

Valuation of Intangibles under Income-Based Methods – Part I

This article examines the application of income-based methods to determine the arm's length price of the transfer of an intangible, and discusses alternative non-arm's length taxation approaches relating to intangibles. The domestic transfer pricing regimes of the United States, Germany and Denmark form the basis for the discussion of the use of income-based methods.

1. Introduction

Intangibles are the major source of sustainable competitive advantages for firms. This is evidenced by the continuous increase in the market-to-book ratio (Tobin's q) of multinational enterprises (MNEs).¹ The gap between the market and replacement values has largely been explained by intangibles not recorded on the balance sheet.² The expansion of the services sector, globalization, deregulation and the emergence of new information technologies have led to a structural change, from traditional scale-based manufacturing, which mainly relies on tangible assets, to new innovation-oriented activities, which rely more on research and development, human resources and new organizational structures. As early as 1933, Mitchell B. Carroll realized the importance of intangibles for businesses: "[In] the alchemy of a successful business, the intangible, immeasurable element of brainwork is a very important factor, if not the most vital factor."³

Valuation of intangibles in transfer pricing is made on the basis of the arm's length principle, both domestically and internationally.⁴ Income allocation under the arm's length principle is made with reference to market transactions. With intangibles being the primary profit driver of market transactions, the application of the arm's length principle to controlled transactions means that the assignment of the ownership of intangibles within an MNE significantly affects the income allocation between associated enterprises and the national tax bases. The taxing right to income and capital gains from an intangible is assigned to the residence state under the OECD Model, unless the intangible forms part of the business assets of a permanent establishment in the source state.⁵ Residence taxation means that an MNE may be able to influence where a substantial share of its profits are recorded and taxed. For example an MNE may establish a subsidiary in a low-tax jurisdiction which will conduct R&D activities or engage associated enterprises to perform contract R&D on its behalf. In both cases, the low-taxed subsidiary will normally be recognized as the tax owner of intangibles resulting from the R&D. Alternatively, an MNE may transfer existing intangibles to a low-

taxed subsidiary, although this will often trigger taxation of the transferor. An MNE may thus be able to permanently reduce taxation of its profits under a territorial tax system, or to defer taxation under a worldwide tax system. This provides an incentive to shift intangibles and the associated income to low-tax jurisdictions. Studies indicate that MNEs are in fact exploiting the tax planning opportunities offered by the arm's length principle.⁶ It is therefore not surprising that controlled transactions involving intangibles attract considerable attention from a tax perspective.

Intangibles are not only the subject of transfer pricing scrutiny, but one of the very reasons for the existence of the transfer pricing issue in the first place. Intangible and other firm-specific advantages are thus held to be one of the *raison d'être* for the existence of MNEs.⁷ Among other things, this is explained by market imperfections such as asymmetry of information and uncertainty.⁸ Through internalization, associated enterprises may be able to carry out transactions more economically effectively than independent enterprises that rely on the market.⁹ The creation and exploitation of intangibles is thus

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1. B. Lev, *Intangibles: management, measurement, and reporting* (Washington D.C.: Brookings Institution Press, 2001), at 8.
2. C. Hulten and J. Hao, *Intangible Capital and the "Market to Book Value" Puzzle*, Economics Program Working Paper Series 08-02 (New York: The Conference Board, June 2008).
3. Para. 676 *Taxation of Foreign and National Enterprises – Vol. IV, Methods of Allocating Taxable Income* (Geneva: League of Nations, Document C.425(b).M.217(b).1933.II.A.).
4. Intangibles may be valued under other standards in other areas of tax law.
5. Arts. 7(1), 12(1), 13(2) and (5), and 21(1) and (2) OECD Model. Art. 12(2) of the UN Model assigns a taxing right to the source country with regard to royalties. On the allocation of the taxing right to intangibles, see W. Schön, "International Tax Coordination for a Second-Best World (Part II)", 2 *World Tax Journal* 1 (2010), at 65, 90.
6. R.E. Caves, *Multinational Enterprises and Economic Analysis* (Cambridge: Cambridge University Press, 2007), at 222, with references. See e.g. *U.S. Multinational Corporations Effective Tax Rates are Correlated with Where Income Is Reported* (Washington D.C.: GAO, GAO-08-950, August 2008).
7. R.E. Caves, *Multinational Enterprises and Economic Analysis*, note 6, at 3 and 190; J.H. Dunning and S.M. Lundan, *Multinational Enterprises and the Global Economy* (Cheltenham, UK and Northampton, MA, US: Edward Elgar, 2nd ed., 2008), at 99.
8. B. Lev, *Intangibles: management, measurement, and reporting*, note 1, at 31.
9. Para. 1.10 OECD Guidelines. The economic theory of the advantage of internalization is based on, among others, R. Coase, *Economica* 4 (1937), 386 et seq.; O.E. Williamson, *Markets and Hierarchies: Analysis and Antitrust implications* (1975); J.C. McManus, *The Multinational Firm and the Nation State*, ed. G. Paquet (New York: Collier, 1972), 66 et seq.; P.J. Buckley and M. Casson, *The Future of the Multinational Enterprise* (Palgrave Macmillan, 1976).

one of the hallmarks of MNEs. This is evidenced by the fact that controlled transactions in recent years have accounted for up to approximately 80% of royalties and licence fees received and paid by US enterprises.¹⁰

Under the arm's length principle, intangibles are of relevance in two distinct situations, namely:

- the transfer of intangibles; and
- the exploitation of intangibles in connection with the transfer of goods and services.

An intangible may be transferred in various ways, including an outright assignment of all the substantial rights in the intangible by sale or otherwise, a licence for less than all the substantial rights in the intangible, or a contribution to a cost sharing arrangement.¹¹ An intangible may be exploited in order to produce goods or services which will be sold in controlled transactions, or to distribute goods or services that have been purchased in controlled transactions. Intangibles are thus often relevant for the arm's length test of a controlled transaction that does not involve the transfer of an intangible.

The arm's length test of the transfer of an intangible should take into account that intangibles generally may be exploited in at least three different ways:

- as the basis for the production and sale of goods and services;
- as a platform for the development of new generations of the intangible; and
- by a subsequent transfer of the intangible.

The arm's length test of intangibles accentuates a number of general transfer pricing issues. First, comparable reference transactions rarely exist because intangibles are often unique. Second, the value of an intangible is normally its value in use which is expected to last several years, and which also depends on the resources and competencies of the individual enterprise. Third, these matters give rise to informational asymmetry between taxpayers and the tax authorities. Hence, a proper arm's length test requires detailed knowledge of the technological features of the intangible and its profit potential, the group's strategy and opportunities for exploiting the profit potential, as well as an understanding of complex financial, legal and commercial matters. The uncertainty associated with an *ex ante* valuation of intangibles is a particular problem for the tax authorities. If the actual profits attributable to an intangible exceed the projected profits which influenced the valuation of the intangible transferred in a controlled transaction, the tax authorities may question whether this discrepancy was caused by unforeseen circumstances or by an abuse of the informational asymmetry. The valuation issues are evidenced by the significant amounts that are often at stake in transfer pricing cases dealing with intangibles.

The purpose of this article is twofold. First, an examination is made of the application of income-based methods to determine the arm's length price of the transfer of an intangible. Second, the article will discuss alternative non-arm's length taxation approaches relating to intangibles. The article will neither address intangibles

exploited in the course of the sale of goods and services, nor other important issues such as the definition of intangibles, the identification of the transfer of an intangible, the ownership of intangibles, the joint development of intangibles, and cost sharing. The domestic transfer pricing regimes of the United States, Germany and Denmark will form the basis for the discussion of the use of income-based methods.

The first part of the article will examine and compare the arm's length principle and other valuation standards (see 2.), provide an overview of the methods applied in corporate finance and transfer pricing to value the transfer of intangibles (see 3.), discuss income-based methods vis-à-vis the comparability requirement of the arm's length principle (see 4.) and examine the existing income-based methods (see 5.). The second part of the article will discuss the application of new income-based methods (see 6.) and alternative non-arm's length approaches to the valuation issue with regard to intangibles (see 7.).

2. Valuation Standards

The arm's length principle is not the only valuation standard that may be applied to intangibles. A comparison of the arm's length principle and the valuation standards of corporate finance and financial reporting is of interest because income-based methods rely on corporate finance approaches. Furthermore, valuation experts with limited knowledge about taxation and the arm's length principle are often involved in the valuation of intangibles prepared for transfer pricing purposes. It is therefore critical to ensure that valuation approaches deviating from the arm's length principle do not sneak into transfer pricing analyses.

