### 1.2. BANKING GROUP - MARKET RISKS

The Intesa Sanpaolo Group policies relating to financial risk acceptance are defined by the Parent Company's Management Bodies, with the support of specific Committees, including the Group Risk Governance Committee and Group Financial Risks Committee. The Group Risk Governance Committee is in charge, among other things, of proposing to the Statutory bodies Group risk management strategies and policies, of ensuring compliance with the guidelines and indications of Supervisory authority concerning risk governance and of assessing the adequacy of the Group's economic and regulatory capital. The Committee coordinates the activities of specific Technical Committees, monitoring financial and operational risks, and is chaired by the Managing Director and CEO.

The Group Financial Risks Committee, chaired by the Chief Risk Officer and the Chief Financial Officer, is responsible for setting out the methodological and measurement guidelines for financial risks, establishing the operational limits and assessing the risk profile of the Group and its main operational units. The Committee also sets out the strategies for the management of the banking book to be submitted to the competent Bodies and establishes the guidelines on liquidity, interest rate and foreign exchange risk. The Committee operates on the basis of the operating and functional powers delegated by the Statutory bodies and on the basis of the coordination action of the Group Risk Governance Committee.

The Group's overall financial risk profile and the appropriate interventions aimed at changing it are examined periodically by the Group Financial Risks Committee.

The Parent Company's Risk Management Department is responsible for the development of corporate risk measurement and monitoring methodologies as well as for the proposals on the Bank's and the Group's system of operating limits. Risk Management is also responsible in outsourcing for the risk measurement for certain operating units on the basis of specific service contracts.

The valuation of financial instruments, also defined as the "fair value policy", is summarised in Part A of the Notes to the consolidated financial statements (Fair value measurement section). Part A of the Notes also presents quantitative disclosure on allocation of the various accounting portfolios in accordance with fair value levels (section A.3.2. Fair value hierarchy).

The various stages of that process together with additional information on the valuation models used to measure the financial instruments are described below.

### Identification, certification and treatment of market data and the sources for measurements

The fair value calculation process and the need to distinguish between products which may be measured on the basis of effective market quotes rather than through the application of comparable or mark-to-model approaches, highlight the need to establish univocal principles in the determination of market parameters. To this end the Market Data Reference Guide – a document prepared and updated by the Risk Management Department on the basis of the Group's Internal Regulations approved by the Management bodies of the Parent Company and Group Companies – has established the processes necessary to identify market parameters and the means according to which such parameters must be extracted and used. Such market data may be both elementary and derived data. In particular, for each reference category (asset class), the regulation determines the relative requisites, as well as the cut-off and certification means. The document defines the collection of the contribution sources deemed adequate for the assessment of financial instruments held for any purpose in the proprietary portfolios of the Bank and its subsidiaries. These same sources are used in revaluations carried out for third parties under Service Level Agreements, reached in advance. Adequacy is guaranteed by the respect of reference requirements, which are based on comparability, availability and transparency of the data, or the possibility of extracting the figure from one or more info providing systems, of measuring the contribution bid-ask, and lastly, for OTC products, of verifying the comparability of the contribution sources. For each market parameter category the cut-off time is determined univocally, with reference to the timing of definition of the parameter, the reference bid/ask side and the number of contributions necessary to verify the price. The use of all market parameters in Intesa Sanpaolo is subordinated to their certification (Validation Process) by the Risk Management Department, in terms of specific controls (verifying the integrity of data contained on the proprietary platform with respect to the source of contribution), reliability tests (consistency of each single figure with similar or comparable figures) and verification of concrete application means.

## **Model Risk Management**

In general, Model Risk is represented by the possibility that the price of a financial instrument is materially influenced by the valuation approach chosen. In the case of complex financial instruments, for which there is no standard valuation method in the market, or during periods when new valuation methods are being established in the market, it is possible that different methods may consistently value the elementary instruments, but provide differing valuations for exotic instruments. The risk model is monitored through a diverse series of analyses and checks carried out at various stages, aimed at certifying the various pricing methods used by the Bank ("Model Validation"), at regularly monitoring the performance of the models in operation to promptly identify any deviation from the market ("Model Risk Monitoring") and at identifying any adjustments to be made to the valuations ("Model Risk Adjustment", see the section below "Adjustments adopted to reflect model risk and other uncertainties related to the valuation").

#### Model Validation

In general, all the pricing models used by the Bank must undergo an internal certification process by the various structures involved. The possibility of independent certification issued by high standing financial service companies is also provided for in highly-complex cases and/or in presence of market turbulence (so-called market dislocation)<sup>1</sup>. The internal certification process is activated when a new financial instrument that requires an adjustment to the existing pricing methods or the development of new methods starts to be used or when the existing methods need to be adjusted for the valuation of existing contracts. The validation of the methods involves a series of operational steps, which are adopted where necessary, including the:

- contextualisation of the problem within the current market practice and the relevant available literature;
- analysis of the financial aspects and the types of significant payoff;

<sup>&</sup>lt;sup>1</sup> For example, Intesa Sanpaolo used a similar validation for CDO exposures.

- formalisation and independent derivation of the mathematical aspects;
- analysis of the numerical/implementation aspects and tests through the replication, where necessary, of the pricing libraries of the Front Office systems through an independent prototype;
- analysis of the relevant market data, verifying the presence, liquidity and frequency of update of the contributions;
- analysis of the calibration methods, in other words the model's ability to optimise its internal parameters (or meta-data) to best replicate the information provided by the quoted instruments;
- stress tests of the parameters of the model that are not observable in the market and analysis of the impact on the valuation of the complex instruments;
- market tests comparing, where possible, the prices obtained from the model with the quotes available from the counterparties.

If no problems are identified by the above analysis, the Risk Management Department validates the method, which becomes part of the Group Fair Value Policy and can be used for the official valuations. If the analysis identifies a significant "Model Risk", which, however, is within the limits of the approach's ability to correctly manage the related contracts, the Risk Management Department selects a supplementary approach to determine the appropriate adjustments to be made to the mark to market, and validates the supplemented approach.

#### Model Risk Monitoring

The performance of the models in operation is monitored continuously to promptly identify any deviations from the market and implement the necessary assessments and measures. This monitoring is performed in various ways, including:

- repricing of quoted elementary instruments: verifying the model's ability to replicate the market prices of all the quoted instruments considered to be relevant and sufficiently liquid. For interest rate derivatives, an automatic repricing system for plain vanilla financial instruments is used in the Bank's Front Office systems, which enables the systematic verification of any deviations between the model and the market. Where significant deviations are found, especially outside the market bid-ask quotes, the impact on the respective trading portfolios is analysed and any adjustments to be made to the corresponding valuations are quantified;
- comparison with benchmarks: the monitoring method described above is further enhanced by the extensive use of data supplied by qualified external providers (e.g. Markit), which provide consensus valuations from leading market counterparties for interest rate instruments (swaps, basis swaps, cap/floor, European and Bermuda swaptions, CMS, CMS spread options), equities (options on indexes and on single stocks) and credit (CDS). Such information is far richer than that normally available from standard contribution sources, for example in terms of maturities, underlying assets and strikes. If there are significant differences between the model and the benchmark their impact is analysed and, as in the case above, any mark-to-market adjustments are quantified. The possibility of extending the comparison with benchmarks to other instruments or underlying assets is constantly monitored;
- comparison with market prices: verification against prices provided by counterparties via Collateral Management, indicative listed prices provided by brokers, intrinsic parameters identified from these indicative listed prices, checks of the most recent revaluation price in relation to the price of the financial instrument deriving from unwinding, sales, and new similar or comparable transactions.

### Adjustments adopted to reflect model risk and other uncertainties related to the valuation

If problems are found by the Model Validation process or the Model Risk Monitoring process in the calculation of the Fair Value of particular financial instruments, the appropriate Mark-to-Market Adjustments to be made to the valuations are identified. These adjustments are regularly reviewed, also considering market trends, or the introduction of new liquid instruments, different calculation methodologies and, in general, methodological advances which may also lead to significant changes in selected models and their implementation.

