

Chamber of Deputies
Sixth Standing Committee

**Problems raised
by financial derivatives**

Informal testimony by the Director General of the Bank of Italy
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Contents

<i>1. Introduction</i>	<i>1</i>
<i>2. Regulatory aspects</i>	<i>2</i>
<i>3. The role and risks of banks in derivatives business</i>	<i>7</i>
<i>4. The scale of derivatives business</i>	<i>9</i>
<i>5. The derivative transactions of local authorities</i>	<i>11</i>
<i>6. Supervisory action</i>	<i>15</i>
<i>7. Concluding remarks</i>	<i>18</i>
 <i>Tables</i>	

1. Introduction

Recent events and initiatives by the media have drawn the public's attention to one of the most complex and innovative branches of the financial market, that of derivative contracts.

Derivatives are not a new phenomenon; already in the first half of the nineteenth century, forms of derivative contract were traded on the Chicago Board of Trade.

The investment services industry is a rapidly developing sector; it has long been subject to a comprehensive set of rules, mostly of EU origin, and to close supervision in view of the potential risks that the instruments used may imply for intermediaries and investors, whether individual savers, firms or public bodies.

The Bank of Italy, which is entrusted by law with the task of safeguarding the stability of banks and the financial system as a whole, pays close attention, within its jurisdiction, to trading in derivatives by supervised entities, imposing specific prudential rules and performing targeted checks and investigations.

On behalf of the Bank of Italy, I would like to thank the Committee for its invitation to present this testimony, which follows that given on the same subject by the Managing Director for Banking and Financial Supervision in December 2004. The purpose is to provide a general update on the regulations and scope of activity, to define the spheres of operation and the tasks of the supervisory authorities, and to review the supervisory measures that the Bank has taken in recent years in respect of the risks that banks encounter in trading in derivatives.

I shall not discuss here the risks associated with US sub-prime mortgages, on which the Governor reported to the Interministerial Committee for Credit and Saving last September.

2. *Regulatory aspects*

2.1 Derivative financial instruments

Derivative instruments are contracts based on the performance of variables, which may be of different types (share prices, interest rates, exchange rates, commodity prices, tariffs, weather conditions, creditworthiness of one or more entities, and so on); indeed, the term “derivative” refers to the fact that the value of the instrument is derived from underlying variables.

Trading in derivatives entails not only the market risk associated with the performance of the underlying variables, but also the counterparty risk arising from possible breach of contract; the legal risk stemming from defects of form in the contract and violation of regulations; and the operational risk of losses from fraud, human error or poor procedures.

The risks associated with derivatives may be magnified for products with high financial leverage.

Derivatives are suitable for pursuing two orders of objectives. First and foremost is the hedging of risks, which is by far the most common reason: the derivative structure of the contract allows an opposite position to be taken against the one entailing the risk that is to be hedged. However, derivatives can also be used for speculative purposes, by betting on the performance of the underlying variables.

The range of derivative instruments is enormous; increasingly complex products are coming on to the market as the fruit of advanced financial engineering techniques;

they combine several basic derivatives (known as plain vanillas) and allow both the above objectives to be pursued simultaneously.

For these reasons, financial legislation merely provides definitions of derivative financial instruments based on lists of technical forms (e.g. swaps, futures, options) and of the possible underlyings.¹

A broad consensus developed a while ago that derivatives were useful for the smooth operation of the financial markets and were therefore admissible by law, irrespective of the objectives pursued. At the same time, because of the risks they entail for both intermediaries and investors, trading in these instruments is governed by a specific set of regulations and is subject to controls.

The regulatory framework hinges on the Consolidated Law on Banking of 1993 and the Consolidated Law on Finance of 1998. Both laws provide for the conduct of supervision – by the Bank of Italy for the aspects relating to the stability of the banks and by Consob for matters concerning the protection of investors.

Trading in derivatives does not require specific authorization by the Bank of Italy. If engaged in on behalf of clients, it comes under the category of investment services, which are usually authorized on request at the time of establishment, as an ordinary complement to the banking business.

2.2 The tasks of the Bank of Italy

The Bank of Italy has the task of monitoring the repercussions of derivative transactions on the stability of single intermediaries and the financial system as a whole.