2.1. The arm's length principle

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

1. Where
 - a) an enterprise of a Contracting State participates directly or indirectly in the management, control or capital of an enterprise of the other Contracting State, or
 - b) the same persons participate directly or indirectly in the management, control or capital of an enterprise of a Contracting State and an enterprise of the other Contracting State,

and in either case conditions are made or imposed between the two enterprises in their commercial or financial relations which differ from those which would be made between independent enterprises, then any profits which would, but for those conditions, have accrued to one of the enterprises, but, by reason of

10. J. Koncz, M. Mann and E. Nephew, "U.S. International Services: Cross-Border Trade in 2005 and Sales Through Affiliates in 2004", 86 *Survey of Current Business* 10 (October 2006); J. Koncz-Bruner and A. Flatness, "U.S. International Services: Cross-Border Trade in 2008 and Services Supplied Through Affiliates in 2007", 89 *Survey of Current Business* 10 (October 2009).

11. *Description of Revenue Provisions Contained in the President's Fiscal Year 2010 Budget Proposal. Part Three: Provisions Relating to the Taxation of Cross-Border Income and Investment* (Washington D.C.: Joint Committee on Taxation, JSC-4-09), at 29.

those conditions, have not so accrued, may be included in the profits of that enterprise and taxed accordingly.

The arm's length principle is interpreted in the OECD Guidelines. The domestic transfer pricing laws of many countries rely on the arm's length principle of Art. 9(1) and the OECD Guidelines.¹²

2.2. Market value

The International Valuation Standards Council (IVSC) uses the following definition of the market value standard:¹³

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

The IVSC has also adopted other valuation standards which put the market value standard into relief:¹⁴

Investment Value, or Worth: The value of property to a particular investor, or a class of investors, for identified investment or operational objectives. This subjective concept relates specific property to a specific investor, group of investors, or entity with identifiable investment objectives and/or criteria.

...

Special Value. An amount above the Market Value that reflects particular attributes of an asset that are only of value to a Special Purchaser.

The differences between the three standards largely rest on whether a one-sided or two-sided perspective is adopted and whether the reference transaction is deemed to take place between the actual parties or hypothetical parties.¹⁵

2.3. Fair value

With regard to financial reporting, the International Accounting Standards Board (IASB) uses the following definition of the fair value standard:¹⁶ "Fair value is the amount for which an asset could be exchanged between knowledgeable, willing parties in an arm's length transaction".

The IASB has proposed to adopt the following new definition of fair value:¹⁷ "Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date". The proposed IASB definition is identical to the definition of fair value applied by the US Financial Accounting Standards Board (FASB).¹⁸ Fair value in financial reporting resembles the IVSC definition of market value¹⁹ and the fair market value standard under US tax law.²⁰

2.4. Comparison

The arm's length principle and the fair value standard (and market value) look alike at first glance, as both focus on the price that would be agreed between unrelated parties in market transactions. A more detailed comparison may be made by a breakdown of the two standards into three constituent elements, namely (1) the con-

trolled transaction, (2) the reference transaction and (3) the valuation.

With regard to the controlled transaction, both standards recognize the controlled transaction as actually structured.²¹

With regard to the reference transaction, both standards require it to be concluded between mutually independent parties.²² The arm's length principle also establishes a comparability requirement under which the reference transaction should be a perfect mirror image of the controlled transaction in terms of all the factors that may affect price formation. The arm's length principle requires both the object and other aspect of the transactions to be comparable. This means a subjective valuation which must be made on an *ex ante* basis.²³ For example in the UK case of *DSG*, the Special Commissioner held that the actual assets, business and attributes of the associated enterprises should remain constant and could be relevant to the determination of the arm's length price under domestic UK tax law which refers to the OECD Guidelines.²⁴ Furthermore, the arm's length principle is based on an assumption of profit maximization²⁵ and arguably also a premise of information symmetry.²⁶ Similarly, fair value establishes a comparability requirement in relation to the object of the valuation, requires the valuation to be made on an *ex ante* basis, and

12. T. Miyatake, *Cahiers de droit fiscal international*, vol. 92a (2007), at 19, 21.

13. Para. 3.1 International Valuation Standard 1 (London: International Valuation Standards Council, 2007).

14. Paras. 3.3 and 3.5 of International Valuation Standard 2 (London: International Valuation Standards Council, 2007).

15. Id. at Para. 6.1.

16. See e.g. International Accounting Standard 16, Property, Plant and Equipment.

17. Para. 1 IASB Exposure Draft 2009/5, Fair Value Measurement.

18. Para. 5 Statement of Financial Accounting Standards (SFAS) 157, Fair Value Measurement.

19. Para. 8.1 Concepts Fundamental to Generally Accepted Valuation Principles (London: International Valuation Standards Council, 2007).

20. SFAS 157, at C50. On the fair market value standard in US tax law, see D. Laro and S.P. Pratt, *Business Valuation and Taxes* (New Jersey: Wiley, 2005), at 7. It has been argued that the arm's length principle is equal to fair market value. See the United States Council for International Business, Comments on Temporary Cost Sharing Regulations, available at www.uscib.org/docs/FINAL_Comments_on_Temporary_Cost_Sharing_Regulations.pdf.

21. Para. 1.64 OECD Guidelines; Exposure Draft 2009/5, IASB, Para. 5; and SFAS 157, Para. 6.

22. Para. 1.6 OECD Guidelines; Paras. 8-10, "Uncontrolled transactions", in *Comparability: Public Invitation to Comment on a Series of Draft Issues Notes* (Paris: OECD, 2006); Exposure Draft 2009/5, IASB, Para. 13; SFAS 157, Para. 10.

23. G. Maisto, *Cahiers de droit fiscal international*, vol. 77a (1992), at 19, 28.

24. Para. 78 *DSG Retail Ltd. v. HMRC*, [2009] SC 3056, 3057, 3060/07. In contrast, in the Australian case of *SNF*, the Court rejected that the test was to determine what consideration an arm's length party in the position of the taxpayer would have paid for the products (Para. 44 *SNF (Australia) Pty Ltd v. Commissioner*, Federal Court of Australia 635 (2010)). The Court determined that an objective valuation should be made where the focus was not on the subjective or special factors of the parties involved in the transaction (e.g. whether they were financially sound or not), but was on the transaction itself and the consideration paid. The decision was solely based on domestic Australian tax law which does not refer to the OECD Guidelines (Para. 48). Hence, the decision does not set a precedent for the interpretation of the arm's length principle of Art. 9(1) of the OECD Model.

25. Paras. 1.34, 1.35, 1.74, 6.14 and 7.33 OECD Guidelines.

26. J. Wittendorff, *Transfer Pricing and the Arm's Length Principle in International Tax Law* (Alphen aan den Rijn: Kluwer Law International, 2010), Chapter 9.2.2.

assumes information symmetry and profit maximization.²⁷ On the other hand, fair value is based on a hypothetical market (principal or most advantageous market), a hypothetical transaction (orderly transaction) and hypothetical market participants.²⁸ The use of hypothetical market participants excludes any element of entity-specific value or any element of value that would not be available in a typical market transaction. Examples of entity-specific factors that may be excluded from fair value include economies of integration,²⁹ the relative bargaining powers, legal rights, tax benefits and location savings.³⁰ This means that fair value constitutes an objective valuation.³¹

With regard to the valuation, both standards are transactional and price-based. An aggregation approach should be applied where the value of an asset in use with other assets exceeds the value of the asset on a stand-alone basis.³² Fair value is based on a highest-and-best-use principle.³³ This principle is rejected in the OECD Guidelines because it implies a one-sided perspective.³⁴ The arm's length principle thus considers the perspective of both parties.³⁵ In principle, fair value is also based on a dual perspective. However, the use of hypothetical market participants and the highest-and-best-use principle means that the profit potentials of both parties will be identical and the valuation essentially one sided. Furthermore, the arm's length principle is premised on determining the appropriate price on a pre-tax basis, whereas the valuation techniques underlying fair value may result in prices being determined on a post-tax basis (see 6.5.4.7.).³⁶

To summarize, the arm's length principle of Art. 9(1) of the OECD Model and the fair value standard (and market value) are distinct valuation standards that diverge from each other in certain significant aspects.³⁷ The outcome of valuations performed under the two standards will thus not necessarily coincide. This should be seen in light of the fact that the two standards pursue different objectives, and that the arm's length principle is applied with respect to an actual transaction between actual parties, whereas fair value is often applied without any actual transaction.

3. Valuation Methods

3.1. Financial reporting and corporate finance

In financial reporting and corporate finance, quantitative methods to determine the fair value of an intangible are classified as (1) cost-based methods, (2) market-based methods and (3) income-based methods.³⁸ In practice, the application of income-based methods is often the preferred approach because reliable input parameters for market-based methods are rarely available, and because cost-based methods are considered to produce unreliable results for most types of intangibles.

An income-based method measures the value of an intangible on the basis of the future economic benefits to be received over its useful life. A direct application of an income-based method determines the future benefits by

tracking the revenues to be derived or costs to be saved from exploiting the intangible. An indirect application determines the future benefits of an intangible using various approaches. In corporate finance, the most com-

27. Exposure Draft 2009/5, IASB, Paras. 7, 8 and 13; and SFAS 157, Paras. 7 and 10.

28. *Id.*

29. On economies of integration in transfer pricing, see J. Wittendorff, *Transfer Pricing and the Arm's Length Principle in International Tax Law*, note 26, at Chapters 9.1.2 and 9.2.2.

