## Example 1-on the valuation for function relocations ${ }^{1}$

## 1. Facts and general assumptions

A domestic parent corporation (MG) transferred a transfer package to a newly established foreign subsidiary corporation (TG) on 01.01 . of the year.

The sustainably achievable financial surplus (FÜ) within the meaning of § 2 FVerlV from the transferred function from the perspective of the transferring MG is expected to amount to EUR 600,000 annually. The TG taking over, on the other hand, expects a financial surplus of EUR 700,000 per year. The domestic income tax burden of the MG is expected to be $25 \%\left(\mathrm{sU}_{\mathrm{MG}}\right)$, the foreign burden of the TG 20 \% ( sU_TG ).

The following further assumptions should apply equally to both companies:

- Subsequent inflow of the above-mentioned FC from the valuation date.
- Full equity financing (MG and TG is unleveraged).
- Application of the Capital Asset Pricing Model (CAPM).
- Maturity-equivalent capitalisation interest rate (i) of all future periods (T):

| Market risk premium before personal income taxes $\mathrm{MRP}_{\mathrm{vSt}}$ | $8.00 \%$ |  |
| :--- | :--- | ---: |
| $\times$ Beta factor for equity | $\beta \mathrm{EK}$ | 1,00 |
| $=$ Risk premium |  | $8,00 \%$ |
| + Risk-free (base) interest rate | $\mathrm{r}_{\mathrm{f}}$ | $2,00 \%$ |
| $=$ Expected return of equity investors | $\mathrm{r}_{\mathrm{EK}}=\mathrm{i}$ | $10,00 \%$ |

### 1.1. Case variant $A$

- Consideration of exemplary synergy and tax effects (§ 2 FVerlV) -

In addition to the general information (see above), an unlimited capitalisation period is to be assumed. Furthermore, the book values ( ${ }_{\mathrm{BWMG}}$ ) of the assets included in the transfer package should be fully depreciated for tax purposes in Germany. Abroad, these assets are to be depreciable for tax purposes on a straight-line basis over 3 years (stl_NDTG). The sum of the values of these assets should correspond to the total value of the transfer package.
a) Determination of the minimum price for MG (example EXIT tax)
aa) Net Present Value (NPV) from MG's point of view
$\mathbf{N P V}_{\mathbf{M G}}=\frac{\text { FÜMG }}{\mathrm{i}_{\mathrm{MG}}}=\frac{600 \mathrm{TEUR}}{10 \%}=\mathbf{6 , 0 0 0} \mathbf{T E U R}$
ab) Minimum price MG taking into account the EXIT tax from the transfer


[^0]b) Determination of the maximum price for TG (example tax-amortisationbenefit): ba) Net present value (NPV) from the point of view of TG

bb) Maximum price TG taking into account the "Tax Amortisation Benefit" (TAB)

| Periods tibis t 3 | 1 | 2 | 3 |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Discount rates: } 1 \div(1+\mathrm{i})_{\mathrm{TG}}{ }^{\mathrm{t}} \\ & \times \text { depreciation in \% p.a. for } \\ & \text { stl_ND } \mathrm{ND}_{\mathrm{TG}} \end{aligned}$ | $\begin{array}{r} \hline 0,9091 \\ 33 \% \end{array}$ | $\begin{array}{r} \hline 0,8264 \\ 33 \% \end{array}$ | 0,7513 $33 \%$ |
| $\begin{aligned} & =\text { Present values of depreciation } \\ & \times{ }_{\text {sU_TG }} \end{aligned}$ | $\begin{array}{r} \hline 0,3030 \\ 20 \% \end{array}$ | $\begin{array}{r} \hline 0,2755 \\ 20 \% \end{array}$ | $\begin{array}{r}\text { 0,2504 } \\ 20 \% \\ \hline 0,0501\end{array}$ |
| = Tax savings from depreciation | 0,0606 | 0,0551 | 0,0501 |
| $\rightarrow$ Sum of these tax savings (StE): 0,1658 |  |  |  |

Maximum price TG $=$ NPV $_{\text {TG }} \times$ Step-Up-Factor $={ }_{\text {TAB }}$

$$
=\text { 7.000 TEUR } \times 1,1987=\text { 8.391 TEUR }
$$

## c) Determination of the settlement value:

The minimum price is to be assumed as 8,000 TEUR and the maximum price as 8,391 TEUR. Since there are no indications that speak against the assumption of the average value of the agreement range as the agreement value, this corresponds to a value in the amount of 8,196 TEUR.

