Verrechnungspreise in der C-Suite
Disruption und Verteidigung
Workshop 3 - Alternativer Fremdvergleich
Henrik Handte, Dr. Nael Al-Anaswah - 27. Februar 2019
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Introduction and overview of alternative approaches
Introduction and overview of alternative approaches

Alternative approaches support traditional arm’s length analysis with the aim of increasing level of comfort in tax audits

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<td>• Approach 2: Market approach (How do third parties behave?)</td>
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<td>• Justification vs. arm’s length behavior</td>
<td>• Approach 3: Price-setting-approach</td>
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<td>• Approach 4A: ROIC approach</td>
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<td></td>
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</tr>
</tbody>
</table>

Improve defendability of TP in tax audits
Approach 1: Alternative CUP (based on DPMA and Markables database)
Approach 1A: CUP based on the German Patent and Trademark Office (DPMA)

General idea

CUP approach based on settlement proposals and decisions from the German Patent and Trademark Office

Establish perspective of the arm’s length transfer prices by observing the arrangements and conditions of similar transactions with a third party or between unrelated parties.

Center of expertise for industrial property protection in Germany.

Largest national IP office in Europe and 5th largest national parent office in the world.

Arbitration Board under the Employee Inventions Act: Settle invention-related disputes between an employee and his/her employer.
## Approach 1A: CUP based on the German Patent and Trademark Office (DPMA)
### Selected settlement proposals and decisions results between 2012 - 2017

<table>
<thead>
<tr>
<th>Reference</th>
<th>Type of IP</th>
<th>License object</th>
<th>License rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arb. Erf. 11/11</td>
<td>Patent</td>
<td>Production process for medicinal active agent</td>
<td>8.00% - 10.00%</td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arb. Erf. 41/12</td>
<td>Patent</td>
<td></td>
<td>3.00%</td>
</tr>
<tr>
<td>Arb. Erf. 13/13</td>
<td>n/a</td>
<td>n/a</td>
<td>30.00% from achieved revenue</td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arb. Erf. 09/13</td>
<td>n/a</td>
<td>Dual clutch transmission</td>
<td>0.50% - 1.50%</td>
</tr>
<tr>
<td>Arb. Erf. 07/13</td>
<td>n/a</td>
<td>n/a</td>
<td>3.00%</td>
</tr>
<tr>
<td>Arb. Erf. 60/12</td>
<td>Patent</td>
<td>Patent within the automotive engineering sector</td>
<td>1.00%</td>
</tr>
<tr>
<td>Arb. Erf. 18/13</td>
<td>Patent</td>
<td>Patent within the automotive engineering and medical engineering sector</td>
<td>1.00%, 5.00%</td>
</tr>
<tr>
<td>Arb. Erf. 03/13</td>
<td>n/a</td>
<td>n/a</td>
<td>0.50%</td>
</tr>
<tr>
<td>Arb. Erf. 25/13</td>
<td>Patent</td>
<td>n/a</td>
<td>20% from profit</td>
</tr>
<tr>
<td>2016</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arb. Erf. 65/13</td>
<td>Patent</td>
<td>Patent within an automotive sector</td>
<td>0.60%</td>
</tr>
<tr>
<td>Arb. Erf. 28/13</td>
<td>Patent</td>
<td>Drug formulation</td>
<td>0.60%</td>
</tr>
<tr>
<td>Arb. Erf. 02/14</td>
<td>Patent</td>
<td>Production process for plant protection products</td>
<td>3.50%</td>
</tr>
</tbody>
</table>
### Approach 1A: CUP based on the German Patent and Trademark Office (DPMA)

