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Quotation of LOP-risks

A big mystery ?

Topics

- General remarks concerning LOP
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- LOP-Forms in Germany
- Deductibles
- LOP-Quotation - General remarks
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General Remarks

- **Prerequisites**
  - > At your clients
  - > In your company
- **Policy period/indemnity period**
  - > Two pairs of shoes
- **Sum Insured**
  - > Is an estimation
  - > Calculate it for two years ahead
  - > Help your client to determine it
  - > Return premium-clause

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General Remarks

- **Taxation of Indemnification**
  - > Not immediately
  - > But at year-end over profit and loss account according to local regulations
- **Scope of cover of LOP-policy**
  - > Same as Fire policy
- **LOP on a "stand-alone-basis"**
  - > LOP is the more difficult risk (antiselec-tion)

General Remarks

- **Limits of Liabilities(LoL) in large LOP-policies**
  - > PML estimation is very difficult if there are a lot of dependencies
  - > PML miscalculation can happen very easily

Important Extensions of basic cover

- **Suppliers extension**
  - > Limit of liability (LoL) and deductible is necessary
  - > Most important suppliers should be named (accumulation control)
- **Customers extension**
  - > Same comments as for suppl. extension
- **Official restrictions in replacement**
  - > Can increase a LOP-loss considerably

Important Extensions of basic cover

- **Unduplicated business documents and other data media**
    - > Duplicates should be kept in places which cannot be hit by one and the same loss
    - > This is by the way a question which is relevant with Risk Management
    - > Additional premium according to agreed LoL

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LOP-Forms in Germany

- **Small-LOP**
  Up to DEM 750.000 sum insured (SI)
  Premium 80 % of fire premium

- **Medium-LOP**
  From DEM 750.000 up to DEM 2.000.000 SI
  Premium 80 % of fire premium

- **Industrial LOP**
  Over DEM 2.000.000 SI
  Premium according to premium guidelines

Deductibles   Combined for Fire and LOP

- PML DEM 100.000.000 for LOP-policy
  Deductible DEM 100.000 (7,2 % rebate)

  Calculation of the rebate:
  full rebate for 50 % of the deductible =   4,6 %
  plus
  50 % of the difference between
  7,2 % and 4,6 % =   1,3 %

  Total rebate   5,9 %

Deductibles   With annual aggregates

- PML DEM 100.000.000 for LOP-policy
  Deductible DEM 100.000 (7,2 % rebate)

  Annual aggregate = DEM 100.000
  7,2 % x 0,8 =   5,76 % rebate
  Annual aggregate = DEM 200.000
  7,2 % x 0,9 =   6,48 % rebate
  Annual aggregate = DEM 300.000
  7,2 % x 0,95 =   6,84 % rebate

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LOP-Quotation General remarks

- The LOP-quotation takes over some items from the Fire-quotation as

  > rebate/loading for class of construction
  > rebate for public fire brigade
  > rebate for fire prevention measures

- In order to get an appropriate rate you should be aware of these items through a share in the fire policy; otherwise you have to estimate rebates/loadings

Practical Exercise   1st case

- **Basic Data**

Original Insured:	Fa. Max Müller
Location:	D-82041 Oberhaching, Tisinstr. 15
Occupancy:	Production and sale of valves for engines (3050)
Class of constr.:	Production: R (- 10 %)
	Storage, prod. of packaging materials: N (normal)

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Practical Exercise   1st case

- **Basic Data (continued)**

  Fire prevention:
  > fully approved, own fire brigade (- 30 %)
  > autom. smoke and heat venting system (- 4 %)
  > storage area fully sprinklered (- 60 %)

  Storage area:
  > 3.500 qm, height of storage 10 m
      correction factor: 1,3

Practical Exercise   1st case

- **Basic Data (continued)**

  Sum insured
  LOP   DEM   80.000.000
  Salaries   DEM   2.000.000

  Loss experience: clean for 5 years (- 15 %)
  Deductible   :   DEM 100.000 (- 7,2 %)
  LoL per event: DEM 50.000.000 (- 11 %)
  Indemn. Period: 12 months

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Practical Exercise   1st case

- **Quotation**

  Remember:
  in order to quote a LOP premium rate we do
  need some information from the quotation of
  the fire premium rate:
  > rebate for class of construction
  > rebate for public fire brigade
  > average rebate for fire prevention
  > rebates on protected values only

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Practical Exercise   1st case

- **Basic Data of Fire-policy**
  Sum insured:
  Production (3050)   DEM 250.000.000 1,50 %o
  Storage (3942)   DEM   30.000.000 1,80 %o
  Pack. Mat. (7251)   DEM   2.000.000 6,50 %o
  Class of construction, Fire prevention see basics
  given for LOP-policy
  Production, storage and production of packed material are three separated fire complexes.

