

1999 embedded value results of
Storebrand Livsforsikring
8 June 2000

Contents

Section 1	Introduction to embedded value	2
Section 2	Storebrand Livsforsikring's 1999 embedded value results	8
Section 3	Using embedded values in life valuations	20

Introduction to embedded value

SECTION 1

What is embedded value?

Embedded value is the present value of future profits after tax—on life insurance already written—plus the shareholders' equity of the company

- ◆ Embedded values are actuarial “best estimates”
- ◆ Embedded values exclude any value that may be attributed to future new business
- ◆ Embedded value profit is the *change* in embedded value from year to year (adjusted for capital movements, e.g. shareholder dividends)

What is embedded value? (continued)



- ◆ The present value of profits after tax that shareholders can expect to receive from the existing portfolio of life insurance policies
- ◆ Includes shareholders' portion of current unrealised investment gains (adjusted for tax)
- ◆ Value of in-force is net of the cost of capital required to support the business
- ◆ Excess of assets over the company's liabilities
- ◆ Includes value of any other non-core businesses
- ◆ Represents the value of the existing life business to shareholders

Why use embedded values?

Embedded value provides a more realistic measure of a life company's profits compared to statutory accounting

- ◆ Shows economic effects of activities
- ◆ Shows value created from both new business written and business from prior years
- ◆ Greater transparency for investors/analysts

However, embedded value is sensitive to key assumptions and can be volatile depending on performance of investment markets



Storebrand

Embedded value as a management tool

- ◆ Embedded value analysis provides management with an effective tool to
 - clarify and quantify the effects on value of existing and proposed products
 - improve accuracy of product pricing
 - focus attention on areas of underperfomance
 - identify and pursue market opportunities profitably
 - identify and thereby repeat good performance
 - shows early effect on profits due to variances between forecast and actual experience, allowing for continuous refinement of models
 - can be used as a basis for management incentive schemes

Value of in-force business

Value of in-force business

- ◆ Present value of future cash flows generated by business already “on the books”
- ◆ Estimates of cash flows based on assumptions for
 - investment returns
 - expense levels (inflation rate)
 - lapse rate
 - mortality/morbidity
- ◆ Net of assumed cost of capital
- ◆ Assumption regarding amount of capital is based on regulatory minimum
- ◆ Present value determined using risk-adjusted discount rate

Impact of key assumptions ...

... on value of in-force business

Assumption	Description	Impact on embedded value	
		With profits policy	Unit-linked policy
Discount rate	Interest rate assumption adopted for the discount of future cash flows	✓ ✓ ✓	✓ ✓ ✓
Investment returns	Total return on investments, weighted between bonds and equities	✓ ✓ ✓	✓ ✓
Expenses	Estimated expenses incurred by the company to administer the policy	✓	✓ ✓ ✓
Lapse rates	Assumed number of policies that will drop-out of the portfolio each year due to, e.g. policyholders cashing-in their policies early, non-payment of premium, etc	✓ ✓ ✓	✓ ✓ ✓
Mortality/ morbidity	Incidence of death claims across the portfolio	✓	✓



Storebrand Livsforsikring's 1999 embedded value results

SECTION 2

Introductory remarks

- ◆ Embedded value figures relate to Storebrand Livsforsikring AS
- ◆ These figures do not include the value of unit linked products sold by Storebrand Fondsforsikring AS
- ◆ Embedded values have been calculated also for 1998 in order to have a basis for comparing 1999 figures
- ◆ All figures are net of tax
- ◆ Embedded values are actuarial “best estimates”

The results have been reviewed by Tillinghast-Towers Perrin (consulting actuaries) who have confirmed that the methodology and assumptions used to determine the embedded values are reasonable

