Matthias Petutschnig and Stefanie Chroustovsky
Comparability Adjustments. A Literature Review

Original Citation:

This version is available at: http://epub.wu.ac.at/6597/
Available in ePubWU: October 2018

ePubWU, the institutional repository of the WU Vienna University of Economics and Business, is provided by the University Library and the IT-Services. The aim is to enable open access to the scholarly output of the WU.
WU International Taxation Research Paper Series
No. 2018 - 08

Comparability Adjustments
A Literature Review

Stefanie Chroustovsky
Matthias Petutschig

Editors:
Eva Eberhartinger, Michael Lang, Rupert Sausgruber and Martin Zagler (Vienna University of Economics and Business), and Erich Kirchler (University of Vienna)
1. Introduction

In recent years the importance of transfer pricing has rapidly increased. Once a minor topic in international business it has grown to become one of the main focuses of multinational enterprises (MNEs) and tax administration around the globe. While transfer pricing regulations aim first and foremost at allocating taxable profits along the lines of intercompany value creation they also aim at establishing a level playing field in international business by eradicating pricing effects that appear in intra-group transactions. An intra-group transaction among subsidiaries or associated entities ought to follow the arm’s length principle. Thus, intra-group prices should be as they would be if the transaction was not conducted within the group but exposed to uncontrolled market mechanisms. This so called intra-group controlled transaction therefore has to be at arm’s length compared to a transaction between independent parties.

One of the driving forces in transfer pricing is the OECD’s Center for Tax Policy and Administration which has only recently published a revised version of its transfer pricing guidelines. Many domestic legislative measures concerning transfer pricing are based on or draw their principles from the OECD guidelines. The 2017 update of the guidelines includes fundamental changes brought through the OECD’s BEPS Action Plan especially Actions 8-10.

The arm’s length principle, the heart of the guidelines measures, has at its core the concept of comparability. The controlled (intra-group) transaction, its price but also its surrounding contractual

---

* Stefanie Chroustovsky is a Research Assistant at the Tax Management Group of the Institute for Accounting and Auditing at WU – Vienna University of Economics and Business.
* Matthias Petutschnig is Associate Professor for Accounting and Taxation at the Tax Management Group of the Institute for Accounting and Auditing at WU – Vienna University of Economics and Business and an Associate Scientist at the Paris based non for profit Association Transfer Pricing Economists for Development (TPED).
1 The scope and reach of the paper were initially discussed with Sébastien Gonnet (TPED) and Romero Tavares (TPED), who provided insights and helpful comments in the course of its preparation. TPED is a Paris-based Association aiming to promote the development and sharing of business economics knowledge in transfer pricing as an enabler of development of emerging economies and developing countries. TPED is currently conducting a research project covering comparability in transfer pricing, more specifically the identification of sound-economic solutions to the absence of comparables in certain regions of the World (notably Africa). The paper also benefitted from the participants of the joint WU-TPED Workshop “How to apply the arm’s length principle without comparables: a major challenge in emerging/developing economies” at the WU Transfer Pricing Center on 5th July 2018.
2 OECD, Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations (2017), Paragraph 1.1 et seq.
obligations, needs to be compared to an uncontrolled (market) transaction. The search for the correct “comparable uncontrolled transaction” (short: “comparable”) to ensure the (controlled) transaction is in line with the arm’s length principle, often proofs to be difficult. A company will have to undergo detailed comparability analyses in order to establish the (any) comparable and to argue that this is the correct comparable for the “controlled transaction”.

As one can imagine the search for the right comparable can be lengthy and cost intensive. A way to shorten the process is through adjusting a semi- or less-comparable uncontrolled transaction in order to become comparable to the controlled transaction. These “comparability adjustments” try to eliminate differences that might occur when transactions from different jurisdictions, different economic situations are compared or when other factors directly or indirectly affect the comparability of two transactions.

Although the increasing importance and significance of comparability adjustments, guidance from tax administrations, literature and from case law is scarce and legally binding rules are largely non-existent. While the OECD TP guidelines⁴ as well as the UN Manual on Transfer Pricing⁵ acknowledge the existence and necessity of such adjustments they do not provide specific advice themselves. This lack of guidance as well as the scarce academic research in this area has led to differing opinions concerning the effectiveness of different types of adjustments as well as the practical application of these adjustments and various issues related with that.

This literature review aims at reflecting the current state of art in research on comparability adjustments and at identifying implications and directions for further research.

2. Related Concepts

When talking about comparability adjustments it is inevitable to first at least briefly familiarise oneself with the arm’s length principle which serves as the prime standard in international transfer pricing and the concept of comparability analysis.

A detailed explanation of the arm’s length principle can be found in Chapter I of the OECD’s TP Guidelines. It is agreed upon as an international standard for transfer pricing and serves as the prevalent ultimate objective. As mentioned above, the arm’s length principle essentially aims at levelling transaction prices among associated enterprises (intra-group) to transaction prices among

⁴ OECD, Transfer Pricing Guidelines, Paragraph 3.35.
⁵ UN, Practical Manual on Transfer Pricing for Developing Countries (2017), Paragraph 5.3.4.12.
independent enterprises. As prices among independent enterprises are commonly established under the influence of market forces they depict the accepted arm’s length price. As associated enterprises are usually not (greatly) influenced when determining their prices, they may deviate from what is the common arm’s length price. In a simplified way it can be said that “intercompany pricing” ought to be “in line with the market price”. The underlying basis of the arm’s length approach, and in turn its justification, is the understanding that a group of companies is not taxed as a whole but the group entities are to be considered and taxed as separate (economic) entities. Therefore, transactions are to be treated as if they were conducted among independent companies.

