Chapter 5.3: Top-Up Tax Computation

Learning Objective

After completing this chapter, you will be able to calculate the Top-Up Tax Percentage, compute Jurisdictional Top-Up Tax from Excess Profit, apply QDMTT offsets, and allocate Top-Up Tax to Low-Taxed Constituent Entities.

Introduction

The Top-Up Tax computation translates the ETR shortfall identified in Chapter 5.1 into an actual tax liability. The process is straightforward in concept: multiply the gap between 15% and the actual ETR by the Excess Profit remaining after SBIE. Yet this mechanical calculation carries significant economic consequences. The resulting liability determines how much additional tax the MNE Group pays—and crucially, where that tax is collected. Jurisdictions that have implemented QDMTTs can intercept the Top-Up Tax, retaining the revenue domestically rather than ceding it to parent entity jurisdictions through the IIR or to UTPR jurisdictions. For groups with multiple low-taxed jurisdictions, the computation must be performed separately for each, and the resulting Top-Up Tax must be allocated to specific Constituent Entities within the jurisdiction—a step that matters for determining which parent in the ownership chain bears the IIR liability. Understanding these mechanics is essential for financial planning, provision calculations, and strategic responses to Pillar Two exposure.

1. The Complete Top-Up Tax Computation

The Top-Up Tax computation follows a four-step process:

```
Step 1: Calculate Top-Up Tax Percentage
        (15% − ETR)

Step 2: Calculate Jurisdictional Top-Up Tax
        (Top-Up Tax % × Excess Profit)

Step 3: Apply QDMTT Offset
        (Reduce by any Qualified Domestic Minimum Top-Up Tax paid)

Step 4: Allocate to Low-Taxed Constituent Entities
        (In proportion to GloBE Income)
```

2. Step 1: Top-Up Tax Percentage (Article 5.2.1)

The Top-Up Tax Percentage is the difference between the 15% minimum rate and the jurisdictional ETR:

```
Top-Up Tax Percentage = 15% − ETR
```

2.1 Key Rules

Scenario	Top-Up Tax %	Result
ETR = 10%	15% − 10% = 5%	Top-Up Tax applies
ETR = 14.99%	15% − 14.99% = 0.01%	Top-Up Tax applies (small amount)
ETR = 15%	15% − 15% = 0%	No Top-Up Tax
ETR = 20%	N/A	Not calculated (ETR ≥ 15%)
ETR = negative	15% − (−5%) = 20%	Top-Up Tax % = 20% (no cap)

2.2 Negative ETR Treatment

If the ETR is **negative** (Adjusted Covered Taxes are negative):

```
Top-Up Tax Percentage = 15% − ETR
```

Example: ETR = −5% - Formula gives: 15% − (−5%) = **20%**

Per OECD Commentary paragraph 102, there is no cap—the Top-Up Tax Percentage equals 15% plus the absolute value of the negative ETR. This ensures the jurisdiction reaches a 15% effective rate on Excess Profit.

3. Step 2: Jurisdictional Top-Up Tax (Article 5.2.2)

Apply the Top-Up Tax Percentage to Excess Profit:

```
Jurisdictional Top-Up Tax = Top-Up Tax Percentage × Excess Profit
```

Where: - **Excess Profit** = Net GloBE Income − SBIE (from Chapter 5.2)

3.1 The Complete Formula Chain

```
┌─────────────────────────────────────────────────────────────────┐
│                                                                 │
│  Net GloBE Income                        €15,000,000            │
│  Less: SBIE                             (€1,675,200)            │
│                                          ───────────            │
│  Excess Profit                           €13,324,800            │
│                                                                 │
│  Top-Up Tax %                                 3.2%              │
│                                          ───────────            │
│  Jurisdictional Top-Up Tax                 €426,394             │
│                                                                 │
└─────────────────────────────────────────────────────────────────┘
```

4. Step 3: QDMTT Offset

If the jurisdiction has a **Qualified Domestic Minimum Top-Up Tax (QDMTT)**, the QDMTT paid reduces the Jurisdictional Top-Up Tax:

```
Net Top-Up Tax = Jurisdictional Top-Up Tax − QDMTT Paid
```

4.1 QDMTT Priority Rule

QDMTT has **priority** over IIR and UTPR: 1. Jurisdiction collects its own QDMTT first 2. Any remaining Top-Up Tax is collected via IIR or UTPR 3. If QDMTT covers full Top-Up Tax, no IIR/UTPR applies

4.2 Example: Ireland with QDMTT

Ireland has implemented a QDMTT. If Ireland collects the full Top-Up Tax domestically:

Item	Amount
Jurisdictional Top-Up Tax	€426,394
QDMTT Paid (Ireland)	(€426,394)
Net Top-Up Tax (IIR/UTPR)	**€0**

Result: No Top-Up Tax flows to parent entity under IIR—Ireland retains the tax.