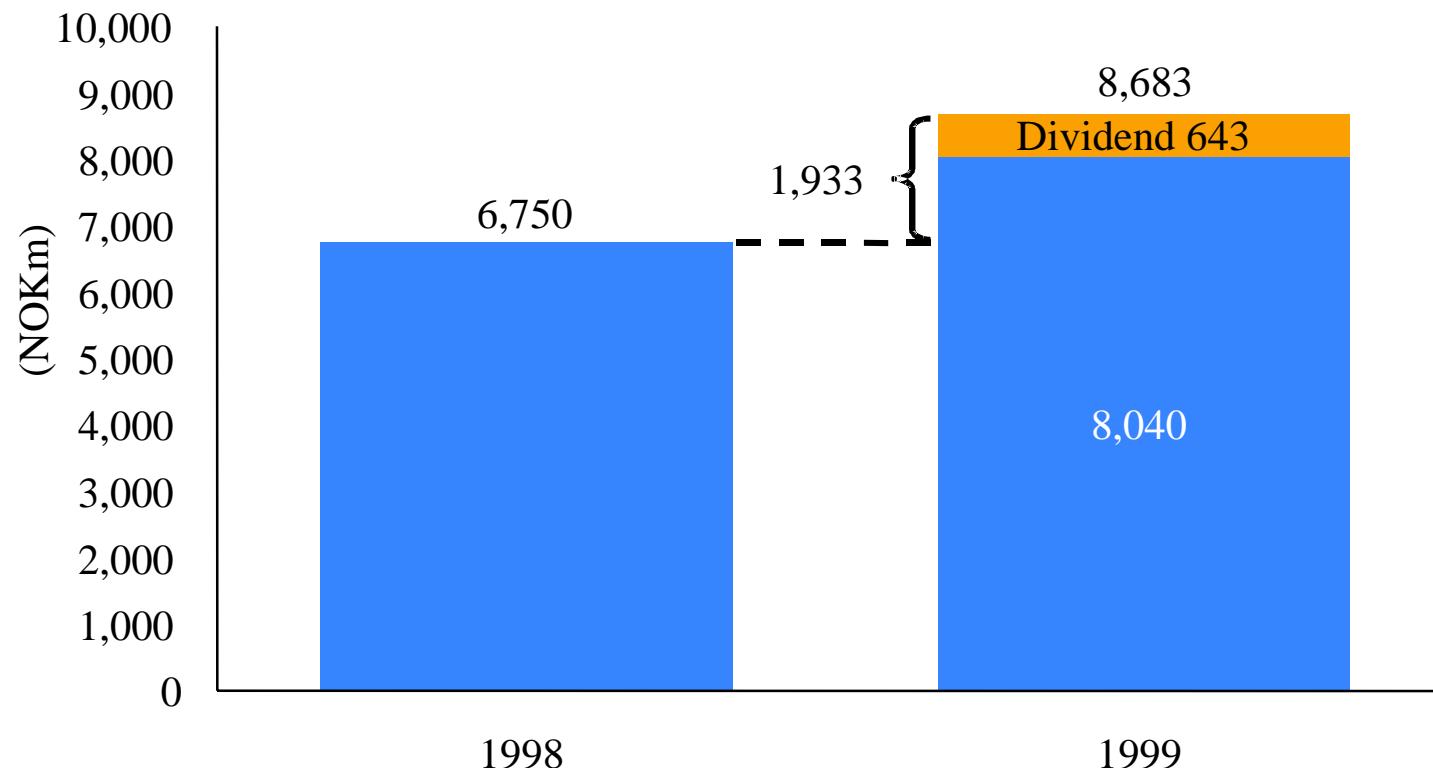
Embedded value of Storebrand Livsforsikring

KEY FIGURES (NOKm)

Embedded value	1998	1999
Embedded value (before shareholder dividend)	7,246	8,683
Less shareholder dividend	(496)	(643)
Year-end embedded value	6,750	8,040
of which value of new sales	156	194
New business premiums		
Regular premiums	551	666
Single premiums and transferred reserves	4,704	4,394

