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# TECHNICAL NOTE ON FINANCIAL RISK MANAGEMENT AND SUPERVISION OF CASSA DI COMPENSAZIONE E GARANZIA S.P.A.

This Technical Note on Financial Risk Management and Supervision of Cassa Di Compensazione e Garanzia S.P.A. on Italy was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed in March 2013. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of Italy or the Executive Board of the IMF.

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## **ITALY**

FINANCIAL SECTOR ASSESSMENT PROGRAM

March 2013

## **TECHNICAL NOTE**

FINANCIAL RISK MANAGEMENT AND SUPERVISION OF CASSA DI COMPENSAZIONE E GARANZIA S.P.A. (CC&G)

Prepared By
Monetary and Capital Markets
Department

This Technical Note was prepared by IMF staff in the context of the Financial Sector Assessment Program in Italy. It contains technical analysis and detailed information underpinning the FSAP's findings and recommendations. Further information on the FSAP can be found at:

http://www.imf.org/external/np/fsap/fssa.aspx.

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#### **Glossary**

AGREX Italian Agricultural Futures Market

BDI Banca d'Italia

BTP Italian Treasury Bond

BrokerTec ICAP's MTF for European fixed income markets
CLFI Consolidated Law on Financial Intermediation

CC&G Cassa di Compensazione e Garanzia (the Italian CCP)

CLS Continuous Linked Settlement

Consob Commissione Nazionale per le Società e la Borsa CPSS Committee on Payment and Settlement Systems

CSD Central Securities Depository
DVP Delivery versus payment
EBA European Banking Authority
ECB European Central Bank

EMIR European Market Infrastructure Regulation

ESCB European System of Central Banks

ESMA European Securities and Markets Authority

EU European Union

FMI Financial market infrastructure
IDEM Italian Derivative Equity Market
IDEX Italian Power Derivatives Markey

IOSCO International Organization of Securities Commissions

MIC Italian interbank collateralized deposits market

MIV Italian Market for Investment Vehicles
MOT Italian Government Bond Retail Market

MoU Memorandum of understanding
MTA Mercato Telematico Azionario
MTF Multilateral Trading Facilities

MTS Mercato Telematico dei Titoli di Stato

OTC Over the counter

PFMIs CPSS/IOSCO Principles for FMIs

TIMS The Options Clearing Corporation's theoretical Intermarket Margining System

methodology

#### **EXECUTIVE SUMMARY<sup>1</sup>**

Cassa di Compensazione e Garanzia (CC&G), the Italian central counterparty (CCP), is systemically important for the Italian market, and through the link with the French CCP, it is also relevant in terms of cross-border financial stability. CC&G is the only CCP that clears the cash and derivatives markets operated by Borsa Italiana and it shares the clearing activities of electronically traded Italian government securities operations (cash and repos) with the French CCP, LCH Clearnet SA. In terms of value, CC&G's major activity is the clearing of Italian government bonds mostly for financial institutions based in Italy. The Italian bond market is indeed deep and sophisticated, the third largest in the world after the USA and Japan's ones. CC&G does not clear OTC derivatives, does not offer clearing services in other jurisdictions than the Italian one, and only clears euro trades; however, through the link with LCH Clearnet SA, a substantial amount of cross-border transactions is handled and large net credit exposures have built between both CCPs (the latter have decreased in the course of the last six months).

CC&G, together with LCH Clearnet SA, has played an important role in maintaining access to the Italian bond market in times of crisis but the margins changes during the November 2011 crisis produced pro-cyclical effects. The share of centrally cleared transactions, in particular in the repo market, has increased markedly since 2008, owing to the growing risk aversion in the recent years. Indeed, the nature of CCPs, offering access to parties in different countries, minimizing counterparty risk and providing anonymity has made them not only resilient during crisis times, but also the preferred and, in some cases, the only available means of funding. Owing in part to the increased use of CC&G and LCH Clearnet SA, activity on the Italian bond market continued even in periods of high risk aversion as in 2011, when Italy suffered from the euro zone's sovereign debt crisis. However, the November 2011 substantial and abrupt increase in LCH Clearnet SA's margins that CC&G consistently followed had a negative pro-cyclical effect, with a further widening of the BTP-Bund spread and liquidity strains for participants of both CCPs. After that, at the authorities' joint request, both CCPs defined a shared methodology to make the impact of variations in margin requirements for the Italian bond market more gradual and less pro-cyclical.

