented new tax incentives for R&D at the cantonal and communal level with the adoption of the Federal Act on Tax Reform and AHV Financing (TRAF). The TRAF provides for, on the one hand, an *output promotion incentive* through the mandatory introduction of a patent box and, on the other hand, an *input promotion incentive* through the optional introduction of an additional deduction for qualifying R&D expenses. Under a rather narrow definition of patents or comparable rights that qualify for the patent box (see article 24a of the Federal Act on the Harmonization of Direct Taxes of Cantons and Municipalities), the related income is subject to a reduced tax rate. See P. Hiny, *Unternehmenssteuerreform (STAF). Praxiskommentar*, EXPERTsuisse (2021) for a detailed overview of these IP-related measures introduced by the TRAF.

35. Harbeke, Hug & Scherrer, *supra* n. 8, at para. 768; Honold & Stocker, *supra* n. 17, at 709. See R. Stocker & N. Zahnd, *Besteuerung immaterieller Wirtschaftsgüter in der Schweiz*, in: *Intangibles Immaterielle Werte*, at para. 1 ff. (A. Vögele ed., Verlag C.H. Beck oHG 2021) for a general overview of IP taxation in Switzerland.

36. I.e. basic value creation.

37. Honold & Stocker, *supra* n. 17, at 710; International Valuation Standards Council (IVSC), *International Valuation Standards (IVS) 210 Intangible Assets*, effective 31 January 2022, at para. 20.1; Lagarden, *supra* n. 1 (*Intangibles*), at 335.

38. Lagarden, *supra* n. 1 (*Immaterielle Wirtschaftsgüter*), at 691. Another type of categorization differentiates between technology-based, marketing-related, contract-based and customer-related IP; see C. Popa et al., *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*, European Union, at 41 (2016). The OECD Guidelines, para. 6.15 ff., further distinguish between trade intangibles and marketing IP, "soft" and "hard" IP as well as routine and non-routine IP.

39. Properties: not legally certified, not traded between unrelated third parties and/or related entities, may constitute comparability factors, e.g. innovation, know-how.

40. Properties: not legally certified, not traded between unrelated third parties and/or related entities, may constitute comparability factors, e.g. corporate culture, best practice manuals.

41. For example, patents, trademarks.

This article focuses on the third category, i.e. intangible assets, which can be registered or legally protected; which may be the subject of a purchase/sale or licensing agreement, and are the subject of transactions between unrelated third parties and/or affiliated entities; but which are hard to value.^{[42][43]}

In terms of IP ownership, the OECD Guidelines distinguish between a legal-formal,^[44] a financial^[45] and a functional-operational^[46] dimension.^[47] The functional owner is in principle entitled to all IP-related income.^{[48][49]} By focusing on functional^[50] ownership in the attribution of income to IP, the OECD adopts a distinctly economic^[51] approach.^[52]

2.2. Definition and accounting treatment of goodwill

The OECD Guidelines do not include a definition of goodwill,^[53] but generally speaking, goodwill represents “any future economic benefit arising from a business, an interest in a business or from the use of a group of assets which has not been separately recognized in another asset”.^[54] In M&A transactions, acquired assets and liabilities are recorded at FV in the consolidated financial statements at the time of acquisition (PPA^[55]) – for financial reporting purposes, (purchased) goodwill is thus a residual concept^[56] that reflects the difference between the acquisition price and the fair market value of tangible assets and identified IP.^[57]

Given that the amount of goodwill therefore depends on which tangible and intangible assets are recognized, its value can differ depending on the purpose of the valuation.^[58] For TP purposes, goodwill may not be a separate asset given that goodwill paid as part of international M&A deals often primarily represents the potential for value enhancement (including synergies and restructuring potential)^[59] hoped for by acquirers.^[60]

In Swiss tax law it is generally accepted that goodwill cannot be transferred separately from other assets of a company as it is hard to conceive goodwill as IP from an economic perspective.^[61]

2.3. Definition of synergy

Synergies are conceivable where two or more entities combine their respective strengths and thus represent the additional value and the opportunities that would not have been available to these firms if they were operating independently.^[62] For this reason, a recurrent criticism of the ALP is that the separate-entity approach and existing TP rules fail to properly account for and allocate synergy-related benefits.^[63]

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42. OECD Guidelines, para. 6.186 ff.
 43. Lagarden, *supra* n. 1 (*Immaterielle Wirtschaftsgüter*), at 691.
 44. For example, legal ownership. OECD Guidelines, para. 6.35.
 45. For example, financial ownership. In the OECD Guidelines (since version 2017) this term is no longer explicitly used, but the concept itself is explained in several places.
 46. For example, functional ownership. OECD Guidelines, para. 6.47 f.
 47. Harbeke, Hug & Scherrer, *supra* n. 8, at para. 800.
 48. After compensating the legal and financial owners.
 49. OECD Guidelines, para. 6.48.
 50. Over legal and financial ownership.
 51. For example, a compensation model based on functions performed, assets used and risks assumed.
 52. OECD Guidelines, para. 6.3 and 6.47 f.; Harbeke, Hug & Scherrer, *supra* n. 8, at para. 808 and para. 812. See e.g. M. Lang et al., *Fundamentals of Transfer Pricing. A Practical Guide*, 45 ff. (Kluwer Law International B.V., 2019) for a description of what a functional and risk analysis entails.
 53. OECD Guidelines, para. 6.27.
 54. Collier & Andrus, *supra* n. 6, at para. 6.59; IVSC, *supra* n. 37, at para. 20.6.
 55. Manatschal & Meuter, *supra* n. 8, at 23; Reams et al., *supra* n. 19, at 42.
 56. Also referred to as net asset value.
 57. O. Beyhs & G. Figlin, *Reallokation von Goodwill auf Cash-Generating-Units nach Reorganisationen: Ein methodischer Vorschlag*, WPg Online 14, at 818 (2020); I. Monferrini, *Immaterielle Werte in der Rechnungslegung*, Schulthess Juristische Medien AG 2016, ZStP – Zürcher Studien zum Privatrecht Band/Nr. 271, at 168; Oestereicher, *supra* n. 5, at 523. Capitalization of inherent (i.e. internally generated) goodwill is not permitted, see F. Poltera & J. Wehrli-Ducaud, *Originärer Goodwill und verdecktes Eigenkapital: Anforderungen an den Drittvergleich gemäss KS 6/97 der ESTV*, Steuer Revue 4, at 293 (2022); L. Siegrist & M. Stucki, *Die buchhalterische Behandlung von Unternehmensübernahmen und Fusionen*, in *Mergers & Acquisitions XII* (R. Tschäni ed., Schulthess Juristische Medien AG 2010), EIZ – Europa Institut Zürich Band/Nr. 103, at 2.
 58. IVSC, *supra* n. 37, at para. 20.7; Popa et al., *supra* n. 38, at 38.
 59. However, where strategic prices are paid and no corresponding countervalue exists, goodwill write-downs (i.e. impairment testing) will become necessary. M. Bucher & M. Schmidli, *Praxiserfahrung mit IFRS 3 Business Combinations: Auswirkungen auf den Akquisitionsprozess*, Der Schweizer Treuhänder 9, at 602 (2006); L. Siegrist & J. Stucker, *Kaufpreisallokation: Erste Erfahrungen mit IFRS 3*, Der Schweizer Treuhänder 4, at 248 (2006).
 60. Beyhs & Figlin, *supra* n. 57, at 818; Popa et al., *supra* n. 38, at 38; M. Schilling & P. Vassalli, *Fragestellungen zur Umsetzung von IFRS 3: Eine Praxisuntersuchung*, Der Schweizer Treuhänder 10 (2007), at 716; Siegrist & Stucki, *supra* n. 57, at 283.
 61. Manatschal & Meuter, *supra* n. 8, at 12; A. Oestereicher, *supra* n. 5, at 518.
 62. A. Damodaran, *The Value of Synergy*, working paper, at 3 (2005); L.F. de Moraes e Castro, *Treatment of Business Synergy for Transfer Pricing Purposes: Critical Analysis of Sections 367(d), 482 and 936 of the Internal Revenue Code and Government Proposals*, 19 Intl. Transfer Pricing J. 2, at 107 (2012), Journal Articles and Opinion Pieces IBFD; C. Fuhrer & C. Witte, *M&A-Integration: So führt der Deal langfristig zum Erfolg*, Expert Focus 10, at 805 (2015); Harbeke, Hug & Scherrer, *supra* n. 8, at para. 780; Popa et al., *supra* n. 38, at 38.
 63. Collier & Andrus, *supra* n. 6, at para. 6.61; De Moraes e Castro, *supra* n. 62, at 108; Peng, *supra* n. 17, at 379.

The OECD also addresses the intra-group allocation of synergies.^[64] It draws a distinction between *joint efficiencies*,^[65] i.e. synergies that can be attributed to “deliberate concerted group actions”,^[66] which should generally be shared between the members of the group in proportion to their contributions to the creation of the synergy, and *passive association*, i.e. situations in which benefits are purely incidental (“incidental benefit”^[67]) and will not be separately remunerated^[68] or specifically allocated between group members.^[69]

The OECD does not regard synergies as IP, as they are not owned or controlled by a single enterprise.^[70] Instead, they should be viewed as a comparability factor^[71] that may be addressed by means of comparability adjustments.^[72] Synergy may not be isolated and booked separately in business or accounting valuation studies and may or may not be booked as goodwill in PPA studies.^[73] However, an appropriate TP valuation would attempt to treat synergies separately (see section 4.2. on how to value and allocate synergies in an intra-group context).

