Determination of the Arm’s Length Profitability for Commissionaires – Use of Working Capital Adjustments
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Abstract
Due to lack of information on comparable companies, transfer pricing practitioners deal with a problem how to benchmark entities having very limited functional and risk profile (ie commissionaire; toll manufacturer etc.). This paper demonstrates the application of the working capital adjustments for determining the arm’s length profitability of a commissionaire using formulation as presented in the work of Miesel and Verma (2001). Subsequently, critical aspects to be considered when applying working capital adjustments are discussed.

Key words: Transfer pricing, working capital adjustment, commissionaire.

1. Introduction
The analysis of transfer prices is generally based on the comparison of behaviour independent companies would show in identical or similar transactions. The comparability is thus a critical factor determining the compliance with arm’s length principle. The OECD Guidelines (paragraph 3.3, chapter III) states that it is considered a good practice for a taxpayer that uses comparables to support its transfer pricing or eventually transfer pricing adjustment to provide appropriate supporting information for the other interested party (ie tax auditor, tax payer or foreign competent authorities). At the same time, OECD Guidelines (paragraph 3.2, chapter III) also acknowledge that there are limitations in availability of information and that searches for comparable data can be burdensome.

Multinational firms (MNCs) often includes various type of companies, ie from strategic entities playing important role and assuming major risks to entities undertaking very limited level of functions and risks. As there is usually no information publicly available on functional profile of companies, transfer pricing practitioners challenge the problem how to benchmark entities of very routine character to keep accuracy and comparability to maximum extent. In this context, the use of comparability adjustments such as working capital adjustments is discussed. For instance, as the search for commissionaires is not usually feasible due to lack of distinguishing information from a classic distributor, operating profit margins of selected comparables performing typical distribution activities are adjusted to “zero” to reflect the basic characteristics of a commissionaire (ie no inventories hold). The comparability adjustments are also often made for a toll manufacturer as it does not own raw material used in the production and thus bears the related risks to limited level only.

This paper demonstrates the application of the working capital adjustments for determining the arm’s length profitability of a commissionaire using formulation as presented by Miesel and Verma (2001). Subsequently, critical aspects to be considered when applying working capital adjustments are discussed.

2. Commissionaire’s Characteristics
The products from manufacturers (principals) to end customers are transferred using various distribution models, such as:

Commission agent
The commission agent provides distribution activities on behalf of a disclosed principal. The principal has the property rights to goods to be sold and also usually signs agreements directly with customers. The commission agent is responsible for targeting new clients, maintaining the relationship with existing customers, management of orders and supporting activities connected with the launching new products on the market. The commission agent undertakes related risks to minimum extent. As the commission agent does not hold a title to the products, it does not bear inventory risk.

Commissionaire
The commissionaire sells goods in his own name but for the account of a principal. Similarly to the commission agent, the commissionaire does not hold a title to goods to be sold and thus no inventory is recorded in his books. Activities performed and risks borne by the commissionaire are similar to those of the commission agent. In the contrast, the commissionaire bears market risk to limited extent, ie risk that his marketing expenses will be not covered by corresponding sales.

Classic buy-sell distributor
The classic buy-sell distributor makes sales deals on his own account, which implies that he usually holds property rights to goods to be sold. The buy-sell distributor performs standard distribution and sales functions and bears associated risks to a certain degree.

Fully-fledged distributor
The fully-fledged distributor arranges sales of goods in his name and on his own account. Along with standard distribution and sales functions, he also performs crucial activities and makes strategic decisions connected with the
distribution activities in terms of creation and implementation of marketing strategy, product portfolio, customers’ base etc. In this regard, all significant risks are assumed to the fully-fledged distributor.

