

Paris, 24 June 2009

# **SOGECAP: 2008 EMBEDDED VALUE**

**SOGECAP**, the SOCIETE GENERALE life insurance subsidiary, is publishing its Embedded Value and New Business Value results based on the principles of the CFO Forum applicable on December 31, 2008. These values correspond to all the company's business in France, including the ORADEA-VIE business; the foreign subsidiaries are taken into account based on their book value.

Alain de Saint-Martin, SOGECAP Chief Executive Officer, has commented "In 2008, the Embedded Value of SOGECAP is €2,573 million, a decrease of 20% over 2007, hence demonstrating that our business has held up well in a very difficult economic environment. The ratio of New Business Value to the present value of premiums is 2.1%, a very satisfactory level."

## Summary of results at December 31, 2008

In € millions	2008	2007	Variation
Adjusted Net Asset Value (ANAV)	1,100	1,199	-8.3%
Certainty equivalent portfolio value	2,277	2,540	-10.4%
Time value of financial options and guarantees	(555)	(272)	104%
Cost of capital and non financial risks	(249)	(266)	-6.4%
Embedded Value (EV)	2,573	3,201	-19.6%
New Business Value (NBV)	154	202	-23.8%
NBV / present value of premiums (1)	2.1%	2.3%	-8.7%
NBV / APE (2)	21.2%	23.1%	-8.2%

<sup>(1)</sup> Present value of premiums generated by activity in 2008 (including future scheduled premiums) is €7,273m.

B&W Deloitte has certified the SOGECAP's Embedded Value calculations for December 31, 2008. In doing so, the firm reviewed exclusively the consistency of the applied methodology and assumptions and their compliance with the CFO Forum principles, the global reconciliation of the data with the accounts and the consistency of the results. The complete B&W Deloitte opinion is published in the detailed note entitled "SOGECAP-Embedded Value 2008" attached as an appendix.

<sup>(2)</sup> APE: Annualised Premium Equivalent (10% of single premiums and flexible premiums, 100% of scheduled premiums) amounts to €726m.

The Embedded Value at end 2008, representing the discounted value of in force business, was €2,573m, for an IFRS shareholders' Equity of €1,261m. The surplus value is therefore around €1.3bn.

The new Business Value (NBV) of French domestic business, the value of the activity generated in 2008, amounted to €154m i.e. 2.1% of the present value of premiums.

### Breakdown of movements in Embedded Value between 2007 and 2008

In € millions	Adjusted net asset value	Portfolio value	Total
Embedded Value published in 2007	1,199	2,002	3,201
Adjusted value in 2007	1,199	2,087	3,286
Operating result	203	75	278
Impact of the economic environment	(218)	(689)	(907)
Dividend paid in 2008	(195)		(195)
Increase in capital	110		110
Embedded Value in 2008	1,100	1,473	2,573

The difference between the published 2007 value and the adjusted 2007 value is due to the replacement of the Institute of Actuaries curve by the swap curve, the scenario generator and modelling changes.

The operating result corresponds mainly to the value of 2008 new business and the result expected to be generated by the portfolio of existing policies.

The economic environment had a negative impact on results (€ -907m) following widening spreads, the sharp drop in the equity markets and the increase in equity and interest-rate volatility.

The operating return on Embedded Value was 8.5% (ratio between the operating margin and Embedded Value at end 2007) vs 10.2% in 2007.

## **Embedded Value sensitivities analysis**

An analysis of the main sensitivities to market changes has demonstrated that the sensitivity of the Embedded Value was no more or less than 7% at the end 2008.