3. International Valuation Standards in the Context of IP and TP

3.1. Fair value versus arm's length principle

There is a multitude of business and IP valuation standards^[74] set by different standardization bodies by now.^[75] The Internal Revenue Service (IRS) and many other tax authorities distinguish between valuations for financial reporting purposes and valuations for TP purposes.^[76] FV^[77] and the ALP^[78] are probably the most well-known standards.^[79]

FV is defined as the price that would be received to sell an asset or be paid to transfer a liability in an orderly market transaction between knowledgeable and willing market participants on the day of the transaction.^[80] FV is thus based on a hypothetical market, a hypothetical transaction and hypothetical market participants, which excludes any elements of entity-specific value.^[81] In contrast, the arm's length price^[82] must be based on comparable circumstances (i.e. the specific circumstances of the related parties must be taken into account).^[83]

To summarize, FV requires an objective, market-based valuation, whereas the ALP requires a subjective, entity-specific valuation.^[84] Therefore, valuations made for accounting or financial reporting purposes should be treated with caution as it cannot be assumed that they necessarily reflect an arm's length price for TP purposes without a careful review of the underlying assumptions.^[85]

3.2. The purchase price allocation framework

Accounting standards such as IFRS 3.13 or IAS 38.8-12^[86] govern the accounting treatment of transactions in which the acquirer obtains control over the operations of the target company.^[87] The purchase price paid must be allocated to the

64. T. Hahn, *Behandlung von Konzernsynergien in TNMM-Datenbankstudien: Endgültige Abkehr vom Fremdvergleichsgrundsatz?*, TPI 2, at 64 (2009).

65. Or additive effects of the group.

66. *OECD Guidelines*, para. 1.179 and 6.30.

67. *Id.*, para. 1.178.

68. It is thus a free-rider result.

69. Collier & Andrus, *supra* n. 6, at para. 6.62; Harbeke, Hug & Scherrer, *supra* n. 8, at para. 781; Pankiv, *supra* n. 33, at 469; Peng, *supra* n. 17, at 382.

70. Helderma & Sporken, *supra* n. 20, at 384; Oestereicher, *supra* n. 5, at 513; Peng, *supra* n. 17, at 379; Popa et al., *supra* n. 38, at 57.

71. *OECD Guidelines*, para. 6.30.

72. Helderma & Sporken, *supra* n. 20, at 384; Oestereicher, *supra* n. 5, at 513 and 520; Peng, *supra* n. 17, at 379.

73. Zhao & Zhang, *supra* n. 15, at 1146.

74. Internationally accepted key valuation standards include the International Valuation Standards (IVS), issued by the International Valuation Standard Council; ISO 10668:2010, issued by the International Organization for Standards (ISO); Statement of Financial & Accounting Standards (SFAS) 157 (*Fair Value Measurement*), developed by the Financial & Accounting Standards Board (FASB) and the International Financial Reporting Standards (IFRS) 13 developed by the International Accounting Standards Board (IASB).

75. Popa et al., *supra* n. 38, at 68 (see also Appendix 4 for an extensive list of standards with a brief description of their characteristics, strengths, weaknesses, opportunities and threats).

76. Sadang, *supra* n. 8, at 2.

77. Standard of value in financial reporting.

78. Valuation standard in TP.

79. J. Wittendorff, *The Arm's-Length Principle and Fair Value: Identical Twins or Just Close Relatives?*, Tax Notes International April, at 224 (2011).

80. Beebe & Spiller, *supra* n. 4, at 3; Schmidtke, *supra* n. 15, at 254; Wittendorff, *supra* n. 79, at 224.

81. Wittendorff, *supra* n. 79, at 225.

82. As defined in *OECD Model Tax Convention on Income and on Capital* art. 9, Treaties & Models IBFD, and the supplementary guidance provided in the *OECD Guidelines*.

83. Peng, *supra* n. 17, at 378; Schmidtke, *supra* n. 15, at 254.

84. Wittendorff, *supra* n. 79, at 248.

85. *OECD Guidelines*, para. 6.155; Manatschal & Meuter, *supra* n. 8, at 23.

86. Please note that Swiss GAAP FER does not currently have a standard dealing with acquisitions.

However, Swiss GAAP FER 30 (Consolidated financial statements), which will be implemented as of 1 January 2024, contains some basic rules. The standard for example requires that acquired assets and liabilities have to be “fair valued”. Goodwill is either recognized and amortized over a period of 5 up to

identifiable assets and liabilities included in a transaction – this valuation and accounting process is referred to as PPA.^{[88][89]} A PPA analysis typically allocates the purchase price into one of the following four blocks: working capital, fixed capital, identifiable IP, and goodwill.^[90] As outlined in section 2.2., goodwill remains as residual difference between the purchase price and net assets determined at FV.^[91] Allocating a major portion of the purchase price to goodwill (while other assets are valued at a low amount) seems attractive as no yearly amortization is required for goodwill and the related negative impact on financial results (apart from an increasing likelihood of impairments) can thus be avoided.^[92]

Indeed, the rules for allocating the purchase price to individual assets and liabilities leave some margin for manoeuvre, which may be exploited to manage the implications of amortizations on a company's performance.^[93] Considering this discretion (which calls into question the informative value of financial statements to some extent), a legitimate and important question is whether the PPA IP value can be used to determine the TP value for the IP.^[94] At this point, it can already be mentioned that according to the OECD,^[95] valuations of IP contained in PPAs performed for accounting purposes are not determinative for the purpose of a TP analysis.^[96] Nevertheless, "accounting valuations and the information supporting such valuations can provide a useful starting point in conducting a transfer pricing analysis"^[97] However, as has been rightly observed, "[t]here have been no specifications on what parts of a PPA may provide a 'useful starting point' or what changes must be made to a PPA before it can be used as the basis for a transfer pricing analysis".^[98] Furthermore, it is crucial to note that IP, which is important to consider for TP purposes is not always recognized as IP for accounting purposes.^[99]

3.3. Valuation of IP based on the arm's length principle

When IP is acquired directly (*asset deal*)^[100] or indirectly through the acquisition of shares (*share deal*) from an independent third party at the market price (i.e. an arm's length price) and then transferred intra-group soon after the acquisition, tax authorities may view the acquisition as a basis for the implementation of the comparable uncontrolled price (CUP) method.^{[101][102]} The more time passes, the greater is the likelihood of discrepancies in viewpoints on the applicability of the CUP method. If the intra-group IP transfer takes place some time after the acquisition from a third party, a separate investigation is typically required to verify whether the transferred IP has increased or decreased in value since the acquisition from an independent third party. A famous and recent example is the *Medingo* case (*Medingo Ltd v. Afula Assessing Officer*) from 8 May 2022. In April 2010, Roche Group acquired Medingo Ltd, an Israeli start-up company, for USD 160 million through a share deal. Approximately three months later, Medingo entered into the following four intra-group service agreements: (i) an R&D (contract) service agreement (cost plus 5%), (ii) a service agreement for the provision of marketing, administration, consultation, and support services (cost plus 5%), (iii) a manufacturing agreement (cost plus 5%), and (iv) a licence agreement, pursuant to which Roche was allowed to manufacture, use, sell, exploit, continue development and sublicense to related parties

a maximum of 20 years or offset directly with equity. R. Ruprecht, *Accounting considerations*. How should transactions be recorded and which options exist, EXPERTsuisse seminar from 22 Nov. 2022, at 11.