**Selected settlement proposals and decisions results between 2012 - 2017**

<table>
<thead>
<tr>
<th>Reference</th>
<th>Type of IP</th>
<th>License object</th>
<th>License rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arb.Erf. 23/12</td>
<td>Patent</td>
<td>Process for slot machines</td>
<td>1.00%</td>
</tr>
<tr>
<td>Arb.Erf. 13/14</td>
<td>Patent</td>
<td>Process for material production</td>
<td>0.66% - 2.00%</td>
</tr>
<tr>
<td>Arb.Erf. 53/13</td>
<td>Patent</td>
<td>Computer software</td>
<td>2.50%</td>
</tr>
<tr>
<td>Arb.Erf. 57/13</td>
<td>Patent</td>
<td>Patent within the automotive sector</td>
<td>1.00%</td>
</tr>
<tr>
<td>Arb.Erf. 03/14</td>
<td>Patent</td>
<td>Patent within the automotive sector</td>
<td>0.80%</td>
</tr>
<tr>
<td>Arb.Erf. 26/14</td>
<td>Patent</td>
<td>Patent within the aviation sector</td>
<td>1.20%</td>
</tr>
<tr>
<td>Arb.Erf. 04/14</td>
<td>Patent</td>
<td>Patent within the plastic material sector</td>
<td>7.50%</td>
</tr>
<tr>
<td>Arb.Erf. 73/13</td>
<td>Patent</td>
<td>Patent within the IT security sector</td>
<td>2.00%</td>
</tr>
<tr>
<td>Arb.Erf. 48/14</td>
<td>Patent</td>
<td>n/a</td>
<td>0.80% , 1.00%</td>
</tr>
<tr>
<td>Arb.Erf. 67/14</td>
<td>Patent</td>
<td>Patent within the automotive sector</td>
<td>1.00%</td>
</tr>
<tr>
<td>Arb.Erf. 21/15</td>
<td>n/a</td>
<td>n/a</td>
<td>0.80%</td>
</tr>
</tbody>
</table>
Approach 1A: CUP based on the German Patent and Trademark Office (DPMA)

Result analysis

1. The database presents the information on an anonymous basis
   - No concrete details on the settlements and proposals
   - Does not have extensive numbers of settlements with license rates and license objects

2. However, represent decisions made and viewpoints of the DPMA
   - Can provide indications

3. More information on each settlements (incl. license rates) are available in the later years
   - Potential for the future

4. Could be use as a corroborative analysis
Approach 1B: CUP based on Markables database
General idea and assessment

Additional database for trademarks

• 7,709 trademark valuations from over 100 countries worldwide
• Sources: Publicly available information from performed valuation e.g. in the context of PPAs, impairment testing, transfer pricing etc.

Considerations

• Implied royalty rates, not actual royalty rates (but assumptions are made clear)
• Different objective of the IP valuation: PPAs at the fair value concept (related parties)
• Comparability of the valuation method, e.g. useful life of IP
• Hard to verify some data/calculations, e.g. no information about the input parameters
• However, increasing applicability and as such valid source for corroborative analysis.
## Approach 1B: CUP based on Markables database

**Example**

### Trademark Valuation Multiples

<table>
<thead>
<tr>
<th>Project Reference</th>
<th>December 15, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company / Business / Brand</td>
<td>Bari Cosmetics, Ltd.</td>
</tr>
</tbody>
</table>

### Markables ID

- **Markables ID**: 19467
- **Revlon Consumer Products Corp.**: 2012
- **United States**: currency
- **United States Dollar (USD) million**: 1.20x

### Trademark in relation to other assets

<table>
<thead>
<tr>
<th>Asset Type</th>
<th>Enterprise Value</th>
<th>% of Total Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trademark / Brand (10 years)</td>
<td>14.8%</td>
<td>14.8%</td>
</tr>
<tr>
<td>Customer Relations (19 years)</td>
<td>50.3%</td>
<td>50.3%</td>
</tr>
<tr>
<td>Other Intangible Assets</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Goodwill</td>
<td>34.9%</td>
<td>34.9%</td>
</tr>
<tr>
<td>Tangible Assets (Total)</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

### Trademark multiples – revenue based

- **trademark value / revenues in %**: 17.8%
  - **Implied trademark royalty rates**
    - Growing revenues assumption: 3.1%
    - Implied royalty rate – low: 3.4%
    - Implied royalty rate – high: 3.7%

### Trademark multiples – profit based

- **trademark profit split**: 14.8%
  - **valuation parameters**
    - Reported discount rate
    - Corporate tax rate (United States): 40%
Approach 2: Market approach (How do third parties behave?)
Approach 2: Market approach (How do third parties behave?)