Embedded value of Storebrand Livsforsikring

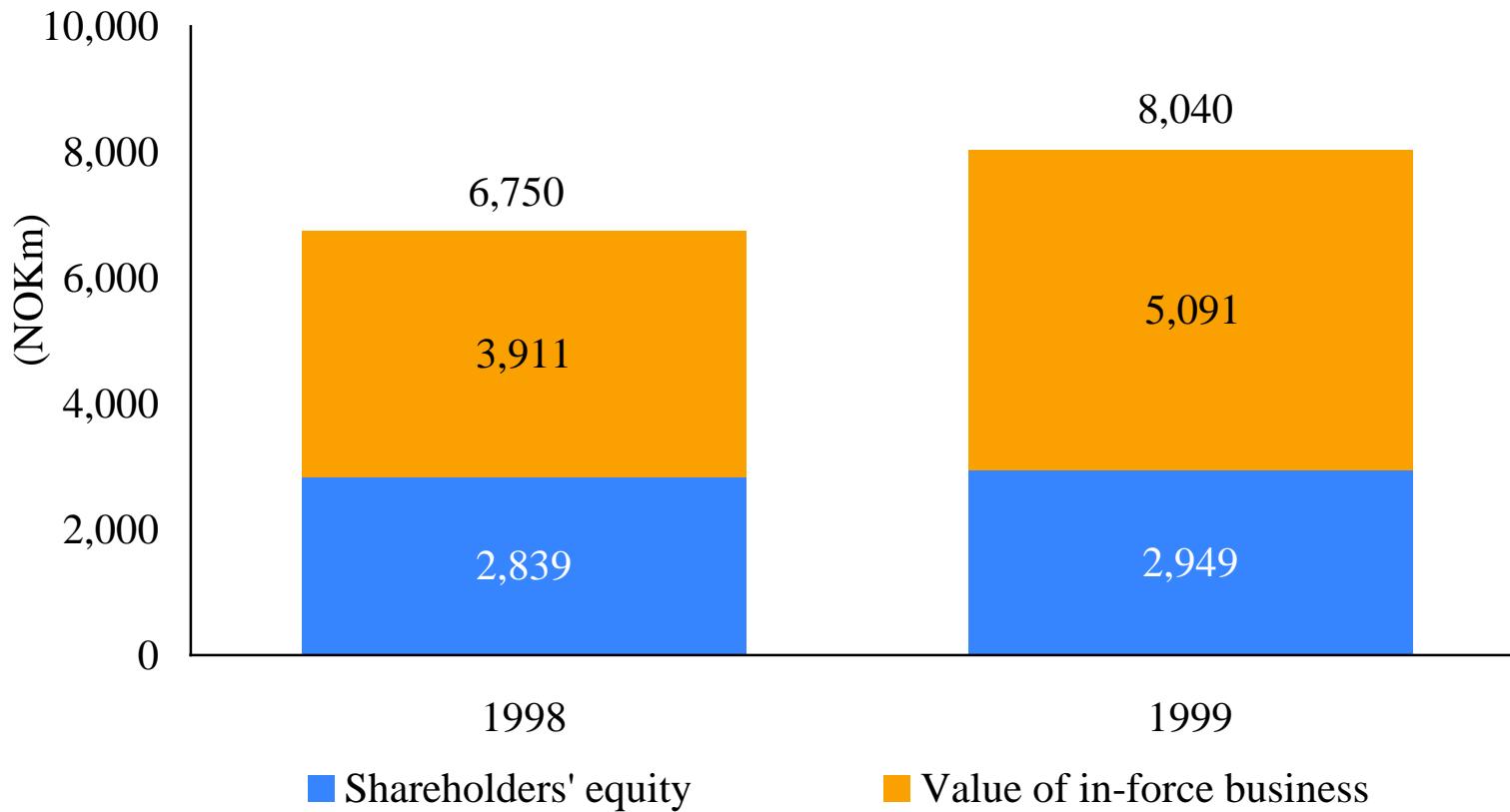
Change in embedded value 1999



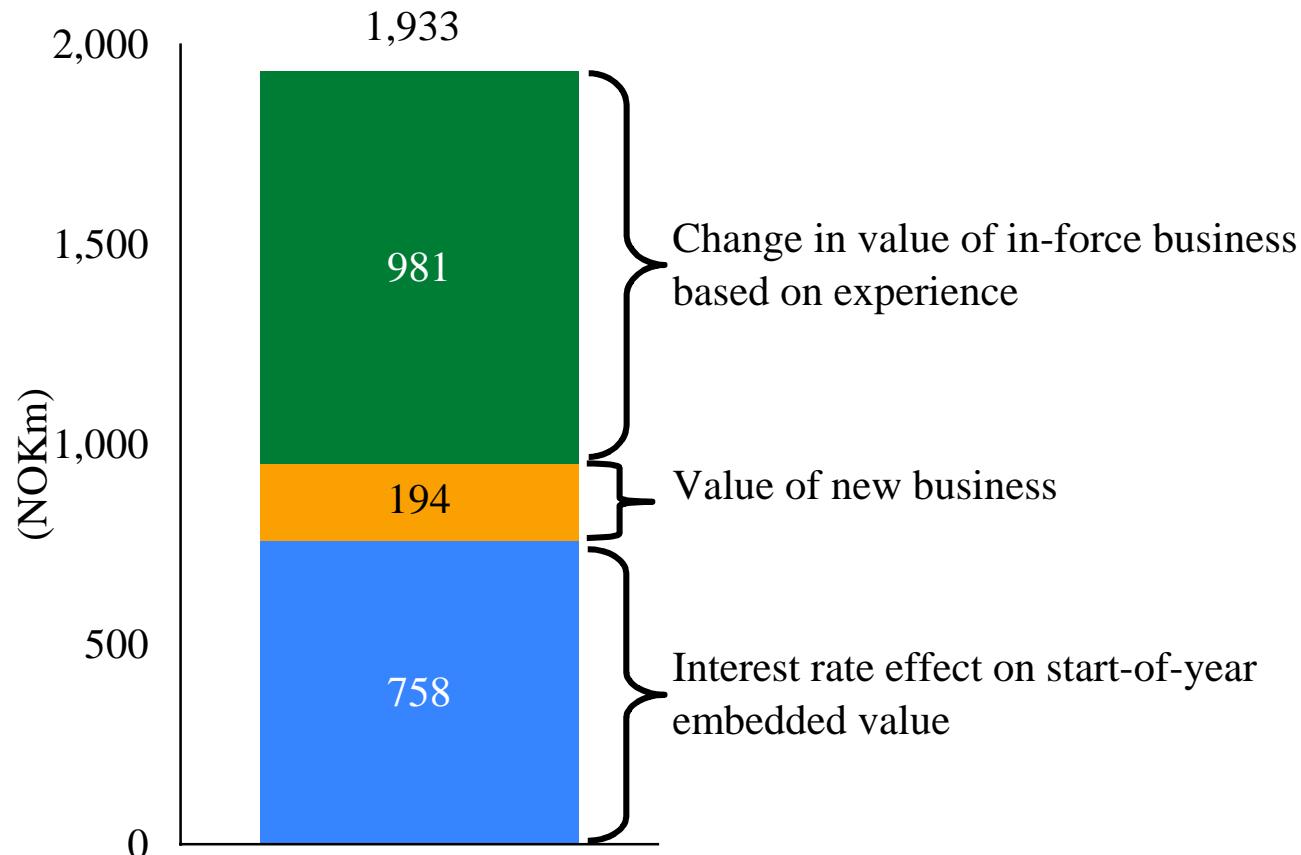
**Change in embedded value in 1999 of NOK1,933m
represents embedded value profits for the year**

Embedded value of Storebrand Livsforsikring

Break-down of year-end embedded values



1999 embedded value profits



Components of embedded value profit

Change in value
of in-force
business based on
experience

- ◆ Variances between forecast and actual operating performance
- ◆ Change in value caused by modifying assumptions at year-end based on actual experience
- ◆ Including shareholders' portion of change in unrealised investment gains, adjusted for tax

