

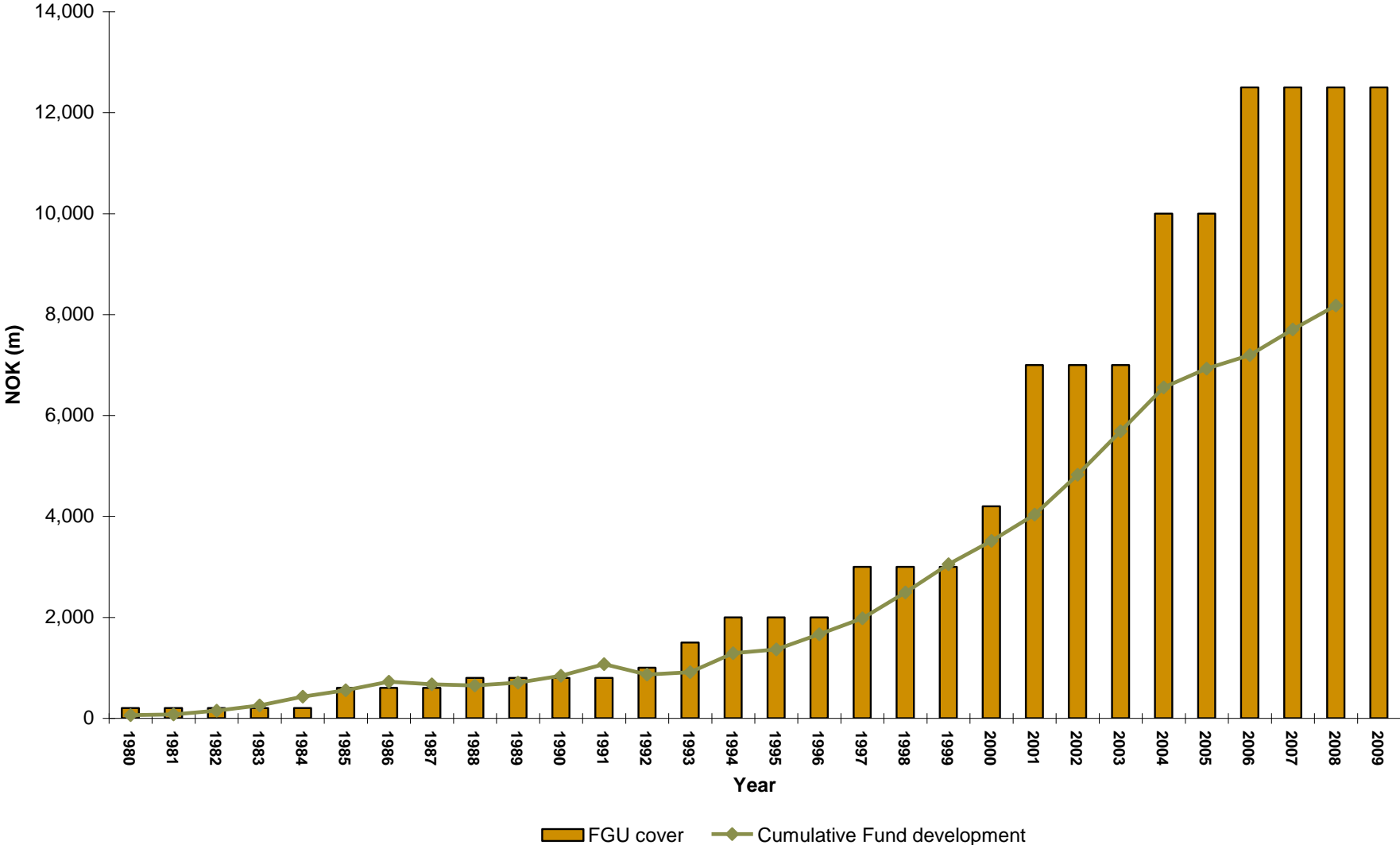
# Conference for NNPP Reinsurers

Oslo 17 June 2009