In order to determine whether a transaction fulfils the arm’s length principle, one needs to find a comparable transaction which in itself fulfils the arm’s length criteria. Comparability is the core of the arm’s length method and its importance cannot be overstated.

In Paragraphs 1.36ff the OECD names five factors that are to be considered when searching for a comparable:

- the contractual terms,
- the functions, taking into account assets used and risks assumed, including how those functions relate to the wider generation of value by the MNE group to which the parties belong, the circumstances surrounding the transaction, and industry practices
- comparability of product characteristics,
- economic circumstances,
- business strategies.

An in-depth comparability analysis is the prerequisite for choosing the right comparable. Hence, the comparability analysis is also a prerequisite for any adjustments in the later process. The aim of the comparability analysis is to find one or more uncontrolled transaction(s) that are comparable to the company’s controlled transaction in order to establish an arm’s length price. In the absence of comparable uncontrolled transactions, transfer pricing practitioners rely on comparable uncontrolled margins, observed within independent comparable companies. Both taxpayers and tax administrations rely extensively on independent comparable companies and derive from the margins that these independent comparable companies earn an indication of the arm’s length – net - margin that the
intra-group company should be earning, in line with the application of the so-called Transactional Net Margin Method (TNMM\textsuperscript{10}), used in most transfer pricing cases. This article primarily discusses comparability adjustments in the context of the selection of comparable companies, as it is the predominant practice in transfer pricing.

However, the search for comparables will not necessarily lead to the one and correct margin but will regularly lead to a spectrum of margins which can all be considered to be arm’s length.\textsuperscript{11} The OECD provides an eight step process that one can follow when conducting a comparability analysis. However these eight steps do not provide a linear process in a step-by-step sense but rather oftentimes these steps need to be administered interactively and repeated several times if necessary.\textsuperscript{12} A pre-stage when searching for comparable uncontrolled transactions and margins is searching for comparable entities conducting the same or similar kinds of business and holding similar kinds of assets. While doing so, one needs to generally consider the five factors the OECD itself proposed as mentioned above.\textsuperscript{13} This can simplify the search for a specific comparable transaction. Although the OECD in general recommends an individual approach in which transactions are compared on a case-by-case basis, a “portfolio approach” may be permissible in cases in which a company’s strategy follows a portfolio approach. Thus, striving for a positive return of a portfolio of transactions compared to a positive return for each transaction included in the portfolio.\textsuperscript{14}

The search for a comparable often constitutes a cost-intensive yet necessary process and is always linked to thorough documentation in order to duly justify the analyses and choices.\textsuperscript{15} It is generally subject to disputes between the taxpayer and the tax administration, which disagree on comparables selection. In order to restrict to some extent the uncertainty and also the leeway for MNEs and tax administrations national legislators tend to limit the spectrum of possible arm’s length prices by introducing “interquartile ranges of results”. Thereby excluding extremely low or extremely high margins from the arm’s length price range.\textsuperscript{16} This interquartile approach however lacks scientific economic foundations and thus cannot be justified by empirical economic research and is therefore criticized for its lack of economic scrutiny and scientific rigor.\textsuperscript{17}

\textsuperscript{10} OECD, Transfer Pricing Guidelines, Paragraph 2.64 et seq.
\textsuperscript{11} Monsenego, Introduction to Transfer Pricing (2013), 30.
\textsuperscript{12} OECD, Transfer Pricing Guidelines, Paragraph 3.4 et seq.
\textsuperscript{13} Osabal, Die Umlage von Adjustments auf die Betriebsstätte einer Vertriebsgesellschaft, taxlex 11/2016, 367 (369).
\textsuperscript{14} Li, Soft Law, Hard Realities and Pragmatic Suggestions: Critiquing the OECD Transfer Pricing Guidelines, in Schön/Konrad (Eds.), Fundamentals of International Transfer Pricing in Law and Economics (2012), 71 (85 et seq).
\textsuperscript{15} Li in Schön/Konrad 81 et seq.\textsuperscript{16} Li in Schön/Konrad 81 et seq.
\textsuperscript{16} Hülster, Grenzen der Korrektur von Verrechnungspreisen in der Betriebsprüfung, IStR 2016, 874 (879).
Both the arm’s length principle as well as the comparability analysis were already included in the 1995 version of the OECDs TP Guidelines. However, especially the chapter on comparability analysis has seen a tremendous increase in contents since the 2010 revision and has grown in both complexity and available guidance.\(^{18}\) Summing up it can be said that the underlying goal of the arm’s length principle and transfer pricing as a whole is to apportion profits as well as losses of multinationals in a way that it is fair both to the MNE itself and the country in which it is based in.\(^{19}\) The OECD’s guidelines try to help in accomplishing this fair apportionment.\(^{20}\)

