



# Cassa di Compensazione e Garanzia

Trading in financial instruments may imply risks connected with the potential default by one of the counterparties with regard to the commitments undertaken for the payment or delivery of the instruments traded. Regardless of whether the default concerns a definitive unavailability (credit risk), or a temporary unavailability (liquidity risk), its management may lead to the settlement of the position at a price other than that of the contract executed (market risk).

*The market supervisory Authorities define guarantee systems intended to minimise the risks associated with trading of financial instruments*

In Italy, the Bank of Italy, in agreement with CONSOB, regulates the setting up and operation of the systems guaranteeing the successful outcome of operations on cash and derivatives financial instruments. The implementation and management of these systems may be delegated to parties more directly involved with the organisation of the markets.

The models of guarantee may be divided into two main categories according to whether they are based on:

- the management of guarantee funds financed with amounts received from fund participants;
- the operation of a central counterparty (CCP) which replaces individual counterparties in each trade and takes on their obligations.

Focusing its attention on the guarantee systems for relationships between intermediaries and market, the Italian model is based on the functioning of two mutualistic funds for the cash markets - the guaranteed settlement fund, set up by the Bank of Italy in agreement with CONSOB, and the contract guarantee fund, set up by Borsa Italiana - and on the operation of a CCP for the derivatives markets. The management of the funds guaranteeing cash market operations is entrusted to the Cassa di Compensazione e Garanzia (CC&G), which also acts as a central counterparty (clearing house) for the derivatives markets.

Surveillance of the CC&G - incorporated under law 1/1991 and set up as a limited company on 31 March 1992 - is performed by the Bank of Italy and CONSOB, which approve its Memorandum of Association, its by-laws and regulations and any subsequent amendment or addition to same. In the course of 2000, Borsa Italiana acquired a controlling interest in the share capital of CC&G, thus enhancing its presence in another significant link of the financial market value chain.

**CC&G FUNCTIONS AS REGARDS THE CASH MARKETS**

With reference to the Stock Exchange and the Nuovo Mercato, the tools for reducing risk are represented by two mutualistic funds covering contracts on shares, convertible bonds, warrants, covered warrants and closed-end mutual funds. The operational management of both funds is assigned to the CC&G, which is also responsible for handling applications on the part of intermediaries and collecting their payments to replenish the fund's financial resources.

- Guaranteed settlement fund: set up and regulated by the Bank of Italy, in agreement with CONSOB, to guarantee the successful outcome of clearing and settlement and to reduce the systemic risk. Apart from the contracts executed on the market, the guarantee of the fund also extends to those concluded externally, with the exception of offsets, *riporto* contracts

*The financial instruments covered by the guaranteed settlement fund and the contract guarantee fund are shares, convertible bonds, warrants, covered warrants and closed-end mutual funds traded on the Stock Exchange and the*

and blocks for settlement beyond three days or prices that vary more than 10% from the official prices recorded on the reference market. Since off-market trades are also covered by guarantee, not only the intermediaries admitted to trading on the Stock Exchange and Nuovo Mercato participate in the fund, but generally all those participating in the clearing and settlement service.

The quota of contribution to the fund is calculated on a monthly basis and is equal to 0.5% of the daily average value of the bilateral balances of operations on financial instruments covered by guarantee submitted by the participant to the clearing and settlement service during the last two months of operations.

The fund, and on its behalf the CC&G, intervenes at compensation level (*stanza di compensazione*) on the multilateral balances of the insolvent on the day in which such insolvency appears. The CC&G takes over the contractual positions of the counterparties of the insolvent guaranteeing cover for the securities and cash debit balances, using first of all the margins paid by the insolvent and taking over ownership of the financial instruments and liquid assets to the credit of the insolvent. When settlement has been closed, the CC&G excludes all operations not covered by guarantee, carries out all collection, payment, delivery and withdrawal operations resulting from the liquidation and sells on the market the assets that have come into its possession. Any actual loss (after deducting the margin paid by the insolvent) is then shared between all the fund participants in proportion to the bilateral balances submitted by each the previous month.

- Contract guarantee fund: set up and regulated by Borsa Italiana to guarantee the successful outcome of contracts and reduce the risk of the counterparty. Participation in the fund is mandatory for all parties admitted to trading on the Electronic Share Market, the Nuovo Mercato, the Electronic Covered Warrants Market and the Electronic traditional Options Market. The fund is made up of margins paid by participants according to the turnover on the instruments covered by the guarantee. The calculation is carried out on the first day of each month, based on the value of contracts entered into during the previous two months. The monthly adjustment of the margin takes place only in cases where the difference between the margin calculated for the month and that paid exceeds certain levels established by Borsa Italiana.