An overview of functions performed, risks borne and assets used by individual type of distribution entity (ie functional and risk profile) is presented in the table below:

<table>
<thead>
<tr>
<th>Functions/Risks</th>
<th>Commission agent</th>
<th>Commissionaire</th>
<th>Buy-sell distributor</th>
<th>Fully-fledged distributor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title to goods</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warehousing &amp; logistics</td>
<td></td>
<td>(X)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase planning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing &amp; advertising</td>
<td>(X)</td>
<td></td>
<td></td>
<td>(X)</td>
</tr>
<tr>
<td>Price setting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales &amp; distribution</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Quality control</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>After-sales support</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warranty &amp; repairs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Invoicing &amp; collection</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>General administration</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Market risk</td>
<td>(X)</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Inventory risk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bad debt risk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product liability risk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign exchange risk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Bakker (2009), p. 24 and own compilation

For simplicity, the commission agent and the commissionaire will be further analysed together as the „commissionaire”, while buy-sell distributor and fully-fledged distributor will be further referred to as the „distributor”.

Based on the facts mentioned above, the commissionaire differs from the distributor mainly with regard to the ownership of the legal title to goods sold. While the ownership rights are fully transferred to distributors, in case of commissionaires, these rights remain at the principal (usually the producer). Therefore, differences in functions performed and risks borne predetermine an expected return to be achieved in line with a risk-reward theory. As depicted in Figure 1, higher risk is associated with potential of higher rewards but, at the same time, with higher probability of incurred losses, whereby a moderate risk assumes relatively low but stable level of compensation (Bakker, 2009).

Figure 1: Relation Between Expected Return and Functional and Risk Profile

Source: Bakker (2009), p. 26 and own compilation

2.1. Determination of Arm’s Length Profitability

Remuneration for the commissionaire is typically determined as a commission (expressed as a percentage on sales). For the purpose of determination the arm’s length profitability for the commissionaire, it is possible to use any of the following methods described in the OECD Guidelines:

- Traditional Transactional Methods:
  - Comparable Uncontrolled Price Method (“CUP”);
  - Resale Price Method (“R-“); and
  - Cost Plus Method (“Cost+”).

- Transactional Profit Methods:
  - Profit Split Method (“PSM”); and
  - Transactional Net Margin Method (“TNMM”).

The selection process of an appropriate transfer pricing method should take account of the respective strengths and weaknesses of individual transfer pricing methods as indicated in the OECD Guidelines (paragraph 2.2, chapter II):
The nature of the controlled transaction determined through a functional and risk analysis;
The availability of reliable information; 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.

The selection process of the transfer pricing method for the commissionaire in our analysis is summarized in the following table:

Table 2: Selected Transfer Pricing Method for Commissionaire

<table>
<thead>
<tr>
<th>TP method</th>
<th>Accepted/ Rejected</th>
<th>Description/ Reasoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUP</td>
<td>×</td>
<td>The CUP method compares the prices charged for products or services in controlled transactions to the price charged in uncontrolled transaction. Reason for rejection: Since sufficient information on individual commission agreements is not publicly available, CUP cannot be applied.</td>
</tr>
<tr>
<td>R-</td>
<td>×</td>
<td>The R- method evaluates whether the amount charged in a controlled transaction is at arm’s length by reference to the gross margin realized in comparable uncontrolled transactions. Reason for rejection: Although R- seems to be most appropriate for distribution and marketing operations, sufficient financial data on the gross margin level could not be obtained due to e.g. differences in the accounting standards etc. and thus R- cannot be reliably used.</td>
</tr>
<tr>
<td>C+</td>
<td>×</td>
<td>The C+ method is based on costs incurred in relation to the manufacturing activities / provision of goods / services at the seller of the product or the service provider. Reason for rejection: C+ is most appropriate method in cases involving manufacturing, assembly, or the provision of services. Therefore, C+ was deemed not the best solution to determine arm’s length transfer prices for the commissionaire.</td>
</tr>
<tr>
<td>PSM</td>
<td>×</td>
<td>The PSM is largely used in cases both parties involved in the transaction to be tested own and contribute with significant intangible assets. Reason for rejection: As the commissionaire performs routine functions only and no intangibles are created, the application of PSM was not deemed reasonable.</td>
</tr>
<tr>
<td>TNMM</td>
<td>✓</td>
<td>The TNMM compares the net operating margins and thus it is less affected by differences in use of various accounting standards or in functions &amp; risks undertaken. Therefore, the TNMM based on sales was selected to determine arm’s length nature of profitability for the commissionaire.</td>
</tr>
</tbody>
</table>


