SECTION 2 – RISKS OF INSURANCE COMPANIES

2.1 INSURANCE RISKS

Life branch

The typical risks of the life insurance portfolio (managed by EurizonVita, EurizonLife, SudPoloVita and CentroVita) may be divided into three main categories of risk: premium risk, life underwriting risk and reserve risk.
Premium risks are protected initially during definition of the technical features and product pricing, and over the life of the instrument by means of periodic checks on the sustainability and profitability (both at product level and at the portfolio level, including all of the liabilities). During the definition of a product, profit testing is used, aimed at measuring profitability and identifying any weaknesses beforehand, by means of specific sensitivity analyses. The issue process for a product involves its prior presentation to the Product Committee, made up of the heads of all company functions and the General management, in order to take account of and validate its structure and features. Where the economic impact is significant revenue related information is also provided, such as results from profit testing.
Life underwriting risks arise when an unfavourable trend is recorded in the actual loss ratio compared with the trend estimated when the rate was calculated, and these risks are reflected in the level of "reserves". The loss ratio refers not only to actuarial loss, but also to financial loss (guaranteed interest rate risk). The Company guards against these risks by means of statistical analysis of the evolution of liabilities in its own contract portfolio, divided by risk type, and through simulations of expected profitability of the assets hedging technical reserves.
Among the risks that require particular attention mention is also made here of the risks connected with hedging of costs. To this end EurizonVita has developed a detailed analysis model that allows it to analyze costs by product macro-category and by life cycle of the product itself. This tool, which is shared by several departments of the Company (such as Administration, Management Control and Actuary), is used to monitor costs, the correct rating and the sustainability of the reserves.
Reserve risk is guarded against through the exact calculation of mathematical reserves, with a series of detailed checks (for example, checking that all the variables required for the calculation such as yields, quotations, technical foundations, parameters for the supplementary reserves, and recalculation of the value of single contracts are correctly saved in the system) as well as overall verifications, by comparing results with the estimates produced on a monthly basis. Specific attention is paid to checking the correct assumption of contracts, by checking the relative portfolio against the reconstruction of movements during the period, divided by purpose, and checking the consistency of the amounts settled compared with the movements of reserves.
The financial area and yield guarantees are also highly important in defining risks.

In the tables below, the structure of the mathematical reserves is shown by expiry date, and the structure of the guaranteed minimum yield.

(in thousands of euro)

Breakdown of mathematical reserves of life branch: maturity	Mathematical reserve	%
up to 1 year	1,195,437	6.60
1 to 5 years	8,023,290	44.30
6 to 10 years	2,300,581	12.70
11 to 20 years	1,228,356	6.78
over 20 years	5,364,047	29.62
TOTAL	**18,111,711**	**100.00**

(in thousands of euro)

Breakdown of risk concentration by type of guarantee	Premiums	%	Total Reserves	%
Insurance and investment products with guaranteed annual yield				
0% - 1%	33,795	2.04	396,197	1.97
from 1% to 3%	549,255	33.07	9,841,968	48.98
from 3% to 5%	188,121	11.33	5,076,598	25.26
Insurance products	**889,524**	**53.56**	**4,930,319**	**24.53**
Shadow reserve	**-**		**-147,861**	**-0.74**
TOTAL	**1,660,695**	**100.00**	**20,097,221**	**100.00**

Almost 50% of the portfolio had expiry dates which do not exceed five years, the rest is mainly represented by supplementary pension contracts.

In this regard, in order to monitor all risks (underwriting and financial) better, EurizonVita uses a tool for simulating assets and liabilities, named FAP (Financial Analysis Program) which has the objective of measuring value and risk.
The mathematical reserves are calculated on almost the entire portfolio, on a contract-by-contract basis, and the methodology used to determine the reserves takes account of all the future commitments of the company.

Casualty branch

The risks of the casualty insurance portfolio mainly relate to premium and reserve risks.
Premium risks are protected initially during definition of the technical features and product pricing, and over the life of the instrument by means of periodic checks on the sustainability and profitability (both at product level and at the portfolio level, including all of the liabilities).
Reserve risk is guarded against through the exact calculation of mathematical reserves. More specifically, for companies with casualty branches the technical reserves may be broken down into: premium reserves, claims reserves, profit sharing and reversal reserves, other technical reserves and the equalisation reserve.
Regarding the assumption of risk, the policies are checked at the time of purchase, using an automatic system which checks the parameters for assumption associated with the tariff of reference to verify the correspondence of the portfolio with the technical and rate settings agreed with the sales network.
The check not only concerns the form but also the substance and, in particular, allows for verification of the exposure in terms of capital – limits of liability.
Subsequently, statistical checks are carried out to verify potentially anomalous situations (such as concentration by area or by type of risk) and to keep under control accumulation at the level of individual persons (with particular reference to policies that provide cover in the accident and health branches). This is also carried out in order to provide the Reinsurance function with suitable indications of the portfolio characteristics in order to prepare the annual reinsurance plan.

