The Platform for Collaboration on Tax

DISCUSSION DRAFT:
A Toolkit for Addressing Difficulties in Accessing Comparables Data for Transfer Pricing Analyses

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A transfer price is a price employed in a transaction between associated enterprises. When independent enterprises transact with one another, market forces determine the pricing of those transactions. This may not always be the case in transactions between associated enterprises.

Transfer pricing is a legitimate and necessary feature of the commercial activities of multinational enterprises. However, where the transfer prices used do not accord with internationally applicable norms or with the arm’s length principle under domestic law, they can distort the allocation of profit among the countries in which a multinational enterprise operates. When transfer pricing artificially shifts profits out of a country it, first and foremost, denies the country essential tax revenue. Such profit shifting can also have much wider implications: tax avoidance by high-profile corporate taxpayers will be perceived as “unfair” by citizens and may undermine the legitimacy and credibility of the wider tax system, thus discouraging compliance by all taxpayers. These are issues faced by developing and developed countries alike.

Many countries have addressed the tax risks created by transfer pricing by introducing domestic tax rules based on the “arm’s length principle.” Most double tax treaties also incorporate the arm’s length principle as the basis for allocating profits (and thus taxes) between associated enterprises. The arm’s length principle provides broad parity of tax treatment for transactions between associated enterprises and those between independent enterprises. Implementation of the principle is intended to create equality of treatment between members of a group of companies (which may gain tax advantages through non-arm’s length transfer pricing) and independent enterprises. It also provides an objective standard that attempts to replicate market results. By helping to level the playing field, and by virtue of the fact that it represents an international standard, the arm’s length principle helps reduce distortions to international trade and investment.

Broadly, country transfer pricing rules aim to ensure that the tax liabilities of associated enterprises in the countries in which they operate are not distorted by the fact that they are related. Fundamentally, they do this by requiring such enterprises to report a measure of taxable profit that would be expected if the associated enterprises adopted the same prices (and other conditions) that would be seen between independent enterprises in comparable circumstances. Transfer pricing rules also typically provide a tax administration with the authority to make adjustments to taxable profit where taxpayers do not adopt arm’s length conditions in their transactions with associated enterprises. In order to establish such prices (and other conditions), it is necessary to compare the conditions of transactions that exist between the associated enterprises with those that do or would exist between independent parties in comparable circumstances. It is necessary to carry out this comparability analysis whenever the arm’s length principle is implemented.

1 See paragraph 1.1.7 of the UN Practical Manual on Transfer Pricing (2013)
Comparability analyses are an important element in the implementation of the arm’s length principle, requiring a comparison of the conditions in transactions between associated parties (“controlled transactions”) with the conditions in comparable transactions between independent parties (“comparable uncontrolled transactions” or “comparables”). It is important to emphasise that comparability analyses are not always primarily focused on the actual price of the transaction. In many instances, transfer pricing rules operate to consider whether a transaction has occurred at all, or has occurred in a way that is substantively different from that which is described in contracts or documentation; in ways that are substantively different from those which would occur at arm’s length; or are not commercially rational. It is important to also stress that comparability analyses are not always based directly on prices found in the market. More often, a comparability analysis utilises data on profit margins. In some cases, the analysis considers economic or commercial factors to measure the relative contributions of value by the parties in order to inform a profit split.  

Many tax administrators report uncertainties and difficulties in conducting comparability analyses. A key issue raised by developing countries, in particular, is the scarcity in some parts of the world of the financial data necessary to carry out a comparability analysis. Such issues can affect taxpayers and tax administrations alike. Taxpayers may face uncertainties about how to comply with transfer pricing rules and incur unnecessary compliance costs in doing so. Tax administrations may face difficulties in implementing their rules, which, in turn, will impact their tax revenues.

In many developing countries, challenges to obtaining information are not limited to specific, highly complex transactions: they may exist in all industries. For many resource-rich developing countries, a lack of data on the pricing of certain commodities is of particular concern.

Unitary taxation or formulary apportionment approaches are sometimes proposed as alternatives to the arm’s length principle, which need not rely on comparables. While the merits and disadvantages of such approaches can be debated, including whether or not they would benefit developing countries, they are unlikely to be implemented at global level in the foreseeable future. This toolkit, therefore, focuses on practical measures that can be implemented in the short to medium term. The issue of a lack of comparable data for transfer pricing analyses was highlighted in the Report to G20 Development Working Group on the Impact of BEPS in Low Income Countries, which was the catalyst for this toolkit.

This toolkit attempts to address some of the challenges associated with difficulties in accessing comparables data. While ‘perfect’ or ideal comparables may only rarely be available,
commonly the data that is available will still allow a reasonably reliable analysis to be performed and a satisfactory approximation of an arm's length outcome to be determined. **Part II** of this toolkit thus focuses on making the best use of available data. It discusses the sources of data and how the use of available data may be optimised through widening the criteria for data-selection and the use of comparability adjustments. It also stresses that the selection of the most appropriate transfer pricing method, on the basis of a detailed factual analysis, is central to the application of the arm's length principle, and in many cases, is likely to have a greater impact on the outcome than the accuracy of the data used in the method's application. This Part is structured according to the general steps to follow in the conduct of a comparability analysis. It provides practical tools such as commonly used profit level indicators for particular types of businesses, a sample functional analysis questionnaire, and a step-by-step template which could be used to screen for potential comparables, as well as information to help tax administrations to critically analyse comparability studies presented by taxpayers.

**In other cases, it may be appropriate to consider other ways of determining arm's length outcomes that do not rely (directly) on comparables.** **Part III** focuses on issues that arise, and solutions that may be available, where adequate data on transactions between independent parties are not available, including the potential for developing safe harbours or prescriptive approaches. It also explores how data in the possession of tax administrations, typically derived from tax returns, may be used to identify arm's length results in a way that preserves confidentiality. Such data may have a part to play in setting safe harbour margins. **Part III** also includes a discussion of some of the policy considerations with regard to such approaches, as well as outlining a number of country practices, and providing practical tools in the form of sample legislation or regulations which could be used to implement such approaches. Given the nature of the problem, the discussions contained in **Part III** may be of particular relevance to policy makers, while **Part II**, in contrast, may be more relevant to transfer pricing practitioners.

**The issue of difficulties in accessing comparables data is complex and needs to be approached from several practical as well as policy angles, and it is recognised that this Toolkit does not provide a comprehensive solution. Consequently, the final part, Part IV, sets out areas where further work is planned, and summarises a number of conclusions.**
This toolkit addresses issues of comparability for transfer pricing, generally. However, in recognition of the importance of the extractive industries\(^7\) and other commodities sectors to the economies of many developing countries, a special emphasis has been placed on clarifying issues that can be critical in these sectors. While the issues and tools set out in the toolkit will be generally applicable regardless of the industry sector involved, the following sections are particularly relevant to the extractive industries or other commodities sectors:

- Part II, Section 2.4.2 on using quoted prices to determine an arm’s length price for a commodity\(^8\)
- Part II, Section 3.3.1 on accessible price databases and publications
- Part II, Section 5.4.1 on (examples of) adjustments for physical characteristics
- Part II, Section 5.4.4 on (examples of) netback approaches
- Part III, Section 4.3 on suggestions of prescriptive rules
- Supplementary work on mineral product pricing (gold, thermal coal, iron ore, copper)

While some of the illustrations included in this toolkit conclude that the local associated enterprise conducts ‘routine’ activities and thus should be remunerated by reference to comparables which have relatively low (and stable) returns, this is far from a presumption and each case must be analysed on its own facts. Indeed, the Toolkit emphasises the importance of determining the most appropriate method according to the facts of the relevant transaction, with the result that the local associated enterprise may or may not be determined to be due all or part of the entrepreneurial profit or loss. As an example, see Case Study 1 which concludes that the local enterprise in fact assumes all the economically significant risks associated with the transactions. In this case, comparables need to be sought to benchmark an arm’s length return for the foreign enterprise, with the local entity being entitled to the remaining profits.

NOTE: All illustrations and case studies used in this toolkit are for illustrative purposes only and are necessarily presented with limited facts. As each case must be considered based on its own facts, the case studies do not have applicability beyond the purpose of illustrating several topics related to the toolkit and should not be used by taxpayers or tax administrations to interpret superficially similar cases.

\(^7\) Other sources of information on taxation and the extractives industries include Philip Daniel (ed.) et al (2016) *International Taxation and the Extractive Industries*. 

\(^8\) “Commodity” strictly refers to products that have a uniform set of characteristics and have a well-established international price (refined gold, for example). However, in this toolkit commodity is used in a more general way to refer to agricultural, mineral, and energy products that may not conform to the strict definition.
PART II: ISSUES ARISING WHEN CONDUCTING A COMPARABILITY ANALYSIS

1. Initial Considerations

A fundamental feature of transfer pricing rules is to distinguish between “controlled transactions” and “uncontrolled transactions”. The former refers to transactions between two enterprises that are associated—in most instances this means that they are members of the same group of companies. The latter refers to transactions between independent enterprises. Such transactions may involve the sale or transfer of goods (including agricultural commodities, mineral products or manufactured goods), or anything else of value, such as physical and financial assets, intangibles (including rights), services or rights to services, etc.

The conditions of a controlled transaction are established, or tested, by reference to the conditions observed in comparable uncontrolled transactions. In order to apply the arm’s length principle to controlled transactions it is necessary to thoroughly understand the commercial or financial relations between the associated enterprises and, specifically, the features of the controlled transaction(s) to be compared. The process of doing this is referred to below as “accurately delineating” the controlled transaction. Once this is understood, it is necessary to select the most appropriate transfer pricing method and identify one or more potential uncontrolled transactions that may be considered comparable.

An uncontrolled transaction is comparable to a controlled transaction when there are no differences between them that could materially affect the pricing being examined; or when such differences exist, if reasonably accurate comparability adjustments are made in order to eliminate the effects of such differences.\footnote{Comparability adjustments are discussed in Section 5.2.}

The OECD Transfer Pricing Guidelines\footnote{Note that Transfer Pricing Guidelines (2016) as referred to in this document incorporate amendments set out in the 2015 BEPS Final Reports on Actions 8-10, Aligning Transfer Pricing Outcomes with Value Creation.} and the UN Practical Manual on Transfer Pricing each set out a framework of five economically relevant characteristics or comparability factors to be kept in mind when considering whether a controlled transaction is comparable to an uncontrolled transaction. These are:

- The contractual terms of the transaction;
- The functions performed by each of the parties to the transaction, taking into account assets used and risks assumed, including how those functions relate to the wider generation of value by the multinational enterprise (MNE) group to which the parties belong, the circumstances surrounding the transaction, and industry practices;

\footnote{The OECD Transfer Pricing Guidelines (2016) define an intangible for transfer pricing purposes 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 between independent parties in comparable circumstances (see Section A of Chapter VI). This definition would include \textit{inter alia}, patents; know-how and trade secrets; trademarks and trade names; and rights under contracts and government licences (including licences or concessions to extract minerals or hydrocarbons). See also footnote 11, below.}
• The characteristics of the property transferred or services provided;

• The economic circumstances of the parties and of the market in which the parties operate; and

• The business strategies pursued by the parties.\(^\text{12}\)

The relative importance of these factors to each case will depend on the circumstances of that case. Further information on what is meant by each of these economically relevant characteristics can be found in Section D.1 of the \textit{OECD Transfer Pricing Guidelines}, and in Chapter 5 of the \textit{UN Practical Manual on Transfer Pricing}.\(^\text{13}\)

\textbf{2. Comparability analysis—delineating the transaction}

This section outlines a process aimed at establishing the economically relevant circumstances and characteristics of a transaction undertaken by a taxpayer with an associated enterprise, and which is the subject of a transfer pricing comparability analysis.\(^\text{14}\)

\textbf{Summary of the typical process for performing a comparability analysis}

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\textit{2.1 Broad-based analysis of the taxpayer’s circumstances}

(Step 2\(^\text{15}\) of typical process outlined in Chapter III of the \textit{OECD Transfer Pricing Guidelines}; Paragraph 5.3.1 of the \textit{UN Practical Manual on Transfer Pricing})


\(^{13}\) Note that all references to the UN Practical Manual on Transfer Pricing will need to be updated following the latest revision, expected to be finalised in 2017.

\(^{14}\) Paragraph 3.4 of \textit{OECD Transfer Pricing Guidelines} (2016) presents a typical process to follow when performing a comparability analysis and clarifies "this process is considered an accepted good practice but it is not a compulsory one, and any other search process leading to the identification of reliable comparables may be acceptable as reliability of the outcome is more important than process (i.e. going through the process does not provide any guarantee that the outcome will be arm’s length, and not going through the process does not imply that the outcome will not be arm’s length)."

\(^{15}\) Step 1 involves simply identifying the relevant years to be examined.
Undertaking a broad-based analysis of the taxpayer’s circumstances may include an analysis of the industry, competition, economic and regulatory factors, and other elements that may affect the taxpayer and its environment.\textsuperscript{16}

See Part A of Examples 1, 2, and 3.

\textbf{2.2 Accurate delineation of the actual controlled transaction—focus on the economically significant characteristics}

(Step 3 of the typical process outlined in Chapter III of the \textit{OECD Transfer Pricing Guidelines}; Paragraphs 5.3.2 and 5.3.3 of the \textit{UN Practical Manual on Transfer Pricing})

After gathering background and contextual information, the next step is to accurately delineate the controlled transaction. The five economically relevant characteristics or comparability factors described above are normally considered in the analysis as they allow for the accurate identification of the features of a controlled transaction that will be the starting point for the comparability analysis.

It is important to verify any contractual terms by reference to the conduct of the parties. While a transfer pricing analysis will typically start from the related party contracts, there is a clear priority of substance over form to the extent the two are misaligned. Furthermore, the written agreements alone generally do not provide sufficient information, particularly in terms of identifying the economically significant activities and responsibilities undertaken, the assets used or contributed and the risks assumed in order to accurately delineate the transaction. On the other hand, in some cases, the contract terms or other written agreements may be the only indication of certain aspects of a transaction. To the extent that related party contracts do not fully delineate the transaction, or they conflict with the actual conduct of the parties, the latter will prevail.

A key element of a comparability analysis is the functional analysis,\textsuperscript{17} which is the foundation of a transfer pricing analysis, providing information to identify all important features of a controlled transaction, including critical functions, key assets utilised, and the assumption of economically significant risks. To provide an illustration of the type of information that may be considered in a functional analysis, Appendix 1 provides an example of a functional analysis questionnaire, although it should be borne in mind that such questions will always need to be tailored to the facts and circumstances of specific cases.

The \textit{OECD Transfer Pricing Guidelines} consider the assumption of risks\textsuperscript{18} to be a crucial part of the functional analysis and the process of delineating a transaction. This is an important aspect to consider as the assumption of greater risks carries the expectation of greater profits. Any contractual assumption of risk must be borne out by the conduct of the parties and in the substance of the transaction. Therefore, in the context of the functional analysis, as set out in the


\textsuperscript{17} See Section D.1.2 of Chapter I of the \textit{OECD Transfer Pricing Guidelines} (2016). The taxpayer’s functional analysis should also be included as part of the local file. See Annex II to Chapter VI of the \textit{OECD Transfer Pricing Guidelines} (2016).

\textsuperscript{18} See paragraph 1.71 of the \textit{OECD Transfer Pricing Guidelines} (2016) which defines risk as the effect of uncertainty on the objectives of the business. The updated UN Practical Manual on Transfer Pricing (forthcoming) adopts a similar approach regarding the relevance and analysis of risk.
OECD Transfer Pricing Guidelines (at paragraph 1.60) a detailed analysis of risks is proposed out according to the following steps:

1. The identification of specific, economically significant risks;
2. The determination of how the specific, economically significant risks have been contractually assumed;
3. Gather information on the conduct of the parties, i.e. how the associated enterprises that are parties to the transaction operate in relation to assumption and management of the specific, economically significant risks, and, in particular, which enterprise or enterprises perform control\(^\text{19}\) functions and risk mitigation functions; encounter upside or downside consequences of risk outcomes (e.g. greater or lower than anticipated revenues or costs); and have the financial capacity to assume the risk);\(^\text{20}\)
4. (i). The determination of whether the contractual assumption of risk is consistent with the conduct of the associated enterprises (i.e. whether the associated enterprises follow the contractual terms);
   (ii). The determination of whether the party assuming the risk [as determined in 4(i)] exercises control over the risk and has the financial capacity to assume the risk based on the information gathered in Step 3. If so, this party is regarded as assuming the risk and Step 5 need not be considered;
5. If the party assuming risk does not control the risk or does not have the financial capacity to assume the risk, allocate the risk to the party that does control it and has the financial capacity to assume it.

The accurately delineated transaction should be priced taking into account the financial consequences of risk assumption, as appropriately reallocated (if necessary), and appropriately compensating risk management functions, as understood in OECD Transfer Pricing Guidelines.\(^\text{21}\)

See Part B of examples 1, 2, and 3.

The international standard on transfer pricing allows, in specific circumstances, for a transaction to be disregarded. The effect of disregarding a transaction is that the taxable profit of the enterprise involved is adjusted to what it would have been if the transaction had not occurred at all, or, if appropriate, adjusted to what it would have been if the transaction had been structured in a commercially rational manner.\(^\text{22}\)

Once a transaction has been accurately delineated, the process of determining the most appropriate method and identifying relevant comparables can commence. The accurately delineated transaction will drive the resultant selection of the most appropriate method and determine the parameters of the search for comparables. See Part B of Examples 1, 2, and 3. See Appendix 2 for characterisations based on typical business models.

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\(^{19}\) See paragraph 1.65 of the OECD Transfer Pricing Guidelines (2016)

\(^{20}\) See paragraph 1.64 the OECD Transfer Pricing Guidelines (2016)

\(^{21}\) See paragraphs 1.61-1.63 and paragraph 1.105 of the OECD Transfer Pricing Guidelines (2016)

\(^{22}\) See paragraph 1.122 of the OECD Transfer Pricing Guidelines (2016)
Box 2: Sugar Producer

This simplified example illustrates the general objective of a comparability analysis.

Company A produces raw cane sugar in Country A and sells it in bulk to associated enterprises only. Raw cane sugar is a commodity product. Terms and conditions of the controlled transaction have been agreed upon (type and quality of sugar, quantity, commercial and contractual rights, and obligations, etc.), and a transfer price of USD 0.08 per pound of sugar has been determined by Company A in its transfer pricing analysis. To test the transfer price of USD 0.08 in order to apply the arm’s length principle, a comparability analysis needs to be performed: a broad-based analysis of Company A’s circumstances needs to be undertaken and the transaction accurately delineated.

The accurate delineation of the transaction showed that Company A purchases sugar cane from local producers and processes it into raw cane sugar. That sugar is then sold to the associated enterprise that packages, sells and distributes it to third party wholesalers and retailers, under a well-known trademark. The accurate delineation concludes that, at arm’s length, the associated enterprise would have the right to a return from the exploitation of that trademark. The analysis shows also that Company A carries out the functions (as well as uses assets and assumes risks) that are typical of independent sugar cane processors; and that the associated enterprise conducts functions (as well as uses assets and assumes risks) that are typical of an independent enterprise that packages, distributes and sells sugar.

Additionally, in this case, a market price of the same type of sugar sold between independent parties under comparable conditions is available.

On the basis of the accurate delineation of the transaction and the availability of information on comparable transactions, the taxpayer concluded that a Comparable Uncontrolled Price method (see 2.4.1.) is the most appropriate method.

In general terms, comparable products (such as identical sugar) need to be identified depending on the availability of sources of information and reliability of the comparable products based on the terms and conditions of the controlled transaction. Then, the most appropriate transfer pricing method is to be selected (in this case Comparable Uncontrolled Price method). Having identified the reliable comparable products and having determined their market prices, these are to be compared to the transfer price of USD 0.08 per pound to conclude if the latter complies with the arm’s length principle.

Many income tax systems are based on self-assessment, under which the taxpayer chooses the transfer pricing method. Tax authorities must be alert to the possibility of opportunistic behaviour in this choice. They need, for example, to scrutinise the presumed risk assumptions presented by the taxpayer and delineate the transaction according to the actual facts and circumstances.

2.3 Initial review of possible sources of internal comparables and sources of information on external comparables

(Steps 4 and 5 of the typical process in Chapter III of the OECD Transfer Pricing Guidelines, Paragraph 5.3.4 of the UN Practical Manual on Transfer Pricing)

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23 Internal comparables are comparable transactions between one party to the controlled transaction and an independent party. External comparables are comparable transactions between two independent enterprises, neither of which is a party to the controlled transaction.
This step involves scanning the environment for potential comparables. While the characteristics of the transaction are of primary importance in selecting the transfer pricing method, the availability of comparables information must also be considered. This step therefore helps to determine the feasibility of potential transfer pricing methods ahead of the closer analysis described below.

2.4 Select the most appropriate transfer pricing method
(Step 6 of the typical process in Chapter III of the OECD Transfer Pricing Guidelines, Paragraph 5.3.6 of the UN Practical Manual on Transfer Pricing)

2.4.1 Overview of the transfer pricing methods

This step involves identifying the most reliable transfer pricing method for establishing, or testing, arm’s length conditions. While the selection of the most appropriate method must first depend on the delineation of the transaction to be tested, as noted above, in order to be practicable, it must also give regard to the availability of potential comparables that would be needed to apply the selected method. As indicated in the OECD Transfer Pricing Guidelines, when it is not possible to find information on comparable transactions and/or make reasonably accurate adjustments, taxpayers might have to select another transfer pricing method.24

The OECD Transfer Pricing Guidelines and the UN Practical Manual on Transfer Pricing each describe five methods for applying the arm’s length principle. Detailed guidance on each of the five methods can be found in these documents. The five methods are:

(a) Comparable Uncontrolled Price (CUP) Method. The comparable uncontrolled price method consists of comparing the price charged for property or services transferred in a controlled transaction to the price charged for property or services transferred in a comparable uncontrolled transaction.

The CUP method is most often applied:

• where an internal comparable is available;

• for commodities, particularly those with deep, liquid markets, which tend to equalise price differences based on the circumstances. In such cases, pricing data from commodities exchanges may be available, but adjustments may be necessary;25

• for financial transactions (for example, interest rates for loans, guarantee fees); and

• for the licensing of some intangibles, particularly where the license is not unique and valuable, to benchmark a royalty rate.

(b) Resale Price Method. The resale price method consists of comparing the resale margin that a purchaser of property or services in a controlled transaction earns from reselling that property or services in an uncontrolled transaction with the resale margin that is earned in comparable uncontrolled purchase and resale transactions.

24 See paragraph 3.5 of the OECD Transfer Pricing Guidelines (2010).

The resale price method is most often associated with sales and distribution functions that do not involve the assumption of significant risk or the exploitation of unique and valuable intangibles (in practice, this method is most often used when there are internal comparables available, perhaps for a different product, but involving comparable functions, assets, and risks).\textsuperscript{26} Other resellers with limited value-adding functions where external comparables in the same industry and geographic market are available.

Since the resale price method requires consistency between controlled and comparable uncontrolled transactions in the determination of gross margins, while accounting standards often allow for flexibility in accounting for certain items e.g. as either cost of goods sold or operating expenses, in practice it is seldom used.\textsuperscript{27}

\textbf{(c) Cost Plus Method}. The cost plus method consists of comparing the mark-up on those costs directly and indirectly incurred in the supply of property or services in a controlled transaction with the mark-up on those costs directly and indirectly incurred in the supply of property or services in a comparable uncontrolled transaction. In an application of the cost plus method, the determination of the appropriate cost base will often be of greater importance than the amount of the mark-up, particularly where the activities concerned are considered to be relatively low value-added.\textsuperscript{28}

The cost plus method is most often associated with manufacturers and service providers that do not assume significant risk or exploit unique and valuable intangibles (for example, contract manufacturers). In practice, this method is most often used when there are internal comparables available, perhaps for a different product, but involving comparable functions, assets, and risks.\textsuperscript{29}

Since the Cost Plus method is also applied at a gross profit level, the same cautions about reliable application as noted above in the section on resale price method apply to the cost plus method.

\textbf{(d) Transactional Net Margin Method (TNMM)}. The TNMM consists of comparing the net profit margin relative to an appropriate base (profit level indicator; for example, costs, sales, assets) that an enterprise achieves in a controlled transaction with the net profit margin relative to the same base achieved in comparable uncontrolled transactions. This method bears some similarities to the cost plus and resale price methods, but is applied at a net profit margin level, rather than a gross profit margin level.

\textsuperscript{26} See Section 3.2 on internal comparables.
\textsuperscript{27} For example, items such as marketing rebates may be accounted for as either marketing expenses or sales discounts. For these reasons, the resale price and cost plus methods are most reliable when they use an internal comparable. Using these methods with external comparables from a different industry or from a different geographic market is likely to be problematic.
\textsuperscript{28} To illustrate: if an arm's length mark-up on costs determined through the comparability analysis is 5%, and the cost base is determined to be 600, the total transfer price will be calculated as 600 * 1.05 = 630. Thus the cost base accounts for around 95.2% of the total transfer price (600/630), and the mark-up only 4.8% (30/630).
\textsuperscript{29} See Section 3.2 on internal comparables.
The TNMM, like the cost plus and resale price methods, is a one-sided method whereby the results of only one party to the transaction (the “tested party”\(^\text{30}\)) are benchmarked, and the other party retains all the residual profits (or indeed losses). It is therefore suitable where the tested party has relatively routine (i.e. benchmarkable) functions, assets, and risks.\(^\text{31}\)

It should be noted that the TNMM can be applied with a variety of net margins (profit level indicators). The profit level indicator (PLI) selected when using a TNMM should be one which reflects the core value-adding activities (and hence profitability in the open market) of the tested party, as determined through the accurate delineation of the transaction. For instance, it might be most appropriate to remunerate a distributor or reseller using a sales-based PLI—since there is normally a strong correlation in the market between the level of sales and an independent distributor’s profitability, while a service provider might be most appropriately served with a cost-based PLI where a strong correlation between the profitability of an independent service provider and its costs would be expected. Typical PLIs used include:

- **Return on Sales (ROS)** for distributors/resellers of tangible products where no unique and valuable contributions are made by the tested party;

- **Return on Assets (ROA) and Return on Capital Employed (ROCE)** for asset-intensive industries, such as manufacturing (where no unique and valuable contributions are made by the tested party). A return on assets basis may also be useful in cases where assets are a key profit driver but other potential PLIs are not available or cannot be reliably applied, e.g., for a manufacturer that both purchases raw materials and sells finished goods to related parties, thus making unreliable a transfer pricing analysis based on costs or revenue (since both figures represent its related party transactions).

- **Return on Costs (ROC)**, in practice often also called a (full) cost plus (not to be confused with the Cost Plus Method, which is applied on a gross profit basis) for service providers, including toll manufacturers and contract R&D;

- **Berry ratio\(^\text{32}\)** for limited risk intermediary enterprises with no intangibles, i.e. where the tested party buys from and sells to associates (for example, sales facilitation services).

Other PLIs can also be applied.

(e) **Transaction Profit Split Method.** The transactional profit split method consists of allocating to each associated enterprise participating in a controlled transaction the portion of common profit (or loss) derived from such a transaction that an independent enterprise would expect to earn from engaging in a comparable uncontrolled transaction. Unlike the one-sided methods (cost plus, resale price, TNMM), which operate by benchmarking an appropriate return

\(^{30}\) See paragraphs 3.18-3.19 of the *OECD Transfer Pricing Guidelines* (2016) for a discussion on the choice of the tested party. Broadly, because the effect of the application of a one-sided method is that the other party is allocated all residual profits (or losses) from the transaction, the tested party will generally be the one that has the less complex functions, taking into account its assets used and risks assumed.

\(^{31}\) See Section B.1 of Chapter II of the *OECD Transfer Pricing Guidelines* (2016) or paragraph 6.3.2 of the *UN Practical Manual on Transfer Pricing for Developing Countries* (2013).

\(^{32}\) A Berry ratio is a ratio of gross profit to operating expenses. See Section B.3.5 of Chapter III of the *OECD Transfer Pricing Guidelines* (2016) or paragraph 6.3.7.5 of the *UN Practical Manual on Transfer Pricing* (2013).
for one party, a profit split method considers the appropriate split of the parties’ combined
profits from the transaction(s), due to each of the parties. When it is possible to determine an
arm’s length remuneration for some elements, such as particular functions performed by the
associated enterprises in connection with the transaction using one of the approved methods
described in Subparagraphs 2(a) to (d), the transactional profit split method may be applied
based on the common residual profit that results once such elements are so remunerated.

A transactional profit split method may be the most appropriate method where:

• the business operations of the associated enterprises are highly integrated, and/or

• both parties make unique and valuable contributions, including where both parties have
a right to the returns from the exploitation of unique and valuable intangibles. 33

In most cases, the transactional profit split method is applied by splitting the actual combined
profits between the associated enterprises on an economically valid basis (for example, based on
the relative contributions of each party). 34 As pointed out in Part III, this is a method that can be
applied in the absence of comparables.

Financial indicators used in transfer pricing methodologies

Each of the methods described above employs specific financial indicators to establish, or
test, arm’s length conditions of a transaction between associated enterprises. In each, data
on the relevant financial indicator is derived from uncontrolled transactions and applied in the
method to establish or test arm’s length conditions for the controlled transaction.

The relevant financial indicators are:

• For the comparable uncontrolled price method—a price;

• For resale price method—a gross margin on sales;

• For cost plus method—a mark-up on direct and indirect costs of supply of goods or
services;

• For transactional net margin method—a margin of operating profit (generally before
interest and taxes) as a proportion of total costs, sales revenue or value of assets
employed. (Other margins related to operating profit may also be available); and

• For the transactional profit split method—division of profit between the parties to the
transaction.