Overview pricing from marketing

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**Product costs**

**Price floor**
No profits below this price

$  

**Price ceiling**
No demand above this price

$$

**Competition and other external factors**

- Competitors’ strategies and prices
- Marketing strategy, objectives, and mix
- Nature of the market and demand

**Consumer perceptions of value**

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3 Models

- Cost-based pricing
- Competition based pricing
- Customer value-based pricing

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From: Principles of Marketing; Gary Armstrong, Philip Kotler; Pearson 2001

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2019 Deloitte
Approach 2: Market approach (How do third parties behave?)
Translated into a transfer pricing set-up

- **Product costs**
  - **Price floor**: No profits below this price
  - **Price ceiling**: No demand above this price

- **Competition and other external factors**
  - Competitors’ strategies and prices
  - Marketing strategy, objectives, and mix
  - Nature of the market and demand

- **Consumer perceptions of value**
  - Minimum
    - Cost approach
    - No consideration of mark-up
  - Bargain
    - Competition (polypoly, oligopoly, monopoly) in a stand-alone case
    - Pricing Strategies
    - Lock-in effects
  - Maximum
    - Max. willingness to pay
    - For distributors: its selling price minus running cost
    - If they pay above: no profit / routine profit e.g. for distributor

From: Principles of Marketing; Gary Armstrong, Philip Kotler; Pearson 2001
Approach 2: Market approach (How do third parties behave?)
Example: Argumentation in tax audit for low/ different profitability of local routine distributors

Assumptions
- Distributors can buy product only from Entrepreneur
- Distributors cannot do arbitrage trading among each other
- Competition: monopoly situation
- Benchmark study for routine distribution: comparables act in a competitive environment

Scenario 1: no price discrimination possible
- \( TP_1 = TP_2 = TP_i \)
- \( P_1 \neq P_2 \neq P_i \) und \( C_{D1} = C_{D2} = C_i \) \( \rightarrow \) Profitability of \( D_1, D_2 \) and \( D_3 \) different
- Entrepreneur calculates TP by maximizing its profit \( \rightarrow TP_{Monopoly} > TP_{Competition} \) \( \rightarrow \) Profitability of distributors decrease
- Application:
  - Tax auditor challenges different profitability of routine distributors in different countries
  - Tax auditor challenges profitability below benchmarking results of local distributors

Scenario 2: price discrimination possible
- \( TP_1 \neq TP_2 \neq TP_i \)
- Entrepreneur sets TP, to maximum willingness to pay of \( D_i \rightarrow TP_{Monopoly} \) increases \( \rightarrow \) Profitability of distributor equals zero
- Application: Tax auditor challenges profitability below benchmarking results or even zero profitability of local distributors
Approach 3: Price-setting approach
Approach 3: Price-setting approach
Price-setting in the context of TP lifecycle

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Business Model</strong></td>
<td>Starting point are the different intercompany transactions in the multinational group</td>
</tr>
<tr>
<td><strong>TP Planning</strong></td>
<td>Planning of TP for different intercompany transaction categories under consideration of the arm’s length principle</td>
</tr>
<tr>
<td><strong>TP Calculation</strong></td>
<td>Calculate the transfer prices for the different products, services, etc.</td>
</tr>
<tr>
<td><strong>Business Process</strong></td>
<td>Running of business during the year</td>
</tr>
<tr>
<td><strong>Monitoring and Analytics</strong></td>
<td>Monitor profitability and compare with arm’s length target margins and if necessary calculations and booking of adjustments</td>
</tr>
<tr>
<td><strong>TP Documentation</strong></td>
<td>Preparation of TP documentation</td>
</tr>
<tr>
<td><strong>Tax Audit</strong></td>
<td>Defend transfer prices in tax audits and management of local tax audits on a global level</td>
</tr>
</tbody>
</table>
Approach 3: Price-setting approach
General idea

