

**CREDIT RISK TRANSFER  
BETWEEN THE BANKING AND INSURANCE INDUSTRIES  
THE ITALIAN EXPERIENCE**

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(COMPILED BY A JOINT BANK OF ITALY– ISVAP WORKING PARTY)

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## TABLE OF CONTENTS

1. Introduction and main findings _____	3
Summary of reciprocal assets and liabilities between banks and insurance companies _____	5
. The transfer of credit risks: traditional and innovative instruments _____	6
3. CRT analysis by international bodies _____	7
4. The analysis of the Italian CRT market _____	8
<b>4.1 Main results _____</b>	<b>8</b>
4.1.1 Data collection problems _____	9
<b>4.2 The transfer of the credit risk _____</b>	<b>10</b>
4.2.1 Securitisation operations (items a1 and a2 of the summary table) _____	10
4.2.2 Credit Derivatives (items a3 and a4 of the summary table) _____	10
4.2.3 Assignment of debt and credit and suretyship insurance guarantees (items a5 and a6 b13 of the summary table) _____	11
<b>4.3 Other forms of underwriting assets and liabilities between banks and insurance companies _____</b>	<b>11</b>
4.3.1 Shares and participations (items b1, b2, b3, b4 of the summary table) _____	11
4.3.2 Subordinated debts (items b5 and b6 of the summary table) _____	13
4.3 Unsubordinated bonds and securities (items b7 and b8 of the summary table) _____	14
4.3.4 Deposits and Lending (items b9, b10, b11, b12 of the summary table) _____	14
4.3.5 Conclusions on the reciprocal assets and liabilities between banks and insurance companies _____	14
Attachment 1: Bank and insurance risks: prudential requirements and risk management profiles _____	16
Attachment 2: A description of the main CRT instruments _____	24
Attachment 3: Summary tables of the survey _____	27
LITERATURE REFERENCED _____	33

## **1. Introduction and main findings**

The development of securitisation techniques and derivative contracts markets, along with increasing interlinkages between markets and financial intermediaries, has provided new and more efficient opportunities for allocating, diversifying and mitigating risks between the various components of financial systems.

In this context the transfer of credit risks from bank portfolios to institutional investors (that is, pension and investment funds, insurance companies and hedge funds) has become very important. The latter are attracted by the returns that such investments can earn in a period in which interest rates are spiralling down but they are also interested in diversifying their portfolios by accepting risks not correlated to those of their respective core businesses.

The supervisory authorities of the G10 countries and the international committees with the remit of financial supervision and stability are paying ever greater attention to the credit risk transfer (CRT), especially as between the banking and insurance sectors. It is first and foremost important to assess the adequacy of risk management techniques and the levels of accounting disclosure adopted by the operators, as well as the profiles of systemic risk. The attention of supervisory bodies is mainly addressed to the complexity of contractual structures, the sectoral and geographic reallocation of risks, and the possibility of regulatory arbitrage able to determine the transfer of risks to areas or environments where less rigorous controls and disciplines operate.

In order to survey the domestic market in 2003, Isvap and the Bank of Italy set up a joint working group charged to examine credit risk transfer and the reciprocal underwriting of instruments for raising capital between banks and insurance companies. The present document reports the results of the work performed.

In order to study the phenomenon it was decided to limit the area of investigation to operations implementing the risk transfer. In conformity with similar international studies not only traditional CRT instruments were studied, such as assignment of credit and credit insurance policies issued by insurance companies to banks, but also the more innovative instruments such as credit derivatives and securitisation.

The survey used the data referring to 2002 and the first six months of 2003 kept in the statistical and data archives of the Bank of Italy and Isvap. CRT operations undertaken by foreign subsidiaries of Italian insurance companies and banks were excluded from the survey on account of the non-comparability of the data in question. The survey, which also includes an examination of the risks typical of the two sectors and their respective supervisory rules (see attachment 1), allowed us – for the first time in Italy – to perform a detailed investigation of the phenomenon and assess its dimensions.

The activities of the working group laid down the premises for further cooperative initiatives between the Bank of Italy and Isvap not only in the specific field of CRT – for which the experience obtained in the use of the databases available provided useful indications for periodic updates and supplementary studies – but also additional themes that, albeit with their different implications, are of common interest to both sectors.

The data collected and the analyses conducted confirmed that the credit risks transferred from Italian banks to insurance companies through innovative tools are not very substantial. In fact, the counterparts of national banks operating in the CRT market are for the most part foreign intermediaries or other national credit institutions.

Italian insurance companies hold ABS deriving from the securitisation of bank credits for about 780 million euro. The prudence adopted by insurance companies is confirmed by the

circumstance that a significant part of such securities is made up of senior tranches, i.e. low-risk securities. Furthermore, the risks inherent in the credit and suretyship insurance policies issued by Italian companies in dealings with banking institutes are also limited.

Very limited use is made of credit derivatives by insurance companies. The present sector regulations require them to use these instruments only for the purpose of reducing investment risks or for more effective portfolio management.

In conclusion, the survey set out to monitor the volume of financial flows as between the Italian banking and insurance sectors in terms of direct equity investments, subordinated debt and other forms of security investments.

At the end of 2003 banks held participating interests in 68 Italian insurance companies. Some of the most important intermediaries for collection of life assurance premiums, and also with important operations in the sale of non-traditional products such as index- and unit-linked policies, figure among the companies in which banks have a controlling interest. But at the same date, Italian and foreign insurance groups had participations in 34 banks, among which the six leading domestic banks. There are only 9 cases of Italian controlling interests and all refer to minor banks.

On the other hand, as concerns reciprocal shareholdings between the Italian bank and insurance sectors, 8 financial conglomerates were found and in 3 cases the level of cross-sectoral participations was over the 10% threshold, as defined by directive 2002/87<sup>1</sup>.

The analysis also brought to light that insurance companies issue proportionally far fewer subordinated debt than banks. Of the approximately 0.8 billion euro issued as at 30 June 2003, over one third was held by Italian banks. At the same date the insurance companies had, instead, subscribed to only about 3% of the subordinated debt issued by the Italian banks, which amounts to 46 billion euro.

Bank bonds held in the portfolios of insurance companies as at 30 June 2003 amounted to 22 billion euro, representing almost one third of the total corporate bonds in insurance company portfolios and 6.6% of all bonds issued by the banks. In conclusion, as regards the flow of funds from banks to insurance companies, the growth in subscriptions to capital redemption operations is worth mentioning. During 2003 the value of these policies rose from 4 to 5 billion euro, mainly as a result of the interesting characteristics of the risk-return ratio.

The following table summarises the stock and the exchange flows between the two sectors documented by the survey.

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<sup>1</sup> The data refer to 2002. An update on the conglomerates is in progress based on 2003 data.

**Summary of reciprocal assets and liabilities between banks and insurance companies (million of euros)**

Operations	31 December 2002			30 June 2003		
	Insurance risks in the banks (a)	Bank risks held by insurance companies (b)	Difference (b) – (a)	Insurance risks in the banks (a)	Bank risks held by insurance companies (b)	Difference (b) – (a)
Credit Insurance	0	6,907	6,907	0	6,715	6,715
Asset backed notes	0	777	777	0	746	746
Credit Derivatives	0	85	85	0	85	85
<b>Total CRT</b>	<b>0</b>	<b>7,769</b>	<b>7,769</b>	<b>0</b>	<b>7,546</b>	<b>7,546</b>
Sureties and Credit and suretyship insurance policies	477	209	- 268	1,800	263	- 1,537
Subordinated Debts	738	1,880	1,142	743	1,330	587
Sector bonds	56	22,422	22,366	101	22,135	22,034
Sector shares	459	2,038	1,579	825	NOT AVAILABLE	NOT AVAILABLE
Repurchase agreements	0	2,533	2,533	0	1,707	1,707
Various investments <sup>(1)</sup>	3,895	7,794	3,899	5,053	7,476	2,423
Holdings <sup>(2)</sup>	4,022	4,991	969	6,856	NOT AVAILABLE	NOT AVAILABLE
<b>Total reciprocal assets/liabilities</b>	<b>9,647</b>	<b>41,867</b>	<b>32,220</b>	<b>15,378</b>	<b>32,911</b>	
<b>Total financial relations</b>	<b>9,647</b>	<b>49,636</b>	<b>39,989</b>	<b>15,378</b>	<b>40,457</b>	

(1) mainly represented by capitalisation policies for banks and bank deposits for insurance companies

(2) holdings refer to shares or stock holdings in the capital of another company taken out to procure lasting relations

## **. The transfer of credit risks: traditional and innovative instruments**

The desire of intermediaries to diversify their risks and optimise the risk-yield ratio of the economic capital, and the objective of increasing ways of raising capital form the basis for the development of techniques of credit risk transfer. The intensification in transactions between undertakings operating in the various sectors of financial intermediation – especially banking and insurance intermediation – has drawn supervisory authorities' attention to the impact on the stability of the financial system and to the possibility of regulatory arbitrage stemming from the differences in regulatory regimes.

CRT objectives can be pursued with either traditional instruments such as corporate bonds, sureties and insurance products, or innovative instruments such as securitisation and credit derivatives.

Given the vast literature on the operation of such products, the following paragraph shall simply describe the elements that distinguish traditional from innovative instruments<sup>2</sup>.

Both instruments are designed to transfer the insolvency risk, the risk of variations in credit standing (reflected, for example, in rating variations) and the country risk. They differ in terms of the ways with which such transfers are carried out.

Unlike bonds, credit derivatives enable credit risk to be separated from the legal ownership of the relative assets. They allow the credit risk of a reference entity to be assumed without at the same time assuming the funding and interest-rate risk, that is those risks inherently linked to the bond instruments issued by the reference entity.

The difference between credit derivatives and traditional forms of personal guarantee with clauses of discussion of the principal debtor (sureties) refers, instead, to the fact that when a credit event occurs the protection buyer can immediately and directly demand indemnity from the protection seller, without having first to proceed to the discussion of the defaulting debtor. Moreover the protection buyer does not have to show his/her loss in order to obtain the payment from the protection seller.

