United Nations | Department of Economic and Social Affairs

The methodology used for the preparation of the United Nations scale of assessments for the period 2019-2021

Outline

The methodology for the United Nations regular budget scale of assessments for the period 2019-2021

- Introduction
- Main Components of the Methodology
- Data Sources
- Step by Step Calculation - Example

Introduction

- The **aim** of this presentation is to provide an **overview of the methodology** for calculating the scale of assessments for the contribution of Member States to the regular budget of the United Nations.
- **Article 17 of the Charter** of the United Nations provides that Member States have the obligation to bear the expenses of the Organization, as apportioned by the **General Assembly**.
- The **fundamental principle** underlying the apportionment by the Assembly is based broadly on the **capacity of Member States to pay**, in accordance with rule 160 of its rules of procedure.

Introduction

- The General Assembly in resolution 73/271 (establishing the 2019-2021 scale) reaffirmed that the Committee on Contributions (CoC) as a technical body is required to prepare the scale of assessments strictly on the basis of **reliable, verifiable and comparable data**.
- The CoC (A/73/11, para. 20) noted the trade-offs between timeliness, reliability, verifiability and comparability of the data.
- The **methodology** presented here is based on Annex II of the **Report of the Committee on Contributions** (A/73/11) and was used for the 2019-2021 scale calculations; the same methodology that was used since the 2001-2003 scale.

Main Components of the Methodology

In resolution 73/271, the GA determined the elements of the scale calculation for the 2019-2021 period.

Three main components of the methodology:

Component	Elements	Year
Comparative estimates of income	• National Income	(1946)
	• Conversion rates	(1946)
	• Base period	(1946)
	• *Two base periods: 3 and 6 years*	*(2001)*
Relief Measures	• Debt burden adjustment	(1986)
	• Low per capita income adjustment	(1946)
Limits to scale	• Floor	(1946)
	• LDC ceiling	(1983)
	• *No increase for LDC*	*(1983-1997)*
	• *Ceiling 0.010 per cent*	*(1998)*
	• Maximum ceiling	(1946)

Income Measure

- Income measure is the first approximation of the Member States' (MS) **capacity to pay**.
- Gross National Income (GNI) is used as the income measure.

Income Measure

- The national income of an economy represents the income of its residents. It is obtained by adjusting the Gross Domestic Product (GDP) with the income of residents from activities abroad and the income of non-residents from activities in the country:

GNI = GDP - primary incomes payable to non-resident units + primary incomes receivable from non-resident units

Exchange Rates

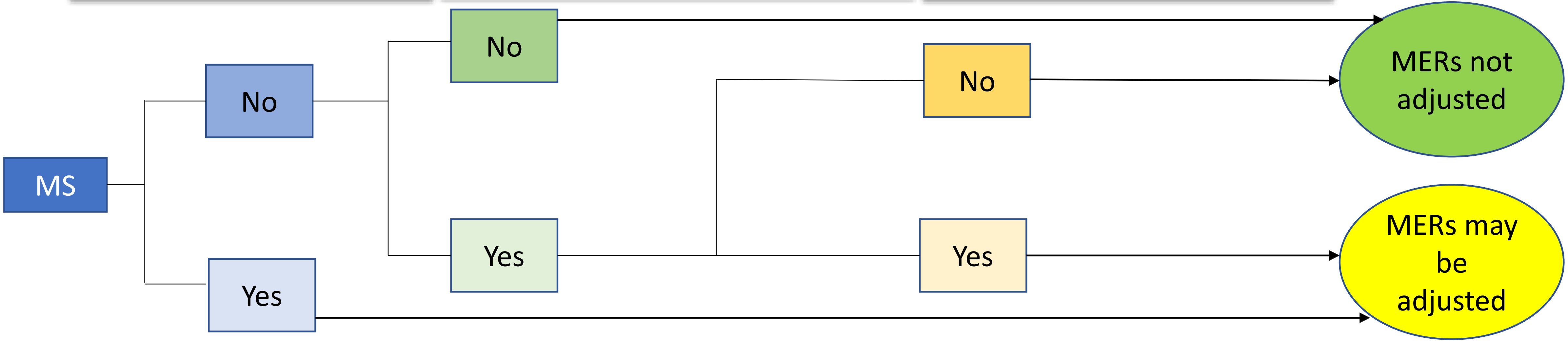
- To establish a comparable measure of income, GNI in national currency is converted to United States dollars (US$) using **market exchange rates** (MERs).
- For MS for which no MERs are available, **United Nations operational rates** (UNOP) of exchange are used instead.
- When MERs cause excessive fluctuations and distortions in the GNI of a particular MS, MERs may be replaced with **price-adjusted rates of exchange** (PARE) or other **appropriate conversion rates**.

Systematic Criteria

Step 1:
- Exchange rate fixed
- pcGNI in US$ is unreasonable

Step 2:
pcGNI growth factor ≥ 1.5 times or ≤ 0.67 times world average pcGNI growth factor

Step 3:
MER valuation index (MVI) ≥1.2 times or ≤ 0.8 times world average MVI



Base Period

- Final scale is calculated based on the arithmetic **average of scales** from the most recent **three-year** and **six-year base periods**.

Six-year base period	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Three-year base period				**2014**	**2015**	**2016**

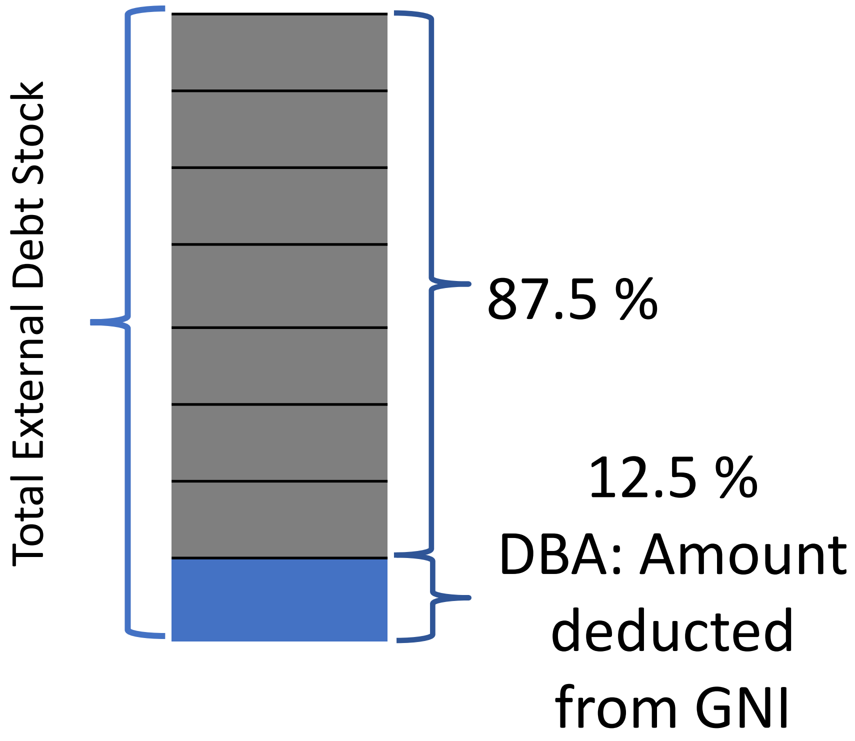
- Each of the **most recent three years receive 25 per cent** of the total weight, and each of the **remaining three years receive about 8.3 per cent** of the total weight.

Debt Burden Adjustment

- Debt burden adjustment (DBA) is an element of the methodology to **relieve the impact of the repayment** of external debt on the capacity to pay.
- The DBA is applied to MS with a per capita GNI below the World Bank threshold for high-income economies.
- Since interest payments are already accounted for in the GNI, only principal payments on external debt are deducted from GNI.
- Indirect redistribution: new GNI shares are based on the debt-adjusted GNI (GNI_{da}).

Debt Burden Adjustment

- DBA is based on a proportion of the total external debt stock of the MS concerned → debt stock approach.
- It is assumed that external debt is repaid over a period of 8 years.