  What do we have to do now?

Practical Exercise   1st case

- **Calculate average rebates for Class of Con-struction and Fire Prevention Measures**

  Class of construction
  Protected value is production building
  SI DEM 250.000.000
  Premium rate 1,5 %o less 10 % = 0,15 %o
  of DEM 250.000.000 =   DEM 37.500

  TSI for fire policy is DEM 282.000.000
  Average rebate therefore   0,13 %o

Practical Exercise   1st case

Fire prevention measures

Production

Basic premium 1,5 %o less 10 % = 1,35 %o

Rebate: own fire brigade   30 %
            SHVS 50 % of 4 %=   2 %

32 % of 1,35 %o = 0,43 %o of DEM 250m
    = DEM 107.500

Practical Exercise   1st case

Fire prevention measures

Storage

Basic premium 1,80 %o x 1,3 = 2,34 %o

Rebate: fully sprinklered   60 %

          50 % of (30 % + 4 %) 17 %

77 % of 2,34 %o = 1,80 %o of DEM 30m
    = DEM 54.000

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Practical Exercise   1st case

Fire Prevention Measures

Packaging materials

Basic premium   6,50 %o

Rebate: own fire brigade   30 %

            SHVS 50 % of 4 %   2 %

32 % of 6,50 %o = 2,08 %o of DEM 2m

=   DEM 4.160

Practical Exercise   1st case

Fire prevention measures

Total rebate: DEM165.660

Total premium for fire policy before rebates for fire prevention, etc.:

250m x 1,35 %o + 30m x 2,34 %o +

2m x 6,50 %o = DEM 420.700

Average rebate for fire prevention: 39,4 %

Practical Exercise   1st case

Now we have the average rebates for

Class of construction   0,13 %o
Fire prevention measures   39,4 %

and we can proceed to the quotation of
the LOP premium rate

Practical Exercise   *1st case*

Basic rate   1,50 %o

rebate for class of constr.   0,13 %o

                                                   1,37 %o

rebate for FPM 39,4 %   0,54 %o

                                                   0,83 %o

rebate for LoL 11 %   0,09 %o

                                                   0,74 %o

rebate for loss history 15 %   0,11 %o

                                                   0,63 %o

rebate for deductible 7,2 %   0,04 %o

LOP premium   0,59 %o

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Practical Exercise   2nd case

Same example as in the first case but different period of indemnities (PoI)

LOP   18 months

Salaries DEM   700.000   9 months

DEM 1.300.000 18 months

If PoI is more than 12 months it is necessary to agree an additional full annual SI for each year affected.

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Practical Exercise   2nd case

Quotation is as follows:

LOP 18 months PoI

DEM 80 mm x 2 = DEM 160 mm SI

rebate for 18 months PoI is 42,5 % calculated on

the premium rate for 12 months PoI =

0,59 %o x 0,575 = 0,34 %o of DEM 160 mm =

DEM 54.400

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Practical Exercise   2nd case

Quotation (continued):

Salaries

DEM 700.000 annual amount PoI 9 months

rebate for 9 months PoI 10 % =

0,59 %o x 0,9 = 0,53 %o =   DEM 371

DEM 1.300.000 annual amount PoI 18 months

SI DEM 1.300.000 x 2 = DEM 2.600.000

rebate for 18 months PoI 42,5 % =

0,59 %o x 0,575 = 0,34 %o = DEM 884

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Practical Exercise   2nd case

Result

1st case PoI 12 months

premium rate   0,59 %o

premium amount   DEM 48.380

2nd case PoI 9/18 months

premium rate   0,34 %o

premium amount   DEM 55.655

Practical Exercise   3rd case

- **Basic Data**
  We are dealing with a company that has four physically separated production plants, but only one LOP-policy. LOP figures can be separated per plant.