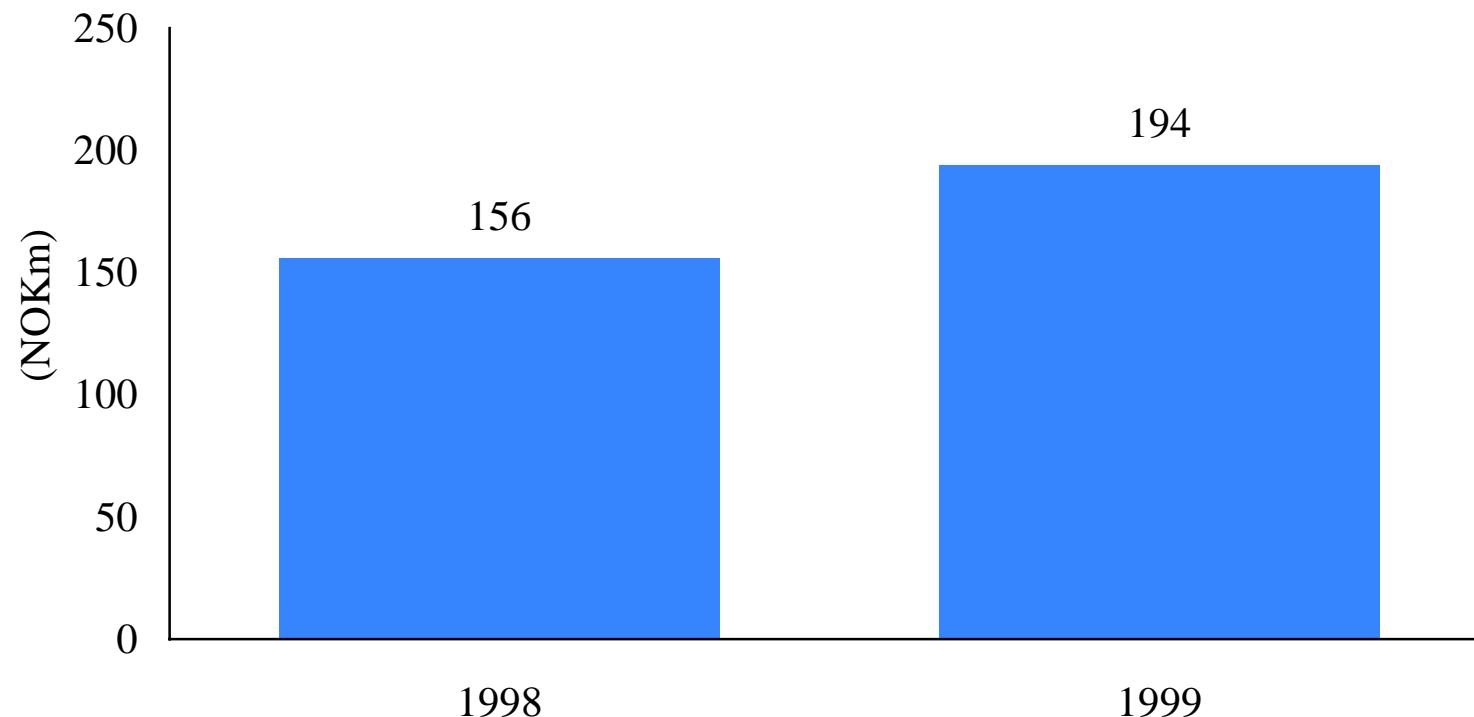
Value of
new business

- ◆ Present value of future profits deriving uniquely from new business written during the year

Interest rate effect on
start-of-year
embedded value

- ◆ Value of one year's "unwinding" of the discount rate on the start-of-year value of in-force business
- ◆ Investment return on shareholders' equity

Value of new business of Storebrand Livsforsikring



- ◆ Value of new business in 1999 was positively impacted by strong sales of individual life products

Summary of main embedded value assumptions

Assumptions (%)	1998	1999
Discount rate	8.50	9.30
Weighted average investment return (pre-tax)	6.00	7.00
Bonds	5.34	6.15
Equities	7.84	8.65
Real estate	6.84	8.15
Effective tax rate	10.00	10.00
Administrative expense inflation	3.5	3.5
Lapses, mortality, etc	Best estimates using available data	



Summary of main embedded value assumptions

Profit sharing assumptions

- ◆ Shareholders participate in profits based on
 - 100% of investment income on shareholder funds
 - 0.42% per year of policyholder funds
 - 100% of profits on non-participating individual business
 - less tax

Sensitivity of embedded value to main assumptions

- ◆ Embedded values are more sensitive to interest rate assumptions than any other single factor