3. Comparability Adjustments
   
   3.1. General

According to the OECD TP Guidelines “to be comparable means that none of the differences (if any) between the situations being compared could materially affect the condition being examined”\(^{21}\). Within the Transfer Pricing Guidelines the topic of identifying the correct comparable has increasingly become an issue and has developed into a complex area imposing increased analysis and documentation requirements on the taxpayer. In essence, comparability analysis is one of the main steps towards fulfilling the arm’s length principle. The goal is, to identify a transaction of an external company and have its circumstances be as close as possible to the transaction conducted between affiliated enterprises or businesses.\(^{22}\) Henshall\(^{23}\) points out that finding a reliable comparable is “far from straightforward” and both MNEs and tax authorities will have to undergo thorough analyses when choosing the right comparable. Yet, acknowledging that finding accurate comparables might pose (too) difficult and sometimes even impossible the OECD TP Guidelines state that “reasonably accurate adjustments can be made to eliminate the effect of any such differences”\(^{24}\). The concept of comparability adjustments can already be found in the 1995 TP Guidelines\(^{25}\). However, section A.6 which deals with comparability adjustments in general (and not in the context of a specific transfer pricing method) was introduced first in the 2010 version of the OECD’s TP Guidelines\(^{26}\) and has undergone no major changes since. The necessity to conduct comparability adjustments directly arises

---

18 Petruzzi in Lang/Storck/Petruzzi 27.
20 Although critics do suggest that the OECD’s guidelines do not consider developing countries properly. See further Schön/Konrad (Eds.), Fundamentals of International Transfer Pricing in Law and Economics (2012).
21 OECD, Transfer Pricing Guidelines, Paragraph 3.47.
22 Henshall, Global Transfer Pricing\(^1\), Paragraph 2.25 et seq.
23 Henshall, Global Transfer Pricing\(^2\), Paragraph 2.30.
24 OECD Transfer Pricing Guidelines, Paragraph 3.50.
26 OECD Transfer Pricing Guidelines (2010), Paragraph 3.47 et seq.
from differences in the compared controlled and uncontrolled transactions. These usually material differences must be able to be adjusted for in order to ensure the comparability. Such adjustments, therefore, have to be conducted only, if they lead to a more accurate reliability of the results of the comparability analysis. Furthermore, as any transfer pricing method, adjustments should only be performed in an individual case and not on a regular standardized basis. When conducting comparability adjustments the data of the uncontrolled transaction (the comparable) will necessarily be adjusted to increase comparability. The OECD points out that the need for various adjustments of a comparable uncontrolled transaction may actually indicate that the uncontrolled transaction as such is not similar to the controlled transaction and it might indicate a total lack of an accurate comparable. Thus adjustments will, if properly applied, turn an imperfectly comparable transaction into a benchmark transaction. The OECD has published a short guide specifically on comparability adjustments which in essence is limited to the view already stated in the TP Guidelines themselves. In it, however, the OECD reiterates its view that adjustments “should only be considered if (and only if) they are expected to increase the reliability of the results”.

The line between an acceptable number and volume of adjustments which still increases the reliability and an excess of adjustments which indicated the uncontrolled transaction is in fact not a sufficient comparable is in practice as hard to determine as finding the initial comparable. Nonetheless, Muyaa points out that despite the practical difficulties “the need to carry out comparability adjustments cannot be overemphasized”. It is however important that when deciding upon a comparable in the first place and then and in deciding upon an adjustment the taxpayer will make each decision according to their best judgement of the situation. The taxpayer’s discretion derives directly from the lack of detailed provisions. This discretion and the subsequent uncertainty might not actually make it easier for the taxpayer but rather complicates the process. Henshall notes that prior to choosing the right form of adjustment the taxpayer will have to identify those differences in the comparables which are economically significant (i.e. the material effect). Thus not all differences will have to be adjusted for as they might not be economically significant and therefore have no material effect on the analysis.

27 OECD Transfer Pricing Guidelines, Paragraph 3.50.
29 Henshall, Global Transfer Pricing, Paragraph 2.27.
30 OECD Comparability Adjustments 2 et seq.
31 Hülster, IStR 2016, 877f.
33 Henshall, Global Transfer Pricing, Paragraph 2.27 et seq.
34 Henshall, Global Transfer Pricing, Paragraph 2.27 et seq.
As mentioned above the OECD TP guidelines offer little guidance on the issue of comparability adjustments. In particular, they only indicate a small number of possible adjustments such as adjustments regarding accounting consistency, segmentation of financial data and adjustments for differences in capital, functions, assets and risks. Further the guidelines contain only one detailed example of only one type of adjustment, namely the working capital adjustment. Regarding this Muyaa points out that the lack of guidance could inevitably lead to increased uncertainty in the application of such adjustments but also to more flexibility in the application of the arm’s length principle itself. Feinschreiber/Kent in line with the OECD guidelines on comparability adjustments further specify, that MNEs as well as tax authorities shall not give certain adjustments a higher standard nor a higher importance compared to others indicating that each adjustment will need appropriate clarification and proof of reliability. For example, a distinction between “routine and noncontroversial” and “more subjective” adjustments will lead to an inaccurate depiction of comparability adjustments and their credibility. Each adjustment will have to be duly justified including providing information on the necessity of the chosen adjustment, its calculations, its results on the comparable and its effect on the comparable’s degree of comparability.

Based on the existing literature the most commonly used adjustments can be categorized in two broad categories:

- Adjustments that seek to eliminate differences in accounting/financial risks between the tested party and the comparables (“accounting and financial risks adjustments”): these are mostly
  - adjustments for accounting inconsistency,
  - working capital adjustments,
  - capital adjustments,
  - other (such as adjustments for different asset utilization, foreign-exchange, economic life cycle etc.).