The assessment was conducted in the middle of a transitional period. The current national regulatory and supervisory framework is being replaced by the European Regulation on OTC derivatives, central counterparties and trade repositories (EMIR). The Regulation is setting harmonized stringent requirements on European CCPs, in line with the CPSS/IOSCO Principles for financial market infrastructure (PFMIs) requirements. This is a significant improvement compared to the previous situation when CCPs were regulated and supervised at the national level. CC&G has until September 2013 to comply with EMIR rules and apply for the CCP authorization under the EMIR framework. The FSAP mission was in the field during this transitional period and took into account the on-going changes to comply with the new European rules. The FSAP mission has

<sup>&</sup>lt;sup>1</sup> This note was prepared by Christine Sampic, consultant for the IMF's Monetary and Capital Markets Department, in the context of the 2013 Italy FSAP.

assessed CC&G's financial risk management and its current supervisory arrangements using the relevant principles of the PFMIs as a reference. The Italy FSAP is one of the first to use the new standards, which are more stringent and detailed than the previous ones, automatically bringing additional recommendations. Most of them are expected to be addressed in the context of CC&G's authorization under the EMIR framework.

**Overall, CC&G benefits from a robust financial risk management framework.** The CCP monitors clearing members' positions in real time. Initial margins are called on a daily basis to cover the liquidation costs that CC&G would incur if it were forced to close the open positions in the event of a member's default. If the uncovered exposures vis-à-vis CC&G, stemming from large variations of prices and/or net positions, overshoot pre-set thresholds, intraday margins are collected. Margin algorithms are based on prudent confidence levels, holding periods and look back periods. CC&G accepts euro cash or highly liquid safe collateral as margin payments. In addition, default funds are constituted by asset classes on prudent stress test scenarios and contributions are almost exclusively in euro cash. Finally, CC&G may rely on its own funds that were substantially increased in 2012. The total resources cover at least the three highest credit exposures to clearing members and immediate resources are available to withstand the default of the participant with the largest exposure, as well as its affiliates. CC&G has access to intraday credit at the central bank and, in case of crisis and based on a Governing Council decision, can also access the central bank overnight credit facility using securities deposited as collateral according to the Eurosystem rules.

CC&G's financial risk management framework is being improved further to comply with EMIR requirements, which in turn are mostly compliant with the PFMIs. The main changes that CC&G needs to implement include higher "skin in the game" resources, the introduction of concentration limits on collateral, the reform of its liquidity management and of its investment policy, the introduction of individual client account segregation, an enhanced stress-testing of the default of participants, and an improved risk management for the link with the French CCP. The latter is essential to maintain the link, which is of particular relevance for Italian banks. In addition, to be fully compliant with the relevant Principles, it should formalize its current commitment to maintain financial resources sufficient to cover at least the default of the two participants and their affiliates that would potentially cause the largest exposures under extreme but plausible market conditions and explicit the rules to address potentially uncovered credit losses and liquidity shortfalls.

The Italian supervisory framework is robust and in line with the PFMIs. The Italian law clearly identifies the respective responsibilities of the authorities: the supervision of CCPs is carried out by Banca d'Italia (BDI) as regards stability and systemic risk containment, and Commissione Nazionale per le Società e la Borsa (Consob), as regards transparency and investor protection. BDI and Consob exercise close and continuous supervision over CC&G. The Italian law provides them with extensive regulatory, supervisory and enforcement powers. They gather comprehensive information on a periodic and ongoing basis in order to monitor relevant risks. Italian authorities assess the CCP against the CPSS-IOSCO standards and regularly undertake on-site inspections. They engage in a dialogue with the CCP and may require it to adopt specific measures to ensure the secure functioning of the clearing services. In particular, BDI, in agreement with Consob, may at any time require the CCP to increase its capital and financial resources. In case of necessity and as a matter of

urgency, BDI shall adopt appropriate measures, including its acting in the place of the managers of the CCP. Italian authorities cooperate between them and with foreign authorities.