Price-setting approach

Ensure arm’s length transfer prices by considering the arm’s length principle already at the point in time transfer prices are set. This ex-ante approach requires clearly defined policies and manual for calculation, monitoring and adjustment of transfer prices.

Budget phase/ beginning FY year
Calculation of transfer prices follows clearly defined principles under consideration of the arm’s length principle. The approach is outlined in TP policies and manuals in order to allow responsible persons to be compliant with the requirements.

During FY year (monthly/ quarterly)
Under the year monitoring of the profitability of the entities takes place. In case deviations from target margins are recognized, adjustments are performed. Monitoring and adjustment mechanisms are also outlined in TP policies and manuals.

Year end
The overall process (i.e. setting and monitoring/adjusting) ensures arm’s length results at year end without year end adjustments. Even if local profitability is out of the arm’s length range, adjustments might not be required.
Approach 3: Price-setting approach
Highly relevant in Germany due to new GAufzV

Time of TP setting

§4 Abs. 1 Nr. 4. a) GAufzV

“Time of TP setting”

Available and used information for TP setting

§4 Abs. 1 Nr. 4. b) GAufzV

“Documentation of information that was available and used in the course of deriving transfer prices as long as such information is relevant for taxation.”

Transparency regarding benchmark studies

§4 Abs. 3 GAufzV

“[…]. Tax payer […] needs to disclose search strategy […]. Search criteria, search results […]. Selection process. The whole search process […] must be retraceable.”
Approach 3: Price-setting approach
Implementation of price-setting in practice (1/2)

**Determine targets**
- Determine TP methods for the different intercompany transaction categories
- Derive arm’s length margins/ profitability for different F&R profiles

**Guidance to achieve targets**
- Define calculation mechanism for transfer prices
- Product specific

**Define processes and responsibilities**
- Define processes
- Decide on responsibilities
Approach 3: Price-setting approach
Implementation of price-setting in practice (2/2)

TP Policy
General definition of arm’s length approach, can be provided to tax authorities.

TP Manual
Manual covering detailed work steps to derive arm’s length transfer prices.

TP Operating Model
Process flow charts or RACI-Matrix to clearly define processes and responsibilities.
Approach 4: Advanced Benchmarking (ROIC and Country Risk Adjustments)
Approach 4A: ROIC Approach
Benchmarking with ROIC

**ROIC approach**
- A PLI under TNMM (benchmarking)
- Can be converted into price, margin (implementation)

**Assumptions on value of assets**
- Benchmarked entities tend to be simpler, incurring lower risk
  - Assumption no or little goodwill is created, and
  - Assumption D&A are representative of economic decay
  - > Assumption BV of assets is a fair reflection of MV of assets

**Assumption on capital structure**
- Disregard actual capital structure
- Benchmark arm’s length capital structure or model optimal – at equilibrium – capital structure
## Approach 4A: ROIC approach

### Benchmarking with ROIC

<table>
<thead>
<tr>
<th>ROIC</th>
<th>B/S</th>
</tr>
</thead>
<tbody>
<tr>
<td>E/(E+D) 40.0%</td>
<td>Fix. assets 100</td>
</tr>
<tr>
<td>D/(E+D) 60.0%</td>
<td>E+D 350</td>
</tr>
<tr>
<td>Post tax cost of equity 11.2%</td>
<td>Cur. assets 300</td>
</tr>
<tr>
<td>Taxes 30.0%</td>
<td>Oth. Liab. 50</td>
</tr>
<tr>
<td>Pre-tax cost of equity 16.0%</td>
<td>Statutory rate, historic ETR</td>
</tr>
<tr>
<td>Pre-tax cost of debt 6.0%</td>
<td></td>
</tr>
<tr>
<td>ROIC 10.0%</td>
<td>Interco policy, actual cost of debt</td>
</tr>
</tbody>
</table>