The QDMTT priority rule reflects a fundamental policy choice in the GloBE architecture: allowing source jurisdictions to collect the minimum tax themselves before ceding revenue to residence jurisdictions. This design respects sovereign taxing rights while still achieving the minimum rate objective. For the MNE Group, QDMTT makes little difference to the total tax bill—the same Top-Up Tax is paid either way. But for competing jurisdictions, the difference is significant: Ireland collecting its own QDMTT retains revenue that would otherwise flow to the UK parent's treasury through the IIR. This dynamic has driven rapid QDMTT adoption, with most low-tax jurisdictions implementing or planning domestic minimum taxes.

For compliance purposes, groups must track which jurisdictions have QDMTTs, verify that the QDMTT is actually "qualified" under GloBE rules (meaning it calculates liability consistently with GloBE principles), and offset the QDMTT paid against IIR liability.

5. Step 4: Allocation to Low-Taxed Constituent Entities (Article 5.2.4)

The Jurisdictional Top-Up Tax is allocated to Constituent Entities **in proportion to their GloBE Income**:

```
                                                 CE's GloBE Income
Entity's Top-Up Tax = Jurisdictional Top-Up Tax × ──────────────────
                                                         Total Jurisdictional
```

5.1 Why Allocation Matters

Allocation determines: - Which entity triggers the IIR charge - Which parent in the ownership chain pays the Top-Up Tax - Reporting requirements on the GIR

5.2 Multi-Entity Jurisdiction Example

Jurisdiction: Singapore (two entities)

Entity	GloBE Income	Share
SG Singapore Pte Ltd	€3,200,000	80%
SG Singapore Services Pte Ltd	€800,000	20%
Total	**€4,000,000**	**100%**

Jurisdictional Top-Up Tax: €197,916 (calculated below)

Allocation:

Entity	Calculation	Allocated Top-Up Tax
SG Singapore Pte Ltd	€197,916 × 80%	€158,333
SG Singapore Services Pte Ltd	€197,916 × 20%	€39,583
Total		**€197,916**

5.3 Loss Entities

If a Constituent Entity has a **GloBE Loss**, it receives **no allocation**—losses are not included in the denominator for allocation purposes.

Entity	GloBE Income/(Loss)	Included in Allocation?
Entity A	€5,000,000	Yes
Entity B	(€1,000,000)	No
Entity C	€2,000,000	Yes

Allocation base: €5,000,000 + €2,000,000 = €7,000,000

The allocation step matters because it determines which entity—and therefore which parent in the ownership chain—bears the IIR liability. In a simple structure with one parent owning all subsidiaries directly, this may seem academic. But in complex group structures with multiple intermediate holding companies, the allocation can affect which jurisdiction's IIR applies and which entity must include the Top-Up Tax in its tax return. The exclusion of loss entities from the allocation denominator prevents a situation where entities with no income would nevertheless be assigned a share of the Top-Up Tax—a result that would be economically incoherent.

6. Additional Current Top-Up Tax (Article 5.2.3)

Additional Current Top-Up Tax arises in specific situations:

6.1 When It Applies

Trigger	Article	Treatment
DTL Recapture	4.4.4	DTL not reversed within 5 years → recalculate prior year ETR
Post-filing decrease	4.6	Prior year Covered Taxes reduced → recalculate prior year
Transition adjustments	9.1	Certain transition period corrections

6.2 Calculation

When Additional Current Top-Up Tax is triggered:

1. **Recalculate** the prior year's ETR without the DTL or with adjusted Covered Taxes
2. **Determine** if the recalculated ETR is below 15%
3. **Compute** the additional Top-Up Tax for that prior year
4. **Include** as Additional Current Top-Up Tax in the **current** fiscal year

6.3 Example: DTL Recapture

FY 2024: SG Germany GmbH claimed €400,000 DTL (at 15% cap) in Covered Taxes.