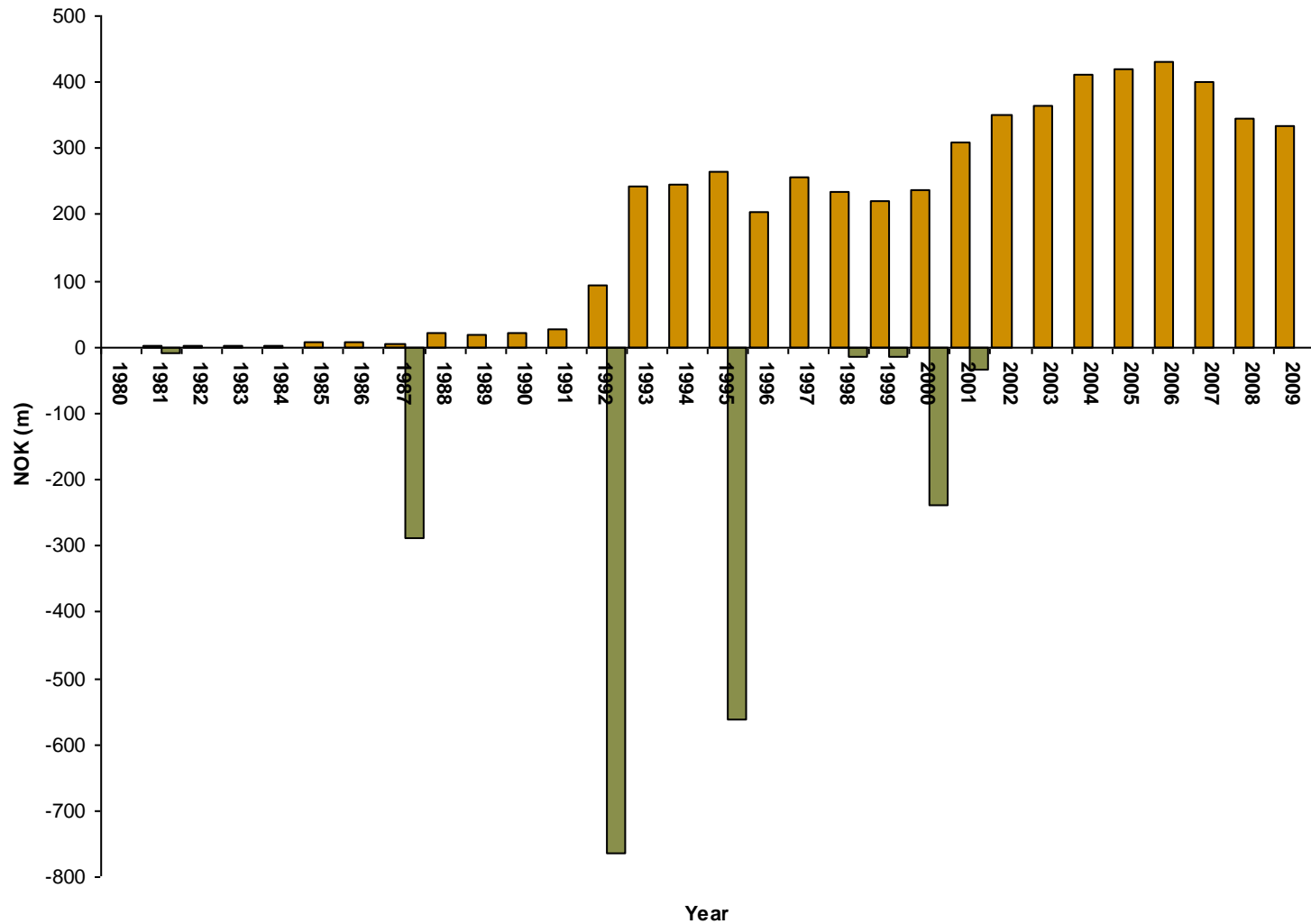
**Section 1: Reinsurance Cover and Results  
Market Breakdown**