Furthermore, it must be pointed out that while sureties and insurance policies against credit risk are typically not only non-tradable instruments but also unsuitable for speculative purposes, credit derivatives are designed to meet the requirements of negotiability as also to exploit arbitrage opportunities in the markets.

The use of credit derivatives also meets the needs of diversification, coverage, liquidity savings<sup>3</sup> and the pursuit of given risk-yield objectives. As concerns banks, for the most part there is also the advantage of maintaining relationships with customers given that such instruments do not call for the physical assignment of the underlying credits; unlike the traditional products produced for the same objectives, they are more flexible and sufficiently standardized as to make them easy to trade.

Securitisation represents the most widespread innovative CRT instrument in Italy, principally following law 130 of 1999 that regulated them in keeping with the Italian legal system<sup>4</sup>.

Securitisations can be broken down into “traditional” (operations that entail an outright assignment of assets) and “synthetic” (operations that use credit derivatives to transfer the credit risk attaching to assets that remain on the balance sheet of the protection buyer).

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<sup>2</sup> Please refer to attachment 2 for a brief description of the main innovative CRT instruments.

<sup>3</sup> In case of unfunded products, i.e. products that do not require an initial capital disbursement.

<sup>4</sup> Law 130 of 1999 governs traditional securitisations.

Traditional operations are preferred by the originator when funding needs are foremost. Synthetic securitisation is mainly used when the objectives such as diversification and optimal asset management are pursued.

Compared to ordinary assignment of credit, both traditional and synthetic securitisations are more efficient techniques for trading traditionally non-tradable assets such as receivables. Thanks to this feature, securitisations allow for an active management of credit risk based on a portfolio approach. However, such innovative instruments expose both protection buyers and sellers to other types of risks<sup>5</sup> whose management requires appropriate organisational and IT structures and specialist skills.

Attachment 1 describes the main aspects of the prudential and accounting treatment of securitisation and credit derivatives for banks and insurance companies.

### 3. CRT analysis by international bodies

There have been numerous studies on the risks and benefits of financial instruments for CRT in the last two years. The analyses were the work of both individual supervisory authorities of some countries of the Group of Ten and international committees with the remit of financial supervision and stability.

One of the first reports (*Cross-sector risk transfers*) was published in May 2002 by the British financial supervisory authority. The report, which was based on interviews with leading market operators, analysed the transfer of risk from banks and investment companies to insurance companies. The authorities were concerned about the lack of transparency and the excessively concentrated nature of the market of risk transfer instruments.

In January 2003 a working party of the Committee on Global Financial Stability (CGFS)<sup>6</sup> published a more detailed study on the CRT question in the G10 countries (*Credit Risk Transfer*, Basel). The report set forth the principal reasons for this market's enormous growth<sup>7</sup>, and in stressing the lack of reliable aggregate global data, particular emphasis was given to insufficient credit risk management systems among ultimate protection sellers<sup>8</sup>.

The International Association of Insurance Supervisors (IAIS)<sup>9</sup> in March 2003 published a report that mainly dwelt on the insurance sector operators' market experience of CRT instruments (*Paper on credit risk transfer between insurance, banking and other financial sectors*, Basel). The report drew attention to the need for a more detailed analysis of the adequacy and effectiveness of the risk management systems by companies operating on the CRT market as

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<sup>5</sup> The counterpart risk in unfunded operations: the legal risk which stems from the fact that the contracts with which such contracts are structured are not always standardised; there is also the risk associated with the arbitrary nature of the assumptions underlying the models used for the definition of the price of the operations (*model risk*); the risk of reputation; the operational risks connected to the complexity of such structured operations.

<sup>6</sup> Made up of representatives of the central banks of the G10 countries.

<sup>7</sup> Among these reasons they listed: a) greater attention on part of banks and financial intermediaries to risk management; b) a more rigorous approach to the evaluation of the risk/yield ratio by investors and creditors; c) a growing trend by banks to manage their own credit risk exposure on a portfolio wide basis; d) the quest for commission earnings by market intermediaries; e) a global economic situation generally characterised by low interest rates; f) arbitrage opportunities created by different regulatory requirements between sectors.

<sup>8</sup> Following this initial study CGFS undertook to improve the collection of data on CRT and commenced work to have the operations in some CRT market segments of wholesale market operators included in the latest statistics on derivatives (published every six-months by the Bank of International Settlements). Particular attention will be dedicated to *Credit Default Swaps* (CDS).

<sup>9</sup> The association that brings together the insurance supervisory authorities of over 100 countries.

also on the desirability of setting guidelines for the correct management of investments in these instruments by insurance and reinsurance companies<sup>10</sup>.

As regards the European Union, a working party of the European Central Bank commenced the study of the CRT market towards the end of 2003. The report concluded that: a) in aggregate terms the ratio of CRT instruments to the total volume of assets is still limited within the European Union<sup>11</sup>; b) European banks operate on the global CRT market essentially to actively manage and diversify their risk exposure (*portfolio management banks*), rather than in their capacity as intermediaries (*trading banks*)<sup>12</sup>.

Another report whose remit was the analysis of the global CRT market is being drawn up by a part of the working party of the Joint Forum<sup>13</sup>. More importantly, the report defined CRT as a market in which the rate of financial innovation is highest and whose products are ever more sophisticated and complex. At the end of 2002 out of a total of 2,300 billion dollars (notional) of tools exchanged on the world market 22% were made up of structured products such as: “portfolio CDS”, synthetic, single tranche securitisations and swaps on losses subsequent to the first. Furthermore, 73% of the market was still made up of the so-called single name Credit Default Swaps (CDS) – that transfer the risk of a single name.

The evolution of the tools makes it difficult to ascertain the actual amount of risk transferred, while the notable expansion of the market attracts non-specialised investors who occasionally lack the capacity necessary to manage such products in all their complexity. The publicity given to such tools has set in train a process that is modifying the credit market. The evaluation of the credit standing of a debtor can, today, be carried out also on the basis of the liquidity of the financial instrument embedding the debtor's credit risk. Closer links between CRT market trends and other financial markets, including the securities market, has an impact on the costs incurred by undertakings in raising capital.

## **4. The analysis of the Italian CRT market**

### **4.1 Main results**

In order to assess the size of the CRT between the banking and insurance sectors in Italy, it was first of all necessary to limit the scope of the survey by conducting an analysis on all operations between the foregoing sectors that could give rise to a CRT.

This, in its turn, gave rise to a CRT definition – which was in line with that used in other international studies – covering CRT instruments such as: credit derivatives, securitisations, assignment of debts and credit and suretyship insurance policies issued by insurance companies to banks.

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<sup>10</sup> As a result of this report, the Financial Stability Forum requested the insurance sector authorities to take steps to improve the availability of data, especially with regard to reinsurance companies. A specially instituted body (*IAIS Task Force on Enhancing Transparency and Disclosure in the Reinsurance Sector*) is making provision to provide important information on the reinsurance sector by the end of 2004 as well as, more importantly, on the degree to which reinsurance companies are active on the CRT market.

<sup>11</sup> In terms of the notional amount, selling risk through structured products (including securitisation) among banks in the sample examined amounted to between 10 and 30 percent of total assets; while the credit risk acquisition (through credit derivatives) as a rule remains less than 1% of total assets, and only in a few cases has it reached higher levels, touching a maximum of 13%.

<sup>12</sup> Among the 101 banks making up the sample only 10 could be included among CRT intermediaries active on the global market.

<sup>13</sup> A group that under the aegis of the Basel Committee, IOSCO and IAIS, comprises the representatives of the supervisory authorities of the three segments of financial intermediation (banking, securities and insurance).

On the basis of this definition of CRT, the data collected shows that the transfer of the credit risk between Italian banks and Italian insurance companies is very limited.

Furthermore, the survey brought to light that Italian banks (whose main task is to take on credit risks) are more active than insurance companies both in the securitisation market (in their capacity as originators and investors in Assets Backed Securities – ABS) and in the credit derivatives market (as buyers and sellers of protection). The counterparts of Italian banks in these operations are principally foreign entities or, in Italy, other banks or non-insurance financial intermediaries.

The risks regarding insurance guarantees for credit and suretyship insurance – issued by Italian companies and covering relations with banks – appear very limited according to the special sample-based survey used to take the census. The survey did not report any direct assignments of credit between the two sectors: neither assignment of bank credit to insurance companies nor assignment of insurance credit to banks.

The detailed analysis of the various forms of cross-sectoral operations (which enabled us to formulate a precise definition of the operations through which CRT between banks and insurance companies is performed under the Italian legal system) was also a good opportunity for an in-depth study of some particularly interesting areas of activity, both in terms of overall financial stability and regulatory questions.

Furthermore, a series of operations between banks and companies was identified that constitute a reciprocal underwriting of assets, liabilities or off-balance sheet commitments. The data shows that in Italy too relations between banks and insurance companies take the form – apart from commercial relationships based on distribution agreements – of the reciprocal subscription of equity securities, bonds (among which the subordinated loans and bonds from banks to insurance companies take pride of place), financing and off-balance sheet commitments.

This survey was based on the records of the supervisory authorities of the two sectors and – for the first time in Italy – it indicated the size of the phenomena in question (see summary table, attachment 3).

#### *4.1.1 Data collection problems*

The survey used the data as at December 2002 and June 2003 held by Isvap and the Bank of Italy. Where possible an attempt was made to compare the data held by the two authorities in order to provide further insight into the various phenomena and monitor the incongruities, errors or shortcomings in the information provided by intermediaries, or in the reporting requirements used by both authorities.

In view of the limits placed by Italian law on supervisory reporting for insurance groups, the survey was only able to consider the operations between Italian banks and insurance companies. Thus data on foreign-controlled insurance and reinsurance companies were not collected, nor those referring to foreign subsidiaries of Italian banks. However, the data on Italian banks did include operations referring to foreign branches.