FY 2029: DTL has not reversed within 5 years → Recapture triggered.

Original FY 2024 Calculation:

Item	Original	Recalculated
Covered Taxes	€12,000,000	€11,600,000
GloBE Income	€50,000,000	€50,000,000

Item	Original	Recalculated
ETR	24.0%	23.2%
Top-Up Tax	€0	€0

Result: ETR remains above 15% even after recapture → No Additional Current Top-Up Tax.

Alternative scenario: If recalculated ETR fell to 14.5%: - Top-Up Tax % = 0.5% - Excess Profit (assume SBIE applied) = €40,000,000 - Additional Current Top-Up Tax = €200,000 (payable in FY 2029)

The Additional Current Top-Up Tax mechanism ensures that the GloBE framework operates correctly over time, not just at the moment of initial calculation. DTL recapture addresses the risk that entities claim deferred tax benefits that never actually materialise as tax payments. Post-filing adjustments address the reality that tax positions change after returns are filed. Without these retrospective corrections, groups could manipulate their ETR calculations knowing that initial claims would never be verified. The practical consequence for compliance teams is significant: they must maintain tracking systems that monitor prior-year positions for years after the original calculation, triggering recalculations when circumstances change.

7. Stratos Worked Example: Complete Top-Up Tax Computation

7.1 Jurisdiction 1: Singapore

Data from previous chapters:

Item	Reference	Amount
Net GloBE Income	Chapter 5.1	€4,000,000
Adjusted Covered Taxes	Chapter 5.1	€392,206

Item	Reference	Amount
ETR	Chapter 5.1	9.81%
SBIE	Chapter 5.2	€194,645
Excess Profit	Chapter 5.2	€3,805,355

Step 1: Top-Up Tax Percentage

```
Top-Up Tax % = 15% − 9.81% = 5.19%
```

Step 2: Jurisdictional Top-Up Tax

```
Jurisdictional Top-Up Tax = 5.19% × €3,805,355 = €197,498
```

Step 3: QDMTT Offset

Singapore has **not** implemented a QDMTT (as of FY 2025).

```
 QDMTT Paid:                               €0
Net Top-Up Tax:                           €197,498
```

Step 4: Allocation

Singapore has one entity (SG Singapore Pte Ltd):

```
Allocation: 100% to SG Singapore Pte Ltd = €197,498
```

7.2 Singapore Summary

Step	Description	Amount
1	Top-Up Tax %	5.19%

Step	Description	Amount
2	Jurisdictional Top-Up Tax	€197,498
3	QDMTT Offset	€0
4	**Net Top-Up Tax**	**€197,498**

7.3 Jurisdiction 2: Ireland

Data from previous chapters:

Item	Reference	Amount
Net GloBE Income	Chapter 5.1	€15,000,000
Adjusted Covered Taxes	Chapter 5.1	€1,770,000
ETR	Chapter 5.1	11.80%
SBIE	Chapter 5.2	€1,675,200
Excess Profit	Chapter 5.2	€13,324,800

Step 1: Top-Up Tax Percentage

```
Top-Up Tax % = 15% − 11.80% = 3.20%
```

Step 2: Jurisdictional Top-Up Tax

```
Jurisdictional Top-Up Tax = 3.20% × €13,324,800 = €426,394
```

Step 3: QDMTT Offset

Ireland **has** implemented a QDMTT. Assume Ireland collects the full Top-Up Tax domestically:

```
 QDMTT Paid (Ireland):                     €426,394
Net Top-Up Tax (IIR/UTPR):                €0
```

Step 4: Allocation

Since QDMTT covers the full liability, no allocation to parent entities is required for IIR purposes.

7.4 Ireland Summary

Step	Description	Amount
1	Top-Up Tax %	3.20%
2	Jurisdictional Top-Up Tax	€426,394
3	QDMTT Offset	(€426,394)
4	**Net Top-Up Tax (IIR)**	**€0**

Result: Ireland retains the Top-Up Tax through QDMTT. No IIR charge to Stratos Holdings plc.