  Original insured: Fa. Fred Feuerstein
  Location: Bremen (P1), Eching (P2)
                             München (P3), Ingolstadt
                             (P4)

Practical Exercise   3rd case

- **Basic Data (continued)**

  Occupancy: Processing of plastic prod.,
                          prod. of cosmetics

  Class of constr.:   P1 = R; P2 = N; P3 = R;
                          P4 = N

  reb. for public f.b.:   P1 = 9%, P2 = 2%, P3 =
  10%

                          P4 = 6%

  loss history 5 years: 35 % (- 10 %)
  deductible eael: DEM 2.000.000 (- 24 %)

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Practical Exercise   3rd case

- **Basic Data (continued)**
  PoI for all plants: 12 months
  suppl. extension: for P3 and P4
       LoL DEM 50 mm (+ 13,6 %)
  Sums Insured:

P1	50.000.000	4003	8,40 %o
P2	100.000.000	4005	3,60 %o
P3	150.000.000	4007	3,90 %o
P4	100.000.000	4016	3,10 %o

Practical Exercise   3rd case

- **Quotation (all premium rates in per mille)**

	P1	P2	P3	P4	
	P1	P2 P3		P4	
Premium	8,40	3,60		3,90	3,10
CoC	0,84	0,00		0,39	0,00
	7,56	3,60		3,51	3,10
Pub.f.b.	0,68	0,07		0,35	0,19
	6,88	3,53		3,16	2,91

- **Average premium rate**

50m x 6,88 + 100m x 3,53 + 150m x 3,16 +
100m x 2,91 = DEM 1.462.000 = 3,65 %o

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Practical Exercise   3rd case

- **Quotation (continued)**
  average premium rate   3,65 %o
  reb. for fire prev. meas.   45%   1,64 %o
                                                                    2,01 %o
  reb. for loss history   10 %   0,20 %o
                                                                    1,81 %o
  reb. for deductible   24 %   0,43 %o
  premium before suppl. extension   1,38 %o

  Next step to do:
  Calculate final premium incl. suppl. extension

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Practical Exercise   3rd case

- **Quotation (continued)**
  premium before suppl. extension 1,38 %o
  (all SI in million DEM; all rates in per mille)

  P1   50 x 1,38   = DEM   69.000
  P2 100 x 1,38   = DEM 138.000
  P3 150 x 1,38 x 1,136 = 1,57 = DEM 235.500
  P4 100 x 1,38 x 1,136 = 1,57 = DEM 157.000

  Final Premium 12 months PoI   DEM 599.500

  corresponds 1,50 %o on TSI DEM 400 mm

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Practical Exercise   3rd case

- **Same Example with different PoI's per Plant**
  P 1 12 months
  50.000.000 x 1,38   = DEM 69.000
  P2 15 months
  200.000.000 x 1,38 x 0,54   = DEM 149.040
  P3 24 months
  300.000.000 x 1,57 x 0,63   = DEM 296.730
  P4 9 months
  100.000.000 x 1,57 x 0,90   = DEM 141.300
  Final premium   DEM 656.070
  corresponds 1,01 %o on TSI DEM 650 mm

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Practical Exercise   4th case

- **Basic Data**
  We are dealing again with Mr. Feuerstein's plants but in this expample the TSI of DEM 400 mm cannot be split up.
  As we have quite different occupancies we must find a solution for an artificial split.
  A way to solve this issue is to split the LOP sum according to the proportion in the fire policy.
  Let's see how this works.

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Practical Exercise   4th case

- **Fire Policy - SI per plant (all SI in mm DEM)**

P1	P2	P3	P4	Total
200	300	500	400	1.400

in % of total (rounded up figures)

14	21	36	29	100

- **Split of SI in LOP-Policy (12 months PoI)**

56	84	144	116	400

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Practical Exercise   4th case

- **Quotation (SI in million DEM, rates in %o)**
56 x 6,88 + 84 x 3,53 + 144 x 3,16 + 116 x 2,91
=
premium DEM 1.474.400 = average rate 3,69
less
45 % rebate for FPM =   2,03 %o
10 % rebate for loss history =   1,83 %o
24 % rebate for deductible =   1,39 %o
Result:
Final premium rate is very close to that with
exact split up (1,39 %o versus 1,38 %o)

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Table of rebates for different PoI

- PoI below 12 months - Sum Insured = 12 months

from	up to	rebate %
	6	20,0
6	9	10,0

- Rebates to be applied to the premium rate for 12 months PoI

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Table of rebates for different PoI

- PoI up to 24 months - Sum Insured = 24 months

from	up to	rebate %
	6	60,0
6	9	55,0
9	12	50,0
12	15	46,0
15	18	42,5
18	21	39,5
21	24	37,0

- Rebates to be applied to the premium rate for 12 months PoI

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