33 These may include, for example, patents; know-how or trade secrets in relation to engineering or
manufacturing processes; as well as trademarks, brands and other marketing intangibles.

34 Examples of the application of a transactional profit split method can be found in Annex II to Chapter II of the
OECD Transfer Pricing Guidelines (2016) and at paragraph 6.3.18 of the UN Practical Manual on Transfer Pricing
(2013).
Although the five methods have the same methodological standing, no single method is suitable in every situation. It depends firstly on the nature of the transaction, as pointed out above, but also on the availability of reliable information and the degree of comparability of uncontrolled transactions. Taking these criteria into account, it should be noted that where a CUP method and another transfer pricing method can be applied equally reliably, the CUP method is to be preferred, given that it is a more direct method. Moreover, once a method has been determined to be the most appropriate given the nature of the transaction, it should not be easily dismissed due to ‘imperfect’ comparables. It will be important to judge the relative reliability of the available options, including the extent to which the ‘imperfections’ impact upon the comparison; and bearing in mind the likely imperfections that would impact upon the application of any other transfer pricing method.

2.4.2 Commodity pricing and prescriptive approaches

Some countries have opted to prescribe an approach to the pricing of certain transactions, notably commodities. There is a variety of these kinds of approaches used in different countries. They are frequently referred to as “sixth method” approaches.

There are numerous versions of the sixth method, but broadly, the approaches rely on quoted prices from commodities markets to price the transaction, and in this respect, they may resemble a CUP method. Most versions of the “sixth method” prescribe that a (particular) quoted price must be used for each category of transactions; some may also mandate a particular pricing date (such as the date of shipment) and/or quotation period to be used. The approaches adopted differ across countries in several respects, including (1) whether the method is prescribed in law, regulation or decree; (2) how the approach is applied, e.g. whether it is applied uniformly to all transactions or allows for (or requires) comparability adjustments based on the facts and circumstances of the case; and (3) the types of transactions to which the approach applies. Some variations, for instance, allow for taxpayers to “opt out” of applying the approach where they can provide evidence that the counterparty entity, typically an associate of the taxpayer and an intermediary between the taxpayer and the arm’s length customer (or supplier in the case of an import transaction), has sufficient economic substance. In such cases, the measure is typically designed to address situations where the existence of the foreign counterparty may make it more difficult for the local administration to verify the true transaction.

These approaches may be seen as an anti-avoidance measure by some countries, or they may reflect an intention of simplifying the application of transfer pricing principles to transactions in industries, which are very significant to the economy, which may be complex, and for which necessary information may be scarce. Where the criteria for application are clear, these kinds of approaches provide advantages in terms of greater certainty.

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35 See paragraph 2.3 of OECD Transfer Pricing Guidelines.
36 Paragraphs 2.16A-2.16E of OECD Transfer Pricing Guidelines (2016) for example, provide that arm’s length prices for commodity transactions may be determined by reference to comparable uncontrolled arrangements represented by quoted prices from commodity exchange markets. In addition, they recommend that tax administrations should be permitted to deem a pricing date and/or quotation period for the transaction where the taxpayer fails to provide reliable evidence of the actual pricing date or quotation period and the tax administration cannot otherwise determine the actual pricing date or quotation period.
37 The ‘opt out’ clause puts the onus on the taxpayer to demonstrate the economically significant characteristics of the actual transaction.
and simplicity. However, to the extent the approach does not consider the actual characteristics of the controlled transaction, they may result in over- or under-taxation, and hence, double taxation or non-taxation, particularly for controlled transactions with characteristics that differ significantly from those typically traded, and which form the basis of the relevant quoted price.

Using quoted prices as a basis for determining an arm’s length price for a transaction is likely to be most reliable where there are transparent, deep, and liquid markets for the target products, and where the approach used is in line with industry practices, which may change over time. In addition, comparability adjustments should be made where required. In order to minimise the risk of over- or under-taxation, it is, therefore, important in the development of any prescriptive rules for policy makers to have a good understanding of the pricing practices used by independent parties in the industry. Potential misalignment with industry practices in uncontrolled transactions is likely to be a particular risk where prescribed approaches are set out in legislation that take time to be amended. More flexible approaches that allow for appropriate comparability adjustments, and for taxpayers to “opt out” where they can demonstrate sufficient substance, would also help to ensure arm’s length pricing and minimise the risk of inappropriate taxation.

Taking into account the potential disadvantages inherent in this type of approach, but also the potential benefits, this toolkit proposes that work should be carried out to determine the feasibility of further developing these types of methods to increase their reliability and address the risks of imposing non-arm’s length pricing. For example, the potential for developing specific approaches for particular commodities, and incorporating a framework for adjustments such as those based on netback approaches (described below in Section 5.4.4 of Part II), may be explored.

See also the section on prescriptive approaches in Part III, Section 4.3.

2.4.3 Process of selecting the most appropriate method

The OECD Transfer Pricing Guidelines provide guidance on the identification of the most appropriate method as follows:

... the selection process should take account of the respective strengths and weaknesses of the methods; the appropriateness of the method considered in view of the nature of the controlled transaction, determined in particular through a functional analysis; the availability of reliable information (in particular on uncontrolled comparables) needed to apply the selected method and/or other methods; and the degree of comparability between controlled and uncontrolled transactions, including the reliability of comparability adjustments that may be needed to eliminate material differences between them.  

38 See related mineral pricing study for methodology for how to build that knowledge.
39 Paragraph 2.2 of OECD Transfer Pricing Guidelines (2016); Paragraph 6.1.2 of the UN Practical Manual on Transfer Pricing (2013). The delineation of the transaction (see section 2.2, above) will provide much of the information needed to determine the most appropriate method. Where the functional analysis reveals that one party makes a relatively more “routine” contribution, while the other party’s contribution is more significant (perhaps involving the contribution of unique and valuable intangibles and economically significant risks) and a one-sided method is considered to be the most appropriate, a tested party will also need to be selected. This will generally be the more “routine” entity. See paragraphs 3.18-3.19 of the OECD Transfer Pricing Guidelines (2016).
Country transfer pricing rules based on the arm’s length principle would normally allow a tax administration to replace a taxpayer’s selected method in cases where the selected method is not the most appropriate one taking into account the facts and circumstances of the case.

**Box 3. Stylised Case: PenCo**

This simplified example illustrates the impact of selecting the correct tested party when using a one-sided method.

PenCo Manufacturing in Country X manufactures pens, which are sold to an associated enterprise, PenCo Sales in Country Y. The table below provides simplified financial statements.

<table>
<thead>
<tr>
<th></th>
<th>PenCo Manufacturing</th>
<th>PenCo Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sales revenue</strong></td>
<td>1,000</td>
<td>1,500</td>
</tr>
<tr>
<td><strong>Total Costs</strong></td>
<td>850</td>
<td>1,200</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(includes purchase price of 1,000 for pens)</td>
</tr>
<tr>
<td><strong>Operating Profit</strong></td>
<td>150</td>
<td>300</td>
</tr>
</tbody>
</table>

In this case, the total profit to the two enterprises from the manufacture and sale of pens is 450 (i.e. 1500 - 850 = 200).

Scenario 1: Assume PenCo Manufacturing is chosen as the tested party and a TNMM with a PLI of a mark-up on full costs (i.e. a Cost Plus analogue, but applied at a net margin level) is selected as the most appropriate transfer pricing method. (The cost plus method could have been selected, except that reliable comparables data at a gross margin level was not available to benchmark an arm’s length return to PenCo Manufacturing.) A search for potential comparables results in a benchmark return of 10 percent mark-up on full costs. PenCo Manufacturing’s profit would be calculated as 850 * 10% = 85. Effectively, this would mean the remaining combined profit of the PenCo group (450 - 85 = 365) would fall to PenCo Sales.

Scenario 2: Assume PenCo Sales is chosen as the tested party and a TNMM with a PLI of a return on sales (i.e. a resale price analogue, but applied at a net margin level) is selected as the transfer pricing method. (The Resale price method could have been selected, except that reliable comparables data at a gross margin level was not available to benchmark an arm’s length return to PenCo Sales.) A search for potential comparables results in a benchmark return of 5 percent net margin on sales. In this case, PenCo Sales’ profit would be calculated as 1,500 * 5% = 75, and the remaining combined profit of the PenCo group (450-75 = 375) would fall to PenCo Manufacturing.

It can be seen in this simplified illustration that the choice of tested party has a very significant impact on the profit of each enterprise. In both scenarios above, the TNMM is employed, but the same issues would arise if other methods, such as a CUP or a transactional profit split, are used. The impact of the choice of method, and the choice of tested party, will often be more significant than the value of chosen financial indicator (in this case full-cost mark-up or return on sales), even where potential comparables data is imprecise, since it is the choice of the method and tested party that determine how the arm’s length transfer price is worked out. That is, in Scenario 1, the transfer price is deduced from the benchmarked net profit margin of PenCo Manufacturing. While in Scenario 2, it is deduced from the benchmarked net profit margin of PenCo Sales. Further, the mechanical example above demonstrates why the accurate delineation of the transaction and from it, the selection of the most appropriate method, is so important to a reliable

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40 This example is intended solely to provide an illustration of the mechanics of applying a transfer pricing method particular ways. No inference should be drawn from it as to the most appropriate method for manufacturing or sales entities, or as to an arm’s length return for such entities.
transfer pricing analysis: if this foundation is incorrect, irrelevant and inappropriate comparables will be used, and the results of the analysis are unlikely to reflect arm’s length outcomes. In this stylised example, therefore, it would be essential to consider the functional analysis (taking into account the assets used and risks assumed) of PenCo Manufacturing and PenCo Sales to determine whether Scenario 1 or Scenario 2 (or an alternative scenario) best fits the actual transaction. For instance, if:

- PenCo Manufacturing undertook routine manufacturing activities to the order of PenCo Sales while PenCo Sales was the ‘entrepreneur’ and had developed a unique and valuable brand for the sales of the Pens, Scenario 1 is more likely to be appropriate;

- PenCo Sales undertook routine distribution and sales activities of high-end designer pens developed and manufactured by PenCo Manufacturing, Scenario 2 may be more appropriate.

All transfer pricing analyses will turn on their own facts, but in many cases the assumption of economically significant risks and the impact of unique and valuable contributions such as intangibles\textsuperscript{41} will often be very important factors in selecting the most appropriate method, and where relevant, the selection of the tested party. For instance, where an enterprise assumes the economically significant risks, including those associated with a unique and valuable intangible, it is unlikely to be possible to identify a reliable comparable for it, and a one-sided method that tests the return to that enterprise will not be appropriate.

2.4.4 Conclusions on selecting the most appropriate method

There is no hierarchy in the selection of transfer pricing methods. There can be situations, based on the accurate delineation of the transaction, where a transactional profit split is more appropriate than a CUP or a one-sided method,\textsuperscript{42} and vice-versa. If it is possible to benchmark a return for one of the parties to a transaction (normally a party that undertakes only routine activities and does not make unique and valuable contributions), then a one-sided method such as a cost plus, resale price or TNMM may be found to be the most appropriate method. On the other hand, if the parties are highly integrated and/or both make unique and valuable contributions, it is more likely that a one-sided method cannot be applied reliably, or cannot be applied at all. In such cases, a transactional profit split might be the most appropriate method.

This section has attempted to demonstrate that the choice of the most appropriate method will, in many cases, be a very significant determinant of the allocation of profit between enterprises. This is illustrated in Case Study 2.

3. Data relevant for comparability analyses

3.1 Role of data

The application of the arm’s length principle generally requires reference to information from uncontrolled transactions. This section considers the sources of such information and illustrates areas where available information is insufficient. Alternative approaches that may be

\textsuperscript{41}Bearing in mind that any analysis of intangibles must consider the parties’ contributions to the intangible, including its development, enhancement, maintenance, protection and exploitation, and not merely legal ownership. See paragraph 6.42 of the OECD Transfer Pricing Guidelines (2016).

\textsuperscript{42}Paragraph 2.4 of OECD Transfer Pricing Guidelines (2016).
available in such instances are considered in Part III of this toolkit. It is important to note that the challenge of insufficient information can arise in all parts of the transfer pricing spectrum. Often, no reference information exists to compare highly complex transactions such as those involving unique and valuable intangibles. However, limitations in the availability of information can occur in relation to all transactions, not just those of a unique nature and complexity.

3.2 Sources of potential comparables data and typical types of data used

Any source of information should be acceptable, as long as it leads to reliable financial and business information for the transfer pricing analysis. There are two broad types of comparables: internal and external. There is no hierarchy between internal and external comparables.

An internal comparable exists where there is a comparable transaction between one party to the controlled transaction and an independent party. The OECD Transfer Pricing Guidelines notes that where they exist:

> Internal comparables may have a more direct and closer relationship to the transaction under review than external comparables. The financial analysis may be easier and more reliable as it will presumably rely on identical accounting standards and practices for the internal comparable and for the controlled transaction. In addition, access to information on internal comparables may be both more complete and less costly. 43

However, in practice, application of the arm’s length principle is heavily reliant in practice on external comparables. An external comparable exists where there is a comparable transaction between two enterprises that are independent of one another, and neither of which is a party to the controlled transaction. The most common source of information on external comparables is commercial databases, which are discussed in the section below.

3.3 Commercial databases

Commercial databases are not necessarily designed for transfer pricing purposes. They typically contain information from public disclosures, for instance, audited company accounts required by corporate, market, financial services, or other regulators, and may cover a large number of sectors and companies.

There are different types of databases. Some contain only financial markets data, others contain data on particular transactions, and still others contain company accounts or other financial information. Some databases collate information from specific geographic areas. The amount of available detail also varies by database, company, and geographic area. In many cases, since the database relies on disclosures required by certain regulatory bodies, the extent of disclosures in a database is determined by the relevant disclosure requirements (see Appendix 3 for an overview of relevant databases). This tends to limit the amount of data directly drawn from developing countries.

Limitations and challenges in using commercial databases

As has been noted above, most commercial databases collate information produced for purposes other than transfer pricing. This can mean that the information collected does not always address the issues relevant for a transfer pricing analysis.

With respect to commercial databases, many developing countries report two core challenges: access and limited data coverage. First, they highlight difficulties, including costs involved, in relation to accessing commercial databases. Second, even where they can be accessed, such databases often contain limited, or no, data concerning local economic operators that may potentially serve as comparables.

A combined review of several private databases commonly relied upon by practitioners does suggest a scarcity of domestic information that can be used for comparability analysis in many countries. The table in Appendix 4 summarises information available in several databases to transfer pricing practitioners globally. To approximate practical requirements only local companies that are independent and for which revenue and net margin information is available (for the possible application of the arm’s length principle using the TNMM) have been counted. Of about 8,885,000 global records for which revenue and net margin information is available, around 5,000,000 meet the basic independence requirement. For more than 164 countries, fewer than 1,000 local observations were available that met the stipulated minimum requirement in 2013. In those countries it will regularly be necessary to look for alternative, non-domestic information sources.

At first glance, this review confirms that for many countries, and in particular emerging and developing economies, there may not be easy access to local comparables. It is noteworthy that this list of countries with very limited domestic information available in public databases includes many that have introduced comprehensive transfer pricing regulations. In these countries, the scope for the application of any transfer pricing method is severely constrained if it has to be based on local comparables. Moreover, the depiction also reveals inconsistency in amount of data available in various OECD economies.

A number of factors affect the variation on the availability of information. The obvious starting point is the relation between the size of a country’s economy and the number of companies in that country. Other structural factors may include the dominance of markets by a few large MNEs or other corporations, important levels of state ownership in selected sectors, and the importance of smaller, sometimes informal, economic operators in many developing countries. In addition to these structural factors, there are, however, a range of regulatory and administrative choices that affect information availability (see Section 2 of Part III).

In addition to limited information being captured in commonly used databases, tax administrations of developing economies frequently report that they face challenges in

44 Please note that the table referred to summarises information shared voluntarily by several private database providers at request. It is thus not a complete summary of globally available information and more information may be available for some countries in databases not included in the review.

45 It is important to note that the minimum criteria do not take into account other factors that require consideration when analysing comparability for applying the arm’s length principle in a particular case, such as industry, size, functions performed, assets employed, risks assumed, and so forth. Applying these factors would further narrow the sample of domestic information for actual cases.
accessing these databases. Notably, in a recent survey of tax officials participating in the Global Transfer Pricing Forum 2016 almost half of the representatives from non-OECD countries indicated that their administration did not have access to a commercial database. These challenges concerning obtaining access to existing information largely relate to budgetary constraints faced by tax administrations in purchasing access to commercial databases. These constraints could be addressed through a range of initiatives:

- At the outset, countries should consider exploring the possibility of discounted rates with the commercial database providers. The use of a specific database by the tax administration likely has a non-negligible signalling effect on the private sector and tax advisory service providers. Consequently, commercial data providers should have an increased incentive in strategic partnerships with revenue services.

- Countries may also consider the acquisition and use of databases, perhaps through regional organisations.

- Some countries, such as Romania, have addressed budgetary constraints by using funds from APA application fees to buy database access; while other countries, such as Kenya, used actual/projected collections from transfer pricing collections as a basis to obtain budgetary approval.

- Other countries have obtained donor support to obtain funds to purchase access to commercial databases.

Reportedly, some countries’ tax administrations have sought to deal with the lack of access to databases by increasing their requirements of taxpayers, for example, by requiring taxpayers to include screenshots in their transfer pricing documentation files as part of the documentation of the benchmarking study.

### 3.3.1 Price databases and publications for commodities

In addition to the general databases described above there are specialised databases and publications available for mineral, agricultural, and energy products. These publications typically provide information on market conditions and prices, trading terms and industry developments (such as long-term and short-term demand and supply forecasts, including, for example, the maintenance operations or other conditions impacting output of major mines). These publications can be useful for revenue authorities to understand market dynamics and the context for transactions, as well as to find transactions that are potentially comparable to the transaction under review.

A list of data sources for each mineral product case study is available in the supplementary study into mineral product pricing.

A critical part of market price determination is the flow of information on market conditions to market participants. This includes information about current and future demand and supply conditions, as well as information on the trading activities of competing firms. This information—in particular information on the terms used in the last incremental sale of a unit of the commodity—helps prices gravitate toward one consistent market price.
In some markets, much of the information on individual transactions is not available to parties outside the trade and is closely guarded by market participants. For example, a supplier who has extracted a relatively high price for a commodity may not wish his competitors to know that since that may risk those prices being undercut in future. Alternatively, there may be only a limited number of buyers or sellers, such as in markets for many rare earth minerals.

To assist market price discovery, numerous publications have arisen for particular mineral and other commodity products, publishing information on market conditions and recent transactions. These publications are based on observations of transactions and/or continuous contact with key market participants and traders, who may report transactions but not necessarily identify the parties to the transaction.

Because sales terms can vary widely, some data publishers adjust raw trade data before publication. This could mean the publisher:

- excludes sales at terms that are notably inconsistent with other transactions around that time;
- fills in elements of a transaction that have not been disclosed by market participants (for example, the publisher may know a particular quantity of a specified form of iron ore has been sold and where it is going, but not the full commercial terms of the transaction);\(^{46}\)
- adjusts or “normalises” observed prices in transactions back to a standard product specification, where those transactions do not occur under common contract terms (for example, where iron ore is shipped to an uncommon destination port);
- provides an assessment of the price in the absence of sufficient trades. That is, they may publish their own estimate of what the product would have traded at on that day, had a transaction occurred.

Adjustments to the raw data ultimately reflect the publisher’s opinion. Their appropriateness, therefore, depends on the ability of publishers to access detailed information on transactions, as well as their experience and skill to choose which pieces of information are most relevant to market participants. Many publishers provide information about the methodologies used to make adjustments, increasing transparency around the process.

Some market participants (and, indeed, revenue authorities) urge that the data, therefore, be used with care, as they may not reflect purely factual information. Revenue authorities will need to give consideration as to how, for example, judicial processes may view a data source. For instance, it may be relevant to consider how widely the source is used by market participants themselves.

In the absence of other information, such as in instances where a taxpayer refuses (or is unable) to provide information about actual contract terms, it may be reasonable to use

\(^{46}\) In particular, these commercial terms would include the obligations of the buyer and seller in relation to the place of delivery of the goods, customs clearances, and related costs such as freight, insurance and any duties payable. Such terms are generally set out in accordance with the Incoterms rules established by the International Chamber of Commerce.
data publications as a starting point to ascertain what terms were used in similar transactions around the same time. It may also be appropriate to use prices disclosed in such publications, or quoted on a public exchange, as the basis upon which to determine arm’s length prices, particularly where such a publication or data source is widely used by independent market participants themselves. However, adjustments may be required where the conditions of the controlled transaction differ from those forming the basis for the quoted price.47

It should be noted that pricing data described above will normally be relevant only where the CUP method is the most appropriate method. Depending on the outcome of comparability analysis, other methods may be more appropriate for transactions involving commodities.

3.4 Identification of potential comparables
(Step 7 of the typical process described in Chapter III of the OECD Transfer Pricing Guidelines, Section 5.3.4 of the UN Practical Manual on Transfer Pricing)

Internal comparables

In some cases, information regarding transactions between the taxpayer (or an associated enterprise of the taxpayer) and unconnected parties may be available. While such information can be very useful, an analysis would be needed to determine whether these transactions are in fact comparable to the transaction(s) under review.

Box 4. Chocolate Bar Manufacturer

This simplified example illustrates the identification and use of internal comparables.

According to the functional analysis performed, Company A is an entity that transacts with other associated enterprises. Company A has several business lines, one of which is dedicated to the manufacturing/production of chocolate bars and other confectionary products. The chocolate bars are sold by Company A to Company C. A special type of granola bar that is physically different from the chocolate bars and to which no reliable adjustments can be made to make it comparable to the chocolate bars, is manufactured by Company A and sold to unrelated parties. Clearly, the granola bars are not comparable products to the chocolate bars and the use of the Comparable Uncontrolled Price method in this case is not appropriate.

However, the accurate delineation of the transactions demonstrates that functions performed, assets used, and risks assumed by Company A in manufacturing chocolate bars and granola bars are very similar, if not identical. This would imply that the reward to the functions related to manufacturing granola bars may be used as the internal comparable to the reward to the functions related to manufacturing chocolate bars, and a profitability return can be attributed to each function based on the selection of the most appropriate transfer pricing method.

Thus, the internal comparable may be used to determine the arm’s length nature of the controlled transaction by comparing the profitability of each production line.

47 See paragraphs 2.16A to 2.16E of OECD Transfer Pricing Guidelines (2016) for more guidance on the use of quoted prices for commodities.
External comparables

It may also happen that derived from the functional analysis, information regarding the controlled transaction has been clearly delineated but no potential internal comparables have been identified for the analysis. In this case, external comparables need to be considered and identified. Depending on the facts and circumstances of the case and on the comparability factors affecting the potential comparables, external comparables could be sought from domestic and/or foreign sources of information. Appendix 3 of this report presents an overview of available sources of public data.

Box 5. Sugar Producer

This simplified example illustrates the identification and use of external comparables.

Following the facts of the illustration in Box 2, Company A produces a commodity product that is traded with associated enterprises only. The company made an operating loss in the relevant period.

The accurate delineation of the transaction shows that Company A purchases sugar cane from independent producers, which it then processes into raw cane sugar. This sugar is then sold to its associated enterprise, Company B, which packages it and distributes to wholesalers and large retailers, under its own trademark.

The analysis further shows that, under an agreement between Company A and Company B, the former contracts to produce sugar only to the order of Company B. Furthermore, Company B is obliged to purchase all the sugar produced by Company A, and actually does so. The analysis reveals that all decisions concerning the amount of sugar to be produced, and scheduling of that production, are made by Company B personnel. Company A does not have any unique and valuable intangibles and does not make any material contributions to any intangibles owned by associated enterprises.

It is concluded that the inventory risk and the market risk are assumed by Company B, and that Company A is most accurately characterised as a ‘contract manufacturer’ on behalf of Company B. It was further concluded that the most appropriate method in this case is a Transactional Net Margin Method, using Company A as the tested party and operating profit/full costs as the PLI.

As no internal comparables are available, it was decided to use one of the commercial electronic databases to identify potential comparables. The search criteria were selected with the aim of identifying independent manufacturers of commodity food products in Country A that did not exploit unique and valuable intangibles, did not conduct material sales and marketing activities, and did not have other business lines. The search initially identified 45 such manufacturers. A manual review of these manufacturers rejected 12 companies, leaving 33 potential comparable manufacturers (“potential comparables”). The search resulted in comparables which were used to benchmark a return for Company A, in line with its routine functions and very limited risks.

As has been noted above, it generally makes sense to begin a search for comparables with information available concerning the local geographic market of the tested party since with such information there is typically no need to consider the impact of geographic market differences. However, where comparables local to the tested party are scarce or unavailable, data from other geographic markets (potential ‘foreign comparables’) can be considered. In such cases, it will be important to examine whether differences in markets are likely to make a material difference to the condition being examined. Where the transaction occurs in a truly global market, geography may not make a material difference.
In some cases, the geographic market may be less relevant than other characteristics, meaning that the most reliable comparables available are those from a foreign market. For example, when using a TNMM, an independent entity from a foreign market with highly comparable functions, assets, and risks may provide a more reliable comparison for transfer pricing purposes than an uncontrolled entity from the local market with a lower degree of comparability in terms of its functional analysis.

Box 6. Different Geographical Markets

This simplified example illustrates that comparables in a differing geographical market can be selected as the most reliable comparables.

The tax administration in Country X was undertaking a transfer pricing audit of a local subsidiary of a large MNE. It had delineated the controlled transaction as the provision of manufacturing services under a contract manufacturing agreement between the associated enterprises. The functional analysis revealed that the subsidiary performed routine manufacturing services using its own assets as well as certain intangibles owned and developed by its associated enterprise. The subsidiary did not undertake any significant research and development, or sales and marketing activities. A search for comparable contract manufacturers in Country X was unsuccessful. The only information on independent manufacturers in Country X was derived from entities with significant research and development and/or sales and marketing functions. Many of the independent manufacturers also appeared to have unique and valuable intangibles.

The audit team concluded that these differences were highly likely to have a material effect on the condition being examined. They, therefore, sought potential comparables from other geographic markets, in particular those where economic conditions were considered similar to those in Country X. A number of independent contract manufacturers based in other markets were found and reviewed.

Based on a thorough analysis of the facts in this case, the audit team concluded that data from independent contract manufacturers with a similar range of functions, assets, and risks as the local subsidiary, albeit from another jurisdiction, provided a more reliable comparison than any of the local manufacturers.

3.4.1 The comparables search process

The following section outlines a typical comparables search process that aims to identify potential comparables using a commercial database. It assumes that the controlled transaction has been accurately delineated and that a one-sided method is determined to be the most appropriate to the circumstances.

Box 7. A Typical Process to Screen for Comparables

1. Industry/business activity qualification codes
   
   A common starting point in the comparables search process searches is industry/business activity classification codes. The most common classification codes are presented in Appendix 5. Additionally, other countries have also created their industry classification codes for statistical purposes or utilise other sources of business activity classification codes. A list of these codes is provided in Appendix 6.

   In practice, the Standard Industry Classification codes (SIC), the Nomenclature of Economic Activities (NACE), and the North American Industry Classification System (NAICS) industry codes are the most commonly used by taxpayers and tax administrations worldwide, but any of the codes may be relevant depending on the data available. Guidance on how these three industry codes are used is provided in
Part C of Case Study 3.

2 Geography/region/country/market
It generally makes sense to consider potential comparables from the same geographic market as the tested party in the first instance as this will minimise any potential differences that could have a material effect on the comparison. Where there is no information available relating to transactions that are in other respects comparable to the tested transaction and relate to the same geographic market, it is important to consider the relative importance of the various comparability factors, bearing in mind that the aim is to find the most reliable comparables available.

Where the market is considered to be a key comparability factor, it may be appropriate for this to be defined as a country, a region, or group of countries that are considered to be either (a) a single or largely integrated market; or (b) sufficiently similar to the market of the tested transactions. See also Section 5.5 on use of foreign data.

3 Key words related to the business activity
This stage generally involves identifying and searching for key terms related to the tested party’s business and the activities associated with the transactions under review.

4 Availability of financial information
For practical reasons, potential results are screened out if two or more years of information are missing.

5 Level of revenues (or other indicators of size, such as assets or number of employees)
Comparing entities that are of similar size can be important as the magnitude of the business can have a material effect on comparability. In addition, it may be appropriate in some cases to examine more carefully any companies with continuous losses. At arm’s length, independent companies may make losses, but this would not be expected to continue for an extended period of time.

6 Independence
A fundamental element of the arm’s length principle is that of a comparison between the controlled transaction and uncontrolled transactions. Therefore, most search processes will seek to eliminate transactions that have been entered into by entities that belong to a multinational group. See Appendix 7 for an explanation of the independence criteria.

7 Type of financial accounts
This stage focusses on identifying entities that provide either consolidated or statutory financial accounts. Financial information of comparables should not be affected/influenced by connected circumstances. Care must be taken when using consolidated financial accounts. They may be used only if the functions conducted by the consolidated group equate to those of the tested party.

8 Active/inactive entities
Inactive entities are usually screened out in the search process as circumstances between active and inactive entities are generally different.

9 Screening for functional comparability
In some cases, the key word search related to business activities described above can be refined by screening transactions based on certain amounts in the financial accounts which would indicate the existence (or absence) of certain functions or assets. For example, if the tested party does not undertake any research and development and does not use any intangibles which may have been created through R&D, it may be appropriate to include a screen to exclude entities which have non-negligible amounts of R&D expenses.