In addition to the adjustments relating to the abovementioned factors, the Mark-to-Market Adjustment Policy also provides for other types of adjustments relating to other factors capable of influencing the valuation. These factors essentially involve:

- high and/or complex risk profile;
- position illiquidity determined by temporary or structural market conditions or in relation to the entity of exchange values held (in case of excessive concentration) and
- valuation difficulties due to the lack of liquid and observable market parameters.

For illiquid products an adjustment is made to the fair value. This adjustment is generally not very relevant for instruments for which the valuation is supplied directly by an active market (level 1). Specifically, highly liquid quoted securities are valued directly at mid price, whereas for quoted securities with low liquidity and unquoted securities the bid price is used for long positions and the ask price for short positions. Bonds that are not quoted are valued according to credit spreads that differ based on the position of the security (long or short).

Conversely, for derivatives for which fair value is determined with a valuation technique (levels 2 and 3), the adjustment may be calculated with different means according to the availability on the market of bid and ask prices and products with similar characteristics in terms of contract type, underlying asset, currency, maturity and volumes traded which may be used as benchmarks.

Where none of the indications above is available, stress tests are performed on input parameters deemed to be relevant in the model. The main factors considered to be illiquid (in addition to the inputs for the valuation of structured credit derivatives, illustrated above) and for which the respective adjustments have been calculated, are represented in this market context, are connected to risks on Commodities, on Dividends and Variance Swaps, FOI (Consumer price index for blue and white-collar worker households) inflation and options on inflation, on specific indexes such as Rendistato, volatility of 12-month cap indexes and "quanto" correlation (connected to pay offs and index-linking expressed in different currencies).

The management of the Mark-to-Market Adjustment process is formalised with appropriate calculation methodologies on the basis of the different configurations of the points set out above. Calculation of the adjustments depends on the dynamics of the factors indicated above and is disciplined by the Risk Management Department. The criteria for the release are subordinated to the elimination of the factors indicated above and disciplined by the Risk Management Department. Such processes are a combination of quantitative elements that are rigidly specified and qualitative elements, valued based on the different configuration over time of the risk factors which generated the adjustments. Thus, the estimates subsequent to initial recognition are always guided by the mitigation or elimination of said risks.

For new products, the decision to apply Mark-to-Market Adjustment processes is taken by the New Product Committee upon the proposal of the Risk Management Department.

### Information on valuation models which are concretely used for measurement of financial instruments

The sections below provide a summary of the information, by type of financial instrument (securities, derivatives, structured products), on the valuation models used to measure the various instruments referred to in Part A Accounting policies – Fair value measurement.

#### I. Pricing model for non-contributed securities

Pricing of non-contributed securities (i.e. securities without official listings expressed by an active market) occurs through the use of an appropriate credit spread test (in application of the comparable approach): given a non-contributed security, the level of the credit spread is estimated starting from contributed and liquid financial instruments with similar characteristics. The hierarchy of sources which are used to estimate the level of the credit spread are the following:

- contributed and liquid securities (benchmark) of the same issuer;
- Credit Default Swaps on the same reference entity;
- contributed and liquid securities of an issuer with the same rating and belonging to the same sector.

In any case the different seniority of the security to be priced is considered relatively to the issuer's debt structure.

Also, for bonds that are not quoted on active markets, an extra spread, estimated based on the bid/ask spread recorded on the market, is added to the "fair" credit spread component, to take account of the higher premium demanded by the market compared to similar quoted securities.

If there is also an embedded option a further adjustment is made to the spread by adding a component designed to capture the hedging costs of the structure and the illiquidity of the underlyings. This component is calculated on the basis of the type of option and its maturity.

## II. Models for pricing interest rate, foreign exchange, equity, inflation and commodity derivatives

Interest rate, foreign exchange, equity, inflation and commodity derivatives, if not traded on regulated markets, are Over The Counter (OTC) instruments, which are bilaterally exchanged with market counterparties and are measured through specific pricing models, fed by input parameters (such as yield, foreign exchange and volatility curves) observed on the market and subject to the monitoring processes illustrated above. In terms of fair value hierarchy, prices determined in this way fall in the Comparable Approach category.

The table below illustrates the main models used to price OTC derivatives on the basis of the category of underlying asset.

Underlying class	Valuation models	Market data and input parameters
Interest rate	Net Present Value, Black, SABR, Libor Market Model, Hull-White at 1 and 2 factors, Mixture of Hull-White at 1 and 2 factors, Bivariate longnormal, Rendistato	Interest rate curves (deposits, FRA, Futures, OIS, swap, basis swap, Rendistato basket), cap/floor/swaption option volatility, correlation between interest rates
Foreign exchange rate	Net present Value FX, Garman-Kohlhagen, Lognormal with Uncertain Volatility (LMUV)	Interest rate curves, spot and forward FX, FX volatility
Equity	Net present Value Equity, Black-Scholes Generalised, Heston, Jump Diffusion	Interest rate curves, underlying asset spot rate, interest rate curves, expected dividends, underlying asset volatility and correlation between underlying assets, "quanto" volatility and correlations
Inflation	Bifactorial Inflation	Nominal and inflation interest rate curves, interest and inflation rate volatility, seasonality ratios of consumer price index, correlation between inflation rates
Commodity	Net present Value Commodity, Generalised Black- Scholes, Independent Forward	Interest rate curves, spot rate, forwards and futures of underlying assets, underlying asset volatility and correlation between underlying assets, "quanto" volatility and correlations

Moreover, the determination of fair value of OTC derivatives must consider, in addition to market factors and the nature of the contract (maturity, type of contract, etc.), also the credit quality of the counterparty. In particular:

- mark-to-market, namely the pricing using risk free (particularly interest rate curve and volatility) market data;
- fair value, which considers counterparty credit risk and future exposures of the contract.

The difference between fair value and mark-to-market – so-called Credit Risk Adjustment (CRA) – is the discounted value of the expected future loss, considering that the future exposure has a volatility related to that of the markets. The application of this methodology occurs as follows:

- in the case of positive net present exposure, CRA is calculated starting from the latter, from credit spreads and in function of the average residual life of the contract;
- in the case of net present exposure close to zero or negative, CRA is determined assuming that the future exposure may be estimated through Basel 2 add-on factors.

#### III. Model for pricing structured credit products

Regarding ABS, if significant prices are not available from consensus platforms/Info providers (level 1, effective market quotes), valuation techniques are used that take into account parameters that can be gathered from an active market (level 2, comparable approach).

In this case, the cash flows are obtained from info providers or specialised platforms, whereas the spreads are gathered from new issues, from consensus platforms and from market research produced by major investment banks, verifying the consistency and coherence of these valuations with the prices gathered from the market (level 1).

Lastly, the valuation based on quantitative models and parameters is accompanied by a qualitative analysis aimed at highlighting structural aspects that are (or not fully) encompassed by the analyses described above, relating the actual future ability to pay the expected cash flows and analyses of relative value with respect to other similar structures.

With reference to complex credit derivatives (CDO), in view of the market dislocations between the financial and credit markets, Intesa Sanpaolo has paid particular attention to pricing methodologies, and prepared a new Fair Value Policy that has been applied since the 2007 financial statements. No material changes were made to the Policy, although the ongoing improvement of input treatment continued, in order to ensure consistent adherence to the market figures. At the same time the Waterfall assessment was refined. The Fair Value Policy also sets out specific procedures on the inputs necessary for valuations.

Regarding CDO pricing, Intesa Sanpaolo uses a quantitative model which estimates joint losses on collateral with a simulation of the relevant cash flows which uses copula functions.

The most significant factors considered in the simulation – for each collateral – are the risk-neutral probability of default derived from market spreads, recovery rates, the correlation between the value of collaterals present in the structure and the expected residual life of the contract.

For spreads, the valuation process incorporates, as promptly as possible, all the market inputs (including synthetic indexes such as LCDX, Levx and CMBX) considered to be significant: consensus parameters calculated by multicontribution platforms and market spread estimates made available by major dealers are used.

The Market Data Reference Guide, which sets out credit spread contribution sources, was moreover integrated with specific policies for the other inputs such as correlations and recovery rates.

For specific types of collateral, such as trust preferred securities, the probability of default is estimated using the Expected Default Frequency from Moody's - KMV.