30. Para. 4.10 Guidance Note No. 4 (London: International Valuation Standards Council, 2010).

31. The difference between a subjective and an objective valuation was illustrated in the US case *U.S. Steel Corp. v. Commissioner*, 617 F.2d 942 (2nd Cir. 1980), where a US parent company paid the same price as unrelated steel manufacturers for sea freight carried out by a foreign subsidiary, even though the parent company accounted for approximately 73% of the gross revenues of the subsidiary. The Court of Appeals held that as the subsidiary had performed identical services for the parent company and the unrelated companies, and had charged the same price for the services, the 1968 regulations did not authorize making any adjustments, even though the other circumstances indicated that the transfer price for the controlled transactions meant that there was income shifting. Hence, this meant an objective valuation based on the typical market prices. In 1986, Congress addressed the decision as follows: "Certain judicial interpretations of section 482 have suggested that pricing arrangements between unrelated parties for items of the same apparent general category as those involved in the related party transfer may in some circumstances be considered a 'safe harbor' for related party pricing arrangements, even though there are significant differences in the volume and risks involved, or in other factors. See, e.g., *United States Steel Corporation v. Commissioner*, 617 F.2d 942 (2d Cir. 1980)". See General Explanation of the Tax Reform Act of 1986, Pub. L. 99-514, 99th Cong., House of Representatives 3838 (JCS-10-87). The 1994 regulations emphasize the importance of the comparability requirement including volume and risk. See Treas. Reg. Secs. 1.482-1(d)(3)(ii)(A)(2) and 1.482-1(d)(3)(iii)(A). Hence, market prices do not provide a safe harbour, where market transactions are not comparable to the controlled transactions, i.e. a subjective valuation must be made.

32. Para. 3.9 OECD Guidelines; Exposure Draft 2009/5, IASB, Para. 22; SFAS 157, Para. 13.

33. Exposure Draft 2009/5, IASB, Paras. 17-21; SFAS 157, Paras. 12-14; Para. 1.2 International Valuation Standard 1 and Para. 6.0 of Concepts Fundamental to Generally Accepted Valuation Principles (London: International Valuation Council, 2007).

34. Para. 6.15 OECD Guidelines. The US Joint Committee on Taxation has compared the use of realistic alternatives with the highest-and-best-use principle which the administration's fiscal year 2010 budget proposals intended to add to Sec. 482 for the purpose of the valuation of intangibles. See *Description of Revenue Provisions Contained in the President's Fiscal Year 2010 Budget Proposal Part Three: Provisions Related to The Taxation of Cross-Border Income and Investment* (Washington D.C.: Joint Committee on Taxation, JSC-4-09, September 2009), at 51. The fiscal year 2011 budget proposals have replaced the highest-and-best-use principle with a realistic alternative approach for intangibles, which is intended to achieve a similar result. The Committee argues that the realistic alternative principle in the Sec. 482 regulations is similar to the highest-and-best-use principle of fair value, because both require consideration of property uses that may yield a greater return than the current use. See *General Explanations of the Administration's FY 2011 Revenue Proposals* (Washington D.C.: Department of the Treasury, February 2010), at 44. The Committee notes that the highest-and-best-use principle is rejected by the OECD Guidelines.

35. Paras. 6.14, 7.29, 7.30, 7.33, 8.35, 9.63, 9.72, 9.81, 9.84, 9.91, 9.92 and 9.116 OECD Guidelines.

36. Para. 5.28 Guidance Note No. 4 (London: International Valuation Standards Council, February 2010).

37. For another view, see WF Finan and S. Work, "Valuing Intangibles for Transfer Pricing and Accounting Standards Purposes: Similarities and Potential Differences", 17 *Tax Management Transfer Pricing Report* (02/05/2009), at S-2; concluding that the general standard applied in corporate finance and transfer pricing is the same. On the subject, see also C. Clark, S. Blough and W. Williams, "Reconciliation of Purchase Price Allocation and Transfer Pricing", 18 *Tax Management Transfer Pricing Report* (04/22/2010), at 1235.

38. Exposure Draft 2009/5, IASB, Para. 38; SFAS 157, Para. 18; Para. 4.2 Guidance Note No. 4 (London: International Valuation Standards Council, February 2010). See G.V. Smith and R.L. Parr, *Intellectual Property: Valuation, Exploitation, and Infringement Damages* (New Jersey: Wiley, 2005), at 148; M. Boos, *International Transfer Pricing: The Valuation of Intangible Assets* (The Hague: Kluwer Law International, 2003), at 73.

monly applied approaches are (1) the incremental income method, (2) the excess earnings method and (3) the relief-from-royalty method.³⁹

The incremental income method determines the value of an intangible by reference to the present value of the premium prices or cost savings to be realized through the exploitation of the intangible.⁴⁰ This involves a comparison of the profits under two alternatives, with and without the intangible in question.

The excess earnings method determines the value of an intangible as the present value of the profits attributable to the intangible after excluding the proportion of the profits that are attributable to all other assets (contributory assets).⁴¹ The contributory asset charge may relate to working capital, fixed assets, other intangible assets and workforce-in-place.

The relief-from-royalty method determines the value of an intangible by reference to the present value of the royalty payments which the transferee is relieved from paying by acquiring ownership of the intangible.⁴²

3.2. Transfer pricing

In transfer pricing, the methods applicable to determine the arm's length price of an intangible have evolved in three stages.⁴³ First, the comparable uncontrolled price method (CUP) was introduced by the 1968 US Treasury Regulations.⁴⁴ The CUP method was also relied on in the 1979 OECD Report and in the 1995 OECD Guidelines. The CUP method constitutes a market-based method. Second, the comparable profit method (CPM) and the profit split method (PSM) were introduced in the 1994 US regulations. The profit methods may be classified as income-based methods. The OECD Guidelines also incorporate the profit methods, but fail to provide real guidance on the use of profits methods with regard to the transfer of intangibles. Third, new income-based methods relying on corporate finance approaches have recently been adopted in the tax laws of the United States, Germany and Denmark. The OECD Guidelines do not provide guidance on the application of new income-based methods. The United States has also introduced the acquisition price method and market capitalization method, both of which may be characterized as market-based methods.⁴⁵

Table 1 indicates the status with regard to the quantitative valuation methods applicable for intangibles in corporate finance and transfer pricing, as well as the guidance on the methods in the US regulations and the OECD Guidelines.⁴⁶

The OECD Guidelines still rely on the first generation transfer pricing method (the CUP method) for intangibles, even though this method usually cannot be reliably applied.⁴⁷ The lack of practical guidance offered by the OECD is reflected in the absence of an international consensus about the methods to be used to evaluate the transfer of intangibles.⁴⁸ The cross-border transfer of intangibles is thus particularly vulnerable to international disputes and double taxation. The OECD is con-

| Corporate finance | Transfer pricing | | |
|----------------------|--|-------------------------------------|-----------------|
| | Method | US Treasury Regulations | OECD Guidelines |
| Cost-based methods | Cost-plus method | n/a | n/a |
| Market-based methods | CUP method | Secs. 1.482-4(c) and 1.482-7T(g)(3) | Para. 6.23 |
| | Acquisition price method ⁴⁹ | Sec. 1.482-7T(g)(5) | – |
| | Market capitalization method ⁵⁰ | Sec. 1.482-7T(g)(6) | – |
| Income-based methods | CPM and TNMM | Treas.reg. § 1.482-5 | – |
| | PSM | Secs. 1.482-6 and 1.482-7T(g)(7) | – |
| | Income method | Sec. 1.482-7T(g)(4) | – |

sidering launching a new transfer pricing project on intangibles which, among other things, will evaluate the existing methods and the need for new methods in this field.⁵¹ Against this background, it is likely that the

39. Para. 4.20 Guidance Note No. 4 (London: International Valuation Standards Council, 2010).

40. Id. Para. 4.29.

41. Id. Para. 4.33.

42. Id. Para. 4.25.

43. The resale price method and cost-plus method are not specified in the US regulations dealing with intangibles. The OECD Guidelines state that the cost-plus method is normally not a reliable method with regard to intangibles, whereas the resale price method is, theoretically, applicable based on information about sublicences. Paras. 6.27 and 6.23 OECD Guidelines. See T. Miyatake, *Cahiers de droit fiscal international*, vol. 92a (2007), note 12, at 32; and M. Boos, *International Transfer Pricing: The Valuation of Intangible Assets*, note 38, at 121.

44. Treas. Reg. (1968) Sec. 1.482-2(d)(2)(ii). The CUP is carried over in the 1994 regulations as the comparable uncontrolled transaction method (CUT). See Treas. Reg. Sec. 1.482-4(c).

45. In contrast to the transaction-based CUP, the two new methods are full value methods that are based on the value of all the intangibles and synergies of an enterprise.

46. The IRS has been evaluating the potential use of real options in relation to cost sharing. See *Tax Management Transfer Pricing Report* (05/26/2004), at 52; *Tax Management Transfer Pricing Report* (6/8/2005), at 84. However, the 2008 cost sharing regulations have not adopted real options as a specified method.