87. M. Sager, H. Schobinger & M. Oppermann, *Neubewertung von Minderheitsanteilen an Tochterunternehmen bei der PPA*, 6-7 Expert Focus 6-7, at 455 (2019); M. Situm, H. Pernsteiner & G. Sorrentino, *Immaterielle Vermögenswerte und Allokation von Kaufpreisen: Informationsgehalt und Ermessensspielräume*, WPG Online 11, at 629 (2020).
88. See e.g. Bucher & Schmidli, *supra* n. 59, at 597 for a succinct summary of a typical PPA process.
89. Sager, Schobinger & Oppermann, *supra* n. 87, at 455; J. Wachowicz, M. Brower & L. Sunisloe, *Differences in PPA Procedures: Financial Reporting vs. Tax Reporting*, Stout Journal, at 1 (2017).
90. Beebe & Spiller, *supra* n. 4, at 1.
91. Siegrist & Stucker, *supra* n. 59, at 248.
92. Bucher & Schmidli, *supra* n. 59, at 600; Siegrist & Stucker, *supra* n. 59, at 248.
93. Siegrist & Stucker, *supra* n. 59, at 250; Situm, Pernsteiner & Sorrentino, *supra* n. 87, at 629 f.
94. This question will be evaluated in more detail in sec. 3.5., after the conceptual and technical differences between the FV and the ALP have been summarized in sec. 3.4.
95. *OECD Guidelines*, para. 6.155.
96. *OECD Guidelines*, para. 6.153 ff.; Collier & Andrus, *supra* n. 6, at para. 6.67.
97. *OECD Guidelines*, para. 6.29.
98. Zhao & Zhang, *supra* n. 15, at 1144. Further guidance by the OECD on this issue would be most welcome.
99. *OECD Guidelines*, para. 6.7 state: "For example, costs associated with developing intangibles internally through expenditures such as research and development and advertising are sometimes expensed rather than capitalised for accounting purposes and the intangibles resulting from such expenditures therefore are not always reflected on the balance sheet. Such intangibles may nevertheless be used to generate significant economic value and may need to be considered for transfer pricing purposes."
100. In the context of M&A transactions, *share deals*, in which the shares of a company are acquired, must be distinguished from *asset deals*, in which its assets are acquired. A succinct summary of basic tax consequences of a business purchase/sale (in particular involving share/asset deals) can be found in P. Hinny, *Steuerfolgen Unternehmenskauf und -verkauf*, in *Mergers & Acquisitions XVI* (R. Tschäni ed., Schulthess Juristische Medien AG 2014), EIZ - Europa Institut Zürich Band/Nr. 148, at 258 ff.
101. Famous and very insightful court cases involving application of the CUP method in relation to post-M&A intra-group transfers of IP include *Gteko* (IL: [abbreviation court name] 6 Jun. 2017, *Gteko Ltd v. Kfar Saba Tax Assessing Officer*); *Broadcom* (IL: CDC, 1 Nov. 2018, *Broadcom v. Kfar Saba Tax Assessing Officer*); *Normet* (NO: CoA Borgating, 19 Mar. 2019, *Normet Norway AS v. Skatteetaten*, Case Law IBFD); *Medingo* (IL: DC Tel Aviv, 8 May 2022, *Medingo Ltd v. Afula Assessing Officer*) as well as case SB.2020.00011/12, SB.2020.00014/15 (CH: AC canton of Zurich, 29 Sept. 2021, SB.2020.00011/12, SB.2020.00014/15).
102. Harbeke, Hug & Scherrer, *supra* n. 8, at para. 835 f.; Hubscher & Houlie, *supra* n. 7, at 220; Schmidtke, *supra* n. 15, at 252 f.

the legacy IP developed by Medingo (2% of the net revenue from product sales). In November 2013, Medingo's operation in Israel was terminated and its IP sold to Roche for approximately USD 45 million. However, the Israeli tax authorities (ITA) argued that these transactions were in fact steps of a single scheme to transfer functions, risks and assets (FAR) of the appellant to Roche immediately following its acquisition in May 2010 for USD 160 million. The ITA (in line with the *Gteko* ruling) thus used this initial acquisition price paid for the shares of Medingo as a benchmark to determine the value of the FAR transferred, i.e. approximately USD 160 million (with some adjustments). In line with the Broadcom ruling, the Supreme Court rejected this view, arguing that "business restructuring" is not "a magic word, where it is sufficient to merely utter it in order to bring about a change of the classification of the transaction that had been made between the parties".

Where reliable comparable uncontrolled transactions are not available or the OECD methods^[103] cannot be applied with sufficient accuracy, the ALP demands the use of another method to ensure that independent parties would have agreed on the same price under comparable circumstances – the OECD acknowledges that valuation techniques^[104] may be useful tools in estimating arm's length prices for the intra-group transfer of IP in such situations.^[105] Chapter VI of the OECD Guidelines explicitly recognizes economic valuation techniques as a useful tool for determining the TP consequences of IP transfers^[106] and the application of income-based valuation techniques (either discounted value of projected future income statements or cash flows derived from the exploitation of the intangibles being valued) is considered to be particularly useful when properly applied.^[107]

As mentioned before, IP has become increasingly important in recent decades and, in step with this, also the need for valuations and economic analyses of these assets.^[108] It is thus astonishing that no uniform understanding has yet emerged in practice of either the definition of IP or the valuation methods to be applied.^[109] Apart from the five well-known TP methods^[110] outlined in chapter II of the OECD Guidelines, a wide range of additional methods^[111] for the valuation of IP is available in literature and business practice.^[112]

Two main groups of economic valuation approaches can be distinguished: *quantitative* and *qualitative*. The objective of a *qualitative* assessment is to rigorously examine the current or intended use of IP and understand its value drivers. However, no estimation is made of its monetary value and qualitative valuations are thus often considered to be interpretative and subjective – they are thus considered to be (more) systematic, reproducible, and objective.^[113]

Quantitative methods use any numerical information or measurable data available and attempt to calculate the monetary or economic value of IP.^[114] They are generally split into three basic concepts: *cost*, *market* and *income*.^[115] As no specific valuation methodologies are proposed by Swiss tax law, these approaches are also followed in Switzerland.^[116] The *cost approach* is either based on historical costs or replacement costs, but should be used with caution given that research expenditure may often be a poor indicator of the value of IP.^[117] The OECD Guidelines generally discourage the use of TP methods that seek to estimate the value of IP based on the cost of IP development as there is rarely any correlation between these costs and the IP value or transfer price once developed.^[118] The *market approach* derives an assessment of value from past transactions^[119] of closely comparable objects.^[120] However, its application is even more difficult than in the case

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103. While any TP method can be used to evaluate IP, the *OECD Guidelines* prefer transaction-based methods over profit-based methods. According to para. 6.145 of the *OECD Guidelines*, the *CUP method* and the *transactional profit split method* are the most useful ones in valuating transfers of IP. Ackermann, *supra* n. 9, at 440.
104. *OECD Guidelines*, para. 6.153 ff.
105. Ackermann, *supra* n. 9, at 441; Beebe & Spiller, *supra* n. 4, at 2; Manatschal & Meuter, *supra* n. 8, at 20; Pankiv, *supra* n. 33, at 469; Riedl & Schwinger, *supra* n. 33, at 455; Verlinden & Mondelaers, *supra* n. 10, at 53 f.
106. As Collier & Andrus have rightly observed, the embrace of valuation techniques reflects an evolution away from pure comparables-based determination of arm's length prices. See Collier & Andrus, *supra* n. 6, at para. 7.61.
107. *OECD Guidelines*, para. 6.153; Helderma & Sporken, *supra* n. 20, at 387 f.; Pankiv, *supra* n. 33, at 469.
108. S. Schmidli & P. Vassalli, *Immaterielle Vermögenswerte: Bedeutung und kritische Faktoren der Bewertung*, Der Schweizer Treuhänder 3, at 144 (2006).
109. *Id.*, at 144.
110. These five methods include *traditional transaction methods* (comparable uncontrolled price method, resale price method and cost-plus method) and *transactional profit methods* (transactional net margin method and transactional profit split method).
111. Useful overviews of approaches to the valuation of IP in a TP context are provided in Helderma & Sporken, *supra* n. 20, at 340 (see Figure 7); Popa et al., *supra* n. 38, at 64; and Siegrist & Stucker, *supra* n. 59, at 249 (see Figure 3).
112. Lagarden, *supra* n. 1 (*Immaterielle Wirtschaftsgüter*), at 699; Lagarden, *supra* n. 1 (*Intangibles*), at 340.
113. C. Lagrost et al., *Intellectual property valuation: how to approach the selection of an appropriate valuation method*, 11 *Journal of Intellectual Capital* 4, at 482 (2010); Schmidli & Vassalli, *supra* n. 108, at 144.
114. Lagrost et al., *supra* n. 113, at 481 f.
115. *Id.*, at 488 f.; Popa et al., *supra* n. 38, at 63; Siegrist & Stucker, *supra* n. 59, at 249.
116. Honold & Stocker, *supra* n. 17, at 711.
117. Ackermann, *supra* n. 9, at 442; Lagarden, *supra* n. 1 (*Immaterielle Wirtschaftsgüter*), at 898; Popa et al., *supra* n. 38, at 64; Siegrist & Stucker, *supra* n. 59, at 249.
118. *OECD Guidelines*, para. 6.142; Schmidli & Vassalli, *supra* n. 108, at 145.
119. For example, purchase, sale or licensing.
120. M. Bellini, R. Iervolino & M. C. Latino, *Transfer Pricing Valuation Methodologies in Times of Economic Downturn: Differences between Market and Income Approaches*, 28 *Int. Transfer Pricing J.* 1, at 27 (2021), *Articles & Opinion Pieces IBFD*; Schmidli & Vassalli, *supra* n. 108, at 146 f.

of business valuations as comparability is particularly challenging for IP and typically no liquid markets exist for individual intangible assets.^[121] The *income approach* measures the value of IP by translating future cash flows generated by that IP over its expected remaining useful life (as one of the critical assumptions supporting the valuation model, this parameter has a considerable impact on the IP value and should be determined in close collaboration with the responsible R&D team(s))^[122] to a single current appraisal by reference to the value of income, cash flow or cost savings generated.^[123] There are a number of methods that are based on this concept.^[124] As all these methods are based on discounting future amounts of cash flow to the present value, the income approach is also referred to as the discounted cash flow (DCF) approach.^{[125][126]} The reliability of a DCF-based valuation^[127] depends on the accuracy of underlying key parameters^[128] and can thus only be used for TP purposes when the valuation is consistent with the ALP.^[129]

When valuing IP, a number of critical factors (in addition to the ones known from standard business valuation) must be considered:

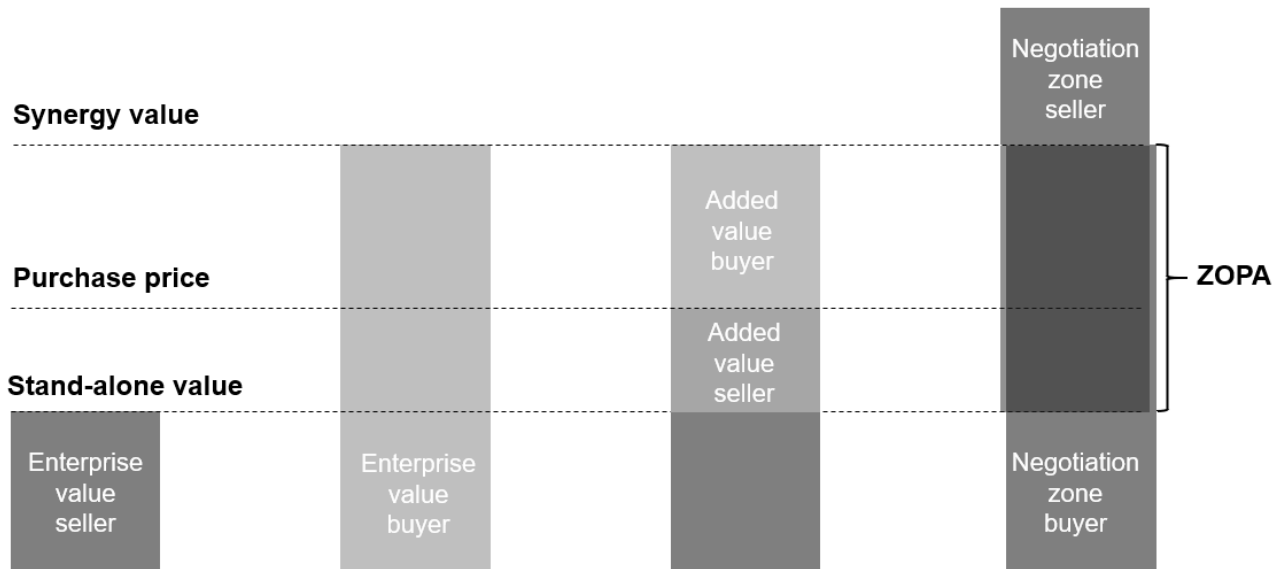
- **Identification:**^[130] A precise identification of IP based on consistent criteria is central to a valuation and should ideally take place already during the initial analysis phase of a potential M&A deal. In practice, this exercise is often of great complexity and is usually only possible after extensive discussions with management and may require the contribution of several business units that are involved in DEMPE activities relating to IP.
- **Purpose:**^[131] An IP valuation may be performed for a wide range of objectives and based on the underlying reasons for the valuation; different valuation exercises are possible. Depending on the purpose,^[132] the best suitable valuation approach should be chosen.
- **Audience:**^[133] The choice of valuation method will also be impacted by the differing expectations of the anticipated target audience.

Based on a two-sided^[134] valuation that considers options realistically available^[135] for all parties involved, a minimum demand of the seller (*enterprise value seller*) and a maximum willingness to pay of the buyer (*enterprise value buyer*) will result.^[136] Both values set the limits for a potentially broad zone of possible agreement (ZOPA). As mentioned before, the OECD does not clarify how this range may be further narrowed down.

The negotiation process between seller and buyer may be illustrated^[137] as in Figure 2.

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121. Ackermann, *supra* n. 9, at 442; Bellini, Iervolino & Latino, *supra* n. 120, at 27; Popa et al., *supra* n. 38, at 64; Schmidli & Vassalli, *supra* n. 108, at 146 f.; Siegrist & Stucker, *supra* n. 59, at 249.
122. Helderman & Sporcken, *supra* n. 20, at 389.
123. Ackermann, *supra* n. 9, at 441; Bellini, Iervolino & Latino, *supra* n. 120, at 26; Popa et al., *supra* n. 38, at 64; Schmidli & Vassalli, *supra* n. 108, at 145 f.; L. Siegrist & Stucker, *supra* n. 59, at 249.
124. For example, the multi-period-excess-earnings method, relief-from-royalty method, incremental-cash-flow method, profit-split method, premium-profits method and the residual-cash-flow method. See Schmidli & Vassalli, *supra* n. 108, at 145; Siegrist & Stucker, *supra* n. 59, at 249.
125. The key steps in the DCF method and key parameters for applying the DCF method are summarized well in Ackermann, *supra* n. 9, at 441 and Bellini, Iervolino & Latino, *supra* n. 120, at 26.
126. Ackermann, *supra* n. 9, at 441; Bellini, Iervolino & Latino, *supra* n. 120, at 26.
127. *OECD Guidelines*, para. 6.158 highlights some specific areas of concern in applying methods based on the discounted value of projected cash flows.
128. Future cash flows and growth rate based on financial projections, discount rate, useful life and terminal value, if any. Important considerations in relation to these key parameters (accuracy of financial projections, assumptions regarding growth rates, discount rates, useful life of intangibles and terminal values, and assumptions regarding taxes) are outlined in *OECD Guidelines*, para. 6.163 ff.
129. Bellini, Iervolino & Latino, *supra* n. 120, at 27.
130. *OECD Guidelines*, para. 9.55; Schmidli & Vasalli, *supra* n. 108, at 147 f.; Siegrist & Stucker, *supra* n. 59, at 250.
131. *OECD Guidelines*, para. 6.155; Lagrost et al., *supra* n. 113, at 483 f.
132. For example, company valuation, IP sale or licence, raising capital, taxation planning, accounting, dispute resolution or litigation support, external reporting, IP exploitation and management or internal management and strategy. An auditor, who is charged to value IP for accounting purposes, for example, will typically assign only little value to goodwill as the related uncertainty is not welcome in the books. A tax advisor, on the other hand, will likely assign a higher value to goodwill as this will open up possibilities in the framework of an overall tax strategy.
133. Lagrost et al., *supra* n. 113, at 485.
134. *OECD Guidelines*, para. 2.119 and para. 3.21.
135. *Id.*, para. 6.52.
136. Riedl & Schwinger, *supra* n. 33, at 456; Stein, Schwarz & Freudenberg, *supra* n. 1, at 246.
137. J. Stucker, *Successful transactions. Valuation considerations and purchase price development in the M&A process*, EXPERTsuisse seminar from 22 Nov. 2022, at 4.

Figure 2. Negotiation process between seller and buyer



3.4. Summary of conceptual and technical differences

In practice, situations in which IP (transferred intra-group and requiring a valuation for TP purposes) has been valued for another purpose^[138] already, are likely in the minority.^[139] In this case, the economic valuation approaches outlined in section 3.3 will be applied to the extent that traditional OECD methods cannot be used. Where IP has been valued for another purpose^[140] already, the question arises whether the PPA IP value can be used to determine the TP value for the IP or whether a separate valuation study needs to be performed.^[141] This section summarizes the main conceptual and technical differences between FV and the ALP, respectively between valuations performed in the context of a PPA and valuations performed for TP purposes based on the ALP.

A number of articles have been written about these fundamental and technical differences.^[142] In a particularly useful essay, Wittendorff compares the two valuation standards along the following three constituent elements: the *controlled transaction*, the *reference transaction* and the *valuation*.^[143] Both valuation standards (FV and ALP) recognize the controlled transaction as actually structured. With regard to the reference transaction, FV is based on a hypothetical market and transaction as well as on hypothetical market participants, which excludes entity-specific factors.^{[144][145]} Regarding the valuation, FV is an exit price, viewed from the one-sided seller's perspective and it relies on a "highest and best use" principle (this results in an objective, market-based value), whereas the ALP considers both perspectives and rejects the highest and best-use principle (this results in a subjective, entity-specific value).^[146] To summarize, while the ALP is mainly intended to prevent income shifting (and double taxation) and to determine the correct taxable income/deduction of a legal entity in a given year, FV reports the value of booked assets, and liabilities in financial statements.^[147]

^{138.} For example, PPA, dispute, M&A or internal analysis.

^{139.} Popa et al., *supra* n. 38, at 38 f.

^{140.} Here the focus is on PPAs.

^{141.} Zhao & Zhang, *supra* n. 15, at 1146.

^{142.} Beebe & Spiller, *supra* n. 4, at 2 f.; Chandler, Blough & Williams, *supra* n. 10, at 1235 ff.; Popa et al., *supra* n. 38, at 49; Sadang, *supra* n. 8, at 4 f.

^{143.} Wittendorff, *supra* n. 79, at 225 f. (see in particular Table 1: Comparison of Fair Value and the arm's length principle).

^{144.} Such as economics of integration or relative bargaining power.

^{145.} Wittendorff, *supra* n. 79, at 225.

^{146.} Id., at 226.

^{147.} Chandler, Blough & Williams, *supra* n. 10, at 1235; Wittendorff, *supra* n. 79, at 226 f.

