Annual Accounts

5th July 2023
Priesh Valabh

Munich RE

NOT IF, BUT HOW

Image: Munich Re

Agenda

Munich RE

01

Sliding Scale Calculations

02

Profit Commission Calculations- Calendar Year

03

Profit Commission Calculation- Underwriting Year Method

04

Loss Participation

Alternative

Image: Munich Re

01

Sliding Scale Calculations

Reinsurance Commissions

Munich RE

The direct insurer’s administrative costs are, however, not reduced through reinsurance, so we as the reinsurer generally returns this portion of the premium to the direct insurer in the form of a reinsurance commission.

On the other hand, the reimbursement of the original costs or even of a lower percentage of these costs can be open to negotiation if the insurance business produces negative results over a period of several years.

Reinsurance Commissions

Munich RE

TYPE OF COMMISSIONS

Flat Commission

The **standard percentage rate** that reinsurer pays to the cedent.

Provisional Commission

A tentative percentage rate that is subject to subsequent adjustment at the end of the contract year.

Overriding Commission

Paid to the ceding company over and above the original standard commission payable.

Brokerage

Munich RE

- When a reinsurer receives a share of the treaty through a broker, the reinsurer will normally agree to a brokerage.
- Not applicable to business ceded directly.
- The percentage of brokerage payable is applied to the written premiums on a gross or net basis and again, this will be clearly stipulated in the contract.

Direct Insurer → **Broking company** ← **Reinsurer**

HDFC ERGO GENERAL INSURANCE

Sliding Scale Commission Calculation

- **Definition:**
- The sliding scale commission calculation is a system of calculation to adapt the reinsurance commission to the profitability of ceded business.
- To evaluate ceded business the loss ratio is used, which shows the relation between incurred losses and earned premium.
- According to this loss ratio the appropriate commission rate can be calculated, using the sliding scale agreements determined in the treaty conditions.
- So, in case of profitable business, sliding scale commission can be a kind of "reward" granted by the reinsurer to the cedent.

Sliding Scale Commission Calculation, Calendar Year

Loss Ratio in % = Incurred Losses / Earned Premium x 100

Earned Premium = + Written Premium
+ Unearned Premiums at the beginning of the year
- Unearned Premiums at the end of the year

Incurred Losses = - Paid Losses
+ Loss Reserve / Withdrawal previous year
- Loss Reserve / Withdrawal current year

Example: $\frac{35.000}{100.000} * 100 = 35\ \%$

Sliding Scale Commission Calculation, Calendar Year

Treaty Stipulations:

Minimum Commission in %: 30

Maximum Commission in %: 40

Provisional Commission in %: 35

Maximum Loss Ratio in %: 50

Minimum Loss Ratio in %: 30

Proportion: 1 point of commission corresponds to 2 points of loss ratio

Commission in %	Loss Ratio
30	more than 48% including 50% and more
31	more than 46% including 48%
32	more than 44% including 46%
33	more than 42% including 44%
34	more than 40% including 42%
35	more than 38% including 40%
36	more than 36% including 38%
37	more than 34% including 36%
38	more than 32% including 34%
39	more than 30% including 32%
40	less than 30% including 30%

Calculation of Sliding Scale
Calendar year

- Steps:

a) Calculation of Incurred Losses and Earned Premium

b) Calculation of Loss Ratio

c) Determination of the commission rate according to the scale

d) Appliance of the commission rate to the premiums written

e) Adjustment of the commission

Sliding Scale Commission Calculation, Calendar Year

Munich RE

Statements of Account for the Fire 1st Surplus Treaty

Currency: EURO	4th Quarter 2009	
	Debit	Credit
Premium		100.000
Commission 35 %	35.000	
Overrider 2,5%	2.500	
Paid Losses	50.000	
Balance due to you	12.500	
	100.000	100.000

Unearned Premium Reserves as at 31.12.2009: - 96.000

Loss Reserves as at 31.12.2009: -150.000

Currency: EURO	1st Quarter 2010		2nd Quarter 2010		3rd Quarter 2010		4th Quarter 2010	
	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit
Premium		80.000		100.000		70.000		90.000
Commission 35 %	28.000		35.000		24.500		31.500	
Overrider 2,5%	2.000		2.500		1.750		2.250	
Paid Losses	30.000		20.000		22.000		35.000	
Balance due to you	20.000		42.500		21.750		21.250	
	80.000	80.000	100.000	100.000	70.000	70.000	90.000	90.000