Based on the results of the selection process, it can be concluded that TNMM was found the most appropriate for determining the arm’s length profitability for the commissionaire. In the line of TNMM, a transfer price set between the principal and the commissionaire should allow the commissionaire to cover operating expenses and to earn a reasonable profit:

\[
\text{Transfer price} = \text{Independent Price} - \text{Operating expenses} - \text{Profit margin} \tag{1}
\]

A reliable application of TNMM requires that a functional profile of tested company and comparables was largely identical. As mentioned above, the commissionaire differs from a distributor mainly with regard to the ownership of title to goods sold. This distinguishing feature may have a significant impact on the level of an operating profit margin ("OM") defined as ratio of operating profit to sales. As noted at paragraph 1.33 of OECD Guidelines, if there are differences that may materially affect financial results of comparable companies, an accurate adjustments can be made to improve comparability. For this purpose, working capital adjustments will be employed to obtain more accurate and reliable data of potentially comparables.

Therefore, the benchmarking analysis for companies comparable to the hypothetical commissionaire in our case is based on two-step process. Companies performing distribution/wholesales activities are firstly search for and subsequently the appropriate working capital adjustments are employed to obtain as reliable data as possible.

2.2. Applicability of Working Capital Adjustments

Working capital\(^1\) represents a measure of both a company's efficiency and its short-term financial health. The working capital is expressed as:

\[
\text{Working capital} = \text{Current Assets} - \text{Current Liabilities} \tag{2}
\]

The working capital formula can be also decomposed to:

\[
\text{Working capital} = [\text{Accounts Receivable} + \text{Inventory}] - \text{Accounts Payable} \tag{3}
\]

\(^1\) Also referred to as the "net working capital", or the "working capital ratio".
This ratio shows whether a company has enough short-term assets to cover short-term debt. Furthermore, it also an indicator of “free” capital which is not tied on current liabilities, and thus, can be invested. Hereby, working capital gives investors an idea of the company’s underlying operational efficiency since an increase in working capital may indicate slow collection of money owed by customers.

The working capital can be graphically depicted as follows:

**Figure 2: Working capital**

<table>
<thead>
<tr>
<th>Fixed Assets</th>
<th>Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Assets</td>
<td>Long term Liabilities</td>
</tr>
<tr>
<td>Working capital</td>
<td></td>
</tr>
<tr>
<td>Current Liabilities</td>
<td></td>
</tr>
</tbody>
</table>

Source: Kislingerová (2001), p.65

### 2.3. Economic Reasoning for Working Capital Adjustments

The OECD Guidelines (paragraph 5, annex to chapter III) states that underlying reasoning of employing working capital adjustments is an attempt to adjust for differences in time value of money between tested party and potential comparables with an assumption that the difference should be reflected in profits. In this context, companies holding high levels of working capital perform in fact additional financing functions for their customers and suppliers by providing them with payment terms:

- If a company records account receivable towards its customers with eg 60 days terms for payment of account, the price of good sold equates to the selling price for immediate payment plus 60 days of interest. An increased levels of accounts receivable imply an additional financing function of the company for the customers that is reflected in higher selling prices, and thus implicitly in the company’s sales. Such company would need itself to borrow money to cover the time gap or suffer the reduction of cash surplus which it would be otherwise available to invest. Hence, an implicit interest imputed in account receivables causes an overstatement of company’s sales.

- Analogously, if a company holds high level of inventory, it provides an additional valuable function for its suppliers and as such it should be compensated either by (i) obtaining lower purchase prices and thus reducing its costs of goods sold (“COGS”) or (ii) charging higher selling prices to cover costs of financing the additional inventory. In this regard, a company with greater inventory may appear to be more profitable than a company with lower inventory. This implicit interest imputed in inventory causes an overstatement of company’s COGS or sales.