47. The OECD Guidelines recognize the use of unspecified methods, provided that they produce arm's length results. See Para. 2.9 OECD Guidelines; Paras. 246-249 *Transactional Profit Methods: Discussion Draft for Public Comment* (Paris: OECD, 2008). In US tax law, an unspecified method may also be the best method for evaluating the arm's length price of an intangible (see 7.4.).

48. T. Miyatake, *Cahiers de droit fiscal international*, note 12, at 33.

49. The acquisition price method was relied on in the US case *DHL Corp. v. Commissioner*, 285 F.3d 1210 (9th Cir. 2002); and the Norwegian case *Cytec Norge (Utv 2007/1440)*. For a detailed analysis of the two cases, see G.J. Ossi, "Deciphering the Ninth Circuit's DHL Decision: Questions Linger on Common Control, Intangibles, Penalties," 11 *Tax Management Transfer Pricing Report* 3 (9/18/2002), at S-3; and H. Flood, "Business Restructuring: The Question of the Transfer of Intangible Assets," 15 *International Transfer Pricing Journal* 4 (2008), at 174, respectively.

50. The market capitalization method was applied by the IRS in *Veritas Software Corp. v. Commissioner*, 133 TC 14 (2009), but the method was abandoned at trial (see 6.5.4.1.).

51. OECD Press release of 2 July 2010.

OECD will introduce guidelines on the use of income-based methods.

4. Income-Based Methods and the Comparability Requirement

The arm's length principle of Art. 9(1) of the OECD Model requires the transfer price of a controlled transaction to correspond to the price in a comparable uncontrolled transaction. Under income-based methods, the value of an intangible is generally determined with reference to the realistic alternatives of the parties, i.e. the opportunity cost. It may intuitively be considered to be an anomaly to base the arm's length test on an uncontrolled transaction which, in a traditional transfer pricing sense, is not comparable to the controlled transaction. An example would be to base the arm's length test of a sale of an intangible on a hypothetical situation where *no* sale is made because the intangible is exploited by the seller. The use of an income approach in transfer pricing may be explained and justified in various ways.

First, the value of an intangible is usually a value in use rather than a value in exchange. Hence, in order for an economically rational enterprise to be willing to sell an intangible, the transfer price should at least correspond to the net present value that it may expect to realize by exploiting the intangible itself (minimum price). Similarly, an economically rational buyer would require that the transfer price not exceed an amount which will cause the expected net present value from its exploitation of the intangible to be below the expected net present value of a realistic alternative investment (maximum price). However, as discussed below, the reliance on realistic alternatives as a separate means of determining transfer prices is generally a hazardous area (see 7.4.).

Second, while the focus of the traditional transaction methods is on market prices (product market equilibrium), the focus of income-based methods is on the production factors employed and the market compensation of those factors (production factor equilibrium). The IRS has summarized its justification of the income approach as follows:⁵²

The theory discussed above [zero economic profit concept] implies that a competitive firm's gross revenue, which equals price times quantity of output, will be equal to the turns that the factors it employs could earn in the marketplace. The traditional arm's length approach looks at the gross revenue side of this equation; the alternative procedure outlined above looks at the input side. It starts by identifying the factors of production employed by the firm, determining the returns that these factors would earn in the marketplace, and computing the sum. In short, the traditional approach looks for prices that the firm's outputs would command in the marketplace, whereas the alternative approach seeks to determine the returns that the firm's factors would earn in the marketplace. Both approaches are equally consistent with the basic goal of the arm's length principle, which is to use information about unrelated parties operating at arm's length to determine the allocation of income in a related party setting.

A correct application of the two approaches should ideally lead to the same result, assuming that a controlled

transaction is executed in a market characterized by perfect competition.⁵³

Third, income-based methods may be compared to the comparable uncontrolled services price (CUSP) method under US tax law which may be applied by comparing either prices or pricing methods.⁵⁴ Hence, if associated enterprises determine the transfer price of a controlled service transaction in the same manner as independent enterprises in market transactions, the outcome is assumed to reflect an arm's length price. The CUSP establishes strict requirements for the recognition of the result of pricing methods as indirect evidence of arm's length prices, e.g. that the method is used to determine actual prices charged in market transactions. This raises the question of whether market prices for intangibles may be corroborated by income-based methods. The fact that income-based methods are favoured for valuation purposes does not necessarily imply that actual market prices correspond to the outcome of valuation exercises. Income-based methods are thus often only capable of defining the arm's length range of an intangible and not the arm's length price, because a dual perspective should be applied under the arm's length principle of Art. 9(1) of the OECD Model (see 2.4. and 6.5.3.).

The above discussion suggests that the application of income-based methods in transfer pricing should be made with caution. The use of income-based methods will generally involve a shift from an empirical, direct approach relying on external data, to a hypothetical, indirect approach relying primarily on internal data and economic theory.⁵⁵

5. Existing Income-Based Methods

5.1. Comparable profit method and transactional net margin method

5.1.1. US tax law

The comparable profit method (CPM) involves an arm's length royalty that is determined as the difference between the pre-royalty profit margin of the transferee from exploiting the intangible and a market return for the routine contributions made by the transferee.⁵⁶ The CPM thus resembles the excess earnings method of corporate finance (see 3.1.). Among other things, the CPM distinguishes itself from a standard application of an income-based method in corporate finance by the fact that actual profits (rather than projected profits) are used as an input parameter, and consequently that a present value calculation is not made.

52. Chapters 10.C, Department of the Treasury and Internal Revenue Service: A study of intercompany pricing under section 482 of the Code (18 October 1988), Notice 88-123, 1988-2 C.B. 485 (the White Paper).

53. C.H. Berry, D.F. Bradford and J.R. Hines, Jr., "Arm's-Length Pricing: Some Economic Perspectives", 54 *Tax Notes* (1992), at 731; M. Abrutyn and J.E. Bischoff, *Cahiers de droit fiscal international*, vol. 77a (1992), at 657, 664.

54. Treas. Reg. Sec. 1.482-9(c)(5)(i). Similarly, the comparable uncontrolled price method may be applied on the basis of indirect evidence of arm's length prices. See Treas. Reg. Sec. 1.482-3(b)(5).

55. J. Wittendorff, *Transfer Pricing and The Arm's Length Principle in International Tax Law*, note 26, Chapter 8.3.

56. Treas. Reg. Sec. 1.482-5.

The CPM is applicable where the transferee makes only routine contributions to the transactions in which the transferred intangible is exploited.⁵⁷ A routine contribution is defined as a contribution for which it is possible to identify market returns.⁵⁸ On the other hand, a non-routine contribution is defined as a contribution that is not accounted for as a routine contribution such as unique intangibles.⁵⁹ The dividing line between routine and non-routine contributions may sometimes be thin. The CPM has been held to be inappropriate for the evaluation of intangibles that are to be used by the transferee as the platform for the development of new generations of the intangible, because R&D is considered to constitute a non-routine contribution.⁶⁰

The CPM is applicable whether the controlled transaction involves a transfer of ownership or a licensing of rights to an intangible, whether payment is made in the form of a royalty or as a lump sum, and whether the intangible is subsequently exploited in controlled transactions between the transferor and the transferee.

The CPM is one sided, as it is solely based on data relating to the transferee. It may be argued that the CPM adheres to the dual perspective requirement of the arm's length principle because the data on the comparables incorporates the results of third-party bargaining. However, as the market price of an intangible largely depends on its value in use for both the transferor and transferee in question, a reliable arm's length result under the CPM makes high demands on the comparability analysis and should, among other things, establish the relative bargaining power of the parties.

The application of the CPM often has three implications:

- an annual recurrent arm's length test based on the actual profits of the licensee and the comparables (periodic adjustment);
- a retrospective arm's length test (outcome testing); and
- an aggregated arm's length test, where the transferor is purchasing goods or services from the transferee produced on the basis of the subject intangible (roundtrip transaction).

The CPM may be illustrated by an example on the licensing of an intangible for a five-year period. Table 2 shows the financial data on the transferee, and how the royalty is determined in order to correspond to the return on operating assets (ROA) of the comparables.