Calculation of Sliding Scale Commission

Munich RE

TREATY CONDITIONS:

Maximum loss ratio	50 %	Minimum commission rate	30 %
Minimum loss ratio	30 %	Maximum commission rate	40 %
		Provisional commission rate	35 %

Loss carried forward

Commission in%	at a loss ratio of
30	over 48% up to and including 50%
31	over 46% up to and including 48%
32	over 44% up to and including 46%
33	over 42% up to and including 44%
34	over 40% up to and including 42%
35	over 38% up to and including 40%
36	over 36% up to and including 38%
37	over 34% up to and including 36%
38	over 32% up to and including 34%
39	over 30% up to and including 32%
40	under 30% up to and including 30%

Sliding-Scale

Profit carried forward

Sliding Scale Commission Calculation, Calendar Year

Munich RE

Solution:

Treaty Stipulations — YEAR 2010

Maximum Loss Ratio in %: 50
Minimum Loss Ratio in %: 30

Minimum Commission in %: 30
Maximum Commission in %: 40
Provisional Commission in %: 35

Currency: EURO

Premiums written	340 000
Unearned premium income	96 000
Unearned premium outgo	-120 000
Earned premiums	316 000
Claims paid	-107 000
Outstanding losses income	+150 000
Outstanding losses outgo	-170 000
Incurred losses	127 000
Loss Ratio	40,19%
Commission acc. to sliding scale in %	34%
Commission	115 600
Commission provisionally charged in %	35%
Commission already charged	119 000
Adjustment due	3 400

Alternative

Image: Munich Re

02

Profit Commission Calculation Calendar – Year Method

Calculation of Profit Commission – Calendar Year

- Definition and various kinds of profit commission calculations
- Contents of the profit commission statement
- Example without loss carry forward clause
- Loss carry forward clause and handling
- Example with loss carry forward

Calculation of Profit Commission – Calendar Year

Definition:

The profit commission calculation is a system of calculation designed to determine the profit share that the reinsurer pays to the cedent in addition to its reinsurance commission.

The profit commission is a kind of “reward” granted by the reinsurer to the cedent for bringing profitable business.

Calculation of Profit Commission – Calendar Year

Various kinds of profit commission calculations (pcc)

- Calendar-year method
- Underwriting-year method
- Year of occurrence method

Calculation of Profit Commission – Calendar Year

Munich RE

Contents of the profit commission statement

Income:

- Premium Written
- Unearned premiums previous year(portfolio entry)
- Outstanding Losses previous year(portfolio entry)

Outgo:

- Commission
- Losses paid (cash losses)
- Unearned premiums current year (portfolio withdrawal)
- Outstanding losses current year (portfolio withdrawal)
- Management expenses (% of premium written)

Calculation of Profit Commission – Calendar Year

Munich RE

Currency : Euro	1st quarter		2nd quarter		3rd quarter				4th quarter	
Year **2007**	**debit**	**credit**	**debit**	**credit**	**debit**	**credit**	**debit**	**credit**	**debit**	**credit**
premium commission 30 %		35 000,00		30.000,00				20.000,00		15.000,00
commission 30 %	10 500,00		9.000,00		6.000,00				4.500,00	
losses paid	0,00		5.000,00		2.000,00				3.000,00	
balance	24 500,00		16.000,00		12.000,00				7.500,00	
					unearned premium as at 31.12.2007				35.000,00	
					outstanding losses as at 31.12.2007				5 000,00	
Currency : Euro	**1st quarter**		**2nd quarter**		**3rd quarter**				**4th quarter**	
Year **2008**	**debit**	**credit**	**debit**	**credit**	**debit**	**credit**	**debit**	**credit**	**debit**	**credit**
premium		50.000,00		45.000,00			30.000,00			20.000,00
commission 30 %	15 000,00		13 500,00		9 000,00				6 000,00	
losses paid	1.000,00		30.000,00		10.000,00				90.000,00	
balance	34 000,00		1.500,00		11.000,00				-76.000, 00	
					unearned premium as at 31.12.2008				50.750 ,00	
					outstanding losses as at 31.12.2008				40.000,00	

Calculation of Profit Commission – Calendar Year

Munich RE

Calculation as at 31st December		2007	2008
Income	premium written	100 000	145 000
	unearned premium previous year		
	outstanding losses previous year	0	35 000
		0	5 000
	total income	100 000	185 000
Outgo	commission	30 000	43 500
Result	losses paid	10 000	131 000
	total outgo	5 000	7 250
		85 000	272 500
		15 000	(87 500)
profit commission 10 %		1 500	

Calculation of Profit Commission – Calendar Year

Munich RE

Loss carry forward clause:

Losses are carried forward from one accounting period to the next.