- Contrary to accounts receivable, by carrying out accounts payable a company is in essence obtaining a “loan” from supplier. Hence, if one company has higher accounts payable than the other one, it is reasonable to expect that its costs associated with the purchase of goods (ie COGS) are higher since suppliers would require higher prices for goods sold in order to be compensated for an additional financing function and to cover their costs of capital. This implicit interest causes an overstatement of company’s costs of goods sold.

In the lights of the facts mentioned above, Operating Profit (“OP”) of companies with greater working capital is usually higher than OP of similar entities with lower working capital due to granting payment terms. By performing working capital adjustments, OP should be corrected for the implicit interest embedded in sales and COGS to increase the accuracy and comparability of tested companies.

**Table 3: Effects of Working Capital Adjustment on Operating Profit (OP)**

<table>
<thead>
<tr>
<th></th>
<th>Sales</th>
<th>COGS</th>
<th>EBIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts Receivable Adjustment</td>
<td>(-)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts Payable Adjustment</td>
<td></td>
<td>(-)</td>
<td>(+)</td>
</tr>
<tr>
<td>Inventory Adjustment</td>
<td></td>
<td>(+)</td>
<td>(-)</td>
</tr>
</tbody>
</table>

Source: Own compilation

Principally, there are three ways how to use working capital adjustments. The most basic one is to adjust both the tested party and the comparable companies to reflect “zero” working capital, ie no inventory, zero accounts receivable and zero accounts payable. Alternative calculation is to adjust OP of comparable companies to a tested party’s levels of working capital or vice versa.

For the purpose of this paper, the working capital adjustments will be performed to “zero”:

- Accounts receivable adjustment to “zero” reduces sales of a company by the embedded interest received from customers (via higher selling prices) for the financing received throughout the year.

- Inventory adjustment to “zero” increases a company’s costs of goods sold of a company by the embedded cost of financing the inventory held throughout the year.

- Accounts payable adjustment to “zero” reduces a company’s costs of goods sold the embedded interest paid to suppliers (via higher purchase prices) for the financing provided throughout the year.

### 2.4. Calculation of Working Capital Adjustments

In a transfer pricing literature, there are many articles (Scholz et al., 2002), (Newlon, 1994) focused on the computation of embedded interest components of payment terms. For the purpose of this paper, the capital adjustments...
will be calculated using the formula presented in the work of Miesel and Verma (2001). The formulation is derived from the following fundamental expressions:

\[ DR = \frac{AR}{Sales} \times 365, \] [4]

\[ \Delta AR = (DR_T - DR_A) \times \frac{Sales}{365}, \] [5]

Where:

- DR = Days receivable;
- AR = Accounts receivable;
- OP = Operating profit; and
- i = Interest rates for short-term loan;

the subscript A and T means Actual or, respectively, Target.

Subsequently, the relation between the accounts receivable adjustment and change in Operating profit (OP) is obtained by applying the following formulas:

\[ \Delta OP = \Delta AR \times \frac{i}{1+i \times \frac{DR_A}{365}} = \left( \frac{DR_T}{365} \times i \times \frac{Sales}{1+i \times \frac{OP}{365}} \right) - \left( \frac{DR_A}{365} \times i \times \frac{Sales}{1+i \times \frac{OP}{365}} \right) \] [6]

The above equation can be re-written to the following:

\[ \Delta OP = \Delta AR \times \frac{i}{1+i \times \frac{AR}{Sales}} \] [7]

The numerator approximates implicit interest embedded in sales over one year. The denominator calculates the present value of the implicit interest.