Section 2: Loss Indexation

# Reinsurance Cover FGU and Development of Fund 1980 - 2009

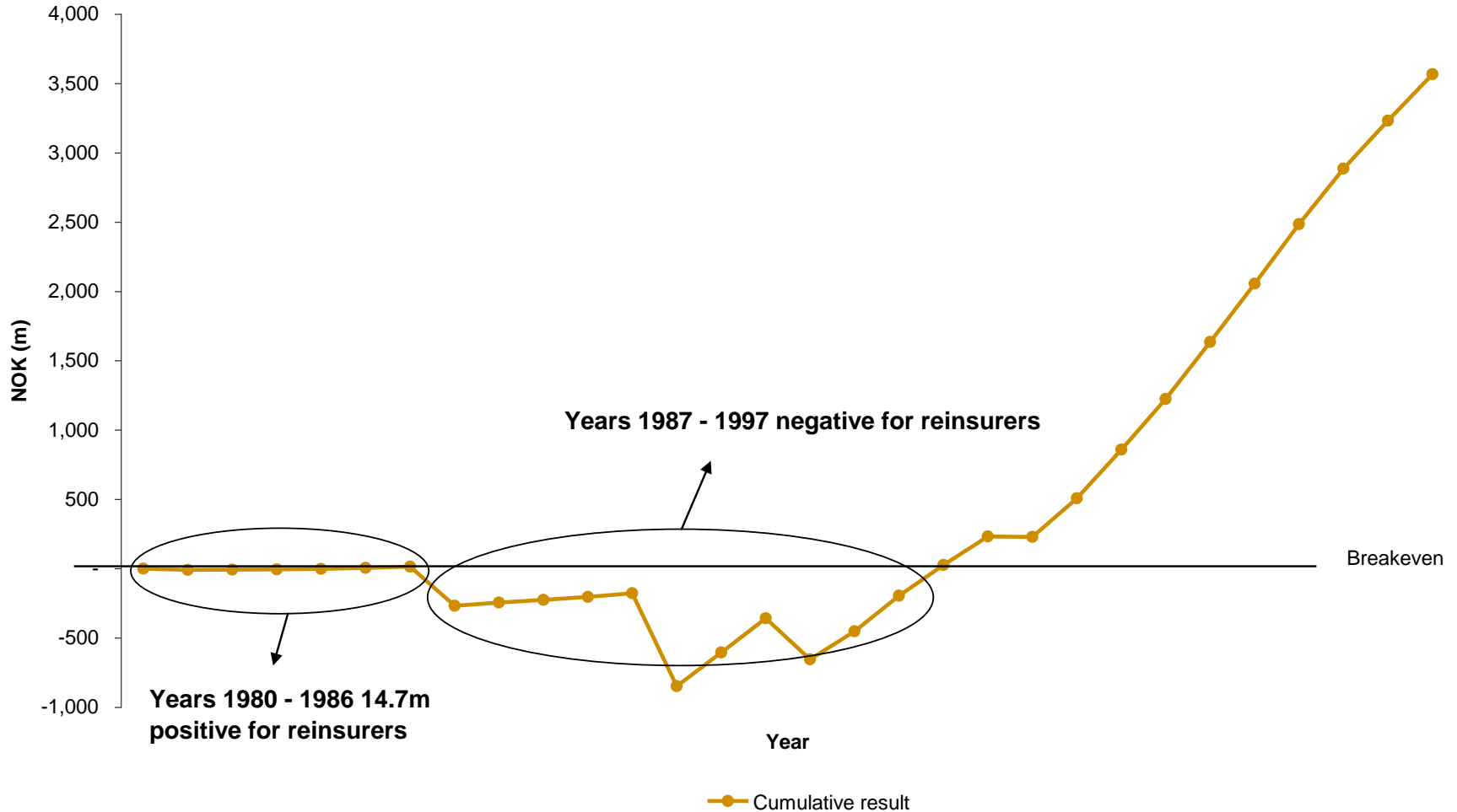


# Reinsurance Results 1980 - 2009



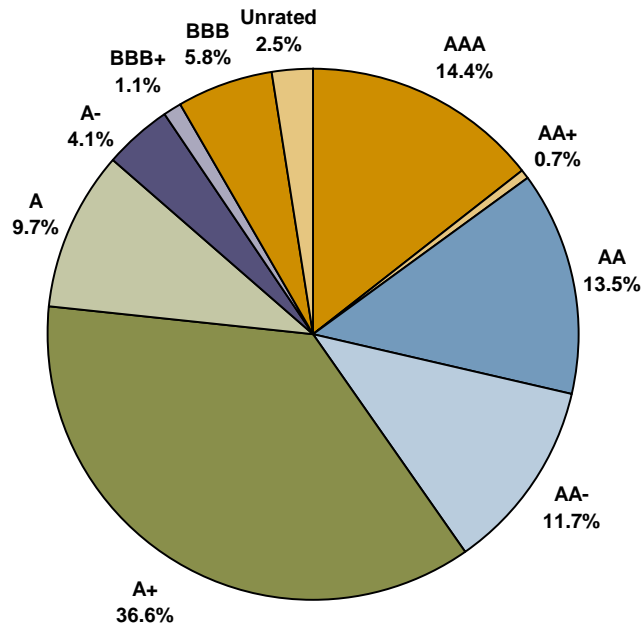
■ Reinsurance premium ■ Reinsurance recovery