Above all, this requires that the adequacy of banks' capital set against risks connected with derivative transactions be always guaranteed by rigorous compliance

¹ See Articles 1.2 and 1.3 of Legislative Decree 58/1998, as amended (Consolidated Law on Finance).

with the rules, recently strengthened by the New Basel Capital Accord (Basel II). The Bank of Italy has constantly reminded banks of the need to price and manage derivative instruments in a conservative way; banks that are not capable of correctly measuring the associated risks are expressly banned from trading in these instruments.

Taking on risks knowingly and managing them correctly requires adequate solutions for banks' organizational structure, corporate governance and internal control.

Following the comprehensive set of rules issued in 1998 on internal controls, last July the Bank of Italy made it obligatory for companies to establish a unit to verify compliance with the applicable laws and regulations. Prudential regulation on internal controls calls banks' attention to the high risks involved in transactions in complex financial products and, consequently, to the need for effective solutions to guard against them.

2.3 The link between the Bank of Italy and Consob

The law entrusts Consob with responsibility for protecting investors from the risks inherent in stipulating derivative contracts with an authorized intermediary. During the hearing on 30 October, the Director General of Consob illustrated the rules governing relations between intermediaries and investors and Consob's various powers and activities. I will not, therefore, speak about these aspects, except to emphasize the importance they can have for the Bank of Italy in relation to its responsibility for ensuring the stability of banks and the financial system.

As I mentioned earlier, the derivative transactions of banks in which the public is involved constitute an investment service. The most common case is that of dealing for

own account, which takes place when banks conclude derivative contracts directly with the client.²

From a legislative point of view the rules of conduct for intermediaries providing investment services are contained in the Consolidated Law on Finance and the implementing regulations laid down by Consob, which has sole responsibility for carrying out the necessary controls.³ These provisions are aimed at fostering investors' risk awareness and have become even more effective and well organized with the entry into force of the MiFID implementing regulations on 1 November 2007.⁴

The effectiveness of the provisions dealing with rules of conduct – in the same way as that of prudential supervisory rules – depends less on supervisory controls than on the proper working of intermediaries' organizational structures and internal control systems. The latter serves to protect investors and to minimize legal and reputational

² However, they are an investment service even when banks simply execute clients' orders, i.e. they receive and transmit the orders and the derivative contracts are concluded with third parties. Financial advice also constitutes an investment service now that the MiFID directive has entered into force.

³ Consequently, the transparency rules of Title VI of the Consolidated law on banking, the CICR (Interministerial Committee for Credit and Savings) decisions, and the Bank of Italy's implementing Instructions do not apply to relations between banks and clients in relation to investment services.

⁴ The provisions detail intermediaries' obligations, which include the requirement to make sure that investors are fully informed about transactions and to verify the suitability of any transactions in relation to the client.

In particular, the distinction is made between the *suitability* of transactions, which must be evaluated by the intermediary in the case of asset management and advisory services, and *appropriateness*, which is ascertained for the remaining investment services.

Prior to the implementation of MiFID, suitability rules could be disappplied if the client was a "qualified investor" with specific investment experience. Following the implementation of MiFID, exceptions to the rules of conduct have been made more detailed. In particular, a distinction is made between "professional clients", for which there is a partial disapplication of the rules of conduct, and "qualified counterparties", for which there is an almost total disapplication.

With specific reference to public bodies, if they are on a list contained in a decree issued by the Minister for the Economy and Finance, they are considered professional clients; in this case some of the regulations can be disappplied. Other public bodies, not included on this list, can apply to be considered professional clients if they meet certain requirements.

risks and hence intermediaries' stability. Accordingly, the law entrusts regulation in this field to both the Bank of Italy and Consob.

Before the recent provisions implementing MiFID, the Bank of Italy was solely responsible for regulating administrative organization and internal controls, while Consob regulated procedures, data flows and conflicts of interest with specific reference to investment services. Each authority was responsible for supervising the application of the rules it had issued, although they cooperated constantly on supervision and the exchange of information.

Following the implementation of MiFID, effective links between the Bank of Italy and Consob have become indispensable. The greater variety of services that intermediaries can provide to their clients and the complexity of the regulations governing rules of conduct make the proper working of intermediaries' organizational structures and internal control systems indispensable. This is so not only to guarantee that investors enjoy the high levels of protection provided for by law but also to forestall the greater risks that intermediaries are likely to encounter because of the greater complexity of the services they supply.