Low Per Capita Income Adjustment

- Income per head of population should be taken into account to prevent anomalous assessments based on comparative estimates of national income (A/73/11, para. 51).
- The Low Per Capita Income Adjustment (LPCIA) provides relief for MS based on per capita GNI (pcGNI).
- It consists of two parameters to set the size of the adjustment:
  - *the threshold to determine which MS benefit from the LPCIA (average pcGNI of all MS)*
  - *the gradient (80 per cent).*

Low Per Capita Income Adjustment

- LPCIA reduces the GNI_{da} share of the affected MS by a factor that is based on the percentage that the $pcGNI_{da}$ is below the established LPCIA threshold, subject to the gradient:

i. Calculate the percentage difference between the $pcGNI_{da}$ and the threshold.

ii. Multiply this percentage with the gradient of 80 per cent.

iii. Reduce the MS GNI_{da} share with this percentage.

iv. Redistribution to MS above the threshold on a pro rata basis of their GNI_{da} share.

Limits to the Scale

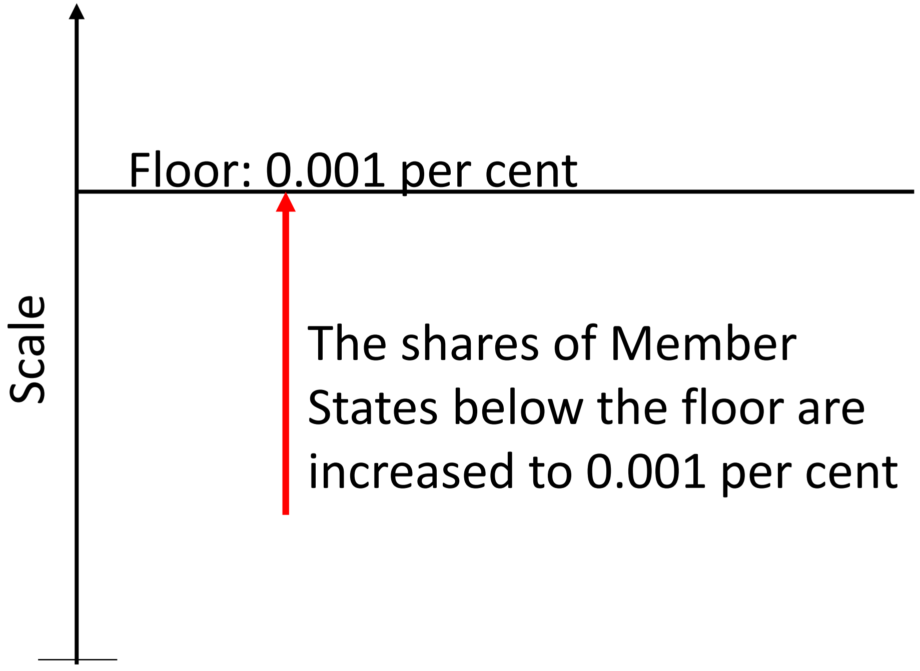
- Floor:
  - The minimum assessment rate.

- Two ceilings
  - A ceiling limit for the Least Developed Countries (LDCs).
  - A maximum ceiling.

Limits to the Scale

Floor

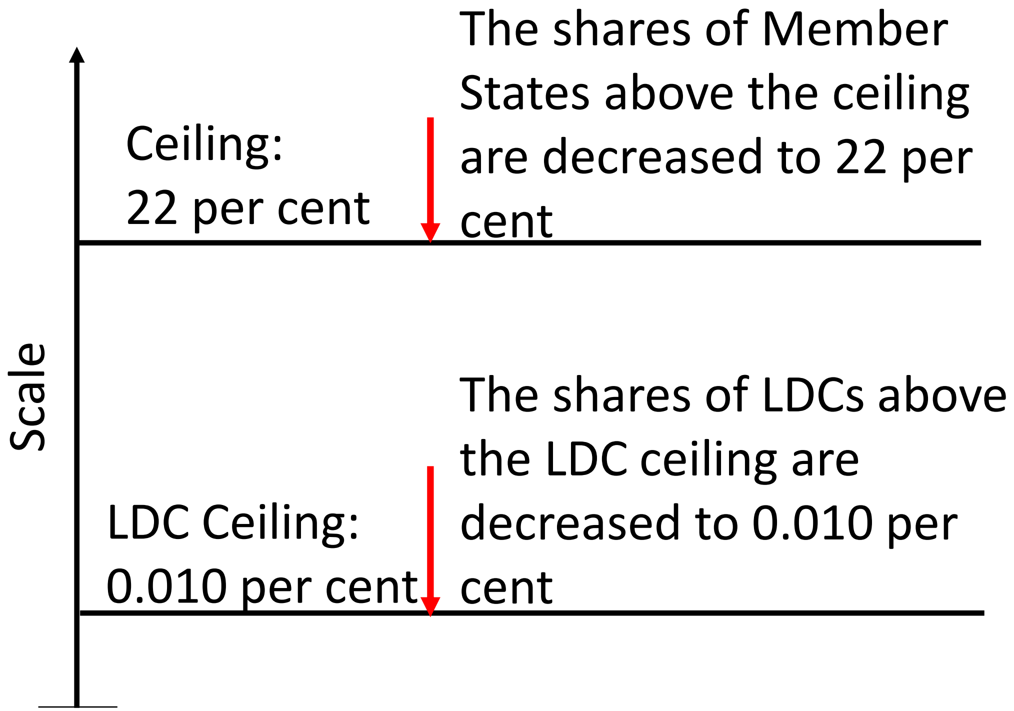
- Floor is the **minimum assessment rate.**
- An element of the methodology **since the outset**: it changed from 0.01 to **0.001 per cent since the 1998-2000 scale**.
- The **adjustment** is distributed on a **pro-rata basis** to MS above the floor.
- The floor limit is considered to be the **practical minimum contribution** that MS should be expected to make to the organization.



Limits to the Scale

Ceilings

- Ceilings are maximum assessment rates.
- **Two ceilings**: Maximum ceiling and maximum assessment rate for LDCs.
- Pro rata redistribution: LDC ceiling points are distributed to all MS except those at the floor; points at maximum ceiling are distributed to all MS except those at the floor and at the LDC ceiling.



Overview of the Methodology

1. Income Measure

a. GNI in National Currency
b. Conversion Rates
c. GNI in US Dollars

2. Relief Measures

a) Debt Burden Adjustment
b) Low Per Capita Income Adjustment

3. Limits to the Scale

a) Floor
b) LDC Ceiling
c) Maximum Ceiling

Machine scale for 3-year base period

Machine scale for 6-year base period

Average of machine scales

National Income

- Data are provided, in national currency, by MS to UNSD in response to the United Nations annual national accounts questionnaire.

  http://unstats.un.org/unsd/nationalaccount/madt.asp?SB=1&#SBG

- When data are not available from the MS, UNSD prepares estimates based on available information from other sources including: MS publications, UN regional commissions, the World Bank, and the IMF.

National Income

- UNSD disseminates the national accounts data in two separate databases:
  - National Accounts Statistics, Main Aggregates and Detailed Tables (MADT) database, available at: http://data.un.org/Explorer.aspx?d=SNA

  - National Accounts Statistics, Analysis of Main Aggregates (AMA) database, available at: http://unstats.un.org/unsd/snaama/Introduction.asp

- The data in national currency from the AMA database are used in the scale calculations.

UNdata A world of information

Exchange Rates

- Exchange rates are used for the conversion of national currencies to United States dollars.

- Market exchange rates (MERs) from the IMF publication International Financial Statistics, available at: http://www.elibrary.imf.org/browse?freeFilter=false&pageSize=10&sort=datedescending&t_7=urn%3ASeries%2F041

- For non-members of IMF, there are no market exchange rates available and the rates used are average annual United Nations operational (UNOPs) rates of exchange, available at: http://treasury.un.org/operationalrates