The fund guarantees the contracts with expiry dates subsequent to that on which the insolvency appears (in respect of which on the other hand the settlement guarantee fund intervenes). In the case of insolvency, the fund is utilised to cover any losses that counterparties of the insolvent incur to close the contractual positions originally opened. Following the intervention, the CC&G, as fund manager, covers the loss incurred and is able to claim back the losses from the insolvent. The fund intervenes by using first of all the margin paid by the insolvent and, if this is not sufficient, the margins paid by the other intermediaries in proportion to the percentage of the margin paid by each on the total amount of the fund. If the total of these margins is not sufficient, an additional contribution is requested from the intermediaries other than the insolvent.

*The combined action of the two funds, guaranteeing execution of the contracts at the original terms as regards price and quantity, eliminates the market risk and guarantees the integrity and stability of the market*

During 2000 the guarantee funds was never required to intervene, since no cases of insolvency occurred.

During 2000 a project was launched to extend the central counterparty model - presently in operation only as regards derivatives instruments - also to the cash markets.

The objective is to improve the current guarantee system eliminating the counterparty risk by introducing a body to replace the counterparties for each trade. The efficiency of the operational environment will derive benefit from this also due to the introduction of cross margining systems: the overall portfolio position will be set up for each participant (cash and derivatives) and the margins will be calculated based on the net exposure. The cross margining will also make it possible to implement a new risk management model, focusing on the riskiness of the overall portfolio of the participant and in particular on the correlation existing between the various financial instruments included. The new model will also streamline the procedures for contribution to the guarantee system on the part of intermediaries, introducing references to the historical volatility of financial instruments and margins in proportion to the volume of daily operations.

*A project is being implemented to introduce a central counterparty also for the cash markets*

## **CC&G FUNCTIONS IN THE DERIVATIVES MARKETS**

As regards the derivatives markets, IDEM and MIF, the CC&G mediates between buyer and seller taking on their positions as its own; it thus becomes the counterparty for all trades carried out on the market, role typical of a clearing house, eliminating in this way the counterparty risk.

All intermediaries admitted to trading on the IDEM and on the MIF are required to participate - directly or indirectly - in the CC&G and to pay margins to fund its financial capacity in order to meet any situations of insolvency.

To protect and guarantee the integrity of the market, the CC&G manages the risk by using a guarantee system based on the payment of margins calculated according to the TIMS (Theoretical Intermarket Margin System) method. The TIMS requires margins to be

calculated on all positions relating to the same underlying product and groups the risk relating to products statistically correlated into an integrated portfolio. All the positions are recalculated each day based on the trend in market prices (marking-to-market) and in the event of high daily fluctuations, the CC&G may request margins during the day from the entire market or from individual participants to cover the increased risk.

The CC&G constantly monitors the financial integrity of its participants paying special attention to shareholders' equity, in order to be in a position to promptly set in motion corrective actions with a view to restoring their solvency. The CC&G may also request at any time all the information necessary to ascertain whether the participant still has the requisites for participation.

The participants are classed as clearing members, in turn distinguished between general and individual, and non-clearing members.

- General clearing members become counterparties of the CC&G for operations concluded for own account, for customer account and for operations concluded by non-clearing members that have appointed them to manage their own contractual positions and those of their customers.
- Individual clearing members become counterparties of the CC&G for the management of their own contractual positions and those of their customers.
- Non-clearing members become counterparties of the general participants appointed by them to manage their own contractual positions and those of their customers.

At the end of 2000, there were 134 CC&G participants (142 in 1999), divided into 83 clearing members (39 general and 44 individual) and 51 non-clearing members. Compared to 1999, the percentage weight of the number of non-clearing members has increased from 34.5% to 38.1%, while the clearing members have gone down from 65.5% in 1999 to 61.9% in 2000 (table 9).

**TABLE 9 - CASSA DI COMPENSAZIONE E GARANZIA: MEMBERSHIP**

Type of membership	Type of participant	1999		2000	
		number	% tot	number	% tot
<b>Clearing</b>	<b>General</b>	<b>37</b>	<b>26.1%</b>	<b>39</b>	<b>29.1%</b>
	Italian Banks	36	25.4%	37	27.6%
	EU Banks	1	0.7%	1	0.7%
	Italian SIMs	-	-	1	0.7%
<b>Clearing</b>	<b>Individual</b>	<b>56</b>	<b>39.4%</b>	<b>44</b>	<b>32.8%</b>
	Italian Banks	38	26.8%	27	20.1%
	EU investment companies	1	0.7%	1	0.7%
	Italian SIMs	17	12%	16	11.9%
<b>Non-clearing</b>		<b>49</b>	<b>34.5%</b>	<b>51</b>	<b>38.1%</b>
	Italian Stockbrokers	13	9.2%	10	7.5%
	Italian Banks	7	4.9%	6	4.5%
	EU Banks	-	-	1	0.7%
	EU investment companies	8	5.6%	10	7.5%
	Italian SIMs	21	14.8%	24	17.9%
<b>Total</b>		<b>142</b>		<b>134</b>	