Parliament therefore established that organizational aspects impacting directly and specifically on the provision of investment services were to be governed by a regulation issued jointly by the Bank of Italy and Consob.

With shared regulatory powers, controls on compliance with the joint regulations are divided between the Bank of Italy and Consob on the basis of the principle of the prevalence of supervisory purpose.⁵ A memorandum of understanding, recently signed by the two authorities, establishes the coordination and cooperation arrangements.

⁵ With reference to investment services, besides its exclusive work in the areas of transparency and proper conduct, Consob concentrates its controls on: compliance; procedures, including internal controls, for the transparent and proper provision of services; and conflicts of interest. The Bank of Italy is responsible for supervising compliance with the provisions on: organizational structure, including the establishment of a compliance unit; business continuity; internal auditing; risk management; and the liability of top management.

The Bank of Italy retains its general competencies under the Consolidated Law on Banking as regards internal organization and control in banks and banking groups.

3. The role and risks of banks in derivatives business

3.1 The role

In their derivatives business banks adopt strategies and operate in ways that differ depending on their chosen corporate objectives.

Broadly speaking, it is possible to distinguish between banks that are active in the derivatives market to a limited extent and only for the purpose of hedging their risks, and banks that use derivatives and innovative products to expand and diversify their sources of revenue, partly as a result of the decline in earnings from traditional banking activities.

Banks conduct derivative transactions mainly with banking and financial counterparties. In recent years, however, there has been a marked increase in the derivatives activities of firms, local authorities and retail customers (collectively referred to as non-institutional customers). The conclusion of derivative contracts with these counterparties normally supplements the more traditional range of banking and financial services.

Structuring derivatives for customers requires banks to have mathematical and financial skills to “engineer” products answering to different needs. This activity is carried out by specialized intermediaries that design products for the banking groups to which they belong or on behalf of other banks.

The technical characteristics of derivatives offered to firms have evolved over time. The first generation of products provided instruments for the management of risks, designed to hedge financial results from the volatility of financial markets, by

predetermining borrowing costs and the purchase/selling prices of raw materials and finished products.

These instruments allowed firms to hedge economic results against financial risks but they did not allow them to benefit from favourable trends in market variables. In recent times this led to the development of products capable of hedging only risks linked to the occurrence of a limited number of negative scenarios for the firm, those deemed most likely to happen.

Recently, firms – and larger firms in particular – have begun calling for increasingly innovative derivative products that combine a speculative component with the hedging function. The high yields of these transactions have persuaded some intermediaries to extend their supply to smaller firms as well. These are complex products whose evaluation presupposes professional knowledge and which, against lower hedging costs or other financial benefits (i.e. payment of an upfront),⁶ expose firms to risks that are difficult to assess.

Generally speaking, retail customers purchase derivative products with the aim of hedging against interest rate risks arising from the loans they have received; they also use derivatives as investments, with a view to earning higher-than-average returns but with the consequent assumption of particularly high risks, which are not always fully recognized.

I shall have more to say later about trading in derivatives with local authorities as counterparties.

3.2 The risks

For the banking system as a whole, market risks stemming from trading in derivatives are modest. In fact the primary role of Italian banks in derivatives business

⁶ A sum of money paid by the intermediary to the counterparty of the contract, in order to restore the financial equilibrium of the transaction in cases of negative market value at the time the contract is drawn up.

is to intermediate between the positions held by residents and the international financial market, transferring a substantial part of the risk on to the balance sheets of leading foreign commercial and investment banks.

In December 2006 the capital absorbed by market risks, including those related to positions held in derivatives, was 4.4 per cent of banks' regulatory capital, down by 1.2 percentage points compared with the same month in 2005. All size categories of banks reported a similar result (major groups, cooperative banks and mutual banks).

However, the development of new types of contract has led to heightened counterparty risks for banks and the emergence of other less easily quantifiable risks, such as those of a legal and reputational nature, capable of impairing the relationship of trust with clients with possible serious consequences for the value of the company.

It follows that in order to forestall the potentially negative effects of the growth of derivatives markets, the sale of contracts must be aimed at suitably qualified persons and concluded subject to a high degree of transparency, a crucial element for guaranteeing the full correspondence of the products placed with counterparties' needs and risk profiles.