In order to incorporate high market dislocation and intense market illiquidity phenomena in valuations, a series of corrections have been prepared for valuations referred to the main input parameters; in particular:

- stress of recovery rates: expected recovery rates on the assets held as collateral in every deal have been decreased by 25% (50% for underlying REITS);
- stress of asset value correlation: inter and intra correlations have been increased by 15% or 25% depending on the type of product;
- stress of spreads: the spreads, used to determine the marginal distributions of defaults, have been increased by 10%;
- stress of expected residual lives: the latter have been increased by 1 year.

Each of these modules contributes to the definition of a sensitivity grid of the value to the single parameter; results are then aggregated assuming independence between the single elements.

The valuation framework used for the CDO Cash Flows also manages the Waterfall effects. The latter entails the correct definition of the payment priorities according to the seniority of the various tranches and the contractual clauses. In general these provide for the diversion of the capital and interest payments from the lower tranches of the Capital Structure to the higher tranches, upon the occurrence of Trigger Events, such as the failure of the Overcollateralisation and Interest Coverage tests.

After this valuation, credit analyses on underlying assets were fine-tuned to incorporate further valuation elements not included in the quantitative models. In particular, a Qualitative Credit Review is provided for and entails an accurate analysis of credit aspects referred to the specific structure of the ABS/CDO and to the collateral present. This is to identify any present or future weaknesses which emerge from the characteristics of the underlying assets, which could have been missed by rating agencies and as such not fully considered in the valuations described in the previous point. The results of this analysis are condensed in certain objective elements (such as Past Due, Weighted Average Delinquency, etc.) which are summarised in an indicator representing credit quality. On the basis of the value of this synthetic indicator, specific thresholds have been identified which correspond to a number of downgrades, so to proceed to a consistent adjustment in the valuation. Finally, for this class of products, Top Management has the possibility to decide a further adjustment which must be based on prices observed from counterparties and on expert opinions.

### IV. The pricing model for hedge funds

The main parameter used for the valuation of hedge funds is the NAV (Net Asset Value), which however may be prudentially adjusted by the Risk Management Department, during the valuation of inventories for accounting purposes, on the basis of an individual valuation process, aimed at verifying specific idiosyncratic risks, mainly identified as follows:

- counterparty risk
- illiquidity risk.

These elements have been measured starting from 2008, the year when the deepening crisis had significant impacts on banks, and the fair value policy was reviewed to fully incorporate the changes in the operating environment and the risks associated with hedge funds in particular following the Lehman default. This policy was introduced during 2009 after a backtesting stage which endorsed the choices made. During 2009-2010 several qualitative parameters were reviewed as part of the regular revision of the policy.

Specifically, the first risk driver – counterparty risk - relates to the risk that the assets of the fund are exposed to when a single service provider is entrusted with prime brokerage or custodian activities, which is a potential source of risk in the case of default. The resulting prudential adjustment to the operational NAV differs according to whether this activity is concentrated in a single name or is diversified across several service providers.

With regard to the illiquidity drivers, these relate to the risk intrinsic to the pricing of the fund assets, therefore, the prudential adjustment is applied based on the availability of prices or certain weaknesses in the pricing policies used by the fund

#### **REGULATORY TRADING BOOK**

### 1.2.1. INTEREST RATE RISK AND PRICE RISK

Consistent with the use of internal risk measurement models, the sections relative to interest rate and price risk have been grouped within the relevant portfolio.

#### **OUALITATIVE INFORMATION**

The quantification of trading risks is based on daily VaR of the trading portfolios of Intesa Sanpaolo and Banca IMI, which represent the main portion of the Group's market risks, to adverse market movements of the following risk factors:

- interest rates:
- equity and market indexes;
- investment funds;
- foreign exchange rates;
- implied volatilities;
- spreads in credit default swaps (CDSs);
- spreads in bond issues;
- correlation instruments;
- dividend derivatives;
- asset-backed securities (ABSs);
- commodities.

A number of the other Group subsidiaries hold smaller trading portfolios with a marginal risk (around 4% of the Group's overall risk). In particular, the risk factors of the international subsidiaries' trading portfolios are interest rates and foreign exchange rates, both relating to linear pay-offs.

### Internal model validation

For some of the risk factors indicated above, the Supervisory Authority has validated the internal models for the reporting of the capital absorptions of both Intesa Sanpaolo and Banca IMI.

In particular, the validated risk profiles for market risks are: (i) generic on debt securities and generic/specific on equities for Intesa Sanpaolo and Banca IMI; (ii) position risk on quotas of funds underlying CPPI (Constant Proportion Portfolio Insurance) products for Banca IMI; (iii) optional risk and specific risk for the CDS portfolio for Intesa Sanpaolo; (iv) position risk on dividend derivatives.

From the second quarter 2010, the validated risk profiles were extended to commodity risk for Banca IMI, the only legal entity of the Group authorised to hold open positions in commodities.

#### VaR

The analysis of market risk profiles relative to the trading book uses various quantitative indicators and VaR is the most important. Since VaR is a synthetic indicator which does not fully identify all types of potential loss, risk management has been enriched with other measures, in particular simulation measures for the quantification of risks from illiquid parameters (dividends, correlation, ABS, hedge funds).

VaR estimates are calculated daily based on simulations of historical time-series, a 99% confidence level and 1-day holding period. The following paragraphs provide the estimates and evolution of VaR, defined as the sum of VaR and of the simulation on illiquid parameters, for the trading book of Intesa Sanpaolo and Banca IMI.

#### Incremental Risk Charge (IRC)

The Incremental Risk Charge (IRC) is the maximum potential loss in the credit trading portfolio resulting from an upgrade/downgrade or bankruptcy of the issuers, over a 1-year period, with a 99.9% confidence level. This measure is additional to VaR and enables the correct representation of the specific risk on debt securities and credit derivatives because, in addition to idiosyncratic risk, it also captures event and default risk.

## Stress tests

Stress tests measure the value changes of instruments or portfolios due to changes in risk factors of unexpected intensity and correlation, or extreme events, as well as changes representative of expectations of the future evolution of market variables. Stress tests are applied periodically to market risk exposures, typically adopting scenarios based on historical trends recorded by risk factors, for the purpose of identifying past worst case scenarios, or defining variation grids of risk factors to highlight the direction and non-linearity of trading strategies.

#### Sensitivity and greeks

Sensitivity measures make risk profiling more accurate, especially in the presence of option components. These measure the risk attributable to a change in the value of a financial position to predefined changes in valuation parameters including a one basis point increase in interest rates.

#### Level measures

Level measures are risk indicators which are based on the assumption of a direct relationship between the size of a financial position and the risk profile. These are used to monitor issuer/sector/country risk exposures for concentration analysis, through the identification of notional value, market value or conversion of the position in one or more benchmark instruments (so-called equivalent position).

### **QUANTITATIVE INFORMATION**

### **Daily VaR evolution**

During the fourth quarter of 2010 market risks originated by Intesa Sanpaolo and Banca IMI decreased compared to the previous periods. The average daily VaR for the fourth quarter of 2010 was 36.8 million euro, down by 15% on the third quarter. With regard to the whole of 2010, the average Group risk profile (38 million euro) decreased compared to the average values in 2009 (40.6 million euro).

# Daily VaR of the trading portfolio for Intesa Sanpaolo and Banca IMI – Comparison between the 4<sup>th</sup> and the 3<sup>rd</sup> guarter of 2010 (a)

(millions of euro)

	average 4th	minimum 4th	maximum 4th	average 3rd	average 2nd	average 1st
	quarter	quarter	quarter	quarter	quarter	quarter
Intesa Sanpaolo	22.3	21.3	24.0	27.6	27.0	19.5
Banca IMI	14.5	11.5	22.4	15.8	13.9	11.7
Total	36.8	33.3	44.3	43.4	40.9	31.3

<sup>(</sup>a) Each line in the table sets out past estimates of daily operating VaR calculated on the quarterly historical time-series respectively of Intesa Sanpaolo and Banca IMI; minimum and maximum values for Intesa Sanpaolo and Banca IMI are estimated using aggregate historical time-series and therefore do not correspond to the sum of the individual values in the column.