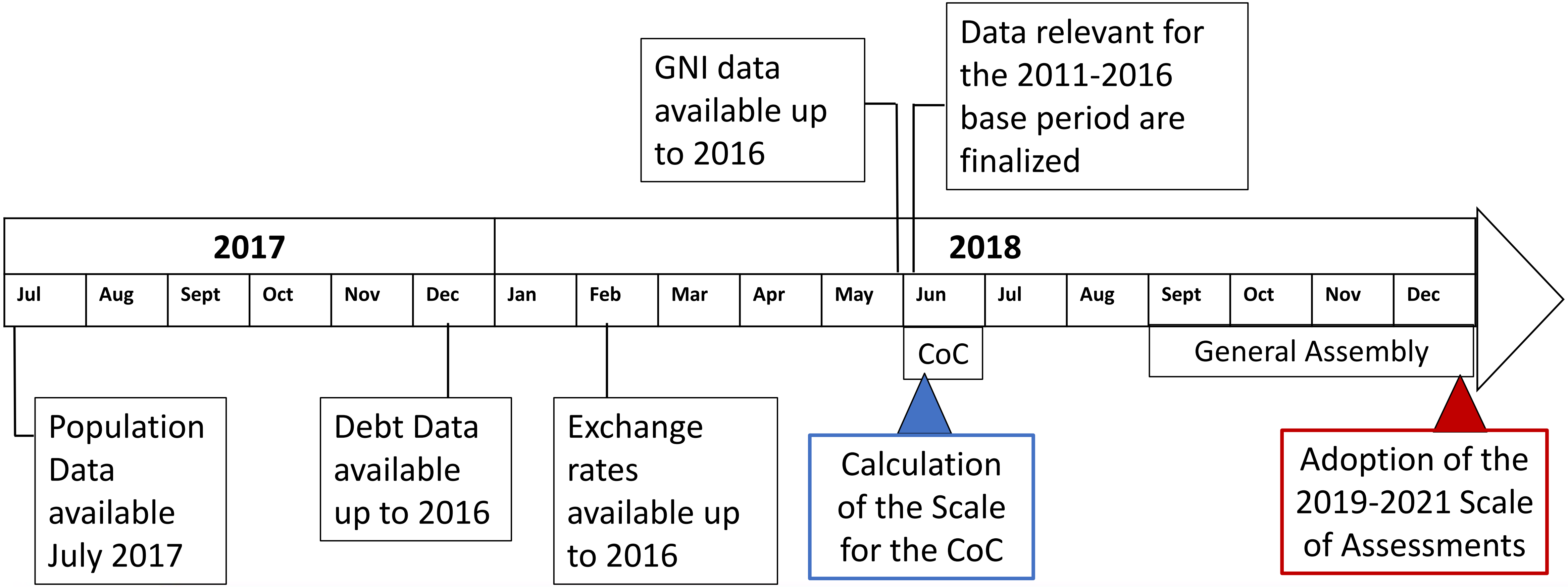
External Debt Data

- Data are obtained from the World Bank International Debt Statistics Database, available at: http://datatopics.worldbank.org/debt/ids/
- The database covers members of and borrowers from the World Bank that have per capita GNI below the World Bank threshold for high-income economies, which was $12,236 in 2016.
- In addition to the 123 MS covered in the database, 3 other MS provided data through their Permanent Missions for the calculation of the adopted scale of 2019-2021.
- Total external debt stock data are used for the debt relief adjustment.

Population Estimates

- Data are obtained from the biennial publication: **World Population Prospects** prepared by the Population Division of the Department of Economic and Social Affairs. Further details on the methodology can be found at: http://esa.un.org/unpd/wpp
- Midyear estimates of total population are used to calculate per capita GNI (pcGNI).
- These estimates are supplemented, as required, by national estimates for countries and areas not included in the World Population Prospects.

Overview of the data preparation process for the 2019-2021 scale calculations



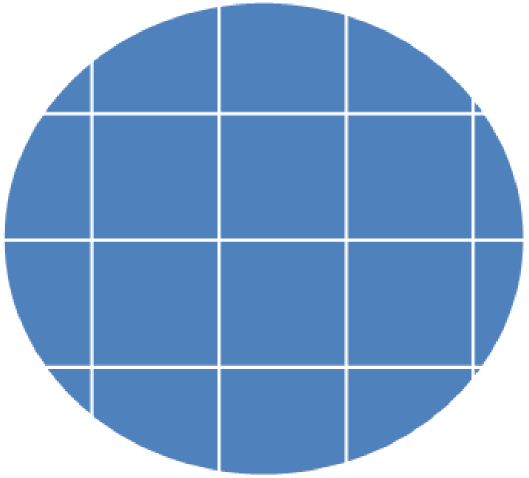
Example of Australia and Bangladesh using the six-year base period 2011-2016