4. The scale of derivatives business

The Bank for International Settlements periodically releases statistics on the notional and market value of the derivatives business conducted by large international banks on the over-the-counter markets.

The volume of trading is expressed in terms of the "notional" value, which is the parameter used to calculate payment flows. The notional value is not an indicator of the risk exposure associated with derivatives. The effective risk exposure is only a small fraction of the notional value and depends on the features of the contracts (underlying asset, indexation mechanism and duration) and the characteristics of the market in

which the bank's transactions are handled (the expected volatility of the value of the underlying asset, the market liquidity and the credit rating of the counterparty).

The risk taken by market participants is given by the market value. This represents the potential loss (negative value) or gain (positive value) that the intermediary would realize if the contract were closed on the date of the observation. The BIS publishes "gross market value" equal to the sum of the positive and negative components in absolute value. This is the aggregate to which one must refer in making international comparisons.

The BIS statistics show rapid growth in the worldwide OTC business of banks in financial and credit derivatives in 2005 and 2006 (Table 1). Their outstanding notional value rose from €189 trillion at the end of 2004 to €315 trillion in December 2006, an increase of 66 per cent. Interest rate derivatives accounted for 70 per cent of this volume (€222 trillion). The fastest-growing segment was that of credit derivatives,⁷ whose notional value increased by 366 per cent over the period to €22 trillion.

Meanwhile, the world gross market value of derivatives increased by 7 per cent, from €6.9 trillion to €7.4 trillion. The smallness of this increase, by comparison with the soaring notional value, reflects the stability of the financial markets and the low volatility of prices.

Italian banks have expanded their derivatives business more slowly than the international markets overall (Table 2). The notional value increased by 16 per cent in 2005 and 2006, from €6.7 trillion to €7.8 trillion. For the Italian banking system too, the largest component was financial derivatives, with a notional value of €7.66 trillion at the end of 2006, while the notional value of credit derivatives was just €140 billion, though it had risen faster, by 44 per cent.

⁷ The BIS statistics cover only the most common type of credit derivatives, namely credit default swaps.

Between the end of 2004 and the end of 2006 the gross market value of the outstanding derivative contracts of Italian banks declined by 15 per cent to €180 billion, accounting for 2.5 per cent of the worldwide total (Table 3). More than half of this exposure was to non-residents.

By June 2007, including the consolidation of the foreign units of the Unicredito group, the notional value of Italian banks' financial and credit derivatives had reached €10 trillion and their gross market value €270 billion. As Governor Draghi noted in his recent address to the World Savings Day conference, the market value of the banks' derivatives exposure was €150 billion.

5. The derivative transactions of local authorities

5.1 The legal framework

As the Consob report has made clear, local authorities' transactions in derivatives, and more generally their access to the capital markets, are subject to specific legislation. I shall not describe the law in detail, but some of its most significant aspects are worth underscoring.

First of all, Law 448/2001 and the implementing decree issued by the Minister for the Economy and Finance (Decree 389/2003) specify and regulate the cases in which local authorities may conclude derivative contracts. In particular, the decree requires their borrowing in currencies other than the euro to be covered against exchange rate risk via exchange rate swaps and "bullet" bonds (those with redemption of the entire principal at maturity) to be accompanied, unless a special sinking fund is created, by debt amortization swaps.⁸

⁸ In an amortization swap, the local authority makes regular instalment payments (say, twice yearly) to a bank, against which the bank creates a fund invested in bonds. At the maturity of the bond issue, the bank pays the local authority an amount that is used to redeem its debt. The obligation to enter into this derivative contract, as an alternative to the creation of a sinking fund, corresponds to the need to make sure that the repayment of the loan not be charged entirely to the budget of the year in which the bonds all fall due.

The rules in force also allow local authorities to enter into a series of derivative contracts provided they are plain vanillas. Derivatives designed for debt restructuring are allowed only if they meet the following requirements: i) they must not postpone the original due date; ii) they must not entail upfront payments of more than 1 per cent of the notional value; and iii) they must not provide for an increase over time in the net present value of payments, in order to prevent the concentration of repayment near the final maturity.