See also the discussion of diagnostic ratios in section 6.3.1 below.
Additional criteria associated with the facts and circumstances of the case may be critical to review at a manual level. For an example of the application of the screening process, see Part C of Case Study 3.

3.4.2 Reviewing a comparables search process using commercial databases

Rather than undertaking a full comparables search themselves, it may be appropriate instead for the tax administration to critically analyse the comparables search undertaken by the taxpayer. This may be the case, for example, if the tax administration does not have access to a database, or for taxpayers regarded as engaged in low-risk transactions, or those with a strong compliance history. A typical process for reviewing a comparables search is presented in Appendix 8.

Box 8. Country Practices

Some countries prefer to start their analysis with the information provided by the taxpayer. Depending on the particular case, this will often consist of the normal transfer pricing documentation. In some cases it may be supplemented by the taxpayer’s responses to questionnaires issued by the tax administration.

South Africa also always starts with what the taxpayer has done. If there are disagreements on certain parts, they will discuss these with the taxpayer and try to find solutions. If there is total disagreement, they will do their own comparability analysis rather than relying on a review of the analysis performed by the taxpayer.

Mexico takes as a starting point the taxpayer’s comparability analysis and from there reviews and sometimes replicates the search. In this process, Mexico assesses whether all the comparability analysis steps have been properly performed and taken into account. If there are inconsistencies, they may perform their own search for comparables. Mexico always corroborates the functional analysis presented by taxpayers.

New Zealand always reviews the information given by the taxpayer, using their experience to analyse its reliability. Norway and Colombia also typically start with the analysis they get from the taxpayer. Colombia always does its own functional analysis (generally including going to the company and doing interviews with key staff). If the comparables used by the taxpayer do not seem to be reliable, then other comparables are selected.

In contrast, Australia usually undertakes its own benchmarking, often based on common sets of potential comparables for particular kinds of transactions, which are then modified based on the particular facts and circumstances and taking into account the information provided by the taxpayer.

Source: OECD interviews with country representatives, May 2016.

48 A further toolkit on Transfer Pricing Documentation will be developed by the Platform for Collaboration on Tax in 2017, which will provide tools such as model legislation / regulations to require the keeping and/or filing of relevant transfer pricing documentation.
4. Making optimal use of available data

As noted above, commercial databases and statutory filings are perhaps the most commonly used source of data for transfer pricing comparability purposes when they are readily available. Other potential sources of information are discussed in this section.

4.1 Other sources of information

4.1.1 Information in the hands of the tax authority

In many developing countries, the information collected by tax administrations through tax filings or at customs may be the most comprehensive source of domestic data on potential comparable uncontrolled transactions. However, the information typically is covered by tax secrecy rules and not available to taxpayers. Furthermore, in the case of customs data, the information collected is unlikely to be directly applicable to a transfer pricing analysis (see below). Consequently, the UN Practical Manual on Transfer Pricing and the OECD Transfer Pricing Guidelines caution against the use of this kind of information for transfer pricing comparability purposes (“secret comparables”), unless requisite information can be disclosed to the taxpayers within the limits of domestic confidentiality rules.

Countries have adopted different positions on the use of secret comparables 49 ranging, for example, from explicit provisions allowing for the use of non-public information in China; to strong opposition to their use in Austria and the United States (see the table in the country practices hereafter). Most, but not all, countries either specifically prohibit the use of secret comparables or refrain from using them in practice.50

49 That is, comparables based on information which cannot be disclosed to the taxpayer, for instance because it is derived from tax returns or compliance activities on other taxpayers undertaken by the tax administration. See paragraph 1.6.13 of the UN Practical Manual on Transfer Pricing (2013) or paragraph 3.36 of the OECD Transfer Pricing Guidelines (2016)

50 For court cases on secret comparables, see Muyaa, E. September/October 2014. Transfer Pricing Comparability Adjustments: The Pursuit of “Exact” Comparables.
### Box 9. Country Practices: The Use of Secret Comparables

<table>
<thead>
<tr>
<th>Country</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>The use of secret comparables is seen as a potential violation of fundamental taxpayer rights in Austria. According to Austrian law, every taxpayer has the right to defend its position before an adjustment is made and this right would be undermined by the use of secret comparables.</td>
</tr>
<tr>
<td>China</td>
<td>Circular 2/2009 explicitly states that the tax authorities may use non-public information.</td>
</tr>
<tr>
<td>South Africa</td>
<td>Practice Note 7 states that SARS does not intend to use secret comparables, but does not rule out the possibility.</td>
</tr>
<tr>
<td>Mexico</td>
<td>A domestic law provision specifically allows the use of secret comparables by the SAT provided that disclosure of the details of the comparables is made to elected “representatives” of the taxpayer under examination.</td>
</tr>
</tbody>
</table>
| Turkey          | “When determining transfer pricing-related assessments, Turkish tax auditors would highly tend to use their own ‘secret comparables’ to which only they have access, by virtue of their public authority.”  
| United Kingdom  | HMRC does not rely on secret comparables, except as a basis for rejecting a potential comparable.                                          |
| United States   | The IRS strongly opposes the use of secret comparables and routinely objects to their use in mutual agreement procedures.  


### 4.1.2 Customs data

**Customs data** is sometimes suggested as a potential source of data on comparables. It is questionable, however, whether information can be used to assess comparability for transfer pricing purposes. Customs valuation data is collected by the customs authorities at the time of import and the information is confidential and not typically publicly available at the transaction level. In most countries, customs valuations to determine the customs duty liability must be determined in accordance with domestic legislation that is based on the WTO Valuation Agreement (1979). In such cases, the transaction value, being the price actually paid or payable with respect to the sale that resulted in the export is the starting point and is the method required to be applied wherever possible (in general used for over 90 percent of imports). However, mis-pricing can also affect customs values. Hence, the customs valuation rules allow for methods other than the transaction value to be applied where it is demonstrated that the relationship between the importer and exporter has influenced the price, or where no sale has

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52 Customs valuations are relevant at the time of import. The transaction for which the customs valuation is determined may differ from the transaction that is relevant for transfer pricing purposes. For example, where the importer is a foreign party who sells the goods to the related party post importation.

53 Countries are allowed to choose whether this price should be the FOB (Free on Board) or CIF (Cost, Insurance and Freight) price, with adjustments made where needed. Specific adjustments to the price may be required for certain commissions, royalties, assists etc.
taken place. The alternative methods prescribed for in the rules then must be applied in strict hierarchical order and are reliant on the availability of certain information (identical or similar goods, industry margins etc.) Moreover, customs valuation data is collected by the customs authority based on specific codes/nomenclature for goods types. Whilst these codes are relatively descriptive, alone, they typically do not provide the level of detail necessary for ascertaining certain characteristics of the goods (i.e. they do not distinguish between goods of different quality or branding), the functions, assets and risks of the parties to the transaction, and the terms of trade. In some cases, however, customs data may be useful to supplement other available information, particularly with regard to the physical characteristics of the goods or the precise date of shipment.

The OECD, WBG, and World Customs Organization (WCO) have been developing practical tools for closer co-operation between customs officers and transfer pricing auditors. Given the different frameworks that apply to each, these efforts have focused on encouraging greater understanding of each other’s rules and from there, better use of available information. The three organisations mentioned have jointly run several workshops involving officials dealing with both customs valuation and transfer pricing. In addition, the WCO, working with the OECD and WBG, has produced a guide that provides background on both customs and transfer pricing methodologies and examines the areas of overlap and possible ways for customs to use transfer pricing data when examining related party transactions, together with some examples of national practices.54

However, non-public administrative information can be highly relevant in practice. Typically, it is the main source of information for the design of benchmarks for risk assessment guiding audit selection. Information from tax returns in the hands of the tax authority can be used to review taxpayer performance against industry benchmarks and other structural risk indicators. It is usually supplemented with information from other sources, including publicly filed accounts at the stock exchange, other sources on industry performance, such as chamber of commerce or business registry data, and private databases or media reports. The data published by different sources on industry specific performance will be useful for risk assessment, but problematic to support actual transfer pricing assessments given that the composition of industry averages is usually fairly broad and includes data from controlled transactions.

Moreover, administrative information has the potential to be used as a source of information for the design of safe harbour rules. In particular, such information may be available to set reliable safe harbour ranges without breaching taxpayer confidentiality. This is discussed further in Section 4 of Part III.

4.2 Wider selection of data

Where necessary, loosening initial screening filters may also increase the pool of information available for comparability studies. The challenge here is striking the right balance as a wider selection criterion comes at the cost of loosening comparability. In particular,

the use of data from other industries with similar functional profiles\textsuperscript{55} can be considered. Such approaches are likely to be more effective when applying a one-sided method that relies on a net profit measure, i.e. TNMM, as differences in accounting classifications between industries and countries are more likely to reduce the reliability of comparisons made at a gross profit level.

\begin{boxedtext}{Box 10. Broadening Search Criteria}

The tax administration in Country A was undertaking a transfer pricing audit of a local subsidiary of a large MNE. It had delineated the controlled transaction as the sale and purchase of construction and mining machinery. An analysis of the industry revealed that this sector is highly cyclical. The local subsidiary was engaged in marketing, sales, and distribution activities, and was found to assume a significant market risk. The tax administration sought information on independent distributors of construction and mining machinery and related goods performing comparable marketing, sales, and distribution activities in Country A, but was unable to find any. The audit team had a number of options for determining an arm’s length range for the controlled transactions, including searching for:

- Local, functionally similar wholesale marketer/distributors of other types of plant, equipment, and machinery and other goods.

- Functionally similar wholesale distributors of construction and mining machinery and related goods in foreign markets with similar economic conditions (particularly levels of capital investment) to those experienced in Country A over the audit period.

\end{boxedtext}

Potentially, less rigid independence requirements could also be considered in some cases. Some countries prefer to screen potential comparables using very strict ownership and control requirements, for instance, by excluding entities where one shareholder holds (directly or indirectly) a significant minority share. While this kind of cautious approach may be appropriate, it may also result in there being no acceptable comparables information with which to undertake the transfer pricing analysis. Some countries address this issue by considering potential comparables where independent minority shareholders may effectively mitigate risks of non-arm’s length practices among related entities, or where such entities have disclosed no related party transactions in their audited financial accounts. These kinds of pragmatic approaches may be of assistance, particularly in markets that are highly concentrated, or where joint ventures are common.

5. Determination of and making comparability adjustments where appropriate

(Step 8 of the typical process discussed in Chapter III of the OECD Transfer Pricing Guidelines, Paragraph 5.3.5 of the UN Practical Manual on Transfer Pricing)

5.1 General

Where there are material differences in the condition under examination between the potentially comparable transactions and the controlled transaction, it is important to consider if reasonably accurate adjustments can be made to eliminate the effect of such

\textsuperscript{55}The possibility of looking at domestic data from different industries with similar functional profiles is also proposed in Paragraph 5.4.3.4 of the UN Practical Manual on Transfer Pricing (2013).
differences. These adjustments are called "comparability adjustments." However, comparability adjustments themselves can introduce additional complexity and potential subjectivity and should be made only if they are expected to increase the reliability of the results and should not be applied automatically without consideration of the applicable facts and circumstances. It is, therefore, important to consider whether a comparability adjustment is likely to improve the reliability of the comparison or whether the unadjusted results (while imperfect) will provide greater reliability.

**Box 11. Unadjusted Results May Be More Reliable Than Adjusted Results**

Company J, a tax resident in Country A and a subsidiary of an MNE group, was subject to a transfer pricing audit. Through the process of accurately delineating the transaction, it was determined that Company J was engaged in the purchase (from its associated enterprise) and distribution of consumer goods. The taxpayer’s transfer pricing documentation included a comparability analysis. The results of their comparability search yielded a number of independent distributors of other consumer goods. The taxpayer’s transfer pricing analysis proposed adjustments to the potential comparables to account for the fact that, unlike the tested party, they did not incur costs associated with producing transfer pricing documentation. The taxpayer argued that these costs had a material effect on the condition being examined, being the EBIT to Sales ratio, since they were included in the operating costs of the tested party but not in those of the comparables.

While the independent distributors clearly did not incur costs associated with producing transfer pricing documentation, they were likely to incur other costs associated with negotiating with their suppliers, which could be in excess of those incurred by the taxpayer with its related party supplier, as well as other tax compliance costs. However, these costs were not separately disclosed in the financial accounts of the comparables. The tax administration, therefore, concluded that while the transfer pricing documentation costs incurred by the taxpayer were significant in at least one of the audit years, the taxpayer’s proposed adjustment was, on balance, more likely to reduce the reliability of the comparison than to increase it, compared to using the unadjusted EBIT/Sales results.

There is no universally accepted method for comparability adjustments nor is there consensus among tax administrations about the reliability of different comparability adjustments. However, the most commonly used comparability adjustments are:

- working capital adjustments (see Section 5.1);
- adjustments for accounting differences (see Section 5.2); and
- country risk adjustments (see Section 5.5.3)

Other types of adjustments are discussed in Section 5.4.

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56 Paragraph 1.40 of *OECD Transfer Pricing Guidelines* (2016). Section 5.3.5 of the UN Practical Manual on Transfer Pricing.

57 Paragraph 3.50 of *OECD Transfer Pricing Guidelines* (2016).
Box 12. Country Practices

Many countries take a very cautious approach in the application of comparability adjustments. Several countries have noted the “comparability adjustment paradox”—that small adjustments will not materially alter the resulting arm’s length range of outcomes and large adjustments may in fact mask more fundamental differences in comparability with the controlled transaction.

Some countries also expressed concerns about whether a comparability adjustment proposed in fact improves the reliability of the comparison, or whether adjustments can add subjectivity to an analysis. In addition, a number of countries reported that they hesitate to make comparability adjustments because they believe they lack the experience or knowledge to apply them and to fully understand their ramifications.

South Africa and Australia, for example, focus more on the qualitative analysis rather than applying mechanical comparability adjustments.

Source: OECD interviews with country representatives, May 2016.

5.2 Working capital adjustments (WCA)

Working capital adjustments are the most commonly applied comparability adjustments. Working capital adjustments are typically performed when applying the TNMM, though they may be equally relevant for the application of cost-plus and resale price methods. They account for the fact that there is an opportunity cost and notional finance cost associated with the holding of working capital, represented by the net of three balance sheet items (inventories, receivables, and payables), which would not otherwise be captured in a measure of profitability58 from the profit and loss statement. The working capital adjustment adjusts the profit level indicator accordingly.

Box 13. Working Capital Ratio

- Working capital = current assets - current liabilities

or

- Working capital = [accounts receivable + inventory] - accounts payable

The ratio shows whether a company has enough short-term assets to cover short-term debt. It gives an idea of the company’s underlying operational efficiency since an increase in working capital may indicate slow collection of money owed by customers.

Where a company has a higher net working capital, it would be expected to make a higher EBIT than an otherwise similar entity with lower net working capital. At arm’s length, the provision of, for example, more favourable payment terms (and thus a higher level of receivables on the balance sheet) would be expected to lead to higher prices to take account of the cost of

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58 Measures of profitability that exclude explicit interest revenues and costs (such as EBIT) are often used. Irrespective of the profit measure applied, however, the opportunity cost and notional finance cost associated with, for example, providing debtors with longer trade terms, holding additional inventory, or paying creditors early, each of which may result in forgoing potential interest income will not be measurable from the profit and loss statement.
holding the additional working capital required, or the interest income forgone as a result of holding that capital. Similarly, a company with greater inventory might in principle be expected to earn a higher EBIT than a company with lower inventory.

By performing working capital adjustments, operating profit that measures profit before accounting for explicit interest expenses or income can be corrected for the implicit interest embedded in sales and cost of goods sold to increase the comparability of the transactions. 59

The following practical difficulties can arise when using working capital adjustments:

- What interest rate should be applied to each of the working capital items?
- The transfer pricing guidelines refer to a commercial loan rate or borrowing rate (depending on the perspective of the tested party) as interest rate to be used. The midpoint between the deposit rate and the lending rate can be a plausible estimation of the operating earnings effects of holding different levels of inventory. 60
- The determination of the point in time for comparing the different balance sheet items (receivables, inventory, and payables) between the tested party and the comparables. For example, the levels of the different items can be compared on the last day of the (calendar) year. This timing may not give a representative level of working capital of the year if, for example, levels of working capital are seasonal. In such cases, averages might be used if they better reflect the level of working capital over the year.

The mechanical nature and apparent precision of working capital adjustments can lend a scientific veneer to the adjustment, potentially masking greater underlying questions as to the reliability of the potential comparable or the appropriateness of the adjustment in principle. WCA may give rise to additional costs and complexity out of proportion to any increase in reliability or accuracy of data.

The formulas on accounts receivable, inventory, and accounts payable adjustments are elaborated on in Appendix 9. An example of a WCA is provided in Appendix 10.

**Box 14. Country Practices**

If comparability adjustments are applied by countries and taxpayers, most will apply working capital adjustments. From countries’ experience, WCAs are the most used comparability adjustments. For example, the United States commonly makes WCAs.

In contrast, South Africa and New Zealand do not often make WCAs. According to these countries, these adjustments only make minor differences to the results when reliable comparables have been selected. To the extent a significant difference is calculated, this raises a concern that the difference is due to issues wider than merely a difference in the level of working capital.

Source: OECD interviews with country representatives, May 2016.

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5.2.1 Working capital as a proxy for a functional adjustment

Working capital-type adjustments are also sometimes proposed as a way to make an adjustment for differences in functions, assets, and risks, in particular in relation to inventories; or in business strategies, particularly those relating to the provision of finance to customers. For example, such an adjustment may be suggested where independent manufacturers or distributors that hold inventories are proposed as potential comparables for manufacturers or distributors that do not. In such cases, the working capital adjustment may be applied to adjust both the tested party and the comparables to “zero” working capital (accounts receivable, inventory, and accounts payable, or in some cases, just inventory). However, the reliability of these kinds of adjustments must be carefully considered: the practical issues noted in the section above are equally, if not even more relevant here.

5.3 Adjustments for accounting differences

Despite the use of international accounting standards, such as IFRS by countries, there are still accounting differences between countries and between various industries or even between different entities in the same industry. An investigation of whether these differences will materially affect the reliability of the comparables is, therefore, important.61

In practice, different accounting standards and approaches may be adopted by entities and this can impact the financial information that is reported. Broadly, there are three types of differences:

- **Timing differences**: For example, inventory write-offs,62 different depreciation or amortisation methods, goodwill amortisation.

- **Permanent differences**: Differences in revenue-recognition, recognition of expenses.

- **Classification differences**: The manner in which costs (such as depreciation) are measured and presented, interest, taxes, foreign exchanges, non-recurring and extraordinary items, share option expenses, differences in the accounting treatment of such items as rebates, capitalisation of certain expenditures, inclusion in cost of goods sold. Classification of certain items as operating/non-operating when the PLI being tested is at the operating profit level.

Due to the limited amount of detailed information, it can be difficult to make reliable adjustments for differences in accounting treatment. However, some practical solutions exist. Timing differences in accounting standards can be mitigated by using multiple year data. Some permanent differences and classification differences can be eliminated or minimised by applying the TNMM on a net margin level.

An example of an adjustment for accounting differences is provided in Appendix 11.

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61 Gonnet, S., Starkov, V. and Maitra, M. 2014. Comparability adjustments in the absence of suitable local comparables in emerging and developing countries.

62 For example, the “last in, first out” system (LIFO) vs. the “first in, first out” system (FIFO).
5.4 Other adjustments

A selection of other commonly used adjustments is set out below. It should be noted that this is not an exhaustive list of comparability adjustments.

5.4.1 Adjustments for physical characteristics

Where a CUP method has been found to be the most appropriate, it is common that adjustments may be necessary for any material differences between the physical characteristics of the goods that have been sold or transferred, and the physical properties of the goods in the uncontrolled transactions. This may often be the case with commodities. For example, a shipment of a mineral product may have different characteristics to a reference or quoted price for that product commonly used within the industry to price such products.

These types of adjustments are most reliable when they are consistent with (arm’s length) industry practices, for example, it is common industry practice that an iron ore product with an iron content close to, but not exactly the same as, iron for which there is a common industry reference price could be adjusted proportionately to reflect that difference in iron content. Moreover, greater caution should be exercised the larger the size of the adjustment relative to the price being adjusted, particularly where there is a lack of reliable information can be found to guide the adjustment.

For different products, some adjustments will be able to be made more reliably than others. Some adjustments can be made with confidence; others will push toward the margin where it is not certain the adjustment can be made reliably (for example, where the direction of an adjustment is established, but the magnitude is uncertain); and for others still, there may be little confidence an adjustment could be made reliably, risking “black box” adjustments that may not withstand challenge (such as where there is no additional information on which direction to adjust or to what magnitude).

Adding further complexity, these adjustments may change over time. For example, the price penalties for impurities for a copper concentrate product may fall or disappear if concentrate markets are tight and smelters are finding it difficult to source sufficient concentrates to run their smelters efficiently.

This emphasises the importance of revenue authorities keeping up to date on industry practices. This could be either through fostering in-house expertise, their informal networks with other revenue authorities, or by purchasing expert external assistance when it is needed.

5.4.2 Contract and payment terms

Adjustments may need to be considered where there are material differences between the contract terms of the controlled transaction under review and the uncontrolled transaction(s) that are potentially comparable. For example, if the price for the purchase and sale of a commodity specifies that the shipping terms are CIF (cost, insurance, and freight) and it is determined that an arm’s length price for the transaction can be determined from the quoted price for the commodity, where that quoted price is an FOB (free on board) port price, an adjustment for the different shipping terms is likely to be necessary. The difference between CIF and FOB is the point at which the ownership of and responsibility for the goods transfers from seller to buyer. In an FOB port transaction, this occurs when the shipment reaches the port of
origin. With a CIF agreement, the seller retains ownership of the goods, pays the costs, and assumes liability until the goods reach the port of destination chosen by the buyer. This adjustment can be made by way of a netback adjustment (see Box 15).

Differences in payment terms can be adjusted with a working capital adjustment (Paragraph 5.2).

5.4.3 Netback approaches—adjustments for differences in the valuation point of commodities

A netback approach can be used to adjust the price of a commodity where a known arm’s length price is available for the commodity at a point in the value chain which differs from the valuation point relevant for the transfer pricing analysis. Typically, the approach is used where there is a known arm’s length or market price downstream of the relevant valuation point: the adjustment “nets back” the costs between the two to determine the price of the upstream product. The netback method thus identifies all the relevant costs incurred between the relevant valuation point and the market pricing point, and makes an adjustment for those costs (including an allowance for capital expenditure where relevant).

The simplest types of netback adjust for the fact that the known market price is based on the same physical product at a different location. The adjustment, therefore, takes into account the transportation cost between the two (see Box 15). More complex netback adjustments would be required to account for differences in the physical characteristics of the commodity, such as where a product is more or less processed than the product for which a market price is known. In such cases, it will be important to consider typical industry practices to determine a reliable netback adjustment.63 Generally, these more complex netback adjustments will take into account the conversion ratio or yield from the known market pricing point to the relevant valuation point, as well as the processing and transportation costs (either arm’s length costs or an approximation of the arm’s length costs, including an allowance for capital expenditure where relevant). In some cases, an adjustment may also need to be made for the time difference between the known market pricing point and the valuation point.

63 See also in Part IV, Section 2.
Box 15. General Example on Netback Approach

Assume the market price for refined Commodity M at the refinery is 100 currency units (c.u.) per tonne. The controlled transaction involves the sale of unrefined Commodity M at the mine gate between two associated enterprises. Arm’s length trading of unrefined Commodity M is rare and there are no data publications that provide information on the price of unrefined Commodity M. If 1 tonne of refined Commodity M requires 2 tonnes of unrefined Commodity M (i.e. a yield of 50 percent) and an arm’s length price for refining and transportation (from the mine to the refinery) amounts to 15 c.u. per tonne, the price of unrefined Commodity M can be calculated as: (100 * 50%) - 15 = 35 c.u. per tonne.

Box 16. Use of a Netback Approach for Freight Costs

This simplified example illustrates the application of a netback approach. Revenue authorities commonly need to make adjustments to account for differences in delivery terms between the transaction under review and other transactions occurring at the time—particularly for mineral and commodity transactions.

In particular, an adjustment is often required for freight charges to establish the price that would be paid for a product at a different geographical location. To determine the amount of this adjustment, “netbacks” are often used by contracting parties and revenue authorities. In such cases, these are published estimates of freight costs between various ports worldwide. These costs can vary based on factors such as the product being shipped, the date of transport, and size of vessel used.

Figure 1 provides a simple example of a netback. The revenue authority typically takes the related party transaction under review and applies the netback to make it possible to compare the price against data from unrelated party transactions of materially the same product around the same time. At this stage in the process of comparability analysis, this calculation is for the purposes of analysis only (it is not done to adjust taxes paid).

64 In addition, freight costs might themselves be subject of transfer pricing analysis if the shipping service is conducted between related parties.
Figure 1: Example of a “netback” calculation

FOB = Free On Board means that the seller delivers the goods on board the vessel nominated by the buyer at the named port of shipment or procures the goods already so delivered. The risk of loss of or damage to the goods passes when the goods are on board the vessel, and the buyer bears all costs from that moment onwards.

CFR = Cost and Freight means that the seller delivers the goods on board the vessel or procures the goods already so delivered. The risk of loss of or damage to the goods passes when the goods are on board the vessel. The seller must contract for and pay the costs and freight necessary to bring the goods to the named port of destination.

To use the netback approach, there must be reliable freight information available that covers not only a comparable time period as the related party shipment, but also that is of the same type of cargo (for example, bulk cargo) and ship size. In many instances, the actual freight rates used by the parties may also be used if an unrelated third party has been engaged to deliver the product on their behalf.

5.5 Dealing with a lack of (local) comparables

5.5.1 General

As has been noted earlier, it may be the case that uncontrolled transactions from markets other than that of the tested party can constitute reliable comparables, or may be accepted and used as the best available comparables in the absence of local market comparables. Reliance on other markets data is not limited to developing countries. This is also the case in many developed countries and even many of the OECD economies. In the search for the most reliable available comparables, potential differences in geographic markets need to be weighed against the other economically relevant characteristics.

65 These terms are defined by the International Chamber of Commerce. See http://www.iccwbo.org/products-and-services/trade-facilitation/incoterms-2010/the-incoterms-rules/

66 A distinction needs to be made between the use of “other markets data” (i.e. data from companies located in a different country to the tested party that has not been demonstrated to have satisfied the requisite standard of comparability with respect to economic circumstances) and “foreign comparables” (i.e. data from companies located in a different country to the tested party that has been demonstrated to have satisfied the requisite standard of comparability).
No specific guidance on how differences in economic market conditions are to be assessed or how any potential adjustments should be conducted is currently available. Despite the widespread use and acceptance of other markets data, there is a lack of detailed practical guidance at the country, regional, and international level regarding their selection and potential adjustments. The OECD Transfer Pricing Guidelines and the UN Practical Manual on Transfer Pricing only have a general provision that comparability and, in particular, the economic-market conditions must be assessed and adjusted for where appropriate.

Where local comparables are not available, selection criteria often emphasise geographic proximity in the selection of foreign comparables. The underlying economic rationale for this is that certain geographical regions (such as the European Union) have important economic similarities and significant intra-regional trade and capital flows. These similarities in principle would be enhanced to the extent that economies are open, integrated, shared the same or similar regulations and regulatory bodies and had a similar level of economic development.67 In Europe, for instance, reliance on regional (pan-European) comparables is widespread and has been endorsed in the Council of the European Union’s Code of Conduct on transfer pricing documentation for associated enterprises in the European Union.68 Selection based on smaller geographic regions or “sub-regions” is promoted in the case of Nordic, Iberian, and Benelux countries. A similar approach is followed in China where the tax administration accepts pan-Asian comparables samples in the absence of Chinese publicly listed comparables, preferring the pan-Asian sets of publicly listed companies to the sets of private Chinese companies. Australia and New Zealand accept comparables from each other. In addition to selection criteria based on geographical proximity, some countries also report a practice of selecting acceptable foreign markets based on a reference to similar country credit ratings and/or economic structures (including legal and regulatory systems, dominant industries, etc.).

Other than in situations involving a comparison of the price of products with a truly global (or regional) market, such as certain commodities, the validity of relying on foreign market data has not been comprehensively analysed. Meenan et al. (2004) investigate whether pan-European comparable data provide statistically different arm’s length ranges from country specific samples. The analysis is focused on 16 EU countries and endorses the use of pan-European data. A repetition of the exercise using the same approach as Meenan et al. in 2004, but using company data from 2008-2014, does, however, paint a different picture and suggests notable heterogeneity in profitability ratios even in the European context (see Appendix 12 for the analysis).

In sum, the use of foreign data—though fairly extensive in practice given the lack of local comparables—has not been studied sufficiently to draw definitive conclusions about its reliability. The available evidence is inconclusive. This report does not therefore provide a general rule about the circumstances in which the use of foreign data could be practical or should be used. It is highlighted however as an issue that would benefit from further study.

67 Differences in social security and health care systems, for example, might make a significant difference when benchmarking transactions with foreign data in certain sectors.
68 Paragraph 25: ‘Member States should evaluate domestic or non-domestic comparables with respect to the specific facts and circumstances of the case. For example, comparables found in pan-European databases should not be automatically rejected. The use of non-domestic comparables by itself should not subject the taxpayer to penalties for non-compliance.’
5.5.2 Adjustments for differences in geographic market

Approaches to adjustments that seek to eliminate the differences in country conditions are varied. There is currently no widely accepted method. A straightforward way to adjust for market differences would resolve many of the challenges facing transfer pricing practitioners in developing countries. In the case of many transactions, the complexity of capturing market differences does, however, seem to rule out any simple solution.