# Cumulative Reinsurance result 1980 - 2009



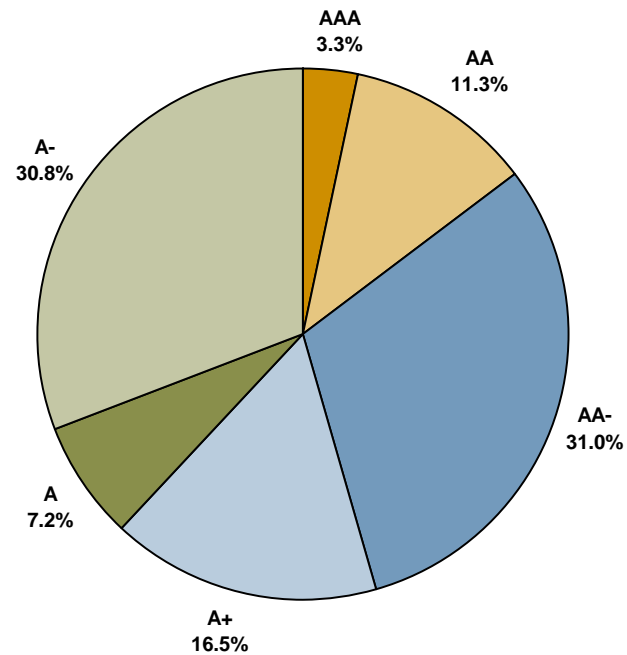
# Breakdown of market by rating 1999 - 2009