---

36 See Annex to Chapter III of the OECD Transfer Pricing Guidelines; see for a discussion of the working capital adjustment further below.
39 OECD Comparability Adjustment, 3.
41 Muyaa, International Transfer Pricing Journal 09-10/2014, 349 et seq; Feinschreiber/Kent, How the OECD Applies Comparability Analysis, Corporate Business Taxation Monthly 02/2012, 27 (32 et seq);
• Adjustments that seek to eliminate differences in strategic/market risks between the tested party and the comparables ("strategic/market adjustments"): these are mostly
  o Country risks adjustments,
  o Other risk-based adjustments,\(^\text{42}\)
  o Adjustments on the broad circumstances and relationships of the parties (circumstances / relationships adjustments).

Accounting and financial risks adjustments are more often used in practice (notably the working capital adjustment), as they are more straightforward to apply. Strategy/market adjustments are rarely used, due to the scarcity of research on how to economically adjust for differences in country risks in the Transfer Pricing context. The last category circumstances / relationship adjustment is also not frequently used in practice while it is the cornerstone of comparability.

We provide below a detailed description of each of these adjustments in the sections below.

### 3.2. Adjustments for accounting consistency

Article 6.1 Paragraph 3.48 of the OECD TP Guidelines 2017 names adjustments for accounting consistencies as one of the possible adjustments to be carried out to eliminate material differences when comparing controlled and uncontrolled transactions. Accounting inconsistencies may arise when comparing transactions that underlie differing accounting practices, accounting rules or accounting principles. This will especially occur when comparables from different countries are chosen. The indication of accounting consistency adjustments can be seen as a reiteration of Chapter III A.4.3.2 Paragraph 3.35 where the OECD acknowledges that it will not always be possible (due to the lack of available data) to choose domestic comparables even if it would be preferable. Furthermore, the OECD states that through choosing non-domestic (or foreign) comparables difficulties from differing accounting standards may arise.

Rosenberg/McLennan/Mohamed/McInnes\(^\text{43}\) have identified a possible reduction of comparability when analysing transactions that underlie different accounting standards. They point out that even within the same setting (and within the same country) differences may occur due to different treatment choices in the various financial statements and acknowledge the impact that for example

---


\(^{43}\) Rosenberg/McLennan/Mohamed/McInnes, Transfer Pricing Comparability 25f.
different depreciation methods may have when analysing comparability. They go as far as indicating that major differences may lead to the disqualification of a presumed comparable altogether.

Similarly Muyaa\textsuperscript{44} identifies various factors that might need to be adjusted for when it comes to accounting standards as they tend to differ significantly across countries. These include cost measurement and presentation, such as depreciation, inventory write-offs, goodwill amortization and gains or losses on fixed assets, interest, taxes, foreign exchange, share option expenses and differences arising from varied inventory valuation methods. Accordingly the ultimate goal for eliminating differences arising from varying accounting standards would be through further converging global accounting standards.

In line with Muyaa, Gonnet/Starkov/Maitra\textsuperscript{45} acknowledge the need for adjustments based on differing accounting standards. They point out however, that due to ever increasing alignment of accounting standards through IFRS differences will have to have a material effect on the reliability of the comparable to spark the necessity for adjustments. Otherwise, adjustments might not be needed. On the other hand, if differences in the accounting standards are materially affecting reliability of the comparability analysis, it might not always be possible to identify every significant difference in the applied accounting standards. Hence, comprehensive adjustments might prove impossible.

### 3.3. Working Capital adjustments

In general, making a working capital adjustment “attempts to adjust for the differences in time value of money”\textsuperscript{46} between the controlled transaction within an intra-group setting (the tested party) and the uncontrolled transaction (the comparable).

In the same manner as adjustments for accounting inconsistencies the OECD lists capital adjustments in its chapter III of the TP guidelines.\textsuperscript{47} The annex to chapter III of the OECD TP Guidelines provides a detailed example of a working capital adjustment stretching over six pages. Even though pointing out this is only one way of adjusting the working capital, the Guidelines aim to establish one common way to adjust a differing comparable hence the rather detailed guidance on this subject. Further the OECD points out that a working capital adjustment will most commonly be used when applying the

\textsuperscript{44} Muyaa, International Transfer Pricing Journal 09-10/2014, 351.
\textsuperscript{45} Gonnet/Starkov/Maitra, Comparability adjustments in the absence of suitable local comparables in emerging and developing economies, Transfer Pricing International Journal 04/2014, 4 (6 et seq).
\textsuperscript{46} OECD Transfer Pricing Guidelines, Annex Chapter III, 444.
\textsuperscript{47} OECD Transfer Pricing Guidelines, Paragraph 3.48.
transactional net margin method (TNMM) however acknowledging that it might also be possible when using the resale price method or the cost plus method.\textsuperscript{48}

Early literature suggests that working capital adjustments used to be mostly based upon estimations. This early approach led to a lack of transparency in the calculations as well as problems in replicability and concerns regarding its objective value.\textsuperscript{49} This undoubtedly sparked the demand for further guidance and has led to action from the OECD itself.