Academic studies point to the potential importance of country specific effects. Potential proxies that could be relied upon to account for these differences are, however, not readily available. Practitioners, nevertheless, have to manage the ensuing uncertainty, including weighing the potential differences created by country specific effects against other differences that may be present in the best available local data (if any such data is available), and proceed in making country adjustments, where they improve the reliability of the comparison. A number of approaches to country adjustments are discussed below; these are, however, exposed to methodological challenges.

5.5.3 Adjusting for country risk by adding a premium (or a discount) to the PLI

Country risk can be defined as the risk induced by the country location of a business activity rather than the fundamental nature of the activity. This risk may derive from the political or economic environment in which that business operates. Country risk is not only a transfer pricing construct, but a real variable that businesses take into account when making investments or entering into third-party transactions.

Most proposals for country risk adjustments simply seek to add a premium/discount to the comparables’ results. Such risk-based adjustments are designed to account for differences in risks assumed in relation to competition, credit, foreign exchange, product liability, technological obsolesce, etc.

There are numerous ways that country risks are adjusted for in practice. These range from very complex to very simple, having relative advantages and disadvantages. One approach is by using working capital adjustments as a proxy for country risk. Büttner (2012) presents the use of the spread in countries’ long-term government bond yields applied to operating assets as the basis for such an adjustment to the operating profit. Gonnet et al. (2014) suggest adjustments to operating profit based on differences in the weighted average cost of capital (WACC) of the tested party and the comparables.

It should be noted, however, that there is little empirical evidence on the reliability of the proposed approaches. Careful consideration should be given as to whether such approaches can account for differences in risk and thus in expected profitability (to the extent that they exist) for commercial ventures in different countries.

Examples of country risk adjustments are provided in Appendix 13.

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70 See Appendix 12.
5.5.4 Adjusting for country risk by using a working capital adjustment as a proxy

There is an argument that differences in working capital employed are a reflection of the differences in economically relevant factors such as country risk, which would affect the pricing of transactions between independent parties. WCAs performed for local (and regional) comparables involve assessing the differential in accounts receivable and remunerating this difference with an appropriate interest rate that takes into account credit risk. In situations where the companies operate in a region where not only the economic circumstances, but also the underlying credit risk and interest rates are significantly different from the tested party and the comparables, adjustments for those differences should be considered as well.

The WCA here is undertaken in two steps. The first step consists of adjusting the accounts receivable of the Country A comparables to zero and applying a Country A interest rate to the differential, which results in lower revenues for the comparables and, therefore, a lower profit margin. The second step consists of adjusting the accounts receivable of the comparables up from zero to the level of the tested party in Country B and applying to them a Country B interest rate, which increases the revenues for the comparables and, therefore, results in a higher profit margin. Formulas on how to calculate this adjustment are provided in Appendix 14.

Box 17. Country Practices

Developing countries, often out of necessity, have to rely on foreign comparables. Country specific risk adjustments can, therefore, be of particular importance for developing countries.

In order to perform country risk adjustments, judgement is required. Some countries, like Australia, tend to avoid making these adjustments. Colombia considers that it does not have enough knowledge regarding when and how to use a country risk adjustment (and in which types of transactions).

Since South Africa does not have any available local comparables, foreign comparables are always used. South Africa first selects countries with the same risk profile. If that is not possible, countries with different risk profiles are selected and, therefore, country risk adjustments are needed.

Mexico has noted that due to constraints on the number of local listed companies, it often seeks to use external comparables located in similar markets. The markets of the United States and Canada are closely connected to the Mexican market through free-trade agreements. Geographic market adjustments are often considered by Mexico when using United States or Canadian comparables. In contrast, Colombia uses United States and Canadian comparables as well, but makes no specific country risk adjustments. Under proper circumstances, Mexico can consider to undertake searches for comparables from similar economies, for example, India and Malaysia.

Canada often uses United States comparables, but because of differences in markets risk, adjustments are sometimes considered necessary. However, these types of adjustments are hard to quantify.

Source: OECD interviews with country representatives, May 2016.

71 These may manifest in terms of differences in interest rates for short term debt, differences in credit terms, and credit risks for business borrowers. See Gonnet, S et al, (2014) Comparability Adjustments: In the absence of suitable local comparables in emerging and developing economies
6. Interpretation and use of data collected, determination of the arm’s length remuneration

(Step 9 of the typical process set out in Chapter III of the OECD Transfer Pricing Guidelines, Paragraph 5.3.7 of the UN Practical Manual on Transfer Pricing)

A comparability analysis, and application of the most appropriate transfer pricing method, may result in a “range” of financial indicators (prices or profit margins) that are equally reliable. Recognising that transfer pricing is not an exact science, the OECD Transfer Pricing Guidelines states:

“[T]here will also be many occasions when the application of the most appropriate method or methods produces a range of figures all of which are relatively equally reliable. In these cases, differences in the figures that comprise the range may be caused by the fact that in general the application of the arm’s length principle only produces an approximation of conditions that would have been established between independent enterprises. It is also possible that the different points in a range represent the fact that independent enterprises engaged in comparable transactions under comparable circumstances may not establish exactly the same price for the transaction.”\(^72\)

Therefore, a common practice is to calculate a range of results and determine whether the financial indicator relating to the transaction under examination is within that arm’s length range. If so, it will be typically considered that the transfer price can be accepted as arm’s length. If not, either the taxpayer or the tax authority must make an adjustment to taxable profit that places the relevant indicator within the range.

Transfer pricing rules in some countries may explicitly define an arm’s length range and allow the use of a statistical technique in cases where an arm’s length range cannot be identified. These are considered further below.

6.1 Arm’s length range

An arm’s length range is a range of relevant financial indicator figures (for example, price, resale margin, cost mark-up, net profit ratio or a split of profit) produced by the application of the most appropriate transfer pricing method to a number of uncontrolled transactions that are all comparable and equally comparable to the controlled transaction. Where the results of the controlled transaction(s) are within the arm’s length range, it is considered that the taxpayer complies with the arm’s length principle and no adjustment would be warranted.

An arm’s length range should normally be relatively narrow. It is unlikely that a search conducted using a commercial database, without further refinement and manual screening, will give rise to an arm’s length range, since there will often be qualitative differences which could affect the results.

It is sometimes difficult for a taxpayer or a tax administration to determine whether a range is an “arm’s length range.” Tax administrations may also be concerned about the uncertainty arising

where the range of results from a set of comparables is wide. For this reason, countries may wish to consider introducing a provision in the rules that limits the application of the concept to relatively small ranges. For example, it might be specified that the highest point in a range may not exceed a percentage (say 25 percent) of the lowest point in the range. Where this cap is exceeded, a statistical approach may be stipulated.

6.2 Statistical approaches

The application of the most appropriate method may result in a number of financial indicators for which the degree of comparability of each to the controlled transactions, and to each other, is uncertain. This may be the case where, for example, a commercial database is used. Such a database is unlikely to provide sufficient information to allow a comparison between the underlying transactions to be carried out with a high degree of accuracy. In such cases, the transfer pricing rules may specify that a statistical technique must be used. An interquartile range is perhaps the most common statistical technique used, but many others exist. See Appendix 15 on how to calculate an interquartile range.

Box 18. Sugar Producer

Following the facts of the illustration in Box 5, Company A (the sugar producer) is most accurately characterised as a contract manufacturer, whereby the most appropriate transfer pricing method is a TNMM, using operating profit/full costs as the PLI. The database search provided 33 potential comparables. The relevant PLI ratios (operating profit/full costs) for each of the potential comparables were extracted from the database, forming a range from 1.2% to 14.7%.

It was noted that the search process identified a relatively large number of potential comparables and resulted in a relatively wide range. It was considered also that the nature of the search process resulted in some uncertainty as to the degree of comparability of each of the potential comparables, but that uncertainty could be neither precisely identified nor adjusted for. It was thus decided to employ a statistical approach that takes account of central tendency to narrow the range in accordance with the domestic transfer pricing legislation of Country A.

The statistical approach identified an interquartile range of 6.1% to 8.8%. The actual PLI of Company A was negative for the period in question. It was thus decided to adjust the taxable profit of Company A to a level that brought its operating profit/full costs ratio to an appropriate point within the range. In this case it was decided that the median point of the range be used.

6.3 Determining an arm’s length range or point from a potentially comparable result

An alternative to comparability adjustments could be to select a different point in the range depending on the level of functions performed, assets used, and risks assumed. For example, it may be possible to determine the arm’s length remuneration for a distributor with relatively limited functions, assets, and risks by reference to a lower point in the range of results from uncontrolled distributors. Similarly, a higher point could be applied in order to determine an arm’s length remuneration for a distributor with relatively more functions, assets, and risks.
U.S. regulations describe both an "arm’s length range" concept and an interquartile range concept. One or the other may be used depending on the quality of the comparables (i.e., how similar are they to the controlled transaction) and the consistency of the comparables (i.e., how similar are the comparables to each other. Thus, where a range can be constructed using comparables that are both high quality and very consistent, an arm’s length range may be used that includes all of the comparables and a result within the range is considered an arm’s length result. In contrast, if the comparables are of a lower quality or less consistent, they may be used to construct an interquartile range that omits the lowest and highest 25% of the comparables. Results that fall outside the interquartile range are generally made to the median of the range. The adoption by the United States of these range concepts is based on a recognition that statistical methods (such as an interquartile range) may appropriate to improve the reliability of the analysis in cases where the comparables are not of the highest quality or best consistency and material differences cannot be sufficiently accounted for using comparability adjustments that increase the reliability of the comparison.”

Norway also sees this trend in selecting a different point in the range as an alternative for comparability adjustments.

Source: OECD interviews with country representatives, May 2016.

6.3.1 Diagnostic (financial) ratios

In some cases, diagnostic ratios can also be used to improve the reliability of a potential set of comparables. Such ratios can be used to help distinguish between results from transactions with differing degrees of comparability, and potentially to eliminate those with a lower degree of comparability from the potential comparable set. One or a combination of diagnostic ratios may be used as a kind of additional screen to narrow a range in cases where comparability defects remain in the potential comparables set that are otherwise difficult to eliminate, resulting in range that would otherwise be overly wide. For example, a ratio of marketing and advertising expenses to sales could be an indicator of the intensity of the marketing and advertising function undertaken. This ratio could then be used to refine the arm’s length range based on comparables with similar levels of marketing / advertising intensity. Diagnostic ratios may also be used in other ways to help analyse and interpret data from a potential comparables set.

Other examples of diagnostic ratios that are often used include: intangibles over total assets, days of inventory (average), days receivable (average), days payable (average), turnover per employee, fixed assets over total assets, inventory over sales, operating assets to total assets, fixed assets to total sales, fixed assets to number of employees, operating expenses to sales, cost of sales to sales, and inventory to total assets.

What ratio should be used depends on various factors related to the nature of the business and, in particular, to any key value drivers identified in the business. It also depends on data availability. A proper functional analysis and good understanding of the business is helpful to analyse which diagnostic ratios may be useful, and will help to avoid “cherry picking” or

subjective uses of such techniques. See Appendices 16, 17, and 18 on common financial ratios and acronyms and ratios measuring functions, assets, and risks.

6.4 Build-up approaches

A build-up approach divides the activities of an enterprise into a number of component parts and then determines or tests an arm’s length return for each of those components. The return for the combined activity is arrived at by adding together the return for each of the components.

Box 20. Build-Up Approaches

The build-up approach may be applied in some circumstances by Australia. Where it is applied, it is usually in conjunction with other transfer pricing methods / approaches.

As an example, take an entity, Company X, located in Country X that assembles products from components, and then markets and sells the finished product to third-party customers. The key facts are:

- Company X purchases Component A from Company Y located in Country Y. This is the most technically complex component, which embodies intangibles that are properly allocated to Company Y.
- Company X also purchases various other components from related and unrelated suppliers.
- In its assembly operation, Company X does not utilise valuable intangibles, nor does it assume significant risk.
- Company X sells the finished products to unrelated customers. In doing so, it has a sales operation that undertakes functions, uses assets, and assumes risks that are similar to those undertaken by third-party distributors in similar circumstances. It maintains the legal ownership of finished products until the point of sale.

The comparability analysis concludes that a one-sided method is most appropriate, with Company X as the tested party. It is not possible, however, to identify independent comparable enterprises that carry out the same assembly and sales functions under the same conditions. However, information on independent assemblers and information on independent distributors are both available so a build-up approach could be considered as a way to approximate a return for both the assembly and sales functions. In this case:

- The return to the assembly function may be determined using independent assemblers or low-risk manufacturers as comparables. In this case, a cost-plus method or a return on assets basis may be appropriate.
- The return to the sales function may be determined using independent buy/sell distributors as comparables. In this case either a gross margin method basis or net margin basis (operating profit/sales or operating profit/operating expenses) may be appropriate.

The results of both of these analyses would then be combined to arrive at the total arm’s length remuneration for Company X. In undertaking this kind of approach, it is essential to ensure that the analysis as a whole makes sense. It is not always the case that the sum of the parts is a reliable measure of the whole, particularly where there are significant synergistic benefits between the component parts. Care should also be taken to avoid the double counting of a reward for functions, assets, and risks, which may be common to both components.

Note that where the build-up approach combines results for two links in the value chain, it will often create a need to hypothesise an internal transfer price from the first link to the second.

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74 An example of how to calculate the diagnostic ratios is available in: Gommers, E.; Reyneveld, J.; and Lund, H. July/August 2007. Pan-European Comparables Searches: Enhancing Comparability Using Diagnostic Ratios.
7. Summary

Part II explained the role that data on comparables play in undertaking a transfer pricing analysis and in establishing, or testing, the pricing of a transaction between associated enterprises. Part II also suggested actions that might be taken to improve the accessibility of existing data and to enhance the effectiveness of comparability analyses.
PART III: APPROACHES TO APPLYING INTERNATIONALLY ACCEPTED PRINCIPLES IN THE ABSENCE OF COMPARABLES

1. Introduction

The issues discussed in Part II, and the actions suggested, are unlikely to provide a complete solution to the core problem faced by many developing countries—insufficient data to undertake a reliable comparability analysis. Developing countries consistently report this as an issue, and it was highlighted in the International Organisation’s Report to G20 Development Working Group on the Impact of BEPS in Low-Income Countries. This is also reflected in the statement in the UN Practical Manual on Transfer Pricing: “It is often in practice extremely difficult, especially in some developing countries, to obtain adequate information to apply the arm’s length principle.”

Part III thus discusses actions that might be taken to address situations where there is a lack of data. These actions include:

- Taking measures to increase the amount of primary source data available; in particular, publicly available information derived from the financial accounts of independent enterprises;
- Exploring the use of other data that may inform the arm’s length nature of the transaction;
- Using safe harbours or other prescriptive rules;
- Using the transactional profit split method;
- Using anti-avoidance measures.

It should be borne in mind that, while comparability is always an essential principle that is integral to the arm’s length principle and all available and reliable data should be used to the maximum extent possible, it is only rarely that data is available to provide a well-defined measure of the arm’s length price or result. In many cases, comparability data provides information that can only approximate an arm’s length measure of price. This is recognised in the arm’s length range discussed in Part II. In other cases, the available comparability data may do no more than inform or provide some pointers as to the arm’s length situation.

This reality means that all parties need to be realistic about the use of comparability data and avoid the misperception that comparability analyses always result in a well-defined and definitive answer. It is often necessary to recognise that a comparability analysis provides only an approximate answer and that some flexibility is needed to determine a principled answer in many cases.

75 Paragraph 1.10.6 of UN Practical Manual on Transfer Pricing (2013).
Some countries, particularly those that are more experienced in transfer pricing seek to mitigate this issue by negotiating with taxpayers to arrive at a sensible, arm’s length result, however others, particularly many developing countries, prefer to avoid settlement of cases in this manner. Further, many developing countries report that they do not have the capacity to negotiate in this way. However, where tax administrations do negotiate with taxpayers, the available data will inform the negotiations.

2. Approaches to increase the availability of primary comparables data

The availability of company information in the public domain is determined by a number of related factors spanning macro determinants, policy approaches, and administrative practices. The most obvious initial determinant is the relationship between the size of a country’s economy and the number of companies in that country. Other structural factors may include the dominance of markets by a few large MNEs or important levels of state ownership in selected sectors and the importance of smaller, sometimes informal, economic operators in many developing countries. In addition to these structural factors, there are, however, a range of regulatory and administrative choices that affect information availability.

A country’s regulatory framework, specifying obligations to prepare and file financial accounts, is at the source of any information accessed by private database providers. While there have been multiple initiatives to strengthen accounting and auditing practices, such as harmonisation efforts in the EU, ensuring general obligations for companies to prepare and lodge financial accounts that are accessible to the public, many countries still lack an appropriate framework. Frequently, only a subset of companies (listed, financial, etc.) is required to prepare and publish accounts. Central registries that allow access to firm-level information may not exist or have limited functionality, complicating efforts to gather standardised information. For instance, information may not be available in electronic format or only shared in aggregated form. The convenience and cost of accessing records influences commercial database providers’ data acquisition strategies. While a number of countries do not charge for accessing information, others add significant cost when obtaining bulk data. Finally, even where appropriate reporting obligations are in place and acquisition costs reasonable, a lack of compliance and effective enforcement can constrain the availability of information. Underrepresentation of a number of large European economies in public databases is likely partly driven by compliance behaviour of non-traded companies and different enforcement strategies to ensure filing requirements are met. Fines for not submitting financial information differ dramatically, even among EU member states.

While not a primary concern, the use of company information for tax purposes is a relevant consideration for ongoing and future corporate financial reform initiatives. The public debate on the transparency, corporate governance, and disclosure of companies’ financial information has become increasingly forceful. The numerous stakeholders and interested parties’ views cover a broad range of policy objectives and expectations. Consequently, several initiatives to strengthen accounting and auditing practices led by the EU and International Financial

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76 In this regard, support through technical assistance or from expert deployments under programmes such as the OECD/UNDP Tax Inspectors Without Borders programme could assist tax administrations.

77 Moreover, size-based exclusion thresholds typically apply to lower compliance costs for small- and medium-sized entities.

78 See also BEPS discussion draft on Action 11.
Institutions have sought to support reform, yet, important barriers remain. The importance of publicly available records for the smooth implementation of transfer pricing regimes thus should be considered as part of the introduction and/or reform of corporate reporting requirements.

3. Approaches that focus on the arm’s length nature of a transaction

Testing the arm’s length nature of a transaction can be particularly useful where sufficiently reliable comparables cannot be found. This section describes the significance of an accurate delineation of a transaction even in the absence of comparables. There are number of such instances.

3.1. Testing the benefits received

The benefit test is a general application of the arm’s length principle, but is most often encountered with regards to payments between associated enterprises for the provision of services or the right to use a valuable intangible.

With regards to services and the question of when a service has been rendered, the OECD Transfer Pricing Guidelines state that this:

…but should depend on whether the activity provides […] economic or commercial value to enhance or maintain its business position. This can be determined by considering whether an independent enterprise in comparable circumstances would have been willing to pay for the activity if performed for it by an independent enterprise or would have performed the activity in-house for itself.

This means that a comparability analysis into the provision of a service would include asking whether, at arm’s length, any payment would be made.

A similar test will often be applicable when considering a payment for the right to use an intangible—typically in the form of a royalty. The application of the arm’s length principle to transactions involving intangibles is complex (and is raised again below), but a key question to ask is whether, at arm’s length, the payer of a sum in respect of a right to use intangibles would in fact be willing to pay an unrelated party for that right (either wholly or partly). Such an analysis might include asking whether the licensee needs to use the intangible in its business; whether the licensee benefits from the use of the intangible, and, if so, to what extent (i.e. to what extent does the intangible create value for the licensee?); and whether the licensor would, at arm’s length, have a right to impose a royalty for the use of the intangible in question. The answers to these questions are an important element in determining whether, or the extent to which, a payment for a royalty meets the arm’s length principle.

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79 See, for example, the work of the World Bank Group’s Centre for Financial Reporting Reform (http://go.worldbank.org/TJUDM0870) and the European Commission’s work on harmonising reporting requirements within the EU and in promotion of equivalent standards in third countries (http://ec.europa.eu/internal_market/accounting/index_en.htm).


4. Safe harbours, fixed margin and other prescriptive approaches

A safe harbour in a transfer pricing regime is a simplification measure through a provision that applies to a defined category of taxpayers or transactions and that relieves eligible taxpayers from certain obligations otherwise imposed by a country’s general transfer pricing rules. One of the merits of a well-framed safe harbour is that it can reduce the need to find data on comparables and to perform a benchmarking study, in every case. General guidance on safe harbours is provided in Section E in Chapter IV of the OECD Transfer Pricing Guidelines.

For the purposes of this toolkit, a safe harbour refers to two types of provisions:

- A mechanism to allow a tax administration to specify an appropriate transfer pricing method, and an associated level or range of financial indicators, that it considers fulfils the requirements of the transfer pricing rules. Such a safe harbour is applicable only in respect to a defined category of transaction. (“Safe harbour for TP”)

- The specification by a tax administration of a process that, when applied in respect to a defined category of transaction, is considered to produce a result that fulfils the requirements of the transfer pricing rules. (“TP Safe harbour on process”)

Both types of safe harbour provide potential benefits to a tax administration and taxpayers. Safe harbours for TP are discussed first below, but it should be noted that many of the same considerations will also apply to TP Safe harbours on process.

4.1 Safe harbours for TP

A safe harbour for TP is typically specified in tax law, regulations or guidance. Safe harbours that are enshrined in law have the benefit of providing much greater certainty to taxpayers. However, because they cannot be easily adjusted, the terms of these kinds of safe harbours must be very carefully considered.

In contrast, regulations and administrative guidance published by a tax administration typically provide greater flexibility. As policy choices will vary, administrations may wish to consider these options in their design of any safe harbours. For example, one model may be to establish the entry conditions for the safe harbour and the applicable method by regulation (to provide greater taxpayer certainty), but publish the applicable range or result in administrative guidance, to be updated periodically, to help ensure that such results continue to approximate an arm’s length outcome. (See Appendix 19 for an illustration of this kind of regulation).

Such regulations typically specify:

- a category of transaction that falls within the safe harbour’s scope;
- a transfer pricing method that is expected to be applied to such transactions;

Note that while safe harbours, fixed margins and other prescriptive approaches are addressed here as potential ways of addressing a lack of comparables, they can also be applied for other reasons, including as simplification or anti-abuse measures.
• a level (or range of levels) of a financial indicator to be used in the application of that method. This may be, for example, a price, gross profit margin or a net profit margin, or a range of such margins.

For example, a safe harbour on method may specify that a cost-plus method is to be used, and a margin of say 5 percent to be applied when determining or testing the transfer pricing of the provision of a certain defined type of service.

**Safe harbours are most suitable for transactions which, in principle, are able to be benchmarked—normally involving functions that do not use valuable intangibles or assuming significant risk.** In principle, these are typically the types of function conducted by the “tested party” when a one-sided method is used.

**In practice, safe harbours may be appropriate in respect to a wide range of transactions, including:**

- Manufacturing, especially in cases where the manufacturer does not have a right to valuable intangibles and does not assume significant risk. This is likely to include manufacturers that are in substance toll manufacturers or contract manufacturers.

- Sales and distribution entities, including sales agents, again in cases where the function does not exploit valuable intangibles or assume significant risk.

- Provision of services that do not involve the exploitation of valuable intangibles or the assumption of significant risk.\(^83\)

**When designing a safe harbour, the definition of the category of eligible transactions will be important** since the safe harbour will allow results that fall within that safe harbour to be treated as arm’s length. Examinations of transactions where a safe harbour has been applied may still be necessary, but would focus on the eligibility of the transaction rather than the results achieved.

**Safe harbours may be either “opt-in” or “opt-out.”** The former refers to a safe harbour in which the taxpayer is able to choose to “opt-in” in order to benefit from it. In this type of regime, a taxpayer that chooses not to opt-in must apply the transfer pricing rules and document their application. Under an “opt-out” safe harbour, the taxpayer is required to apply the method specified in the safe harbour to any transactions that fall within its scope, unless it opts not to. Where the taxpayer opts out of the safe harbour, it must apply the transfer pricing rules and document their application. A taxpayer that opts out of a safe harbour regime generally bears the burden of proof that its chosen method meets the arm’s length principle. An “opt-out” regime will thus be a more straightforward option for many developing countries as it has the potential to reduce administrative costs.

**In the context of this toolkit, the most significant benefit of a safe harbour on method is to eliminate the need for a taxpayer to conduct a full comparability analysis and benchmarking study in determining or testing its transfer pricing and in preparing its**

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\(^83\) See Section D of Chapter VII of *OECD Transfer Pricing Guidelines* (2016).
documentation. At the same time, a tax administration is relieved of conducting the same comparability analysis and benchmarking analysis during an audit of a specific case. Where the tax administration does conduct an audit, it would normally be restricted to verifying that the transaction in question falls within the scope of the safe harbour. A safe harbour thus provides a mechanism for applying transfer pricing rules without the need for the taxpayer and tax administration to identify data on comparable transactions in each case.

In addition, safe harbours can have a number of advantages for taxpayers and tax administrations:

- For taxpayers, they can reduce compliance costs and provide some certainty of treatment for some transactions;
- For tax administrations, they can reduce enforcement costs, releasing resources from auditing of routine and low-risk issues. The audit of such cases would typically be restricted to checking that the transaction in point meets the safe harbour conditions.

Care needs to be taken in setting a safe harbour price or margin to ensure it approximates to an arm’s length price. If the price or margin is set too low, or the scope is not appropriately set, then tax revenue may be lost and MNEs will gain a tax advantage over independent enterprises. In addition, there is a risk that safe harbours may create a mechanism for tax competition between countries and tax planning by MNEs: if the safe harbour is too low, it could operate like a tax incentive regime, attracting profits (appropriately taxable elsewhere) which could be “sheltered” by the safe harbour. If the price or margin is set too high, and an opt-out is available, taxpayers may choose not to adopt it; where it applies, it could create double taxation and/or requests for compensating adjustments from the counterparty’s tax administration.

The need to set a safe harbour price or margin that approximates to arm’s length terms means the tax authority will need to undertake some form of benchmarking exercise using data on comparables. Such an exercise would not normally need to be carried out more than once a year (to set the price or margin)—in some cases perhaps less frequently.

This need to carry out such an exercise raises the question of the source of data. For the purpose of identifying data on comparables suitable for setting a safe harbour margin, if data is otherwise scarce or unavailable, a solution would be to use data already in the hands of the tax administration, sourced primarily from tax return information. Such information is confidential, but it should be possible to use it to identify and specify an appropriate price or range without revealing the identity of the taxpayers on which the analysis is based. In order to provide verification of the reliability of the analysis, it may be good practice to make publicly available a detailed description of the analysis, including the criteria used in selecting data for inclusion, and/or aggregated results. To this end, it may be useful for countries and regional and international organisations to assess the potential for building up an international or regional set of data based on data already in the hands of tax administrations, presented in an aggregated format that retains taxpayer confidentiality, and subject to transparency of process.

84 See also the OECD Transfer Pricing Guidelines (2016) at section E.4 of Chapter IV.
In order to reduce the risk of a safe harbour regime creating double taxation or double non-taxation, a number of measures may be taken:

- the tax administration should ensure that any margins contained in the safe harbour approximate to the arm’s length position;

- the rules should allow taxpayers to opt out of any otherwise mandatory safe harbour where they can demonstrate an alternative arm’s length outcome;

- if a treaty is in place, transfer pricing set according to a safe harbour should fall within the scope of the treaty, giving access to MAP or, if relevant, measures to eliminate double taxation. Ideally, safe harbours could be agreed between treaty partners (see below);

- the safe harbour should apply only to prices that are reflected in financial accounts. It should not allow a “downward adjustment” to profit from the accounts position to the measure of taxable profit. Such an adjustment may give rise to double non-taxation.

There are merits to regional or international co-operation in establishing safe harbour regimes.

- The first opportunity is to establish bilateral safe harbours, which are agreed between two or potentially more than two countries. Such safe harbours significantly reduce the risk of double taxation. These types of safe harbours are only available where existing international agreements, such as bilateral treaties, are in place, and are likely to make sense only where there are a relatively large number of transactions between associated enterprises located in both the countries party to the bilateral agreement.

- The second opportunity is for regional co-operation in establishing unilateral safe harbours. Such co-operation has three potential types of benefit. The first is that an aligned approach to safe harbours may be helpful to business. The second is that an aligned approach, including aligned safe harbour pricing or margins, reduces risk of tax competition between countries. The third is that peer support between countries may be made available in designing and implementing a safe harbour.

Regional and international co-operation also provides an important opportunity to create and record data from information in the hands of tax administrations. As mentioned above, financial data in the hands of tax administrations, derived primarily from tax return information, is likely to be very useful in setting safe harbour margins. Such information from a number of countries, if shared or made publicly available, would be equally useful for countries wishing to use foreign comparables or to test the return to a foreign enterprise that is associated to a domestic taxpayer. Follow-up action on this issue is recommended in Part IV of this toolkit.

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85 Opt out mechanisms are particularly useful where the burden of proof normally rests with the tax administration. In such cases, an opt-out clause can incorporate a reversal in the burden of proof, putting the onus on the taxpayer to demonstrate its position.