In any event, derivative transactions can be entered into only in respect of liabilities actually due and only with intermediaries having an adequate rating.⁹

The Finance Law for 2007 requires advance notice to the Treasury Department of financial derivative transactions. This notification, which is a legal requisite for the validity of the contract, enables the Ministry to assess the transaction's compliance with the provisions of the law and, in case of violation, to inform the State Audit Office so that the latter can take the actions within its authority.¹⁰ Further, at aggregate level derivative transactions must be notified quarterly to the Ministry for the Economy and Finance, together with data on the net utilization of short-term bank credit, loans granted by entities outside to the public sector, bond issues and securitizations.¹¹

5.2 *The background*

In the first years of the new century Italian local government finance – previously based essentially on earmarked central government transfers and medium and long-term mostly fixed rate debt with Cassa Depositi e Prestiti – was radically transformed.

⁹ The circular of the Ministry for the Economy and Finance of 27 May 2004 specifies that an “adequate” rating means at least BBB/Baa2/BBB from, respectively, Standard & Poor's, Moody's and Fitch.

¹⁰ See Law 448/2001, Articles 41(2-*bis*) and 41(2-*ter*), introduced respectively by Law 296/2006, Articles 1(737) and 1(738).

¹¹ Ministerial Decree 389/2003, Article 1.

The curbing of expenditure by central government produced liquidity strains for local authorities. At the same time, administrative decentralization and the reform of Title V of the Constitution increased their financial autonomy.

In this context, rules were introduced whose purpose was to broaden the scope for independent financing by local authorities, by facilitating access to the financial markets. This altered the composition of these entities' liabilities substantially. Bonds, which in the mid-1990s had accounted for just 1 per cent of their total debt, rose to one third in 2006. Two thirds of these securities are placed abroad. Intermediaries emerged specializing in public sector and infrastructural finance.

The increasing complexity of local financial management highlighted the potential benefits of innovative financial instruments and resulted in significant growth in the use of derivatives, even by those local authorities that had never entered into such contracts.¹²

The market in local authority derivatives basically comprises several leading international investment banks, Cassa Depositi e Prestiti, the Italian subsidiary of a European bank, and a few specialized Italian intermediaries.

The largest transactions are generally undertaken by consortiums in which foreign intermediaries often play an important role. For instance, in recent large derivative transactions (involving Campania and Piedmont), no more than a third of the total notional value went to the leading Italian intermediary in this sector.

Local authorities' exposure in financial derivatives nearly doubled in the twelve months to December 2006, from €500 million to almost €1 billion, according to the Central Credit Register; and by August 2007 it had risen to €1,054 million (Table 4). This figure, equal to 2.9 per cent of these entities' total outstanding debt, is an

¹² As the State Audit Office noted in its 2007 report on the financial management of the regions, this included Piedmont, Veneto and Basilicata, which in 2006 entered into derivative contracts with a notional value of €2.4 billion.

underestimate, given that the larger authorities often turn to foreign intermediaries, for which data are not available.

5.3 The purpose of derivatives and the risks for the local authorities

Financial derivatives enable local authorities to meet some financial needs, such as debt restructuring through rescheduling and/or liability substitution,¹³ or the hedging of market risk, by adapting loan terms to the changing economic and financial situation. In this latter respect derivatives have enabled local authorities, even though their outstanding debt was very largely at fixed rates, to benefit from the fall in interest rates consequent on the convergence towards the single European currency.

In some cases the main purpose of derivative transactions was to generate additional liquidity, at least in the short term, essentially with the effect of raising additional finance. This can be done either by entering into contracts with negative market value, in respect of which the intermediary makes cash payments to the local authority in the form of upfront fees, or by debt restructuring transactions that alter the original amortization schedule, postponing the repayment of part of the principal.

Careful analysis of derivative contracts, which as noted was required by the Finance Law for 2007, is especially necessary for those derivatives that produce a financing effect, in that they increase the future burden of debt service. What is more, these liabilities are not recorded in local authority accounts or the public debt statistics. Local government finances become less transparent.

Another reason for concern is the practice of subsequent renegotiation of derivatives. In some cases this has been done by small local authorities seeking, when faced with existing negative-value contracts, to restructure the terms so as to spread current costs over time. Such operations increase the complexity of the instruments,

¹³ These measures lower the cost of debt or modify its maturity (for instance, some regions have repaid Cassa Depositi e Prestiti loans in advance and replaced them with bond issues).

obscure the structure of the costs and benefits and shift additional costs to future years. This could produce a snowball effect, with progressively increasing financial exposure.