	In € millions	% of value
Increase in interest rates of 100 bp	(124)	-4.8%
Decrease in interest rates of 100 bp	+120	+4.7%
Decrease in equities of 10%	(170)	-6.6%
Increase in interest-rate volatility of 25%	(21)	-0.8%
Increase in equity volatility 25%	(106)	-4.1%
Increase in administrative costs of 10%	(49)	-1,9%
Decrease in lapse rates of 10%	+97	+3,8%
Decrease in mortality rate of 5%	+32	+1,3%

#### New Business Value sensitivities analysis

	In € millions	% of value
Increase in interest rates of 100 bp	+9	+5.8%
Decrease in interest rates of 100 bp	(40)	-25.7%
Increase in interest rate volatility of 25%	(12)	-7.9%
Increase in equity volatility 25%	(26)	-16.9%
Increase in administrative costs of 10%	(3)	-1.9%
Decrease in lapse rates of 10%	+20	+13.1%
Decrease in mortality rate of 5%	+4	+2.4%

#### Société Générale

Société Générale is one of the largest financial services groups in the euro-zone. The Group employs 163,000 people worldwide in three key businesses:

- Retail Banking & Financial Services: Société Générale serves more than 30 million individual customers worldwide.
- Global Investment Management & Services: Société Générale is one of the largest banks in the euro-zone in terms of assets under custody (EUR 2 762 billion, March 2009) and under management (EUR 332 billion, March 2009).
- Corporate & Investment Banking: Société Générale ranks among the leading banks worldwide in euro capital markets, derivatives and structured finance.

Société Générale is included in 3 socially-responsible investment indexes: FTSE4Good, ASPI and Ethibel. <a href="https://www.socgen.com">www.socgen.com</a>

#### Sogécap

Sogécap is the life insurance and self-funded pensions company belonging to the Société Générale Group. It is the sixth largest Life company, and fourth largest bank insurance company in France in terms of turnover. In 2008, the Sogecap Group, which employs more than 1,000 people worldwide, generated a turnover of EUR 7,8 billion and a net income of EUR 191 millions.

www.sogecap.com

# **APPENDIX**

# SOGECAP EMBEDDED VALUE 2008

#### Introduction

SOGECAP's Embedded Value and New Business Value are calculated in line with the CFO Forum principles. The results correspond to all SOGECAP activities in France, including those of the ORADEA-VIE partnership.

The valuation of foreign subsidiaries is only taken into account based on their book value already included in shareholders' equity.

Embedded Value is made up of:

- the Adjusted Net Asset Value (ANAV), which corresponds to the sum of the following:
  - SOGECAP's equity;
  - o unpaid dividends;
  - o reserves, excluding "the reserve de capitalisation" which is not recognised as shareholder equity in the IFRS account;
  - unrealised capital gains, net of tax, of the equity portfolios and other portfolios whose financial earnings are allocated in full to SOGECAP.
- The value of Business in Force which is equal to the present value of future profits over the residual life of policies, after allowing for the time value of financial options and guarantees, cost of capital and non financial risks.

The present value of future profits, calculated according to certainty equivalent approach is equal to the discounted sum of profits generated by existing contracts at December 31, 2008.

The time value of financial options and guarantees is the additional cost of those financial options and guarantees beyond their intrinsic value included in the certainty equivalent approach.

The time value of financial options and guarantees is calculated as the difference between the average value of discounted future profits using 1,000 stochastic scenarios and the certainty equivalent approach.

The cost of capital reflects the taxation and investment costs on the assets backing solvency margin net of the cost of subordinated loans.

The cost of non financial risks factors in:

- operational risks;
- the risk of a change in loss experience. A risk premium has therefore been added to the discount rate for risk products.

### Summary of results at December 31, 2008

In € millions	
Adjusted Net Asset Value (ANAV)	1,100
Certainty Equivalent portfolio value	2,277
Time value of financial options and guarantees	(555)
Cost of capital and non-financial risks	(249)
Embedded Value	2 573

In € millions	
Certainty Equivalent new business value	237
Time value of financial options and guarantees	(55)
Cost of capital and non-financial risks	(27)
New Business Value	154
NBV / present value of premiums*	2.1%
NBV / APE**	21.2%

<sup>\*</sup> Present value of premiums generated by activity in 2008 (including future scheduled premiums) is €7,273m.

### Breakdown of movements between 2007 and 2008

In € millions	Adjusted net asset value	Portfolio value	Total
Embedded Value published in 2007	1,199	2,002	3,201
Adjusted value in 2007	1,199	2,087	3,286
Operating result	203	75	278
Impact of the economic environment	(218)	(689)	(907)
Dividend paid in 2008	(195)		(195)
Increase in capital	110		110
Embedded Value in 2008	1,100	1,473	2,573

The difference between the published 2007 value and the adjusted 2007 value is due to the replacement of the Institute of Actuaries curve by the swap curve, the scenario generator and modelling changes.