Analogically, the adjustment computation will be identical for accounts payables and inventory:

\[ \Delta OP = \Delta AR \times \frac{i}{1+i \times \frac{DP_A}{365}} = \Delta AP \times \frac{i}{1+i \times \frac{AP}{COGS}} \] [8]

\[ \Delta OP = \Delta INV \times \frac{i}{1+i \times \frac{INV}{365}} = \Delta INV \times \frac{i}{1+i \times \frac{INV}{COGS}} \] [9]

Where:

- DP = Days payable;
- AP = Accounts payable;
- COGS = Costs of goods sold
- INV = Inventory;
- i = Interest rates for short-term loan.

The subscript A and T means Actual or, respectively, Target.

Based on the working capital adjustment to zero, the operating profit margin ("OM") to “zero” is obtained by applying the following formula:

\[ OM = \frac{OP}{Sales}, \] [10]

\[ OM_{zer} = \frac{(Sales-AR_{zer})-(COGS-AP_{zer} + INV_{zer}) - SG&A}{Sales-AR_{zer}} \] [11]

Where:

- SG&A = Selling, and General Expenses & Amortization

3. Applicability of Working Capital Adjustments (Empirical Evidence)

3.1. Data Used in the Analysis

For purposes of determining the arm’s length profitability of a typical commissionaire for motor vehicle parts, the data from companies that are engaged in similar activities are required. When searching for companies providing commission services, it is found difficult or even impossible to distinguish the classic distributor from the commissionaire as the business activity/industry is usually rather based on activity or group products than functions performed. For example, the European companies are often screened using an official European statistical classification of economic activities – NACE rev.2 codes. In this regard, specific activities such as the provision of commission services etc. are likely not managed as a separate category, but rather overlapped by NACE codes indicating distribution/wholesales activities.

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2 “Nomenclature Generale des Activites Economiques” (“NACE”)
In the first step of benchmarking the commissionaire of motor vehicle parts, a search for distributors of motor vehicle parts is firstly performed. For this purpose, Amadeus database (update 228, September 2013)\(^3\) containing financial information on more than 3 million European companies is used.

The aim of database search is to identify companies with the following characteristics:
- Operate in similar markets to our hypothetical commissionaire;
- Are characterized independent; and
- Perform similar activities to our hypothetical commissionaire.

The print screen below summarises the steps taken within the search strategy in the Amadeus database:

<table>
<thead>
<tr>
<th>Update number</th>
<th>228</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data update</td>
<td>18 Sep 2013 (n° 2282)</td>
</tr>
<tr>
<td>Step result</td>
<td>Search result</td>
</tr>
<tr>
<td>All companies</td>
<td>3,169,920</td>
</tr>
<tr>
<td>1. Region/Country/region in country: European Union [28]</td>
<td>2,427,466</td>
</tr>
<tr>
<td>2. NACE Rev. 2 (Primary codes only): 4531 - Wholesale trade of motor vehicle parts and accessories</td>
<td>14,952</td>
</tr>
<tr>
<td>4. No of subs.: None</td>
<td>2,546,141</td>
</tr>
<tr>
<td>5. Working capital: All companies with a known value, 2011, 2010, 2009, for all the selected periods</td>
<td>1,476,791</td>
</tr>
<tr>
<td>6. Turnover: All companies with a known value, 2011, 2010, 2009, for all the selected periods</td>
<td>1,620,943</td>
</tr>
<tr>
<td>7. Operating P/L [=EBIT]: All companies with a known value, 2011, 2010, 2009, for all the selected periods</td>
<td>1,536,263</td>
</tr>
</tbody>
</table>

Boolean search : 1 And 2 And 3 And 4 And 5 And 6 And 7 And 8

Total No. of comparables 109

Based on search steps No. 1 - 4, the independent companies from European Union operating under the NACE Rev.2 code 4531 - Wholesale trade of motor vehicle parts and accessories were selected. Furthermore, criteria No. 5 - 7 were applied to check data availability of potentially comparable companies. Only companies which had known values of Turnover, EBIT and Working capital for all the selected years (2011, 2010 and 2009) were selected.