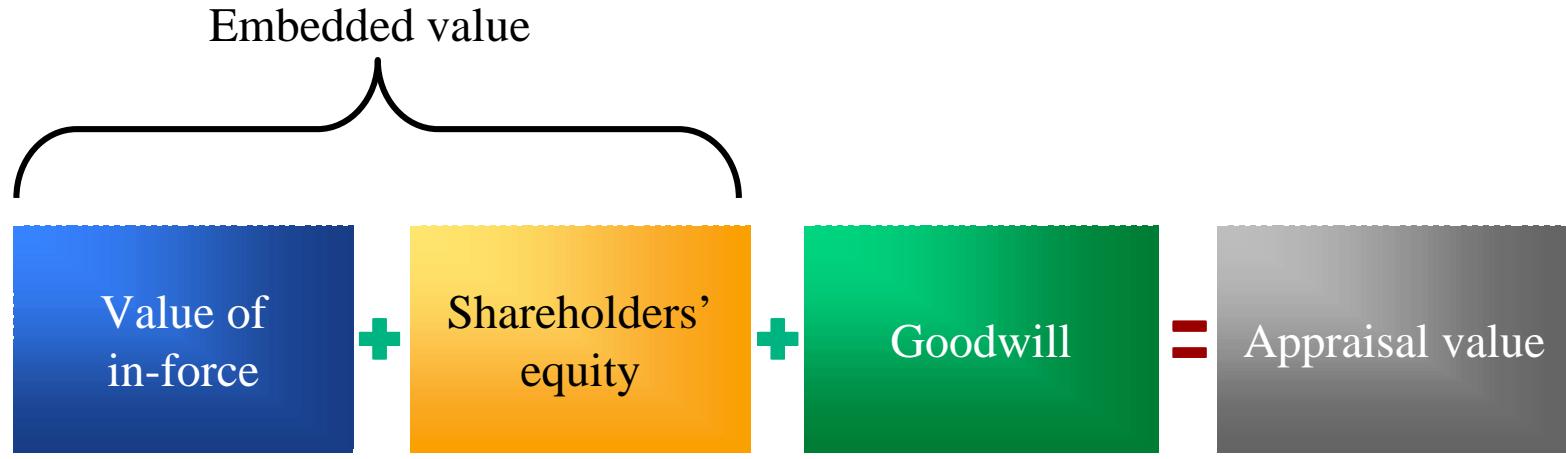
(NOKm)	Discount rate and Investment return		
	Base case	+1%	Change (%)
1999 embedded value	8,040	(260)	(3.2%)

- ◆ A *reduction* in interest rates has the opposite effect on embedded value (i.e. increases embedded value) by roughly the same magnitude
- ◆ The sensitivity of new business to changes in interest rate assumptions is similar to the sensitivity on the value of in-force business

Using embedded values in life valuations

SECTION 3

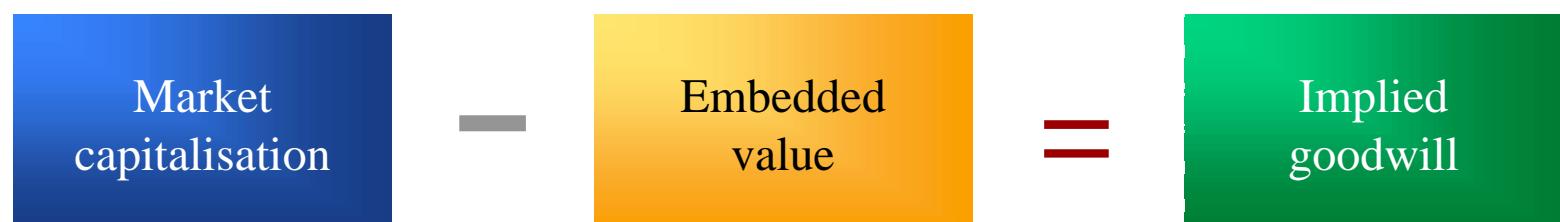
Valuation of a life company



- ◆ Captures the qualitative aspects of the company
 - growth outlook
 - new business margins
 - market position
 - consolidation candidate
 - management strength
- ◆ Embodies fair representation of expected value to shareholders over the long-term

Appraisal value

The “building blocks” of appraisal value are useful in establishing whether a share is relatively cheap or expensive



Appraisal value

- ◆ Goodwill captures the qualitative aspects of the company
 - growth rate
 - brand strength
 - profit margins
 - distribution
 - management
- ◆ Goodwill is often estimated by applying a multiple to the value of one year's new business
- ◆ Embedded value financial reporting includes the value of the year's new business

Appraisal value (continued)

Multiples on new business in the UK

	Market cap (£m)	EV 1999 A	Goodwill value of other businesses C	Goodwill implied on life business D (=A-B-C)	Value of new business 1999A E	Implied multiple on new business 1999 (x) F (=D/E)
Countrywide						
Assured	544	188	201	155	18	8.6
Legal & General	8,233	4,933	118	3,182	133	24.0
Norwich Union	9,123	5,453	207	3,463	111	31.3
Prudential	18,425	6,659	2,066	9,700	425	22.8
Sun Life & Provincial						
Provincial	5,111	2,540	370	2,200	108	20.3
St. James's Place	1,118	410	86	621	25	25.0
CGU	12,705	8,965	1,121	2,619	172	15.2
Average						21.0

Source: UBS Warburg. Figures as of 24 May



Storebrand