The current supervisory framework is expected to be mainly confirmed when implementing the new European legislation and a supervisory college will be created. A new law is expected to replace the current national legal framework by making reference to EMIR, which as a regulation, directly applies in all member states. It should also clarify which are the competent authorities for each function of the regulation: it is expected to mainly confirm the current distribution of responsibilities between BDI and Consob and designate Consob as the entry point for European authorities. The future law is also expected to grant BDI, in agreement with Consob, the right to issue additional requirements on the CCP and require both authorities to formalize their cooperation arrangements. In addition, a supervisory college will have to be created; it is expected to be chaired by BDI and, pursuant to the EMIR provisions, it will consist not only of the competent authorities supervising CC&G but also of the European supervisors of the entities on which the operations of CC&G might have an impact, namely selected clearing members, trading venues, interoperable CCPs and central securities depositories.

For the sake of financial stability, the Fund also strongly suggests to go beyond current legal provisions on CCP's insolvency and to develop contingency plans to deal with a potential failure of CC&G as soon as the outcome of the ongoing discussions on this issue at the international and European level is available. This will facilitate the authorities' intervention in the event of a crisis, and ultimately avoid a spillover effect. In particular, the authorities should identify in advance what resolution arrangements will apply to the CCP and in what manner. These would either allow the critical services of the CCP to be sustained or for the CCP's winding down in an orderly manner, which is essential due to the systemically importance of CC&G. This crucial issue for financial stability is not a requirement under the PFMIs, and international discussions are still ongoing to define appropriate ways to deal with recovery and resolution of financial market infrastructures: Italian authorities intend to act according to their outcome and the related European stance.

Table 1. Italy FSAP: Main Recommendations and Suggestions on CC&G's Financial Risk Management and Supervision

	Financial	
Danner dation and Fostalin Danner the for two laws at the		Timeframe <sup>2</sup>
Recommendations and Entities Responsible for Implementation	Stability Relevance	і ітеттате
CC9:C/- financial viels management	Relevance	
CC&G's financial risk management	11:1-	
As required by EMIR, <sup>3</sup> CC&G's current and future exposures to the linked CCP	High	Immediate
should be fully covered, consistently with the "Guidelines for Interoperability"		
adopted by ESMA on March 15, 2013 (CC&G).	111	T 1' .
As required by EMIR, the amount of CC&G's own resources to be used in the	High	Immediate
default waterfall will need to be increased and distributed in a proportionate way		
across markets (CC&G)	111 1	
As required by EMIR, the changes in the investment policy should be completed	High	Immediate
(CC&G)		
As required by EMIR, the liquidity risk management framework should be finalized	High	Immediate
and implemented (CC&G)		
As required by EMIR, concentration limits on collateral should be introduced	High	Immediate
(CC&G)		
As required by EMIR, stress-testing the default of participants has to be further	High	Immediate
enhanced (CC&G)		
Explicit rules and procedures to address potentially uncovered credit losses and	High	Near Term
liquidity shortfalls should be established in relation with the future contingency		
arrangements (CC&G in cooperation with authorities)		
For the sake of transparency, the existing arrangements to cover at least the	Medium	Immediate
default of the two participants and their affiliates that would potentially cause the		
largest exposures under extreme but plausible market conditions should be		
reflected in the CCP rules (CC&G)		
CC&G rules should clarify that the liquidity risk generated by the default of at least	Medium	Immediate
the two clearing members <i>and their affiliates</i> to which it has the highest exposures		
is taken into account when measuring liquidity needs (CC&G)		
The default simulation exercises should involve participants and relevant	Medium	Immediate
authorities (CC&G)		
CC&G's supervision	11111	NI ·
It is strongly suggested to develop contingency plans to deal with a potential	High	Near term
failure of CC&G when the outcome of the ongoing discussions on this issue at the		
international and European level is available (BDI and Consob)		
Additional Suggestions and Entities Responsible for Implementation	Relevance	Timeframe
Additional staff resources may be needed for CC&G's supervision (Consob)	Medium	Near Term
Italian authorities' websites could be complemented with their supervisory policy	Low	Near Term
regarding CC&G (BDI and Consob)		