4. Reasons for and Treatment of Acquisition Premiums

4.1. Strategic considerations of acquisitions and acquisition premiums

To answer the question whether the value of the shares transferred may be the right IP value for TP purposes, it is important to also note the strategic considerations of the acquisition and the acquisition premium.^[148] Five main motives for M&A deals have been identified through extensive research in the 1980s: synergies, bad management of the target company (and the related incremental value that an acquirer believes can be created by running a target more efficiently, which is also referred to as value of control or control premium^[149]), market undervaluation of the target, overvaluation of the target by a potential acquirer, and rent-seeking behaviour of the management and the board of the acquiring company.^[150] *Synergies* and *control premiums* are the two most commonly identified factors that account for the presence of acquisition premiums and are discussed in more detail below. The treatment of synergies and control premiums is particularly challenging given that these concepts are extremely vague and elusive in the business world.^[151]

4.2. Treatment of synergies

Estimating the potential value of synergies (which should necessarily be the result of increased cash flows) is one of the most difficult aspects of cross-border M&A transactions.^[152] It is conceptually useful to categorize the various sources of synergy into operating and financial synergy.^[153] *Operational synergies* allow companies to reduce their operating costs, increase revenue, growth, market power, etc., while *financial synergies* can take the form of higher cash flows, a lower cost of capital (i.e. discount rate), or a more favourable tax status.^[154] If available, it might again be convenient to use the synergy values as presented in a PPA. However, it is important to note that synergies are treated in a specific way in PPAs: as the FV reflects the value of market participant synergies (market participant synergies are synergies that would be realized by the typical market participant), buyer-specific synergies (buyer-specific synergies are those synergies that a specific buyer expects in excess of those that a typical market participant may realize) are not taken into account.^[155] In contrast, a valuation of synergies for TP purposes should include buyer-specific synergies.^[156] Damodaran suggests that synergy can be valued by answering the following two fundamental questions:^[157]

- *What form is the synergy expected to take?* For synergy to have an effect on value, it has to influence one of the key parameters of a valuation. These are either higher cash flows from existing assets (e.g. due to cost savings and economies of scale), higher expected growth rates (e.g. due to enhanced market power), a longer growth period (e.g. from increased competitive advantage), or a lower cost of capital (e.g. due to a higher debt capacity).
- *When will the synergy start affecting cash flow?* The realization of synergies must be carefully planned and monitored in the post-acquisition integration process as they are likely to show up only over time. The longer it takes for synergy effects to show up, the lesser their value.

For each type of synergy, a specific DCF valuation model needs to be designed. To value operating synergy, for example,^[158] a simple three-step approach can be followed:^[159]

- *Step 1:* Independent valuation of the firms involved in the M&A transaction by discounting expected cash flows at the weighted average cost of capital (WACC^[160]) of each entity.

^{148.} Zhao & Zhang, *supra* n. 15, at 1145.

^{149.} Cornell, *supra* n. 19, at 63.

^{150.} Id., at 60 f.

^{151.} De Moraes e Castro, *supra* n. 62, at 107; Reams et al., *supra* n. 19, at 43.

^{152.} Damodaran, *supra* n. 62, at 5; Ray & Ray, *supra* n. 7, at 120 and 131.

^{153.} Damodaran, *supra* n. 62, at 2 and 4; Ray & Ray, *supra* n. 7, at 120 and 125; Reams et al., *supra* n. 19, at 43.

^{154.} Damodaran, *supra* n. 62, at 4; Reams et al., *supra* n. 19, at 43.

^{155.} Chandler, Blough & Williams, *supra* n. 10, at 1237.

^{156.} Id.

^{157.} Damodaran, *supra* n. 62, at 6.

^{158.} See Damodaran, *supra* n. 62, at 10 ff., for a detailed discussion on how various types of synergies (cost synergies, growth synergies, diversification, cash slack, tax benefits and debt capacity) may be valued in practice.

^{159.} Damodaran, *supra* n. 62, at 6 f.

^{160.} The application of DCF methods requires the determination of an appropriate discount rate. DCF methods are applied under conditions of uncertainty. It is assumed that marketplace participants are said to be *risk averse*. A risk-averse market participant prefers situations with a narrower range of uncertainty over situations with a greater range of uncertainty relative to an expected income. Market place participants seek compensation, referred to as a *risk premium*, for accepting uncertainty. Therefore, the determination of the discount rates implies the comparison of the cash flows generated by the IP asset with the cash flows generated with the most favourable *alternative investment*. In this respect, it must be carefully observed that the cash flows from the asset being valued and the alternative investments are equivalent in terms of risk and maturity. The determination of the asset-specific/risk-adjusted discount rate is based on the WACC.

- *Step 2*: By adding the values obtained in step 1, the value of the combined firm *with no synergy* is obtained.
- *Step 3*: By building in the effects of synergy into the key parameters of the valuation model, the value of the combined firm *with synergy* is obtained. The difference between step 2 and step 3 then provides a *value for synergy*.

As will be demonstrated in section 4.3, it is key to keep the value of synergy apart from the value of control to avoid double counting of synergy effects. After considering the sources and nature of synergies and valuing them accordingly, the next step is to address the allocation issue by choosing the most appropriate^[161] TP method.^[162] One-sided,^[163] price-based methods are of limited use because of the necessity to find market comparables.^[164] Although the two-sided comparable CUP method is the most direct and reliable way to apply the ALP,^[165] it also requires the highest degree of comparability (regarding the physical features of goods and services), which equally limits its use in addressing the allocation problem of synergies.^[166] The two-sided^[167] profit split method (based on a contribution analysis^[168]) is designed to work in those situations.^[169]

As mentioned before, synergies should be shared between the members of the group in proportion to their contributions to the creation of synergy based on a functional analysis^[170] according to the OECD.^[171] The basic proposition for fair sharing of synergy may thus be expressed as follows: “Since synergy requires skills and strengths contributed by both the acquiring and target firms for its existence, the acquiring company’s share of the synergy will depend upon how unique the strengths it brings to the mix are. In the limiting case, if only the acquiring firm has the components necessary for the synergy firm, it should receive a large share of the synergy benefits [and vice versa].”^[172] Applying this basic proposition to five important sources of synergy yields the *framework for sharing* as shown in Table 1.^[173]

Table 1. Framework for sharing synergy

Synergy	Allocation
Cost savings	If cost savings are unique to the acquiring firm (e.g. in the case of locational synergies), it can demand a higher percentage of synergy benefits.
Growth	If the strengths and skills that the acquiring firm brings to the table are difficult to replicate, it can demand a higher percentage of the synergy benefits.
Debt capacity	Such synergies can typically only be realized if the entities involved are in different businesses and risky on a stand-alone basis. To the extent that neither firm has unique strengths, synergy benefits will be split fairly equally.
Cash slack[*]	Cash slack synergies result from a combination of cash and growth opportunities – the sharing of related benefits thus depends on the relative scarcity of these strengths across the market.
Tax benefits	The acquiring firm’s share depends on how integral it is to receiving either higher tax deductions after the merger or a lower tax rate.

* If a firm with excess cash (cash slack) combines with a firm with high-return projects (i.e. growth opportunities) and limited cash, higher value for the combined firm comes from projects realized with the excess cash that would otherwise not have been taken. Damodaran, *supra* n. 62, at 5.

Although theory seems clear, application and quantification of the value creation concept remain challenging in practice. However, just as the phase-gate process or the RACI^[174] model can help to operationalize a DEMPE analysis, cooperative game theory (in particular, the Shapley value model) may be used to quantify the split of profits or value created due to group synergies.^[175] The Shapley value provides a useful and workable way to determine a fair and arm’s length division of rewards

161. OECD Guidelines, para. 2.1 ff.
 162. Damodaran, *supra* n. 62, at 35; Peng, *supra* n. 17, at 383.
 163. One-sided methods include the resale price method, cost-plus method and transactional net margin method.
 164. Peng, *supra* n. 17, at 383.
 165. OECD Guidelines, para. 2.15.
 166. Peng, *supra* n. 17, at 383 f.
 167. Two-sided methods include the comparable uncontrolled price method and the transactional profit split method.
 168. OECD Guidelines, para. 2.150. In a contribution analysis, the profits of transactions between contracting related parties are allocated on the basis of an arm’s length agreement.
 169. V. Hahn et al., Shapley Value: A Fair Solution To the Value Creation Puzzle In Transfer Pricing?, 104 Tax Notes International 4, at 296 (2021); Peng, *supra* n. 17, at 383.
 170. Value creation for IP in particular is based on the concept of the DEMPE contributions made by the various members of an MNE. See Hahn et al., *supra* n. 169, at 293 f.
 171. OECD Guidelines, para. 1.177 ff.; Collier & Andrus, *supra* n. 6, at para. 6.62; Pankiv, *supra* n. 33, at 469; Peng, *supra* n. 17, at 382.
 172. Damodaran, *supra* n. 62, at 35 f.
 173. See id., at 36 f. for more details.
 174. The acronym “RACI” stands for responsible, accountable, consulted, and informed.
 175. Hahn et al., *supra* n. 169, at 294; S. Batrakova & A. Hoefele, *Group Synergies and the Shapley Value Analysis: A Game Theory Approach*, 24 Intl. Transfer Pricing J. 5, at 351 (2017), Journal Articles & Opinion Pieces IBFD.

to each party in a transaction based on each entity's marginal contribution to overall value creation.^[176] Even though the Swiss tax authorities have so far not encountered valuations involving the Shapley value concept, it can be expected that both the Federal Tax Administration (FTA) and the State Secretariat for International Finance (SIF) would be open to such approaches.