## Daily VaR of the trading portfolio for Intesa Sanpaolo and Banca IMI – Comparison between 2010-2009 (a)

(millions of euro)

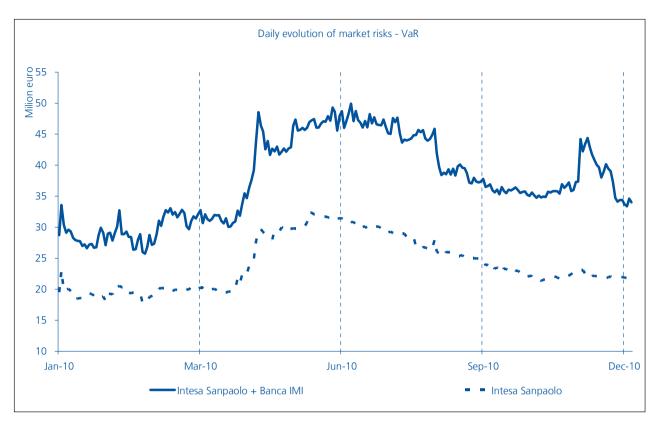
		2010				2009			
	average	minimum	maximum	last day	average	minimum	maximum		
itesa Sanpaolo	24.1	17.8	32.2	21.6	26.9	18.8	35.6		
anca IMI	13.9	8.9	22.4	13.2	13.7	7.2	21.7		
Total	38.0	27.6	49.9	34.8	40.6	27.1	55.6		

<sup>(</sup>a) Each line in the table sets out past estimates of daily operating VaR calculated on the quarterly historical time-series respectively of Intesa Sanpaolo and Banca IMI; minimum and maximum values for Intesa Sanpaolo and Banca IMI are estimated using aggregate historical time-series and therefore do not correspond to the sum of the individual values in the column.

Banca IMI alone recorded an average VaR in line with the previous year. Observing performance over the year, it is clear that the risk measures grew in line with the crisis in the sovereign markets in the eurozone and a subsequent stabilisation mainly from operations (a decrease in certain exposures and greater hedge effectiveness) and a different impact of volatilities on historical simulation scenarios.

As mentioned in part A.3 of the Notes to the consolidated financial statements, in October 2008 and during the year 2009, certain highly illiquid securities (mainly ABS) and positions resulting from unfunded structures were reclassified to the loan portfolio.

The average VaR in the fourth quarter of 2010 for this portfolio, not included in the VaR limit monitoring and the above statistics, was approximately 8.8 million euro.



For Intesa Sanpaolo, the breakdown of the risk profile in the fourth quarter of 2010 with regard to the various factors shows the prevalence of the hedge fund risk, which represented 54% of total VaR. Credit spread risk was the most significant component for Banca IMI, representing 51% of the total.

# Contribution of risk factors to overall VaR (a)

4th quarter 2010	Shares	Hedge funds	Interest rates	Credit spreads	Foreign exchange rates	Other parameters	Comodities
Intesa Sanpaolo	3%	54%	14%	24%	2%	3%	0%
Banca IMI	8%	0%	24%	51%	2%	7%	8%
Total	5%	25%	19%	39%	2%	6%	4%

<sup>(</sup>a) Each line in the table sets out the contribution of risk factors considering the overall VaR 100%, calculated as the average of daily estimates in the fourth quarter of 2010, broken down between Intesa Sanpaolo and Banca IMI and indicating the distribution of overall VaR.

With regard to the hedge fund portfolio, the table below shows the exposures broken down by type of strategy adopted.

### Contribution of strategies to portfolio breakdown (a)

	31.12.2010	31.12.2009
- Catalyst Driven	0%	1%
- Credit	75%	72%
- Non credit strategies	5%	0%
- Directional trading	4%	4%
- Equity hedged	8%	9%
- Fixed Income Arbitrage	8%	12%
- Multi-strategy	0%	1%
- Volatility	0%	1%
Total hedge funds	100%	100%

<sup>(</sup>a) The table sets out on every line the percentage of total cash exposures calculated on amounts at period-end.

During 2010, the hedge fund portfolio achieved the envisaged asset allocation, investing in strategies linked to distressed credit and exiting other categories of credit more linked to market direction (e.g. Multistrategy, Volatility).

Risk control with regard to the trading activity of Intesa Sanpaolo and Banca IMI also uses scenario analyses and stress tests. The impact on the income statement of selected scenarios relating to the evolution of stock prices, interest rates, credit spreads and foreign exchange rates as at the end of December is summarised in the following table.

(millions of euro)

	EQUITY			FOREIGN E) UITY INTEREST RATES CREDIT SPREADS RAT				сомм	ODITIES	
	volatility +10% and prices -5%	volatility -10% and prices +5%	-25bp	+25bp	-25bp	+25bp	-10%	+10%	-50%	+50%
Total	-5	5	16	-15	82	-80	15	-4	-6	6
of which SCP					6	-7				

#### In particular:

- for positions on stock markets a 5% increase in stock prices and a resulting 10% drop in volatility would have led to a gain
  of about 5 million euro; on the contrary, a 5% decrease in prices and resulting 10% increase in volatility would have led to a
  loss of about 5 million euro;
- for exposures to interest rates, a parallel +25 basis point shift in the yield curve would have led to a 15 million euro loss, whereas a parallel -25 basis point shift would have led to a 16 million euro gain;
- for exposures affected by changes in credit spreads, a 25 basis point widening in spreads would have led to an 80 million euro loss, of which about 7 million euro attributable to structured credit products (SCP);
- on foreign exchange exposures, the revaluation of the euro would have recorded a loss of about 4 million euro;
- lastly, on commodity exposures a 6 million euro loss would have been recorded had there been a 50% decrease in prices.

#### **Backtesting**

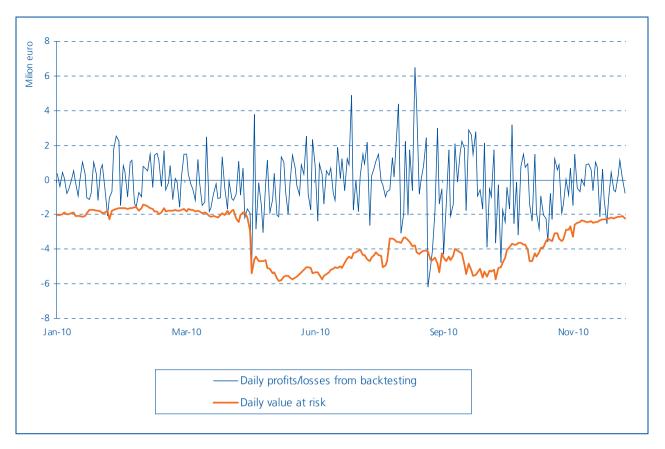
The effectiveness of the VaR calculation methods must be monitored daily via backtesting which, as concerns regulatory backtesting, compares:

- the daily estimates of value at risk;
- the daily profits/losses based on backtesting which are determined using actual daily profits and losses achieved by individual desks, net of components which are not considered in backtesting such as commissions and intraday activities.

Backtesting allows verification of the model's capability of correctly seizing, from a statistical viewpoint, the variability in the daily valuation of trading positions, covering an observation period of one year (approximately 250 estimates). Any critical situations relative to the adequacy of the Internal Model are represented by situations in which daily profits/losses based on backtesting highlight more than three occasions, in the year of observation, in which the daily loss is higher than the value at risk estimate.

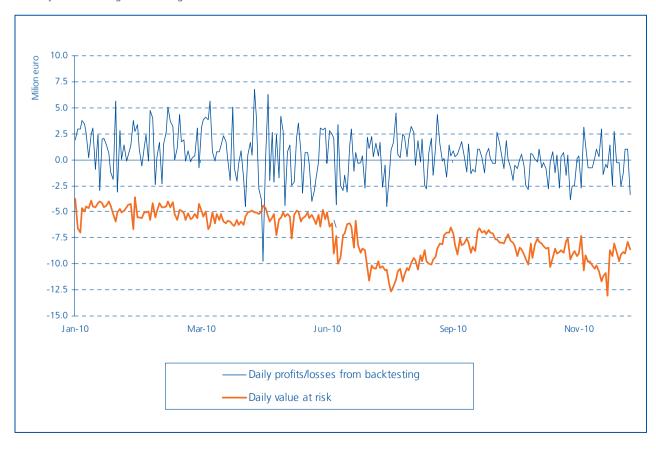
## **Backtesting in Intesa Sanpaolo**

Intesa Sanpaolo's regulatory backtesting, shown in the following graph, found six cases where the daily losses from backtesting were higher than the VaR estimate. These excesses are mainly due to the volatility of interest rates and the bases between the treasury and swap curves in the periods of tension on the financial markets, where there is greater portfolio concentration.