The risks for these authorities are considerably greater where their derivative transactions are not supported by the assistance of professional advisors, capable of assessing the effective risks and benefits.

6. Supervisory action

6.1 Supervision of the financial system and derivatives

In performing its duty of safeguarding the stability of the banking system, the Bank of Italy has closely followed developments in the financial industry not only by regulation but also by supervisory action to heighten intermediaries' awareness of the risks in connection with business involving complex financial instruments and to foster consistency between organizational structure, control systems and risks.

The Bank's supervisory action bears on every type of risk to which intermediaries doing derivatives business are exposed.

First of all there are the financial risks associated with the derivatives business banks undertake in managing their own portfolios. In this area, checks are conducted within the framework of regular, general inspections. For intermediaries whose business is more sophisticated and complicated, where necessary, special sectoral inspections are conducted, focusing on the financial intermediation sector.

The Bank requires, and verifies, that in their derivatives business intermediaries' conduct is consistent with the norms of sound and prudent management.

The operational procedures that are considered virtuous include, for example, regular assessment of the creditworthiness of counterparties to derivative transactions, constant control of risk exposures, and monitoring of legal and reputational risks. Stress

testing should be used to set ceilings on exposures to customers (counterparty risk) and to check their consistency with the latter's risk profile.

The Bank of Italy also considers Consob's reports of possible dysfunctions that, by affecting relations with customers, may have repercussions for banks' sound and prudent management.

For the same reason, the Bank has intervened in respect of the financial dealings between banks and local authorities.

In 2002, in view of the restriction of the purpose of local authorities' borrowing to investment, the Bank required banks to make sure that local authorities' applications clearly specified the purpose of the loan, in order to avoid legal risks related to the validity of contracts.

For the same reason, in 2004 the intermediaries subject to the Bank's supervision were called upon to comply fully with the rules on derivative transactions with local authorities.

6.2 Supervisory action in 2004-05

Many of the episodes on which public opinion has recently focused, occurred in 2004-05; in the same period the Bank of Italy carried out checks to evaluate the exposure of Italian banks to legal and reputational risks connected with derivatives business.

The top managers of the largest banks – which accounted for the bulk of the transactions in derivatives with non-institutional counterparties – were repeatedly reminded of the need for marketing to be carried out in compliance with the applicable rules, for legal prescriptions to be matched by appropriately formalized internal rules and for the controls on the operations of sales networks to be strengthened. Supervisory

action in this period stimulated intermediaries' adoption of practices compatible with the principles of the MiFID directive.

In 2005 inspections were ordered at two of the main Italian banks that engaged in trading in derivatives with firms. In one case the checks found shortcomings in the control system and in the procedures for assessing counterparty risks. The bank's attention was also drawn to the frequent recourse made to alterations in the derivatives, which led to continuous deferment of customer payments and thus to growth in the value of the contracts.

In both cases, in response to requests made by Consob under Article 10.2 of the Consolidated Law on Finance, the checks also concerned aspects of the marketing of OTC derivatives to non-institutional customers.

Consob has been sent reports on irregularities found during the Bank's inspections in intermediaries' performance of investment services or in the conduct of financial salesmen.

6.3 Supervisory action from 2006 onwards

In view of the growing importance of derivatives and, more recently, of the possible repercussions of the latest strains in the financial markets on the solvency of intermediaries, the Bank of Italy has further intensified its monitoring activity.

Starting in 2006 targeted inspections have been carried out at three of the banking groups most active in the sector.

In the well-known case of Banca Italease, the serious shortcomings found in the bank's organizational structure and internal control system, together with the large losses incurred on its derivatives business, led the Bank of Italy to adopt particularly rigorous supervisory measures. Among other things it ordered a complete renewal of the

board of directors and the board of auditors, an immediate increase in capital to make good the losses incurred, and a ban on business in derivatives other than plain vanillas.

In the last few months an additional programme has been launched, with checks focused on business in derivatives. The on-site examinations, currently under way at four banking groups, also cover derivatives business with local authorities.