As regards the Bank of Italy, the main records used concerned the accounts matrix, the shareholding structure of the banks, the reporting pursuant to article 129 for the issue of equity securities, and *Centrale dei rischi* (the central information office on credit risks). Thus the survey was mainly based on data provided by the banks for purposes of solo supervision. Therefore, in most cases it centred on the available data<sup>14</sup>. It should, in conclusion, be pointed out that the

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<sup>14</sup> Only in case of data on bank commitments in favour of insurance companies and subordinated insurance debt subscribed to by banks was it necessary to conduct a sample-based investigation to better analyse the situation of banks taking out capital redemption policies.

identification of the economic sector of the counterparts on the basis of the accounts matrix<sup>15</sup> was poorly detailed for almost all of the operations conducted with non-EU counterparts. The foreign insurance companies were not surveyed separately but included in the vast category of foreign holding companies.

As concerns Isvap, the supervisory forms used were those that companies are required to submit along with their financial statements, the quarterly reports on assets covering technical reserves and the quarterly reports on trading in derivatives. When necessary the data was cross-checked with the UIC (Italian Foreign Exchange Office) securities databank.

The foregoing limitations to reporting requirements, on the one hand, meant concentrating the analysis on the Italian market in the narrow sense of the term (i.e. operations concluded between Italian banks and Italian insurance companies and excluding foreign subsidiaries) and, on the other hand, rendered the survey very difficult and time-consuming. The work undertaken in terms of the analysis and cross-checking of data, their comparability and matching, indicates that it would be advisable in future not only to use the reporting data but also other instruments such as, for example, questionnaires to intermediaries and meetings between supervisory authorities and leading operators.

However, the data set forth herein is qualitatively sound and enables us to perform a correct evaluation of the size of the phenomena in question.

## **4.2 The transfer of the credit risk**

### *4.2.1 Securitisation operations (items a1 and a2 of the summary table)*

The volume of operations by the bank sector in the Italian securitisation market is second only to the public sector. Credits securitised by banks through securitisation operations amounted to about 72 billion euro in the period 1999-2003.

It can be stated that the originator banks in Italy only transferred a small amount of the credit risks implicit in securitisation operations. This is also confirmed by the large amount of junior and mezzanine notes subscribed by the banks themselves for their own securitisation operations.

As concerns Italian insurance companies only one securitisation operation was performed in compliance with law 130/99 and this was undertaken by a company that securitised credits from loans made to life insurance policyholders for an overall amount of 278 million euro. At the date of this survey, the ABS securities issued for such operation were not available in the portfolio of the Italian banks that hold, overall, a total amount of ABS for over 10 billion euro<sup>16</sup>.

On the other hand the Italian insurance companies held ABS securities in their portfolio for a total of almost 4 billion euro, of which about 20% deriving from operations in which banks were the originators. They were mainly made up of senior tranches<sup>17</sup>, therefore less risky, and were mainly kept by insurance companies in item C reserves.

### *4.2.2 Credit Derivatives (items a3 and a4 of the summary table)*

Italian banks are particularly active in the credit default swap market, i.e. the most widespread type of credit derivatives. The activities in this market are mostly carried out through foreign branches whose volume of operations is twice that of domestic operations.

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<sup>15</sup> The sectoring of the matrix is based on European criteria.

<sup>16</sup> About 11 billion euro as at 31 December 2002 and about 14 billion euro as at 30 June 2003.

<sup>17</sup> Of all the ABS derived from bank originators for about 0.77 and 0.74 billion euro, respectively at 31 December 2002 and at 30 June 2003, the Senior ABS accounted, respectively, for 76% and 78%.

As regards the banks only very small volumes refer to operations with Italian insurance companies. Out of a total of credit derivatives with a notional value of more than 40 billion euro<sup>18</sup> sold by banks only 85 million euro had Italian companies as counterparts. In addition, it does not seem that Italian insurance counterparts have sold protection to Italian banks.

In order to correctly interpret the data provided, it is also necessary to emphasise that most of the credit derivative operations effected by banks on the Italian market are accounted for by a single bank acting as an "intermediary" (in other words the positions mainly concern the trading book).

#### *4.2.3 Assignment of debt and credit and suretyship insurance guarantees (items a5 and a6 b13 of the summary table)*

The issue of credit insurance guarantees was analysed through a sample-based survey that involved about one quarter of the exposures referring to credit insurance. Only certain types of risk were examined: those arising from relations with banks (such as sales by instalments, mortgage and facilitated credit backed by collateral, real-estate title insurance, credits from leasing contracts). The survey presents a picture of the operations of Italian companies in favour of Italian banks: about 90% of the credit insurance guarantees examined (8 billion euro) refer to relations with banks (6.7 billion euro) and mainly comprise real-estate title guarantees. This is a type of insurance activity that can be understood as the selling of protection by an insurance company to cover the operational risk accepted by a bank in providing credit<sup>19</sup>.

A sample-based survey was also undertaken with respect to suretyship insurance, limited to policies stipulated with private policyholders which regarded commitments to make payments (excluding those arising from legal obligations) with a maximum exposure amounting to at least 5 million euro per policyholder or to at least 10 million euro per group. In most cases suretyship covers bank loans that, in some cases, were linked to the underwriting of liens or constraints on single-premium life-insurance policies. It should, in particular be noted that, taking account of the threshold amount used, such suretyship policies were issued by a limited number of insurance companies.

The practice of assignment of credit was virtually absent. The reason seems to be due to the fact that the market, in order to conclude such operations, prefers securitisation (more standardised, regulated and liquid) than the direct assignment of credit.

### ***4.3 Other forms of underwriting assets and liabilities between banks and insurance companies***

#### *4.3.1 Shares and participations (items b1, b2, b3, b4 of the summary table)*

In addition to the interests of savers in alternative forms of investments that has led to commercial agreements and production and distribution joint ventures between the two sectors, in Italy the interest of banks in the insurance market has been encouraged by the law on the kinds

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<sup>18</sup> It should be pointed out that the data take into account the relations between the two subjects (the counterparts) that stipulate the credit derivative contract and not the subject matter of the contract (the underlying credit).

<sup>19</sup> Credit institutions carry out a legal investigation before granting mortgage loans in order to ascertain that the property offered as collateral belongs to the debtor and is unencumbered. Such investigations are entrusted to notaries public who – when performing this task – may incur in errors and omissions such as to compromise the validity of the mortgages registered on the property offered as collateral. The policy covers the loss arising in the event of the invalidity and unenforceability of mortgages. The insurance cover refers to all the activities of the bank policyholder and single loan operations cannot, therefore, be covered. The indemnity is paid on the basis of the actual loss suffered.

of investment that can be held. Prudential rules have in fact allowed banks to control insurance companies and vice versa<sup>20</sup>.

On the basis of the carrying amounts posted in the financial statements at December 2002, the absolute value of the share capital held by Italian insurance companies in banks amounted to about 5 billion euro while Italian banks or bank groups held about 4 billion euro in the share capital of insurance companies.

By the end of 2003 Italian banks held participations in 68 Italian insurance companies, 33 of which operating in life insurance. The participation in 18 of the foregoing 68 constituted a controlling interest. It also emerged that Italian banks hold participations in 19 foreign insurance companies or brokers. Similarly, at the same date, national and foreign insurance groups had holdings in 34 Italian banks; five such groups – of which two Community groups – had holdings in the first six national bank groups. Furthermore, insurance companies held a controlling interest in 9 small sized banks.

Only in a few cases do reciprocal holdings between the banking and insurance sectors refer to financial groups whose activities mainly occur in the banking and insurance sectors.

A recent Community directive requires that such groups (the so-called financial conglomerates) should be subject to a special supervisory regime (the so-called supplementary supervision) aimed at ensuring that the overall risks are managed correctly and that there are sufficient assets at the group-wide level.<sup>21</sup>

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<sup>20</sup>It should be remembered that insurance companies, whether subsidiaries or parent companies, do not fall within the bounds of a banking group or within the scope of consolidation for reporting and prudential purposes.

<sup>21</sup> Directive 2002/87/EC of the European Parliament and of the Council on the supplementary supervision of credit institutions, insurance undertakings and investment firms in a financial conglomerate and amending Council Directives 73/239/EEC, 79/267/EEC, 92/49/EEC, 92/96/EEC, 93/6/EEC and 93/22/EEC, and Directives 98/78/EC and 2000/12/EC of the European Parliament and of the Council.

## FINANCIAL CONGLOMERATES

The definition of "financial conglomerate" introduced by Directive 2002/87 is based on two concepts relating to the activities of the group: their essential financial and cross-sectoral nature. These features must be verified on the basis of the thresholds fixed by the directive, which, as their principal reference parameters, consider the balance sheet total of the single entities of the group and the relative minimum solvency requirements.

In detail:

- ❑ the threshold envisaged for determining whether the activities of the group mainly occur in the financial sector is 40%. This is calculated as the ratio between the summation of the balance sheet total of the companies operating in the financial sector and the summation of the balance sheet total of all the companies of the group. If this ratio is over 40%, the group is deemed to have a principally financial character.
- ❑ the parameter used to determine whether cross-sectoral activities are significant is 10%. This is calculated as the ratio between the summation of the balance sheet total of the companies operating in one of the two financial sectors (insurance/banking) and the summation of balance sheet total of the financial sector entities in the group, and the ratio of the summation of all the solvency requirements of the same financial sector to the summation of the solvency requirements of the financial sector entities in the group. If the average of these two ratios exceeds 10%, the group is deemed to be a financial conglomerate.

In addition to these criteria, it is envisaged that financial groups with systemic importance be included in the scope of the directive. This means groups whose activities, while focused on only one financial sector (e.g. banking), reach high quantitative levels in the other sector as well. In practice, for purposes of the directive, groups whose activities in the smallest financial sector in the group exceeds EUR 6 billion in terms of the sum of the balance sheet total in the relevant financial statements are also to be regarded as financial conglomerates.