## **Backtesting in Banca IMI**

Banca IMI's regulatory backtesting, set out in the following graph, highlights a critical situation in May due to the volatility of the treasury curves during the sovereign crisis in the eurozone.



#### Issuer risk

Issuer risk in the trading portfolio is analysed in terms of mark to market, with exposures aggregated by rating class, and it is monitored through a system of operating limits based on both rating classes and concentration indexes.

## Breakdown of exposures by type of issuer for Intesa Sanpaolo and Banca IMI (a)

	Total	of which						
		Corporate	Financial	Emerging	Covered	Securitis.		
Intesa Sanpaolo	44%	0%	62%	2%	35%	1%		
Banca IMI	56%	-12%	43%	1%	10%	58%		
Total	100%	-5%	53%	2%	25%	25%		

<sup>(</sup>a) The table sets out in the Total column the contribution of Intesa Sanpaolo and Banca IMI to issuer risk exposures. The other columns indicate percentage breakdown of issuer risk exposures.

Period-end percentage on area total, excluding Government bonds, own bonds and including cds.

The breakdown of the portfolio subject to issuer risk shows the prevalence of securities of the financial segment for Intesa Sanpaolo and the securitisation segment for Banca IMI.

## **Operating limits**

The structure of limits reflects the risk level deemed to be acceptable with reference to single business areas, consistent with operating and strategic guidelines defined by top management. The attribution and control of limits at the various hierarchical levels implies the assignment of delegated powers to the heads of business areas, aimed at achieving the best trade-off between a controlled risk environment and the need for operating flexibility. The functioning of the system of limits and delegated powers is underpinned by the basic concepts of hierarchy and interaction described below.

The application of such principles led to the definition of a structure of limits in which the distinction between first level and second level limits is particularly important:

- first level limits: are approved by the Management Board, after the opinion of the Group Financial Risks Committee. Limit variations are proposed by the Risk Management Department, after the opinion of the Heads of Operating Departments. Limit absorption trends and the relative congruity analysis are periodically assessed by the Group Financial Risks Committee.
- second level limits: have the objective of controlling operations of the various desks on the basis of differentiated measures based on the specific characteristics of traded instruments and operating strategies, such as sensitivity, greeks and equivalent exposures.

In the third quarter 2010, the Management Board resolved a new VaR limit for the Group of 70 million euro, an increase compared to the previous 63 million euro. This increase was defined for the purpose of purchasing out of the money options in a highly volatile market environment in which diametrically opposite scenarios may also occur.

The use of VaR limits in Intesa Sanpaolo (held for trading component), in the component sub-allocated to the organisational units, averaged 66% in 2010, with a maximum use of 98%. In Banca IMI, VaR operating limits averaged 59%, with a maximum use of 91%.

At the end of 2009, the Group Financial Risks Committee also introduced limits for the Incremental Risk Charge, set at 220 million euro for Intesa Sanpaolo and 150 million euro for Banca IMI. The use of the IRC limits at year end amounted to 42% for Intesa Sanpaolo and 59% for Banca IMI.

The use of VaR operating limits on the AFS component at year end was 70%. The limit on that component amounts to 40 million euro and was introduced in 2009 to monitor the volatility of shareholders' equity.

# BANKING BOOK 1.2.2 INTEREST RATE RISK AND PRICE RISK

#### **QUALITATIVE INFORMATION**

#### A. General aspects, interest rate risk and price risk management processes and measurement methods

Market risk originated by the banking book arises primarily in the Parent Company and the main Group companies involved in retail and corporate banking. The banking book also includes exposure to market risks deriving from the equity investments in quoted companies not fully consolidated, mostly held by the Parent Company and by Equiter, IMI Investimenti and Private Equity International.

The following methods are used to measure financial risks of the Group's banking book:

- Value at Risk (VaR);
- Sensitivity Analysis.

Value at Risk is calculated as the maximum potential loss in the portfolio's market value that could be recorded over a 10-day holding period with a 99% confidence level (parametric VaR). Besides measuring the equity portfolio, VaR is also used to consolidate exposure to financial risks of the various Group companies which perform banking book activities, thereby taking into account diversification benefits. Value at Risk calculation models have certain limitations, as they are based on the statistical assumption of the normal distribution of the returns and on the observation of historical data that may not be repeated in the future. Consequently, VaR results cannot guarantee that the possible future losses will not exceed the statistically calculated estimates.

Shift sensitivity analysis quantifies the change in value of a financial portfolio resulting from adverse movements in the main risk factors (interest rate, foreign exchange, equity). For interest rate risk, an adverse movement is defined as a parallel and uniform shift of  $\pm 100$  basis points in the interest rate curve. The measurements include an estimate of the prepayment effect and of the risk originated by on demand customer loans and deposits, whose features of stability and of partial and delayed reaction to interest rate fluctuations have been studied by analysing a large collection of historical data, obtaining a maturity representation model through equivalent deposits. Equity risk sensitivity is measured as the impact of a price shock of  $\pm 10\%$ .

Furthermore the sensitivity of the interest margin is also measured by quantifying the impact on net interest income of a parallel and instantaneous shock in the interest rate curve of  $\pm 100$  basis points, over a period of 12 months. This measure highlights the effect of variations in interest rates on the portfolio being measured, excluding assumptions on future changes in the mix of assets and liabilities and, therefore, it cannot be considered a predictor of the future levels of the interest margin.

# B. Fair value hedgingC. Cash flow hedging

Hedging of interest rate risk is aimed at (i) protecting the banking book from variations in the fair value of loans and deposits due to movements in the interest rate curve or (ii) reducing the volatility of future cash flows related to a particular asset/liability. The main types of derivative contracts used are interest rate swaps (IRS), overnight index swaps (OIS), cross-currency swaps (CCS) and options on interest rates stipulated with third parties or with other Group companies. The latter, in turn, cover the risk in the market so that the hedging transactions meet the criteria to qualify as IAS-compliant for consolidated financial statements.

Hedging activities performed by the Intesa Sanpaolo Group are recorded using various hedge accounting methods. A first method refers to the fair value hedge of specifically identified assets and liabilities (micro-hedging), mainly consisting of bonds issued or acquired by Group companies and loans to customers. Moreover, macro-hedging is carried out on the stable portion of on demand deposits and in order to cover the risk of fair value changes intrinsic in the instalments under accrual generated by floating rate operations. The Group is exposed to this risk in the period from the date on which the rate is set and the date of payment of the relevant interests.

Another hedging method used is the cash flow hedge which has the purpose of stabilising interest flow on variable rate funding to the extent that the latter finances fixed-rate investments (macro cash flow hedge). In other cases, cash flow hedges are applied to specific assets or liabilities (micro cash flow hedge).

The Risk Management Department is in charge of measuring the effectiveness of interest rate risk hedges for the purpose of hedge accounting, in compliance with international accounting standards.

During the year no hedging activities were performed to cover the price risk of the banking book.

## D. Hedging of foreign investments

For equity shareholdings in Group companies held in foreign currencies, risk hedging policies are assessed by the Group Risk Governance Committee and the Group Financial Risks Committee, taking into consideration the advantages and the costs embedded in hedging transactions.

During the year foreign exchange hedges were implemented against the exchange risk on gains in foreign currency generated by the Parent Company's branches abroad.

### **QUANTITATIVE INFORMATION**

### Banking book: internal models and other sensitivity analysis methodologies

Interest margin sensitivity – assuming a 100 basis point rise in interest rates – amounted to +163 million euro (-166 million euro in the event of reduction) at the end of 2010; these values increased compared to the 2009 year-end figures (+119 million euro and -120 million euro, respectively, in the event of an increase/decrease in interest rates).