Step 1: Comparable Measures of Income

GNI in national currency

National currency to US$

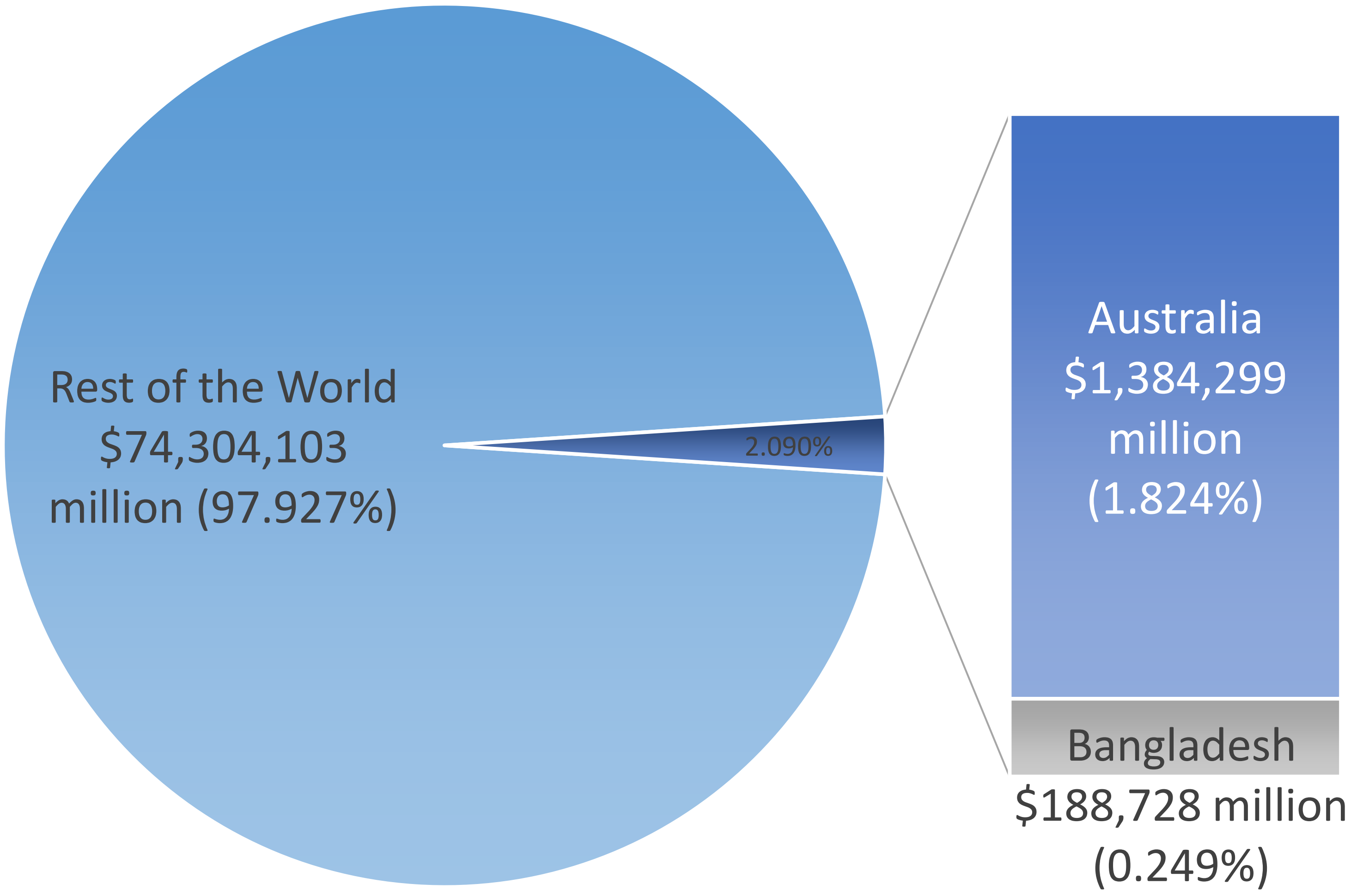
GNI in US Dollars



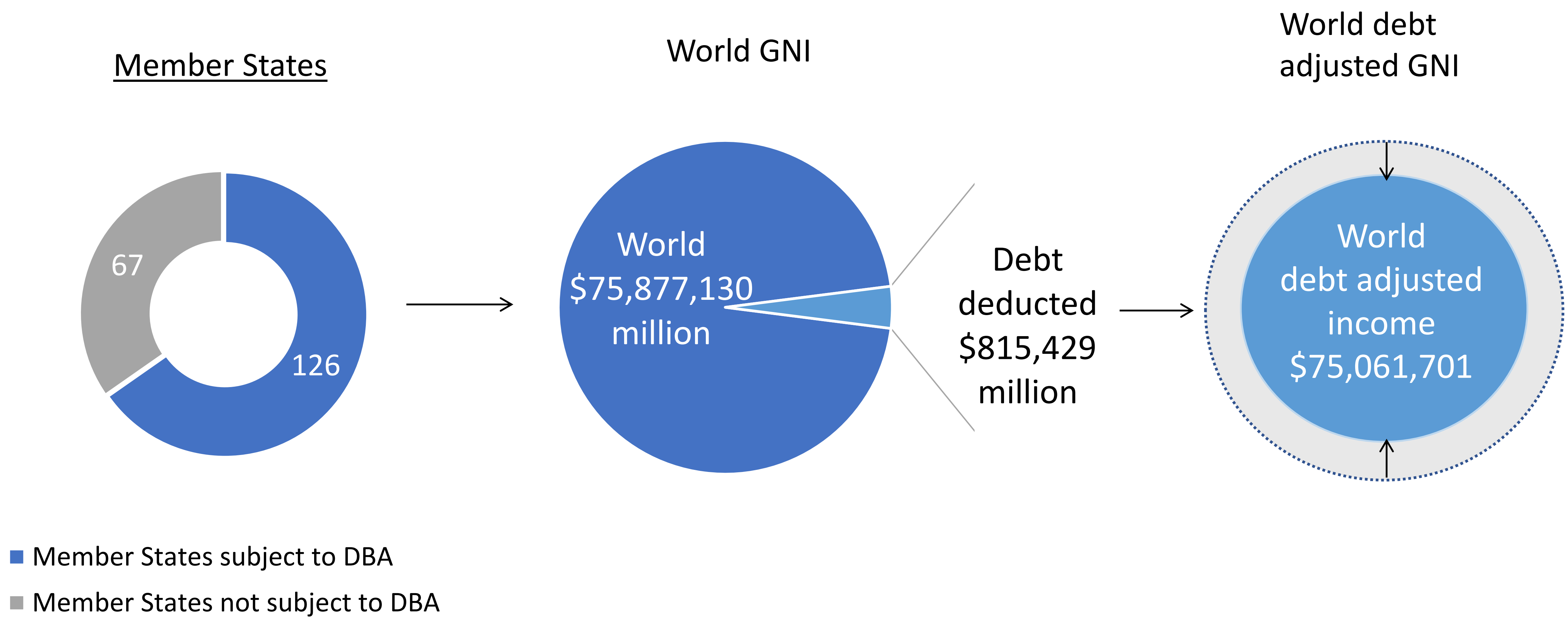
Step 1: World GNI in US Dollars

The average world GNI for the six-year base period 2011 to 2016 is $75,877,130 million

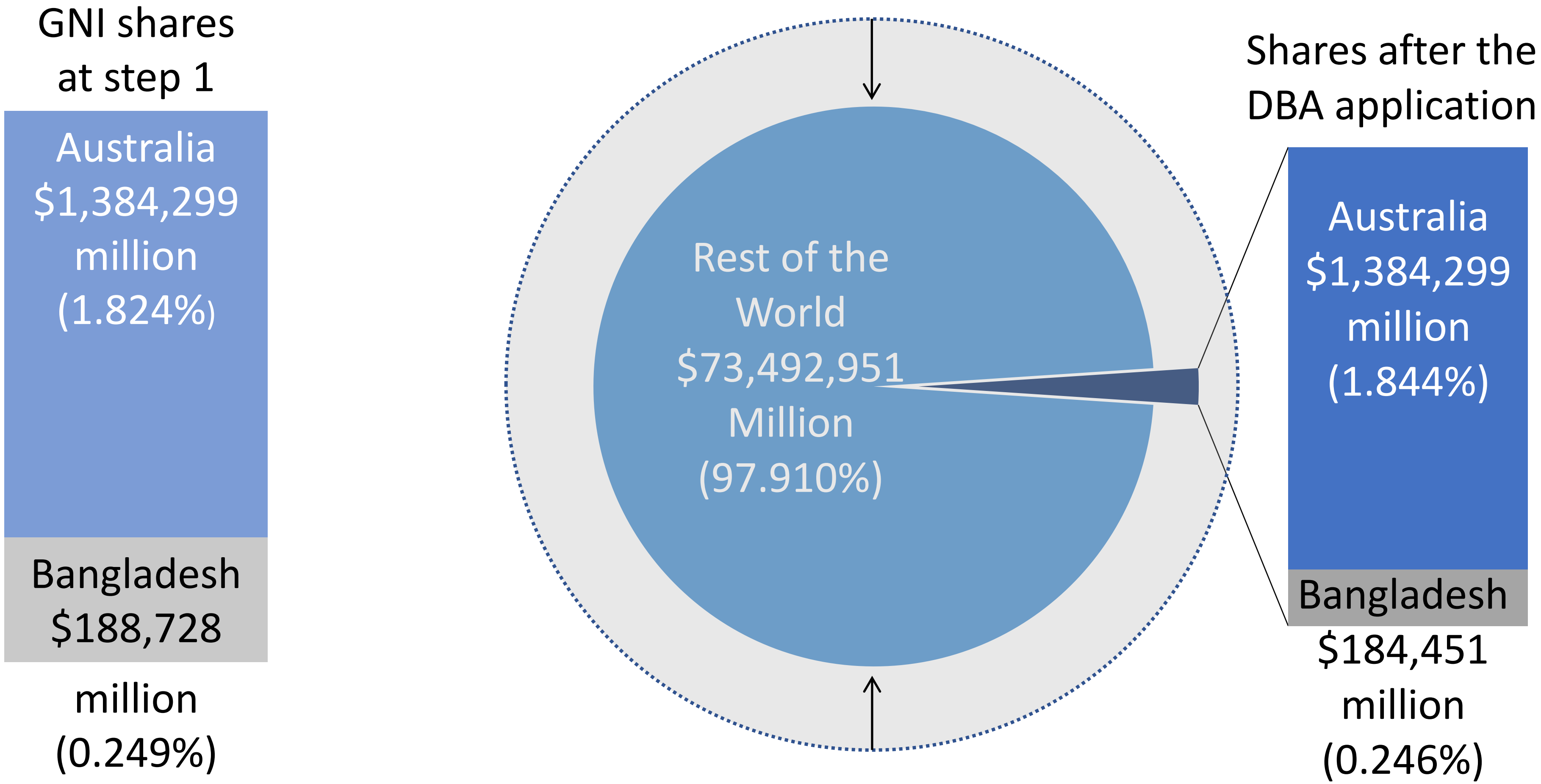
Step 1: MS' Share in World GNI



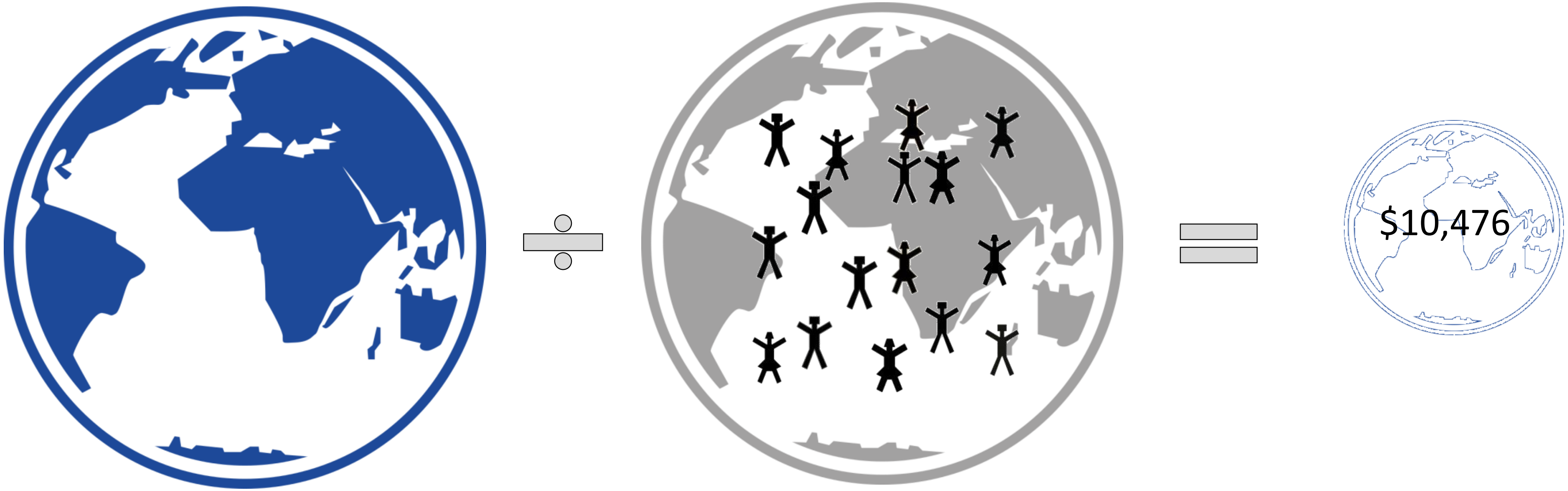
Step 2: Debt Burden Adjustment



Step 2: Debt Burden Adjustment



Step 3: LPCIA Threshold

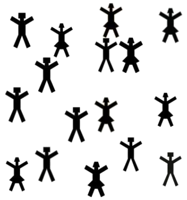


World GNI
$75,877,130
million

World population
7,242,786,811

LPCIA threshold
per capita GNI

Step 4: Member State per capita debt adjusted GNI

	Member State GNI_{da}		Population		Member State $pcGNI_{da}$
					
Australia:	$1,384,299 mil	÷	23,308,74	=	$59,389
Bangladesh:	$184,451 mil	÷	158,461,331	=	$1,164