### 1.2. Case variant $B$

- Limited capitalisation periods -

In addition to the general information (see above), the assumption is to apply that, due to the developments that can be expected in the future, the capitalisation period for MG is to be limited to 3 years ( $\mathrm{tmG}=3$ ) and for TG to 5 years ( $\mathrm{ttG}=5$ ). The reasons for this had been credibly explained (§ 5 FVerlV). The annual FC should continue to accrue in each period ( t ) to the extent mentioned above. In addition, the book values ( $\mathrm{BWMG}^{\text {) }}$ ) of the domestic assets included in the transfer package should still be 1,000 TEUR. For the TG, the ${ }_{\text {step-up }}$ factorTAB remains 1.1987.
a) Determination of the minimum price (example limited capitalisation period):
aa) Net Present Value (NPV) from MG's point of view

| Period $\mathrm{n}_{\mathrm{t} 1 \mathrm{bis} \mathrm{t}} \mathrm{t}$ | 1 | 2 | 3 |
| :---: | ---: | ---: | ---: |
| Discount rates: $1 \div(1+\mathrm{i})_{\mathrm{MG}^{\mathrm{t}}}$ | 0,9091 | 0,8264 | 0,7513 |
| $\times$ Payment surpluses $(\mathrm{FU})_{\mathrm{MG}}$ | 600 TEUR | 600 TEUR | 600 TEUR |
| $=$ Present values in $\mathrm{t}_{0}$ | 545 TEUR | 496 TEUR | 451 TEUR |

$\rightarrow$ Sum of present values in $\mathrm{t}_{0}=$ NPV $_{\text {MG }}: \quad$ 1,492 TEUR
ab) Minimum price MG taking into account the EXIT tax from the transfer
$\underset{\text { price }}{\text { Minimum }}$
$\mathbf{M G}^{=} \frac{\mathrm{NPV}_{\mathrm{MG}}-\left(\mathrm{s}_{\mathrm{U}-\mathrm{MG}} \times \mathrm{BW}_{\mathrm{MG}}\right)}{(1-\mathrm{s})}=\frac{1,492 \mathrm{TEUR}-(25 \% \times 1,000 \mathrm{TEUR})}{1-25 \%}=1,656$ TEUR
b) Determination of the maximum price for TG (example tax-amortisation-
benefit): ba) Net present value (NPV) from the point of view of TG

| Periods ${ }_{\text {tibis }} \mathrm{t}$ | 1 | 2 | 3 | 4 | 5 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Discount rates: $1 \div(1+\mathrm{i})_{\mathrm{TG}}{ }^{\mathrm{t}}$ | 0,9091 | 0,8264 | 0,7513 | 0,6830 | 0,6209 |
| $\times$ Payment surpluses $(\mathrm{FÜ})_{\mathrm{TG}}$ | 700 TEUR | 700 TEUR | 700 TEUR | 700 TEUR | 700 TEUR |
| $=$ Present values in $\mathrm{t}_{0}$ | 636 TEUR | 579 TEUR | 526 TEUR | 478 TEUR | 435 TEUR |

$\rightarrow$ Sum of present values in $t_{0}=$ NPV $_{\text {TG }}: \quad \mathbf{2 , 6 5 4}$ TEUR
bb) Maximum price TG taking into account the "Tax Amortisation Benefit" (TAB)
$\rightarrow$ Step-up factor ${ }_{\mathbf{T A B}}$ unchanged from case variant $A$ : 1.1987
Maximum price ${ }_{\text {TG }}=$ NPV $_{\text {TG }} \times$ Step-Up-Factor $={ }_{T A B}$
$=$ 2.654 TEUR $\times 1,1987=$ 3.181 TEUR
b) Determination of the settlement value:

The minimum priceMg is 1,656 TEUR and the maximum priceTG is 3,181 TEUR. Since there are no indications against the mean value ( 2,419 TEUR) of the agreement range for the determination of the agreement value, this value is to be used as a basis for taxation.