In the case of invariance of the other income components, the aforesaid potential impact would be reflected also in the Group's year-end net income and taking into account the abovementioned assumptions concerning the measurement procedures.

In 2010, interest rate risk generated by the Intesa Sanpaolo Group's banking book, measured through shift sensitivity analysis, averaged 516 million euro with a year-end figure of 426 million euro, almost entirely concentrated on the euro currency; these figures compare with 560 million euro at the end of 2009. Interest rate risk, measured in terms of VaR, averaged 98 million euro

in 2010, confirmed by the final year end figure (131 million euro at the end of 2009), with a minimum value of 82 million euro and a maximum value of 116 million euro.

Price risk generated by minority stakes in quoted companies, mostly held in the AFS (Available for Sale) category and measured in terms of VaR, recorded an average level during 2010 of 94 million euro (126 million euro at the end of 2009), with minimum and maximum values of 83 million euro and 115 million euro respectively. The VaR at the end of 2010 amounted to 86 million euro. Lastly, the table below shows a sensitivity analysis of the banking book to price risk, measuring the impact on Shareholders' Equity of a price shock of ±10% for the abovementioned guoted assets recorded in the AFS category.

#### Price risk: impact on Shareholders' Equity

	Impa shareholders' e (millions of	equity f euro)
Price shock Price shock	-10% 10%	-73 73

#### 1.2.3. FOREIGN EXCHANGE RISK

#### **QUALITATIVE INFORMATION**

## A. General aspects, foreign exchange risk management processes and measurement methods

"Foreign exchange risk" is defined as the possibility that foreign exchange rate fluctuations produce significant changes, both positive and negative, in the Group's balance sheet aggregates. The key sources of exchange rate risk lie in:

- foreign currency loans and deposits held by corporate and retail customers;
- purchases of securities, equity investments and other financial instruments in foreign currencies;
- conversion into domestic currency of assets, liabilities and income of branches and subsidiaries abroad;
- trading of foreign currencies and banknotes;
- collection and/or payment of interest, commissions, dividends and administrative costs in foreign currencies.

More specifically, "structural" foreign exchange risk refers to the exposures deriving from the commercial operations and the strategic investment decisions of the Intesa Sanpaolo Group.

Foreign exchange transactions, spot and forward, are carried out mostly by Banca IMI, which also operates in the name and on behalf of the Parent Company with the task of guaranteeing pricing throughout the Bank and the Group while optimizing the proprietary risk profile deriving from brokerage of foreign currencies traded by customers.

The main types of financial instruments traded include: spot and forward exchange transactions in foreign currencies, forex swaps, domestic currency swaps, and foreign exchange options.

## B. Foreign exchange risk hedging activities

Foreign exchange risk deriving from operating positions in foreign currency in the banking book is systematically transferred from the business units to the Parent Company's Treasury Department, for the purpose of guaranteeing the elimination of such risk. Similar risk containment is performed by the various Group companies for their banking book. Essentially, foreign exchange risk is mitigated by the practice of raising funds in the same currency as assets.

Held for trading exposures are included in the trading book where foreign exchange risk is measured and subjected to daily VaR limits.

## **QUANTITATIVE INFORMATION**

## 1. Breakdown by currency of assets and liabilities and of derivatives

(millions of euro)

		Currencies					
	US dollar	GB pound	Swiss franc	Yen	Egyptian pound	Other currencies	
A. FINANCIAL ASSETS	28,315	•	5,301	2,660	3,561	11,931	
A.1 Debt securities	4,937	<b>2,343</b> 800	345	1,072	<b>3,361</b> 751	2,591	
A.2 Equities	682	156	21	4	89	158	
A.3 Loans to banks	8,691	135	259	660	1,009	1,927	
A.4 Loans to customers	14,005	1,252	4,676	924	1,712	7,255	
A.5 Other financial assets	-	-	-	-	-	-	
B. OTHER ASSETS	2,696	1,056	62	130	-	255	
C. FINANCIAL LIABILITIES	41,013	6,833	978	1,576	3,061	9,790	
C.1 Due to banks	12,128	815	446	367	15	1,880	
C.2 Due to customers	10,213	1,384	313	515	2,381	7,004	
C.3 Debt securities	18,671	4,634	219	694	665	887	
C.4 Other financial liabilities	1	-	-	-	-	19	
D. OTHER LIABILITIES	1,000	394	27	58	-	270	
E. FINANCIAL DERIVATIVES							
- Options							
long positions	1,160	124	145	186	-	79	
short positions	1,896	79	95	189	-	53	
- Other derivatives							
long positions	48,714	8,354	1,154	2,433	-	8,225	
short positions	36,147	4,398	5,474	3,578	-	7,809	
TOTAL ASSETS	80,885	11,877	6,662	5,409	3,561	20,490	
TOTAL LIABILITIES	80,056	11,704	6,574	5,401	3,061	17,922	
IMBALANCE (+/-)	829	173	88	8	500	2,568	

## 2. Internal models and other sensitivity analysis methodologies

Management of foreign exchange risk relative to trading activities is included in the operating procedures and in the estimation methodologies of the internal model based on VaR calculations, as already illustrated.

Foreign exchange risk expressed by equity investments in foreign currency (banking book), including Group companies, originated a VaR (99% confidence level, 10-day holding period) amounting to 122 million euro as at 31 December 2010. This potential impact would only be reflected in the Shareholders' Equity, as specified above.

## 1.2.4. DERIVATIVES

## **A. FINANCIAL DERIVATIVES**

## A.1. Regulatory trading book: period-end and average notional amounts

	31.12.	31.12.2010		2009
	Over the	Central	Over the	Central
	counter	counterparties	counter	counterparties
1. Debt securities and interest rates	2,609,337	210,215	2,546,798	354,565
a) Options	373,205	126,555	440,872	204,509
b) Swaps	2,235,310	-	2,105,572	-
c) Forwards	764	-	328	144
d) Futures	58	83,660	-	149,912
e) Others	-	-	26	-
2. Equities and stock indices	36,937	17,658	52,243	12,640
a) Options	36,543	16,012	51,776	11,966
b) Swaps	156	-	359	-
c) Forwards	238	-	108	-
d) Futures	-	1,646	-	674
e) Others	-	-	-	-
3. Foreign exchange rates and gold	101,916	7	79,229	13
a) Options	11,793	-	6,580	=
b) Swaps	25,052	-	24,735	-
c) Forwards	64,597	-	47,646	-
d) Futures	-	7	-	13
e) Others	474	-	268	-
4. Commodities	2,615	1,513	1,163	821
5. Other underlying assets	-	-	-	-
TOTAL	2,750,805	229,393	2,679,433	368,039
AVERAGE VALUES	2,719,832	300,071	2,692,371	439,380

# A.2. Banking book: period-end and average notional amounts

# A.2.1. Hedging

	31.12.	2010	31.12.	2009
	Over the	Central	Over the	Central counterparties
		counterparties		Counterparties
1. Debt securities and interest rates	264,509	-	243,294	-
a) Options	8,946	-	4,017	-
b) Swaps	255,563	-	239,277	-
c) Forwards	-	-	-	=
d) Futures	-	-	-	=
e) Others	-	-	-	-
2. Equities and stock indices	-	-	-	-
a) Options	-	-	-	-
b) Swaps	-	-	-	-
c) Forwards	-	-	-	-
d) Futures	-	-	-	-
e) Others	-	-	-	-
3. Foreign exchange rates and gold	5,718	-	4,314	-
a) Options	-	-	-	-
b) Swaps	5,718	-	4,277	-
c) Forwards	-	-	37	-
d) Futures	-	-	-	-
e) Others	-	-	-	-
4. Commodities	-	-	-	-
5. Other underlying assets	-	-	-	-
TOTAL	270,227	-	247,608	-
AVERAGE VALUES	263,820	-	170,652	75

## A.2.2. Other derivatives

(millions of euro)