Out of the 20 Italian bank groups that at the end of 2002 held participations (from a minimum of 20% to a controlling interest) in insurance companies and out of the 6 insurance groups that in the same period held participations in banks and/or stock brokerage companies, 3 exceeded the 10% threshold and 5 exceeded the cross-sectoral threshold of 6 billion euro.

In the light of community law it will, therefore, be necessary to consider the risks of the banking and insurance components in an integrated manner with regard to the groups subject to this law. For example, from the standpoint of the subject matter of this report, the use and the exchange of CRT instruments between insurance and banking entities belonging to the same group would not satisfy the requirements of risk protection insofar as – although there is an actual transfer between sectors – the credit risk still remains within the same conglomerate.

Moreover, community regulations require that, as concerns the single entities of each of the two sectors, whenever reciprocal capital ties exist account must be taken of the need to avoid any double gearing.

### *4.3.2 Subordinated debts (items b5 and b6 of the summary table)*

Banks issue many more subordinated debts than insurance companies. This could be explained by two factors: on the one hand, the inclusion of such instruments (at certain given conditions) into the regulatory capital has been envisaged for a longer period of time by the law regulating banking activities and, on the other, the inversion in the productive cycle of insurance companies makes the need to raise capital less important for them.

It should also be remembered that subordinated debt can be issued with different technical forms: the form most commonly used by banks refers to "securities", while for insurance companies subordinated debt generally takes the form of a loan, with the exception of two issues for high amounts.

The analysis of the data reveals that Italian insurance companies invest in the subordinated debt of Italian banks about twice the amount that the latter invest in subordinate insurance debt. However, taking account of the fact that the volume of subordinate insurance debt is much lower than banks' subordinate debt, Italian banks are the main subscribers to insurance subordinate debt (about one third of the issues).

The mutual underwriting of subordinated instruments is one of the aspects to which the supervisory authorities are dedicating special attention. In fact, where there are links in the form of participations between a bank and an insurance company and/or reciprocal subscriptions of subordinate instruments which are included in the valuation of a company's capital, there exists the risk of double gearing.

#### *4.3 Unsubordinated bonds and securities (items b7 and b8 of the summary table)*

Italian insurance companies invest about one third of their corporate bond portfolios for about 22 billion euro, in unsubordinated securities issued by banks, especially in order to invest resources from unit and index-linked policies, which are typical products sold through bank counters.

The amount of securities issued by insurers in bank portfolios is negligible. However, given the limited amount of bonds issued by insurance companies, which do not have the funding needs of the bank sector, this is only to be expected.

#### *4.3.4 Deposits and Lending (items b9, b10, b11, b12 of the summary table)*

Bank funding from insurance companies carried out through current accounts, deposits, and certificates of deposit amounts to about 1% of the overall deposits of banks obtained using the same techniques. This amount rises to 1.2% if we take account of bank funding from insurance sources obtained through repurchase agreements.

The data referring to bank lending to insurance companies are particularly interesting as this aggregate figure accounts for almost all of the capital redemption policies issued by insurance companies and purchased by banks. The survey has, in particular, brought to light that not only is the amount of bank lending to insurance companies very limited (about 4 billion euro, equivalent to 0.4% of the total bank lending), but also that 90% of bank lending to insurance companies concerns capital redemption policies. These policies are not, in practice, viewed as a classic form of lending but rather as an alternative manner of investing bank deposits in financial instruments with an insurance character and which, above all in the present economic climate, offer an interesting risk-return trade off.

#### *4.3.5 Conclusions on the reciprocal assets and liabilities between banks and insurance companies*

In brief, in terms of participations, banks hold a notable amount of the share capital of insurance companies: they control some of the country's most important intermediaries for premium collection, above all in life insurance, while insurance companies only control small-size bank intermediaries. In terms of issues of subordinated instruments, banks are among the leading subscribers of subordinated insurance debt.

The other relations surveyed by the report indicate that funding flows proceed from companies to banks. The latter receive funds from the insurance sectors mainly through the issue of bonds and to a residual degree through the traditional funding instruments (deposits, certificates of deposit, repurchase agreements).

Instead, as concerns the flow of funds from banks to insurance companies the subscribing to capital redemption policies by banks should be noted. The recent increase in these operations

would appear to be the result of the banks search for investments able to offer a good risk-return ratio.

## **Attachment 1: Bank and insurance risks: prudential requirements and risk management profiles**

### **1. Typical bank and insurance sector risks**

Increasing interlinkages between bank and insurance intermediaries have blurred the boundaries between the two areas of activity. Nevertheless, the process of convergence between the two sectors has not changed the prevalent risks that each sector must assume or the differences in their nature: credit risk for banks and technical risks for insurers<sup>22</sup>. In addition, banks and insurance companies tend to approach the same type of risk using different terminologies and philosophies.

#### **1.1 Bank risks**

Banks are multi-product enterprises. Their main activity is credit brokerage - the joint operation of collecting the savings of the public and offering credit. Alongside their credit brokerage, banks also pursue activities in financial instruments and offer financial and non-financial services to their customers.

Banks are, therefore, primarily exposed to credit risk: the risk that a debtor will default on a loan or a bond; or that the guarantor or the counterpart in a derivative contract will not meet his obligations; or the risk of variations in the credit standing of the counterpart. Moreover "country risk" can also be classified as a credit risk, since the economic-political conditions of the state of residence of the issuer may adversely affect the certainty of a loan reimbursement.

Liquidity risk is also important for banks. This is the result of the presence in the balance sheet of short-term liabilities (demand deposits) against less-marketable assets (receivables due from customers).

Trading in financial instruments, moreover, exposes the banks to market risk, in relation to possible unfavourable changes in the value of the trading book as a result of unexpected changes in market conditions. The sources of exposure to market risk include interest rates, exchange rates and stock and commodity quotations. In the event that option positions are taken out, there is also the price volatility risk of the underlying instrument.

Banking activities also entail the assumption of operating risks, i.e. the risks of losses due to errors or internal mismanagement of the bank (human or IT system errors) or external events<sup>23</sup>. These risks acquire greater and greater importance in relation to the creation of new and more sophisticated financial products, the outsourcing of company business and the intensification of dealings in financial markets. In conclusion there is the reputational risk resulting from cases of fraud or misconduct by the personnel or distribution network, or from ethically incorrect or not fully transparent behaviour towards customers.

#### **1.2 Insurance risks**

An insurance company's activity consists in accepting, for the payment of a premium, the obligation to make payment to a policyholder in the future if a given event occurs affecting human life (life insurance) or to indemnify him for damage caused by a loss (to the

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<sup>22</sup> This was the conclusion reached by the *Joint Forum*. In this regard reference can be made to the following reports: "Risk Management Practices and Regulatory Capital – Cross-sectoral comparison", *Joint Forum*, November 2001 and "Trends in Risk Integration and Aggregation", *Joint Forum*, June 2003.

<sup>23</sup> The definition of operational risk is set forth in the Basle Accord - recently revised - and also includes legal risks but not strategic and reputational risks.

policyholder's property, estate or physical integrity) (non-life insurance). Companies accept risk in return for the anticipated payment of premiums, from which they obtain the means to make contingent payments in respect of the insured benefit, cover the costs of underwriting and managing the contract and provide an appropriate return on capital. The premium has, therefore, the function of guaranteeing the economic balance between revenues and payments. This technical balance, as at the date on which the contract was stipulated, is guaranteed in the following periods by allocating part of the premiums in special provisions known as technical provisions. These represent commitments towards policyholders, against which the company must make provisions according to prudent and objective evaluations if it is to be able to honour them in the future.

The performance of insurance activities therefore entails, first of all, the underwriting of technical risks insofar as the actuarial model used to determine the premium and the amount of technical provisions may not be adequate to face the actual commitments entered into by the company. This risk is defined as the underwriting risk and concerns:

- ✓ the risk of errors in the calculation of premium rates (premium risk), which is determined, for example, by the lack of reliable probability distribution functions as concerns the occurrence of "losses" when a premium is fixed; in other words, the incapacity of a company to replicate the probability distributions used to determine tariffs in its own "contract portfolio" (the risk of accidental deviations); or by the risk of excessive loss, ascribable to the possibility that expected payments are not in line with those actually incurred on account of unforeseen and unforeseeable changes in the probability distributions used when determining premiums (systematic deviation risk); such circumstances refer, for example, to legislative changes, inflation, adverse trends in market variables, etc.
- ✓ the risk of insufficient technical reserves (reserving risk), referring to the underestimate of the reserves necessary to meet future commitments of the company as a result of erroneous estimates and changes in the reference context<sup>24</sup>. This risk acquires different characteristics according to the duration of the guarantees given, which in general are longer in life insurance, and the arrangements for the payment of the benefits.

The distinguishing features of insurance companies raise the need to invest the volume of premiums received principally in financial assets that are appropriate to the commitments undertaken towards policyholders. Therefore, the insurance companies are exposed to risks typical of financial intermediation (investment risks) such as market, credit and liquidity risks. In many life-insurance products, these types of risk constitute technical risks<sup>25</sup>.

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<sup>24</sup> In non-life insurance an example of reserving risk is provided by the change in the trend in court decisions on awards of bodily injury, which had a major impact on motor-insurance indemnities. As concerns life insurance there is, for example, the appearance of new diseases or medical progress in the fight against mortal diseases.

<sup>25</sup> It is sufficient to consider revaluable policies where the calculation of the premium is based on demographic (life/death of policyholder) and financial (the so-called technical rate) assumptions.

## INSURANCE POLICIES

Policies on the duration of human life can be classified according to the guarantee offered, into: *whole life insurance*, whereby the insurer undertakes to pay a capital sum in the event of the policyholder's death; *endowment policies*, which principally serve social security purposes; *mixed policies*, in which death benefits and endowment benefits are combined in various ways. Although the historical function of life insurance policies serves social security objectives, in the course of time the need was felt to protect these policies against inflation and maintain their competitiveness with respect to other forms of savings. Consequently, adjustable, and later on indexed policies were introduced. In the early 1980s *revaluable* policies appeared in Italy, characterised by minimum guaranteed returns. In recent years the companies have started to offer policies with essentially financial features. The benefits of such contracts are linked to a share index or other reference value (index-linked policies) or to the value of units held in an internal insurance fund or an external unit trust or investment company (unit-linked policies). The characteristic of these contracts is that the investment risk is usually borne by policyholders.