Step 5: Calculating LPCIA

Threshold (world average pcGNI)

1. The percentage difference by which the $pcGNI_{da}$ is below the threshold is calculated.

MS $pcGNI_{da}$

2. That is multiplied by the **gradient** (since 1998-2000 scale: **80 per cent**).

3. MS GNI_{da} share is reduced by a corresponding percentage.

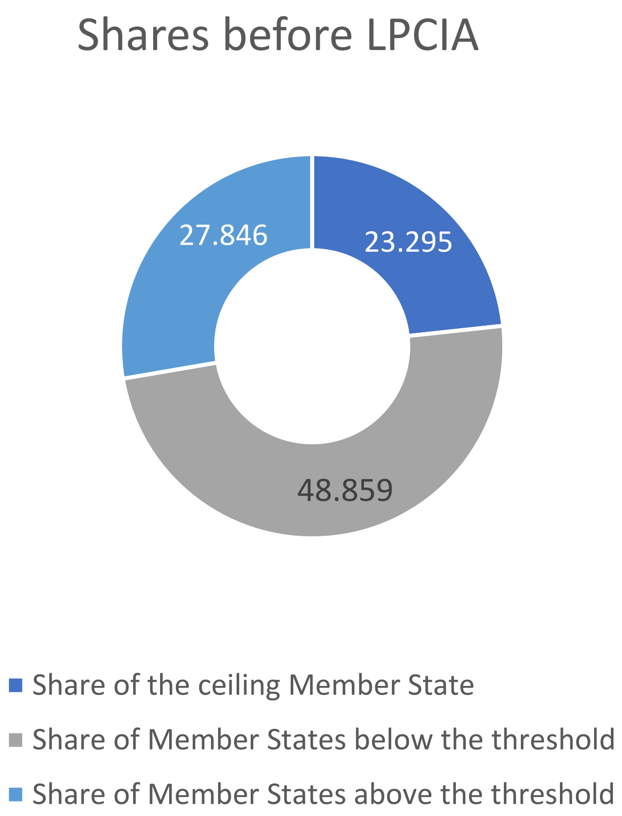
Step 6: Application of the LPCIA

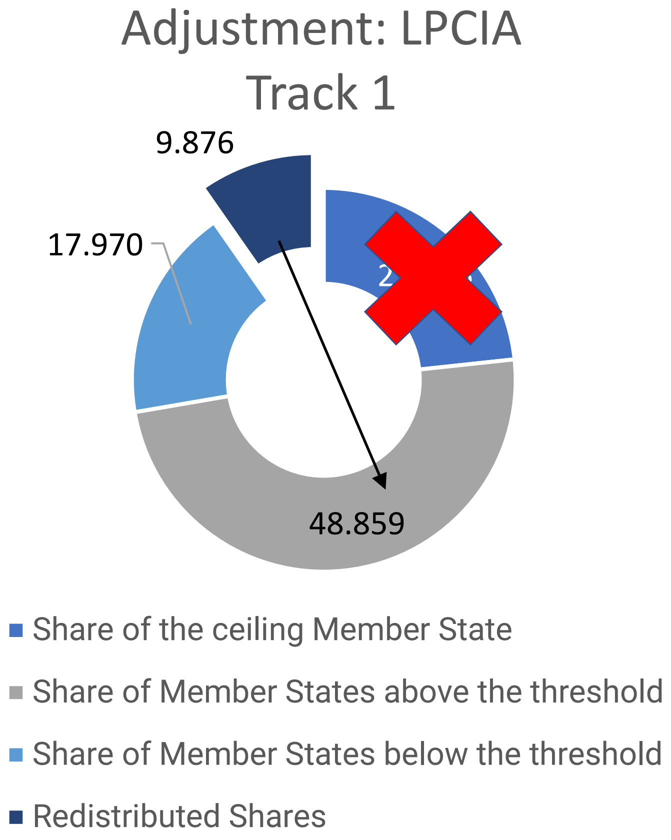
- For each base period, the total LPCIA is reallocated pro-rata to MS whose average $pcGNI_{da}$ is above the threshold.
- For illustrative purposes, to demonstrate the outcomes with and without maximum ceiling rates, two tracks are calculated.

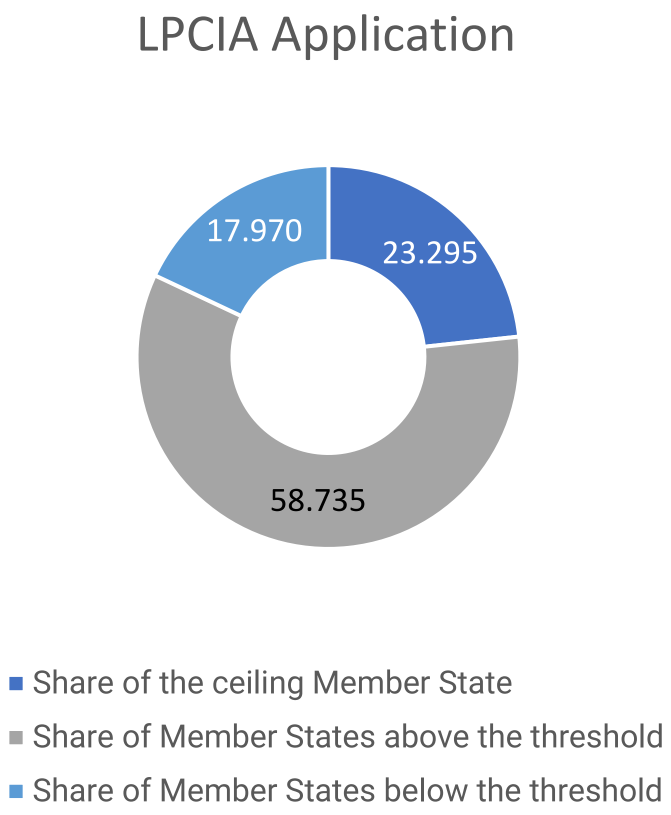
Step 6: Application of the LPCIA

Track 1 Used for final scale	Track 2 Used for presentation purposes
The **ceiling MS does not absorb any points** in this and the subsequent steps. This procedure allows for a slightly lower redistribution of the maximum ceiling adjustment and has been part of the methodology since the outset.	The **ceiling MS** is part of the calculations and **absorbs points**, in this and the subsequent steps.