In August the Bank of Italy launched an inquiry into the derivatives business of the entire banking system. To this end the control bodies of the Italian banks have been asked to make a self-assessment of the adequacy of their organizational structures, operational processes, and systems for measuring and controlling risks associated with derivative products. They were also asked to examine the main types of products supplied and to indicate those that were the most complex and risky. Assessments will be possible once all the responses have been received, indicatively by the end of November.

The initiatives taken to protect banks' operations in the most innovative sectors include the supervisory provisions regarding compliance. The Bank of Italy will be required, in implementing the second pillar of Basel II, to carry out additional checks on the risks of incurring legal or administrative sanctions, major financial losses or reputational damage as a consequence of violating laws, regulations or self-regulatory provisions (known as the risk of non-compliance). The discussion with intermediaries will focus on the effectiveness and appropriateness of operational and organizational mechanisms that are also intended to protect against non-compliance risks.

7. Concluding remarks

Considering the size of the Italian banking system's capital base, the scale of the risks connected with transactions in derivatives is limited. Risks for the stability of the system as a whole are not discernible at present.

The capital adequacy rules, recently strengthened by the implementation of Basel 2, also augment the prudential defences against the risks associated with derivative instruments. Supervisory action, intensified by the new regulatory framework, aims to increase the effectiveness of intermediaries' risk valuation and management.

As regards bank-customer relations, more highly diversified mechanisms of investor protection have been introduced with the transposition of the MiFID directive. The conditions have been created for even closer cooperation between the Bank of Italy and Consob in order to ensure full compliance with the rules of conduct and complete monitoring of the risks assumed by intermediaries.

With specific reference to local government transactions in derivatives, there is a need for more attention by local authorities, greater operational transparency and more effective controls. In this sense, the measures to attain these objectives now under discussion by Parliament in its examination of the 2008 Finance Bill are to be judged positively. The Bank of Italy is ready to cooperate in designing the implementing provisions. On a general plane, a rationalization of the legislative framework is desirable in order to prevent circumvention of the rules.

In the altered market and legislative environment, the Bank of Italy will continue to keep a close watch on the evolution of banks' activity in derivatives, with the objective of ensuring the stability of the system while respecting banks' entrepreneurial autonomy.

Table 1

**Notional value and gross market value of
the global OTC derivatives market**
(amounts in billions of euros)

Risks / contracts	Notional value			Gross market value		
	Dec. '04	Dec. '06	% change	Dec. '04	Dec. '06	% change
Total derivative contracts	189,346	315,248	66	6,885	7,361	7
Total foreign exchange contracts	21,504	30,508	42	1,135	958	-16
<i>Forwards and forex swaps</i>	<i>10,977</i>	<i>15,055</i>	<i>37</i>	<i>472</i>	<i>355</i>	<i>-25</i>
<i>Currency swaps</i>	<i>6,037</i>	<i>8,179</i>	<i>35</i>	<i>547</i>	<i>455</i>	<i>-17</i>
<i>Options</i>	<i>4,490</i>	<i>7,273</i>	<i>62</i>	<i>116</i>	<i>149</i>	<i>28</i>
Total interest rate contracts	139,867	221,706	59	3,977	3,670	-8
<i>Forward rate agreements</i>	<i>9,390</i>	<i>14,191</i>	<i>51</i>	<i>16</i>	<i>24</i>	<i>46</i>
<i>Swaps</i>	<i>110,593</i>	<i>174,472</i>	<i>58</i>	<i>3,600</i>	<i>3,163</i>	<i>-12</i>
<i>Options</i>	<i>19,884</i>	<i>33,043</i>	<i>66</i>	<i>361</i>	<i>483</i>	<i>34</i>
Total equity-linked contracts	3,219	5,683	77	366	646	77
<i>Forwards and swaps</i>	<i>555</i>	<i>1,339</i>	<i>141</i>	<i>56</i>	<i>125</i>	<i>125</i>
<i>Options</i>	<i>2,664</i>	<i>4,344</i>	<i>63</i>	<i>310</i>	<i>522</i>	<i>68</i>
Total commodity contracts	1,059	5,268	397	124	506	308
<i>Gold</i>	<i>271</i>	<i>352</i>	<i>30</i>	<i>23</i>	<i>43</i>	<i>81</i>
<i>Other</i>	<i>789</i>	<i>4,916</i>	<i>523</i>	<i>101</i>	<i>464</i>	<i>361</i>
Total credit derivatives (CDS)	4,696	21,897	366	98	357	265
<i>Single-name instruments</i>	<i>3,757</i>	<i>14,339</i>	<i>282</i>	<i>82</i>	<i>219</i>	<i>167</i>
<i>Multi-name instruments</i>	<i>939</i>	<i>7,557</i>	<i>705</i>	<i>16</i>	<i>137</i>	<i>751</i>
Not allocated	19,000	30,186	59	1,184	1,222	3

Source: Bank for International Settlements.

