

Reading: Odomirok - Chapter 26

BEAT (Taxes) - practice 01 - problem

Model: text example

Problem Type: BEAT (Base Erosion & Anti-Abuse Tax)

Given Calculate the additional tax due under BEAT.

GWP	370
InvInc	90
losses	190
expenses	15

<==== coverage starts Jan 1 so GWP = GEP for year

base erosion payment to related foreign party	180
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** the base erosion payment in the text example was for reinsurance*

Step 1 calculate RIT (Regular Income Tax)

Note that for this example, TBIL includes: *losses, expenses, base erosion payments*

$$\begin{aligned}
 \text{RTI} &= \text{TBEP} + \text{InvInc} - \text{TBIL} \\
 &= 370 + 90 - 385 \\
 &= 75 \\
 \\
 \text{RIT} &= \text{RTI} \times (\text{regular tax rate}) \\
 &= 75 \times 21\% \\
 &= 15.75
 \end{aligned}$$

Step 2a calculate Modified Taxable Income (MTI)

$$\begin{aligned}
 \text{MTI} &= \text{RTI} + (\text{base erosion payments}) \\
 &= 75 + 180 \\
 &= 255
 \end{aligned}$$

Step 2b calculate Modified Income Tax (MIT)

$$\begin{aligned}
 \text{MIT} &= \text{MTI} \times (\text{BEAT tax rate}) \\
 &= 255 \times 10\% \\
 &= 25.50
 \end{aligned}$$

Step 3 calculate the additional tax due under BEAT

$$\begin{aligned}
 \text{additional tax} &= \max(0, \text{MIT} - \text{RIT}) \\
 &= \max(0, 25.50 - 15.75) \\
 &= \max(0, 9.75) \\
 &= 9.75 \quad \leftarrow \text{final answer}
 \end{aligned}$$

Reading: Odomirok - Chapter 26

BEAT (Taxes) - practice 02 - problem

Model: text example

Problem Type: BEAT (Base Erosion & Anti-Abuse Tax)

Given Calculate the additional tax due under BEAT.

GWP	390
InvInc	80
losses	105
expenses	20

<==== coverage starts Jan 1 so GWP = GEP for year

base erosion payment to related foreign party	125
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** the base erosion payment in the text example was for reinsurance*

Step 1 calculate RIT (Regular Income Tax)

Note that for this example, TBIL includes: *losses, expenses, base erosion payments*

$$\begin{aligned}
 \text{RTI} &= \text{TBEP} + \text{InvInc} - \text{TBIL} \\
 &= 390 + 80 - 250 \\
 &= 220
 \end{aligned}$$

$$\begin{aligned}
 \text{RIT} &= \text{RTI} \times (\text{regular tax rate}) \\
 &= 220 \times 21\% \\
 &= 46.20
 \end{aligned}$$

Step 2a calculate Modified Taxable Income (MTI)

$$\begin{aligned}
 \text{MTI} &= \text{RTI} + (\text{base erosion payments}) \\
 &= 220 + 125 \\
 &= 345
 \end{aligned}$$

Step 2b calculate Modified Income Tax (MIT)

$$\begin{aligned}
 \text{MIT} &= \text{MTI} \times (\text{BEAT tax rate}) \\
 &= 345 \times 10\% \\
 &= 34.50
 \end{aligned}$$

Step 3 calculate the additional tax due under BEAT

$$\begin{aligned}
 \text{additional tax} &= \max(0, \text{MIT} - \text{RIT}) \\
 &= \max(0, 34.50 - 46.20) \\
 &= \max(0, -11.70) \\
 &= 0.00 \quad \leftarrow \text{final answer}
 \end{aligned}$$