Losses can be carried forward

- for a limited period, e.g. for 3 or 5 years
- to extinction

Calculation of Profit Commission – Calendar Year

Munich RE

<u>Handling:</u>

- Loss carried forward for a limited period:
- A profit is used initially to eliminate the oldest loss in each case.
- If the profit is larger than the oldest loss, the difference remaining after its elimination is used to eliminate, either wholly or partially, the second oldest loss, and so on.
- In other words, losses – beginning with the oldest – are eliminated through profits made in the following years.

Calculation of Profit Commission – Calendar Year

Munich RE

Calculation of loss carry forward clause

Loss carry forward(lcf): 3 years

Year	2003	2004	2005	2006	2007	2008
Result	30,000	-500	-7000	-1000	5000	9500
lcf 1st year						
lcf 2nd year						
lcf 3rd year						
Total Result						

Calculation of Profit Commission – Calendar Year

Munich RE

Calculation of loss carry forward clause

Loss carry forward(lcf): 3 years

Year	2003	2004	2005	2006	2007	2008
Result	30,000	-500	-7000	-1000	5000	9500
lcf 1st year						
lcf 2nd year						
lcf 3rd year						
Total Result						

5000 Profit 2007

-500 **Loss 2004**

4500 Reduced Profit

-7000 **Loss 2005**

Amount to be carried forward, 3rd year -2500

Calculation of Profit Commission – Calendar Year

Munich RE

Calculation of loss carry forward clause

Loss carry forward(lcf): 3 years

Year	2003	2004	2005	2006	2007	2008
Result	30,000	-500	-7000	-1000	5000	9500
lcf 1st year			-500	-7000	-1000	0
lcf 2nd year				-500	-7000	-1000
lcf 3rd year					-500	-2500
Total Result					-3500	6000

Alternative

Image: Munich Re

03 Profit Commission Calculation Underwriting – Year(U/W) Method

Calculation of Profit Commission, U/Y Method Agenda

Munich RE

01

Differences between the calendar-year and the u/y method

02

Example

Calculation of Profit Commission, U/Y Method

Differences between the calendar-year and the u/y method

a) Calculations **must** be drawn up for each Underwriting Year separately.

In other words:

In the various calendar-years calculations must be drawn up for each Underwriting Year.

Calculation of Profit Commission, U/Y Method

Munich RE

Differences between the calendar-year and the u/y method

b) Unearned premiums

They are taken into consideration in the case that the calendar-year and the u/y are identical or as long as unearned premium are established.

In the case of 12-month policy periods all the premiums of a given u/y are earned at the end of the second year after the commencement of that underwriting year.

Calculation of Profit Commission, U/Y Method

Differences between the calendar-year and the u/y method

c) All figures i.e. unearned premiums, outstanding losses remain in the given u/y (i.e. not carried over from one calendar-year to the next)

Calculation of Profit Commission, U/Y Method

Munich RE

Technical Account Year 2002 (issued by the insurance company)

Class of business: Marine – 1st Surplus **Currency : €**	**U/Y = underwriting year**			
	U/Y	**Amount**	**Debit**	**Credit**
Premium	2002	50,000		50,000
Commission	2002	15,000	15,000	
Losses Paid	2002	7,000	7,000	
Balance due to you				28,000
unearned premiums as at 31.12.2002	2002			17,500
outstanding losses as at 31.12.2002	2002			3,000

Calculation of Profit Commission, U/Y Method Cont..

Munich RE

Treaty conditions: Loss carried forward: Management Expenses: Profit commission:	3 years 5 % 10 %	Currency: €

Calendar year	**2002**
Income	
premiums written	50.000
unearned premiums p.y.	0
outstanding losses p.y.	0
Total Income	**50.000**
Outgo	
commission	15.000
losses paid	7.000
unearned prem. c.y.	17.500
outstanding losses c.y.	3.000
managem. expenses 5 %	2.500
Total Outgo	**45.000**
Result of the calend. y.	**5.000**
Profit commission	500

Calculation of Profit Commission, U/Y Method Cont..