\textit{Bittner/Jann}\textsuperscript{50} reiterate the assumption that working capital adjustments are most commonly used when the transactional net margin method (TNMM) is applied. Furthermore, although generally concurring with the example given by the OECD in its 2010 guidelines, they identify substantial simplifications in the application of the working capital adjustments. Especially the OECDs use of a standard interest rate raises concerns as differences that may arise from differing interest rates are neither reflected nor addressed. When comparing companies within Europe this might only pose a negligible difference, however, especially in the context of the past financial crises (which had a vivid effect on interest rates) as well as considering a more global setting, these differences should be accounted for. Further, \textit{Bittner/Jann} point out that possible implicit interest profits, which in practice add another layer of complexity, are not considered or addressed in the OECD example. They do however admit that especially a simplification of the latter point might not lead to significantly different results concerning the adjustment. On the other hand simplification of the underlying interest rates might lead to a reduced level of accuracy in the application of a working capital adjustment and diminish the reliability of the comparable.

\subsection*{3.4. Capital adjustments}

While working capital adjustments represent the most common form of capital adjustments,\textsuperscript{51} capital and balance sheet adjustments are not limited to working capital considerations. Working capital adjustments are necessary when differences occur regarding inventories, receivables and payables when comparing the controlled transaction and the uncontrolled transaction. Even though \textit{Muyaa}\textsuperscript{52} is in favour of the OECDs detailed guidance on working capital adjustments, some main issues remain

\begin{itemize}
\item \textsuperscript{48} OECD Transfer Pricing Guidelines, Annex Chapter III, 443.
\item \textsuperscript{49} Scholz/Ackerman/Schmitt, Anpassungsrechnungen zur Erhöhung der Aussagekraft von Fremdvergleichen bei Verrechnungspreisen, IWB 22/2001, 1089 (1089).
\item \textsuperscript{51} Muyaa, International Transfer Pricing Journal 09-10/2014, 350.
\item \textsuperscript{52} Muyaa, International Transfer Pricing Journal 09-10/2014, 350.
\end{itemize}
unanswered in her opinion. These include the question of timing when comparing transactions (ie choosing the applicable point in time) as well as the question which interest rates are applicable when adjusting for differences in time value.

Likewise Gonnet/Starkov/Maitra\(^{53}\) point out that capital adjustments might be necessary in various circumstances relating to “ease of access to credit markets, interest rates, stock market volatility, market risk, level of inflation, tax rates etc” as all of these factors might substantially influence the difference in cost of capital between compared companies and also between compared countries. Additionally, they point out that differences may not only arise due to comparing differing countries but also regarding a time aspect and that a proper cost of capital adjustment captures both: location and time.

These possibly material differences do not exclusively affect the working capital but concern the whole capital and balance sheet structure of both the tested party and the comparable. Yet, both the literature and standard setters (OECD, national lawmakers, tax administrations, etc) primarily (and almost exclusively) focus on working capital adjustments. Therefore there is a big void in scientific literature and in practical guidance with respect to capital and balance sheet adjustments that are not focused on adjusting current assets and current liabilities but are rather directed on the overall balance sheet structure and on non-current balance sheet items.

### 3.5. Risk-based adjustments

(In-)Comparability in regards to risk is a less tangible matter. Allocating a certain risk level to a specific transaction in an intra-group setting or determining country risk levels is just as difficult as finding a suitable comparable. A company might have assumed a general risk level which is not (or cannot be) apportioned in detail to specific transactions or which might often not be observable altogether.\(^{54}\) However a standardized general risk adjustment covering more than an individual transaction under review goes against the OECDs approach and its arm’s length principle which presupposes the analysis of transactions on an individual level.\(^{55}\) Risk adjustments in general aim at eradicating risk effects on pricing. When it comes to these sort of adjustments taxpayers face similar problems as with most of the other forms of adjustments: the lack of published uniform guidance.

\(^{53}\) Gonnet/Starkov/Maitra, Transfer Pricing International Journal 04/2014, 5 et seq.


\(^{55}\) OECD Transfer Pricing Guidelines, Paragraph 3.50 et seq.
Shortly after the 2010 version of the TP Guidelines was published Oosterhoff\textsuperscript{56} criticized the OECD for essentially avoiding the topic of risk differences when adjusting for comparability as this is where the “\textit{real challenge in practice}” lies. Oosterhoff points out that working capital adjustments, which are favourably treated by the OECD in its guidelines by providing extensive guidance, produce much less controversy and are thus not in need of vast scientific attention compared to the relatively controversial risk adjustments.

\textit{Ackermann/Stock}\textsuperscript{57} draw their attention to the fact that a common business approach in group constellations is to bundle risk at a specific group member in order to relieve other group members of increased risk. In such practices it might pose difficult to find suitable comparables for a transaction or to properly adjust for risk allocations. They further criticize the lack of guidance from the OECD as well as national legislators (in their case specifically the German legislator) regarding risk adjustments. Due to this lack of information and to avoid misconceptions with tax administrations their recommendations include clarity and transparency to enable replicability. Comparability concerning risk will, according to them, always include a certain level of approximations as due to differing business structures risk may vary profoundly. Furthermore, they point out that database studies and benchmark analyses often inadequately depict risk structures when it comes to comparable companies. Hence, published operating numbers tend to be unreliable and inadequate for calculating risk adjustments. Thus, they suggest benchmark analyses are to be neglected and instead suggest focusing on mathematical models such as a “risk adjustment factor” and an “insurance rate” when performing risk adjustments.