Table 2

Financial and credit derivatives of banks and banking groups operating in Italy
(notional values in billions of euros)

	December 2004		December 2006		% change 2006 / 2004
	Amount	%	Amount	%	
Financial derivatives	6,622.7	100.0	7,658.1	100.0	15.6
<i>of which: residents</i>	<i>2,283.4</i>	<i>34.5</i>	<i>2,432.1</i>	<i>31.8</i>	<i>6.5</i>
<i>non-residents</i>	<i>4,339.3</i>	<i>65.5</i>	<i>5,226</i>	<i>68.2</i>	<i>20.4</i>
Credit derivatives	99.2	100.0	143.1	100.0	44.2
<i>of which: residents</i>	<i>6.1</i>	<i>6.1</i>	<i>11.4</i>	<i>8</i>	<i>88.3</i>
<i>non-residents</i>	<i>93.1</i>	<i>93.9</i>	<i>131.7</i>	<i>92</i>	<i>41.3</i>

Source: Bank of Italy – Supervisory accounting reports.

Table 3

Financial and credit derivatives of banks and banking groups operating in Italy
(market value in millions of euros)

	December 2004		December 2006	
	Amount	%	Amount	%
Financial derivatives				
Positive market value	106,477	100.0	86,368	100.0
Residents				
<i>General government</i>	627	0.6	1,751	2.0
<i>Banks, financial cos., insurance</i>	37,651	35.4	31,398	36.4
<i>Firms</i>	5,416	5.0	4,238	4.9
<i>Other</i>	1,578	1.5	1,133	1.3
Non-residents	61,205	57.5	47,848	55.4
Negative market value	105,234	100.0	92,663	100.00
Residents				
<i>General government</i>	338	0.3	431	0.5
<i>Banks, financial cos., insurance</i>	34,661	33.0	34,603	37.3
<i>Firms</i>	1,604	1.5	1,447	1.6
<i>Other</i>	2,194	2.1	5,926	6.4
Non-residents	66,437	63.1	50,256	54.2
Credit derivatives				
Positive market value	100	100.0	830	100.0
Residents				
<i>General government</i>	-	0.0	10	1.2
<i>Banks, financial cos., insurance</i>	1	1.0	691	83.2
Non-residents	99	99.0	129	15.6
Negative market value	138	100.0	148	100.0
Residents				
<i>Banks, financial cos., insurance</i>	3	2.2	1	0.7
Non-residents	135	97.8	147	99.3
Financial and credit derivatives				
Gross market value	211,949	100.0	180,009	100.0
Residents				
<i>General government</i>	965	0.5	2,192	1.2
<i>Banks, financial cos., insurance</i>	72,316	34.1	66,693	37.1
<i>Firms</i>	7,020	3.3	5,685	3.2
<i>Other</i>	3,772	1.8	7,059	3.9
Non-residents	127,876	60.3	98,380	54.6

Source: Bank of Italy – Supervisory accounting reports.

Table 4**Banks' exposure in financial derivatives to local authorities**
(amounts in millions of euros)

	Regions	Provinces	Municipalities	Other	Total
Dec. 2005	131	77	286	9	503
Dec. 2006	341	81	528	3	953
June 2007	245	131	688	3	1,067
Aug. 2007	278	99	674	3	1,054

Source: Bank of Italy – Central Credit Register.

NOTE. The Central Credit Register collects monthly reports on the exposure in OTC financial derivatives of banks operating in Italy, i.e. their claims against clients net of any offsetting arrangements (positive net market value for the bank). Unlike the supervisory accounting reports, the Register only records positions that show a positive net value for the bank. Contracts entered into by foreign subsidiaries of Italian banks, those of foreign branches of Italian banks with non-residents, and exposures below the €75,000 reporting threshold are not included.