The operating result corresponds to the value generated by:

- the unwinding of the risk discount rate;
- new business (new subscriptions and flexible premiums on existing contracts);
- the change in operating assumptions used in the projections (loss experience, expenses);
- operational experience differences.

The impact of the economic environment corresponds to the effects of market variability (equity, interest rates, etc). This impact was negative as a result of the:

- sharp fall in equity markets;
- widening of spreads;
- heightened volatility of the equity and interest rate markets prompting an increase in the cost of options.

Two other factors had an impact on the ANAV. These are:

- the dividend payment in 2008,
- the capital increase.

<sup>\*\*</sup> APE: Annualised Premium Equivalent (10% of single premiums and flexible premiums, 100% of scheduled premiums) amounts to €726m.

# Reconciliation of Embedded Value and IFRS shareholders' equity

The IFRS shareholders'equity of SOGECAP at end 2008 is €1,261m.

The additional value, arising from French domestic business, which was not included in the IFRS shareholders' equity amounted to €1,312m.

## **Sensitivities**

# Embedded Value sensitivity

	In €millions	% of EV
Increase in interest rates of 100 bp	(124)	-4.8%
Decrease in interest rates of 100 bp	+120	+4.7%
Decrease in equities of 10%	(170)	-6.6%
Increase in interest-rate volatility of 25%	(21)	-0.8%
Increase in equity volatility of 25%	(106)	-4.1%
Increase in administrative costs of 10%	(49)	-1,9%
Decrease in lapse rates of 10%	+97	+3,8%
Decrease in mortality rate of 5%	+32	+1,3%

On the basis of the sensitivities defined by the CFO Forum, the Embedded Value of SOGECAP could vary by more or less 7%.

# New Business Value sensitivity

	In €millions	% of EV
Increase in interest rates of 100 bp	+9	+5.8%
Decrease in interest rates of 100 bp	(40)	-25.7%
Increase in interest-rate volatility of 25%	(12)	-7.9%
Increase in equity volatility of 25%	(26)	-16.9%
Increase in administrative costs of 10%	(3)	-1.9%
Decrease in lapses rate of 10%	+20	+13.1%
Decrease in mortality rate of 5%	+4	+2.4%

### Methodology and assumptions

### Adjusted Net Asset Value

Adjusted Net Asset Value (ANAV) corresponds to the sum of the following elements:

- SOGECAP's equity;
- unpaid dividends;
- reserves, excluding "the reserve de capitalisation" which is not recognised as shareholder equity in IFRS accounts;
- unrealised capital gains, net of tax, of the equity portfolios and other portfolios whose financial earnings are allocated in full to SOGECAP.

## Certain equivalent scenario

The portfolio value calculated according to the certain equivalent approach is equal to the discounted value of profits after tax. The principles applied are as follows:

- assumptions as to mortality, surrenders, arbitrage, etc, are estimated on the basis of statistical analyses;
- future returns are calculated such that discounted future cash-flows using the initial risk-free interest rate curve (swap curve on December 31, 2008), plus a liquidity premium of 0.8%, give the opening market value of the assets:
- risk premiums are not taken into account when calculating the earnings on equities and property;
- risk premiums are not taken into account for future investments;
- forward curves are calculated on the initial risk-free interest rate curve (swap curve on December 31, 2008) plus a liquidity premium of 0.8%;
- profits after tax are discounted using this same curve;
- the projection period is 30 years;
- the tax rate is over the projection period at 34.43%;
- the asset allocation as at end of 2008 has been maintained constant over the projection period;
- all overheads generated by SOGECAP's activities in France are modelled;
- securities falling within the IAS 39 classification "loans and receivables" are valued using their net book value at December 31, 2008.

# Time value of financial options and guarantees

The time value of financial options and guarantees is calculated as the difference between the average value of discounted future profits using 1,000 stochastic scenarios and the certainty equivalent approach.