1999



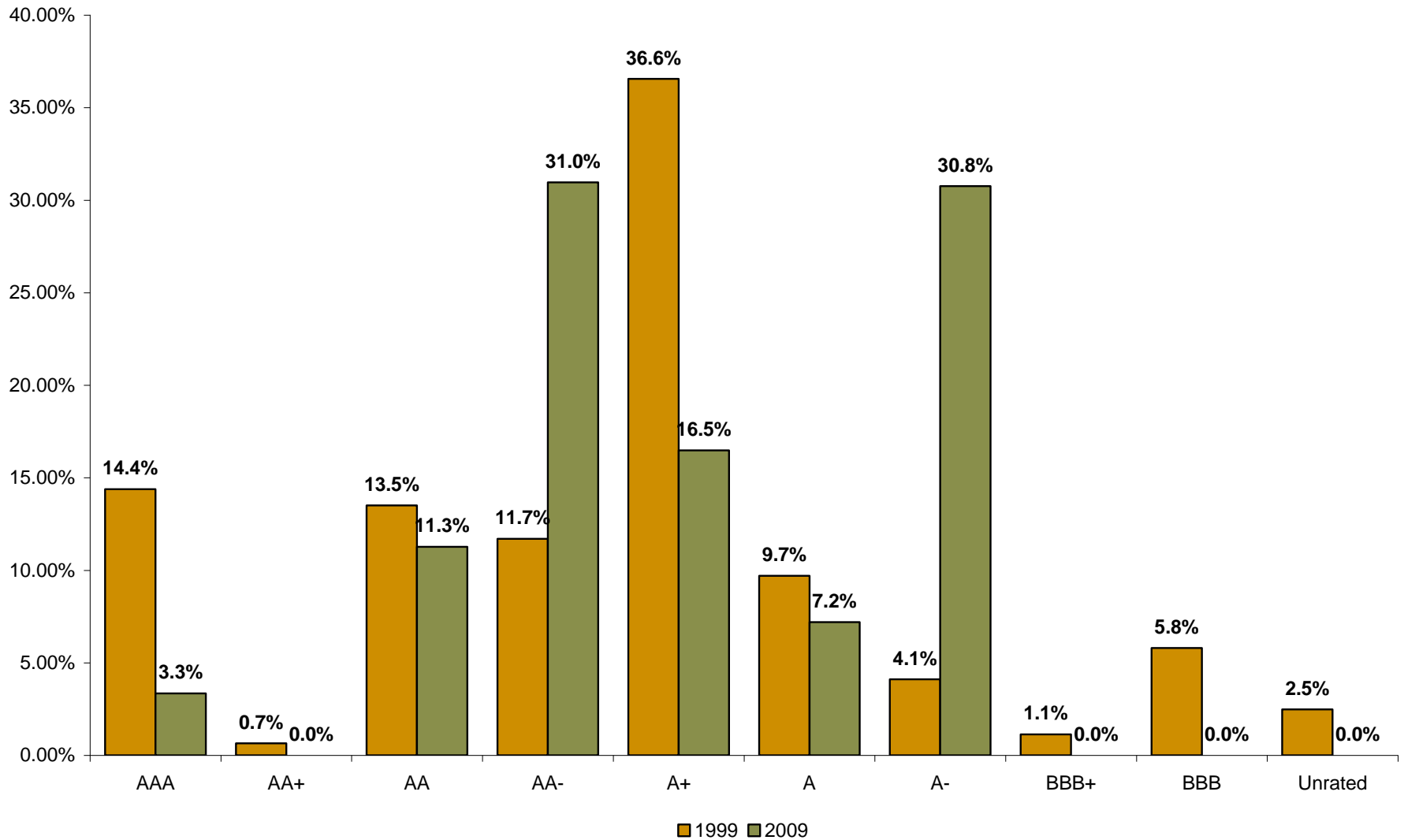
= S&P Rating of AA- overall

2009



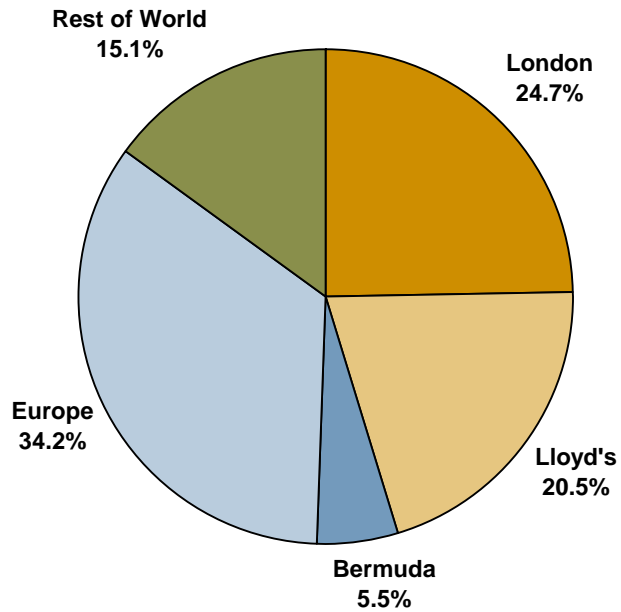
= S&P Rating of A+ overall

# Breakdown of market by rating 1999 - 2009



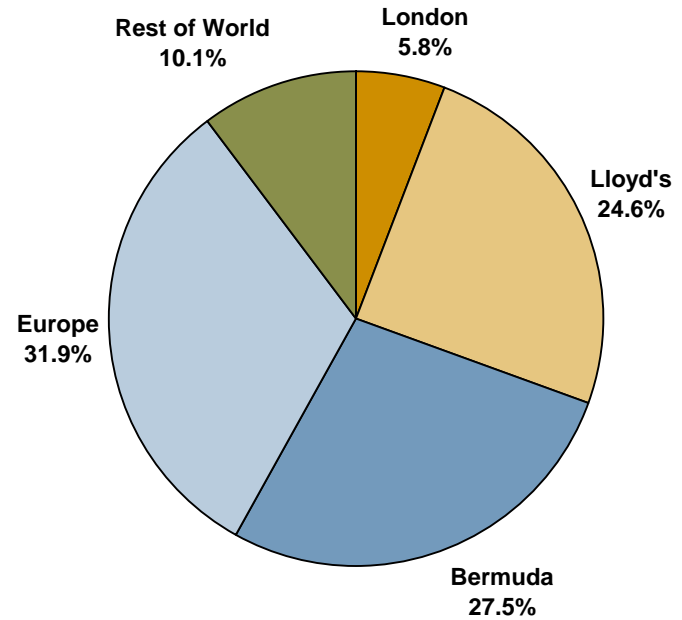
# Breakdown of market by territory 1999 - 2009