If the consideration for an intangible is in the form of a lump sum, a conversion into an equivalent royalty amount is required under US tax law.⁶¹ The equivalent royalty amount for a taxable year is determined by treating the lump sum as an advance payment of a stream of royalties over the useful life of the intangible, or a shorter period under an agreement, taking into account the projected sales of the licensee as of the date of the transfer. Thus, the equivalent royalty amount is determined by dividing the lump sum by the present value of the projected sales over the relevant period, calculated on the basis of an appropriate discount rate.⁶² This approach

Table 2

| | Year | | | | |
|--------------------------------|---------|---------|---------|-------|-------|
| | 1 | 2 | 3 | 4 | 5 |
| Operating assets | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 |
| Net sales | 1,300 | 1,500 | 2,000 | 2,000 | 2,000 |
| Total pre-royalty costs | (1,200) | (1,000) | (1,000) | (800) | (850) |
| Pre-royalty operating profits | 100 | 500 | 1,000 | 1,200 | 1,150 |
| – ROA, tested party | 1.7% | 8.3% | 16.7% | 20% | 19.2% |
| – ROA, comparables | 7% | 8% | 10% | 8% | 9% |
| Royalty amount | (320) | 18 | 400 | 720 | 610 |
| Post-royalty operating profits | 420 | 482 | 600 | 480 | 540 |
| – Royalty rate | (24)% | 1.2% | 20% | 36% | 30.5% |
| – ROA, tested party | 7% | 8% | 10% | 8% | 9% |

ensures that the payment for intangibles may be subject to periodic adjustments under the commensurate with income standard of Sec. 482 of the Internal Revenue Code regardless of whether the form of payment is a lump sum or a royalty.⁶³ Consequently, the CPM is designed to determine an arm's length royalty for the transfer of an intangible rather than an arm's length lump sum.

The equivalent royalty concept may be illustrated by an example where the estimated useful life of an intangible is ten years, sales of the transferee based on the intangible are projected to be 100 million per year, the appropriate discount rate is 10% and the upfront lump sum for the transfer of ownership of the intangible is 30.7 million. On this basis, the present value of the projected sales is 614 million, and the equivalent royalty rate will be 5% (614/30.7). The equivalent royalty amount will thus be 5 million for each year (5% of 100). If an arm's length test for any given year indicates that the equivalent royalty amount is not on an arm's length basis, a periodic adjustment is warranted under the commensurate with income standard.

An *ex post* arm's length test (periodic adjustment) of a fixed royalty rate or a lump sum means that the controlled transaction as actually structured is disregarded for transfer pricing purposes and that use of hindsight is made. In a case involving the 1968 regulations, the US Tax Court decided that this approach was in breach of the arm's length principle in *R.T. French Co. v. Commis-*

57. Treas. Reg. Sec. 1.482-5(b)(2)(i). The regulations recognize the possibility that, in rare cases, a comparable reference transaction with valuable non-routine intangibles may be found and the use of the CPM in such cases is not ruled out. See Preamble, Explanation of Provisions, Sec. 1.482-5, TD 8552 (IRB 1994-31).

58. Treas. Reg. Sec. 1.482-6(c)(3)(i)(A).

59. Treas. Reg. Sec. 1.482-6(c)(3)(i)(B)(1).

60. Sec. IV.B.2 Coordinated Issue Paper, Sec. 482 CSA Buy-In Adjustments, LMSB-04-0907-62 (27 September 2007), which addresses the contribution of existing intangibles to a cost sharing arrangement.

61. Treas. Reg. Sec. 1.482-4(f)(5)(i).

62. Treas. Reg. Sec. 1.482-4(f)(5)(iii) (Example).

63. Preamble, Explanation of Provisions, Sec. 1.482-4(f)(5), TD 8552 (IRB 1994-31); Chapters 6.D.1 and 8.C White Paper.

tioner⁶⁴ and *Bausch & Lomb, Inc. v. Commissioner*.⁶⁵ The Court held in both cases that the actual profits from the intangibles were irrelevant for the arm's length test of fixed royalty rates, as the parties did not have access to this information at the time the licence agreements were concluded.

A key example of the application of the CPM concerns DevCo, a US developer, producer and marketer of widgets (Example 4). DevCo develops a new high-tech product that is manufactured by its foreign subsidiary, ManuCo.⁶⁶ ManuCo sells the product to MarkCo (a US subsidiary of DevCo) for distribution and marketing in the United States. The year 1996 is under audit, and the IRS examines whether a royalty rate of 5% (USD 1,750 royalty on the basis of sales of USD 35,000) paid by ManuCo to DevCo is an arm's length consideration for the technology. The IRS determines that the CPM will be the best method. ManuCo is selected as the tested party because it engages in relatively routine manufacturing activities, while DevCo engages in a variety of complex activities using unique and valuable intangibles. In a separate analysis, it is determined that the transfer price that ManuCo charged to MarkCo for the product is an arm's length price. Therefore, ManuCo's financial data derived from its sales to MarkCo are reliable. The interquartile range of uncontrolled manufacturers' average operating profits is USD 3,000 to USD 4,500. ManuCo's average reported operating profit for the years 1994 to 1996 of USD 21,500 falls outside this range. Therefore, the IRS determines that an allocation may be appropriate for the year 1996. To determine the amount, if any, of the allocation, the IRS compares ManuCo's operating profit for 1996 to the median of the comparable operating profits for 1996. The median result for the uncontrolled comparables for 1996 is USD 3,750. Based on this comparison, the IRS increases the royalties paid by ManuCo by USD 21,500 (the difference between USD 25,250 and the median of the comparable operating profits, USD 3,750). Accordingly, the total royalty for 1996 amounts to USD 23,250, equal to a royalty rate of 66.4%, whereby ManuCo is left with profits of USD 3,750, equal to a return on assets of 14.4%. The total net profits (USD 1,750 plus USD 25,250) are thus divided between licensor and licensee in the ratio 86:14.

Example 4 allocates the greater part of the intangible profits to the US licensor. This is the response of the IRS to court cases in which a significant part of the intangible profits was allocated to foreign licensees based on the 1968 regulations.⁶⁷

An argument in support of Example 4 is that an owner of an intangible generally has several alternatives available for the exploitation of the intangible and, all things being equal, the owner may have significant bargaining power vis-à-vis a group of potential licensees that are equally capable of exploiting the intangible.⁶⁸ In such cases, competition between the potential licensees would limit the profit margin of the licensee to a normal market return for the functions performed, risks assumed and assets employed. This assumes that none of the potential

licensees offer some unique advantage in exploiting the intangible, and that the profits of the licensor's best realistic alternative are not significantly below the licence alternative. The Tax Court relied on a similar analysis of the relative bargaining powers of the licensor and licensee in *Bausch & Lomb, Inc. v. Commissioner*.⁶⁹

In the normal licensing situation, each party possesses something unique which is necessary for exploitation of a particular project. For example, one party may possess the production technology and the other possesses the capital and marketing expertise. A license agreement is negotiated since neither party possesses all of the attributes needed to exploit the product on its own. Here in contrast, B&L possessed both the production technology and the marketing network necessary to produce and sell soft contact lenses. B&L Ireland merely had the capital, a nonproprietary asset which theoretically could have been supplied by any number of entities. Thus, B&L Ireland would have found itself in a weaker bargaining position vis-à-vis B&L.

The Court thus made a crucial distinction between a normal licence agreement, where both parties make contributions of unique resources, and a licence agreement in which the licensee, in essence, contributes only capital. The ability of a licensee to capture some of the incremental profits attributable to the intangible in a market transaction also depends on whether the licensee relieves the licensor of significant risks.⁷⁰ In a Sec. 482 context, it is thus important to distinguish between a normal licensee and a stripped licensee, which neither possesses unique resources nor assumes significant risks.

A normal licensee may be attributed part of the profits attributable to the intangibles under the CPM. However, if comparable transactions cannot be identified, it may be necessary to have recourse to another method, e.g. the profit split method or an unspecified method. A stripped licensee will not normally capture any significant part of the profits attributable to intangibles under the US regulations.⁷¹ This is in line with the White Paper, which would determine market returns on the basis of manufacturing activities with a similar risk, where only routine manufacturing intangibles are employed.⁷² Example 4 is also based on the assumption that a stripped licensee may be treated as a contract manufacturer.⁷³ The treat-

64. *R.T. French Co. v. Commissioner*, 60 TC 836 (1973).

65. *Bausch & Lomb, Inc. v. Commissioner*, 92 TC 525, 597 (1989), aff'd. 933 F.2d 1984 (2d Cir. 1991).

66. Treas. Reg. Sec. 1.482-5(e) (Example 4).

67. J. Wittendorff, *Transfer Pricing and the Arm's Length Principle in International Tax Law*, note 26, Chapter 18.5.1.2.1.

68. G.J. Ossi, "The Significance of Intangible Property Rights in Transfer Pricing", 19 *Tax Notes International* (1999), at 993, 1007.

69. *Bausch & Lomb, Inc. v. Commissioner*, 933 F.2d 1984 (2d Cir. 1991).

70. B.C. Becker, "Projected and Actual Profits' Impact on Licensees", 17 *Tax Management Transfer Pricing Report* (10/9/2008), at 461; J.L. Andrus, *Cahiers de droit fiscal international*, vol. 92a (2007), at 629, 644; J.P. Warner and H.B. McCawley, *Transfer Pricing: The Code and the Regulations* (Washington D.C.: 887 Tax Management, Foreign Income Portfolio, 2004), at A-134 (1) and A-141; A.J. Barbera, "Considering risk in trademark royalty arrangements", 12 *Tax Management Transfer Pricing Report* (5/28/2003), at 71; J.R. Mogle, "Intercompany Transfer Pricing for Intangible Property", 6 *Tax Management Transfer Pricing Report* (5/21/1997), at S-1.; E. King, *Transfer Pricing and Valuation in Corporate Taxation* (Boston: Kluwer Law International, 1994), at 214.