86 A sample memorandum of understanding for competent authorities to establish bilateral safe harbours is provided in Annex 1 to Chapter IV of OECD Transfer Pricing Guidelines (2016).
Box 21. Country Practices: Australia

Australia considers safe harbours can provide advantages in terms of a reduction in the compliance costs of both taxpayers and tax administrations. Whilst there will always remain a risk of misuse or manipulation, a properly constructed safe harbour should result in a net gain to the tax administration (reduced resource costs being greater than lost tax revenue) whilst reducing the compliance burden for affected taxpayers.

The Australian Taxation Office (ATO) has a “Simplified Transfer Pricing Recordkeeping” initiative in place that allows eligible entities that meet the requisite criteria to opt into applying the simplified transfer pricing recordkeeping requirements. The ATO developed safe harbour values through general industry benchmarking and risk sensitivity analyses using taxpayer-lodged information.

The eligibility criteria to apply simplified recordkeeping options are:

- The taxpayers' total international related-party dealings (expense or revenue) represent less than or equal to 2.5 percent of total turnover for the taxpayers' Australian economic group;
- The taxpayer does not have related-party dealings with entities in “specified countries”; 89
- The taxpayer does not have related-party dealings involving royalties, licence fees or research and development arrangements;
- The taxpayer has assessed its compliance with the transfer pricing rules.

Other criteria are: the taxpayer has not derived sustained losses (for three consecutive years), has not undergone a restructure within a year, and has no specific service-related party dealings greater than 15 percent of the turnover. The safe harbours are:

<table>
<thead>
<tr>
<th>Distributors</th>
<th>EBT ratio of minimum 3%</th>
</tr>
</thead>
<tbody>
<tr>
<td>intra-group services</td>
<td>Mark-up on costs of the relevant services either:</td>
</tr>
<tr>
<td></td>
<td>7.5% or less for services received</td>
</tr>
<tr>
<td></td>
<td>7.5% or more for services provided</td>
</tr>
<tr>
<td>Management and administrative services</td>
<td>Mark-up on costs of the relevant services of either:</td>
</tr>
<tr>
<td></td>
<td>5% or less for services received</td>
</tr>
<tr>
<td></td>
<td>5% or more for services provided</td>
</tr>
<tr>
<td>Technical services</td>
<td>Mark-up on costs of the relevant services of either:</td>
</tr>
<tr>
<td></td>
<td>10% or less for services received</td>
</tr>
<tr>
<td></td>
<td>10% or more for services provided</td>
</tr>
<tr>
<td>Low-level loans (inbound)</td>
<td>For inbound loans:</td>
</tr>
<tr>
<td></td>
<td>Interest rate is no more than the Reserve Bank of Australia (RBA) indicator lending rate for small business; variable; residential-secured term</td>
</tr>
<tr>
<td></td>
<td>The funds actually provided under the loan are Australian dollar funds and this is reflected in the loan agreements</td>
</tr>
<tr>
<td></td>
<td>Associated expenses are paid in Australian dollars</td>
</tr>
</tbody>
</table>


87 More country practices on safe harbours are provided in Appendix 20.
89 Generally, countries considered to be facilitating aggressive tax arrangements and BEPS.
4.2 Safe harbours on TP process

A safe harbour on TP process stipulates a process that a taxpayer must undertake in order to identify an arm’s length price or margin. In cases where the process is followed, the taxpayer is provided with some certainty that the resulting price or margin will be accepted by the tax authority as an arm’s length price or margin (or at a minimum would provide the taxpayer with protection from penalties), but in contrast with the safe harbours for TP described in the section above, the safe harbour on process does not specify a particular transfer pricing method or range of results to be achieved. In other cases, published guidelines on processes and parameters to be met will allow taxpayers to self-assess their risk of transfer pricing audit.

The safe harbour on process may include, for example:

- A description of the characteristics of transactions that fall within the scope of the safe harbour;
- The steps of a benchmarking process—for example, the search criteria to be employed in a comparables search;
- How the identified comparable data is to be utilised—for example, by stipulating a specific range within the data set that may be treated as a proxy for an arm’s length range;
- The treatment of an actual result that falls outside the range—for example, to adjust the result to a point within the range.

4.3 Other prescriptive rules

Some countries also apply prescriptive rules to certain transactions—for example, by requiring a particular fixed margin or determining the way in which a price is to be calculated for all transactions of a particular type. Like safe harbours, such measures may be characterised by some countries as appropriate simplification measures. They may also be regarded as a valid policy response in some other situations, for instance as an anti-avoidance measure. In designing these kinds of approaches, consideration should be given to the potential for double taxation and/or double non-taxation that may be created. Some countries apply more or less prescriptive rules to certain types of transactions such as those involving commodities. Typically, these kinds of rules rely on prices quoted on commodities exchanges and the like, but may prescribe certain conditions. See the discussion in Section 3.3.1 of Part II.
Box 22. Country Practices: Brazil

The transfer pricing legislation in Brazil allows the taxpayer to choose any of the given methods, even if that results in the lowest taxable income.

Brazilian transfer pricing approach permits the use of CUP, resale price, and cost plus. Regarding the CUP method, it is the only mandatory method in the case of transactions with commodities. Brazil does not allow the use of the TNMM or profit split method.

Import and export

For goods (other than commodities), services, and rights (in general):

**For import transactions:**
- Comparable Uncontrolled Price method
- Resale Price method (20% gross profit margin or other specific margins for specific economic sectors)
  - 30% for the following sectors: chemical products, glass and glass products, pulp, paper, and paper products, metallurgy.
  - 40% for the following sectors: pharmaceutical products, smoke products, optical, photographic, and cinematographic equipment and instruments, equipment for dental, medical, and hospital use, extraction of oil and natural gas, and oil derivative products.
- Cost Plus method (20% mark-up margin)

**For export transactions:**
- Comparable Uncontrolled Price method
- Wholesale Price in the Country of Destination Less Profit method (15% gross profit margin)
- Retail Price in the Country of Destination Less Profit method (30% gross profit margin)
- Cost Plus method (15% mark-up margin)

**For transactions with commodities, import and export:**
- Comparable Uncontrolled Price method: The value of the commodity in the controlled transaction may be adjusted to the average market premium of the commodity, considering the differences that may exist between the standard contract of the mercantile exchange (futures exchange), taken as reference, and terms negotiated between related parties, such as: payment terms, quantities negotiated, climatic influences in the characteristics of the product, intermediation costs on purchases and sales between unrelated entities, packaging, costs of landing at the port, internal transportation, storage and customs clearance, including taxes and import duties (all in the destination market).

Brazil’s transfer pricing regime is described in more detail in Chapter 10 of the UN Practical Manual on Transfer Pricing.

5. Transactional profit split method

Broadly, a profit split method determines or tests the results of a transaction between related parties by reference to a division of profits between them. This division should be determined in reference to the split that would have been expected had the parties not been related. Data on the profit split found in any comparable uncontrolled transactions are relevant to such an analysis, but such data may be difficult to identify or not exist. For this reason, profit splits may be made on another economically valid basis, such as an analysis of economic and business processes that are employed to determine the respective contributions to profit of each
of the parties to the transaction. Such analyses do not necessarily apply or require data from comparable uncontrolled transactions.

Where reliable comparables are not available because both (or all) parties make unique and valuable contributions (e.g. in the form of intangibles) and/or their operations are highly integrated, profit split may be the most appropriate method. Unique and valuable contributions most frequently derive from the utilisation of valuable scarce contributions, including those from intangibles and from the assumption (including the control and management) of the key business risks. However, the selection of a profit split method purely on the basis of a lack of data (absent the factors mentioned above) risks leading to a significant departure from the arm’s length outcome.

In cases where the profit split method is the most appropriate method and no external data is available as to the way in which combined profits should be split, internal data can be used for this purpose. The use of internal profit splitting factors requires knowledge of the operations of the taxpayer and the relevant related enterprises. Generally, this will involve an examination of the contribution by each of the parties to the value chain. Interviewing employees to help evaluate the significant contributions of each enterprise to the overall value chain can help determine reliable criteria on which to base the allocation of profits. Because these judgments can be subjective, it is very important to engage with the taxpayer. Since the application of this method requires detailed information, including the combined profits of the enterprises involved, information from the other associated enterprise(s) under consideration needs to be obtained.

Section C, Chapter II of the OECD Transfer Pricing Guidelines gives additional guidance on the use of the (transactional) profit split method.

6. Valuation techniques

Valuation techniques may be used in a number of transfer pricing contexts. They can be a useful tool in estimating the arm’s length price as a result of the sale or transfer of, for example:

- Physical capital assets (such as plant and equipment);
- Property;
- Intangible assets;
- Equity in a company.

With regard to the transfer of intangibles or rights in intangibles, income-based methods or valuation techniques based on discounted value of projected future income streams or cash flows (discounted cash flow method) that can be attributed to the intangible at issue can be useful.

Guidance on valuation techniques is provided in Section D.2.6.3, Chapter VI of the OECD Transfer Pricing Guidelines and in Examples 27, 28, and 29 (also, less explicitly, in Examples 16 and 17) of the Annex to Chapter VI.
With regard to large capital assets, an asset may be valued according to market data, a professional valuation, or a method based on purchase price and subsequent depreciation.

With regards to the last of these, at least one country has introduced specific rules, which involve the acquisition of new or used assets by taxpayers from connected persons. The acquisition price of assets will be significant, for example, for the acquisition of assets that give rise to tax deductible depreciation. Such an approach might require the invoice for the acquisition of the asset when it was purchased from an independent third party and in the case of a used asset, the subsequent application of the decline in value already amortised since the asset was purchased. If the asset in question is sold in a different state from the one in which it was purchased, barring ordinary wear and tear, or if there is no third-party invoice, or in the case of an asset built or assembled using a number of components and thus with several invoices, a technical appraisal may be performed by a third-party expert not employed by the company.

While valuation techniques can be very useful, their reliability will depend on the assumptions used in the valuation. In addition to the valuation report, an analysis based on such techniques should therefore also consider the basis of the underlying assumptions (e.g. in business or project plans and forecasts) as well as the sensitivity of the analysis to changes in these assumptions.

7. Advance pricing arrangements

While not directly addressing the issue of a lack of comparables information, some countries find advance pricing arrangements useful to develop greater understanding of business operations: an APA can provide the tax administration with access to useful industry information and analyses of pricing methodologies.\(^{90}\)\(^{91}\) Industry information will be relevant not only to the accurate delineation of the transactions at hand, but in some cases may also help inform their general guidance and examination processes,\(^{92}\) particularly as it concerns taxpayers in the same industry or sector. APAs can be particularly useful in complex situations where comparables information is not available, such as where a transactional profit split is found to be the most appropriate method.

However, APAs are generally resource intensive, so tax administrations may wish to weigh their advantages against competing resource needs, especially in the early days of transfer pricing regimes. Where companies applying for an APA are considered to be lower risk, it may be questionable whether scarce audit resources in countries building up capacity should be focused on these cases. Moreover, APAs are unlikely to be a suitable tool for all types of transactions: most tax administrations with APA experience consider that they work best for complex transactions undertaken by generally compliant taxpayers.

\(^{90}\) For a discussion of APAs generally, see Section F of Chapter IV of the OECD Transfer Pricing Guidelines (2016) and Section 9.6.2 of UN Practical Manual on Transfer Pricing (2013).


\(^{92}\) Paragraph 9.6.2.5 of UN Practical Manual on Transfer Pricing (2013).
8. Anti-avoidance and other tax base protection measures

Many countries employ general and/or specific anti-avoidance measures. Typical general anti-avoidance rules seek to defeat otherwise lawful practices that nevertheless are contrary to the intent of the law. While the topic of anti-avoidance measures is extremely broad, and thus beyond the scope of this toolkit, a number of specific anti-avoidance provisions that may be relevant to intra-group transactions are briefly outlined below.\(^{93}\)

Specific anti-avoidance rules are typically used in response to particular systemic, high-risk issues, for example, in situations where information asymmetry between taxpayers and tax administrations causes particular difficulties or to deal with a particular loophole or problem. In some cases, they may apply only where there is a high risk that the taxpayer has a tax avoidance motive; in other cases, they may be mechanical rules that apply a particular tax treatment to all transactions that meet certain objective criteria.\(^{94}\) In their latter form, they can resemble the prescriptive rules described at Section 4.3 above.

As an example, in recognition of the difficulties often encountered in dealing with intra-group financing transactions, many countries have introduced measures to address excessive deductions of interest. Some countries (for example, the UK) have taken a purely arm’s length approach. However, most countries with such rules have introduced more formulaic approaches, recognising the practical difficulties and administrative capacity needed to implement a purely arm’s length approach. This is reflected in the recommended approach arising from the BEPS Action 4 report.\(^{95}\) This recommended an approach based on limiting the deductibility of interest based on a ratio of net interest to EBITDA.

Other measures with similar aims may be available to supplement such rules. For example, in 2009 the UK introduced a rule that limits interest deductions available to UK companies belonging to large groups to no more than the total external interest expense of the group to which they belong.\(^{96}\)

A similar approach may be available with regard to the deductibility of royalties. The application of the arm’s length principle to determine a royalty paid under a licence agreement in respect to the use of intangibles may be complicated and reliable comparable data may be sparse. In such a situation, countries might introduce a cap on royalty deductions based on a ratio of royalties payable to EBITDA, or a similar measure.

Another common type of specific anti-avoidance rule deals with controlled foreign corporations (CFCs). These kinds of rules address the risk of profit shifting to foreign subsidiaries in defined scenarios by taxing those profits in the hands of the parent company. Typically, the rules apply in cases where the foreign subsidiary is not subject to a level of taxation similar to that which applies in the parent company jurisdiction. As CFC rules respond to the risk

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\(^{94}\) These types of specific anti-avoidance measures can resemble the prescriptive rules described in Section 4.3, above.


\(^{96}\) The Worldwide Debt Cap provision is in Part 7 of the Taxation (International and Other Provisions) Act 2010.
of base erosion from parent company (residence) jurisdictions, they tend to be less relevant to
PART IV: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS FOR FURTHER WORK

1. Summary

This toolkit has been prepared in response to concerns raised by developing countries regarding the challenges they face in identifying the data needed to carry out a transfer pricing analysis as part of a tax audit. Research described in this toolkit suggests that this is indeed a significant issue. In many developing countries, the relevant information on local comparables either does not exist (or is very scarce) or is not available in a way that is usable. This toolkit describes ways in which the pool of data on potential comparables may be increased and approaches that countries can take to improve access to existing data.

It is particularly noteworthy that the accurate delineation of the transaction (prioritising substance over form) and from it, the selection of the most appropriate transfer pricing method (and, where relevant, the selection of the appropriate tested party) will often be much more important in determining arm’s length prices and countering abuse than will the numerical level of the selected financial indicator, since the former are the necessary foundation to the analysis and will determine the basis for the calculation of the arm’s length price (often including consideration of which party will be entitled to any residual returns).

The toolkit details the process of undertaking or reviewing a comparability analysis, including performing or reviewing a search based on commercial databases where they are available. It also describes measures that may be taken to make the most effective use of existing data, including through the use of data from foreign markets, the use of data drawn from widened search criteria, and a discussion on the use of comparability adjustments.

However, recognising that a lack of data is often a genuine problem, particularly for developing countries, this toolkit also places some emphasis on approaches to implementing transfer pricing rules that reduce the reliance on publicly available comparables’ data. In particular, the paper discusses in this context the use of safe harbours, benefit tests, profit splits, and protective measures.

Transfer pricing is not an exact science and that, by their nature, transfer pricing analyses typically provide an indication of the arm’s length position and an estimate of the arm’s length price, rather than a definitive answer. Conducting a transfer pricing analysis is essentially the application of a principle to a particular set of facts, and not a process of following a series of set steps. Flexibility and judgement are needed in order to determine a principled answer in many cases.
2. Conclusions

Despite the potential of the measures mentioned above, this toolkit recognises that they do not offer a complete and comprehensive solution. This toolkit concludes that there are three key areas that developing countries might consider particularly effective, and that could merit further development.

2.1. Safe harbours

In some contexts, safe harbours can be used to mitigate the effects of poor availability of data. This toolkit sets out a number of relevant issues for countries considering the adoption of safe harbours in their transfer pricing rules, including how best to design such approaches in order to minimise the potential for harmful outcomes, such as double taxation or tax competition. These include: setting a safe harbour price or margin in line with the arm's length measure (perhaps by reference to 'secret' data or in conjunction with other tax administrations); allowing taxpayers to opt out of the regime (though in exchange, the taxpayer would bear the burden of proof); and ensuring that transactions conducted under a safe harbour are within the scope of treaties, including relief from double taxation under the mutual agreement procedure. This toolkit also notes that developing such safe harbours in co-operation with major trading partners may have additional benefits.

2.2. Data available to tax administrations

Data relevant to comparability analyses is likely to be contained in information submitted to tax administrations, in particular the information contained in tax returns. Such information is not normally usable by tax administrations conducting audits since the information is confidential and cannot be disclosed to other taxpayers. This toolkit suggests that work should be carried out to test the feasibility of using such information in a way that maintains taxpayer confidentiality. A proposal for taking this forward is contained in paragraph 1 of Section 3 below.

2.3. A framework for the selection and application of the most appropriate method

In many cases, the accurate delineation of the transaction, and from that the selection of the most appropriate method, will have a very significant impact on the allocation of profit between countries and in countering tax avoidance, perhaps more so than the selected value of the relevant financial indicator. This toolkit suggests that developing countries are likely to gain by placing emphasis on the analysis of the transaction and the selection of the most appropriate method, and highlights the following key points:

1. For transactions involving the sale of commodities or other property for which a comparability analysis concludes that a comparable uncontrolled price method is appropriate, the arm's length price may be determined by reference to a quoted price where one is available. Industry knowledge will be useful in determining how to apply the quoted price (for example, which price to use) and in making any necessary comparability adjustments. A simplified approach may assist in effective implementation. It is proposed that further work should be conducted to develop such approaches, such as those based on approaches known as the “sixth method” or “reference pricing.”
2. For transactions in which the analysis concludes that a one-sided method is most appropriate, an evaluation of the economically relevant characteristics of the transaction will help to make the best use of any available comparables information (which may include information from foreign markets) to determine appropriate arm’s length outcomes. Furthermore, in addition to being a simplification measure, carefully constructed safe harbours may be particularly useful in helping countries to address these kinds of transactions where there is a systemic lack of comparables information. Countries may, therefore, wish to consider developing safe harbour approaches to benchmark arm’s length returns to a tested party for relevant classes of transactions.

3. For transactions in which the analysis concludes that a profit split approach is most appropriate, data on comparable transactions may not be required.

4. To address categories of cases in which there is a significant, systemic risk of tax loss, and data is not available or capacity is insufficient to apply one of the above methods effectively, countries might consider an anti-avoidance or protective measure, such as that recommended as an outcome of BEPS Action 4 in relation to the deductibility of interest or other prescriptive rules.

3. Recommendations for further work

This toolkit proposes a number of actions, for the next phase of the work begun in this toolkit, which developing countries, supported by donors and regional and international organisations, may take.

A. Increasing the pool of data

1. Consider the feasibility of setting up an international database of data derived from information in the hands of tax administrations, presented publicly in an aggregated format that retains taxpayer confidentiality, and subject to transparency of process. Such information could be used to establish safe harbour margins or ranges and may be useful to test the validity of using potential comparables from a specific foreign market, or to test a foreign party to a transaction. In particular,

   - Individual countries could seek to identify arm’s length profit margins of taxpayer enterprises operating in their countries. The analysis would be restricted to certain profit level indicators of independent enterprises conducting specific types of business.

   - A mechanism for verifying the accuracy and relevance of the information should be considered—for example, an independent internal audit and/or publishing the processes used in collecting data.

   - In addition, country data could be used to form a centralised database, accessible to tax administrations and, potentially, taxpayers. The database would consist of financial data, drawn from information available to tax administrations (including from tax returns), aggregated at the level of category of transaction in each country.
2. Explore actions that may be taken to increase the number of countries that require the central registration of financial accounts of private and public companies, thus providing data for inclusion in commercial and other databases.

B. Improving access to commercial databases

3. Consider means by which developing countries can be supported in acquiring commercial databases, and building the skills to use them effectively. For instance, capacity building and sharing of best practices on the efficient and effective use of databases could be provided as part of other technical assistance initiatives supporting transfer pricing administration, through regional co-operation, or expert deployments.

4. Explore opportunities for regional and international co-operation for acquiring and using commercial databases.

C. Effective use of existing data

5. Undertake further research and spread available good practices on measures that may be taken to use existing data more effectively. Such guidance might include the challenges, and options for using data from foreign markets, the use of data drawn from widened search criteria, and the use of comparability adjustments. There is limited evidence on the impact of geographic differences on profitability. This is an area which could benefit from further research, and the suggested mechanism for increasing the pool of data, described at point 1 above, may provide data to support such research.

Selection and application of the most appropriate method

6. Develop further guidance and training for developing countries on the selection and application of the most appropriate method.

Safe harbours

7. Further develop guidance on the use of safe harbours in the application of the one-sided methods, including best practices.

Natural resources and other commodities sectors

8. Recognising the significance of the natural resources and other commodities sectors to many developing countries, conduct further work to refine measures such as those based on quoted prices (such as “sixth method” approaches). This would also examine the development of a framework for adjustments such as those based on “netback” approaches. Such work would aim to develop approaches that apply the arm’s length principle in a workable and efficient way.

Prescriptive, anti-avoidance or protective measures

9. Consider the feasibility and the advantages and disadvantages of measures designed to protect the tax bases of developing countries in cases where there is both a systemic high risk of tax loss and an inability to apply transfer pricing and other measures due to lack of
information or gaps in capacity. An example of such a measure would be the proposed limitation on the deductibility of interest based on a ratio of net interest to EBITDA set out in BEPS Action 4. Similar measures that could be explored may include limitations on royalty deductions (for example, based on a ratio of royalties payable to EBITDA) or other high-risk base eroding payments.
Addressing Difficulties in Accessing Comparables Data for Transfer Pricing Analyses

Case Studies
CASE STUDIES

Case Study 1: Thermal Coal

Part A: Broad-based analysis of the taxpayer’s circumstances (refer to Section 2.1)

Industry practice

Thermal coal is a bulk commodity used predominantly as an energy source for electricity generation. Thermal coal varies by grade based on energy content and levels of impurities (see related study into mineral product pricing for more information). Coal from different mines may be blended, for instance, to achieve a particular energy content, with coal products sold either directly to final users (such as electricity suppliers and cement producers) or via traders.

Tax audit

A Co is a joint venture of two multinational enterprises incorporated in Country A. A Co mines the coal and is responsible for all steps in preparing the coal for shipment to customers, from extraction to cleaning, dewatering, and drying. A Co has been producing for six years. Country A’s tax administration performs a random audit of A Co. While analysing A Co’s tax returns and annual reports of the past five years the auditor finds that: A Co generally returned small profits but sometimes made small losses; and A Co has a subsidiary in a low-tax jurisdiction: B Co. During desk research into A Co, the tax auditor also notes a recent news article in a financial newspaper in Country A, which describes an important visit of A Co’s customers for a meeting with A Co (in Country A), including pictures of a visit to A Co’s mining site.

Contractual arrangement between the parties

B Co purchases coal from A Co and takes legal title to the goods once they are ready for shipment. B Co immediately sells the coal directly to third-party customers, arranging shipments from Country A. The coal is shipped directly from Country A to the customer, i.e. B Co never takes physical delivery of shipments.

The contract between A Co and B Co states that B Co is responsible for marketing the coal. B Co is contractually obliged to purchase 100 percent of the coal produced by A Co meeting marketable standards. The taxpayer’s transfer pricing documentation states that B Co has been allocated strategic/marketplace risks, inventory risk, financial risks, and transaction risks in relation to the sales of coal, each of which are stated to be economically significant, while A Co has been allocated other infrastructure and operational risks.

The contract provides for B Co to receive a service fee from A Co in the form of a 7 percent commission on sales achieved. Based on its financial statements, B Co appears to be very profitable, but has very low payroll (staff) costs.

98 All case studies used herein are for illustrative purposes only and are necessarily presented with limited facts. The case studies do not have applicability beyond the purpose of illustrating several topics discussed in the toolkit and should not be used by taxpayers or tax administrations to interpret superficially similar cases.
Based on the contracts and the sales invoices between B Co and final customers provided by A Co to the auditor, the taxpayer has characterised B Co as an entrepreneur selling coal to third parties. To verify this, the tax auditor wants to interview the country director of A Co.

Part B: Accurate delineation of the actual controlled transaction—focus on the economically significant characteristics (refer to Section 2.2)

Evidence based on the actual conduct of the parties

Country A’s tax officials interview the country director of A Co, which reveals the following:

- Because of the expertise and experience of A Co’s staff in the thermal coal industry, and due to their direct involvement in the coal production process, A Co is contracted to assist B Co in finding customers.

- A Co invites customers to Country A at least once a year to review and discuss the technical specifications of current and expected future coal production, as well as expected customer demand for the coming period. These discussions are with A Co’s personnel.

- During those visits, A Co also negotiates with customers on B Co’s behalf regarding the final purchase terms.

- There is not much contact between the staff from A Co and B Co. Sometimes B Co advises A Co on market conditions in customer countries and arranges meetings with customers on behalf of A Co.

- B Co pays A Co a service fee (based on cost plus a mark-up of 8 percent) for its marketing support activities.

- In accordance with the offtake agreement between A Co and B Co, B Co does in fact purchase all available coal inventories from A Co. In most cases, B Co purchases the coal and instantaneously sells it to its third-party customers.

- The final purchase contracts are always between the third-party customers and B Co.

Assessment of functions, assets, and risks

Functions:

- A Co is the mining company responsible for all the steps in the coal mining process. Furthermore, A Co finds customers, maintains the market, makes strategic decisions about which markets to serve and how, negotiates all customer contracts, performs ongoing contract management, and effectively manages inventory, delivery shortfalls, and excesses.
B Co performs limited sales and marketing functions. Its activities include preparing market reports, arranging meetings for A Co, attending customer meetings to provide translation or linguistic services and other administrative tasks or coordination activities like scheduling of deliveries and processing related paperwork. For these reasons, B Co’s activities are considered routine and easily transferrable.

Assets:

- A Co owns all the equipment needed for the coal mining process. B Co does not own any assets aside from the coal inventories, which it typically disposes of to customers instantaneously. B Co rents office space.

- Long-term contracts and customer relationships could constitute marketing intangibles. However, these contracts do not specify a fixed price for the coal to be supplied (instead, pricing is renegotiated regularly based on prevailing market prices). Given the commoditisation of coal by grades, and the nature of the global market for thermal coal, the value of these intangibles is likely to be lower than it would in other industries. B Co legally owns these intangibles, but A Co has made significant contributions to the development, enhancement, maintenance, protection, and exploitation (“DEMPE”) of them.

Economically significant risks relating to the thermal coal industry include:

- Strategic/marketplace risks
  - Reduced sales because there is substitution to other energy sources (such as gas or renewables).
  - Finding continuous demand from international customers.

- Infrastructure/operational risks (including inventory risk)
  - Delays or mistakes in delivery of the products, including those which result in coal that is not of a marketable grade.
  - Additional costs in relation to production.
  - Purchase cancellations or mismatches in demand and supply leading to extra inventory that requires careful stockpiling (due to its combustibility) or quick sale.

- Financial risks
  - Price fluctuations.

- Transactional risks
  - Exchange rate risks.
  - Credit risk of third-party customers.

Based on the facts established during the audit, A Co, and not B Co, controls most of these risks. A Co also has the financial capacity to assume them. On this basis, A Co, and not B Co, should be regarded as assuming these risks for the purposes of the transfer pricing analysis.

**Delineating the actual transaction**

Taking all factors into account, the risks contractually allocated to B Co should, in fact, be allocated to A Co when delineating the actual transaction for transfer pricing purposes. B Co’s
risk profile is, in fact, very limited: it does not seem to be an entrepreneur using its own expertise. Rather, B Co appears to be akin to a low-risk service provider (or *commissionnaire*) to A Co, which essentially operates under the instructions of A Co. A Co makes all key decisions affecting the business.

*Comparability*

To adjust the profit for A Co, the tax auditor uses B Co as the tested party. With the functional profile of B Co characterised as a service provider or *commissionnaire*, a search is performed to find comparables to benchmark a return for B Co. The transactional net margin method (TNMM) with (full) costs as the profit level indicator was selected as the most appropriate transfer pricing method for the case. In this regard, much of the analysis focuses on determining the appropriate cost base in B Co since this will have a greater influence on the total transfer price than the mark-up. The adjustment in Country A to the deductible sales commission expense of A Co will be equal to the difference between the result from the comparability analysis and the actual profits in B Co.

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99 The illustration in footnote 33 to the section on the cost plus method (Part II, 2.4.1) is equally relevant to the application of a TNMM with a profit level indicator based on full costs. For convenience, the text of that footnote reads, “To illustrate: if an arm’s length mark-up on costs determined through the comparability analysis is 5%, and the cost base is determined to be 600, the total transfer price will be calculated as 600 * 1.05 = 630. Thus the cost base accounts for around 95.2% of the total transfer price (600/630), and the mark-up only 4.8% (30/630).”
Case Study 2: Construction

Part A: Broad-based analysis of the taxpayer’s circumstances (refer to Section 2.1)

Organisational structure

XYZ is a multinational group of companies (the “Group”) that provides specialist consultancy, design and project-management services for large-scale engineering projects. The group’s ultimate parent company and head office are located in Country F.

In 2012, the Group was engaged to provide a full range of engineering services with respect to the construction of an oil refinery in Country M. The refinery was being constructed by MNO Ltd., a petroleum company operating in Country M. In 2012, the Group set up a local subsidiary company, XYZ (M) in Country M whose function was to oversee and manage the provision of engineering services to MNO Ltd. during the construction of the refinery. It was expected that the project would last four years, with completion in 2016.