Non-life insurance contracts constitute a heterogeneous set of policies that reflect the variety of risks covered. The main classes are as follows: *casualty insurance*, which offers protection against risks occasioned by accidents or illness; *property insurance*, which comprises insurance protecting property from various risks (theft and fire); financial insurance, or credit insurance (in which the loan operations of the policyholder are guaranteed) and suretyship insurance (in which the performance of the debtor's obligations are guaranteed); and *liability insurance*, which safeguards the policyholder against the risk of having to pay indemnities for third-party damage.

For the purposes of this study:

- ❑ The risk covered by contracts falling under Credit Insurance refers to the total or partial loss of credit due to the ascertained or presumed insolvency of the debtor in the manner and terms indicated in the various policies according to the operations undertaken. The risk guaranteed refers solely to the definitive (total or partial) loss of the credit as a result of the insolvency of the debtor, which must be ascertained, declared or presumed in the manner and within the terms indicated in the policy, and take due account of the operations undertaken. Guarantees against the risk inherent in financial credit operations (i.e. operations conducted on a purely fiduciary basis) not backed by collateral securities do not form part of the insurance guarantees in question and insurance companies are not allowed by law to offer them.
- ❑ Suretyship insurance comprises insurance contracts that perform the same legal and economic function of a security in money or other collateral, or that of a suretyship whereby the specific party accepting liability (contracting party) stands surety for another (beneficiary). Suretyship insurance can only be provided as an ancillary guarantee with respect to the principal liability. Suretyship insurance therefore includes guarantees for liabilities that can arise with respect to a given subject (the policyholder) whenever he defaults on the primary liability consisting in the performance, or non-performance or provision of something, according to the prescriptions of a specific contractual clause or clauses. However, guarantees offered on a purely fiduciary basis against financial operations that are not recognised in law, which do not refer to legally valid and enforceable contractual economic agreements specifically regulated, do not form part of the insurance guarantees in question and insurance companies are not allowed by law to offer them.

As concerns credit risk, insurance companies are exposed to the counterparty risk contained in the bond portfolio (usually more important for life-insurance companies), to the risk of re-insurer's insolvency<sup>26</sup> (more felt in non-life insurance), and to risks on receivables due from policyholders, intermediaries (agents and brokers) and other insurance companies. The companies can assume credit risk within the framework of their "typical" activities, especially through credit and suretyship insurance policies.

Moreover, insurance companies, above all as concerns long-term insurance, face a liquidity risk in the event that the company's assets are not in line with the due dates and cash flows necessary for the commitments made and expressed in the technical provisions.

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<sup>26</sup> Reinsurance consists in the transfer by the insurance company (the reinsured) of part of its own risk to a reinsuring party (the reinsurer).

In conclusion, companies are exposed to operational risks, which are associated with the high volume of data to be processed (process risk<sup>27</sup>) and risks of "fraud", attributable to possible incorrect or non-transparent behaviour on the part of the distribution networks or policyholders.

## 2. The prudential treatment of risks in the banking and insurance sectors

The peculiarities associated with banks and insurance companies, also in terms of the "prevalent" risks accepted in the performance of their respective activities, are reflected in the different prudential arrangements put in place by the sectoral supervisors, and hence certain characteristic differences that range from accounting rules to the definition of capital. Particular importance is attached to the characteristics and the different roles played by reserves and capital<sup>28</sup> in the context of the their respective types of management which are, consequently, reflected in the prudential controls.

### 2.1 Banking sector

For purposes of bank supervision both provisions and capital are essential. The amount of capital in a typical bank balance sheet is typically much greater than that represented by provisions. Statistical experience suggests that the expected losses, handled through provisions<sup>29</sup>, are significantly lower than the losses actually sustained by banks as a result of their exposure to credit risk. Consequently, it is necessary to ensure that the level of capital (higher than the provisions) is appropriate to absorb unexpected losses.

The regulatory capital that banks must hold is determined according to the approach set forth in the Basle Accord. This envisages that banks (and banking groups) constantly observe a minimum capital requirement (total capital ratio), determined by summing the capital to be held against assets exposed to credit risks (the solvency coefficient) to the capital requirement needed to face market risks, which applies to the financial instruments making up the portfolio of assets held for trading<sup>30</sup>.

The regulations concerning the solvency coefficient lay down that banks hold an amount of capital equal to at least 8% of the assets exposed to credit risk, weighted in relation to the level

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<sup>27</sup> This risk comes to the fore both when underwriting risks and when settling claims.

<sup>28</sup> Reserves represent resources earmarked to make up for the average value of foreseeable losses, according to the probability distributions observed in the past (the so-called "expected losses"). The capital constitutes the protection of the company's stability against "unexpected losses", or those losses that may happen, although the probability is very slight. They amount to the difference between expected and actual losses.

<sup>29</sup> Provisions break down into specific and general provisions. The first refer to sums deducted from bank income and are designed to face losses arising from well-defined credits. They are a means of reducing the carrying amount of a given receivable to face the losses expected from it. In accounting terms, this result can be obtained either through the direct writing down of the asset value (as accounting rules require in Italy) or by allocating an amount to a liability reserve (which is not possible in Italy). General provisions refer to reserves allocated against potential losses that do not refer to specific assets and are, therefore, shown under appropriate liability items.

<sup>30</sup> The market risks envisaged by supervisory regulations are as follows: the *risk of position*, deriving from the oscillations of the price of the financial instruments which depends on factors regarding market trends (generic risks) and/ or the situation of the issuing company (specific risk); the *settlement risk*, which arises when the counterpart, at the expiry of the contract, does not honour the commitment to provide the securities, goods or money due; the *risk of counterpart* or the risk of non-performance by the counterparts; the *exchange rate risk* or the risk of sustaining losses on currency operations on account of adverse variations in the rates of exchange of foreign currencies (this is calculated in relation to the entire balance sheet and not only to the trading book); and in addition, there are prudential rules that require the monitoring of exposure to the interest rate risk that refer to the entire balance sheet.

of risk pertaining to each asset<sup>31</sup>. The capital requirements against credit risk also apply to off-balance sheet operations (guarantees given, off-balance sheet commitments and derivatives). It was also envisaged that the Bank of Italy, under certain circumstances, can impose a higher capital requirement.

The law in force also lays down limits to the concession of loans for major amounts in respect of the regulatory capital (law on the concentration of risks). Limits have also been set on the amount of the risks both with regard to one single counterpart (individual limit) and to the overall large-loan exposure (overall limit).

## THE PRUDENTIAL AND ACCOUNTING TREATMENT OF CREDIT DERIVATIVES AND SECURITISATIONS

### ***Banking law***

*a.* As concerns the *prudential treatment*, a “hands on” approach is adopted (i.e. aimed at ascertaining the real transfer of risk).

As regards securitisation operations, the Bank of Italy has laid down specific regulations that establish the prudential treatment to be adopted towards assets held by banks against securitisation operations. The general principle states that a capital requirement must be applied to the junior bonds issued by the special purpose vehicle company and held by the bank. This should not exceed what the bank would have “paid” if the securitised assets were part of its own balance sheet.

The prudential regulation of credit derivative contracts varies according to whether they are classified in the trading or the banking book.

Credit derivatives classified in the banking book produce effects that, in practice, are similar to a guarantee received (protection buyer) or issued (protection seller). Therefore, the bank as protection buyer can transfer the risk on the credit derivative counterpart, whenever the latter possesses a more favourable weighted factor than the principal debtor.

The credit derivatives classified in the trading book are subject to the prudential regulations on market risks, on a par with financial derivative contracts (i.e. on interest and exchange rates, etc.).

In conclusion, it is necessary to remember that no specific accounting rules exist for complex and structured transactions - particularly as concerns those transactions made up of a number of phases, actors and operations. However, the application of the general principle of the prevalence of substance over form allows us to consider as a single entity, for accounting and prudential purposes, a set of apparently separate operations that are economically inter-connected. This valuation is performed on a “case by case” basis.

*b.* Considerable emphasis is given to *information disclosure*. As concerns securitisations (whether performed in Italy or abroad, traditional or synthetic), given that securitised assets must be transferred from the balance sheet of the originator bank, the junior bonds must be measured at their estimated realisable value, estimated by taking account of the degree to which the asset portfolio, to which the securitisation refers, can be recovered.

Furthermore, the notes on the accounts must provide complete and adequate information on the strategies underlying the securitisation operation as also upon the risks, relative monitoring procedure and income results from positions (on- and off balance sheet) involved in the securitisations (for example: the distinction between positions deriving from securitisation operations conducted on the bank's own account or for third parties; the type and amount of the exposures held vis-à-vis the securitisation; information on the securitised assets underlying junior bonds subdivided by type (debt, securities, etc.) and quality (doubtful debt, difficult loans, etc.); the strategies underlying the operations; the risks and the relative monitoring procedures; the economic result from securitisation positions).

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<sup>31</sup> The Basle Accord was recently revised in order to improve the risk sensitivity of capital requirements vis-à-vis credit risk. The other objects of the revision of the Accord were as follows: the introduction of a specific capital requirements to make up for operational risks; emphasis in the process of reviewing capital adequacy; the reinforcement of the role of market discipline.

The regulations issued by the Bank of Italy state that banks must provide qualitative and quantitative information on credit derivative operations in the notes on the individual and consolidated accounts. Moreover, the protection-selling bank is required to disclose the risks accepted through credit derivatives among its commitments while the protection buyer must provide indications on the amount of credit guaranteed by credit derivatives in notes on the accounts. Both are required to indicate the strategies underlying the credit derivative operations in their annual report.

## 2.2. Insurance sector

In the insurance sector "technical" provisions acquire paramount importance. These are set aside to meet the commitments deriving from the underwriting of contracts (payment of benefits and claims).