71. E. King, *Transfer Pricing and Valuation in Corporate Taxation*, note 70, at 231.

72. Chapter 11.C.1.a White Paper, note 52.

73. E. King, *Transfer Pricing and Valuation in Corporate Taxation*, note 70, at 212.

ment of a stripped licensee as a contract manufacturer does not conflict with the reasoning of the Tax Court in *Bausch & Lomb, Inc. v. Commissioner*.

A normal licensee and a stripped licensee may engage in similar functions and employ similar measurable assets. On the other hand, a normal licensee may employ its own non-routine manufacturing or marketing intangibles. The allocation of market risk may also be a key factor in distinguishing between a normal licensee and a stripped licensee.⁷⁴ Market risk includes profit margin risk and demand risk.⁷⁵ Market risk may be split between licensor and licensee in various ways depending, among other things, on the basis for the royalty, whether the royalty is fixed or variable, and the contractual rights and obligations.

Profit margin risk, which relates to the level of operating costs, is assumed by the licensee where the royalty rate is fixed and is based on sales.⁷⁶ Where the royalty rate is fixed and based on sales, the profit margin risk relating to sales prices affects both licensor and licensee. Furthermore, profit margin risk will affect both licensor and licensee where the royalty rate is fixed and based on pre-royalty profits. Profit margin risk is assumed by the licensor, where the royalty rate is variable and based on pre-royalty profits in order to ensure the licensee a fixed level of profits.

Demand risk is generally shared between licensee and licensor, who will both be affected by variations in volume. However, this does not necessarily hold where the licensor is under a contractual obligation to purchase a minimum volume or has arranged for related parties to assume such obligations.

A normal licensee often assumes both profit margin risk and demand risk, which will preclude a comparison with unrelated contract manufacturers.⁷⁷ A stripped licensee, on the other hand, may be relieved from one or both of these risks and be comparable to unrelated contract manufacturers. A similar risk analysis is found in the legislative history to the commensurate with income standard of Sec. 482.⁷⁸

In requiring that payments be commensurate with the income stream, the Act does not intend to mandate the use of the “contract manufacturer” or “cost plus” methods of allocating income or any other particular method. As under prior law, all the facts and circumstances are to be considered in determining what pricing methods are appropriate in cases involving intangible property, including the extent to which the transferee bears real risks with respect to its ability to make a profit from the intangible or, instead, sells products produced with the intangible largely to related parties (which may involve little sales risk or activity) and has a market essentially dependent on, or assured by, such related parties’ marketing efforts.

In Example 4, the entire output of the licensee is sold to a sister company. The facts of the example do not state whether the sister company is contractually obliged to purchase the goods and relieve the licensee from demand risk. Under the 1994 regulations, a contractual obligation to purchase the output of an affiliated company may be irrelevant, as the IRS is authorized to impute contractual terms that accord with the actual

conduct of the parties.⁷⁹ In *Bausch & Lomb, Inc. v. Commissioner* it was a decisive factor for the Tax Court’s rejection of the contract manufacturing theory of the IRS that there was not a contractual obligation for the affiliated companies to purchase the goods of the Irish licensee.⁸⁰

The transfer price from the licensee to the sister company is assumed to be on an arm’s length basis in Example 4. If, in a similar situation, a sister company has assumed the market risk, the profit split method may constitute the best method. In such a situation, the licensee should be remunerated for its routine activities, and the residual profits should be allocated between the licensor and the sister company that bears the market risk.

The CPM means that the ownership of intangibles acquired in controlled transactions is disregarded. The method is normally inapplicable where the transferee owns valuable, non-routine intangibles (see above). However, this is only the case for intangibles which have been (1) acquired from an uncontrolled taxpayer or (2) developed by the transferee.⁸¹ In such cases it may be difficult, if not impossible, to identify uncontrolled taxpayers that possess comparable intangibles. So why does this not apply to valuable, non-routine intangibles acquired in the controlled transaction in question? In principle, the risk assumed by a transferee investing in and becoming the owner of an intangible is identical, no matter how ownership is established. The CPM may negate the outcome of court cases rejecting the contract manufacturing theory of the IRS, which meant that outbound transfers of intangibles were disregarded for Sec. 482 purposes. The courts have rejected this theory, where a transfer of license rights to a foreign subsidiary and subsequent purchases of the output of the foreign subsidiary were not “interrelated,”⁸² and where a transfer of ownership of intangibles has been made in non-recognition transactions under Sec. 351 of the Internal Revenue Code.⁸³ However, the theory might have been accepted if the transactions had been “interrelated” and outside the scope of Sec. 351. The test of transactions being interrelated was based on the intentions of the parties at the time of the controlled transaction, and the existence or absence of contractual obligations to purchase a mini-

74. J.L. Andrus, *Cahiers de droit fiscal international*, vol. 92a (2007), note 70, at 644.

75. Treas. Reg. Sec. 1.482-1(d)(3)(iii)(A)(1).

76. B.C. Becker, note 70.

77. Correspondingly, the Treasury Department and the IRS have stated that a licensee cannot normally be compared to a distributor. See Preamble, Explanation of provisions, Sec. 1.482-4T(f)(3), TD 9278 (IRB 2006-34).

78. General Explanation of the Tax Reform Act of 1986, Pub. L. 99-514, 99th Cong., House of Representatives 3838 (JCS-10-87).

79. Treas. Reg. Sec. 1.482-1(d)(3)(ii)(B)(2).

80. Similarly *Sundstrand Corp. v. Commissioner*, 96 TC 226 (1991).

81. Preamble, Explanation of Provisions, Sec. 1.482-5T, TD 8470 (IRB 1993-10); Preamble, Explanation of Provisions, Sec. 1.482-5, TD 8552 (IRB 1994-31).

82. *Bausch & Lomb, Inc. v. Commissioner*, 933 F.2d 1984 (2d Cir. 1991); and *Sundstrand Corp. v. Commissioner*, 96 TC 226 (1991).

83. *Eli Lilly & Co. v. Commissioner*, 856 F.2d 855 (7th Cir. 1988); and *G.D. Searle and Co. v. Commissioner*, 88 TC 252 (1987).

imum volume at a minimum transfer price. Where the transactions were found not to be interrelated, the transferee was held to assume market risk and the contract manufacturing theory was rejected. Accordingly, where a transferee does not bear market risk with regard to the subsequent transactions where the subject intangible is exploited, the CPM assumes that the risk of ownership is effectively eliminated. Provided that the transferee does not make any other non-routine contributions, all of the above-normal profits from the exploitation of the subject intangible are allocable to the transferor.⁸⁴

With regard to the transfer of ownership of an intangible, the arm's length test under the CPM is made on the basis of the right to use intangibles in uncontrolled transactions. The method is thus not sensitive to the significance of legal ownership for the arm's length price of an intangible.⁸⁵ This may cause a distortion of the income allocation to the benefit of the transferor.⁸⁶

Another feature of the CPM is that the entire difference between the pre-royalty profits and the market return for routine contributions made by the licensee is deemed to constitute intangible profits which are allocable to the licensor. This means that economies of integration are fully allocated to the licensor, even though such benefits arise from the cooperation of the transferor and transferee and cannot be ascribed to specific legal or economic contributions from individual enterprises. This aspect of the CPM may also cause a distortion of the income allocation.

To summarize, the CPM is applicable, where the transferee does not make non-routine contributions to the transactions where the subject intangible is exploited. The method is one sided, and a careful comparability analysis is needed to safeguard that the dual perspective requirement of the arm's length principle is satisfied. The CPM may cause income distortions to the benefit of the transferor for various reasons:

- economies of integration are fully allocated to the transferor;
- the arm's length test of the transfer of the ownership of an intangible is made on the basis of the right to use the intangible;
- the concept of an equivalent royalty in conjunction with the commensurate with income standard means that the arm's length test is made on the basis of hindsight; and
- the one-sided aspect of the CPM may push the transfer price to the upper end of the arm's length range, where the profit potential of the transferee exceeds the profit potential of the transferor.

5.1.2. OECD Guidelines

The transactional net margin method (TNMM) of the OECD Guidelines corresponds to the CPM of the US regulations.⁸⁷ The OECD Guidelines implicitly recognize the use of the TNMM for purposes of the arm's length test of intangibles.⁸⁸ However, no real guidelines are provided on the application of the TNMM with regard to intangibles. In particular, the OECD Guide-

lines do not mention the US approach of determining an arm's length royalty as the difference between the pre-royalty profit of the transferee and a market return for routine contributions made by the transferee.⁸⁹ This was arguably due to the reservations of several member countries in 1995 about the adoption of profit methods and periodic adjustments in the 1994 US regulations.⁹⁰ However, as most member countries are now familiar with the profits methods, the OECD may gradually be changing its position on the US approach. The OECD position on the US approach was touched on in two reports in 2008.