	31.12.	2010	31.12.	<b>2009</b>
	Over the counter	Central counterparties	Over the counter	Central counterparties
1. Debt securities and interest rates	13,860	-	4,284	-
a) Options	8,763	-	2,296	-
b) Swaps	5,097	-	1,988	-
c) Forwards	-	-	-	-
d) Futures	-	-	-	=
e) Others	-	-	-	=
2. Equities and stock indices	6,920	-	4,196	-
a) Options	6,920	-	4,196	-
b) Swaps	-	-	-	-
c) Forwards	-	-	-	=
d) Futures	-	-	-	-
e) Others	-	-	-	-
3. Foreign exchange rates and gold	4,688	-	3,127	-
a) Options	31	-	-	-
b) Swaps	714	-	280	-
c) Forwards	3,943	-	2,847	-
d) Futures	-	-	-	-
e) Others	-	-	-	-
4. Commodities	-	-	-	-
5. Other underlying assets	-	-	-	-
TOTAL	25,468	-	11,607	-
AVERAGE VALUES	16,620	-	15,620	-

The table above shows the financial derivatives recognised in the financial statements in the trading book, but not forming part of the regulatory trading book. In particular, the table shows the derivatives recorded separately from the combined financial instruments and the derivatives used to hedge debt securities measured at fair value through profit and loss and the put and call options relating to commitments on equity investments.

# A.3. Financial derivatives gross positive fair value – breakdown by product

		Positive fair value						
	31.12.		31.12.	2009				
	Over the	Central	Over the	Central				
	counter	counterparties	counter	counterparties				
A. Regulatory trading book	35,244	782	34,351	581				
a) Options	5,367	676	5,295	581				
b) Interest rate swaps	27,373	-	26,345	-				
c) Cross currency swaps	1,508	-	1,874	-				
d) Equity swaps	4	-	39	-				
e) Forwards	810	-	687	-				
f) Futures	-	37	_	-				
g) Others	182	69	111	-				
B. Banking book - hedging	7,377	_	6,991	_				
a) Options	505	-	239	=				
b) Interest rate swaps	6,503	_	6,586	_				
c) Cross currency swaps	369	_	165	-				
d) Equity swaps	_	_	_	_				
e) Forwards	_	_	1	_				
f) Futures	-	-	_	_				
g) Others	-	-	-	-				
C. Banking book - other derivatives	699	_	551	_				
a) Options	319	-	209	-				
b) Interest rate swaps	370	_	316	-				
c) Cross currency swaps	6	-	3	-				
d) Equity swaps	-	-	_	_				
e) Forwards	4	-	23	-				
f) Futures	-	-	-	-				
g) Others	-	-	-	-				
TOTAL	43,320	782	41,893	581				

# A.4. Financial derivatives gross negative fair value – breakdown by product

		Negative fair value						
	31.12.	2010	31.12.	2009				
	Over the counter	Central counterparties	Over the counter	Central counterparties				
A. Regulatory trading book	38,083	674	36,272	481				
a) Options	6,525	579	6,126	481				
b) Interest rate swaps	28,749	-	27,124	-				
c) Cross currency swaps	1,880	-	2,297	-				
d) Equity swaps	7	-	38	-				
e) Forwards	745	-	567	-				
f) Futures	-	57	-	-				
g) Others	177	38	120	-				
B. Banking book - hedging	5,753	-	5,054	-				
a) Options	176	-	199	-				
b) Interest rate swaps	5,037	=	4,340	-				
c) Cross currency swaps	540	-	515	-				
d) Equity swaps	-	-	-	-				
e) Forwards	-	-	-	-				
f) Futures	-	=	-	-				
g) Others	-	-	-	-				
C. Banking book - other derivatives	1,223	-	518	-				
a) Options	879	-	459	-				
b) Interest rate swaps	219	-	33	-				
c) Cross currency swaps	5	-	1	=				
d) Equity swaps	-	=	-	-				
e) Forwards	120	=	25	-				
f) Futures	-	=	-	-				
g) Others	-	-	-	-				
TOTAL	45,059	674	41,844	481				

# A.5. Over the counter financial derivatives: regulatory trading book – notional amounts, gross positive and negative fair values by counterparty – contracts not included under netting arrangements

(millions of euro) Governments **Public** Financial Insurance Nonand Central entities institutions financial counterparties companies Banks companies 1. Debt securities and interest rates - notional amount 200 3,892 46,365 12,158 4,412 39,553 415 - positive fair value 6 375 747 292 28 1,437 4 -1,180 - negative fair value -113 -512 -157 -24 -62 - future exposure 33 127 86 19 177 1 2. Equities and stock indices - notional amount 52 2,759 323 6,138 142 7 - positive fair value 20 9 2 -47 - negative fair value -1,597 -1 -4 - future exposure 5 25 10 8 3. Foreign exchange rates and gold - notional amount 154 8,309 9,031 251 7,245 63 - positive fair value 71 136 11 238 3 -61 -417 -95 -108 - negative fair value -2 - future exposure 12 61 121 2 94 1 4. Other values - notional amount 8 1,398 3 23 - positive fair value - negative fair value -2 -64 1 150 - future exposure

# A.6. Over the counter financial derivatives: regulatory trading book – notional amounts, gross positive and negative fair values by counterparty – contracts included under netting arrangements

				3			(millions of euro)
	Governments and Central Banks	Public entities	Banks	Financial institutions	Insurance companies	Non- financial companies	Other counterparties
1. Debt securities and interest rates							
- notional amount	2,150	_	1,740,513	758,117	109	1,453	-
- positive fair value	465	-	26,075	2,329	-	40	-
- negative fair value	-8	-	-27,978	-2,451	-14	-20	-
2. Equities and stock indices							
- notional amount	-	-	18,648	8,822	53	-	-
- positive fair value	-	-	554	196	-	-	-
- negative fair value	-	-	-688	-207	-3	-	-
3. Foreign exchange rates and gold							
- notional amount	748	1	67,277	6,713	404	1,720	-
- positive fair value	381	-	1,045	236	134	230	-
- negative fair value	-	-	-1,718	-419	-	-41	-
4. Other values							
- notional amount	-	-	742	105	-	358	-
- positive fair value	-	-	130	14	-	7	-
- negative fair value	-	-	-54	-11	-	-25	-

# A.7. Over the counter financial derivatives: banking book – notional amounts, gross positive and negative fair values by counterparty – contracts not included under netting arrangements

(millions of euro) Governments **Public** Financial Insurance Nonand Central financial counterparties entities institutions companies Banks companies 1. Debt securities and interest rates - notional amount 79,610 400 10 9,545 - positive fair value 938 2 -485 - negative fair value -2,294 -135 -1 - future exposure 22 1 5 2. Equities and stock indices - notional amount 2,783 81 88 2,304 - positive fair value 3 8 -389 - negative fair value -188 3 5 - future exposure 5 3. Foreign exchange rates and gold - notional amount 1,934 116 13 - positive fair value 46 - negative fair value -149 -14 29 9 - future exposure 4. Other values - notional amount - positive fair value - negative fair value - future exposure

# A.8. Over the counter financial derivatives: banking book – notional amounts, gross positive and negative fair values by counterparty – contracts included under netting arrangements

							(millions of euro)
	Governments	Public	Banks	Financial	Insurance	Non-	Other
	and Central	entities		institutions	companies	financial	counterparties
	Banks					companies	
1. Debt securities and interest rates							
- notional amount	-	_	181,972	6,832	_	_	_
- positive fair value	-	_	6,331	215	_	_	_
- negative fair value	-	-	-2,496	-309	-	-	-
2. Equities and stock indices							
- notional amount	-	-	1,139	525	-	-	-
- positive fair value	-	-	119	69	-	-	-
- negative fair value	-	-	-1	-	-	-	-
3. Foreign exchange rates and gold							
- notional amount	-	-	8,325	18	-	-	-
- positive fair value	-	-	337	5	-	-	-
- negative fair value	-	-	-515	-	-	-	-
4. Other values							
- notional amount	-	-	-	-	-	-	-
- positive fair value	-	-	-	-	-	-	-
- negative fair value	-	-	-	-	-	-	-