4.3. Treatment of control premiums

The value of control differs from the value of synergy in significant respects: while *synergy* is created by combining two entities (these entities may be firms, businesses or projects), *control* resides entirely in the target firm.^[177] Control premium represents the incremental amount an investor is willing to pay to acquire control of a company^[178] and the incremental value an acquirer believes can be created by operating the target firm more efficiently.^[179] The term “control premium” has created confusion as some people erroneously use it to represent the overall acquisition premium offered by buyers in taking over a public company.^[180] It is therefore useful to distinguish between *investment control* (i.e. the ability to immediately convert shares to cash) and *management control* (i.e. the ability to hire senior managers, oversee corporate operations, determine whether a company should be sold etc.).^[181]

Given that even minority public shareholders have total control (this is all the control any public investor needs)^[182] over their investment, there is no control premium associated with *investment control*.^[183] *Management control*, on the other hand, is vested in the board of directors for all public companies.^[184] As the board should always try to maximize the value of the outstanding shares, transferring control from one board to another may only have an impact on value if the latter can run the firm differently or better.^[185]

To distinguish between the value of synergies and the value of control, Damodaran suggests doing two DCF analyses. Valuing the company run by the incumbent managers results in a *status quo value* while its revaluation with a hypothetical “optimal” management team results in an *optimal value*.^[186] The value of control is the difference between these two sets of projections, without exploiting any other synergies.^[187] Another possibility to quantify the expected value of control is to view it as the product of the *change in value from changing the way a firm is operated* and the *probability that this change will occur*.^[188] In a DCF framework, the value of a firm can be enhanced by increasing the cash flows from existing assets, increasing the expected growth rates in these cash flows, extending the length of the high growth period or reducing the cost of capital. The probability of changing control (management change) is greater the more power stakeholders have and the stronger corporate governance systems are. Given that the value of control thus derives from changing the way a firm is run, simple rules of thumb to determine what it is worth must be clearly rejected.^[189]

To summarize, “[c]ontrol is worth more at badly managed, badly run firms than it is at well managed, well run firms”^[190]. If the target firm is run optimally already, the value of control may be zero^[191] and no control premium should be added – in this case, acquisition premiums are therefore the result of other factors, such as operating and financial synergies.

4.4. Treatment of milestone payments

While valuing IP is challenging in general, it is even more so for IP that is yet in a development stage (i.e. not yet ready to be commercialized) and for which no comparables will likely be available at the time of transfer.^[192] This type of IP has to

176. Hahn et al., *supra* n. 169, at 302; see Batrakova & Hoefele, *supra* n. 175, at 351 and 354 for a numerical example on how the Shapley value can be used for analysing synergies such as economics of scale.

177. Damodaran, *supra* n. 62, at 47.

178. This amount is typically higher than the current market value of the firm.

179. A. Damodaran, *The Value of Control: Implications for Control Premia, Minority Discounts and Voting Share Differentials*, working paper, at 3 (2005); Damodaran, *supra* n. 62, at 7; Reams et al., *supra* n. 19, at 43; A. Damodaran, *The Value of Control: Some General Propositions*, working paper, at 3.

180. E.W. Nath, *Best Practices Regarding Control Premiums: Comments Regarding the Appraisal Foundation's Proposed White Paper on Control Premium*, *Journal of Business Valuation* 2, at 28 (2011); Reams et al., *supra* n. 19, at 43.

181. Cornell, *supra* n. 19, at 54; J.R. Hitchner, *Financial Valuation: Applications and Models*, Wiley Finance Series, at 54 (2011); Reams et al., *supra* n. 19, at 43.

182. Nath, *supra* n. 180, at 28.

183. Nath, *supra* n. 180, at 26; Reams et al., *supra* n. 19, at 43.

184. Cornell, *supra* n. 19, at 54; Hitchner, *supra* n. 181, at 54.

185. *Id.*

186. Damodaran, *supra* n. 179 (*The Value of Control: Implications*), at 3.

187. Cornell, *supra* n. 19, at 63.

188. Damodaran, *supra* n. 179 (*The Value of Control: Some General Propositions*), at 3.

189. Damodaran, *supra* n. 179 (*The Value of Control: Some General Propositions*), at 30. V. Jentsch, for example, argued that in Swiss valuation practice control premiums would range between 10% and 30% with the average control premium likely to have settled at around 20%, see V. Jentsch, *Unternehmensbewertungen von nicht börsenkotierten Kapitalgesellschaften im Gesellschafts- und Umstrukturierungsrecht*, GesKR, at 233 (2019).

190. Damodaran, *supra* n. 179 (*The Value of Control: Some General Propositions*), at 30.

191. Damodaran, *supra* n. 179 (*The Value of Control: Some General Propositions*), at 30 and 32; Hitchner, *supra* n. 181, at 56.

192. Stein, Schwarz & Freudenberg, *supra* n. 1, at 247; Riedl & Schwinger, *supra* n. 33, at 457.

be categorized as “hard to value intangible” (HTVI) according to the OECD.^[193] The special rules for HTVI introduced by the OECD in 2017 allow tax authorities to retrospectively adjust transfer prices set *ex ante* based on *ex-post* findings under certain circumstances.^[194] The Swiss tax authorities do not apply the HTVI approach and it has been rejected in the literature as being incompatible with Swiss case law on hidden profit distribution.^[195] The OECD (as well as the Swiss tax authorities) acknowledges that there is a variety of mechanisms that independent companies might adopt to address high uncertainty in the valuation of IP at the time of the transaction and recommends the use of alternative valuation methods or pricing models that independent companies would have used in comparable circumstances.^[196] In practice it is increasingly common to address high uncertainty by applying flexible pricing models such as *milestone payments*. Such payments become due only when certain milestones (e.g. approval milestones, such as the first regulatory approval of the IP in the European Union or sales milestones, such as a cumulative sales revenue of CHF 500 million (globally) within ten years) have been reached.^[197]

The practically relevant question from a TP perspective is whether such future milestone payments have an impact on the IP value as determined at the time of the transfer. As shown in the case study below, the answer to this question depends on the *materiality* (if potential future milestone payments are negligible compared to the acquisition price, tax authorities may likely not further investigate this matter) of such payments compared to the acquisition price and the *nature* of the milestone.

5. Case Study Solutions

This section answers the three main research questions raised in the introduction:

- **Solution (1):** The OECD Guidelines (and most tax authorities around the world) recognize economic (in particular income-based^[198]) valuation techniques as useful tools in estimating arm’s length prices for the intra-group transfer of IP.^[199] Valuations of IP contained in PPAs performed for accounting purposes are not determinative for TP purposes but may serve as a “starting point”.^{[200][201]} Using the PPA IP value of CHF 20 million in the sense of a “starting point” is therefore appropriate but certainly needs to be supported by a proper valuation method^[202] (*bottom-up approach*). Given that the IP transfer occurred immediately after the M&A transaction, tax authorities may likely view the acquisition as a basis for the implementation of the CUP method (*top-down approach*).^[203] The higher the value of transferred IP compared to the overall acquisition price, the easier (and more reliable) it generally is to assess the IP value using a top-down approach (given that only minor adjustments will be required) – and vice-versa. Based on such a top-down approach, a maximum value for the IP can be derived while based on a bottom-up approach, estimation of an accurate value should be possible.

193. OECD Guidelines, para. 6.189 f. See also the further guidance published by the OECD in June 2018 for tax authorities on the application of the approach to hard-to-value intangibles.

194. T. Hug, *Schwer bewertbare immaterielle Werte im Verrechnungspreisrecht*, Expert Focus 12, at 1025 ff (2019).

195. Harbeke, Hug & Scherrer, *supra* n. 8, at para. 852; Hug, *supra* n. 194, at 1028 f.

196. OECD Guidelines, para. 6.181 f.; Hug, *supra* n. 194, at 1029.

197. Baumgartner & Keller, *supra* n. 21, at 50 f.

198. The income approach converts a stream of expected future economic benefits into a single present value. This approach is typically estimated through a DCF method, which is based on the premise that the value of an investment comes from the receipt of future cash flows or economic benefits. These benefits consist of earnings, cost savings, tax deductions and proceeds from disposition. Under the DCF method, the valuation comprises of the present value of future cash flows for the expected life of the asset discounted at a rate of return that considers the relative risk of achieving the cash flows and the time value of money. Finally, a terminal value may be used to calculate the value of the future cash flows in perpetuity. The OECD Guidelines explicitly endorse the application of the income approach for the valuation of IP provided it is applied properly (see OECD Guidelines, para. 6.153).

199. OECD Guidelines, para. 6.153.

200. Id., para. 6.29.

201. Id., para. 6.29 and 6.155. See also examples 23 and 26 of ch. VI, Annex I (examples on intangibles of the OECD Guidelines).

202. For example, a DCF-based relief-from-royalty method.

203. OECD Guidelines, para. 6.147. According to para. 6.145 of the OECD Guidelines, the CUP method and the transactional profit split method are the most useful ones in valuing transfers of IP. The CUP method evaluates whether the amount charged in a controlled transfer of IP is arm’s length by reference to the amount charged in an uncontrolled transaction involving a transfer of similar IP with similar profit potential. Two types of comparables can be used to apply the CUP method: *internal CUPs* (i.e. transactions involving a related party and unrelated third parties) and *external CUPs* (i.e. transactions involving only unrelated third parties). In addition to similar profit potential, key comparability factors to consider in applying the CUP method include the circumstances of the intangibles’ transfer, the time and terms of transfer, stage of IP development, uniqueness of the IP, risks incurred, and services provided as part of the IP being transferred. If possible, adjustments should be made for any differences in these factors between potential CUPs and the tested transactions to improve comparability. The CUP method is often most reliable when internal CUPs are available. Under the *profit split method* (PSM), the combined operating profit or loss from the relevant business activity is allocated between the controlled taxpayers in a two-step process. The *first step* requires a market return for routine contributions be allocated to each party under one of the other specified methods. Routine contributions ordinarily include contributions of tangible property, services and IP owned by uncontrolled taxpayers engaged in similar activities. But income allocated under the first step will not reflect profits attributable to the controlled group’s valuable IP where similar property is not owned by the uncontrolled taxpayers from which market returns are derived. In cases where such IP is present, there normally will be an unallocated residual profit. Under the *second step* of the PSM, residual profit is divided among the controlled taxpayers based on the *relative values of their contributions* to the relevant business activity other than their routine contributions. The PSM is not applicable when only one controlled taxpayer makes significant non-routine contributions.