 $<sup>^{2}</sup>$  "Immediate" is within one year; "near-term" is one to three years; "medium-term" is three to five years.

 $<sup>^{3}</sup>$  This flags that the recommendation is expected to be addressed in the context of CC&G's authorization under the EMIR framework, which is foreseen by September 2013.

#### INTRODUCTION

- 1. CCPs should be financially sound, subject to prudent risk management procedures and be effectively regulated, overseen,<sup>4</sup> and supervised. Central clearing of financial instruments generally reduces systemic risk since it reallocates credit risks to the CCP whose dedicated role it is to manage those risks in a robust and transparent manner. However, CCPs concentrate risks and, if not properly managed, they can be sources of financial shocks, such as liquidity dislocations and credit losses, or a major channel through which shocks are transmitted across domestic and international financial markets.
- 2. CC&G, the Italian CCP, is systemically important for the Italian market, as it clears all the cash and derivatives markets operated by Borsa Italiana and part of the Italian government securities operations (but no OTC derivatives). Its coverage is domestic, even though, as a subsidiary of Borsa Italiana, CC&G is part of the London Stock Exchange Group. The activity of CC&G, originally limited to listed derivative financial instruments, now also extends to the share market, where the interposition of a central counterparty is compulsory, and to the markets for Italian government securities, where it is optional, both for outright operation and repos. In terms of value, CC&G's major activity is currently the clearing of Italian government bonds mostly for financial institutions based in Italy. The Italian bond market is indeed deep and sophisticated, the third largest in the world after the USA and Japan's ones. Both resident and non-resident institutions may become members of CC&G, however, currently most clearing members are Italian financial institutions. As far as cash (outright) securities transactions cleared in the Euro zone are concerned, it ranks after EuroCCP in the Netherlands (Euro 6,142 billion), LCH Clearnet SA in France (Euro 5,960 billion) and Eurex Clearing in Germany (Euro 3,253 billion). Taking into account the repos clearing activity, CC&G ranks third, after LCH Clearnet SA and Eurex.
- 3. Through the link with the French CCP, CC&G has also a cross-border systemic importance. Traders of government securities on MTS (Mercato Telematico dei Titoli di Stato, the wholesale screen-based market for government securities), EuroMTS and BrokerTec may sign up for central counterparty service becoming member (direct or indirect) either of CC&G or the French central counterparty, LCH Clearnet SA. CC&G does not offer clearing services in other jurisdictions than the Italian one; however, through the link with LCH Clearnet SA, a substantial amount of cross-border transactions is handled<sup>6</sup> and large credit exposures have built between both CCPs (the latter have decreased in the course of the last six months.<sup>7</sup>

<sup>6</sup> The link is used when both counterparts are not clearing through the same CCP.

<sup>&</sup>lt;sup>4</sup> As defined in the CPSS report on "Central Bank Oversight of payment and Settlement Systems" Bank for International Settlements, Basel, 2005, "oversight of payment and settlement systems is a central bank function whereby the objectives of safety and efficiency are promoted by monitoring existing and planned systems, assessing them against these objectives and, where necessary, inducing change."

<sup>&</sup>lt;sup>5</sup> Source: ECB website.