The correct estimate of the amounts to be disbursed as a result of a loss event and an adequate level of technical provisions to meet such disbursements lie at the heart of insurance business and of a sound financial position for the company. Therefore the instruments of prudential supervision are mainly concerned to contain the technical risks to which companies are exposed by ascertaining that correct actuarial principles are applied. The capital - to which recourse is made when the level of benefits paid to policyholders exceeds that of technical provisions - only plays a secondary role in the productive process.

As regards investment risks, sectoral regulations include rules on assets representing technical provisions<sup>32</sup>. These assets must satisfy the criteria of safety, yield, marketability, diversification and dispersion. For some assets accepted as cover for technical provisions (e.g. real estate, shares, debts and claims) maximum limits are set forth. Additional limits are set for exposure to a single party.

The regulations of the insurance sector lay down rules on the minimum capital requirements (the so-called *solvency margin*) that companies must possess. These requirements essentially depend upon the overall volume of business conducted<sup>33</sup> and are calculated according to premiums or the average cost of claims (non-life insurance) or to the mathematical provisions and capital at risk (life insurance<sup>34</sup>). In specifying minimum capital requirements no provision is made for the level of risk inherent in the asset. However, community regulations on the solvency margin, implemented in Italy in November 2003, lay down that in case of deterioration in a company's financial position, which entails risks for policyholders, Isvap may order the company to set up a supplementary solvency margin in order to guarantee its short-term solvency.

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<sup>32</sup>The assets accepted as cover for technical provisions are specifically listed, in a summary form, under article 26 of legislative decree 174/95 and article 27 of legislative decree 175/95 and in more detail in Isvap regulations 147 (life insurance) and 148 (non-life insurance) and subsequent amendments. For unit and index linked policies, that is for those products where the investment risk is borne by policyholders, the regulations lay down less stringent rules insofar as they provide for qualitative limits that mainly refer to the rating of the issuer or the security.

<sup>33</sup> In 2000 a project to revise the prudential rules of the insurance sector was commenced (the Solvency II project). The project sets out to define capital requirements based on a more accurate and complete measurement of the risks to which insurance companies are exposed; further the harmonisation of sectoral prudential rules in Europe; enhance disclosure by companies.

<sup>34</sup> Capital at risk is determined by the difference between insured capital in the event of death and the relative mathematical provision set aside. See ISVAP paper n. 6, 1999 on the solvency margin.

## THE PRUDENTIAL AND ACCOUNTING TREATMENT OF CREDIT DERIVATIVES AND SECURITISATIONS

### *Insurance regulations*

*a.* At present there is no specific rule to regulate the use of credit derivatives and securities arising from the securitisation operations by insurance companies. The references are contained in general regulations on investments covering technical provisions and on the use of financial derivatives.

As regards-linked products it should, in particular, be noted that policies linked to indices or other reference values constructed or linked, directly or indirectly, to asset-backed securities or to credit derivatives are prohibited. Instead, for unit-linked policies a distinction is made between the use of credit derivatives, subject to specific authorisation by Isvap, and the use of securitisation instruments which are admitted on condition that they observe certain qualitative (a rating of not less than A-) and quantitative limits (limits for single issues and unlisted securities).

The general regulations on derivatives, on the other hand, apply to traditional products whose use is allowed in relation to assets representing technical provisions, but insofar as they reduce the investment risk or promote a more effective management of the portfolio. As regards asset-backed securities the general rules apply on the quality of investments, which mainly concern the safety and marketability of such instruments.

*b.* As concerns disclosures on financial statements, in view of the limited nature of the operations by the companies in this field, no detailed instructions have been given for such investments. Consequently, credit derivatives follow general accounting principles of financial derivatives and in the attachment to the financial statements the commitments made as regards the purchase or sale of such instruments are set out under "other" residual items.

### **3. The management of credit risk by banks and insurance companies**

The availability of appropriate risk management systems is an essential priority for banks and insurance companies. They have, first and foremost, developed methodologies aimed at the management of the prevalent risks of each sector (credit risk in the case of banks and technical risks in the case of insurance companies). Recently, the works of international groups – with particular reference to the Joint Forum<sup>35</sup> – have paid great attention to the selection of the best practices followed by bank, financial and insurance intermediaries in the management of the risks to which they are exposed. In view of the focus of this work upon credit risks, the practices followed by banks and insurance companies in credit risk management are set forth below.

#### **3.1 Banks**

With reference to banks, the concession of new lines of credit and renewing existing ones takes place on the basis of formal authorisation procedures, involving several levels of management structure, and including special committees for the granting of lines of credit. Specialised units operate for assessing credit towards various sectors and geographical areas.

To ensure appropriate diversification in the granting of loans exposure limits are established towards single parties, single productive sectors and geographical areas and groups of related customers. These limits are fixed according to the classifications of counterparts by creditworthiness: more ample limits are assigned to counterparts with greater creditworthiness.

For the purpose of recovering debts, classification systems have been created that enable to control and measure the actual credit risk at any moment in time. More recently some banks have

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<sup>35</sup> See note 12.

defined internal models for the quantification of credit risk through the measurement of every loan facility in terms of the probability of default, loss in the case of default and exposure in the event of default. The amount of capital necessary to deal with unexpected losses can be defined through these measurements.

To mitigate credit risk banks use a vast range of techniques including real and personal securities and, increasingly, securitisation and credit derivatives. The development of more systematic approaches to the measurement of credit risk through the use of internal models has encouraged the use of credit risk transfer techniques and made the market for such instruments more liquid.

### **3.2 Insurance companies**

As regards insurance companies, credit risk generated by investments is managed within legally established limits by the definition of guidelines indicating the types of appropriate assets, and the limits and scope for investment. The guidelines set forth vary according to the various areas of business managed by the companies.

Credit risk arising from the conclusion of reinsurance contracts is handled through an accurate risk assessment of the companies with which the reinsurance agreements are stipulated, and through the diversification of the counterparts offering such contracts, but it is principally handled by requiring that a guarantee be established in the form of a monetary deposit by the transferee<sup>36</sup>. In addition, insurance companies sometimes request additional protection from reinsurance partners, in the form of collateral or letters of credit.

In conclusion, the credit risk accepted through the issue of credit and suretyship insurance policies is handled with essentially insurance methodologies based on the concept of pooling as well as, although to a secondary degree, the evaluation of the credit worthiness of the customer. The need to cover any technical losses at the end of each financial year is dealt with by Italian insurance companies also through the establishment of an obligatory provision termed "equalisation reserve", which attenuates the volatility of losses and is strictly linked to the trend in economic cycle.

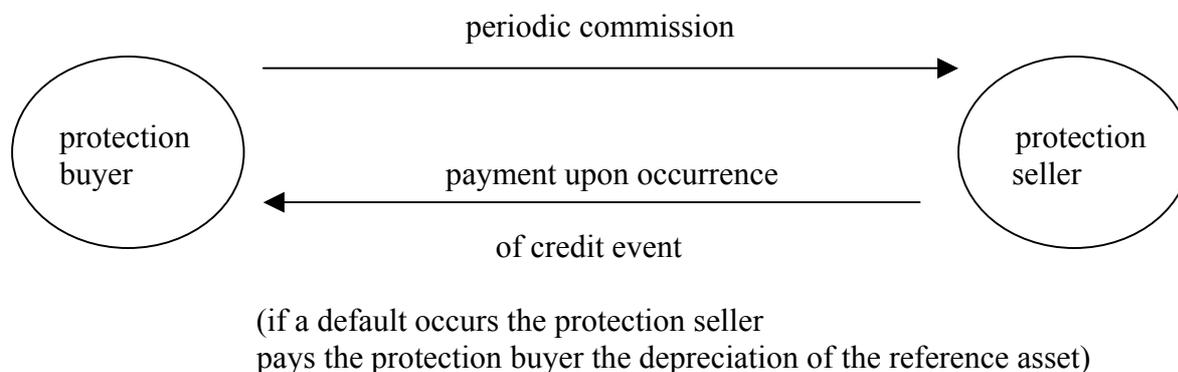
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<sup>36</sup>In proportional reinsurance (which consists in the transfer and assumption, to the same percentage degree, of risks, premiums and losses) the amount of the deposit is commensurate with the technical provision transferred in reinsurance. In non-proportional reinsurance (in which there is no relation between the technical results of the insurer and those of the reinsurer - the latter intervenes for those losses that, singularly or cumulatively, exceed a given amount) deposits are often not used.

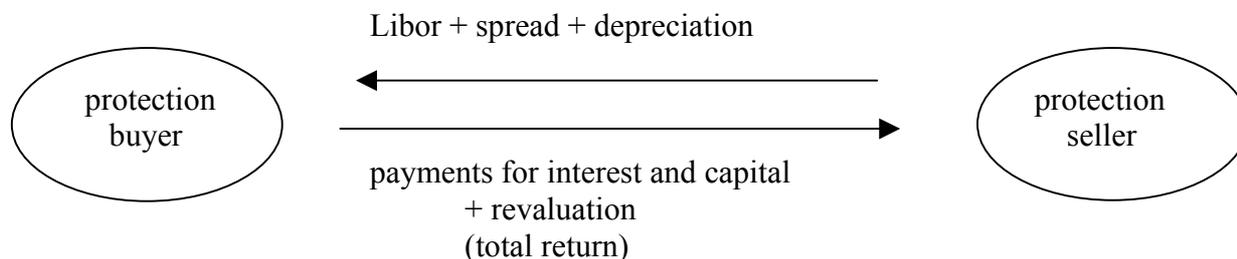
## Attachment 2: A description of the main CRT instruments

**An example of a traditional securitisation operation:** in its simplest version, the operation involves the transfer of assets by a subject (*the originator*) to a *special purpose vehicle* (SPV) which raises money through the issue of securities. The latter are divided into *senior notes*, specifically earmarked for the market and *junior notes*, subordinated to the senior notes in terms of reimbursement rights, and generally subscribed to by the originator itself. Sometimes the SPV issues intermediate (*mezzanine*) notes in terms of reimbursement priority. In addition, the originator in some cases provides further forms of credit enhancement (guarantees, sureties, etc.), in other words, coverage for the «first losses» which occur in the securitised portfolio.