Part B: Accurate delineation of the actual controlled transaction—focus on the economically significant characteristics (refer to Section 2.2)

Contractual arrangements between the parties

XYZ (M) dealt directly with MNO Ltd. to provide these services under a contract agreed and signed in 2012. Under the terms of the contact, fees for the services are paid directly to XYZ (M), which has the responsibility for the satisfactory completion of the contract. XYZ (M) employs approximately 15 employees located in Country M, based in its offices near the site of the construction project. In order to fulfil the project, XYZ (M) engages a number of technical experts, engineers, and managers employed by a sister company XYZ (S) located in Country S. The costs of these personnel are recharged to XYZ (S) at a rate of their pay, plus a mark-up of 40 percent.

Throughout the period of the contract, XYZ (M)’s revenue consisted of the fees charged to MNO Ltd., and its costs consisted of its local costs, plus the fees paid to XYZ (S) for the provision of specialist personnel. During the course of the project there were a number of delays and, as a result, the contract with MNO Ltd. was renegotiated in 2014. The financial accounts of XYZ (M) show significant losses for all years from 2012 to 2016.

Tax audit

Country M’s tax authority decided to audit the tax position of XYZ (M), including the transfer pricing in respect of the costs of provision of personnel by XYZ (S). The tax authority conducted a detailed analysis in order to fully delineate the transaction. The analysis concluded that the key issues that drive the commercial success or failure of the contract with MNO Ltd. are:

- the terms and pricing of the initial, and revised, contract with MNO, and
- the control of the Group’s costs through the management of the engagement of specialist personnel, and the management of their deployment in the project.
Evidence based on the actual conduct of the parties

The audit revealed that the contract with MNO Ltd. was negotiated in 2012 by personnel from the Country F head office, although signed by the Managing Director of XYZ (M). The renegotiation of the contract in 2014 was led by personnel from the Country F head office, although employees of XYZ (M) were present at the renegotiation. The analysis also revealed that the management of the deployment of specialist experts (engineers, consultants etc.) was undertaken by project managers engaged by XYZ (S). It was concluded that the employees of XYZ (M) were not suitably qualified to manage the project, did not have the authority to manage the project, and did not in fact do so. It was further considered that the real role of XYZ (M) was to provide local logistics (including office and IT support and provision of utilities) to the engineering personnel. The audit also found that XYZ (S) had sufficient financial capacity to assume the risks associated with the project.

Delineating the actual transaction

The application of the Country M transfer pricing rules (in line with international principles) requires that in delineating the actual transaction the assumption of risks must be supported by the exercise of control and the existence of financial capacity to assume such risks. In this case, therefore, it was concluded that although XYZ (M) was contractually allocated the entrepreneurial risks, it did not exercise control over them. Instead, XYZ (S) controlled these risks. Since XYZ (S) also had the relevant financial capacity to assume these risks, they were allocated for the purposes of delineating the transaction to XYZ (S). XYZ (M) was merely providing low-risk services. This accurately delineated transaction is then used to determine and apply the most appropriate transfer pricing method, and to search for independent comparables with which to benchmark an arm’s length result.

As a result, the tax administration took the view that a method based on a mark-up on cost is most appropriate, with XYZ (M) as the tested party. A benchmarking study was undertaken to find suitable comparables. The effect of the application of this method was to recognise a profit in XYZ (M) for tax purposes throughout the period of the contract. The adjustment in Country M is a reduction in the deductible fee paid by XYZ (M) to XYZ (S).
**Case Study 3: Gold Production and Sales**

**Part A: Broad-based analysis of the taxpayer’s circumstances (refer to Section 2.1)**

*Industry practice*

Many industrial-scale gold mines operate by recovering tiny gold particles from ore using leaching or other techniques. Following initial leaching, in which gold is dissolved in a solution; it is recovered and eventually smelted to produce unrefined gold bars (doré). These bars are then taken from the mine and refined, with the refined gold sold onto world (pure) gold markets (see related study into mineral product pricing for more information).

*Organisational structure*

A Co in Country A is a multinational enterprise mining gold and selling unrefined gold doré to a related party in Country B (B Co) in Europe. B Co has an established refinery that has operated for over 10 years and sells the refined gold to third parties on international gold markets. Country B provides a corporate income tax exemption for gold trading. A Co’s annual gross revenue is around USD 400 million and B Co’s annual gross revenue is around USD 425 million. A Co and B Co are part of a multinational group with mining operations in several countries. The company is headquartered in Country C.

**Part B: Accurate delineation of the actual controlled transaction—focus on the economically significant characteristics (refer to Part II, Section 2.2)**

*Contractual arrangement between the parties*

There is a purchase agreement between A Co and B Co that stipulates B Co will buy all doré from A Co and B Co is also responsible for refining the gold and selling the refined product, taking legal title to the doré bars when they are delivered to the refinery by A Co.

B Co purchases and maintains all equipment required for the refining process and bears all payroll expenses related to the activity. In addition, B manages all operations related to refining the gold. This is reflected in its financial statements.

Under the purchase agreement, A Co is paid for the weight of the gold in each doré bar; referencing the London Bullion Market Association (LBMA) daily gold price for the day the bar is delivered to B Co. A Co pays the cost of refining each bar, any environmental taxes incurred by B Co (such as to dispose of waste materials), and delivery costs. A Co receives revenue based on the sale of each doré bar, minus a “handling fee” calculated as 5.4 percent of the value of each bar, which is retained by B Co as consideration for on-selling the refined gold. B Co recognises all revenue from the refined gold sales. B Co’s net revenue sources in relation to its gold sales are therefore its handling fees described above; any net gains in the price of gold between the time it purchases doré from A Co and it sells the refined gold, as well as a small margin on gold prices which it achieves on sales of commemorative gold coins to collectors.
Tax audit

Country A revenue authorities perform a tax audit at A Co. The audit confirms B Co purchases the unrefined gold from A Co and invoices and sells the finished gold bars to third-party customers. According to the financial statements of B Co, it has been recording substantial profits over recent years, primarily as driven by its contractual arrangement with A Co.

Assessment of functions, assets, and risks

B Co:

Functions:

- Refining of gold, silver, and platinum group metals;
- Selling refined precious metals to customers via over-the-counter (bilateral) sales;
- B Co manages its price risk by aiming to ensure it undertakes the refining and on-selling activities as quickly as possible, generally taking only a few hours, scheduling delivery appropriately to minimise delays, and where necessary, entering into hedging arrangements;
- Testing and analysis of unrefined precious metals for purity, and of refined precious metals for quality assurance before sale;
- Disposing of all waste materials from the refining process;
- Producing ceremonial products from the precious metals for retail sale (such as commemorative coins).

Assets:

- All assets relating to the refining process, including buildings and equipment;
- All laboratory equipment for testing and assay.

Risks:

- Risks associated with refining the precious metals (such as losses during refining);
- Risks associated with finding customers for refined precious metals, negotiating sales, and delivering the refined product;
- Risks associated with changes in the price of precious metals between the time of the purchase of unrefined metals and the resale of refined precious metals into the market;
- Credit and counterparty risks.
Relevant A Co Functions and Assets

A Co owns all mine assets. It operates the mine and beneficiates the gold ore to produce doré according to an agreed annual production target. It procures all inputs needed to mine the ore and produce doré. In addition, it arranges (and pays for) the delivery of the doré to B Co in Europe. A Co also maintains all mine assets in good working order.

Transfer pricing method

Refined gold is a highly commoditised product with a highly liquid international market. Based on the functions, assets, and risks, B Co’s core business is confirmed to be metals refining. Gold sales are important, but B Co does not need to search for customers or maintain a loyal customer base. For this reason, its gold sales are judged to be a routine function and should, therefore, be routinely remunerated using the transactional net margin method (TNMM) with sales as the profit level indicator.

Benchmark

From B Co’s financial statements, and after undertaking the comparability analysis described below, it appears that A Co is over-remunerating B Co for its functions of refining the doré and on-selling the refined gold. Country A revenue authorities benchmark B Co’s profitability against other precious metals refining companies operating in Europe (see benchmark process).

This benchmarking confirms B Co’s profitability from its gold business is substantially above the range of profitability of other comparable precious metals refineries.

Part C: Identification of potential comparables (refer to Part II, Section 3.4)

Benchmarking process

<table>
<thead>
<tr>
<th>Step process to identify comparable companies</th>
<th>Reasons for the step</th>
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<tbody>
<tr>
<td>1 Selecting the database</td>
<td>See Appendix 3 list of databases</td>
</tr>
<tr>
<td>2 Geographical screening Region/country/region in country</td>
<td>(Pan) Europe</td>
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<tr>
<td>3 Industry code screening</td>
<td>NACE Code 2441 - Precious metals production (see below)</td>
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<tr>
<td>4 Selecting the company size</td>
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<td>5 Text screening</td>
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<td></td>
<td>refining, production, nonferrous, non-ferrous, precious, metals</td>
</tr>
<tr>
<td>6</td>
<td>Financial data availability Operating revenue/turnover</td>
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<tr>
<td>7</td>
<td>Independence screening</td>
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<tr>
<td>8</td>
<td>Independence screening</td>
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<tr>
<td>9</td>
<td>Selecting the type of financial accounts</td>
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<tr>
<td>10</td>
<td>Selecting active/inactive companies</td>
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<td>11</td>
<td>Functional comparability analysis</td>
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### Europe:

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<td>3</td>
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<td>5</td>
<td>Determines the NAICS industries</td>
</tr>
<tr>
<td>6</td>
<td>Determines the national industry</td>
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100 Sources:

http://siccode.com/en/pages/what-is-a-classification-system
http://www.cso.ie/px/u/NACECoder/NACEItems/2441.asp
Addressing Difficulties in Accessing Comparables Data for Transfer Pricing Analyses

Appendices and References
APPENDIX 1

Questionnaire: functional analysis
Source: IRS 2006, exhibit 4.61.3-4

For guidance in performing a functional analysis of a business this questionnaire sets out a list of generic questions that might be used to gain an understanding of the various functions, risks, and intangibles. The list is not intended to be exhaustive and should be tailored to suit the needs of the specific business entity being reviewed.

ANALYSIS OF FUNCTIONS

I. Manufacturing

A. Materials purchasing
   1. What materials or partly finished goods are purchased?
   2. From whom are purchases made?
   3. Are any purchases made from related companies?
   4. Where and how are raw materials purchased?
   5. Who performs the purchasing function?
   6. Who plans purchasing schedules?
   7. Who negotiates purchasing arrangements?
   8. Who approves the vendor as being of acceptable quality?
   9. Do purchasing decisions require head office approval?
  10. What are the other approvals required? Who makes these approvals?
  11. Are any purchases made on consignment?
  12. What are your major risks?

B. Inventory
   1. Where is inventory held?
   2. Who controls the levels of inventory?
   3. How are inventory levels controlled?
   4. Is there a computer system?
   5. Are any purchases made on consignment?
   6. How many days of inventory are on hand?
   7. Has there ever been a case, for whatever reason, where you were stuck with excess inventory?
   8. Who bears the cost of obsolete inventory?
   9. What are your major risks?

C. Production equipment
   1. Who determines the purchasing budget?
   2. Who negotiates purchasing?
   3. Who maintains the plant?
   4. Who has expenditure authority for capital equipment?
   5. Who writes specifications for the plant?
   6. From whom is production equipment purchased?
   7. Are any purchases made from related companies?
   8. Do you have discretion over the equipment used?
   9. Can you modify the equipment?
10. What decisions require head office approval?
11. What are the approvals required?

**D. Production scheduling**
1. Who is responsible for production scheduling decisions?
2. What factors enter the decisions?
3. When are the decisions made?
4. Is a computer system used?
5. What decisions require head office approval?
6. What are the approvals required?
7. What are your major risks?
8. Does your distributor buy everything you manufacture?

**E. Manufacturing and process engineering**
1. What products are produced?
2. Who designed the products and who owns the technology?
3. What is the manufacturing process?
4. Who developed the original process?
5. Have any improvements been made locally?
6. Is it possible to compare productivity between the subsidiaries in the group?
7. Have you ever utilized a third party to produce your products?

**F. Package and labeling**
1. What packaging and labeling is done?
2. Where is it done?
3. Who makes the decisions in relation to packaging and labeling?
4. Have you complete autonomy to make such decisions?

**G. Quality control**
1. What form does quality control take?
2. Who sets finished product quality standards and procedures?
3. Who performs the quality control and who bears the cost?
4. Who provides the equipment and techniques for quality control?
5. How much product is lost because it fails quality and control checks?
6. What are your major risks?
7. What decisions require head office approval?
8. What are the approvals required?

**H. Shipping of products**
1. Who pays freight charges for product in and out?
2. Who arranges shipping of products?
3. Who ships your products?
4. Where are the products shipped?
5. How are they shipped?
6. Who is responsible for the selection of shippers?
7. Who is responsible for shipping deadlines?
8. What are your major risks?
9. What decisions require head office approval?
10. What are the approvals required?

**II. Research and development**
1. What research and development do you carry out?
2. Is any research and development carried out on your behalf by related companies?
3. Do you commission third parties to carry out research and development on your behalf?
4. Where are products designed?
5. What input do distributors have on manufacturing, product design or product modifications?
6. How important is the development of patents in the industry?
7. What patents do you own? Describe the unique products created by each patent.
8. What unpatented technical know-how have you developed that might differentiate your products from competitors, create import cost efficiencies, or give you an advantage in increasing your market share?
9. What decisions require corporate head office approval?
10. What are the approvals required?
11. Who formulates the budget?
12. Are license agreements in existence between you and related companies or third parties?
13. Is there a cost sharing agreement in force and if so what are the details?
14. Provide a copy of the cost sharing agreement and the relevant details.

III. Marketing

A. Strategic
1. Do you carry out your own marketing?
2. Are market surveys performed? Do you monitor market demand?
3. What decisions require head office approval?
4. What are the approvals required?
5. Who are your competitors?
6. Who assesses demand in foreign markets?
7. What are the risks related to demand for your products?
8. Who formulates the marketing budget?
9. Does your distributor always buy what your manufacturer produces?
10. Has your manufacturer ever refused to fill an order?
11. Do related companies carry out marketing on your behalf?
12. Are third-party distributors used?
13. Who chooses, authorizes, and controls third-party distributors?

B. Advertising, trade shows, etc.
1. What forms of marketing do you utilize?
2. What forms of advertising are used? Who pays for it?
3. Are trade shows used and if so who organizes them and who pays for them?
4. Are samples provided to distributors?
5. Who produces product brochures, specification sheets, etc.?
6. What marketing assistance do you receive?
7. What decisions require head office approval?
8. What are the approvals required?

IV. Sales and distributions

A. Sales
1. How are sales made and who is involved?
2. Who issues the invoice to the customer?
3. Who issues the invoice to you?
4. Who formulates the projections and sets targets?
5. Where are sales orders received?
6. Who is responsible for the achievement of sales targets?
7. Who negotiates sales contracts? Do they operate autonomously?
8. Does your distributor always buy what your manufacturer produces?
9. How much is sold to related companies?
10. Are only finished goods shipped from here?
11. Who are your competitors?
12. What are the risks related to demand for your products?
13. What decisions require corporate head office approval?
14. What are the approvals required?
15. Are products exported? If so, who is responsible for the export function?
16. What are the major risks in selling products in foreign countries?

B. Quality control
   1. What form does quality control take?
   2. Who sets finished product quality standards and procedures?
   3. Who performs the quality control and who bears the cost?
   4. Who provides the quality control and who bears the cost?
   5. How much product is rejected by customers as below standard?
   6. Who bears the loss on defective products?
   7. What are your major risks?
   8. What decisions require head office approval?
   9. What are the approvals required?

C. Freight
   1. Who pays freight charges for product in and out?
   2. Who arranges shipping of products?
   3. Who ships your products? To where? How?
   4. Who is responsible for the selection of shippers?
   5. Who is responsible for shipping deadlines?
   6. What are your major risks?
   7. What decisions require head office approval?
   8. What are the approvals required?

D. Inventory
   1. Do you actually receive the goods and hold stock?
   2. Where is stock held?
   3. Who controls the levels of inventory?
   4. How are inventory levels controlled? Is there a computer system?
   5. Are any purchases made on consignment?
   6. How many days of inventory are on hand?
   7. Has there ever been a case, for whatever reason, where you were stuck with excess inventory?
   8. Who bears the cost of obsolete inventory?
   9. What are your major risks?

E. Installation and after-sales services
   1. Do you install your products?
   2. Do you provide after-sales services? If so, describe the service.
   3. Does any company carry out product repairs and who bears the cost?
   4. Who bears the cost of installation and after-sales service?
   5. Do you provide product guarantees?
   6. Who bears warranty costs?
V. Administration and other services

A. General administration
   1. Is there a complete administration function?
   2. Do related companies perform any administration for you?
   3. What decisions require corporate head office approval?
   4. What are the approvals required?
   5. Who is responsible for administrative codes of practice?

B. Pricing policy
   1. Who determines the product pricing?
   2. What is the pricing policy for the various goods and services?
   3. What are your major risks?
   4. What decisions require corporate head office approval?
   5. What are the approvals required?

C. Accounting
   1. What accounting functions are carried out? By whom?
   2. Where are the financial reports prepared?
   3. What decisions require head office approval?
   4. What are the approvals required?
   5. Is a bank account maintained? For what purpose?
   6. Who has check signatory authority? What are the authority limits?
   7. Do you bear the credit risk on sales to customers?
   8. Who pays product liability insurance premiums?
   9. Who arranges and pays for other insurance?

D. Legal
   1. Who is responsible for legal matters?
   2. What decisions require head office approval?
   3. What are the approvals required?

E. Computer processing
   1. Is computer processing and programming done here? If not, by whom and where?
   2. Who developed the software and is any charge made for it?
   3. Who has expenditure authority for capital equipment?
   4. What decisions require head office approval?
   5. What are the approvals required?

F. Finance/loans/credit
   1. Are there any intercompany loans or long-term receivables and, if so, is interest charged?
   2. What trade credit terms are received and given?
   3. Is interest paid or charged if credit periods are exceeded?
   4. Who is responsible for borrowing requirements?
   5. What are your major risks?
   6. What decisions require head office approval?
   7. What are the approvals required?

G. Personnel
   1. Are there any compensation to or from overseas affiliates?
   2. What positions do they hold in the company?
   3. What training do you provide your employees?
   4. What is the length of the training period?
5. Is there on-the-job training?
6. Where is management training done?
7. What is the staff turnover rate?
8. Are all employees on your payroll?
9. Who is responsible for the employment of staff?
10. What decisions require head office approval?
11. What are the approvals required?

H. Use of property / leasing
1. Is property owned or leased from affiliates?
2. Do you lease property to affiliates?
3. Who is responsible for this function?

VI. Executive
1. To whom does the general manager report?
2. Does anyone report to the parent company besides the general manager?
3. Who is responsible for dealing with government agencies?
4. What are some of the regulatory requirements?
5. Has the parent ever told you to use more procedures than you have developed?
6. How does manufacturing site selection occur?
7. Where does the initial impetus in relation to corporate decisions come from?
8. What decisions require head office approval?
9. What are the approvals required?

ANALYSIS OF RISKS

I. Market risk
1. What are the market risks?
2. Do you bear the market risks? If not, who does?
3. How significant are the market risks?

II. Inventory risk
1. Does inventory become obsolete?
2. Who bears the cost of obsolete inventory?
3. Do you provide warranties in relation to finished goods?
4. Who bears the cost of returns under warranty?

III. Credit and bad debt risk
1. What credit terms are given and received?
2. Do you bear the cost of bad debts? If not, who does?
3. Is this a significant risk?

IV. Foreign exchange risk
1. Are you exposed to foreign exchange risk? If so, explain the risks.
2. How significant is the risk?
3. What steps do you take to minimize foreign exchange risk?
4. Do you have a manual that outlines your procedures/policies for dealing with foreign exchange risk? If so, provide a copy.
5. Do you engage in hedging of foreign exchange risk? If so, provide an explanation of your hedging activities.
ANALYSIS OF INTANGIBLES

I. Manufacturing
   A. Research and development
      1. Have you developed your own products? Are they unique?
      2. Have you developed manufacturing processes?
      3. How important are these processes to your business? Are they unique?
   B. Manufacturing processing/technological know-how
      1. Do you possess technological know-how?
      2. If so, what is its nature?
      3. How important to your business is the know-how?
      4. Is the know-how unique?
   C. Trademarks/patents, etc.
      1. Do you own any trademarks/patents?
      2. How significant are they to your business?
   D. Product quality
      1. Within your industry, and as compared to your competition, how would you rate the quality of your product?
   E. Other
      1. Are there any other manufacturing intangibles?
      2. Request copies of all licensing agreements.

II. Marketing
   A. Trademarks/trade names
      1. Do you own any trademarks/trade names?
      2. How significant are they to your business?
   B. Corporate reputation
      1. Do you consider that you have a corporate reputation?
      2. What is the nature of this reputation?
      3. Is corporate reputation significant in your business?
   C. Developed marketing organization
      1. Do you have a developed marketing organization?
   D. Ability to provide service to customers
      1. Within your industry, and as compared to your competitors, how would you rate the quality of the services you provide to customers?
APPENDIX 2

Characterisation based on typical business models

The functional analysis of the tested party is normally summarised by giving it a characterisation based on typical business models. For example, at either extreme, an entity performing sales functions may be “characterised” as:

- a fully-fledged distributor, performing full buy-hold-sell functions, including marketing and sales, having the relevant associated assets such as a warehouse, inventory and a logistics system, and assuming the relevant risks associated with these functions and assets, or

- a sales agent, selling on consignment, performing limited sales functions on behalf of another entity, having limited or no assets as it does not take title to the goods, and assuming limited risks.

Entities engaged in manufacturing activities could be characterised as:

- a fully-fledged manufacturer, undertaking full manufacturing functions; having the associated assets, including property, plant and equipment, as well as inventory; and assuming all the associated risks. These activities could potentially include research and development (particularly with regards to the manufacturing process) and would generally encompass forecasting demand, procurement of raw materials and other inputs, production scheduling, etc.

- a contract manufacturer, which manufactures to order, or

- a toll manufacturer, which essentially performs manufacturing services since it manufactures to order, but does not procure or own inputs, work in progress or outputs.

While these “shorthand” characterisations can be very useful in helping to determine the most appropriate method or profit level indicator, and in directing the search for comparables, a characterisation based on a vague functional analysis may produce misleading results. The characterisation is just a label used for convenience and should not be regarded as a substitute for the functional analysis.
Examples of commercial databases used for transfer pricing


Note: List is not intended to be exhaustive. There are a range of other providers.

<table>
<thead>
<tr>
<th>Provider</th>
<th>Database</th>
<th>Geographical Coverage</th>
<th>Content Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bloomberg</td>
<td>Bloomberg Reference Data Services</td>
<td>Worldwide</td>
<td>Financial markets data</td>
</tr>
<tr>
<td>Bureau van Dijk</td>
<td>Osiris, Orbis, Amadeus, Oriana, Aida, Bel-First, Dafne, Diane, Fame, Icarus, Odin, Mint Korea, Reach, Ruslana, Sabi, Sabina, Zephyr</td>
<td>Worldwide</td>
<td>Company financial information (listed)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Europe, Asia-Pacific, Italy</td>
<td>Company financial information (private and listed)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Belgium-Luxembourg, Germany, France</td>
<td>As above</td>
</tr>
<tr>
<td></td>
<td></td>
<td>UK and Ireland, US and Canada</td>
<td>As above</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nordic and Baltic, Korea, Russia, Ukraine and Kazakhstan</td>
<td>As above</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Spain and Portugal, Austria, Worldwide</td>
<td>As above</td>
</tr>
<tr>
<td></td>
<td>Capital Market Publishers India</td>
<td>Capitaline TP</td>
<td>Company financial information (private and listed)</td>
</tr>
<tr>
<td>Centre for Monitoring Indian Economy</td>
<td>Prowess</td>
<td>India</td>
<td>Company financial information (private and listed)</td>
</tr>
<tr>
<td>Dun &amp; Bradstreet</td>
<td>Company360, Mergent Million Dollar Directory</td>
<td>Australia, US</td>
<td>Company financial information (private and listed)</td>
</tr>
<tr>
<td></td>
<td>HFR Database</td>
<td>US</td>
<td>Hedge fund information</td>
</tr>
</tbody>
</table>

103 http://www.capitaline.com/new/tp.asp
104 http://www.cmie.com/
<table>
<thead>
<tr>
<th>Research</th>
<th>IBISWorld</th>
<th>Australia</th>
<th>Company financial information (private and listed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>InfoCredit</td>
<td>Teigil</td>
<td>Poland</td>
<td>Company financial information (private and listed)</td>
</tr>
<tr>
<td>Intangible Spring</td>
<td>Intangible Spring</td>
<td>Worldwide (US &amp; Canada)</td>
<td>Invotex Group</td>
</tr>
<tr>
<td>Interfax</td>
<td>SPARK</td>
<td>Russia, Ukraine, and Kazakhstan</td>
<td>Company financial information (private and listed)</td>
</tr>
<tr>
<td>Invotex Group</td>
<td>Royalty Connection</td>
<td>Worldwide (US)</td>
<td>Intangibles license agreements (sourced from US SEC)</td>
</tr>
<tr>
<td>KIS-Line</td>
<td>KIS-Line</td>
<td>South Korea</td>
<td>Company financial information (private and listed)</td>
</tr>
<tr>
<td>Kompass</td>
<td>Kompass</td>
<td>Worldwide</td>
<td>Company information (private and listed)</td>
</tr>
<tr>
<td>ktMine</td>
<td>ktMine IP</td>
<td>Worldwide (US)</td>
<td>Intangibles license agreements and royalty rates</td>
</tr>
<tr>
<td>Moody's Analytics</td>
<td>RiskCalc Plus</td>
<td>Worldwide (29 models)</td>
<td>Risk of default models (credit score)</td>
</tr>
<tr>
<td>Rimes</td>
<td>Rimes</td>
<td>Worldwide</td>
<td>Financial markets data, commodities, hedge funds and properties/REITs</td>
</tr>
<tr>
<td>RoyaltyRange</td>
<td>RoyaltyRange</td>
<td>European</td>
<td>Intangibles license agreements and royalty rates</td>
</tr>
<tr>
<td>Onecle</td>
<td>Business Contracts</td>
<td>US</td>
<td>Business contract filings (SEC)</td>
</tr>
<tr>
<td>Royaltystat</td>
<td>Licence Agreements Database</td>
<td>Worldwide (US)</td>
<td>Intangibles license agreements (sourced from US SEC)</td>
</tr>
<tr>
<td>RoyaltySource</td>
<td>RoyaltySource</td>
<td>Worldwide (US)</td>
<td>Intangibles license agreements (sourced from US SEC)</td>
</tr>
<tr>
<td>Standard and Poor's</td>
<td>Capital IQ Financials</td>
<td>Worldwide</td>
<td>Company financial information (private and listed)</td>
</tr>
<tr>
<td></td>
<td>Compustat - North America</td>
<td>North America</td>
<td>Company financial information (listed)</td>
</tr>
<tr>
<td></td>
<td>Compustat Global Credit Analytics</td>
<td>Worldwide</td>
<td>Company financial information (listed)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Risk of default models (credit score)</td>
</tr>
</tbody>
</table>

108 http://www.intangiblespring.com/pages/data
109 http://www.royaltyconnection.com
110 http://www.royaltyconnection.com/
111 http://www.kisline.com/
112 http://rs3.kompass.com/en
113 http://www.ktmine.com/
114 http://www.ktmine.com/products/ktmine-ip/
115 http://www.moodysanalytics.com/riskcalc2013
116 http://www.rimes.com/
117 http://www.rangeroyalty.com/
118 http://www.onecle.com/
119 https://www.royaltystat.com/
<table>
<thead>
<tr>
<th>Thompson Reuters 121</th>
<th>Dealscan 122</th>
<th>Worldwide public company data</th>
<th>Worldwide private company data</th>
<th>Worldwide intangibles data</th>
<th>Financial transactions data (loans)</th>
<th>Financial markets data</th>
<th>Fund management data</th>
<th>Company financial information (listed)</th>
<th>Company financial information (private and listed)</th>
<th>Intangibles license agreements and royalty rates</th>
</tr>
</thead>
</table>

121 www.tax.thomsonreuters.com/products/brands/onesource/onesource-transfer-pricing/comparable-databases
122 www.loanconnector.com/dealscan/LPC_WEB_DS_SecurlD.html
APPENDIX 4

Countries with available data from potential comparables meeting minimum requirement for application of the arm’s length principle