<sup>&</sup>lt;sup>7</sup> Appendix I provides a more detailed description of CC&G, the markets it serves, the link with LCH Clearnet SA, as well as its legal and regulatory framework.

- 4. The current legal, regulatory, and supervisory framework is being replaced by the European legislation on OTC derivatives, central counterparties and trade repositories (EMIR of July 4, 2012). EMIR implementing Regulatory Technical Standards developed by the European Securities and Markets Authority (ESMA) and the European Banking Authority (EBA) and issued by the European Commission as Delegated Regulations have become applicable in Europe since March 15, 2013. A draft law is expected to be presented to the new Parliament. The new law will replace the current national legal framework by making reference to EMIR, which as a Regulation, directly applies in all member states. It will also define the competent authorities for each function of the Regulation. The CCP has until September 2013 to comply with EMIR and Delegated Regulation's provisions and apply for the CCP authorization under the new framework. The FSAP mission was in the field during the transitional period and took into account the on-going changes needed to comply with the new European rules, which, in turn, are deemed to comply with the PFMIs.
- 5. The FSAP mission has assessed CC&G's financial risk management and its current supervisory and oversight arrangements using the relevant principles of the PFMIs as a reference. The Committee on Payment and Settlement Systems (CPSS) and the International Organization of Securities Commissions (IOSCO) reviewed the existing sets of standards for FMIs and replaced them by one new set of Principles for Financial Market Infrastructures (PFMIs) that was published in April 2012. The Fund's board has decided that the new Principles will be used as benchmarks for FSAPs, starting on January 2013, since CPSS and IOSCO members have committed to endorse them in their legal and regulatory framework by the end of 2012. The Italy FSAP is one of the first to use the new standards, which are more stringent and detailed than the previous ones, automatically bringing additional recommendations. Most of them are expected to be addressed in the context of CC&G's authorization under the EMIR framework.
- **6.** The assessment's outcome is not a detailed assessment report, but rather a technical **note** that includes (i) a discussion on the robustness of financial risk management arrangements by CC&G based on the corresponding principles of the PFMIs;<sup>11</sup> and (ii) an evaluation of current supervisory and oversight arrangements for CC&G, based on the five responsibilities of central

<sup>9</sup> This note was prepared by Christine Sampic, Expert for the IMF's Monetary and Capital Markets Department, for the 2013 Italy FSAP. Her analysis was based on the authorities' answers to the Fund's questionnaire, background documentation, as well as meetings with the relevant authorities (BDI, Consob) and the financial industry (Borsa Italiana, CC&G, MTS, banks and securities firms associations—ABI and ASSOSIM, Unicredit, Intesa San Paolo and Monte Paschi di Siena as CC&G's largest clearing members).

 $<sup>^{8}</sup>$  More details on EMIR can be found in Appendix II.

<sup>&</sup>lt;sup>10</sup> The new single set of principles promotes greater consistency in the oversight and regulation of FMIs. It reflects lessons drawn from the recent financial crisis, as well as experience of the more normal operation of such infrastructures since the previous standards were adopted. Compared with the previous standards, the new principles introduce more demanding requirements for participant default arrangements, the management of liquidity risk, operational risk and risks arising from links and interdependencies. In addition, the principles address some issues not fully covered by previous standards, such as segregation and portability, tiered participation and general business risk. The responsibilities of central banks, market regulators and other relevant authorities for FMIs are described in detail.

<sup>&</sup>lt;sup>11</sup> See Appendix III for the list of the Principles used as a reference in this note.

banks, market regulators, and other relevant authorities for financial market infrastructures included in the PFMIs. Whenever possible, EMIR requirements have been taken into account.