A breakdown of the claims reserves as at 31 December 2008 for EurizonTutela and CentroVita is provided below.

(in thousands of euro)

Development of Casualty Branch Reserves	Year of generation/event					
	2004	**2005**	**2006**	**2007**	**2008**	**TOTAL**
Reserve amount:						
as at 31/12 generation year N	9,359	11,593	18,219	20,390	34,026	93,587
as at 31/12 year N+1	2,245	6,305	7,693	11,560		27,803
as at 31/12 year N+2	740	2,792	4,490			8,022
as at 31/12 year N+3	881	1,417				2,298
as at 31/12 year N+4	732					732
Total claims paid	**6,358**	**10,322**	**11,833**	**14,981**	**13,421**	**56,915**
Claims reserve booked as at 31.12.2008	**732**	**1,417**	**4,490**	**11,560**	**34,026**	**52,225**
Final claims reserve for previous years						**8,925**
Total claims reserve booked as at 31.12.2008						**61,150**

2.2 FINANCIAL RISKS

ALM and financial risks

In line with the growing focus in the insurance sector on the issues of value, risk and capital in recent years, a series of initiatives with the objective of both strengthening risk governance and managing and controlling risk-based capital has been launched.
With reference to investment portfolios, set up both as coverage of obligations with the insured and in relation to free capital, the Investment Policy is the control and monitoring instrument for market and credit risks.
The Policy defines the goals and the operating limits that are needed to distinguish the investments in terms of eligible assets and asset allocation, breakdown by rating classes and credit risk, concentration risk by issuer and sector, market risks (in turn measured in terms of sensitivity to variations in risk factors and Value at Risk).
Investment decisions, portfolio evolution and compliance with operating limits, articulated in diverse types, are discussed, normally on a monthly basis, by specific investment committees.
As already mentioned above, in order to measure and manage all the (underwriting and financial) risks together, a simulation tool, known as FAP, is also used with the objective of measuring the intrinsic value, the fair value of the liabilities and the economic capital.
The FAP is based on a dynamic Asset Liability Management (ALM) model that forecasts stochastically-generated economic scenarios, simulating the evolution of the value of assets and liabilities based on the technical features of the products, the trend in significant financial variables and a management rule which guides investments and disinvestments.
This model measures the capital required to cover underwriting and financial risk factors. Among the former, the FAP models risks deriving from the dynamics of an extreme surrendering of policies, from sharp changes in mortality and longevity, and from pressure on costs; among the latter, the FAP takes into consideration scenarios of stress over year-long time spans on interest rates, on credit spread and on stock market trends.
By means of the ALM system, the FAP process makes it possible to calculate the sensitivity of liabilities with respect to the movements of market risk factors in order to effectively manage the financial assets covering technical provisions.

Investment portfolios

As at 31 December 2008, the investment portfolios of the Group companies, recorded at book value, amounted to 42,547 million euro; of these, the share regarding traditional revaluable life policies and free capital ("Class C" portfolio or portfolio at risk) amounted to 16,160 million euro, while the other component ("Class D" portfolio or portfolio with total risk retained by the insured) mostly comprised investments related to index- and unit-linked policies and pension funds totalling 26,387 million euro.

Considering the various types of risks, the analysis of investment portfolios, described below, concentrates on the financial assets included in the "at-risk portfolio".

Financial assets under separate management and free capital

In terms of breakdown by asset class, at the end of 2008 and net of the positions in derivative financial instruments detailed below, 94.6% of the assets (15,450 million euro) consisted of bonds, whereas assets subject to equity price risk represented 4.4% of the total and amounted to 720 million euro. The remaining part (1%, 164 million euro) consisted of investments relating to UCITS, Private Equity and Hedge Funds.
Investments relating to EurizonVita's and SudPoloVita's free capital amounted to 846.4 million euro (market values, net of current account balances) and had a risk level in terms of Value at Risk (99% confidence level, 10-day holding period) of 11 million euro.

Interest rate risk exposure

The breakdown by maturity of bonds showed 12.5% short-term (under 1 year), 37% medium-term and 45% long-term (over five years).