Step 6: Application of the LPCIA



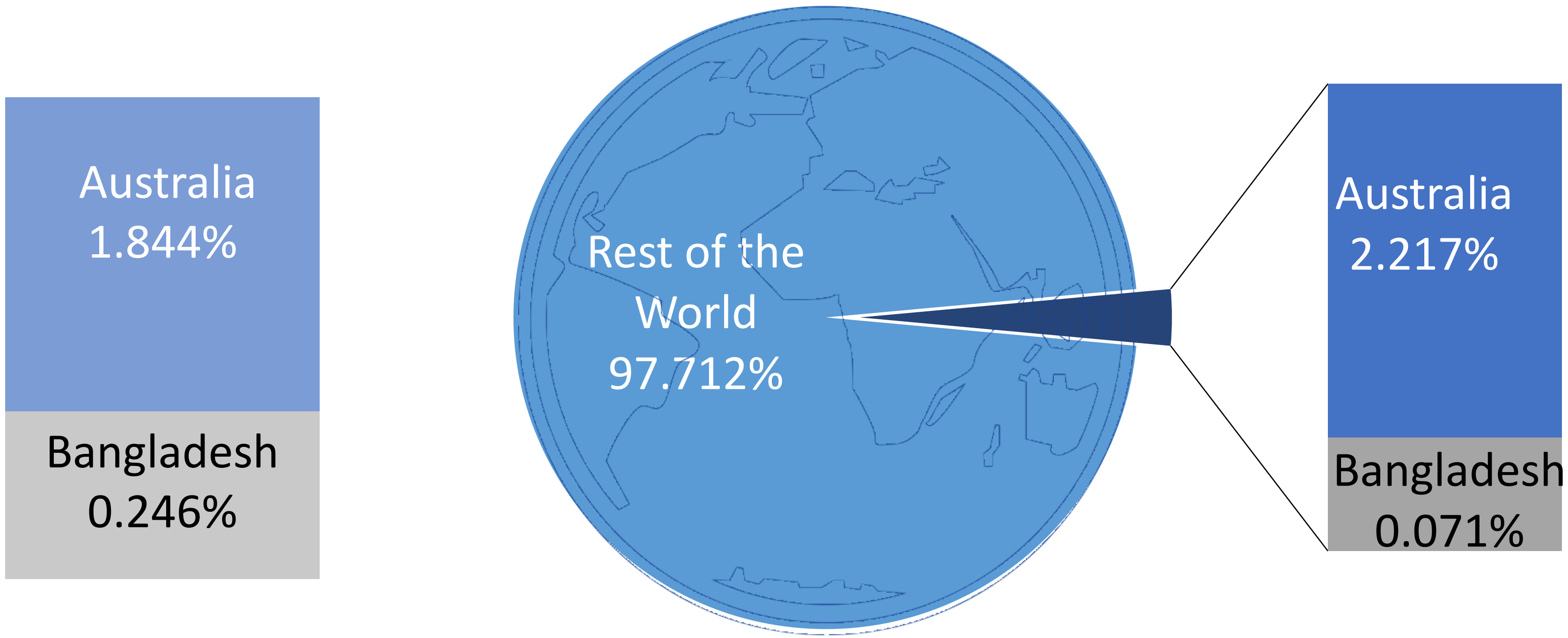




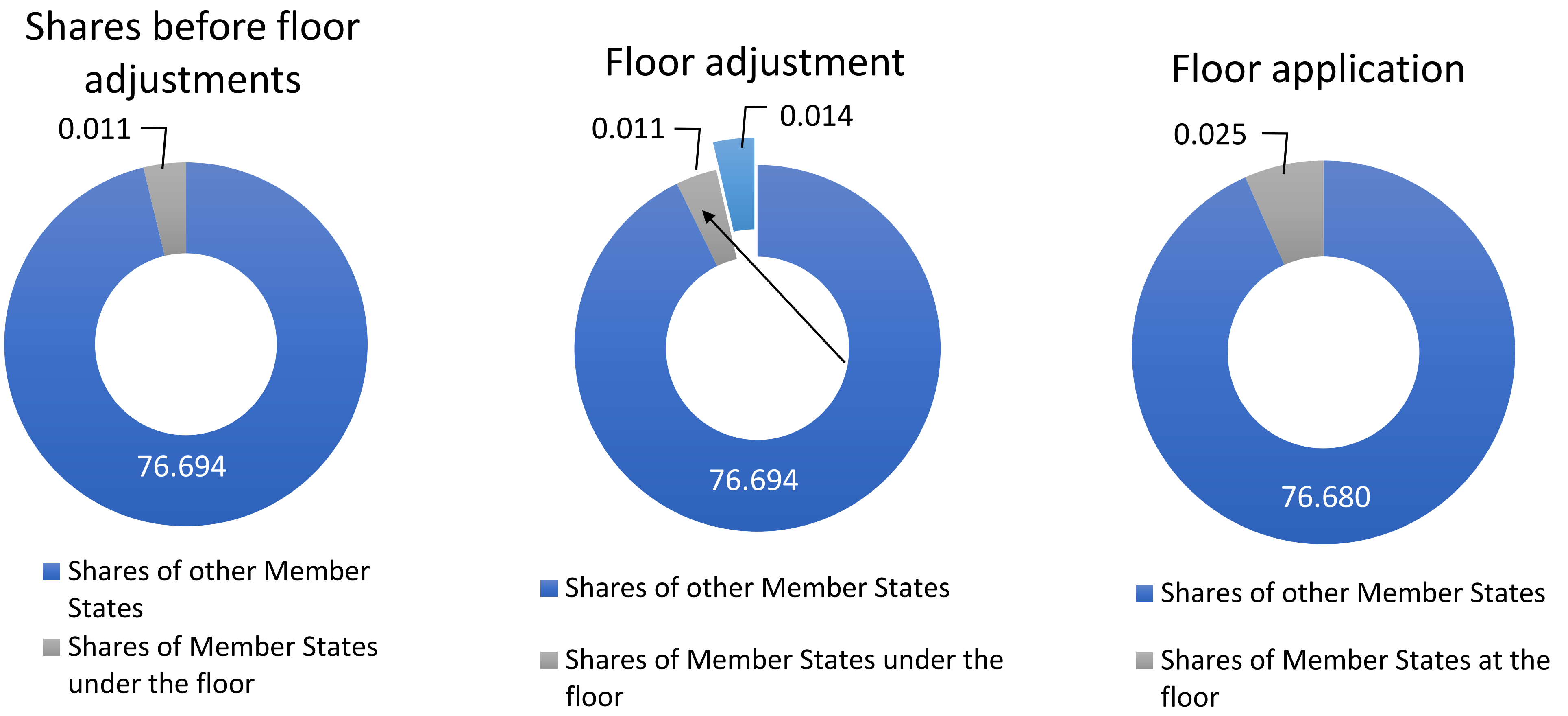
Step 6: Application of the LPCIA

Shares at the DBA step

Shares after LPCIA application

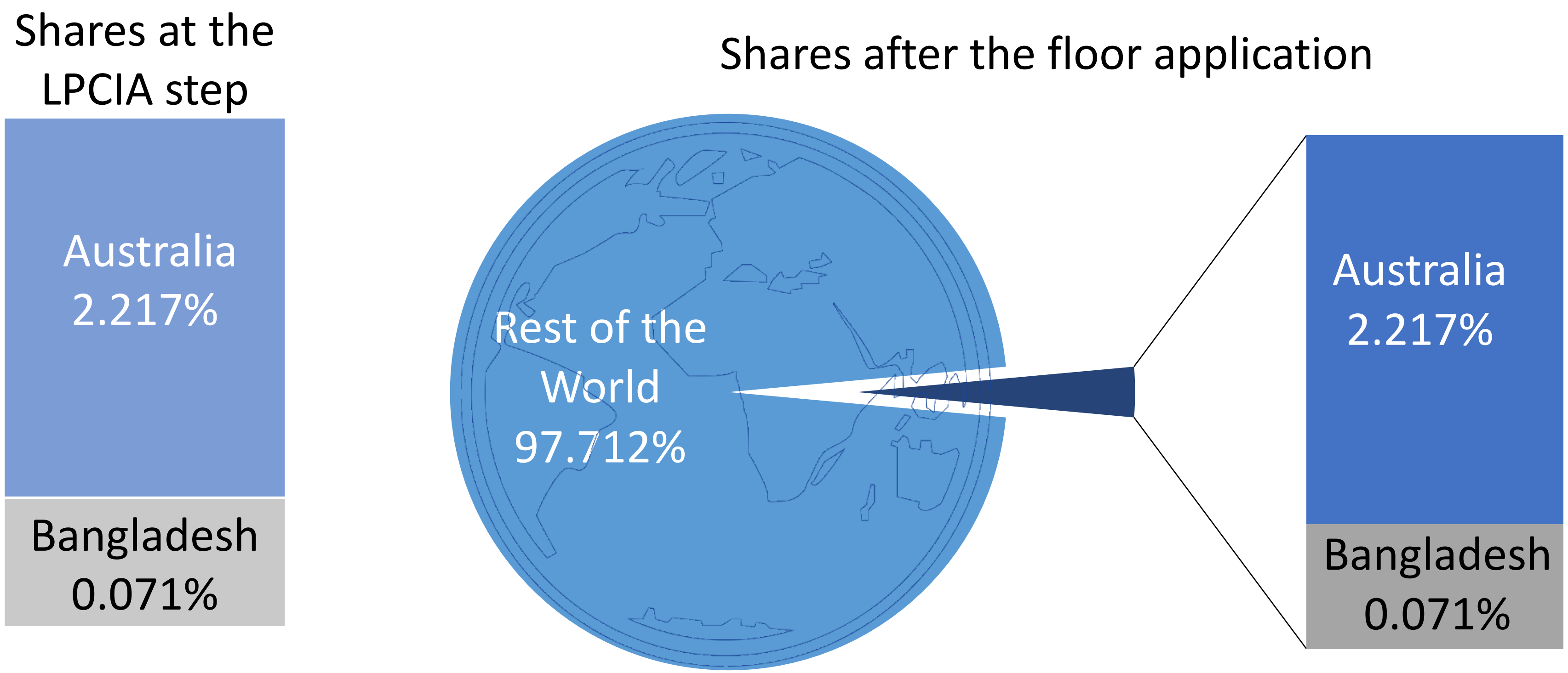


Step 7: Floor limit



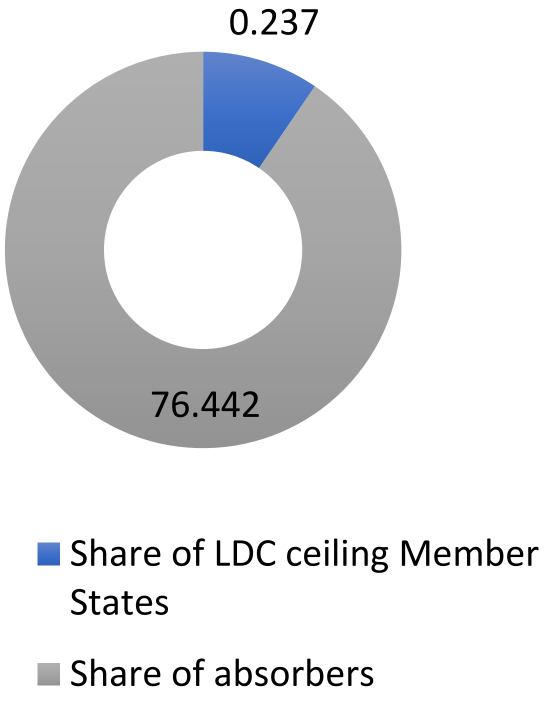
The **ceiling Member State** does not take part in this step of the methodology

