SECTION 2 – RISKS OF INSURANCE COMPANIES

2.1 INSURANCE RISKS

QUALITATIVE INFORMATION

Life business

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 managed initially during definition of the technical features and product pricing, and over the life of the instrument by means of periodic checks on sustainability and profitability (both at product level and at portfolio level, including 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 analyse 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 as at 31 December 2009.

		(thousands of euro)
Breakdown of mathematical reserves of life branch: maturity	Mathematical reserve	%
up to 1 year	2,924,843	13.82 20 51
6 to 10 years	1,927,217	9.10
11 to 20 years over 20 years	1,126,033 10,847,860	5.32 51.25
TOTAL	21,168,678	100.00
		(thousands of euro)
Breakdown of risk concentration by type of guarantee	Total Reserves	%
Insurance and investment products with guaranteed annual vield		
0% - 1%	746,643	3.28
from 1% to 3% from 3% to 5%	12,631,017 4,640,385	55.57 20.42
Insurance products	4,735,320	20.83
Shadow reserve	-23,856	-0.10
TOTAL	22,729,509	100.00

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.

The following table shows a breakdown by maturity of financial liabilities represented by assets covering commitments arising under unit- and index-linked policies and subordinated liabilities.

			(tho	busands of euro)
Breakdown of financial liabilities by maturity	Within 12 months	Over 12 months	Total as at 31.12.2009	Total as at 31.12.2008
Unit linked	72,859	15,169,129	15,241,988	13,237,964
Index linked	624,261	6,983,955	7,608,216	8,002,896
Subordinated liabilities	-	275,217	275,217	308,458
Total	697,120	22,428,301	23,125,421	21,549,318

Non-life business

The risks typical of the non-life insurance portfolio (managed through EurizonTutela and CentroVita) mainly relate to premium and reserve risks.

Premium risks are managed initially during definition of the technical features and product pricing, and over the life of the instrument by means of periodic checks on sustainability and profitability (both at product level and at portfolio level, including liabilities).

Reserve risk is guarded against through the exact calculation of technical reserves. More specifically, for companies with non-life businesses, 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 line of business). This is also carried out in order to provide the Reinsurance department 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 2009 for EurizonTutela and CentroVita is provided below.

					(thousa	ands of euro)
Development of Casualty Branch Reserves	Year of generation/event					
	2005	2006	2007	2008	2009	TOTAL
Reserve amount:						
as at 31/12 generation year N	-	24,575	26,107	30,629	36,623	
as at 31/12 year N+1	-	23,003	26,584	28,670	-	
as at 31/12 year N+2	-	21,680	24,743	-	-	
as at 31/12 year N+3	-	21,096	-	-	-	
Total claims paid	37	18,696	20,250	18,521	10,915	68,418
Claims reserve booked as at 31.12.2009	-	2,461	4,606	10,994	26,371	44,432
Final claims reserve for previous years						3,187
Total claims reserve booked as at 31.12.2009						47,619

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 has been launched with the objective of both strengthening risk governance and managing and controlling risk-based capital.

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 statistically-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 stress scenarios 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.

Any gaps between projected outflows and cash at hand are evaluated on a monthly basis in order to monitor liquidity risk arising from the difficulty of meeting outlay requirements not sufficiently covered by the redemption of investments. The asset and liability maturity profile is also evaluated on a monthly basis, seeking to keep the indicators of the average financial duration of these two components in a fixed range of tolerance, so as to ensure that assets are managed consistently with the maturity profile of the corresponding liabilities while also reflecting tactical views and market expectations.

Investment portfolios

As at 31 December 2009, the investment portfolios of the Group companies, recorded at book value, amounted to 48,805 million euro; of these, the share regarding traditional revaluable life policies and free capital ("Class C" portfolio or "portfolio at risk") amounted to 20,522 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 28,283 million euro.

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

Financial assets under separate management and free capital

In terms of breakdown by asset class, at the end of 2009 and net of the positions in derivative financial instruments detailed below, 93% of the assets (19,183 million euro) consisted of bonds, whereas assets subject to equity price risk represented 4.5% of the total and amounted to 911 million euro. The remainder (2.5%, 564 million euro) consisted of investments relating to UCI, private equity and hedge funds.

Investments relating to EurizonVita's and SudPoloVita's free capital amounted to 1,290 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 36 million euro.