#### CC&G'S FINANCIAL RISK MANAGEMENT

#### A. Overview of CC&G Financial Risk Management Framework<sup>12</sup>

- 7. Overall, CC&G benefits from a robust financial risk management framework. The latter is based on financial requirements for clearing members, initial and variation margins, default funds and CC&G's own funds. CC&G monitors clearing members' positions in real time. Initial margins are called on a daily basis to cover the liquidation costs that CC&G would incur if it were forced to close the open positions in the event of a member's default. If the uncovered exposures vis-à-vis CC&G, stemming from large variations of prices and/or net positions, overshoot pre-set thresholds, intraday margins are collected. Initial margin parameters are determined by margin algorithms based on prudent confidence levels, holding periods and look back periods. CC&G accepts euro cash or highly liquid safe collateral as margin payments. In addition, default funds are constituted by asset classes on prudent stress test scenarios and contributions are mainly in euro cash. Finally, CC&G may rely on its own funds that were substantially increased in 2012. The amount of each default fund is sufficient to cover at least the three highest credit exposures to clearing members. The maximum exposure of non-defaulting clearing members is limited to their contributions to the relevant default fund and CC&G has no right to ask for further contributions. CC&G has access to the intraday central bank credit and in case of crisis and based on a Governing Council decision can access also the overnight central bank credit using securities deposited as collateral according to the Eurosystem rules.
- 8. CC&G, including its link with LCH Clearnet SA, has played an important role in reducing counterparty risk and in maintaining access to the Italian bond market in times of crisis, but the margins changes during the November 2011 crisis produced pro-cyclical effects. The share of centrally cleared transactions, in particular in the repo market, has increased markedly since the beginning of the crisis, owing to the growing risk aversion in the recent years (to more than 96 percent for MTS traded repos in January 2013). Indeed, the nature of CCPs, offering access to parties in different countries (through the link with LCH Clearnet SA in the case of CC&G), minimizing counterparty risk and providing anonymity has made them not only resilient during crisis times, but also the preferred and, in some cases, the only available means of funding. Owing in part to the increased use of both CCPs, activity on the Italian bond market continued even in periods of high risk aversion as in 2011, when Italy suffered from euro zone's sovereign debt crisis, with government yields coming under intense pressure. However, the November 2011substantial and

 $<sup>^{\</sup>rm 12}$  The financial risk management framework is described in Appendix IV.

<sup>&</sup>lt;sup>13</sup> MTS trading decrease by less than 50 percent in November and December 2011 compared to the four previous months, and was below the lows registered at the end of 2008.

abrupt increase in LCH Clearnet SA's margins that CC&G consistently followed had a negative procyclical effect, with a further widening of the BTP-Bund spread and liquidity strains for both CCPs' participants.<sup>14</sup>

#### B. Main Issues in Relation with CC&G's Financial Risk Management

CC&G's financial risk management framework is being improved further to comply with EMIR requirements, which in turn are mostly compliant with the PFMIs. EMIR is a key part of the European current reforms to strengthen the resilience of the financial markets and contribute to mitigate the risk of vicious circles of market instability and fragmentation observed during the crisis. The growing preference for CCP cleared transactions increases the relative importance of CCPs' risk management practices. The new Regulation, which is directly applicable in all member states, <sup>16</sup> is setting harmonized stringent requirements on European CCPs, in line with the PFMIs requirements. This is a significant improvement compared to the previous situation when CCPs were regulated and supervised at the national level. The Regulation itself (EMIR) and its implementing rules (Commission Delegated Regulations) are quite detailed and prescriptive. The CCP has until September 2013 to comply with EMIR and ESMA rules and apply for the CCP authorization under the EMIR framework. The main changes needed for CC&G to comply with EMIR include measures to mitigate pro-cyclicality, higher "skin in the game" resources, 17 the introduction of concentration limits on collateral, the reform of its investment policy and of its liquidity management, the introduction of individual client account segregation, and an improved risk management for the link with the French CCP. In addition, to be fully compliant with the PFMIs relevant Principles, it should formalize its commitment to maintain financial resources sufficient to cover at least the default of the two participants and their affiliates that would potentially cause the largest exposures under extreme but plausible market conditions, on top of what is required by EMIR (i.e., coverage of the default of, at least, the two participants that would potentially cause the largest exposures under extreme but plausible market conditions, but not their affiliates). CC&G should also explicit the rules to address potentially uncovered credit losses and liquidity shortfalls.