**An example of a credit default swap:** the protection buyer buys protection against credit risk with regard to a reference asset from a counterpart or protection seller. In return for the payment of a periodic commission the latter undertakes to pay the protection buyer when a credit event occurs (e.g.: the non-payment at the expiry date of sums due for interest and/or capital by the subject issuing the underlying asset).



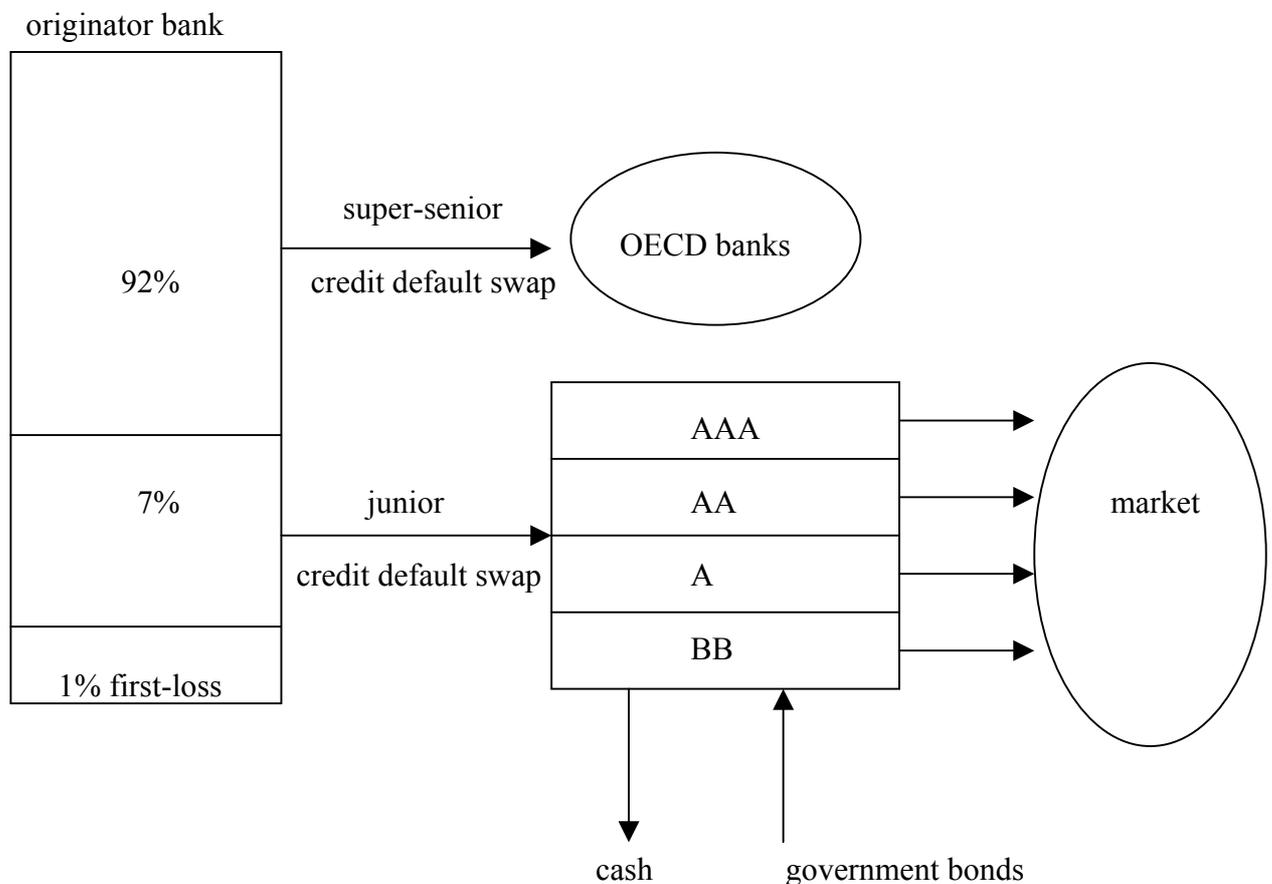
**An example of a total rate of return swap:** the protection seller sells to the protection buyer protection from both credit and market risk; the protection buyer, in fact, pays the seller the total return on the reference asset (i.e. all the payments contractually provided for by the reference asset and any revaluation of the reference asset); the protection seller, in turn, pays the purchaser Libor+spread and any depreciation undergone by the reference asset.



**An example of credit linked notes:** the subject that subscribes to the notes sells risk protection on the underlying reference assets to the subject issuing them; in case of default, the issuer (protection buyer) needs only reduce the reimbursement value of the security, without therefore being subject to any counterparty risk.

**An example of a synthetic securitisation operation:** the originator bank, while maintaining ownership of the assets, transfers the credit risk inherent in them by means of two credit default swaps. Typically, first-loss risk remains with the originator (this first loss is generally limited in

value if the quality of the assets is very high and represents a kind of “deductible”). In return for the *junior credit default swap*, stipulated with a SPV, notes are issued to the extent necessary to cover the second loss so that the residual part of the portfolio is, from an economic point of view, practically risk free<sup>37</sup> and therefore it becomes less costly for the originator to cover with a credit default swap rather than with an ABS issue. The funds raised from the acquisition of notes by subscribers are typically invested in less risky and more liquid assets (for example, government bonds). The *super-senior swap* is usually carried out by the originator bank with a counterpart bank in the OECD area in order to benefit from a more favourable weighting for purposes of asset requisites. For the investor, the risk inherent in these operations is, above all, comprised by the leverage effect between the amount of the issue and the amount of the reference portfolio. As a result of this leverage the actual credit risk becomes a multiple of the average risk of the portfolio of the originator.



Among the most innovative CRT instruments we can mention, for example:

**Credit default swaps on indices:** such indices (TRAC-X and iBoxx) refer to the average of CDS spreads associated with a given set of reference entities. They provide a measure of the average price for the acquisition of protection on this set of reference entities by offering a term of comparison for the valuation of other derivative products on other exposures that are

<sup>37</sup> The senior tranche of the notes issued against the first loss has, as a rule, a triple A rating: this represents “the signal” for the market that the part of the portfolio whose risk is not transferred through ABS is substantially without risk.

combined together according to the choice of a given investor. These instruments, moreover, provide a mechanism for making other credit risks marketable and “available for cover”.

**Tranched credit risk or single-tranche CDO:** in these synthetic operations a single tranche is issued. It may have differential risk intensity – junior, mezzanine or senior – depending upon whether it covers the first, second or ultimate losses connected with an asset portfolio. The investor defines the intensity of the risk to which he wishes to expose himself and, according to this request, the appropriate tranche is issued. Cost savings can be obtained (in terms of coverage costs), while placement is facilitated thanks to the fact that these are bespoke products (i.e. tailored to meet the specific needs of customers).

### Attachment 3: Summary tables of the survey

#### A - CREDIT RISK TRANSFER

##### ABS originating from Italian banks in the insurance portfolio.

	Italian banks		Total ABS in insurance portfolio	
	Dec 2002	Jun 2003	Dec 2002	Jun 2003
<i>units in Italy</i>	777,217	746,220	3,715,635	3,784,120

a1

This item indicates the ABS originating from Italian banks issued in Italy **after law 130**, by SPVs set up under Italian law and subscribed to by Italian insurance companies operating in life and non-life insurance. The data does not include securities placed through private placement, securities issued by Italian SPVs outside Italy and securities issued in Italy by non-Italian SPVs. Securities are valued at the lower value between cost and market price or (for securities held for investment) at cost when placed in item C, and at their current value when placed in item D.

**Data sources:** ISVAP records pursuant to legislative decree 173/97 and regulations 147/96 and 148/96; Bank of Italy pursuant to article 129 TUB, SPV indications

##### ABS issued by insurance companies in the portfolio of banks

	Italian insurance companies		Total issues (all economic sectors)	
	Dec 2002	Jun 2003	Dec 2002	Jun 2003
<i>total</i>	-	-	11,635,755	14,132,613
<i>of which units outside Italy</i>	n.a.	n.a.	966,719	1,312,089

a2

Only one securitisation operation was recorded pursuant to law 130 by Italian insurance companies in December 1999 (securitisation of credits from the financing obtained from life-insurance policyholders) not recorded in the balance sheets of Italian banks when the survey was conducted..

**Data sources:** Bank of Italy account matrix and ISVAP calculations.

##### Credit derivatives: banks buying protection from insurance companies

	Italian insurance companies		Total credit derivatives sold by insurance companies		Total credit derivatives bought by banks	
	Dec 2002	Jun 2003	Dec 2002	Jun 2003	Dec 2002	Jun 2003
<i>total</i>	-	-	-	-	47,849,092	43,651,646
<i>of which units outside Italy</i>	-	-	-	-	29,312,336	24,539,092

a3

The analysis on the 2002 financial statements and quarterly statements reveals that the single two CDS operations did not have Italian banks but foreign banks as their counterparts.

**Data sources:** Bank of Italy account matrix and ISVAP calculations based on financial and quarterly statements.

##### Credit derivatives: sale of protection by banks to insurance companies

	Italian insurance companies		Total credit derivatives bought by insurance companies		Total credit derivatives sold by banks	
	Dec 2002	Jun 2003	Dec 2002	Jun 2003	Dec 2002	Jun 2003
<i>total</i>	85,000	85,475	109,328	n.a.	43,559,400	43,559,400
<i>of which units outside Italy</i>	-	-	-	-	30,149,397	25,147,230

a4

From the checks on the 2002 financial statements and quarterly statements it emerged that of the two CDS operations investigated one had Italian banks as a counterpart and the other foreign banks.