**Origin of data:**

- **E/(E+D):** Bloomberg comps, academic sources
- **D/(E+D):** CAPM => beta is ‘comparable’
- **Post tax cost of equity:** Statutory rate, historic ETR
- **Taxes:** 30.0%
- **Pre-tax cost of equity:** 16.0%
- **Pre-tax cost of debt:** 6.0%
- **ROIC:** 10.0%

**P&L**

- **Sales:** 1400.0
- **CoGS:** 1165.0
- **GP:** 235.0
- **OE:** 200.0
- **OP:** 35.0
- **OM:** 2.5%

**B/S**

- **TP**
  - Fix. assets: 100
  - E+D: 350
  - Cur. assets: 300
  - Oth. Liab.: 50
  - TP: 400
Approach 4B: Country risk adjustment approach

General idea - Theory

The adjustment is calculated by adjusting the operating profit of the non-local comparable company (CompCo) to reflect an expected additional return on operating assets with the country specific risk premium as a proxy.

- **Adjustment** = [operating assets of CompCo] * [country specific risk premium]
- Adjustment is applied on (added to) CompCo operating profit achieving an adjusted operating profit

The average long-term government bond yield (the risk free rate) is used as a proxy for the country specific risk premium.
The 10-year bond yield rate and the 5-year bond yield rate of the identified countries and the tested party country are obtained. We used an average of the 5 and 10 year bond yields.

The bond yield gap is calculated by deducting the identified comparable countries average yield rate from the tested party’s average yield rate.

Multiply the relevant bond yield gap with the operating assets of each identified comparable company to calculate the adjustment for country specific risk.

<table>
<thead>
<tr>
<th>Country</th>
<th>10-year bond yield rate</th>
<th>5-year bond yield rate</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estonia</td>
<td>6.69%</td>
<td>6.69%</td>
<td>6.69%</td>
</tr>
<tr>
<td>Turkey</td>
<td>10.94%</td>
<td>11.54%</td>
<td>11.24%</td>
</tr>
<tr>
<td>Egypt</td>
<td>15.65%</td>
<td>15.30%</td>
<td>15.48%</td>
</tr>
</tbody>
</table>

Relationship | The bond yield gap |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt - Turkey</td>
<td>4.24%</td>
</tr>
<tr>
<td>Egypt - Estonia</td>
<td>8.79%</td>
</tr>
</tbody>
</table>

\[
\text{MOTC} = \frac{\text{Adjusted operating profit}}{(\text{Operating revenue} - \text{Adjusted operating profit})}
\]
Approach 4B: Country risk adjustment approach

Implementation example

**Step 4**
Add the adjustment for the country specific risk to the operating profit of the selected company to calculate the adjusted operating profit.

\[
\text{[Operating assets of CompCo] x [Country specific risk premium]}
\]

**Step 5**
Calculate the MOTC.

\[
\text{MOTC} = \frac{\text{Adjusted operating profit}}{(\text{Operating revenue} - \text{Adjusted operating profit})}
\]

**Step 6**
Then calculate the adjusted IQR to reflect the additional return based on the risk of each country.

<table>
<thead>
<tr>
<th><strong>Unadjusted IQR</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Comparable Set</strong></td>
</tr>
<tr>
<td>Companies</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Adjusted IQR</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Comparable Set</strong></td>
</tr>
<tr>
<td>Companies</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Kontaktdaten der Referenten, die Ihnen gerne als Ansprechpartner zum Thema zur Verfügung stehen

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