# A.9. Residual maturity of over the counter financial derivatives: notional amounts

	Up to 1 year	Between 1 and 5 years	Over 5 years	Total
A. Regulatory trading book	1,238,382	980,788	531,635	2,750,805
A.1 Financial derivatives on debt securities and interest rates	1,146,190	945,150	517,997	2,609,337
A.2 Financial derivatives on equities and stock indices	6,725	26,407	3,805	36,937
A.3 Financial derivatives on foreign exchange rates and gold	84,070	8,013	9,833	101,916
A.4 Financial derivatives - other	1,397	1,218	-	2,615
B. Banking book	134,439	100,693	60,563	295,695
B.1 Financial derivatives on debt securities and interest rates	126,599	93,184	58,586	278,369
B.2 Financial derivatives on equities and stock indices	1,597	4,700	623	6,920
B.3 Financial derivatives on foreign exchange rates and gold	6,243	2,809	1,354	10,406
B.4 Financial derivatives - other	-	-	-	-
Total 31.12.2010	1,372,821	1,081,481	592,198	3,046,500
Total 31.12.2009	1,269,211	1,049,825	619,612	2,938,648

### **B. CREDIT DERIVATIVES**

## B.1. Credit derivatives: period-end and average notional amounts

(millions of euro)

	Regulatory tr	ading book	Banking b	Banking book		
	single counterparty	more counterparties (basket)	single counterparty	more counterparties (basket)		
<ul><li>1. Protection purchases</li><li>- Credit default products</li><li>- Credit spread products</li><li>- Total rate of return swap</li><li>- Others</li></ul>	28,380 - 1,079 -	28,894 - - -	-	- - -		
Total 31.12.2010	29,459	28,894	-	-		
Average values	29,453	41,861	-	-		
Total 31.12.2009	29,356	54,809	-	-		
<ul><li>2. Protection sales</li><li>- Credit default products</li><li>- Credit spread products</li><li>- Total rate of return swap</li><li>- Others</li></ul>	25,932 - 354 -	29,677 - - -	- - -			
Total 31.12.2010	26,286	29,677	-			
Average values	28,046	42,727	-	-		
Total 31.12.2009	26,216	55,779	-			

Part of the contracts in force as at 31 December 2010, shown in the table above, has been included within the structured credit products, namely: 1,070 million euro of protection purchases and 1,840 million euro of protection sales, in any case almost entirely attributable to exposures not included in US subprime exposures.

For further information on the relative economic and risk effects, see the chapter on market risks in this Part of the Notes to the consolidated financial statements.

## B.2. Over the counter credit derivatives: gross positive fair value – breakdown by product

millions of euro

		(millions of euro)
	Positive f	air value
	31.12.2010	31.12.2009
A. Regulatory trading book a) Credit default products	<b>2,233</b> 1,824	<b>2,386</b> 2,084
b) Credit spread products c) Total rate of return swap d) Others	409	302
B. Banking book a) Credit default products b) Credit spread products c) Total rate of return swap d) Others	- - - -	- - - -
TOTAL	2,233	2,386

Part of the positive fair values, recognised as at 31 December 2010, and shown in the table above, has been included within the structured credit products, namely: 337 million euro, almost entirely attributable to positions taken to hedge the exposure in structured credit products.

For more details, see the market risks chapter in this part of the Notes to the consolidated financial statements.

# B.3. Over the counter credit derivatives: gross negative fair value – breakdown by product

(millions of euro)

	Negative fa	ir value
	31.12.2010	31.12.2009
A. Regulatory trading book	2,382	2,722
a) Credit default products	2,146	2,426
b) Credit spread products	-	-
c) Total rate of return swap	236	296
d) Others	-	-
B. Banking book	-	-
a) Credit default products	-	-
b) Credit spread products	-	-
c) Total rate of return swap	-	-
d) Others	-	-
TOTAL	2,382	2,722

Part of the negative fair values, recognised as at 31 December 2010, and shown in the table above, has been included within the structured credit products, namely: 663 million euro almost entirely attributable to exposures not included under the US subprime category.

For more details, see the market risks chapter in this part of the Notes to the consolidated financial statements.

# B.4. Over the counter credit derivatives: gross (positive and negative) fair values by counterparty – contracts not included under netting arrangements

							(millions of euro)
	Governments and Central Banks	Public entities	Banks	Financial institutions	Insurance companies	Non- financial companies	Other counterparties
REGULATORY TRADING BOOK							
1. Protection purchases			2 2 42	2.242			
- notional amount	-	57	2,343	2,219	-	-	-
- positive fair value	-	62	62	55	-	-	-
- negative fair value	-	-	-8	-10	-	-	-
- future exposure	-	6	182	150	-	-	-
2. Protection sales							
- notional amount	-	-	2,434	2,965	-	-	-
- positive fair value	-	-	9	240	-	-	-
- negative fair value	-	-	-88	-475	-	-	-
- future exposure	-	-	1,429	3,008	-	-	-
BANKING BOOK							
1. Protection purchases							
- notional amount	-	-	-	-	-	-	-
- positive fair value	-	-	-	-	-	-	-
- negative fair value	-	-	-	-	=	-	-
2. Protection sales							
- notional amount	-	-	-	-	-	-	-
- positive fair value	-	-	-	-	-	-	-
- negative fair value	-	-	-	-	-	-	-

# B.5. Over the counter credit derivatives: gross (positive and negative) fair values by counterparty – contracts included under netting arrangements

							(millions of euro)
	Governments and Central Banks	Public entities	Banks	Financial institutions	Insurance companies	Non- financial companies	Other counterparties
REGULATORY TRADING BOOK							
1. Protection purchases							
- notional amount	-	-	41,010	12,724	-	-	
- positive fair value	-	-	978	385	-	-	
- negative fair value	-	-	-273	-84	-	-	
2. Protection sales							
- notional amount	-	-	38,487	12,077	-	-	
- positive fair value	-	-	238	204	-	-	
- negative fair value	-	-	-962	-482	-	-	
BANKING BOOK							
1. Protection purchases							
- notional amount	_	_	_	_	_	_	
- positive fair value	-	-	_	_	_	-	
- negative fair value	-	-	-	-	-	-	
2. Protection sales							
- notional amount	-	-	_	-	_	-	
- positive fair value	-	-	_	-	_	-	
- negative fair value	-	-	_	_	_	-	

# B.6. Residual maturity of credit derivatives: notional amounts

	Up to 1 year	Between 1 and 5	Over 5 years	Total
A. Regulatory trading book  A.1 Credit derivatives with "qualified reference obligation"	<b>13,048</b> 8,073	<b>92,210</b> 72,470	<b>9,058</b> 7,790	<b>114,316</b> 88,333
<ul> <li>A.2 Credit derivatives with "unqualified reference obligation"</li> <li>B. Banking book</li> <li>B.1 Credit derivatives with "qualified reference obligation"</li> <li>B.2 Credit derivatives with "unqualified reference obligation"</li> </ul>	4,975 - - -	19,740 - - -	1,268 - - -	25,983 - -
Total 31.12.2010  Total 31.12.2009	13,048	92,210	9,058	114,316 166,160

## C. CREDIT AND FINANCIAL DERIVATIVES

# C.1. Over the counter credit and financial derivatives: net fair values and future exposure by counterparty

	Governments and Central Banks	Public entities	Banks	Financial institutions	Insurance companies	Non- financial companies	Other counterparties
1. Financial derivatives -							
bilateral agreements							
- positive fair value	840	-	1,609	214	134	235	-
- negative fair value	-	-	-1,979	-483	-17	-42	-
- future exposure	37	-	1,191	1,894	30	94	-
- net counterparty risk	877	-	1,211	272	164	329	-
2. Credit derivatives -							
bilateral agreements							
- positive fair value	-	-	-	1	-	-	-
- negative fair value	-	-	-1	-	-	-	-
- future exposure	-	-	-	1	-	-	-
- net counterparty risk	-	-	-	1	-	-	-
3. "Cross product" agreements							
- positive fair value	-	-	1,312	323	-	-	-
- negative fair value	-	-	-1,087	-377	-	-	-
- future exposure	-	-	4,536	733	-	-	-
- net counterparty risk	-	-	4,252	777	-	-	-