The following options have been valued:

- profit sharing on the euro-denominated sub-funds by taking into account bonus policies and profit sharing reserves;
- surrender options;
- option of transfers (arbitrage) between unit-linked and euro-denominated sub-funds on multi-fund policies;
- guaranteed minimum death benefit on multi-support contracts.

Surrenders and arbitrages are modelled in accordance with dynamic behaviour rules based on market conditions.

The cash flows taken into account are the following:

- profits after tax, which factor in all income and expenses except for income on equity:
- fraction of shareholders in the reserves and unrealised capital gains at the end of each simulation.

## Cost of capital

The cost of capital reflects the taxation and investment costs on the assets backing solvency margin net of the cost of subordinated loans. The capital required is equal to 100% of the solvency margin required by the current European regulation.

#### The cost of non financial risks

The operational risk has been taken into account using a risk premium of 0.14% expressed as a percentage of the solvency margin requirement.

For the risk products, a risk premium of 2% has been added to the discount rate.

#### New Business Value

New Business Value is calculated according to the stand alone method. It does not therefore take into account the existing unrealised capital gains and profit sharing reserve.

New business production includes:

- for euro-denominated and multi-fund contracts, all payments made during the year, with the exception of scheduled premiums for contracts in force at end 2007 which are taken into account in the Embedded Value.
- for risk products, all new policies underwritten in 2008.

New Business Value is calculated according to the same methodology used for Embedded Value.

#### Economic scenario generator

1,000 economic scenarios were calibrated in a risk-neutral environment. The economic variables included in the projections were:

- equity indexes (CAC 40 and Eurostoxx) and dividend rates,
- risk-free interest-rate curve,
- inflation.

The scenarios were generated using the Hull and White model.

The swap curve was used in calibrating the model. A liquidity spread of 0.80%, calculated by taking the difference between the IBOXX index and the ITRAXX index for each maturity date in the bond portfolio, was added to the swap rate curve at December 31, 2008 in order to take account of the lack of liquidity of the bond markets at December 31, 2008.

Maturity	Rate
1 year	3.35%
2 years	3.48%
3 years	3.76%
4 years	3.92%
5 years	4.05%
7 years	4.28%
10 years	4.54%
15 years	4.72%
20 years	4.68%
25 years	4.50%

The volatilities used are the average of the implied volatilities in 2008:

Interest-rate	12.5 % (10-yr swaption on 20- yr rates)
Equities	29.6 % (10 year call)

# Certification of the SOGECAP 2008 MCEV - Opinion of B&W Deloitte

We have reviewed SOGECAP's Embedded Value at December 31, 2008 as calculated internally according to the directives and under the responsibility of the company's management. Within this framework, our review covered exclusively the consistency of the methodology and the assumptions, the global reconciliation of the data with the accounts and the consistency of the results. As part of the review of the assumptions, it should be noted that it also covered the consistency of the stochastic economic scenarios. The review was conducted in accordance with normal standard practice and processes. In particular, we have relied on and not sought to check the data provided by SOGECAP.

In the light of the above, we consider that the methodology adopted complies with market practices and with the principles of the CFO Forum applicable at December 31, 2008 except the adjustment of the swap curve for a liquidity premium of 0.8%.

As mentioned in the CFO Forum principles, in case the market displays unusual characteristics as at the valuation date, the implied volatility could be substituted by less recently observed measures and expert opinion. For 2008, SOGECAP used the average implied volatility over 2008 instead of the implied volatility as at December 31, 2008.

We believe that the assumptions made by SOGECAP's management are globally reasonable and consistent and the results of the Embedded Value calculation have been produced in compliance with the methodology adopted by SOGECAP management and the assumptions made.

The Embedded Value calculations rely on a number of assumptions based on the economic conditions, operating conditions, taxes and other matters, many of which are beyond the Company's control. Although the assumptions used represent estimates which SOGECAP and B&W Deloitte believe are reasonable, actual future experience may vary from that assumed in the calculation of the embedded value results, and such variation may be material. Deviations from assumed experience are normal and are to be expected.