(in thousands of euro)

Financial assets	Book value	%	Duration
Fixed-rate bonds	**11,573,410**	**70.86**	**5.14**
up to 1 year	1,680,732	10.29	
1 to 5 years	4,772,489	29.22	
over 5 years	5,120,189	31.35	
Floating rate/indexed bonds	**3,876,724**	**23.73**	**2.37**
up to 1 year	363,954	2.23	
1 to 5 years	1,243,584	7.61	
over 5 years	2,269,186	13.89	
TOTAL	**15,450,134**	**94.59**	
Equities or similar capital securities	**720,183**	**4.41**	
UCITS, Private Equity, Hedge Fund	**163,967**	**1.00**	
TOTAL AS AT 31.12.2008	**16,334,284**	**100.00**	

The Modified duration of the bond portfolio, calculated by means of the sensitivity to uniform and parallel variations of the interest rate curve of ±25 basis points, is 4.4 years. The reserves relating to the revaluable contracts under Separate Management have an average modified duration of 3.9 years. The related portfolios of assets have a modified duration of around 3.3 years.
The sensitivity of the fair value of the portfolio of financial assets to interest rate movements is summarised in the table below which highlights both exposure of the securities portfolio and the effect of positions represented by hedging derivatives which reduce its sensitivity. For example, a parallel shift in the yield curve of +100 basis points leads to a negative fair value change in the bond portfolios of 643 million euro. In this scenario, the value of hedging derivatives increases by 122 million euro which party offsets the capital loss registered by bonds.

(in thousands of euro)

	Book value	%	Fair value changes due to interest rate fluctuations	
			+100 bps	-100 bps
Fixed-rate bonds	11,573,410	75.74	-559,941	630,113
Floating rate/indexed bonds	3,876,724	25.37	-82,737	89,170
Interest rate risk hedging effect	-169,953	-1.11	122,468	-155,048
Total	**15,280,181**	**100.00**	**-520,210**	**564,235**

Credit risk exposure

The investment portfolio had a high credit quality. As shown in the table below, AAA/AA bonds represented approximately 79% of total investments and A bonds 12%. Low investment grade securities (BBB) constituted around 3% of the total and the portion of speculative grade or unrated securities was marginal.

(in thousands of euro)

Breakdown of financial assets by issuer rating	Book value	%
Bonds	**15,450,134**	**94.59**
AAA	3,656,298	22.38
AA	9,333,136	57.14
A	2,015,496	12.34
BBB	424,785	2.60
Speculative grade	9,154	0.06
Unrated	11,265	0.07
Equities or similar capital securities	**720,183**	**4.41**
UCITS, Private Equity, Hedge Fund	**163,967**	**1.00**
TOTAL	**16,334,284**	**100.00**

The analysis of the exposure in terms of the issuers/counterparties produced the following results: securities issued by Governments, Central Banks and other public entities represented approximately 75% of the total investments, whereas financial companies (mostly banks) contributed to around 15% of the exposure and industrial securities made up approximately 4%.
The sensitivity values of the fair value of the bonds with respect to a variation in the creditworthiness of the issuers, namely a market credit spread shock of ±100 basis points, as at end of 2008, are shown in the table below.

(in thousands of euro)

	Book value	%	Fair value changes due to credit spread fluctuations	
			+100 bps	-100 bps
Government bonds	12,332,402	79.82	-631,256	708,754
Corporate bonds	3,117,732	20.18	-127,681	137,132
Total	**15,450,134**	**100.00**	**-758,937**	**845,886**

Equity risk exposure

The sensitivity of the equity portfolio to a hypothetical deterioration in equity prices of 10% amounts to 72 million euro, as shown in the table below.

(in thousands of euro)

	Book value	%	Fair value changes due to stock price fluctuations
			-10%
Equities - Financial institutions	139,514	19.37	-13,951
Equities - Non-financial companies and other counterparties	580,669	80.63	-58,067
Total	**720,183**	**100.00**	**-72,018**

Exchange risk exposure

The investment portfolio is not appreciably exposed to foreign exchange risk: over 99% of investments are made up of assets denominated in euro. The rest hedges the reserves of the insurance policies which lead to payments in foreign currency.

Financial derivative instruments

Financial derivative instruments are used to cover the financial risks of the investment portfolio or for effective management.

The table below shows the book values of the financial derivative instruments as at 31 December 2008.

(in thousands of euro)

Type of underlying	Interest rates		Equities, equity indexes, commodities, exchange rates		TOTAL	
	Quoted	Unquoted	Quoted	Unquoted	Quoted	Unquoted
Hedging derivatives	-	-169,953	-	-	-	-169,953
Effective management derivatives	-	-12,192	-	3,119	-	-9,073
TOTAL	**-**	**-182,145**	**-**	**3,119**	**-**	**-179,026**

The capital losses shown for the hedging derivatives are offset, due to the nature of the instruments, by the capital gains on the positions hedged.