The 2008 OECD discussion draft on profit methods examines three aspects of the use of the TNMM for the purposes of evaluation of a royalty. First, the discussion draft reveals that there is not a unanimous position among the Member countries on the merits of the TNMM. The Member countries may be divided into three categories, namely (1) countries that accept the use of the TNMM both to set and test a royalty, (2) countries that accept the use of the TNMM to set a royalty, but not to test the outcome of a royalty and (3) countries that do not accept the use of the TNMM either to set or to test a royalty.⁹¹ Second, the member countries are aligned regarding the use of the TNMM as a sanity check of the outcome of a primary method used to evaluate a royalty.⁹² Third, the discussion draft contains the following statement regarding the comparability requirement of Art. 9(1):⁹³

In addition, it should be noted that the functional analysis of a licensee may be different from the functional analysis of a non-licensed distributor or manufacturer because the licensee holds a contractual right over the intangible. Whether this difference materially affects the comparison depends on the value of the license right and on the extent to which the licensee actually exploits it, e.g. whether it has and actually exercises more autonomy in the development of products or of marketing campaigns than a non-licensed manufacturer or non-licensed distributor who would simply manufacture according to specifications or buy-and-sell products. Where appropriate, these differences need to be taken into account in the comparability analysis.

The concerns with the US approach may be classified as follows: (1) the use *per se* of profit methods, (2) prospective transfer pricing adjustments, (3) retrospective transfer pricing adjustments and (4) comparability issues. In terms of the first concern, Art. 9(1) of the OECD Model does not address the methods to be used, so therefore profit methods cannot generally be rejected. Further-

84. A similar argument may, in principle, be used with regard to ownership of non-routine intangibles that the licensee has acquired from an uncontrolled taxpayer assuming that the transferee does not bear market risk.

85. See G.J. Ossi, note 68.

86. This issue was acknowledged in relation to the relief-for-royalty method in *Nestlé Holdings, Inc. v. Commissioner*, 152 F.3d 83, (2d Cir. 1998) (see 6.5.2.).

87. Paras. 2.58-2.107 OECD Guidelines.

88. Para. 6.26 OECD Guidelines.

89. Para. 84 *Transactional Profit Methods: Discussion Draft for Public Comment* (Paris: OECD, 2008).

90. T. Miyatake, *Cahiers de droit fiscal international*, note 12, at 32.

91. Para. 84-85 of *Transactional Profit Methods: Discussion Draft for Public Comment* (Paris: OECD, 2008).

92. Id. Paras. 86-88.

93. Id. Para. 89.

more, the profits methods are recognized by the OECD, and the previous “method of last resort” status has been removed by the 2010 update.⁹⁴ In terms of the second concern, the arm’s length principle of Art. 9(1) neither addresses the price determination method nor the pricing process.⁹⁵ On this basis, a contractual arrangement to make prospective adjustments of a royalty rate (variable royalty) cannot be criticized under the arm’s length principle of Art. 9(1). On the other hand, in the absence of such an arrangement, making periodic adjustment of a fixed royalty rate would infringe the arm’s length principle. In terms of the third concern, it is not possible to deduce a preference for a prospective arm’s length test or a retrospective arm’s length test from Art. 9(1).⁹⁶ This is a procedural issue which is not governed by the arm’s length principle.⁹⁷ Hence, Art. 9(1) does not authorize tax authorities to make an adjustment solely because a licence arrangement involves a variable royalty determined on a retrospective basis. The fourth concern is a genuine arm’s length issue, because it involves the comparability of independent enterprises and the associated enterprise selected as the tested party. This corresponds to the key issue under the US regulations, where a distinction is made between a normal licensee and a stripped licensee.

The Norwegian *Kronos Titan* case addressed the use of a variable royalty that was contingent on the profits of the transferee. The Court expressed a reservation about this approach (unofficial translation by the author):⁹⁸

The current royalty may also be profit-contingent. However, such a method may be met with considerable scepticism, in particular if the amount of the royalty is determined in such a manner that Kronos is only left with a profit which corresponds to or is marginally above the return which the company could achieve by investing its capital, for instance, in a bank or in risk-free government bonds, currently 9-10 percent per annum. The more the profits are squeezed down to the aforementioned “break-even” point, and in particular if the profits go below this point, the more likely it is that the price will be based on a dependency relationship – and not on an arm’s length basis.

However, the Court also noted the following regarding the valuation:

On this basis the licensor in a profitable market is nearly able to dictate the conditions to a licensee, independently of the existence of a community of interest. It would thus be perceived as being very unreasonable for a taxpayer if, in addition to paying a high price, it were also not allowed a tax deduction for it.

The Court thus recognized that a licensor potentially may be able to capture almost all of the intangible profits in market transactions, i.e. the concept underlying the CPM in US tax law.

The 2008 OECD discussion draft on business restructurings and the new Chapter IX of the OECD Guidelines touches on the aggregation aspect of the US approach. It is acknowledged that it may be appropriate to make an aggregated arm’s length test of the transfer of an intangible and subsequent controlled transactions between the transferor and transferee, where the transferor will continue to use the subject intangible.⁹⁹ Although, the focus is on the sale and subsequent licensing back of an intan-

gible, the principle should also apply to the transfer of an intangible and subsequent purchase of goods and services produced on the basis of the intangible, i.e. the approach underlying Example 4 of the US regulations.

To summarize, although the OECD may gradually be coming to terms with the basis of the US approach, there is still a gap between the two set of rules. As the price-setting process and the timing of the arm’s length test are issues not governed by Art. 9(1), the OECD should not dwell on the appropriateness of contractual arrangements involving a variable royalty rate. The OECD-favoured profit split method may also result in a variable royalty rate and this has not given rise to similar concerns. Instead, the OECD should focus on the genuine arm’s length issues, namely the comparability issue and the requirement for an *ex ante* valuation. The latter involves that the TNMM is only suited for evaluating royalties, not lump sums. Furthermore, under Art. 9(1), an *ex post* evaluation (periodic adjustment) of a fixed royalty rate cannot be made by the tax authorities (see 7.5.).

5.2. Profit split method

5.2.1. US tax law

The profit split method (PSM) is applicable where both the transferor and transferee make non-routine contributions to the transaction in which the subject intangible is exploited.¹⁰⁰ The method is applicable whether the controlled transaction involves a transfer of ownership or licensing of rights to an intangible, whether payment is made in the form of royalties or as a lump sum, and whether the intangible is subsequently exploited in controlled transactions between the transferor and transferee. The method has not been applied by US courts in cases dealing with the transfer of intangibles, whereas the method has been relied on in cases involving the transfer of goods, where both associated enterprises made non-routine contributions.¹⁰¹

The PSM resembles the CPM because it is based on actual profits rather than projected profits and because a lump sum must be converted into an equivalent royalty amount. Hence, the application of the PSM to evaluate a

94. See introduction to *Proposed Revision of Chapters I-III of the Transfer Pricing Guidelines* (Paris: OECD, 2009), and Paras. 1.45, 1.49, 3.50, 3.52, 3.54 and 7.31 2009 OECD Guidelines.

95. Para. 187 *Roche Products Pty. Ltd. v. Commissioner*, Administrative Appeals Tribunal 639 (2008); Para. 85 *GlaxoSmithKline Inc. v. The Queen*, 2008 TCC 324 (2008).

96. Paras. 3.68-3.70 of *Proposed Revision of the Transfer Pricing Guidelines* (Paris: OECD, 2009). See now Paras. 3.69-3.71 OECD Guidelines.

97. J. Wittendorff, *Transfer Pricing and the Arm’s Length Principle in International Tax Law*, note 26, at Chapter 12.2.4.

98. *Kronos Titan* case (Utv 1992/1250).

99. Para. 9.86 OECD Guidelines; and Para. 85 “Transfer Pricing Aspects of Business Restructurings: Discussion Draft for Public Comment” (Paris: OECD, 2008).