1999



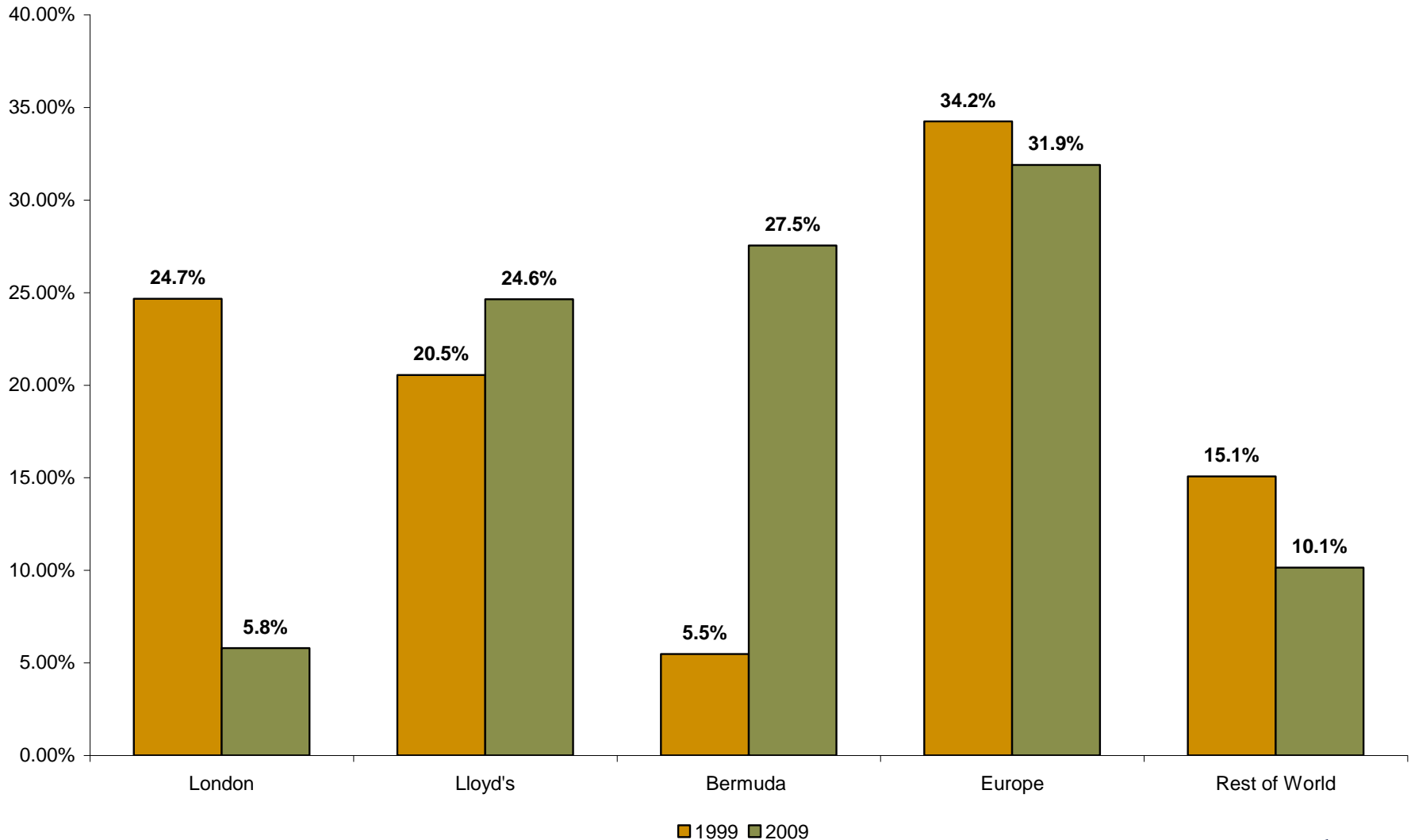
73 reinsurers in all

2009



69 reinsurers in all

# Breakdown of market by territory 1999 - 2009



**Section 1:** Reinsurance Cover and Results  
Market Breakdown

**Section 2:** Loss Indexation

# Loss Indexation

## 20 YEARS' LOSS HISTORY

Indexed loss events larger than NOK 175m

All losses have been indexed according to an annual rebuilding cost of 3.5%.