<sup>&</sup>lt;sup>14</sup> In November 2011, LCH Clearnet SA raised its requirements against positions in Italian government securities substantially (500 basis points on 7–10 year maturities) following the widening of spreads between Italian government paper and European benchmark securities that reached 550 basis points. CC&G had to raise its own margin requirements to maintain the connection with the French CCP. The increase was notified to the markets and went into effect at the opening of the trading day on November 9; the same day CC&G requested the posting of intraday margins about 12 times greater than the average for the other months of 2011. Source: April 2012 BDI Financial Stability Report.

<sup>&</sup>lt;sup>15</sup> More details on EMIR can be found in Appendix II.

<sup>&</sup>lt;sup>16</sup> As with any other EU Regulation, their provisions will be directly applicable (i.e., legally binding in all member states without implementation into national law) from the day of entry into force.

<sup>&</sup>lt;sup>17</sup> "Skin in the game" resources are CC&G's own resources to be used in the default waterfall.

- As far as margins are concerned, the main issue is to limit pro-cyclicality effects, which 10. has already been addressed to a large extent. 18 The PFMIs require that to the extent practicable and prudent, a CCP should adopt forward-looking and relatively stable and conservative margin requirements that are specifically designed to limit the need for destabilizing, pro-cyclical changes. Selective increases in margin requirements in response to deteriorating conditions in the market may indeed trigger a vicious circle, especially if they come as a surprise for market participants, as this was the case in November 2011. Therefore, after the November 2011 event, at the authorities' joint request, both CC&G and LCH Clearnet SA had to define a shared methodology to make the impact of variations in margin requirements for financial instruments cleared through the link more gradual and less pro-cyclical (see the Sovereign Risk Management Framework in Appendix IV). As for ESMA rules, they prescribe to avoid disruptive or big step changes in margin requirements and to establish transparent and predictable procedures for adjusting margin requirements in response to changing market conditions. In doing so, it requires the CCP to employ at least one of the following options: (i) applying a margin buffer at least equal to 25 percent of the calculated margins; (ii) assigning at least 25 percent weight to stressed observations in the look-back period; (iii) ensuring that its margin requirements are not lower than those that would be calculated using volatility estimated over a 10 year historical look-back period. For most of its margins, CC&G already use a historical look-back period over 10 years; for the other margins it will have to check if it needs to apply the 25 percent ratios.
- 11. Other slight amendments may be necessary on margin calculations. Confidence intervals, holding periods and look back periods are almost completely in line with the new requirements established in EMIR. Commission Delegated Regulations require that the CCP shall at least respect a confidence interval of 99 percent for financial instruments other than OTC derivatives. This is already mostly the case, except for some cash instrument for which the coverage level currently applied is set at 98.4 percent for two days price variations for longer time brackets. CC&G should also ensure the historical volatility is always calculated based on data covering at least the latest 12 months and that the time horizon for the liquidation period ("close-out period") is at least two business days for financial instruments.
- 12. The amount of CC&G's "skin in the game" will need to be increased and distributed in a different way across markets. Currently, this amount stands at euro 5 million for all the default funds. According to the Commission Delegated Regulation, it will probably have to be increased since it should be calculated by multiplying the minimum required capital, including retained earnings and reserves by 25 percent, to be allocated to each market in proportion to the size of each default fund. By the time it applies for its CCP authorization, CC&G will therefore have to dedicate around euro 20 million of its own funds as its "skin in the game" and allocate this amount by sections of clearing, the Italian bond market default fund being by far the largest (around 80 percent of the default funds total amount).

<sup>&</sup>lt;sup>18</sup> Pro-cyclicality refers to changes in risk management practices that are positively correlated with market, business, or credit cycle fluctuations and that may cause or exacerbate financial instability.