Step 7: Shares at the floor step

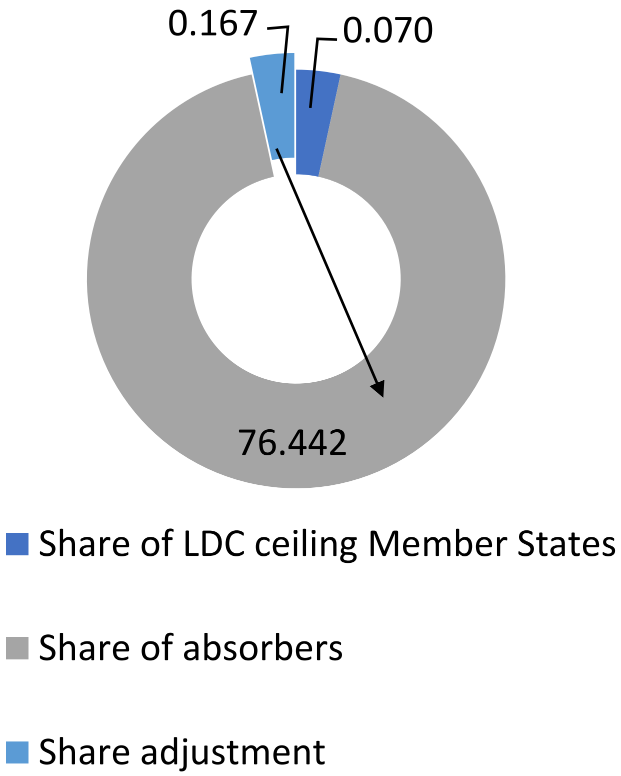


Step 8: LDC Ceiling

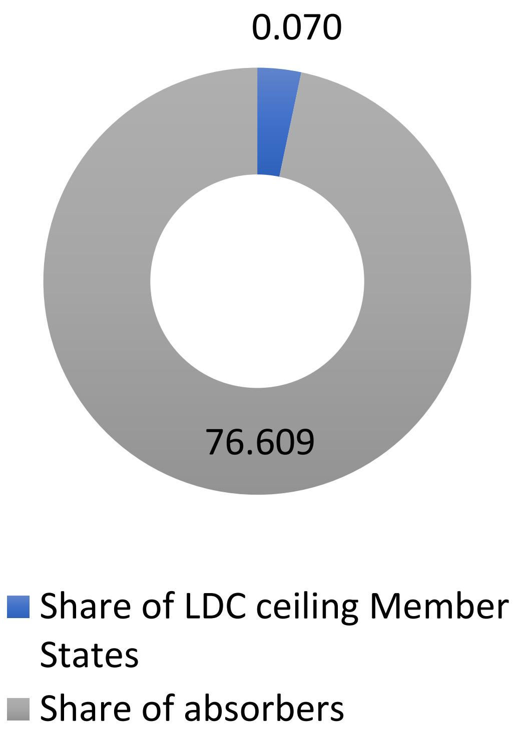
Total share before LDC ceiling



Adjustment: LDC ceiling

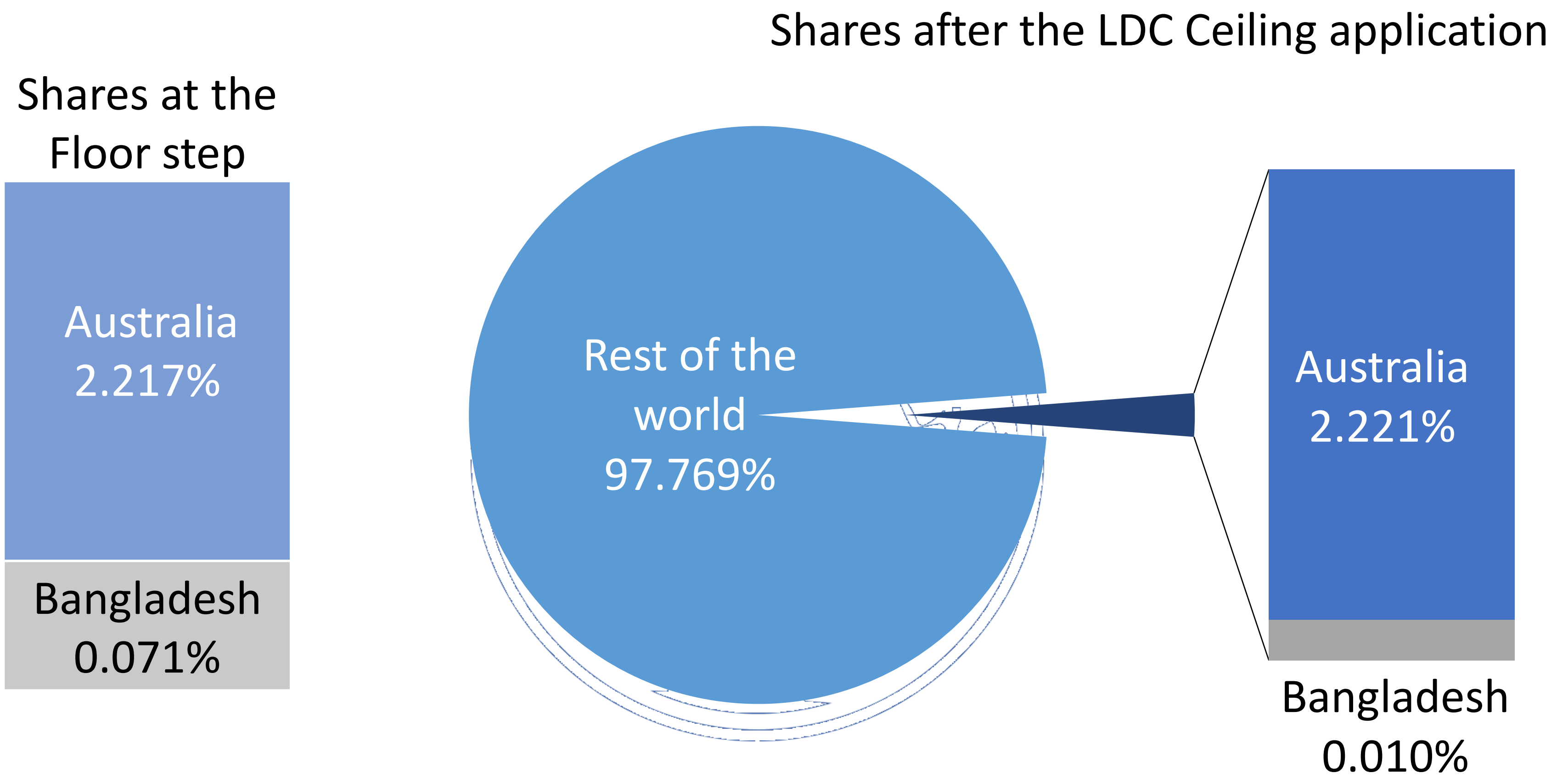


After LDC ceiling

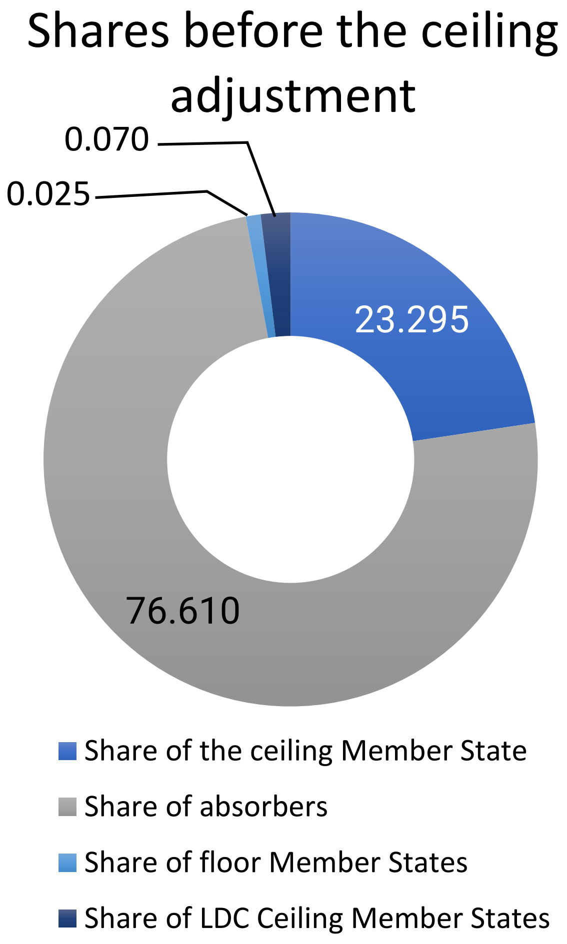


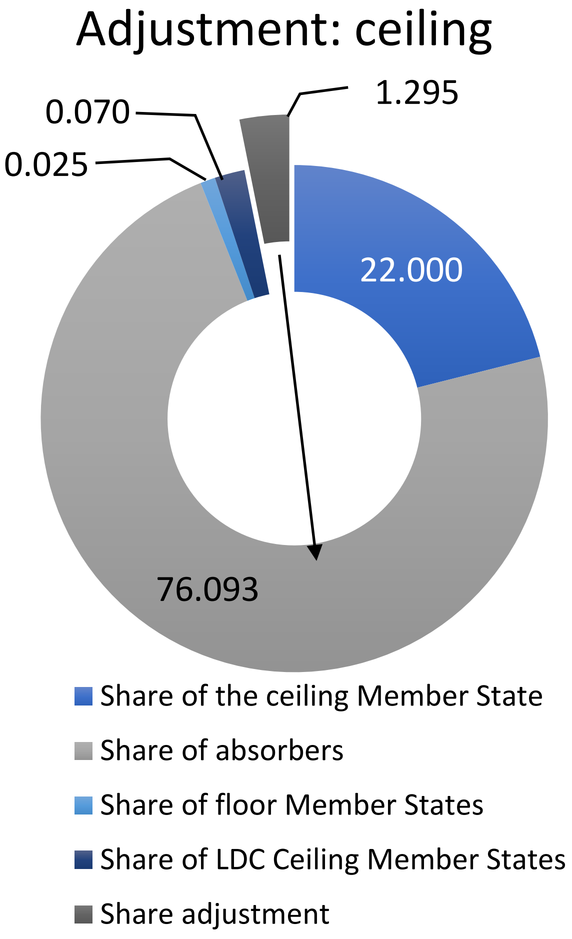
The **floor Member States** and the **ceiling Member States** do not take part in this step of the methodology

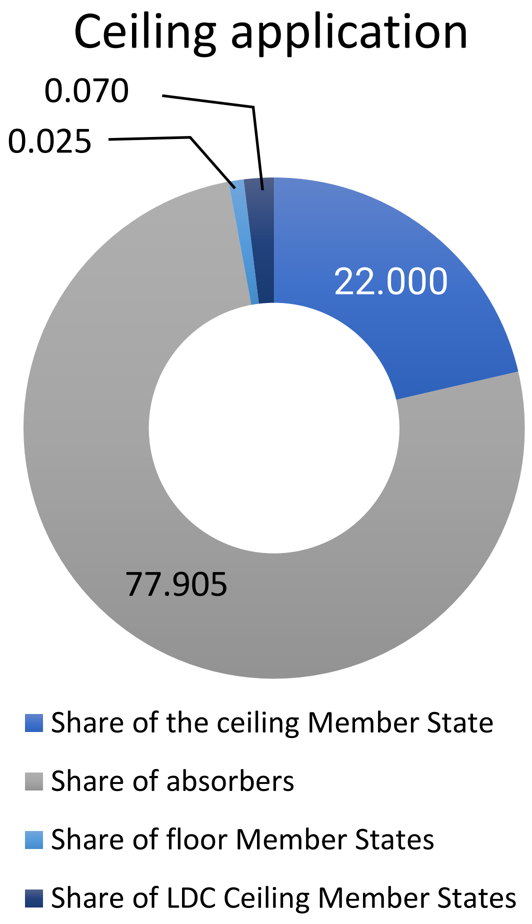