\textit{Muyaa}\textsuperscript{58} offers an extensive list of possible forms of risk adjustments. She provides examples of risk adjusted for competition, foreign exchange rates, product liability and/or technological obsolescence, credit risks, country risks and market risk. In her detailed approach she finds that some risks such as foreign exchange and credits risks can be adjusted using market data whereas others might not be able to be adjusted for at all (such as market risk). Similar to \textit{Ackermann/Stock} she acknowledges the difficulty of apportioning risk to a specific transaction. For this reason she subdivides risk into “project-specific risks (also diversifiable risks)” and “market risks (non-diversifiable or systematic risk)”. The former can be adjusted for, the latter inevitably leads to a disqualification of the comparable.

\textsuperscript{57} Ackermann/Stock, Berücksichtigung von Risiko bei der Bestimmung von Verrechnungspreisen, BB 2013, 619 (619 et seq).
\textsuperscript{58} Muyaa, International Transfer Pricing Journal 09-10/2014, 350 et seq.
Already in 1998, Silva\textsuperscript{59} gives an extensive explanation and practical formulae on country risk adjustments. He focuses his attention to risks associated with foreign exchange rates and consequently adjustments for such risks and points out that when comparing prices or profits these risks will materially affect comparisons between transactions and have to be adjusted for.

Adjustments for country risk are most commonly of special interest when it comes to choosing comparables from different countries varying in their state of development (i.e. industrialised countries vs developing countries). Developing countries might present themselves to be less predictable and more volatile economies comprising risk that has to be adjusted for. Muyaa considers country ratings from external rating agencies (e.g. S&P) as a basis for calculating country risk adjustments. She furthermore reiterates the fact that not all risks will be able to be adjusted for especially when it comes to the general attitude individual businesses have towards risk.\textsuperscript{60}

More recent research in the field of country risk adjustments focuses stronger on transferring basic principles of finance and finance research into tax practice. Captain/Eshleman/Krustev/Grozeva/Chang\textsuperscript{61} present a “data-driven approach” aiming at standardizing country risk adjustments in order to ensure replicability. They refer to the so-called “sovereign yield spread approach” which is commonly used in financial analyses as starting point. The idea behind this is the question “how much additional yield an investor would require to invest in a foreign country government bond instead of investing in a U.S. Treasury bond”.\textsuperscript{62} They start by first regressing the sovereign yield spread on exogenous country risk factors and then converting the results into transfer pricing adjustments. In their understanding, and in line with the common understanding, country risk “refers to risk induced by the country location of a business activity rather than the fundamental nature of the activity”.\textsuperscript{63} They stress the importance of country risk adjustments by pointing out that almost every business active in a cross-border setting will take risk considerations into account when making decisions.

3.6. Economic / Business circumstances adjustments


\textsuperscript{60} Muyaa, International Transfer Pricing Journal 09-10/2014, 350 et seq.


\textsuperscript{62} The U.S. Treasury bond is widely used due to its “long and reliable history” as well as the U.S.’ “large number of public companies”.

\textsuperscript{63} This is to be distinguished in particular from risks specific business related economic circumstances bear such as individual business models etc. See 3.5.
Unlike the adjustments outlined above, economic circumstance adjustments are not specifically listed as a form of adjustments by the OECD in its Guidelines. However, literature suggests, differing economic circumstances can produce material differences when comparing transactions and should thus be included in the set of possible adjustments.

The OECD does, however, list economic circumstances as an important factor when conducting a comparability analysis. Hence, it can be assumed that economic circumstances also play an important role when it comes to necessary comparability adjustments. According to the OECD economic circumstances include market conditions, geographic situations and governmental regulations. Fris/Gonnet outline that when it comes to comparability analysis and subsequently to comparability adjustments, too little focus is given to the circumstances and relationships the parties of the controlled transactions are in compared to the uncontrolled transaction. They even go as far as stating that if the differences in relationships in the controlled transaction and the uncontrolled transaction are material the the uncontrolled transaction has to be disqualified as a comparable. Nonetheless, they acknowledge that differences in relationships might also be viewed as differences at the market level (they illustrate this by reference to internal distributors compared to external franchisees).

However, they draw their attention to the fact that in specific cases uncontrolled external transactions might not be as arm’s length as they appear. They argue that intra-group transactions might be similar to uncontrolled transaction in the sense that a company might have a particularly close relationship with the company that has been chosen as a comparable and prices are not fully influenced by market forces but strongly rely on the relationship between the two companies. In their opinion commonly used transfer pricing comparability analysis does not include an in-depth analysis of relationships and are hence not comprehensive.

As part of their analysis of comparability adjustments Fris/Gonnet subdivide the economic adjustments into “economic crisis adjustments” and “economic circumstance adjustments” as subgroups of economic circumstance adjustments in a comprehensive sense.