Ideally, these two values will be relatively close. In practice, tax authorities often corroborate^[204] the IP value derived through a bottom-up approach with the IP value derived through a top-down approach.^{[205][206]} The downward adjustments to the purchase price depend on identifying and quantifying the factors that make up the purchase price, but are not attributable to the transferring IP. These downward adjustments may include synergies, a premium for control, net tangible assets and routine returns to other business functions.^[207] In the case at hand, the IP is worth CHF 20m based on a DCF valuation.

However, the stark discrepancy with the acquisition price calls into question whether the DCF method has been properly applied. Departing from an acquisition price of CHF 200 million and considering the profit potential that remained in Switzerland (CHF 1 million p.a.), the following back-of-the-envelope calculation can be made: discounting CHF 1 million p.a. with a generous discount rate of 10% and considering a perpetual annuity results in a present value of CHF 10 million. IP in the amount of CHF 190 million (CHF 200 million – CHF 10 million) must thus have left Switzerland and should be accounted for (maximum IP value before appropriate adjustments) for tax purposes. Unless the taxpayer can transparently and convincingly defend the parameters used in the DCF model, tax authorities will likely assess this case based on the acquisition price method. Tax authorities will thus depart from the initial acquisition price of CHF 200 million and make appropriate adjustments as they deem fit.

- *Solution (2)*: Assuming that the values for cost synergies (CHF 40 million) and growth synergies (CHF 100 million) have been properly determined, the question is how these should be allocated among the parties and how they thus impact the IP value. As outlined in section 3.1., valuations for PPA purposes do not take buyer-specific synergy effects into account. They are thus allocated to goodwill instead of the IP. For TP purposes, however, buyer-specific synergies should be taken into account to the extent that they have an impact on future business results. As shown in section 4.2., the acquiring company's share of the synergy will depend upon how unique the strengths it brings to the mix are. Let's assume that other pharmaceutical groups could have generated the same cost savings – they are therefore equally split between Pharma AG and Innovation AG. Let's also assume that Pharma AG has a unique blend of technological and marketing skills and has strong experience in converting promising IP into commercial products.^[208] A large part of growth synergies (e.g. 90% of the overall growth synergies of CHF 100 million, i.e. CHF 90 million) are thus attributed to Pharma AG. Assuming that the inputs used in the DCF valuation reflect an already well-managed firm, no additional control premium is added in this case.^[209]

This leaves the question of how to deal with goodwill (CHF 140 million). Depending on the facts, a substantial portion of the value described in the PPA as goodwill of Innovation AG may have been transferred to Pharma AG together with the other IP of Innovation AG.^[210] Depending on the facts, some portion of the value described in the PPA as goodwill may also have been retained by Innovation AG.^[211] To address this issue, it has to be examined whether the change in the functional and risk profile (F&R profile) of Innovation AG constitutes a transfer of functions that is subject to compensation. Articles 61a and 61b of the Federal Act on Direct Federal Taxation (FDTA) and articles 24c and 24d of the Federal Act on the Harmonization of Direct Taxes of Cantons and Municipalities (FTHA) cannot be interpreted in such a way that a mere transfer of functions (without at least constituting a partial business)^[212] leads to a liability of compensation,

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204. In practice it is common (and highly recommended) to use two different methods (*primary method* [e.g. a DCF method] and *corroborative method* [e.g. trading multiples or transaction multiples]) to corroborate the results of the first method used. This will further strengthen taxpayers' basis for defending their position on audit.
205. Also referred to as corroboratory acquisition price method.
206. As no specific valuation methodologies are proposed by Swiss tax law, the commonly applied standard valuation methods are used in practice. Honold & Stocker, *supra* n. 17, at 711.
207. *Synergies*: Synergies are an important component for a company to offer a premium price to acquire a target company. As mentioned before, such synergies typically fall into one of two categories: *operational* and *financial*. *Operational synergies* include expected increased revenues, cost-savings, investment cutbacks and greater market power. *Financial synergies* are those to be gained from combining capitalization structures and consist of higher expected cash flows, lower discount rates and enhanced debt capacity. *Control premium*: If the valuation is a status quo valuation, a control premium may be added provided that there is a potential for (management) change and a more effective use of resources. *Tangible assets*: To isolate and determine the value of IP (as a residual), value attributable to tangible assets net of short-term liabilities would need to be deducted from the purchase price. These values are readily identifiable from the target's balance sheet as provided by the client. *Routine returns*: The value of any business assumes the development of products and markets, manufacturing or sourcing capabilities, quality control, logistics and distribution channels, and post-sales support and services. Such activities and the related assets are implicitly included in the value and the amount paid by the acquirer. The value of these routine activities may be material and needs to be reduced from the purchase price to determine the value of the IP.
208. Damodaran, *supra* n. 62, at 36.
209. After considering these adjustments, a (maximum) IP value of CHF 80 million results for TP purposes: CHF 200 million (acquisition price) – CHF 10 million (profit potential remaining in Switzerland) – CHF 20 million (cost synergies attributable to buyer) – CHF 90 million (growth synergies attributable to buyer) – CHF 0 million (control premium) = CHF 80m.
210. As shown in section 2.2., goodwill may not be a separate asset and it is generally accepted in Swiss tax law that goodwill cannot be transferred separately from other assets of a company.
211. See example 23 in *OECD Guidelines*, ch. VI, Annex I (examples on intangibles).
212. Hiny, *supra* n. 34, at 333 ff.; P. Hiny, *Unternehmenssteuerreform (STAF). Praxiskommentar*, EXPERTsuisse (2021) for detailed explanations on the tax treatment of transfers into and out of Switzerland (including the relocation of functions) following adoption of the Federal Act on Tax Reform and AHV Financing (TRAF) as of 1 January 2020.

respectively consideration of goodwill in the valuation. In the case at hand, neither the changes in the F&R profile relating to management^[213] nor distribution^[214] trigger such liability of compensation. The change from a fully-fledged R&D entity to a contract R&D service provider includes the transfer of (not yet marketable) IP, which can be valued using the valuation techniques^[215] presented in section 3.3. In this context, there is no scope for additional compensation or goodwill allocation. In the case at hand, it is therefore assumed that no additional goodwill (beyond the buyer-specific cost and growth synergies) has been transferred from Innovation AG to Pharma AG.

- *Solution (3)*: The Swiss taxpayer will argue that these milestone payments only become due because of further DEMPE-related activities performed and investments made in Germany. It will thus argue that the IP was correctly valued and transferred at CHF 20 million. However, given that the potential future milestone payments are even higher than the initial IP value, the nature of the milestone would need to be further investigated by the FTA.

With regard to the *approval milestone*, the relevant question is how much of this payment is attributable to the value creation and development that took place in Switzerland during clinical phases I and II and how much to the additional R&D and related investments in Germany. In the pharmaceutical industry an active ingredient that successfully passed clinical phase II typically has a relatively complete product DNA, which means that only marginal (though important) changes will be made in phase III.^[216] This implies that the first two phases have considerably contributed to value (let's assume 80%).

With regard to the *sales milestone*, however, the importance of German investments in marketing and related commercial activities is likely significantly higher (let's assume 90%). Using reasonable estimates for future variables^[217] and the already known parameters,^[218] the additional value of potential future milestone payments attributable to Switzerland can be calculated using a DCF method. Based on the parametrization of the DCF model, the expected value of milestone payments (i.e. the additional IP value to be taxed in Switzerland)^[219] attributable to Switzerland is CHF 5.42 million.^[220] The arm's length transfer price for the transfer of IP from Innovation AG to Pharma AG in *step 2* would thus need to be increased accordingly.

6. Conclusions

Section 3. of this article has shown that FV and the ALP are distinct valuation standards that diverge from each other in significant aspects.^[221] A detailed comparison analysis of the PPA versus TP IP valuation, including their underlying assumptions, is therefore all the more important.^[222] The starting point of such exercise should always be an understanding of the general background of a valuation and a functional analysis to determine what IP assets have been transferred and what their exact impact is.^[223] Taking these differences into account and using an integrated approach to both the preparation of PPAs and TP valuations can provide taxpayers with a strong basis for defending their position on audit.^[224]

Section 4. has highlighted the importance of distinguishing between the value of synergies and the value of control. Once the value of control has been estimated, the value of synergy can be estimated using the three-step approach outlined in section 4.2.^[225] In many cases,^[226] there are no control premiums and acquisition premiums are mainly the result of synergy-related factors.^[227] Especially in the context of HTVIs, milestone payments are a practically important tool for addressing valuation-related uncertainties. To assess an arm's length IP value, it is important to evaluate in detail which parties contributed to the value that milestone payments are supposed to compensate.