YEAR	D.O.L.	Type of Loss	No. of Losses	Incurred	Indexed	Indexed with 8,000 deductible
1992	01.01.- 01.01.92	Storm	29,619	1,210,892,570	2,099,670,812	1,981,194,812
1994	23.01.- 23.01.94	Storm	7,122	173,995,052	281,644,838	253,156,838
1995	31.05.- 06.06.95*	Flood	6,302	850,664,624	1,330,402,094	1,305,194,094
1996	12.10.- 13.10.96	Storm	3,697	176,729,693	267,050,700	252,262,700
2000	30.10.- 01.11.00	Storm, storm surge, flood	4,480	228,710,951	301,168,647	283,248,647

\*Losses within Reinsurance Period

# Loss Indexation

Possible considerations	Comments
General inflation	
increase in Premium Income	
increase in Policy Count	
increase in Aggregates	
"Implied Aggregates"	
increase in building stock	
increase in property values	
changes in insurance policy conditions	
changes in claim settlement practices	
Population	

# Loss Indexation

Possible considerations	Comments
General inflation	✓
increase in Premium Income	x Levy is set by FNH in relation to loss experience. Not a proxy for exposure.
increase in Policy Count	x Not available
increase in Aggregates	x
"Implied Aggregates"	x levy has been reducing since 2004. Reduction applies as original policies renew.
increase in building stock	✓
increase in property values	x cat losses are constituted of repair costs, not market value of property
changes in insurance policy conditions	✓ the deductible increased to NOK 4,000 in 1990 and NOK 8,000 in April 2005
changes in claim settlement practices	x no evidence. To the contrary : NNPP loss prevention measures, NNPP Claims Committee
Population	?

# Loss Indexation - Aggregates

## Renewal Information Aggregates

- TSI 2007 : NOK 9,386,317,716,254
- TSI 2008 : NOK 10,111,864,592,381
- Reinsurers : “My exposure has increased 7.7%”
- No !

Annual indexation of sums insured by Norwegian insurers.

The price index used as a benchmark for all property values represents :

- price of new buildings / the full replacement value of a building, including
  - the change in building productivity
  - the margin of the property developer
  - the market value

This index does not accurately reflect catastrophe exposure :

- lots of small losses
- usually repaired on site

Therefore other methods should be used to inflate old losses.

# Loss Indexation - Population

## NORWAY POPULATION

Year	Population	change	
1992	4,273,634		
1993	4,299,167	0.60%	
1994	4,324,815	0.60%	
1995	4,348,410	0.55%	
1996	4,369,957	0.50%	
1997	4,392,714	0.52%	
1998	4,417,599	0.57%	
1999	4,445,329	0.63%	
2000	4,478,497	0.75%	
2001	4,503,436	0.56%	
2002	4,524,066	0.46%	
2003	4,552,252	0.62%	
2004	4,577,457	0.55%	
2005	4,606,363	0.63%	
2006	4,640,219	0.73%	
2007	4,681,134	0.88%	
2008	4,737,171	1.20%	10.85%

Not a normal measure of inflation.

Note :

- the 4 zones with 90% of the '92 losses have grown at less than half the rate of the national increase over the period
- In this region 4.5% total growth since 1993 or 0.28% per annum

Source : Statistics Norway (2/03027)

# Loss Indexation - Inflation

## INFLATION : CPI

Year	Index	change
1989	80.40	
1990	83.70	4.10%
1991	86.60	3.46%
1992	88.60	2.31%
1993	90.60	2.26%
1994	91.90	1.43%
1995	94.20	2.50%
1996	95.30	1.17%
1997	97.80	2.62%
1998	100.00	2.25%
1999	102.30	2.30%
2000	105.50	3.13%
2001	108.70	3.03%
2002	110.10	1.29%
2003	112.80	2.45%
2004	113.30	0.44%
2005	115.10	1.59%
2006	117.70	2.26%
2007	118.20	0.42%
2008	122.20	3.38%

20 years	Geomean 1989-2008	2.23%
1992 storm	Geomean '92-'08	2.03%
1995 flood	Geomean '95-'08	2.02%

Source : Statistics Norway

# Loss Indexation – Building stock

## BUILDING STOCK

Year	number	change
1997	3,271,093	
1998	3,310,969	1.22%
1999	3,359,137	1.45%
2000	3,412,767	1.60%
2001	3,472,427	1.75%
2002	3,522,519	1.44%
2003	3,579,237	1.61%
2004	3,637,948	1.64%
2005	3,686,525	1.34%
2006	3,722,012	0.96%
2007	3,758,532	0.98%
2008	3,805,518	1.25%

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Geomean '97-'08 1.39%

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Source : Statistics Norway (10/03158)  
data available from 1997