8. Consolidated Top-Up Tax Summary

8.1 Stratos Group FY 2025

Jurisdiction	ETR	Top-Up Tax %	Excess Profit	Jur. Top-Up Tax	QDMTT	Net Top-Up Tax
Germany	23.00%	N/A	N/A	€0	N/A	€0
Singapore	9.81%	5.19%	€3,805,355	€197,498	€0	**€197,498**

Jurisdiction	ETR	Top-Up Tax %	Excess Profit	Jur. Top-Up Tax	QDMTT	Net Top-Up Tax
Ireland	11.80%	3.20%	€13,324,800	€426,394	(€426,394)	€0
Total				**€623,892**	**(€426,394)**	**€197,498**

8.2 Where Does Stratos Pay?

Amount	Recipient	Mechanism
€197,498	UK (Stratos Holdings plc)	**IIR**
€426,394	Ireland	**QDMTT** (retained by Ireland)

Total Group Tax Liability: €623,892

Of which: - Paid to UK via IIR: €197,498 - Retained by Ireland via QDMTT: €426,394

9. IIR vs UTPR Application

Once the Net Top-Up Tax is determined, the charging mechanism applies:

9.1 IIR First (Article 2.1)

The **IIR** applies at the Ultimate Parent Entity level:

```
If UPE is in an IIR jurisdiction:
    → UPE pays Top-Up Tax on all low-taxed subsidiaries
```

Stratos example: UK has implemented IIR. Stratos Holdings plc pays €197,498 on Singapore.

9.2 UTPR as Backstop (Article 2.4)

The **UTPR** applies if: - No IIR covers the Top-Up Tax, OR - UPE is in a non-IIR jurisdiction

```
If UPE is NOT in an IIR jurisdiction:
   → UTPR jurisdictions collect Top-Up Tax via denied deductions
```

The IIR-first, UTPR-backstop design reflects the framework's preference for residence-based collection while ensuring that the minimum tax cannot be avoided simply by locating the parent in a non-participating jurisdiction. For most MNE Groups with UPEs in OECD countries that have implemented Pillar Two, the IIR will be the primary collection mechanism. The UTPR becomes relevant primarily for groups headquartered in non-adopting jurisdictions—most notably, as of late 2024, the United States. Understanding which mechanism applies matters for financial statement provisioning, cash flow planning, and determining which tax authority will ultimately receive the Top-Up Tax.

10. Computation Flowchart

```
START: Low-taxed jurisdiction identified (ETR < 15%)
       │
       ▼
┌────────────────────────────────────────────────────┐
│ Step 1: Top-Up Tax Percentage                      │
│         = 15% − ETR                                │
└────────────────────────────────────────────────────┘
       │
       ▼
┌────────────────────────────────────────────────────┐
│ Step 2: Jurisdictional Top-Up Tax                  │
│         = Top-Up Tax % × Excess Profit             │
│         (where Excess Profit = GloBE Income - SBIE)│
└────────────────────────────────────────────────────┘
       │
```

```
        ▼
┌──────────────────────────────────────────────────┐
│ Does jurisdiction have QDMTT?                    │
└──────────────────────────────────────────────────┘
        │
   ┌────┴────┐
  YES       NO
   │         │
   ▼         │
┌────────────────────┐                             │
│ Step 3: QDMTT      │                             │
│ Offset             │                             │
│ Net = Jur. Top-up  │                             │
│       − QDMTT Paid │                             │
└────────────────────┘                             │
        │                                          │
        ▼                                          ▼
┌──────────────────────────────────────────────────┐
│ Step 4: Allocate to LTCEs                        │
│         (In proportion to GloBE Income)          │
└──────────────────────────────────────────────────┘
        │
        ▼
┌──────────────────────────────────────────────────┐
│ Apply IIR or UTPR                                │
│ (Chapter 2.1 / 2.4)                              │
└──────────────────────────────────────────────────┘
        │
        ▼
END: Top-Up Tax collected
```

11. Common Pitfalls

11.1 Pitfall 1: Applying Top-Up Tax % to Net GloBE Income

Error: Calculating Top-Up Tax as Top-Up Tax % × Net GloBE Income.

Correct approach: Apply Top-Up Tax % to **Excess Profit** (Net GloBE Income − SBIE).