213. According to the prevailing view, this is a routine function and therefore not subject to compensation.

214. The change to a LRD does not trigger a transfer of IP and the customer base remains with the distributor. It also does not involve the transfer of a separable part of a business operation (*Teilbetrieb*), but merely involves an adjusted allocation of risks. Such change is not subject to compensation.

215. Potentially involving pricing models that are able to address high uncertainty in the valuation of IP.

216. The purpose of clinical phase III trials is to provide evidence of the efficacy and reliability of a new drug. This final stage before potential approval usually includes a large number of patients who are carefully selected and meet certain inclusion and exclusion criteria.

217. The following probabilities need to be estimated: probability of successful clinical phase III study (e.g. 30%), probability of approval once phase III has been successfully completed (e.g. 80%), probability of reaching the sales milestone after successful approval (e.g. 50%) and probability of approval (e.g. 30%).

218. Known parameters are the last bond interest rate of the German PharmaGroup, which may be used as a discount rate (let's assume the WACC is 4%) and the expected time period within which the milestones can be reached (approval milestone within three years and sales milestone within ten years).

219. Exit taxation.

220. See section 7., *Appendix*, for details on the calculation (*Milestone Payments Simulation*).

221. Wittendorff, *supra* n. 79, at 226.

222. Popa et al., *supra* n. 38, at 12; Zhao & Zhang, *supra* n. 15, at 1147.

223. *Id.*

224. Chandler, Blough & Williams, *supra* n. 10, at 1235. Nine useful recommendations on how to apply economic valuation techniques in a TP context are outlined in a 2017 report from the EU Joint Transfer Pricing Forum, see EU Joint Transfer Pricing Forum (JTPF), *Report on the Use of Economic Valuation Techniques in Transfer Pricing*, European Commission (2017), at 4 ff.

225. Damodaran, *supra* n. 62, at 47.

226. Particularly if the DCF valuation is based on inputs that reflect a well-managed firm, see Damodaran, *supra* n. 179 (*The Value of Control: Some General Propositions*), at 32.

227. Reams et al., *supra* n. 19, at 43.

To summarize, there is no simple way to find the right IP valuation approach and the use of methods is highly context-specific (this choice will, for example, depend on the type of IP to be valued, the availability of data and other information, the reason for the valuation or the timing of the valuation in the life cycle of the IP).^{[228][229]} As Lagrost et al. have rightly observed, “[t]here is no simple way to find the right evaluation approach to apply in evaluating an IP asset but rather a set of questions and decisions that an evaluator must respond to in order to produce the most accurate and reliable IP valuation”^[230]. Nevertheless, considering the “best practices” listed below may significantly reduce the risk of high-stakes conflicts between taxpayers and tax authorities in case of TP audits involving IP valuations for TP purposes.^[231] Generally, the number of IP-related TP audits can be expected to further increase due to regular exchange of information and ever-increasing cooperation between tax administrations of different countries. The lack of an international valuation standard further accentuates the issue of potential double taxation in audits. This is especially the case for highly innovative countries such as for example Israel (which is often referred to as the “start-up nation”) or Switzerland.

Best practices in IP valuation include:

- **Consistency with the ALP:**^[232] When economic valuation approaches are applied in the framework of a TP analysis, it is essential to ensure an application that is consistent with the ALP. This is particularly important in times of economic downturn (e.g. COVID-19 pandemic), as such events can have a significant impact on key parameters of the DCF method.^[233]
- **Two-sided valuation(s):**^[234] A thorough examination of both sides of a transaction (including a sensitivity analysis^[235]) is required for evaluating transfers of IP. This exercise usually results in a range of values rather than a specific price and if the seller’s minimum price is lower than the buyer’s maximum price, the arm’s length price will fall within such range.
- **Transparent documentation:**^[236] A transparent conduct and documentation of the entire process,^[237] including valuation assumptions, will increase the acceptability of the results thereof and validation in a tax audit. Solid documentation is especially important because TP valuations are often reviewed only a few years after they have been prepared. Furthermore, the tax authorities performing the review typically have a different (and likely less technical) background than the (valuation) professionals who prepared the report and are willing to second guess both methods and data.^[238]
- **Consistent IP valuation:**^[239] Establishing and following a consistent IP valuation process that is reasoned and takes all necessary factors^[240] and stakeholders (e.g. group accounting, M&A corporate team, valuation specialists, integration team, tax or legal under the leadership of business)^[241] into account is recommended. Given the unique nature of every M&A deal, it is certainly difficult to standardize the process. Nevertheless, a general framework or policy may be helpful and provides guidance.^[242]

As always in TP, valuing intra-group IP transfers following international M&A transactions is about finding a *balanced* solution:

228. Lagarden, *supra* n. 1 (*Immaterielle Wirtschaftsgüter*), at 699.
 229. Lagrost et al., *supra* n. 113, at 498; Popa et al., *supra* n. 38, at 62.
 230. Lagrost et al., *supra* n. 113, at 498.
 231. Hubscher & Houllie, *supra* n. 7, at 219; Riedl & Schwinger, *supra* n. 33, at 458.
 232. OECD Guidelines, para. 6.154; Bellini, Iervolino & Latino, *supra* n. 120, at 24; Popa et al., *supra* n. 38, at 94.
 233. Bellini, Iervolino & Latino, *supra* n. 120, at 24 and 28. See in particular Popa et al., *supra* n. 38, at 94 ff., which summarizes important considerations for a valuation from a TP perspective that are a consequence of the ALP, divided into the main building blocks of a typical valuation (financial projections, royalty, routine return, discount rate, useful life and terminal value).
 234. OECD Guidelines, para. 6.157; Collier & Andrus, *supra* n. 6, at para. 6.66; EU Joint Transfer Pricing Forum (JTPF), *supra* n. 224, at p. 14; N. Harbeke, Hug & Scherrer, *supra* n. 8, at para. 834.
 235. The *sensitivity analysis* aims to determine the *key risk factors* influencing the estimated IP value. Sensitivity analysis can help to understand the range of potential outcomes in order to interpret model output results and to evaluate the sensitivity of models to key assumptions. Main steps in performing a sensitivity analysis are: (i) identification of key risk factors and drivers that influence the estimated equity value; (ii) design of the “what-if” analysis; (iii) calculating the impact of the “what-if” analysis.
 236. OECD Guidelines, para. 6.160; Lagarden, *supra* n. 1 (*Intangibles*), at 339.
 237. A solid documentation of any M&A deal should include “the before situation”, the *restructuring* itself, and “the after situation”. See H. Flood, *Business Restructuring: The Question of the Transfer of Intangible Assets*, 115 ntl. Transfer Pricing J. 4, at 179 (2008), Journal Articles and Opinion Pieces IBFD.
 238. Chandler, Blough & Williams, *supra* n. 10, at 1237; Popa et al., *supra* n. 38, at 109.
 239. OECD Guidelines, para. 6.161; Ackermann, *supra* n. 9, at 439.
 240. For example, identification of IP, data collection and analysis, application of economic valuation approaches, conclusions on the IP value.
 241. It is good practice to tackle any PPA or tax valuation exercise and M&A transaction in general with an *interdisciplinary team*. Coordinating and streamlining efforts by a company’s financial reporting group and its tax group may also lead to savings in terms of time and costs and ensures consistency among the valuation analyses. *Areas of convergence (or divergence)* in the methodologies used should be addressed and documented early on (rather than having to justify different approaches later, when potentially material tax consequences may already have arisen). Lagarden, *supra* n. 1 (*Intangibles*), at 332; Sadang, *supra* n. 8, at 6; Wachowicz, Brower & Sunisloe, *supra* n. 89, at 6.
 242. R. Welte, *M&A: Auf was es bei einer erfolgreichen Unternehmenstransaktion ankommt. Tipps aus der Praxis*, EXPERTSuisse seminar from 22 Nov. 2022, at 28.

While recognizing that an existing PPA valuation study may serve as a starting point for TP valuation, due diligence requires that “taxpayers should make sure to perform a detailed functional and risk analysis, assess whether the historical transfer pricing policies of the acquired entity is at arm’s length, understand the nature and the commercial substance of post-M&A restructuring, and study the transferred value at the legal-entity level”.^[243]

7. Appendix – Milestone Payments Simulation

Approval milestone (CHF)		WACC	Time period
Approval milestone (CHF)	30,000,000	4.0%	3
Discounted approval milestone (CHF)	26,669,891		
Probability of successful clinical phase III study	30.0%		
Probability of approval once phase III has been successfully completed	80.0%		
Overall probability that milestone events will occur	24.0%		
Discounted weighted approval milestone (CHF)	6,400,774		
Share of Switzerland	80.0%		
Share of Germany	20.0%		
Approval milestone attributable to Switzerland (CHF)	5,120,619		
Sales milestone (CHF)		WACC	Time period
Sales milestone (CHF)	30,000,000	4.0%	10
Discounted sales milestone (CHF)	20,266,925		
Probability of reaching the sales milestone after successful approval	50.0%		
Probability of approval	30.0%		
Overall probability that sales milestone will be reached	15.0%		
Discounted weighted sales milestone (CHF)	3,040,039		
Share of Switzerland	10.0%		
Share of Germany	90.0%		
Sales milestone attributable to Switzerland (CHF)	304,004		
Additional value of milestone attributable to Switzerland (CHF)	5,424,623	Additional IP value	

²⁴³. Zhao & Zhang, *supra* n. 15, at 1147.