When it comes to adjustments for “classic” differences in economic circumstances Fris/Gonnet find that comparing transactions from different locations will lead to differences concerning: “political risk exposure, credit market conditions [...], regulatory differences, differences in payment terms, and other business or market-related risks”. These differences will most often lead to differences in financial data of the comparables which has to be adjusted for in order to keep them as useful comparables. Essentially, their adjustment for market risk can be seen as both an adjustment for economic

64 OECD Transfer Pricing Guidelines, Paragraph 1.110 et seq.
circumstances as well as a form of risk adjustment as outlined above. The reason for their adjustment is a difference in market conditions but the adjustment itself is in essence an adjustment for risk operationalized with a risk premium.68

Regarding economic crisis adjustments they point out that most MNEs will have their transfer pricing structures designed for relatively stable economic conditions not specifically for crisis times. Especially database searches for comparables which are based on data from previous periods will not reflect economic shocks in a timely manner. Hence, the need for adjustments will be evident. Fris/Gonnet give various suggestions on how to adjust for economic crisis including using alternative timeframes compared to the usual use of weighted averages as well as adjusting the financial profitability of the chosen comparable to reflect the given situation.69

In her 2014 article Muyaa70 admits that when it comes to the issue of comparability, choosing an uncontrolled transaction as a comparable from a company operating in the same market will simplify the process and limit the amount and intensity of necessary adjustments. Nonetheless, due to the already difficult task of finding suitable comparables, limiting ones search to the same geographical market would only intensify the struggle. Furthermore, the ongoing trend of globalization and the tendency to use comparables from other geographical markets will lead to an increased need to adjust for occurring differences. Muyaa further specifies, that due to the wide range of possible differences in market conditions and the related lack of sufficient information often leads to difficulties in determining accurate adjustments. This will in turn lead to difficulties assuring that all material effects on pricing originating in such differences have sufficiently been adjusted for.

For Hülster71 difficulties may arise out of similar problems. He points to the fact that due to lack of information and hence a lack of comparable companies within the same industry companies will search for comparables outside their sector which will in turn lead to increased need for adjustments. This way a company will in addition to market differences that have to be adjusted for, have to adjust for differences brought by differing industries and market sectors.

Large sections of the literature view economic adjustments in the context of market differences and the effects different market conditions will have on comparability. Bilaney72 shows that economic adjustments also include adjustments needed for differences in business life cycles. In his 2015 article he particularly stresses the importance to adjust for differences in capacity utilization. Especially when comparing newly established companies (ie start-ups) with companies in a different phase the need for adjustments is evident. This can also be said for phases of slow growth or a decline in demand for

70 Muyaa, International Transfer Pricing Journal 09-10/2014, 351 et seq.
71 Hülster, IStr 2016, 878 et seq.
72 Bilaney, International Transfer Pricing Journal 03-04/2015, 101 et seq.
goods or services of a specific company even if other comparability factors match. As goes for all kinds of adjustments, Bilaney reiterates that capacity utilization adjustments are only to be conducted if the differences that are to be adjusted for have material effects and the adjustment will result in increased reliability of the comparable uncontrolled transaction. When looking at the causes for low capacity utilization one needs to distinguish between individual (i.e., company in a start-up phase, strike within a company) and declines on a general level (i.e., declines of product demand in the whole business sector). In the latter case there will be no need for an adjustment as the controlled transaction and the comparable uncontrolled transaction operate in the same sort of conditions. Thus, Bainley points out that due to the lack of guidance on capacity utilization adjustments, proper documentation of the adjustments are required in order to justify its use.\(^\text{73}\)

Similarly, but less extensive, Gonnet/Starkov/Maitra\(^\text{74}\) mention “economic cycle adjustments”. With this they especially refer to economic shocks and crises that may or may not occur on a global scale but inevitably will influence comparability between observed parties. Analogous to Captain et al.\(^\text{75}\) they assume that a regression analysis might be well suited for such instances, yet acknowledging the possible difficulty in obtaining reliable data.

Silva\(^\text{76}\) in his 2018 working paper as well as in a prior publication\(^\text{77}\) refers to adjustments for location savings referring to advantageous positions arising in different geographic markets which can lead to economic benefits that need to be adjusted for.

### 3.7. Other forms of adjustments

Comparability adjustments are not limited to the list outlined above. Notably Muyaa\(^\text{78}\) lists “asset intensity adjustments” as a possible addition to common adjustments. Similarly Feinschreiber/Kent\(^\text{79}\) indicate that the identification of the level of asset utilization when choosing a comparable is an integral part of the functional analysis. Identifying the assets a taxpayer uses (intangibles, property, financial assets etc) will help when considering comparables and inevitably also when identifying necessary adjustments.

---

\(^{73}\) Bilaney, International Transfer Pricing Journal 03-04/2015, 101 et seq.

\(^{74}\) Gonnet/Starkov/Maitra, Transfer Pricing International Journal 04/2014, 7.

\(^{75}\) Captain/Eshleman/Krustev/Grozeva/Chang, BNA Insights 12/2016.

\(^{76}\) Silva, Adjusting transfer pricing comparables to reflect location savings, 2018.

\(^{77}\) Silva, Pygmalion Comparables: Why Data from the „Center“ Does Not Apply for „Periphery“, BNA Tax 23/2015, 1 (1 et seq).


\(^{79}\) Feinschreiber/Kent, Corporate Business Taxation Monthly 02/2012, 32.
Starkov/Maitra/Li\textsuperscript{80} take capital adjustments a step further in their 2015 article by combining it with adjustments “for differences in volatility of financial returns in different markets”. It can thus be said, that this sort of adjustment is neither purely a capital adjustment nor purely a risk adjustment (derived from the fact the volatility is due to the setting in different markets).

Koomen\textsuperscript{81} as well as Macho\textsuperscript{82} suggest comparability adjustments should be expanded providing for adjustments related to differing contractual terms and conditions of a specific transaction. Furthermore, Koomen expects additional recognition of the topic of comparability adjustments in general and in conjunction with it further guidance on that matter from the OECD.\textsuperscript{83} Similarly Hülster\textsuperscript{84} sees the need for adjustments due to differing contractual terms, however, he at the same time acknowledges the difficulty in obtaining this kind of information in the first place.