Using the above search steps, Amadeus database generated 109 companies applicable for the purposes of this analysis. Subsequently, the financial screening was performed:
- Companies had known values of Sales and COGS:
  - If Sales values were not available, Turnover (Operating revenue) was used instead.
  - If COGS values were not available, Material costs were used instead.
- Sales, COGS are different from zero
  - For the calculation of Operating profit margin (OP) and Days receivable/Days payable, Sales and COGS of companies (or respectively Turnover and Material costs where relevant) do not equal to zero.

By applying the financial screening, a sample of potentially comparable companies to our hypothetical commissionaire of motor vehicle parts was reduced to 105 companies.

3.2. Interest Rates to Be Applied

For companies within the Euro area, one-year lending interest rate to enterprises was taken from the European Central Bank monthly bulletins as reference rates used in this paper. For countries outside Euro area, lending interest rates were obtained from the International Financial Statistics published by the International Monetary Fund (“IMF”). Where data was not available, CIA World Factbook was reviewed as a last resort.

3.3. Determination of the Arm’s Length Range

In order to define the arm's length value(s) of the OM in the most reliable way, the inter-quartile range (further “IQR”) was applied based on the recommendation of the OECD Guidelines. The IQR is defined as a group of the 50 per cent the most frequent values in the set and represents all figures situated between the lower and the upper quartiles.

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\(^3\) A pan-European database developed by the Bureau van Dijk EP, containing information and financial data of enterprises seated in Europe.
3.4. Results of the Analysis

By employing the working capital adjustments to zero, the following results of OM were obtained:

<table>
<thead>
<tr>
<th>Year</th>
<th>OM 2011</th>
<th>OM 2010</th>
<th>OM 2009</th>
<th>3-yr average</th>
<th>OM_adj 2011</th>
<th>OM_adj 2010</th>
<th>OM_adj 2009</th>
<th>3-yr average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>-7.75%</td>
<td>-13.37%</td>
<td>-7.15%</td>
<td>-6.09%</td>
<td>-7.62%</td>
<td>-15.89%</td>
<td>-12.19%</td>
<td>-8.44%</td>
</tr>
<tr>
<td>Lower quartile</td>
<td>1.75%</td>
<td>1.70%</td>
<td>1.79%</td>
<td>1.75%</td>
<td>0.64%</td>
<td>0.67%</td>
<td>0.72%</td>
<td>0.71%</td>
</tr>
<tr>
<td>Median</td>
<td>3.34%</td>
<td>3.96%</td>
<td>3.74%</td>
<td>3.94%</td>
<td>2.41%</td>
<td>2.83%</td>
<td>2.97%</td>
<td>2.91%</td>
</tr>
<tr>
<td>Upper quartile</td>
<td>6.78%</td>
<td>6.14%</td>
<td>6.81%</td>
<td>6.23%</td>
<td>5.62%</td>
<td>5.22%</td>
<td>5.42%</td>
<td>4.97%</td>
</tr>
<tr>
<td>Maximum</td>
<td>19.93%</td>
<td>22.23%</td>
<td>20.05%</td>
<td>19.23%</td>
<td>19.67%</td>
<td>21.97%</td>
<td>18.21%</td>
<td>18.87%</td>
</tr>
</tbody>
</table>

As shown from the table above, adjusted OMs are lower than unadjusted OMs which imply that IQR of adjusted OMs is placed lower than IQR of unadjusted OMs. The results are consistent with the transfer pricing theory according to which a profit margin attributed to the commissionaire should be lower than profit margin of the distributor in compliance with their functional profiles. The results can be also graphically demonstrated as follows:

Figure 4: IQR Comparison - Unadjusted OM vs. Working Capital Adjusted OM to Zero

Provided that the capital adjustment is made to inventory only, the differences in OMs are rather slight, whereby the IQR of adjusted OMs is overlapped with IQR of unadjusted OMs.
4. Critical Aspects to Be Considered

When the working capital adjustments are intended to be made, the following critical aspects should be considered:

a) **Appropriateness of working capital adjustments to be used**

The results of the analysis performed by Hejazi (2004) prove that in perfectly competitive environment where each firm is assumed to be a price taker, the working capital adjustments are a requirement. Nevertheless, pursuant to the provisions of OECD Guidelines (Annex to Chapter III), the working capital adjustments should not be automatically made and would not be automatically accepted by tax authorities. They should only be considered when the reliability of the comparables will be improved.