### 1.3. Variation of case variant B price adjustment clause -

In the follow-up review it is found that the TG - in deviation from the original planning (cf. case variant B, letter b)) - has actually achieved FC in the amount of EUR 805,000 (instead of EUR 700,000) and is still achieving it in the sixth year (now ${ }_{\text {TTG }}=6$ ). In the future, however, no further FC from the transfer package was to be expected. The parties (MG and TG) had neither concluded a price adjustment clause nor a licence agreement. The taxpayer was unable to rebut the statutory presumption of $\S 1$ a sentence 1 AStG that uncertainties existed with regard to the price agreement at the time the transaction was concluded and that independent third parties had agreed on a proper adjustment arrangement. The previous minimum valueTG of EUR $1,656,000$ continues to apply unchanged. The new maximum priceTG is determined as follows:
a) New net present value (NPV) from TG perspective

| Periods tlbis t | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Discount rates: $1 \div(1+\mathrm{i})_{\mathrm{TG}}{ }^{\mathrm{t}}$ | 0,9091 | 0,8264 | 0,7513 | 0,6830 | 0,6209 | 0,5645 |
| $\times$ Payment surpluses $(\mathrm{FU})_{\mathrm{TG}}$ | 805 TEUR | 805 TEUR | 805 TEUR | 805 TEUR | 805 TEUR | 805 TEUR |
| $=$ Present values in $\mathrm{t}_{0}$ | 732 TEUR | 665 TEUR | 605 TEUR | 550 TEUR | 500 TEUR | 454 TEUR |

$\rightarrow$ Sum of present values in $\mathrm{t}_{0}=\mathbf{N P} V_{\text {TG }}: \quad \mathbf{3 , 5 0 6}$ TEUR
b) New maximum price TG taking into account the "Tax Amortisation Benefit" (TAB)
$\rightarrow$ Step-up factor ${ }_{\text {TAB }}$ unchanged from case variant $A: \quad \mathbf{1 , 1 9 8 7}$
$\underset{\text { price }}{\operatorname{Max}} \underset{\operatorname{Maximum}}{ } \quad=\quad \mathrm{NPV}_{\mathrm{TG}} \times$ Step-Up-Factor ${ }_{\mathrm{TAB}}=$ price $_{\text {TG }}$

$$
=3,506 \mathrm{TEUR} \times 1,1987=4,203 \mathbf{T E U R}
$$

Due to the actual profit development of the TG, a new maximum price of 4,203 TEUR results. The average value of the new agreement range ( $\mathbf{1 , 6 5 6}$ TUER to $\mathbf{4 , 2 0 3}$ TEUR) is $\mathbf{2 , 9 3 0}$ TEUR. A significant deviation within the meaning of section 1a sentence 1 AStG exists, since the actual value of EUR 2,930,000 is higher than the value of EUR 2,903,000 (EUR 2,419,000 previous hypothetical agreement value plus $20 \%$ thereof) (section 1a sentence 3 AStG ). Pursuant to § la sentence 5 AStG , an appropriate adjustment amount can subsequently be determined.
i. of TEUR $\mathbf{5 1 1}$ (TEUR 2,930 less TEUR 2,419). The income is to be calculated accordingly according to § Section 1 (1) sentence 1 of the German Income Tax Act (AStG) must be corrected.


[^0]:    ${ }^{1}$ The calculation variables in the examples were assumed simplistically and are therefore not comparable with real market conditions.