Interest rate risk exposure

The breakdown by maturity of bonds showed 5% short-term (under 1 year), 31% medium-term and 57% long-term (over five years).

Notes to the consolidated financial statements – Part E – Information on risks and relative hedging policies

		(th	ousands of euro)
Financial assets	Book value	%	Duration
Fixed-rate bonds	16 575 187	80.23	6 15
up to 1 year	971 682	4 70	0.15
1 to 5 years	5,564,733	26.94	
over 5 years	10,038,772	48.59	
Floating rate/indexed bonds	2,607,433	12.63	2.70
up to 1 year	141,863	0.69	
1 to 5 years	852,783	4.13	
over 5 years	1,612,787	7.81	
TOTAL	19,182,620	92.86	5.68
Equities or similar capital securities	911,372	4.41	
UCI, Private Equity, Hedge Fund	564,318	2.73	
TOTAL AS AT 31.12.2009	20,658,310	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 5.7 years. The reserves relating to the revaluable contracts under Separate Management have an average modified duration of 4.6 years. The related portfolios of assets have a modified duration of around 4.9 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 982 million euro. In this scenario, the value of hedging derivatives increases by 109 million euro which party offsets the capital loss registered by bonds.

			(thous	sands of euro)	
	Book value	%	Fair v du rate	value changes due to interest te fluctuations	
			+100 bps	-100 bps	
Fixed-rate bonds	16,575,187	86.96	-936,176	1,027,290	
Floating rate/indexed bonds	2,607,433	13.68	-46,269	102,044	
Interest rate risk hedging effect	-122,443	-0.64	108,926	-136,791	
TOTAL	19,060,177	100.00	-873,519	992,543	

Credit risk exposure

The investment portfolio had a high credit quality. As shown in the table below, AAA/AA bonds represented 78% of total investments and A bonds approximately 9.5%. Low investment grade securities (BBB) constituted around 5% of the total and the portion of speculative grade or unrated securities was marginal (0.5%).

		(thousands of euro)
Breakdown of financial assets by issuer rating	Book value	%
Bonds	19,182,620	92.86
AAA	6,163,170	29.83
AA	9,938,305	48.11
A	1,971,865	9.55
BBB	995,483	4.82
Speculative grade	93,689	0.45
Unrated	20,108	0.10
Equities or similar capital securities	911,372	4.41
UCI, Private Equity, Hedge Fund	564,318	2.73
TOTAL	20,658,310	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 made up 72% of the total investments, whereas financial companies (mostly banks) contributed to around 13% of the exposure and industrial securities made up approximately 8%. The sensitivity values of the fair value of the bonds with respect to a variation in the creditworthiness of the issuers, namely

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 2009, are shown in the table below.

			(thou	isands of euro)	
	Book value	%	Fair value changes sprea	s due to credit ad fluctuations	
			+100 bps	-100 bps	
Government bonds Corporate bonds	14,868,209 4,314,411	77.51 22.49	-894,254 -165,523	1,029,759 177,351	
TOTAL	19,182,620	100.00	-1,059,777	1,207,110	

Equity risk exposure

The sensitivity of the equity portfolio to a hypothetical deterioration in equity prices of 10% amounts to 91 million euro, as shown in the table below.

	Book value	%	(thousands of euro) Fair value changes due to stock price fluctuations
			-10%
Equities - Financial institutions Equities - Non-financial companies and other counterparties	237,584 673,788	26.07 73.93	-23,758 -67,379
TOTAL	911,372	100.00	-91,137

Foreign exchange risk exposure

The investment portfolio is not appreciably exposed to foreign exchange risk: approximately 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.

Liquidity risk associated with positions in financial derivative instruments is attributable to plain-vanilla derivatives (chiefly interest rate swaps and constant-maturity swaps) traded on OTC markets with significant liquidity characteristics and sizes. These instruments are thus also liquid and easily liquidated with the counterparty with which they were traded or other market operators.

The table below shows the book values of the financial derivative instruments as at 31 December 2009.

Type of underlying	Interest rates		Equities, equity indices, commodities, exchange rates		(thousands of euro) TOTAL	
	Quoted	Unquoted	Quoted	Unquoted	Quoted	Unquoted
Hedging derivatives Effective management derivatives	-	-122,443 -13,771	-	- 212	-	-122,443 -13,559
TOTAL	-	-136,214	-	212	-	-136,002

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.