Hence, alternative approaches should be taken into consideration. For instance, an applicability of quantitative criteria such as diagnostic ratios in terms of days of inventory, days of receivable or turnover per employee etc. during a search process represents possible option how to distinguish the commissionaire from the classic distributor. This approach is also discussed in the work of Jelínek (2009). Nevertheless, the diagnostic ratios are employed during the search process, while the working capital adjustments are applied to the final set of comparable companies, whereby their combination is not recommended as it may finally lead to a significant distortion of the margin values due to potential overlapping.

Furthermore, it is necessary to consider whether adjustments of working capital would be the most appropriate solution. For a company having higher level of inventory and receivables but lower levels of all other assets compared to selected comparable companies, the applicability of an adjustment for all other assets instead of working capital, or eventually, the applicability of a more suitable profit level indicator such as ROA (Return on assets) would be questioning.

b) **Interest rates to be applied**

The calculation of working capital adjustments accounts for the implicit interest embedded in inventory, accounts receivable, and accounts payable. In general, if comparable companies are from different countries, they face different costs of capital. Therefore, using corresponding interest rates will partially adjust for such differences. As mentioned in OECD Guidelines (annex to chapter III), a commercial loan (lending) rate may be appropriate in most cases. The importance of appropriate interest rates to be applied is stressed in the context of turbulent environment (eg financial crisis) when significant differences in risk-free interest rates may be observed throughout Europe (Bittner - Jann, 2011).

Nevertheless, with regard to the fact that Amadeus database is geographically limited to European companies (or European Union as in our case), differences in adjusted OM caused by differences in interest rates are rather low. The simplifying assumption of identical interest rates is also reflected in the hypothetical capital adjustment calculation presented in OECD Guidelines (annex to chapter III). For the comparison, the Figure 6 demonstrates how the IQR changes if a fixed interest rate of 5% for all given periods (2009-2011) is used in place of a relevant corporate lending rate.
c) Choice of payment terms

Some transfer pricing practitioners discuss the importance of the choice of payment terms to be used. In the work of Miesel and Verma (2001), it is demonstrated that extreme payment terms can materially affect the IQR range since the ranking of the comparable companies may be reversed due to choice of payment terms. They advise to choose comparable companies with the similar payment terms as that of the tested party and then to apply average payment terms of comparable companies to be benchmarked.

Mert-Beydilli and Suzme (2002) discuss the reliability of results when zero payment terms are used. Based on their conclusions, two factors must be taken into consideration when applying adjustments – (1) the degree of comparability between the tested party and comparables measured by the difference between the ratio of the adjusted denominator of the selected profit level indicator to sales and to cost of sales and (2) the comparables’ level of payment terms. Specifically, they show that adjusting to zero payment terms may results in substantially different implied target profits for the tested party if the comparability is poor and comparables operate at relatively long payment terms.

Conclusion

Working capital adjustments are found a useful tool for determining the arm’s length profitability for simplest entities in the value chain such as commissionaires or toll manufactures. The analysis outlined in this paper demonstrates that working capital adjustments may significantly influenced the position of IQR. Furthermore, a fundamental assumption that the commissionaire performing routine functions and bearing low risks should achieve lower OMs than the standard distributor was confirmed. On the other hand, working capital adjustments may be also tool for manipulation of the arm’s length results due to inconsistency and vagueness of rules for their application in terms of a calculation method, interest rates to be used and payment terms to be benchmarked. In this context, the working capital adjustments are assumed to really increase the comparability and reliability only if clear rules are adopted to make their application consistent and transparent. Otherwise, the arm’s length range would be distorted.

Acknowledgement

The article is processed as an output of the research project Business strategies on the globalized markets – MF/13/2012 as part of the research activities of the University of Economics in Prague.

References