<table>
<thead>
<tr>
<th># of independent records with revenue and net margin information</th>
<th>Countries</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>=&lt;10</td>
<td>Afghanistan (AF), Albania (AL), Algeria (DZ), Andorra (AD), Angola (AO), Anguilla (AI), Antigua and Barbuda (AG), Armenia (AM), Aruba (AW), Bahamas (BS), Barbados (BB), Belize (BZ), Benin (BJ), Bhutan (BT), Brunei Darussalam (BN), Burkina Faso (BF), Burundi (BI), Cambodia (KH), Cameroon (CM), Cape Verde (CV), Central African Republic (CF), Chad (TD), Comoros (KM), Congo (CG), Congo, Democratic Republic of (CD), Costa Rica (CR), Côte d’Ivoire (CI), Cuba (CU), Curacao (CW), Djibouti (DJ), Dominica (DM), Dominican Republic (DO), East Timor (TL), El Salvador (SV), Equatorial Guinea (GQ), Eritrea (ER), Ethiopia (ET), Fiji (FJ), Gabon (GA), Gambia (GM), Georgia (GE), Gibraltar (GI), Grenada (GD), Guatemala (GT), Guinea (GN), Guinea Bissau (GW), Guyana (GY), Haiti (HT), Honduras (HN), Kiribati (KI), Korea, Democratic People’s Republic of (KP), Kosovo (KV), Kyrgyzstan (KG), Lao People’s Democratic Republic (LA), Lesotho (LS), Liberia (LR), Libya (LY), Liechtenstein (LI), Macao (MO), Madagascar (MG), Malawi (MW), Maldives (MV), Mali (ML), Mauritania (MR), Micronesia, Federated States of (FM), Monaco (MC), Mongolia (MN), Mozambique (MZ), Myanmar/Burma (MM), Namibia (NA), Nauru (NR), Nicaragua (NI), Niger (NE), Palau (PW), Papua New Guinea (PG), Paraguay (PY), Rwanda (RW), Saint Kitts and Nevis (KN), Saint Lucia (LC), Saudi Arabia (SA), Senegal (SN), Seychelles (SC), Sierra Leone (SL), Somalia (SO), South Sudan (SS), Sudan (SD), Suriname (SR), Swaziland (SZ), Tanzania, United Republic of (TZ), Togo (TG), Tonga (TO), Turkmenistan (TM), Tuvalu (TV), Uganda (UG), Ukraine (UA), Uzbekistan (UZ), Vanuatu (VU), Vatican City, State/Holy See (VA), Yemen (YE), Zambia (ZM)</td>
<td>106</td>
</tr>
<tr>
<td>10-100</td>
<td>Azerbaijan (AZ), Bahrain (BH), Belarus (BY), Bolivia (BO), Botswana (BW), Ecuador (EC), Ghana (GH), Iran, Islamic Republic of (IR), Iraq (IQ), Jamaica (JM), Kenya (KE), Lebanon (LB), Marshall, Islands (MH), Mauritius (MU), Moldova, Republic of (MD), Montenegro (ME), Morocco (MA), Nepal (NP), Nigeria (NG), Palau (PW), Papua New Guinea (PG), Paraguay (PY), Rwanda (RW), Saint Kitts and Nevis (KN), Saint Lucia (LC), Saint Vincent and the Grenadines (VC), Samoa (WS), Sao Tome and Principe (ST), Senegal (SN), Seychelles (SC), Sierra Leone (SL), Sint Maarten (SX), Solomon Islands (SB), Somalia (SO), South Sudan (SS), Sudan (SD), Suriname (SR), Swaziland (SZ), Tajikistan (TJ), Tanzania, United Republic of (TZ), Togo (TG), Tonga (TO), Turkmenistan (TM), Tuvalu (TV), Uganda (UG), Uzbekistan (UZ), Vanuatu (VU), Vatican City, State/Holy See (VA), Yemen (YE), Zambia (ZM)</td>
<td>30</td>
</tr>
<tr>
<td>100-1000</td>
<td>Argentina (AR), Bangladesh (BD), Bermuda (BM), Brazil (BR), Cayman, Islands (KY), Chile (CL), Cyprus (CY), Egypt (EG), Hong Kong (HK), Indonesia (ID), Israel (IL), Jordan (JO), Kazakhstan (KZ), Kuwait (KW), Macedonia (FYROM) (MK), Malta (MT), Mexico (MX), New Zealand (NZ), Oman (OM), Pakistan (PK), Peru (PE), Philippines (PH), Saudi Arabia (SA), Singapore (SG), South Africa (ZA), Sri Lanka (LK), Switzerland (CH), Vietnam (VN)</td>
<td>28</td>
</tr>
<tr>
<td>1000-10,000</td>
<td>Australia (AU), Austria (AT), Canada (CA), Denmark (DK), Iceland (IS), India (IN), Ireland (IE), Lithuania (LT), Luxembourg (LU), Netherlands (NL), Slovenia (SI), Taiwan (TW), Thailand (TH), United Kingdom (UK)</td>
<td>13</td>
</tr>
<tr>
<td>10,000-100,000</td>
<td>Belgium (BE), Bosnia and Herzegovina (BA), China (CN), Colombia (CO), Croatia (HR), Czech Republic (CZ), Estonia (EE), Finland (FI), Germany (DE), Greece (GR), Japan (JP), Korea, Republic of (KR), Latvia (LV), Malaysia (MY), Poland (PL), Serbia (RS), Sweden (SE), Turkey (TR), United Kingdom (GB), United States of America (US)</td>
<td>20</td>
</tr>
<tr>
<td>=&gt;100,000</td>
<td>Bulgaria (BG), France (FR), Hungary (HU), Italy (IT), Norway (NO), Portugal (PT), Romania (RO), Russian Federation (RUS), Slovakia (SK), Spain (ES), Ukraine (UA)</td>
<td>11</td>
</tr>
</tbody>
</table>

Please note that this table summarises information shared voluntarily by several private database providers. It may therefore not be a complete summary of globally available information.
## APPENDIX 5

### Most common types of classification codes

<table>
<thead>
<tr>
<th>System</th>
<th>Code</th>
<th>Description</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Industrial Classification System</td>
<td>SIC</td>
<td>Created in the 1930s to standardise data in the United States. It is the most widely used reference guide for comparability purposes.</td>
<td><a href="http://www.sec.gov/info/edgar/siccodes.htm">http://www.sec.gov/info/edgar/siccodes.htm</a></td>
</tr>
<tr>
<td>Nomenclature of Economic Activities</td>
<td>NACE</td>
<td>Four-digit statistical classification of economic activities in the European Union. Taken from its name in French, <em>Nomenclature statistique des activités économiques dans la Communauté européenne</em>.</td>
<td><a href="http://ec.europa.eu/competition/mergers/cases/index/nace_all.html">http://ec.europa.eu/competition/mergers/cases/index/nace_all.html</a></td>
</tr>
</tbody>
</table>
## A selection of other types of classification codes

<table>
<thead>
<tr>
<th>System</th>
<th>Country</th>
<th>Abbreviation (if any)</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Industry Classification Code</td>
<td>New Zealand</td>
<td></td>
<td><a href="http://businessdescription.co.nz/#/home">http://businessdescription.co.nz/#/home</a></td>
</tr>
<tr>
<td>Economic Activity Codes</td>
<td>Chile</td>
<td></td>
<td><a href="http://www.sii.cl/catastro/codigos.htm">http://www.sii.cl/catastro/codigos.htm</a></td>
</tr>
</tbody>
</table>
APPENDIX 7

Independence criteria

The Bureau van Dijk Independence Indicators are noted as A, B, C, D, and U, with further qualifications.

Indicator A

Definition: Attached to any company with known recorded shareholders (excluding the 3 "collective" types indicated above) none of which having more than 25% of direct or total ownership.

This is further qualified as A+, A or A-:

- **A+**: Companies with 6 or more identified shareholders (of any type) whose ownership percentage is known
- **A**: As above, but includes companies with 4 or 5 identified shareholders
- **A-**: As above, but includes companies with 1 to 3 identified shareholders

The logic behind these qualifiers is that the probability of having missed an ownership percentage over 25% is the lowest when the greatest number of shareholders is known, so that the company’s degree of independence is more certain.

The qualification A+ is also attributed to A companies in which the sum of direct ownership links (all categories of shareholders included) is over 75%. Which means that those companies cannot have an unknown shareholder with 25% or more and can thus not be identified with an Independence Indicator other than A.

Please note that BvD also gives an A- notation to a company that is mentioned by a source (Annual Report, Private Communication or Information Provider) as being the Ultimate Owner of another company, even when its shareholders are not mentioned.

As it can been seen from the above definitions, the qualifications "+" or "-" do not refer to a higher or a lower degree of independence but to the degree of reliability of the Indicator that is attributed.

In BvD terminology "A" companies are called "Independent companies".

Indicator B

Definition: Attached to any company with a known recorded shareholder (excluding the 3 "collective" types mentioned above) none of which with an ownership percentage (direct, total or calculated total) over 50%, but having one or more shareholders with an ownership percentage above 25%.

---

The further qualification as B+, B and B- is assigned according to the same criteria relating to the number of recorded shareholders as for indicator A.

The qualification B+ is also attributed to B companies in which the summation of direct ownership percentages (all categories of shareholders included) is 50.01% and higher. Indeed, this means that the company surely does not qualify under Independent Indicator C (since it cannot have an unknown shareholder with 50.01% or higher).

**Indicator C**

**Definition:** Attached to any company with a recorded shareholder (excluding the 3 "collective" types mentioned above) with a total or a calculated total ownership over 50%.

The qualification C+ is attributed to C companies in which the summation of direct ownership percentage (all categories of shareholders included) is 50.01% or higher. Indeed, this means that the company surely does not qualify under Independent Indicator D (since it cannot have an unknown direct shareholder with 50.01% or higher).

The C indicator is also given to a company when a source indicates that the company has an ultimate owner, even though its percentage of ownership is unknown.

**Indicator D**

**Definition:** This is allocated to any company with a recorded shareholder (excluding the 3 "collective" types mentioned above) with a direct ownership of over 50%.

**Indicator U**

**Definition:** This is allocated to companies that don’t fall into the categories A, B, C or D - indicating an unknown degree of independence.
APPENDIX 8

Factors to consider when reviewing a comparables search process

- **Choice of transfer pricing method**: The choice of the transfer pricing method (and if necessary, the choice of tested party) are very important. These must be in line with the comparability (including functional) analysis and properly supported. Knowledge of the tested party (especially derived from the functional analysis) is necessary. This knowledge can be obtained through the master and the local file, CbC report, external publicly available information (on the Internet), internal information within the tax authority, and so on.

- **TNMM**: A benchmark is often done related to the transactional net margin method. The choice of the profit level indicator (revenues, operational costs, assets, etc.) should be consistent with the functional analysis and the nature and characteristics of the transaction.

- **Internal comparables**: Where information on potentially comparable transactions between the taxpayer or its associated enterprise and independent parties exist, they should be analysed to determine whether they are internal comparables. This also requires a bigger picture of the whole group the tested party operates within.

- **Selection of database or other source of potential comparables**: The scope of the data included in the database or other source of information should be considered to ensure it is appropriate.

- **Benchmark steps**: The benchmark steps (e.g. industry classification codes or key words used) and the corresponding results should be reviewed and, if necessary, can be replicated to see if it leads to the same outcome of potential comparables. If there are questions or doubts about the steps being taken, these should be discussed with the taxpayer; other criteria may be applicable.

- **Manual screening**: The manual screening is the part of the analysis that is most sensitive for selectivity or “cherry picking”. A good understanding of the tested party and the transaction being analysed to judge its comparability to the other companies is necessary.

- To have a good understanding of the outcome of the benchmark, a rough data dump within the database can be made. This number should be in line with the final outcome of the benchmark. If there are big deviations, leading to doubts as to the reliability of the benchmark, this should be discussed with the taxpayer.

- Besides the final set of comparables, the comparables that were not accepted should also be reviewed [if there are too many, (statistical) sampling can be used] to judge if they are correctly not accepted.

- **Loss-making comparables**: These companies can have, for example, an average loss over three/five years or losses for three out of five years. If a company has prolonged
losses (or on the other hand, extremely positive results) this can be an indication of the existence of particular economic conditions, a business strategy or higher risks, which may mean that the loss-making entity is not comparable to the tested party. Normally, loss-making comparables are refused unless the taxpayer can show that it is indeed comparable (e.g. at a similar stage of a particular business cycle; carrying out a similar business strategy; or subject to the manifestation of similar economically significant risks, etc).

- **Number of comparables:** The number of comparables can influence the interquartile range. If there is a big number of potential comparables from initial screening, it may be appropriate to incorporate quantitative selection criteria in some cases. If there is a small number of comparables, this may have a strong influence on the comparability and the use of a statistical interquartile range.

- **Comparability adjustments and diagnostic ratios:** These adjustments should only be made to increase the comparability and the reliability of the data, not to create comparability. Caution is advised when using adjustments or diagnostic ratios.
APPENDIX 9

Formulas for working capital adjustments

**Accounts Receivable Adjustment**

In order to estimate the difference in financing, a comparison of the accounts receivable to sales ratio amongst the tested party and the comparables is necessary. Companies that provide longer payment terms will generally have higher accounts receivable than those companies that offer less generous terms.

If the comparables’ receivables are adjusted to affect the same accounts receivable to sales ratio of the tested party, a calculation is performed to indicate what the comparables’ receivables would be if they offered the same terms of payment.

\[ Sc = \text{comparables’ sales} \]
\[ TP = \text{tested party} \]

The equation used for the average accounts receivable \( (\text{AAR} \text{ in the formula}) \) adjustment is:

\[
\Delta \text{AAR}_c = \left( \frac{AAR}{S} \right)^{TP} S_c - \left( \frac{AAR}{S} \right)^{C} S_c
\]

\[
\text{Adjusted Sales}_{\text{comparables}} (\text{Adj } S_c) = S_c + \left( \frac{\Delta \text{AAR}_c}{i} \right) \times \left( \frac{i}{1+i} \right)
\]

**Inventory Adjustment**

The longer inventory is kept, the smaller the profit on the sale of the goods due to the increase in the cost of inventory holding. While the cost of inventory holding increases over time and the selling price remains stable, this results in a lower profit.

In order to estimate the difference in the opportunity costs of holding different levels of inventory, a comparison of the ratio of inventory to sales of the tested party and the comparables should be performed. By applying the ratio, an adjusted inventory level can be calculated for the comparables that reflects the tested party’s inventory intensity. The next step in the inventory adjustment involves multiplying the change in the comparables’ inventory (adjusted inventory less unadjusted inventory) by the prime lending rate.

In the case where the tested party is holding higher inventory levels, the comparables’ adjusted inventory will be positive, operating expenses will be reduced, and the comparables’ operating income will be increased to reflect the comparables’ cost savings from holding fewer inventories. In the case where the tested party is holding lower inventory levels, the comparables’ adjusted inventory will be lower, the opportunity cost estimates will be negative, operating expenses will
be increased, and the comparables’ operating income will be decreased to reflect their higher opportunity costs.

\[ Sc = \text{comparables’ sales} \]
\[ TP = \text{tested party} \]

The equation used for the inventory adjustment is:

\[
\text{Change in Average Inventory}_{\text{comparable}}(\Delta I_c) = \left[ \left( \frac{\text{AI}_{TP}}{S} \right) \times S_c \right] - A_I_c
\]

\[
= \left[ \left( \frac{\text{AI}_{TP}}{S} \right) - \left( \frac{\text{AI}_{C}}{S} \right) \right] \times S_c
\]

Adjusted Cost of Sales \(\text{comparable} (\text{Adj COS}_c) = \text{COS}_c - (\Delta I_c \times i)\)

**Accounts payable adjustment**

Since accounting data do not break out the element of cost of goods sold that can be considered an interest expense, an estimate of the cost of goods sold is necessary. In order to estimate which part of the cost of goods sold is an interest cost (time value of money); a comparison of the accounts payable to sales ratio of the tested party and the comparables is necessary.

Companies that receive terms that are more generous will generally have higher accounts payable to sales ratios than those companies receiving less favourable terms. The difference in the accounts payable to sales ratios amongst the tested part and any individual comparable will reflect the differences in sales terms offered by their respective suppliers.

The equation for the accounts payable adjustments is:

\[
\text{Change in Average Accounts Payable}_{\text{comparable}}(\Delta AAP_c) = \left[ \left( \frac{\text{AAP}_{TP}}{S} \right) \times S_c \right] - \text{AAP}_c
\]

\[
= \left[ \left( \frac{\text{AAP}_{TP}}{S} \right) - \left( \frac{\text{AAP}_{C}}{S} \right) \right] \times S_c
\]

Adjusted Cost of Sales \(\text{comparable} (\text{Adj COS}_c) = \text{COS}_c - \Delta \text{AAP}_c \times \left( \frac{i}{(1 + i)} \right) \)
Example of a working capital adjustment

Example from the *OECD Transfer Pricing Guidelines* (Annex to Chapter III, p. 329).

TestCo (the tested party) has been identified as having significantly higher levels of working capital as compared to Comp Co (a comparable entity). In order to adjust for this, first differences in the levels of working capital between the tested party and the comparables (in this case only one: CompCo) are identified and measured against an appropriate base. In this example, trade receivables, trade payables, and inventories are considered, and the differences are applied against a sales base (on the basis that the TNMM is being applied as a sales-based financial indicator).

<table>
<thead>
<tr>
<th>TestCo</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$179.5m</td>
<td>$182.5m</td>
<td>$187m</td>
<td>$195m</td>
<td>$198m</td>
</tr>
<tr>
<td>Earnings Before Interest &amp; Tax (EBIT)</td>
<td>$1.5m</td>
<td>$1.83m</td>
<td>$2.43m</td>
<td>$2.54m</td>
<td>$1.78m</td>
</tr>
<tr>
<td>EBIT/Sales (%)</td>
<td>0.80%</td>
<td>1%</td>
<td>1.30%</td>
<td>1.30%</td>
<td>0.90%</td>
</tr>
</tbody>
</table>

**Working Capital (at end of year)**

<table>
<thead>
<tr>
<th></th>
<th>TestCo</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Receivable (R)</td>
<td>$30m</td>
<td>$32m</td>
<td>$33m</td>
<td>$35m</td>
<td>$37m</td>
<td></td>
</tr>
<tr>
<td>Inventories (I)</td>
<td>$36m</td>
<td>$36m</td>
<td>$38m</td>
<td>$40m</td>
<td>$45m</td>
<td></td>
</tr>
<tr>
<td>Trade Payables (P)</td>
<td>$20m</td>
<td>$21m</td>
<td>$26m</td>
<td>$23m</td>
<td>$24m</td>
<td></td>
</tr>
<tr>
<td>Receivables (R) + Inventory (I) - Payables (P)</td>
<td>$47m</td>
<td>$45m</td>
<td>$52m</td>
<td>$58m</td>
<td>$46m</td>
<td></td>
</tr>
<tr>
<td>(R + I - P) / Sales</td>
<td>25.60%</td>
<td>25.80%</td>
<td>24.10%</td>
<td>26.70%</td>
<td>29.30%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>CompCo</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$120.4m</td>
<td>$121.2m</td>
<td>$121.8m</td>
<td>$126.3m</td>
<td>$130.2m</td>
<td></td>
</tr>
<tr>
<td>Earnings Before Interest &amp; Tax (EBIT)</td>
<td>$1.59m</td>
<td>$3.59m</td>
<td>$3.15m</td>
<td>$4.18m</td>
<td>$6.44m</td>
<td></td>
</tr>
<tr>
<td>EBIT/Sales (%)</td>
<td>1.32%</td>
<td>2.96%</td>
<td>2.59%</td>
<td>3.31%</td>
<td>4.95%</td>
<td></td>
</tr>
</tbody>
</table>

**Working Capital (at end of year)**

<table>
<thead>
<tr>
<th></th>
<th>CompCo</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Receivable (R)</td>
<td>$17m</td>
<td>$18m</td>
<td>$20m</td>
<td>$22m</td>
<td>$23m</td>
<td></td>
</tr>
<tr>
<td>Inventories (I)</td>
<td>$18m</td>
<td>$20m</td>
<td>$26m</td>
<td>$24m</td>
<td>$25m</td>
<td></td>
</tr>
<tr>
<td>Trade Payables (P)</td>
<td>$11m</td>
<td>$13m</td>
<td>$11m</td>
<td>$15m</td>
<td>$16m</td>
<td></td>
</tr>
<tr>
<td>Receivables (R) + Inventory (I) - Payables (P)</td>
<td>$24m</td>
<td>$25m</td>
<td>$35m</td>
<td>$31m</td>
<td>$32m</td>
<td></td>
</tr>
<tr>
<td>(R + I - P) / Sales</td>
<td>19.90%</td>
<td>20.60%</td>
<td>28.70%</td>
<td>24.50%</td>
<td>24.60%</td>
<td></td>
</tr>
</tbody>
</table>

The differences between TestCo and CompCo are then calculated, and the time value of money reflected by multiplying the difference by an appropriate interest rate in order to increase comparability. This adjustment is then applied to CompCo’s operating profit margin (EBIT/sales) to produce a working capital adjusted operating profit margin.
<table>
<thead>
<tr>
<th>Working Capital Adjustment</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>TestCo’s (R + I - P) / Sales</td>
<td>25.60%</td>
<td>25.80%</td>
<td>24.10%</td>
<td>26.70%</td>
<td>29.30%</td>
</tr>
<tr>
<td>CompCo’s (R + I - P) / Sales</td>
<td>19.90%</td>
<td>20.60%</td>
<td>28.70%</td>
<td>24.50%</td>
<td>24.60%</td>
</tr>
<tr>
<td>Difference (D)</td>
<td>5.70%</td>
<td>5.10%</td>
<td>-4.70%</td>
<td>2.10%</td>
<td>4.70%</td>
</tr>
<tr>
<td>Interest rate (i)</td>
<td>4.80%</td>
<td>5.40%</td>
<td>5.00%</td>
<td>5.50%</td>
<td>4.50%</td>
</tr>
<tr>
<td>Adjustment (D * i)</td>
<td>0.27%</td>
<td>0.28%</td>
<td>-0.23%</td>
<td>0.12%</td>
<td>0.21%</td>
</tr>
<tr>
<td>CompCo’s EBIT / Sales (%)</td>
<td>1.32%</td>
<td>2.96%</td>
<td>2.59%</td>
<td>3.31%</td>
<td>4.95%</td>
</tr>
<tr>
<td>Working Capital Adjusted EBIT / Sales for CompCo</td>
<td>1.59%</td>
<td>3.24%</td>
<td>2.35%</td>
<td>3.43%</td>
<td>5.16%</td>
</tr>
</tbody>
</table>

In this case, CompCo’s operating margin would be higher in Year 1, 2, 4 and 5 and lower in Year 3. These operating profits reflect the more comprehensive financing function of TestCo.

Some observations:

- An issue in making working capital adjustments is what point in time are the Receivables, Inventory and Payables compared between the tested party and the comparables. The above example compares their levels on the last day of the financial year. This may not, however, be appropriate if this timing does not give a representative level of working capital over the year. In such cases, averages might be used if they better reflect the level of working capital over the year.

- A major issue in making working capital adjustments involves the selection of the appropriate interest rate (or rates) to use. The rate (or rates) should generally be determined by reference to the rate(s) of interest applicable to a commercial enterprise operating in the same market as the tested party. In most cases a commercial loan rate will be appropriate. In cases where the tested party’s working capital balance is negative (that is Payables > Receivables + Inventory), a different rate may be appropriate. The rate used in the above example reflects the rate at which TestCo is able to borrow funds in its local market. This example also assumes that the same interest rate is appropriate for payables, receivables and inventory, but that may or may not be the case in practice. Where different rates of interest are found to be appropriately applicable to individual classes of assets or liabilities, the calculation may be considerably more complex than shown above.

- The purpose of working capital adjustments is to improve the reliability of the comparables. There is a question whether working capital adjustments should be made when the results of some comparables can be reliably adjusted while the results of some others cannot.

There are alternative approaches to perform working capital adjustments. One alternative would be to adjust the tested party’s result to results to reflect those of the comparables and adjusting both the tested party and the comparables’ results to reflect zero working capital.
Example of adjustment for accounting differences

Employee Stock-Based Compensation Adjustment

The basic premise for making a stock-based compensation adjustment is that employee stock-based compensation is a form of employee remuneration (i.e. similar to wages and bonuses). As employee stock-based compensation is not always subject to uniform accounting treatment, this can lead to distortions in a company’s financials that have a material impact on the condition being examined (for example, the net margin) that may require adjustment, as is illustrated by the following example.

A comparison is being made of the net margins earned in controlled transactions entered into by Enterprise A (the tested party) and the net margins earned in uncontrolled transactions entered into by Enterprise B.

- Enterprise A has booked employee stock option compensation as an expense.
- Enterprise B has disclosed that it awarded its employees stock-based compensation during the relevant year of $3.25 million after tax, but that no employee stock-based compensation expense has been booked.

This difference in treatment has a material impact on the net margin reported by Enterprise B, as its expenses are understated as compared to Enterprise A. In order to adjust for this material difference, assuming a statutory tax rate of 35%, the reported $3.25 million after-tax stock-based compensation is firstly grossed up to a before-tax amount of $5 million ($3.25/(1-0.35)) and Enterprise B’s net margin is adjusted accordingly:

<table>
<thead>
<tr>
<th></th>
<th>Enterprise B (before adjustment)</th>
<th>Enterprise B (after adjustment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>-65</td>
<td>-65</td>
</tr>
<tr>
<td>Gross profit</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>Selling, general and administrative expenses</td>
<td>-19</td>
<td>-24</td>
</tr>
<tr>
<td>Depreciation</td>
<td>-5</td>
<td>-5</td>
</tr>
<tr>
<td><strong>Operating profit</strong></td>
<td><strong>11</strong></td>
<td><strong>6</strong></td>
</tr>
<tr>
<td>Operating margin</td>
<td>11%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Limited empirical support for reliance on non-adjusted foreign market data

1. Background

The use of foreign comparable information for transfer pricing studies has not been directly investigated in academic analysis, but Meenan et al. (2004)\textsuperscript{126} investigated whether pan-European comparable data provide different arm’s length ranges from country specific samples and concluded that “European arm’s length ranges do not statistically differ from country-specific arm’s length ranges in almost all cases.” In this Appendix we revisit the analytical approach taken by Meenan et al. to test whether their conclusions hold in a sample that spans company information from 2008-2014.

2. Empirical strategy

We seek to determine whether the interquartile range for a given industry depends on country- and time-specific characteristics or if it is constant across countries. In theory, a lack of available data in one country can be compensated by drawing on information in other countries, provided that key aspects of the underlying distribution are comparable.

To clarify our empirical approach, we introduce the following notation. We denote the cumulative distribution function of firm profitability in country $i$ by $F_i(r)$. Our dataset comprises a total of $N$ countries. Accordingly, the aggregate cumulative distribution function, $F(r)$, follows

$$F(r)=w_1F_1(r)+w_2F_2(r)+...+w_NF_N(r)$$

where $w_i$ is the share of firms operating in country $i$.

We rely on non-parametrical chi square statistics to test the homogeneity of interquartile ranges. The idea of this approach is to choose a pair of profit margins, representing the hypothesized first and third quartile of the distribution, and test whether the shares of firms with lower profitability ratios are the same across the $N$ countries. Following Meenan et al. (2004), we determine the critical values $r^*$ and $r^{**}$ for each industry based on the aggregate distribution $F(x)$. Specifically, we set

\begin{equation}
F(r^*)=0.25, \text{ and } F(r^{**})=0.75
\end{equation}

and test whether

\begin{equation}
F_i(r^*)=0.25 \text{ and } F_i(r^{**})=0.75 \quad \text{ for all } i.
\end{equation}

Note that the benchmark against which the country-specific distribution is tested is a weighted average of country-specific distributions. For countries with large weights, the test is thus less

\textsuperscript{126} http://ec.europa.eu/taxation_customs/resources/documents/forum7/europe_one_market_white_paper_feb18.pdf
likely to reject the hypothesized equality. An alternative approach would exclude the country-specific distribution being tested in determining the critical values \( r^* \) and \( r^{**} \). As a result, the benchmark would become country-specific. For simplicity and comparability of our results with prior work, we use (1) in setting the critical values and acknowledge that other test approaches were more likely to reject the hypothesis of equal distributions.

The chi-square test implied by (2) can be decomposed in two ways. First, equality of country-specific interquartile ranges with the aggregate interquartile range can be tested for each country separately. Second, tests of the interquartile ranges can be broken down into two separate tests: one for the 25th and one for the 75th percentile.

Combining these two strategies implies that the hypothesis summarized by (2) can either be tested with one chi-square distributed random variable with 2N degrees of freedom, the strategy we pursue, or 2N chi-square distributed variables with one degree of freedom each as in Meenan et al. (2004). While the second strategy provides additional information, such as which country or which percentile does not correspond to the aggregate distribution, the question of whether distributions are comparable across Europe is more stringently answered with one joint test.

3. Sample selection

We draw on the database ORBIS (commercially offered by Bureau van Dijk), which provides consolidated and unconsolidated financial information on firms worldwide. We select companies operating in the manufacturing or retail sector (Nace Rev 2. Main Sections C and G) and retrieve information on profitability and size measures for the years 2006-2014. To ensure that our main dependent variables are not distorted by strategic pricing decisions of multinational enterprises, we follow Meenan et al. (2004) in restricting the sample to independent firms.127

Our baseline sample thus comprises roughly 600,000 European firms in the manufacturing and retail sectors. To further strengthen sample homogeneity, we limit the baseline set in a sequence of six steps, summarized in Table 1 below. First, we drop firms if we observe less than six years of our main dependent variables (Return on Assets for firms in the manufacturing sector and Operating Profit margin for firms in the retail sector). This shrinks the initial sample by almost 50 percent. Second, we drop small firms, with sales below EUR 2 Mio, further reducing the sample by 40 percent of the initial sample.

After eliminating firms with exceptional profitability ratios (Step 3),128 we obtain our first dataset, covering roughly 63,000 firms. This is the basis for our more general analysis presented in Section 3. Before turning to this broader set, we repeat and extend prior work by Meenan et al. (2004) in Section 2. For this purpose, we restrict the dataset to firms operating in one of the four industries (Automotive manufacturing, electronics manufacturing, chemicals distribution, and electronics distribution) that were examined earlier. Finally, we drop firms if they are located in countries with less than 10 firms in the same industry to ensure that the statistical tests are meaningful.