4. Discussion and implications for future research

Already in 2007 the OECD’s Working Party suggested that further guidance on performing comparability adjustments should be developed.\textsuperscript{85} In part this has been done as the 2010 version of the OECD TP Guidelines includes a detailed example of a working capital adjustment. However, as literature has shown, the lack of additional guidance on the rest of the mentioned adjustments and the lack of practical calculation examples bares the risk of spreading discrepancies in the application of such adjustment procedures. Muyaa\textsuperscript{86} points out that resulting from these sort of discrepancies there will be increased risk of double taxation.

It does seem somewhat surprising that even though, the OECD so largely focused on the topic of comparability and enhanced its guidance on it in the revised TP Guidelines 2017, the topic of adjustments has remained almost untouched as if its importance was not recognized or, and this seems more likely, the difficulty in streamlining adjustments was silently acknowledged. Similar to the discussion held on the issues concerning comparability analyses, the difficulties concerning accessibility of data of comparable uncontrolled transactions also influences the effectiveness of adjustments and the ability to properly conduct such adjustments. Future research will be necessary

\textsuperscript{80} Starkov/Maitra/Li, Comparability Adjustments in the Absence of Suitable Local Comparables in Emerging and Developing Economies, Transfer Pricing International Journal 5/2015, 2 (6 et seq).

\textsuperscript{81} Koomen, International Transfer Pricing Journal 07-08/2015, 244.

\textsuperscript{82} Macho, Anpassungsrechnungen, in Macho/Steiner/Spensberger (Hrsg), Verrechnungspreise kompakt\textsuperscript{3} (2017).

\textsuperscript{83} Koomen, International Transfer Pricing Journal 07-08/2015, 244.

\textsuperscript{84} Hülster, ISTR 2016, 878 et seq.


\textsuperscript{86} Muyaa, International Transfer Pricing Journal 09-10/2014, 349.
in the context of this practical application. Although it is commonly accepted that necessary adjustments have to be made to the comparable uncontrolled transaction (compared to the controlled transaction under review) this will in turn lead to difficulties due to the reasons stated above.87

Even existing guidance and literature is by far not fully explored. Bittner/Jann88 make clear that even though there is a relatively large pool of guidance on working capital adjustments it still falls short of taking into account complexities that regularly have to be accounted for in practice. The OECD’s guidance on working capital adjustments serves as a proper basis however its simplifications will have to be dealt with by practitioners and tax administrations in the future and give way for further research.

A concern that has already been voiced by Luckhaupt/Overesch/Schreiber89 essentially points once again to an increased demand for accurate comparables with ever more requirements to be fulfilled in the process of identifying the former. These enhanced requirements do not, however, match the availability of data. This will either have to be addressed by tackling the evident lack of data (e.g. by making the country-by-country reporting public), or by tackling the lack of guidance on adjustments as suggested in this review.

Interestingly Schwaiger90 brings up another facet of adjustments in his 2011 article. He stresses that adjustments might also be used as a way to retrospectively adjust intra-group prices in order to fine-tune the group’s tax base. This way comparability adjustments might be misused as a means of (ex-post) tax planning he argues. He does, however, acknowledge that the existence of documentation requirements and the need for justification aims to guard tax administrations against this sort of misuse. The fact that transfer pricing has been misused by MNEs to erode their tax base and shift profits into low-taxed countries, has been widely discussed in the past and is in itself not a new concept.91 However, as comparability adjustments are still commonly under-regulated there might be existing dangers to further enable base erosion by leaving the interpretation and application of adjustments largely to the discretion of the taxpayer. Hence, a common approach is clearly required to prevent potential misuse.

87 Bilaney, International Transfer Pricing Journal 03-04/2015, 102 et seq.
90 Schwaiger, Nachträgliche Preisanpassungen zwischen verbundenen Unternehmen, Year-End Adjustments of Transfer Prices Between Related Parties, SWI 10/2011, 420 (422 et seq).
5. Conclusion

In summary this paper has tried to provide a comprehensive overview of existing literature on the topic of comparability adjustments. As seen above, even though the topic of comparability adjustments has been around since before the first version of the TP Guidelines, the topic is yet to be fully explored both in official guidance as well as literature, research and especially practical tools.

As discussed, comparability adjustments can be subdivided into two groups: “accounting and financial risks adjustments” and “strategic/market adjustments”. With the exception of working capital adjustments, the lack of guidance and recognized standardized application will quite possibly lead to continued discrepancies in their use. Taxpayers continue to struggle with the immense amount of documentation as well as justification requirements when it comes to adjustments as there is no clear path to follow and very few practical application examples which would unify the application of adjustments.

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. Due to the lack of literature as well as experience in this area early concerns of comparability adjustments still remain. It is evident that there is a broad area in which future research and practical support is necessary and required in order to provide clarity, consistency as well as recognition with tax authorities.

On the other hand however, with the broad variety of possible and acceptable adjustments at hand, establishing further guidance on these adjustments could help to broaden the sample of potentially comparable stand-alone companies. Especially for geographical areas such as Africa or for developing countries in general where the scope of potential comparables is very limited or even non-existent, establishing easy to apply and simple yet adequate and scientifically rigorous ways of employing foreign comparables (e.g. European comparables) could be a major improvement for both the local tax administrations and the taxpayers.

---