11.2 Pitfall 2: Forgetting QDMTT Offset

Error: Reporting full Jurisdictional Top-Up Tax without checking for QDMTT.

Correct approach: Always check if the jurisdiction has implemented QDMTT and reduce the IIR/UTPR liability accordingly.

11.3 Pitfall 3: Allocating to Loss Entities

Error: Including entities with GloBE Losses in the allocation calculation.

Correct approach: Only entities with **positive** GloBE Income receive an allocation of Top-Up Tax.

11.4 Pitfall 4: Ignoring Additional Current Top-Up Tax

Error: Failing to track DTL recapture and post-filing adjustments.

Correct approach: Monitor 5-year DTL reversal and 3-year current tax payment timelines; recalculate prior years when triggered.

11.5 Pitfall 5: Double-Counting QDMTT

Error: Reducing Jurisdictional Top-Up Tax by estimated QDMTT before it's actually paid.

Correct approach: Only offset QDMTT that is **actually paid** in the fiscal year.

12. Top-Up Tax Calculation Worksheet

Use this worksheet for each low-taxed jurisdiction:

```
 TOP-UP TAX CALCULATION WORKSHEET
Jurisdiction: _________________________
Fiscal Year: _________________________

SECTION A: INPUTS
A1  Net GloBE Income (from Ch. 5.1)                    €__________________
A2  ETR (from Ch. 5.1)                                 __________________%
A3  SBIE (from Ch. 5.2)                                €__________________
A4  Excess Profit (A1 − A3)                            €__________________

SECTION B: TOP-UP TAX PERCENTAGE
B1  Minimum Rate                                        15%
B2  Jurisdictional ETR (A2)                            __________________%
B3  TOP-UP TAX PERCENTAGE (B1 − B2)                    __________________%

    If B3 ≤ 0%: STOP. No Top-Up Tax.

SECTION C: JURISDICTIONAL TOP-UP TAX
C1  Excess Profit (A4)                                 €__________________
C2  Top-Up Tax Percentage (B3)                         __________________%
C3  JURISDICTIONAL TOP-UP TAX (C1 × C2)                €__________________

SECTION D: QDMTT OFFSET
D1  Does jurisdiction have QDMTT?                       YES / NO

    If NO: Skip to Section E

D2  QDMTT Paid                                         €__________________
D3  NET TOP-UP TAX (C3 − D2)                           €__________________

    If D3 ≤ 0: No IIR/UTPR liability.
```

```
SECTION E: ALLOCATION TO LTCEs
List entities with positive GloBE Income:

| Entity | GloBE Income | % Share | Allocated Top-Up Tax |
|--------|--------------|---------|---------------------|
| ______ | €___________ | ______% | €__________________ |
| ______ | €___________ | ______% | €__________________ |
| ______ | €___________ | ______% | €__________________ |
| TOTAL  | €___________ | 100%    | €__________________ |

SECTION F: ADDITIONAL CURRENT TOP-UP TAX
F1  Any DTL recapture triggered?                    YES / NO
F2  Any post-filing adjustments?                    YES / NO

    If YES to either: Complete recalculation per Article 5.2.3

F3  Additional Current Top-Up Tax                  €__________________
F4  TOTAL TOP-UP TAX (D3 or C3 + F3)               €__________________

SECTION G: CHARGING MECHANISM
G1  UPE in IIR jurisdiction?                        YES / NO

    If YES: IIR applies → UPE pays Top-Up Tax
    If NO:  UTPR applies → Allocated to UTPR jurisdictions
```

The Top-Up Tax computation brings together all the preceding analysis—GloBE Income, Covered Taxes, ETR calculation, and SBIE—into a final liability figure. For many groups, this number will be the most important outcome of the entire Pillar Two compliance process, directly affecting financial statements, cash flows, and strategic decisions. The QDMTT offset adds a layer of complexity that requires monitoring jurisdictional adoption and implementation timing. The allocation rules matter primarily for IIR purposes, determining which parent entity in potentially complex ownership structures bears the tax liability. Perhaps most importantly, the Top-Up Tax computation is not a one-time exercise: the Additional Current Top-Up Tax rules mean that groups must continue monitoring prior-year calculations for DTL recapture, post-filing adjustments, and other triggers that can create liability in subsequent years. Building systems that track these ongoing obligations is as important as performing the initial computation correctly.