Munich RE

Treaty conditions: Loss carried forward: Management Expenses: Profit commission:	 3 years 5 % 10 %	Currency: €

Calendar year	CY 2002	CY 2003	Total
Income			
premiums written	50.000	10.000	60.000
unearned premiums p.y.	0	17.500	
outstanding losses p.y.	0	3.000	
Total Income	**50.000**	**30.500**	**60.000**
Outgo			
commission	15.000	3.000	18.000
losses paid	7.000	8.000	15.000
unearned prem. c.y.	17.500	0	0
outstanding losses c.y.	3.000	22.000	22.000
managem. expenses 5 %	2.500	500	3.000
Total Outgo	**45.000**	**33.500**	**58.000**
Result of the calend. y.			**2.000**
Profit commission			200
already paid in previous years			- 500
correction			- 300

Calculation of Profit Commission, U/Y Method Cont..

Munich RE

Treaty conditions:
Loss carried forward: 3 years
Management Expenses: 5 %
Profit commission: 10 %

Currency: €

Calendar year	CY 2002	CY 2003	CY 2004	CY 2005	Total
Income					
premiums written	50.000	10.000			60.000
unearned premiums p.y.	0	17.500			
outstanding losses p.y.	0	3.000	22.000	3.000	
Total Income	**50.000**	**30.500**	**22.000**	**3.000**	**60.000**
Outgo					
commission	15.000	3.000			18.000
losses paid	7.000	8.000	11.000	1.800	27.800
unearned prem. c.y.	17.500	0			
outstanding losses c.y.	3.000	22.000	3.000	2.000	2.000
managem. expenses 5 %	2.500	500			3.000
Total Outgo	**45.000**	**33.500**	**14.000**	**3.800**	**50.800**
Result of the calend. y.					**9.200**
Profit commission					920
already paid in previous years					- 1.000
correction					- 80

Calculation of Profit Commission, U/Y Method Cont..

Munich RE

Treaty conditions: Loss carried forward: Management Expenses: Profit commission:	 3 years 5 % 10 %	Currency: €

Calendar year	**CY 2002**	**CY 2003**	**CY 2004**	**CY 2005**	**Total**
Income					
premiums written	50.000	10.000			60.000
unearned premiums p.y.	0	17.500			
outstanding losses p.y.	0	3.000	22.000	3.000	
Total Income	**50.000**	**30.500**	**22.000**	**3.000**	**60.000**
Outgo					
commission	15.000	3.000			18.000
losses paid	7.000	8.000	11.000	1.800	27.800
unearned prem. c.y.	17.500	0			
outstanding losses c.y.	3.000	22.000	3.000	2.000	2.000
managem. expenses 5 %	2.500	500			3.000
Total Outgo	**45.000**	**33.500**	**14.000**	**3.800**	**50.800**
Result of the calend. y.					**9.200**
Profit commission					920
already paid in previous years					- 1.000
correction					- 80

Calculation of Profit Commission, U/Y Method Cont..

Munich RE

Treaty conditions:		Currency: €
Loss carried forward:	3 years	
Management Expenses:	5 %	
Profit commission:	10 %	

Calendar year	CY 2002	CY 2003	CY 2004	CY 2005	CY 2006	Total
Income						
premiums written	50.000	10.000				60.000
unearned premiums p.y.	0	17.500				
outstanding losses p.y.	0	3.000	22.000	3.000	2.000	
Total Income	**50.000**	**30.500**	**22.000**	**3.000**	**2.000**	**60.000**
Outgo						
commission	15.000	3.000				18.000
losses paid	7.000	8.000	11.000	1.800	1.500	29.300
unearned prem. c.y.	17.500	0				
outstanding losses c.y.	3.000	22.000	3.000	2.000	300	300
managem. expenses 5 %	2.500	500				3.000
Total Outgo	**45.000**	**33.500**	**14.000**	**3.800**	**1.800**	**50.600**
Result of the calend. y.						**9.400**
Profit commission						940
already paid in previous years						- 920
correction						20

Calculation of Profit Commission, U/Y Method Cont..