Step 8: Shares at the LDC Ceiling



Step 9: Maximum ceiling step

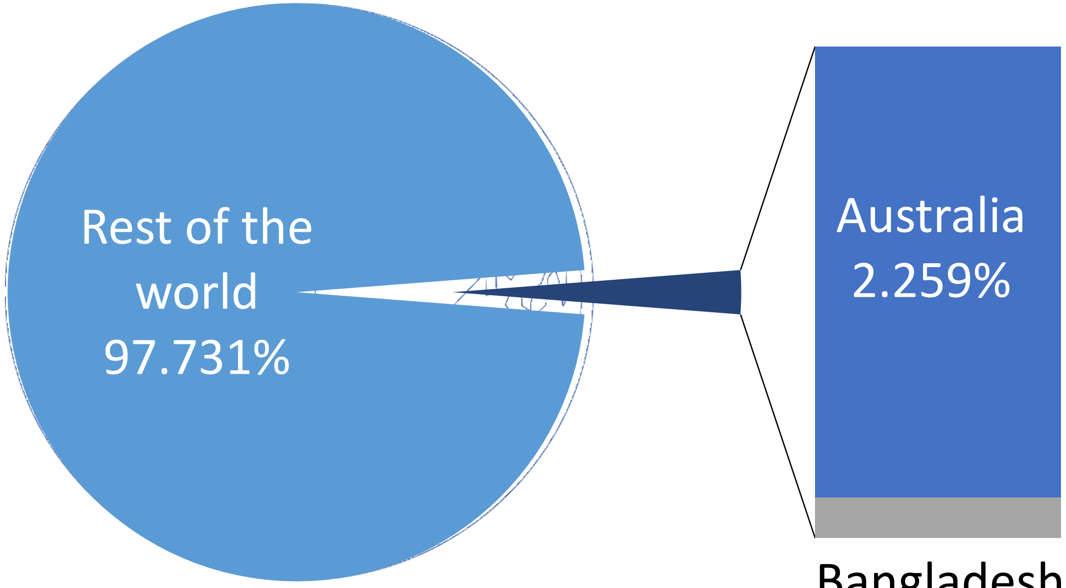






The **floor Member States** and the **LDC ceiling Member States** do not take part in this step of the methodology

Step 9: Shares at the maximum ceiling step



Step 10: Final Step

6 year base period		3 year base period				Final Scale
Australia 2.259%	+	Australia 2.161 %	÷	2	=	Australia 2.210 %
Bangladesh 0.010%		Bangladesh 0.010%				Bangladesh 0.010%

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