---

127 Specifically, we restrict the sample to firms with independence indicators B or higher (these companies are not majority owned by other corporations) and exclude firms that own a subsidiary, directly or indirectly, with more than 50 percent.

128 We record the 2.5 and 97.5 percentile of profitability ratios. For the manufacturing sector and retail sector, these bounds are given by \((-0.02,0.24)\) and \((-0.04,0.18)\), respectively. We drop firms with profitability ratios not lying within these bounds.
4. Descriptive statistics

Meenan et al. (2004) analyze four broad industry categories—automotive manufacturing, electronics manufacturing, chemicals distribution, and electronics distribution—because this specific grouping comprises a large and representative percentage of the TNMM comparability analysis, which is conducted in practice. The authors use NACE Rev 1. codes up to the four-digit level to define groups. To ensure comparability of our results, we stick closely to this definition. In contrast to Meenan et al. (2004) we rely on the NACE Rev. 2 classification and employ correspondence tables, provided by Eurostat, to map their codes to the updated classification system (see Table 2 below).

<table>
<thead>
<tr>
<th>Table 1: Sample Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step</strong></td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 2: Definition of industry groups in terms of NACE Rev. 2 codes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Industry</strong></td>
</tr>
<tr>
<td>NACE Codes</td>
</tr>
<tr>
<td>Number of firms</td>
</tr>
</tbody>
</table>

Our main dependent variables are return on assets (ROA) for firms in the manufacturing sector and operating profit margin (OPM) for firms in the distribution sector. Both of these variables are ratios with earnings before interest and taxation in the numerator. The profitability measure ROA standardizes profits by the amount of total assets, while OPM employs turnover in the
denominator. We further smoothen the distribution of these profitability measures by taking three-year averages.

Table 3 below summarizes basic distributional statics for the selected industries, aggregating over all countries in our sample. In 2008, the interquartile range of profitability in the automotive manufacturing sector was (0.024, 0.081). Compared to the numbers reported by Meenan et al. (2004), the interquartile range is somewhat narrower and shifted downwards in our sample.129 With a median ROA of 5.4 percent in 2008, the electronics manufacturing industry in Europe also experienced some decline compared to profitability ratios in 2004. Firms in the retail sector were, with an interquartile range of (0.015, 0.063) and (0.017, 0.068), respectively, somewhat more profitable in 2008.

When contrasting interquartile ranges between 2008 and 2014, different trends emerge. While the manufacturing industry became more heterogeneous, with interquartile ranges broadening (see last row in Table 3, Span), profitability ranges in the distribution sector seem to have narrowed slightly.

Figure 1 below gives a first indication of the heterogeneity in profitability ratios across countries.130 The first panel shows that median profitability ratios (ROA) have diverged since 2008. This fact could explain the observed increase in the interquartile range of the aggregate distribution, even if country-specific interquartile ranges remained constant. We would thus expect that profitability ratios are less comparable in 2014 than in 2008. A similar picture emerges from looking at the electronics manufacturing industry. Among firms in the distributional sector, reported median profitability remained more stable.

Table 3: Profitability Distribution in 2008 and 2014

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Quartile</td>
<td>0.024</td>
<td>0.021</td>
<td>0.028</td>
<td>0.03</td>
</tr>
<tr>
<td>Median</td>
<td>0.046</td>
<td>0.047</td>
<td>0.054</td>
<td>0.061</td>
</tr>
<tr>
<td>3rd Quartile</td>
<td>0.081</td>
<td>0.09</td>
<td>0.096</td>
<td>0.107</td>
</tr>
<tr>
<td>Interquartile range (3rd - 1st)</td>
<td>0.057</td>
<td>0.069</td>
<td>0.068</td>
<td>0.077</td>
</tr>
</tbody>
</table>

Notes: Profitability is measured via ROA for manufacturing industries and via OPM for firms in distribution. Three-year averages are used.

129 The interquartile range in the automotive manufacturing sector reported in Meenan et al. (2004) was (0.036,0.118) with a median of 0.069.
130 The number of firms per country and industry is reported in Table 4 in the Appendix.
5. Results

Table 4 presents the results of a range of chi square tests, where the first and third quartile of country-specific distributions is contrasted with the aggregate quartiles, as depicted in Table 3. We first test the joint hypothesis that all country-specific profitability distributions correspond to the aggregate distribution. To obtain more granular results, we subsequently investigate correspondence between country-specific and aggregate quartiles separately for each country (and industry).

The first row presents results for the joint test whether industry-specific profitability quartiles are constant across countries. The numbers depicted are probabilities of the null hypothesis being valid. For none of the industries examined we find statistical evidence for comparable distributions. Electronics manufacturing seems to have slightly more similar quartiles: here we find a residual probability of 0.5 percent that country-specific distributions are comparable. For 2014, this residual probability declines to less than 0.1 percent.

In the following rows we examine the comparability of country-specific distributions with the aggregate on a country by country basis. As expected, the chi square test rejects the null hypothesis of equal first and third quartiles for a number of countries in each industry.
Table 4: Chi-square tests in a number of industry sectors

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint test</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Separate test</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H0 rejected</td>
<td>&lt;0.001</td>
<td>&lt;0.001</td>
<td>0.005</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>DE, ES, FI, GB, GR, HU, NO, PT, SI, SK, RO</td>
<td>CZ, DE, ES, FI, GB, GR, HU, IT, NO, PL</td>
<td>FR, IT, PL</td>
<td>CZ, DE, ES, FI, GB, GR, HU, IT, NO, PL</td>
</tr>
<tr>
<td>H0 not rejected</td>
<td>CZ, FR, IT, PL</td>
<td>FR, PT, SI, SK, RO</td>
<td>CZ, DE, ES, GB, HU, SI, SK</td>
<td>DE, FR, HU, PL, SI, SK</td>
</tr>
</tbody>
</table>
APPENDIX 13

Examples on country risk adjustments

Example 1

Simplified country risk adjustment

The tested party (TestCo) is a contract manufacturer operating in Country A, and the only available comparable (CompCo) is a contract manufacturer operating in Country B.

<table>
<thead>
<tr>
<th></th>
<th>TestCo Country A</th>
<th>CompCo Country B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>100</td>
<td>120</td>
</tr>
<tr>
<td>Total costs</td>
<td>80</td>
<td>90</td>
</tr>
<tr>
<td>Operating profit</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>Operating assets</td>
<td>80</td>
<td>100</td>
</tr>
</tbody>
</table>

The country risk in Country A is considered to be higher than that in Country B, and thus it is considered necessary to adjust for this country risk. The adjustment is calculated by adjusting the operating profit of CompCo to reflect the additional return on operating asset in accordance with the country specific risk premium. The average long-term government bond yield is used as a proxy for the country specific risk premium.

The average long-term government bond yield for Country A is 9% and for Country B it is 5%. Hence, the government bond yield gap is 4%. The adjustment for country specific risk is then calculated as follows:

\[
[\text{operating assets of CompCo}] \times [\text{country specific risk premium}] = [100] \times [4\%] = 4
\]

This additional 4 of profit, which reflects the increased return for the notional country specific risk borne by CompCo for the purposes of the comparability analysis, is then added to the operating margin of CompCo. CompCo’s profit will increase from 30 to 34.

---

Example 2

Country practices - Canada

Company A is a limited risk entity operating in Country A. The only available (reliable) comparables are from Country C. Following a functional analysis, it is determined that a TNMM is the most appropriate transfer pricing method for the tested transactions, and the return on assets (ROA) is the most appropriate profit level indicator (with Company A as the tested party) to benchmark comparable companies set.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>1.06%</td>
<td>-0.34%</td>
<td>0.75%</td>
<td>0.56%</td>
<td>-10.06%</td>
<td>-1.61%</td>
</tr>
<tr>
<td>Lower quartile</td>
<td>10.16%</td>
<td>5.21%</td>
<td>5.60%</td>
<td>5.05%</td>
<td>2.21%</td>
<td>5.65%</td>
</tr>
<tr>
<td>Median</td>
<td>13.52%</td>
<td>12.21%</td>
<td>10.18%</td>
<td>7.59%</td>
<td>6.72%</td>
<td>10.04%</td>
</tr>
<tr>
<td>Upper quartile</td>
<td>16.60%</td>
<td>19.18%</td>
<td>18.67%</td>
<td>13.70%</td>
<td>10.58%</td>
<td>15.75%</td>
</tr>
<tr>
<td>Maximum</td>
<td>36.37%</td>
<td>28.98%</td>
<td>22.19%</td>
<td>21.83%</td>
<td>27.04%</td>
<td>27.28%</td>
</tr>
<tr>
<td>Average</td>
<td>13.67%</td>
<td>13.25%</td>
<td>11.66%</td>
<td>9.56%</td>
<td>6.86%</td>
<td>11.00%</td>
</tr>
</tbody>
</table>

ROA tested party 3.45% -6.21% 3.12% 1.25% -4.17% -0.51%

To adjust for the differences between two markets, it is reasonable and practical to impose a country risk premium on the comparable companies set. In order to apply the hypothetical country risk premiums to the comparable company set for the years under investigation, the country risk premium is calculated and applied to the ROA of all the comparable companies. A simple comparison of using the level indicators of unadjusted comparable companies would be incorrect since the identified risk associated with investing capital in the foreign country would not be included.

A 5-10-year government bond yield rate provides a fair investment benchmark for a practically risk-free rate. The interest rate risks, reinvestment rate risks, and default risks are included in the price of the bond over the duration of the bond. In order to make the country risk adjustment, the difference between the home country and foreign country 10-year government bond yield rate needs to be calculated.

<table>
<thead>
<tr>
<th>Calculation of Bond Yield Differential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country government 10 bonds</td>
</tr>
<tr>
<td>2011</td>
</tr>
<tr>
<td>Home country government 10 bond yield annual rate</td>
</tr>
<tr>
<td>Foreign country bonds</td>
</tr>
<tr>
<td>Bond yield differential</td>
</tr>
</tbody>
</table>

In order to apply the foreign country risk premiums to the comparable set for the years under investigation, the bond yield differential is added to the return on assets of all the comparable companies.
As a result of the adjustment, the outcome for the ROAs of the comparables has increased. It should be recommended to adjust the tested party’s ROA to the median value for each year under consideration.
APPENDIX 14

Formulas for a two-step approach to country risk

**Equation 1 - Balance sheet adjustment**

\[ \Delta AR_T = (0 - \text{Comparables Days AR}) \times \frac{Sales}{365} \]

Where:
\( \Delta AR_T \) = the change in accounts receivable when setting the target (T) days accounts receivable to zero

Comparables Days AR = the days in accounts receivable of the European comparables

0 = the target days receivable to remove the impact of days receivable

**Equation 2 - Income statement adjustment**

\[ \Delta Sales_T = \Delta AR_T \times \frac{i_{\text{non-domestic}}}{1 + \left(\frac{i_{\text{non-domestic}} \times \text{Comparables Days AR}}{365}\right)} \]

Where:
\( \Delta Sales_T \) = the adjustment to sales after removing the impact of accounts receivable
\( \Delta AR_T \) = the impact on accounts receivable estimated as part of the balance sheet adjustment
\( i_{\text{non-domestic}} \) = the short-term interest rate reflecting the underlying credit risk

After equation 1 + 2 the working capital is removed. The next step is to introduce the working capital related impact of operating in the more risky developing market.

**Equation 3 - Balance sheet adjustment**

\[ \Delta AR_{LT} = (T \text{Target Comparables Days AR} - 0) \times \frac{Adjusted Sales}{365} \]

Where:
\( \Delta AR_{LT} \) = change in accounts receivable when setting days of accounts receivable to the tested party days of receivable
Target Comparables Days AR = the days in accounts receivable of the tested party
0 = the accounts receivable of the comparables following the above described first step of the adjustment

\[ ^{132} \text{Starkov et al (2014), Comparability adjustments pp. 9-10} \]
Equation 4 - Income statement adjustment

\[ \Delta Sales_{LT} = \Delta AR_{LT} \times i_{local} \]

Where:
\( \Delta Sales_{LT} \) = the adjustment to sales by adjusting the accounts receivable in line with the local target company
\( \Delta AR_{LT} \) = the impact on accounts receivable estimated as part of the balance sheet adjustment
\( i_{local} \) = the short-term interest rate of the local market in which the target company operates.
APPENDIX 15

Interquartile range

Steps to find an interquartile range in Excel:

**Step 1:** Enter your data into a single Excel column on a worksheet. For example, type your data in cells A2 to A10. Don’t leave any gaps in your data.

**Step 2:** Click a blank cell (for example, click cell B2) and then type `=QUARTILE(A2:A10,1)`. You’ll need to replace A2:A10 with the actual values from your data set. For example, if you typed your data into B2 to B50, the equation will be `=QUARTILE(B2:B50,1)`. The “1” in this Excel formula (A2:A10,1) represents the first quartile (i.e. the point lying at 25 percent of the data set).

**Step 3:** Click a second blank cell (for example, click cell B3) and then type `=QUARTILE(A2:A10,3)`. Replace A2:A10 with the actual values from your data set. The “3” in this Excel formula (A2:A10,3) represents the third quartile (i.e. the point lying at 75 percent of the data set).

**Step 4:** Click a third blank cell (for example, click cell B4) and then type `=B3-B2`. If your quartile functions from Step 2 and 3 are in different locations, change the cell references.

**Step 5:** Press the “Enter” key. Excel will return the IQR in the cell you clicked in Step 4.

Most databases provide a tool to calculate an interquartile range.
### Financial ratios and acronyms

<table>
<thead>
<tr>
<th>Description</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tax leverage</strong></td>
<td>$T_{Lev} = \frac{NP}{EBT}$</td>
</tr>
<tr>
<td><strong>Financial leverage</strong></td>
<td>$F_{Lev} = \frac{EBT}{EBIT}$</td>
</tr>
<tr>
<td><strong>Operating margin</strong></td>
<td>$OM = \frac{EBIT}{Sales}$</td>
</tr>
<tr>
<td><strong>Total assets turnover</strong></td>
<td>$TAT = \frac{Sales}{TA}$</td>
</tr>
<tr>
<td><strong>Asset structure</strong></td>
<td>$AS = \frac{TA}{EBT}$</td>
</tr>
<tr>
<td><strong>Accounts receivable turnover</strong></td>
<td>$RecTO = \frac{Rec}{Inv}$</td>
</tr>
<tr>
<td><strong>Inventory turnover</strong></td>
<td>$ITO = \frac{Inv}{Sales}$</td>
</tr>
<tr>
<td><strong>Cash position</strong></td>
<td>$CP = \frac{Sales}{CA}$</td>
</tr>
<tr>
<td><strong>Short term liquidity</strong></td>
<td>$STLiq = \frac{CA}{CL}$</td>
</tr>
<tr>
<td><strong>Liability structure</strong></td>
<td>$LiabSt = \frac{CL}{Debt}$</td>
</tr>
<tr>
<td><strong>Long term solvency</strong></td>
<td>$LTSol = \frac{Debt}{Capital}$</td>
</tr>
<tr>
<td><strong>Financial structure and risk management</strong></td>
<td>$\frac{Capital}{Equity}$</td>
</tr>
</tbody>
</table>
# APPENDIX 17

## Common acronyms

<table>
<thead>
<tr>
<th>Financial statements line items</th>
<th>Acronym</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Income statement</strong></td>
<td></td>
</tr>
<tr>
<td>Sales (Turnover)</td>
<td>TO</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>COGS</td>
</tr>
<tr>
<td>Gross profit</td>
<td>GP</td>
</tr>
<tr>
<td>Operating expenses (Including selling, general and admin expenses,</td>
<td>OPEX</td>
</tr>
<tr>
<td>depreciating expenses often referred to as “SG&amp;A”)</td>
<td></td>
</tr>
<tr>
<td>Earnings before interest and tax</td>
<td>EBIT</td>
</tr>
<tr>
<td>Interest expense</td>
<td>Int</td>
</tr>
<tr>
<td>Earnings before tax</td>
<td>EBT</td>
</tr>
<tr>
<td>Net profit</td>
<td>NP</td>
</tr>
<tr>
<td><strong>Balance sheet</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Assets</strong></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>Cash</td>
</tr>
<tr>
<td>Accounts receivables</td>
<td>Rec</td>
</tr>
<tr>
<td>Inventory</td>
<td>Inv</td>
</tr>
<tr>
<td>Other current assets</td>
<td>OCA</td>
</tr>
<tr>
<td>Current assets</td>
<td>CA</td>
</tr>
<tr>
<td>Fixed assets (net of depreciation)</td>
<td>FA</td>
</tr>
<tr>
<td>Property plant and equipment</td>
<td>PPE</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>IA</td>
</tr>
<tr>
<td>Total assets</td>
<td>TA</td>
</tr>
<tr>
<td><strong>Liabilities</strong></td>
<td></td>
</tr>
<tr>
<td>Accrued expenses</td>
<td>AE</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>Pay</td>
</tr>
<tr>
<td>Other current liabilities</td>
<td>OCL</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>CL</td>
</tr>
<tr>
<td>Long-term debt</td>
<td>Debt</td>
</tr>
<tr>
<td>Equity</td>
<td>eQ</td>
</tr>
</tbody>
</table>
## Ratios measuring functions, assets, and risks

<table>
<thead>
<tr>
<th>Specific implication</th>
<th>Transfer pricing categorisation (functionality driven)</th>
<th>Ratio</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational ability</td>
<td>Function performed driven</td>
<td>( OM = \frac{EBIT}{Sales} )</td>
<td>Operating margin, widely used in transfer pricing analysis as a PLI under the TNMM method</td>
</tr>
<tr>
<td>Use of sources finance to obtain leverage benefits</td>
<td>Function performed driven</td>
<td>( FLev = \frac{EBIT}{EBIT} )</td>
<td>Financial leverage</td>
</tr>
<tr>
<td>Use of tax (timing, deferral) to obtain leverage benefits</td>
<td>Function performed driven</td>
<td>( TLev = \frac{NP}{EBIT} )</td>
<td>Tax leverage</td>
</tr>
<tr>
<td>Cash flow position</td>
<td>Function performed driven</td>
<td>( CP = \frac{Sales}{CA} )</td>
<td>Cash position as expressed by sales to current assets, generated cash flow</td>
</tr>
<tr>
<td>Financial and funding structure</td>
<td>Function performed driven</td>
<td>( FSRM = \frac{Capital}{Equity} )</td>
<td>Financial structure and risk management. Companies’ financing decisions determine the mix of debt and equity aimed at operational funding. It is also important from a transfer pricing perspective, especially with the thin capitalisation rule (3:1 debt to equity).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity</th>
<th>Assets</th>
<th>( TAT = \frac{Sales}{TA} )</th>
<th>Total assets turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts receivables</td>
<td>Accounts receivables risk</td>
<td>( RecTO = \frac{Rec}{Inv} )</td>
<td>Accounts receivables turnover</td>
</tr>
<tr>
<td>Inventory</td>
<td>Inventory risk</td>
<td>( ITO = \frac{Inventory}{Sales} )</td>
<td>Inventory turnover</td>
</tr>
<tr>
<td>Liquidity</td>
<td>Short term liquidity risk</td>
<td>( STLiq = \frac{CA}{CL} )</td>
<td>Short term liquidity</td>
</tr>
<tr>
<td>Solvency</td>
<td>Long term solvency</td>
<td>( LTSol = \frac{Debt}{Capital} )</td>
<td>Long term solvency</td>
</tr>
<tr>
<td>Liability</td>
<td>Liabilities</td>
<td>( LiabSt = \frac{CL}{Debt} )</td>
<td>Liability structure</td>
</tr>
</tbody>
</table>
APPENDIX 19

Illustrative legislation or regulation for a safe harbour on international transactions involving routine manufacturing operations

Note: This illustration is set out in the format of legislation or regulations, but the same provisions could equally be applied through an administrative guideline or practice note.

1. This article applies where:
   a. a taxpayer is party to one or more controlled transactions that compensate the taxpayer for “qualifying manufacturing activities” that it carries on in [country]; and
   b. the conditions in Sub-articles 5 and 6 of this Article are met;

2. Where this article applies with respect to one or more controlled transactions:
   a. no adjustment will be made under [section #] with respect to those controlled transactions; and
   b. the requirements of the transfer pricing regulations will not be applicable

3. A taxpayer carries on a “qualifying manufacturing activity” if:
   a. that activity consists only of:
      i. the performance of manufacturing services on behalf of a connected person, or a number of such persons (“toll manufacturing”); or
      ii. the production of manufactured products to order for sale only to a connected person, or a number of such persons (“contract manufacturing”); and
   b. the taxpayer does not perform a manufacturing service for any unconnected persons or sell manufactured goods to any unconnected persons; and
   c. the taxpayer has entered into an arrangement with the connected person or persons under which the connected person or persons assume the principal business risks associated with the manufacturing activities of the taxpayer and agrees to compensate the taxpayer for its manufacturing activities at levels consistent with Sub-article 5 of this Article; and
   d. the taxpayer does not engage in advertising, sales, marketing and distribution functions, credit and collection functions, or warranty administration functions with regard to the manufacturing service it performs and/or products it manufactures, and does perform functions, use assets or assume risks that are expected to contribute to the value of intangibles, such as activities relating to the development, enhancement, maintenance, protection or exploitation of those intangibles;
   e. in the case of contract manufacturing, it does not:
      i. retain title to finished products after they leave its factory;
      ii. bear any transportation or freight expense with respect to such finished products; and
      iii. bear any risk of loss with respect to damage or loss of finished products in transit; and
   f. the taxpayer does not engage in managerial, legal, accounting, or personnel management functions other than those directly related to the performance of its manufacturing activities; and
   g. the taxpayer does not:
      i. own, or share in the ownership of
      ii. have rights or reasonable claims to ownership, or a share in the ownership, of;
      iii. bear the cost or part of the cost of developing or enhancing; or
      iv. pay royalties for the right to exploit any valuable product, process or marketing intangibles (e.g. designs, patents, formulas, trademarks, brand names), including valuable know-how.

4. For the purposes of Sub-article 1(a) of this Article, transactions compensating a taxpayer for qualifying manufacturing activities are:
a. in the case of contract manufacturing, sales of manufactured products
b. in the case of toll manufacturing, service fees received for the qualifying manufacturing activity

5. **Condition 1** - The compensation received by the taxpayer for transactions related to that activity (but not for any other transactions conducted by the taxpayer) is not less than the applicable minimum amount:
   a. In cases where the taxpayer conducts a qualifying manufacturing activity that is contract manufacturing, the minimum amount of total compensation from the sale of the products in respect of the qualifying manufacturing activity is the total costs of the qualifying manufacturing activity, excluding only net interest expense, currency gain or loss and any non-recurring or extraordinary costs, plus a XXX percent mark-up.
   b. In cases where the taxpayer conducts a qualifying manufacturing activity that is toll manufacturing, the minimum amount of net income for the manufacturing service performed by the taxpayer is the total costs of the qualifying manufacturing activity, excluding only net interest expense, currency gain or loss and any non-recurring or extraordinary costs, plus a XXX percent mark-up.

6. **Condition 2** - Documentation is maintained by the taxpayer and submitted to the [Tax Authority] within [45] days of a written request being duly issued by the [Tax Authority]. The documentation must include:
   a. a description of the activities of the taxpayer and, in particular, documents the consistency of the activities with Sub-article 3 of this Article; and
   b. Calculations demonstrating that the transactions compensating a taxpayer for the qualifying manufacturing activities are consistent with Sub-article 5 of this Article.

7. Where this article does not apply to a controlled transaction, the general rules outlined in this Regulation will apply.

Application of this Article is without prejudice to the application of [Country’s] obligations under an applicable international treaty.

The mark-ups specified in Sub-article 6 of this Article may be reviewed periodically by the Ministry of Finance [or tax administration], taking into account Article 3 of this Regulation.
## APPENDIX 20

### Country practices on safe harbours for low value-adding transactions

<table>
<thead>
<tr>
<th>Country</th>
<th>Safe harbour margin/mark-up</th>
<th>Low value-adding transactions defined</th>
<th>Excluded transactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>OECD</td>
<td>2-5%</td>
<td>Supportive nature, not part of the core business of the MNE group, not requiring use of and do not lead to the creation of unique and valuable intangibles. Non-exhaustive list of examples provided. Also, cannot be rendered to unrelated customers of the members of the MNE group.</td>
<td>Core business services; R&amp;D services; manufacturing and production services; sales, marketing and distribution services; financial transactions; extraction, exploration, or processing of natural resources; insurance/reinsurance; services of corporate senior management.</td>
</tr>
<tr>
<td>EU JTPF</td>
<td>3-10% (often about 5%)</td>
<td>The core nature of the service is that whilst required it is of a routine nature and not generating high-value adding to either the provider or recipient. Includes services that generate high turnover as long as low-value adding.</td>
<td>Likely to be excluded are services in the nature of innovative R&amp;D, IP, financial transactions and other services that are a significant commercial driver as well as those activities with the potential to generate a high level of reward associated with exposure to high risk.</td>
</tr>
<tr>
<td>Australia</td>
<td>7.5% (+/- 2.5%)(^{133})</td>
<td>Non-core services, i.e. supporting, generally routine services not integral to the earning activities of the MNE group and de minimis cases (totalling less than AUD 500,000 a year)</td>
<td>Amount charged for all non-core services is not more than 15% of the total accounting expenses of the acquiring entity</td>
</tr>
<tr>
<td>Austria</td>
<td>5 – 15% margin (5% mark-up if only direct costs) or cost (no mark-up)</td>
<td>The margin applies to routine services, i.e. services relating to routine functions where assets are involved only on a small scale and where risk taking is small. The cost only safe harbour applies to ancillary services, i.e. intra-group services that are not part of the core business of the enterprise.</td>
<td>Not explicitly identified.</td>
</tr>
<tr>
<td>Hungary</td>
<td>3-10%</td>
<td>Typically a low value-added service involving back office, accounting, legal, IT or HR services.</td>
<td>Not explicitly identified.</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Cost (no mark-up)</td>
<td>Refers to “support services”—services in the area of bookkeeping, legal issues, tax matters and human resources are generally considered as</td>
<td>In general, the following activities are considered primary business processes: production, procurement, sales, marketing, product</td>
</tr>
</tbody>
</table>

\(^{133}\) Additional documentation may be required to substantiate the higher / lower mark up. Note that these safe harbours are the subject of a bilateral arrangement between Australia and New Zealand.
<table>
<thead>
<tr>
<th>Country</th>
<th>Safe harbour margin/mark-up</th>
<th>Low value-adding transactions defined</th>
<th>Excluded transactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Zealand</td>
<td>7.5% (+/- 2.5%)&lt;sup&gt;134&lt;/sup&gt;</td>
<td>Such supporting services. However, an adjustment would indeed be applied if: i) activities are involved that are part of or add more than marginal value to the primary business processes of the group or ii) the respective services are also more than occasionally rendered to independent enterprises.</td>
<td>Development and research &amp; development.</td>
</tr>
<tr>
<td>Singapore</td>
<td>5%</td>
<td>Services that are not integral to the profit-earning or economically significant activities of the group. They include activities that are supportive of the group’s main business and are generally routine but are not similar to activities by which the group derives its income. NOTE: Also applies to de minimis cases.&lt;sup&gt;135&lt;/sup&gt;</td>
<td>Not explicitly identified.</td>
</tr>
<tr>
<td>US</td>
<td>Cost (no mark-up)</td>
<td>Services must qualify as either “specified covered services” or “low margin covered services,” and may not be services that in the taxpayer’s business judgment contribute significantly to key competitive advantages, core capabilities, or fundamental risks of success or failure in trades/businesses of the</td>
<td>Excluded transactions: manufacturing and production; extraction, exploration or processing of natural resources; construction; reselling, distribution, acting as a sales or purchasing agent or acting under commission or other similar arrangement; R&amp;D or</td>
</tr>
</tbody>
</table>

<sup>134</sup> The tolerance of 2.5 percent is possible when dealing with another country that has established policy for mark-up. The direction of the tolerance depends on whether the services are provided to (only increase possible) or supplied by (only decrease possible) the New Zealand associated enterprise.

<sup>135</sup> The margin applies not only non-core but also situations where the cost of supplying/acquiring services is relatively small, i.e. NZD 600,000. Note that these safe harbours are the subject of a bilateral agreement between New Zealand and Australia.
<table>
<thead>
<tr>
<th>Country</th>
<th>Safe harbour margin/mark-up</th>
<th>Low value-adding transactions defined</th>
<th>Excluded transactions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>renderer, recipient, or both. Specified covered services are listed in an IRS publication; currently there are 101 services on the list. Low margin covered services are those that have a median comparable arm’s length mark-up on total services costs of less than or equal to 7%.</td>
<td>experimentation; engineering or scientific services; financial transactions, including guarantees; and insurance or reinsurance.</td>
</tr>
</tbody>
</table>
REFERENCES

Literature:


  Available here:
  
  http://www.google.co.uk/url?sa=t&rct=j&q=foreign+comparables&source=web&cd=5&ved=0CDsQFjAE&url=http%3A%2F%2Fwebdms.ciat.org%2Faction.php%3Fkt_path_info%3Dktcore.actions.document.view%26fDocumentId%3D6168&ei=8QRQT4mQGomc0AW1w-nGCw&usg=AFQjCNFSSfwcp3d07SxPrb_Za8Mo9O4EwQ&cad=rja


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  Note that the 2016 OECD Transfer Pricing Guidelines incorporate amendments published in October 2015 as part of the BEPS Final Report on Actions 8-10, Aligning Transfer Pricing Outcomes with Value Creation. These amendments were adopted as part of the Transfer Pricing Guidelines on 23 May 2016.

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