100. Treas. Reg. Sec. 1.482-6(c)(3)(i)(B).

101. E.g. *Eli Lilly & Co. v. Commissioner*, 856 F.2d 855 (7th Cir. 1988). The method was also applied by the IRS in *GlaxoSmithKline Holdings (Americas) Inc. v. Commissioner*, Tax Court Docket Nos. 5740-04 and 6959-05, which was settled by the IRS and taxpayer.

lump sum will imply that the controlled transaction as actually structured is disregarded and that the arm's length test is made on the basis of hindsight. However, contrary to the CPM, the PSM involves that economies of integration are shared by the associated enterprises. The 2008 cost sharing regulations have introduced a new version of the residual profit split method (RPSM) which is based on projected profits and the calculation of a lump sum.¹⁰²

The method is specified as a comparable profit split method and a RPSM.¹⁰³ The most commonly used application is the RPSM.¹⁰⁴ The comparable profit split method is rarely applied, as information on comparable reference transactions will not normally be available.¹⁰⁵

Under the RPSM, the combined profits of the associated enterprises are allocated in a two-step process.¹⁰⁶ First, a market return is allocated to routine contributions made by the associated enterprises. Second, the residual profits are allocated on the basis of the relative value of non-routine contributions made to the controlled transaction by the associated enterprises. The application of the RPSM may be illustrated by the following example where Company A licenses an intangible to Company B which exploits the subject intangible together with its own intangibles for the manufacturing and sale of goods:

| | Combined profits | Company A | Company B |
|--|-------------------------|------------------|------------------|
| Total profits | 1,000 | – | – |
| Routine profits | (300) | 0 | 300 |
| Residual profits | 700 | – | – |
| Relative value of non-routine contributions: | | | |
| – Company A: 40% | (280) | 280 | – |
| – Company B: 60% | (420) | – | 420 |
| Allocation of combined profits | 0 | 280 | 720 |

The determination of the routine profits under the first step of the RPSM is often made on the basis of the CPM. The regulations provide for three methods for determining the relative value of the non-routine intangibles under the second step:¹⁰⁷

- on the basis of external reference transactions that reflect the fair market value of the intangibles;¹⁰⁸
- on the basis of the capitalized costs of developing the intangibles and all related improvements and updates, appropriately amortized for the useful life of each intangible;¹⁰⁹
- on the basis of the amount of the actual intangible development costs in recent years, provided that the costs of the associated enterprises are relatively constant over time and the useful life of the intangible property of the enterprises is approximately the same.

The first method would require information on the market value of not only the subject intangible itself, but also of the other non-routine intangibles used by the parties with regard to the transactions in which the subject intangible is exploited. If this information were available, the application of the RPSM would often be superfluous.

The second and third methods turn the RPSM into a hybrid between an income-based method and a cost-based method. The regulations acknowledge that reliance on intangible development costs to allocate intangible income reduces the relative reliability of the PSM vis-à-vis other methods that are not based on such estimates.¹¹⁰ Nonetheless, these methods are reportedly the most commonly used.¹¹¹ The regulations do not make a distinction between basic research and applied research, even though it may be difficult to allocate costs incurred in basic research between specific products. It may also be questioned whether development costs should be considered when intangibles resulting from this have not yet been incorporated into saleable products. Furthermore, the reliability of the results may be affected by geographic differences in factor costs.

The application of the capitalization and amortization method of the RPSM is illustrated by an example where a US parent company licenses a patented technology to its European subsidiary that alters the technology and

102. Treas. Reg. Sec. 1.482-7T(g)(7)(i).

103. Treas. Reg. Sec. 1.482-6(c)(1).

104. 2009 *Annual APA Report* (Washington D.C.: IRS, 29 March 2010), table 19.

105. J.P. Warner and H.B. McCawley, *Transfer Pricing: The Code and the Regulations*, note 70, at A-144; and T. Horst, "Profit Split Methods", 60 *Tax Notes* (1993), at 335.

106. Treas. Reg. Sec. 1.482-6(c)(3)(i).

107. Treas. Reg. Sec. 1.482-6(c)(3)(i)(B)(2). No methods are specified with regard to non-routine contributions not qualifying as intangibles. The cost sharing regulations provide that the residual profits should be allocated on the basis of comparable reference transactions or the capitalized development costs. See Treas. Reg. Sec. 1.482-7T(g)(7)(iii)(C)(2).

108. Chapter 11.C.2 of the White Paper, note 52, stated that the residual profits could be allocated on the basis of information on allocations in comparable reference transactions. In principle, this means that the comparable profit split method would be applied in the second step of the residual profit split method. See H.N. Higinbotham, "The Profit Split Method: Effective Application for Precision and Administrability", 5 *Tax Management Transfer Pricing Report* (10/2/1996), at S-1.

109. Treas. Reg. Secs. 1.482-6(c)(3)(iii) and 1.482-8 (Example 8). This method is explained as follows in *APA 2003 Study Guide* (Washington D.C.: IRS, 2003), at 26: "In order to determine the expected value in Year Y of expenditures made in the past, the following calculations are typically performed. First, the past amounts spent are *capitalized*. This means that they are increased in value each year to reflect a rate of return on investment that is appropriate for the expenditures' risk. Second, after the intangibles produced by particular expenditures are placed in service, the value, while still capitalized, is simultaneously *amortized*. This means that the value is decreased each year to reflect an assumption that the intangible's value decreases over time (e.g., over time becomes partially or completely obsolete). The value is amortized according to the intangible's estimated useful life and amortization schedule. In taxpayers' analyses, amortization normally brings the intangible's value down to zero after a number of years; however, in some cases the intangible might retain some value indefinitely."

110. Treas. Reg. Sec. 1.482-6(c)(3)(ii)(C)(3). Chapter 11.C.2 of the White Paper, note 52, stated that the relative values of intangibles should not be determined on the basis of the development costs, since there is normally no correlation between the market value and development costs of intangibles. See T. Horst, note 105.

111. J.P. Warner and H.B. McCawley, *Transfer Pricing: The Code and the Regulations*, note 70, at A-144.

develops a high-intensity marketing campaign.¹¹² The residual profits of the subsidiary may thus be attributed to three non-routine intangibles, namely the basic product technology of the US parent company, the application research of the subsidiary and the marketing effort of the subsidiary. In the year under examination, the subsidiary has sales of 500 million and pre-royalty expenses of 300 million, resulting in pre-royalty profits of 200 million. In the first stage of the RPSM, the subsidiary is allocated profits of 20 million based on a CPM analysis, resulting in residual profits of 180 million. In the second stage, the residual profits are allocated on the basis of the capitalized and amortized expenses relating to the three non-routine intangibles employed. Using information on the average useful life of the non-routine intangibles, it is determined that the US parent company's expenses relating to the basic technology have a value of 0.20 per dollar of sales and that the subsidiary's expenses relating to the application research and marketing campaign have a value of 0.40 per dollar of sales. On this basis, the arm's length royalty for the year under examination is determined to be 60 million (0.20/0.40 at 180 million).

To summarize, the PSM is applicable where both associated enterprises make non-routine contributions to the transactions in which the intangibles are exploited. It is a two-sided method that considers the perspective of both parties. In relation to a normal sale or licence of an intangible, the PSM is based on actual profits, and a lump sum must be converted to an equivalent royalty amount. With regard to cost sharing, the method is based on projected profits and the calculation of a lump sum. The application of the method is marked by significant discretionary elements, e.g. that it is necessary to evaluate the absolute or relative market value of the non-routine intangibles employed by the parties. If the method is applied on the basis of intangible development costs, the reliability of the results will diminish.¹¹³ The PSM also relies on the potentially subtle distinction between routine and non-routine intangibles. On this basis, the PSM is most suitable for advance pricing agreements and mutual agreement procedures. Nevertheless, where the application of other methods will cause unreliable results, the PSM may constitute the best method.

5.2.2. OECD Guidelines

The OECD Guidelines state that in relation to highly valuable intangibles, the PSM may be applied, particularly where both parties own valuable intangibles used in the transaction.¹¹⁴ The OECD Guidelines express a preference for the PSM over the CPM, notably because of comparability concerns.¹¹⁵ The focus of the OECD is on the transfer of goods and services where intangibles are exploited (rather than the transfer of intangibles).

The OECD Guidelines specify the contribution method, the comparable profit split and the residual profit split method.¹¹⁶ Under the contribution method, the combined profits from a controlled transaction are allocated between the associated enterprises in a single step, based on the relative values of the functions performed, risks assumed and assets employed by the enterprises.¹¹⁷ The contribution method has been developed for the evaluation of global trading by financial institutions and is not suited for the valuation of intangibles.¹¹⁸ The OECD's guidance on the comparable profit split method and the residual profit split method (RPSM) resembles the 1995 US regulations (see 5.2.1.). Under the RPSM, the OECD allows for residual profits to be allocated in any way that mirrors the outcome of uncontrolled transactions.¹¹⁹ It is assumed that such allocation normally is made on the basis of assets/capital or costs.¹²⁰ The US concept of using capitalized and amortized intangible development costs is recognized.¹²¹

112. Treas. Reg. Sec. 1.482-6(c)(3)(iii). See also Treas. Reg. Sec. 1.482-8(b) (Examples 8, 9 and 12).

113. Preamble, Sec. 1.482-6, TD 8552 (IRB 1994-31).

114. Para. 6.26 OECD Guidelines.

115. Para. 2.147 OECD Guidelines. See more pronounced Paras. 3.52 and 3.53 1995 OECD Guidelines; Paras. 3.12-3.16 *Tax Aspects of Transfer Pricing within Multinational Enterprises – the United States Proposed Regulations* (Paris: OECD, 1993).

116. Paras. 2.118 and 2.133 OECD Guidelines.

117. Para. 2.119 OECD Guidelines.

118. D. Hay, F. Horner and J. Owens, "Past and Present Work in the OECD on Transfer Pricing and Selected Issues", 22 *Intertax* (1994), at 423.

119. Para. 2.132 OECD Guidelines.

120. Para. 2.135 OECD Guidelines.

121. Para. 2.140 OECD Guidelines.