Treaty conditions:		Currency: €
Loss carried forward:	3 years	
Management Expenses:	5 %	
Profit commission:	10 %	

Calendar year	**CY 2002**	**CY 2003**	**CY 2004**	**CY 2005**	**CY 2006**	**CY 2007**	**Total**
Income							
premiums written	50.000	10.000					60.000
unearned premiums p.y.	0	17.500					
outstanding losses p.y.	0	3.000	22.000	3.000	2.000	300	
Total Income	**50.000**	**30.500**	**22.000**	**3.000**	**2.000**	**300**	**60.000**
Outgo							
commission	15.000	3.000					18.000
losses paid	7.000	8.000	11.000	1.800	1.500	200	29.500
unearned prem. c.y.	17.500	0					
outstanding losses c.y.	3.000	22.000	3.000	2.000	300	0	0
managem. expenses 5 %	2.500	500					3.000
Total Outgo	**45.000**	**33.500**	**14.000**	**3.800**	**1.800**	**200**	**50.500**
Result of the calend. y.							**9.500**
Profit commission							950
already paid in previous years							- 940
correction							10

Alternative

Image: Munich Re

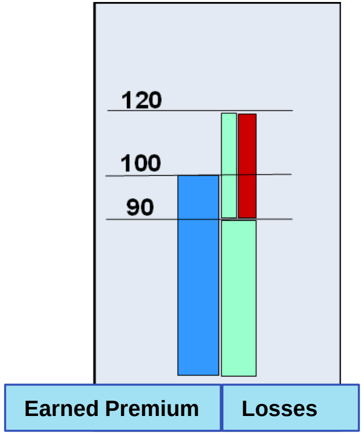
04

Loss Participation

Loss Participation - Definition

If the effective losses exceed a certain percentage of the earned premiums (loss ratio), the primary insurer pays a contractually agreed share of the losses exceeding this percentage up to a defined maximum.

In the statement of account, this item is posted separately as a credit for the reinsurer.



Losses exceeding agreed percentage up to defined maximum

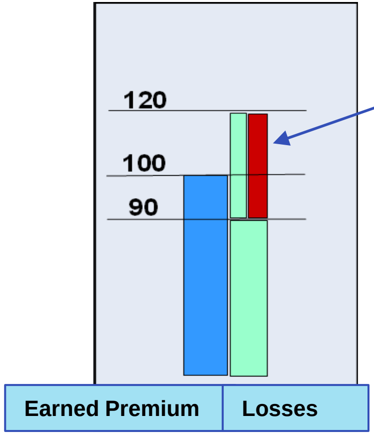
Loss Participation - Definition

Munich RE

Fire Quota Share

Treaty information:

"In case the incurred losses of one year exceed 90 % of the earned premiums of the same year, the ceding company will pay 50% of the difference (in addition to its self retention)"



Red column:
50% cedents share

Loss Participation - Definition

Munich RE

Fire Quota Share

		EUR
+	Written Premium 2012	46,000
+	Unearned Premium entry as at 01.01.2012	9,400
–	Unearned premium as at per 31.12.2012	-9,600
	Earned Premium:	**...............**
–	Claims paid during 2012	-38,900
+	Loss reserve as at 01.01.2012	16,800
–	Loss reserve as at 31.12.2012	-27,700
	Incurred Losses:	**...............**

Question:
How much is the original insurer's loss participation (in EUR)?
In which reinsurance account should the reinsurer be credited with that amount?

Loss Participation - Definition

Munich RE

Fire Quota Share

	EUR
Earned premiums:	
Incurred losses:	

How much is the cedent‘s Loss participation?

Incurred Losses
Less 90% of the earned premiums

Exceeding loss

50 % Loss participation:

When will the Reinsurer be credited with this loss participation?

The amount of EUR 4.290 will be credited to the reinsurer in the 4th quarter 2012 account.

Questions

5th July 2023
Priesh Valabh

Munich RE

NOT IF, BUT HOW

Image: Munich Re

LIMA Programme

Your feedback is appreciated

Please visit: www.menti.com
Use the code: 31 58 40 0

NOT IF, BUT HOW

Image: Munich Re

Thank you for your attention!

5th July 2023
Priesh Valabh

Munich RE

NOT IF, BUT HOW

Image: Munich Re