**Data sources:** Bank of Italy account matrix and ISVAP calculations on financial statements and quarterly statements.

**Issue of insurance guarantees to banks - credit insurance**

	Italian banks		Total economic sectors	
	Dec 2002	Jun 2003	Dec 2002	Jun 2003
<i>value of exposure</i>	6,907,131	6,715,327	8,740,452	7,696,482

a5

The data refers to a survey carried out on a representative sample of companies, but limited to certain types of risk referring to banks relations (instalment sales, mortgage loans and facilitated loans backed by collateral, real-estate title insurance, leasing contract credits and other credits) that altogether represent about 23% of the total exposure of credit insurance and 13% of premiums issued. The total economic sectors only refer to the sample investigated.

**Data sources:** ISVAP surveys.

**Assignment of debt**

	Total assignment of debt by banks		Total credits traded by insurance companies	
	Dec 2002	Jun 2003	Dec 2002	Jun 2003
<i>units in Italy</i>	0	0	0	0

a6

In the period under investigation no such operations were recorded.

## B - RECIPROCAL ASSETS/LIABILITIES

### Participations of Italian banks in insurance companies

b1

	Italian insurance companies		Total participations recorded in Italian banks' financial statements	
	Dec 2002	Jun 2003	Dec 2002	Jun 2003
<i>carrying amount</i>	4,021,690	6,856,215	24,553,811	28,091,309

Data are taken from the participation data bank held by Italian banks.

Data sources: Bank of Italy

### Insurance shares held in banks' portfolio (trading portfolio)

b2

	Italian insurance companies		Total shares in the trading portfolio of Italian banks	
	Dec 2002	Jun 2003	Dec 2002	Jun 2003
<i>carrying amounts</i>	458,755	825,011	7,579,000	15,630,000

This item indicates the carrying amount of the shares (respectively insurance and total shares) of the banks' trading portfolio.

Data sources: account matrix of the Bank of Italy

### Participations of Italian insurance companies in banks

b3

	Italian banks		Total participations recorded in Italian insurance companies' financial statements	
	Dec 2002	Jun 2003	Dec 2002	Jun 2003
<i>carrying amounts</i>	4,991,282	n.a.	31,340,911	29,829,281

Data refer to item CII of the balance sheet assets comprising investments in affiliated undertakings and participating interests. Analytic accounting data for 30 June 2003 are not available.

Data sources: ISVAP

### Bank shares in the insurance portfolios (trading portfolios)

b4

	Italian banks		Total shares	
	Dec 2002	Jun 2003	Dec 2002	Jun 2003
<i>carrying amounts</i>	2,037,894	n.a.	9,370,779	10,933,642

This item indicates the carrying amount of the shares (respectively banks and total shares) in the trading portfolio held by insurance companies. At 30 June 2003 data were not available (see note at point b3).

Data sources: ISVAP

**Subordinated debts issued by insurance companies**

	In Italian banks' portfolio		Total issued by insurance companies		Total subordinated debts in banks' portfolio	
	Dec 2002	Jun 2003	Dec 2002	Jun 2003	Dec 2002	Jun 2003
<i>units in Italy</i>	738,179	742,724	1,989,501	2,047,146	14,038,599	16,133,610

b5

This item measures at par values the subordinated debts issued by Italian insurance companies in their various technical forms (securities and loans) subscribed to by Italian banks. Data is not available for foreign branches of Italian banks.

**Data sources:** total subordinated debts in banks' portfolio: account matrix of the Bank of Italy; subordinated debts issued by insurance companies and subscribed to by banks: ISVAP data based on the notes on the companies' accounts and on comments to the six-monthly report + sample survey by the Bank of Italy

**Subordinated securities issued by banks and subscribed to by insurance companies**

	In the Italian insurance companies' portfolio		Total subordinated securities issued by banks		Total subscriptions to subordinated securities by insurance companies	
	Dec 2002	Jun 2003	Dec 2002	Jun 2003	Dec 2002	Jun 2003
<i>units in &amp; outside Italy</i>						
<i>subordinated debts - securities</i>	1,880,185	1,330,346	44,731,267	46,160,229	n.a.	n.a.

b6

This item indicates the amount of subordinated securities originating from banks and subscribed to by insurance companies. The data are presented at their carrying amount (the lower as between cost and market price for item C and market price for item D). The total economic sectors contain the par value of outstanding subordinated securities issued by banks, expressed at par value. Data on subordinated debts issued by banks under technical forms other than securities and held in the portfolios of insurance companies are not available.

**Data sources:** total subordinated securities issued by banks: account matrix of the Bank of Italy; subordinated securities issued by banks in the portfolio of Italian insurance companies: ISVAP calculations on balance sheet data.

**Unsubordinated bonds and securities issued by insurance companies in banks' portfolio**

	In Italian banks' portfolio		Total issued by Italian insurance companies		Total unsubordinated bonds and securities in banks' portfolio	
	Dec 2002	Jun 2003	Dec 2002	Jun 2003	Dec 2002	Jun 2003
<i>units in Italy</i>	56,434	100,827	2,500,000	2,500,000	182,698,000	193,508,000

b7

This item measures the carrying amount of securities issued by Italian insurance companies in the portfolio of Italian banks, excluding ABS (senior, mezzanine and junior) and subordinated securities. The total issues are stated at their par values.

**Data sources:** account matrix of the Bank of Italy and ISVAP calculations based on balance sheet data.

**Unsubordinated bonds and securities issued by banks and subscribed to by insurance companies**

	Issued by Italian banks in insurance companies' portfolio		Total issued by Italian banks		Total unsubordinated bonds and securities in insurance companies' portfolio	
	Dec 2002	Jun 2003	Dec 2002	Jun 2003	Dec 2002	Jun 2003
<i>units in Italy</i>	22,422,150	22,135,088	323,193,855	334,304,765	67,593,960	71,305,701

b8

This item refers to the amount of (unsubordinated) bonds originating from banks and subscribed to by insurance companies. The data are presented at their carrying amount (the lower as between cost and market price for item C and market price for item D). This item refers to the par value of outstanding (unsubordinated) bonds issued by banks, stated at par value.

**Data sources:** total bonds issued by banks: account matrix of the Bank of Italy; bonds issued by banks and subscribed to by insurance companies: ISVAP calculations based on balance sheet data.

**Bank investments (excluding subordinated debt) towards insurance companies**

	Italian insurance companies		Total capital redemption policies issued		Total economic sectors	
	Dec 2002	Jun 2003	Dec 2002	Jun 2003	Dec 2002	Jun 2003
<i>units in Italy</i>	3,895,400	5,053,458	22,682,066	n.a.	1,047,155,040	1,069,722,393
<i>units outside Italy</i>	n.a.	n.a.	n.a.	n.a.	39,242,815	31,718,068

b9

This item includes the so-called "capital redemption policies" which, according to a detailed investigation conducted on a sample of banks (equal to 60% of the total), represent 90% of the investment operations conducted by Italian banks with Italian insurance companies. This item also indicates the total of cash credit (in its various technical forms) provided by Italian banks to Italian insurance companies.

**Data sources:** account matrix of the Bank of Italy

**Investments of insurance companies towards banks**

	Italian insurance companies		Total economic sectors	
	Dec 2002	Jun 2003	Dec 2002	Jun 2003
<i>units in Italy</i>				
deposits, interest-bearing bonds, deposit certificates, overdrawn c/a	7,582,974	6,965,006	594,384,814	604,478,552
other forms of funding	26,300	207,000	6,455,500	7,583,374
<i>units outside Italy</i>				
deposits, interest-bearing bonds, deposit certificates, overdrawn c/a	181,386	300,602	49,963,419	50,335,725
other forms of funding	3,310	3,310	832,807	2,026,941

b10

The data (which expresses the bank funding originating from insurance companies) is stated at the carrying amount. The sub-item "other forms of funding" does not include bonds.

**Data sources:** account matrix of the Bank of Italy

**Repo operations on securities with insurance companies: spot buying - forward selling**

	Italian insurance companies		Total economic sectors	
	Dec 2002	Jun 2003	Dec 2002	Jun 2003
<i>units in Italy</i>	0	0	15,380,850	16,774,473

b11

This item indicates the asset repos (as investments) for banks, whose counterparts are insurance companies. The data is stated at the transaction value (overall spot flow of funds for the operation)

**Data sources:** account matrix of the Bank of Italy

**Sureties forming part of fidelity insurance guarantees issued to banks**

	Italian banks	
	Dec 2002	Jun 2003
<i>value of exposure</i>	209,383	262,754

b13

The data refer to a survey conducted on suretyship insurance policies concluded with private parties concerning commitments to make payment (excluding legal obligations) with a maximum exposure of € 5 million or for single groups for amounts in excess of € 10 million. Generally speaking these are guarantees against bank loans.

**Data sources:** ISVAP sample-based survey

**Repo operations on securities with insurance companies: spot selling - forward buying**

	Italian insurance companies		Total economic sectors	
	Dec 2002	Jun 2003	Dec 2002	Jun 2003
<i>units in Italy</i>	2,533,238	1,706,613	95,259,001	85,163,266

b12

This item indicates the liability repos (for funding) of banks in which insurance companies figure as counterparts. The data is stated at the transaction value (overall spot flow of funds for the operation)

**Data sources:** account matrix of the Bank of Italy

**Sureties issued by banks in favour of insurance companies**

	Italian insurance companies		Total economic sectors	
	Dec 2002	Jun 2003	Dec 2002	Jun 2003
<i>units in Italy</i>	470,246	1,793,890	119,576,062	116,470,603
<i>units outside Italy</i>	6,280	5,923	11,358,401	9,660,779

b14

This item measures the total of guarantees issued (endorsement credit) given by banks in favour of Italian insurance companies.

**Data sources:** account matrix of the Bank of Italy and *Centrale dei rischi* (the central information office on credit risks).

\* the expression "units in Italy" refers to: for insurance companies, the enterprises set up under Italian law and their secondary offices in EU states by way of establishment; for banks, all the Italian banking institutes with the exclusion of foreign branches and subsidiaries, which are included, instead, under "units outside Italy"

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