**13**. CC&G should formalize its existing arrangements to maintain financial resources sufficient to cover at least the default of the two participants and their affiliates that would potentially cause the largest exposures under extreme but plausible market conditions. With regards to credit risk, EMIR is not fully in line with the PFMIs. Indeed EMIR requires that the default fund and the other financial resources of a CCP shall at all times enable it to withstand the default of at least the two clearing members to which it has the largest exposures under extreme but plausible market conditions. Commission Delegated Regulations add that stress testing programs must include also the entities in the same group. This is almost in line with Principle 4 on credit risk that states that a CCP that is systemically important in multiple jurisdictions should maintain additional financial resources sufficient to cover the default of the two participants and their affiliates that would potentially cause the largest exposures under extreme but plausible market conditions. However, the European Regulation does not require that the financial resources of the CCP also cover the default of the affiliates. 19 It does not seem to be a major issue for CC&G since most affiliates are non-clearing members, and the current resources cover at least the three largest exposures in practice, but Italian authorities may want to have this point formalized. A way of doing so would be to include the PFMIs requirement in CC&G's rules.

#### 14. CC&G should apply appropriate conservative concentration limits on collateral.

Principle 6 on collateral requires FMIs to avoid concentrated holdings of certain assets where this would significantly impair the ability to liquidate such assets quickly without significant adverse price effects. High concentrations within holdings can be avoided by establishing concentration limits or imposing concentration charges. Concentration limits restrict participants' ability to provide certain collateral assets above a specified threshold as established by the FMI. Concentration charges penalize participants for maintaining holdings of certain assets beyond a specified threshold as established by the FMI. Further, concentration limits and charges should be constructed to prevent participants from covering a large share of their collateral requirements with the most risky assets acceptable. They should also allow mitigating wrong-way risk. <sup>20</sup> According to EMIR and Commission Delegated Regulations, a CCP shall establish and implement policies and procedures to ensure that the collateral remains sufficiently diversified to allow its liquidation within a defined holding period without a significant market impact. It should determine concentration limits at the level of:

(i) individual issuers; (ii) type of issuer; (iii) type of asset; (iv) each clearing member; and (v) all clearing members. Currently, CC&G does not apply concentration limits and will therefore need to do so in the near future.

**15. Stress-testing the default of participants has to be further enhanced.** In line with the PFMIs, Commission Delegated Regulations require CCPs to establish an internal policy framework

<sup>&</sup>lt;sup>19</sup> Adding affiliates was done at the end of the PFMI's adoption process, which may explain why it was too late to be reflected in EMIR.

<sup>&</sup>lt;sup>20</sup> 'Wrong-way risk' means the risk arising from exposure to a counterparty or issuer when the collateral provided by that counterparty or issued by that issuer is highly correlated with its credit risk.

for defining the types of extreme but plausible market conditions. This framework shall identify all the market risks to which the CCP would be exposed following the default of one or more clearing member, including unfavorable movements in the market prices of cleared instruments, reduced market liquidity for those instruments, and declines in the liquidation value of collateral. For each market segment, the CCP shall rely on a range of historical scenarios, including periods of extreme market movements observed over the past 30 years, or as long as reliable data have been available, and a range of potential future scenarios. Stress tests should also include the technical or financial failure of liquidity providers and interoperable CCPs, the potential losses arising from the default of a client that clears through multiple clearing members. CC&G must also conduct reverse stress tests at least quarterly.

- 16. CC&G is adapting its account structure to offer individual segregation to clients.
- Currently, CC&G rules mandate "segregated" accounts for Non-Clearing Members—i.e., participants to trading venues—but this kind of segregation does not share all the elements of the EMIR requirements and clearing members' clients cannot open individual segregated accounts. To comply with EMIR and PFMIs requirements, the CCP will have to offer the option to segregate clients' accounts on an individual basis (and not only through omnibus accounts). CC&G is therefore developing a new category of accounts that will enable each clearing member to hold the collateral of individual clients in segregated accounts if requested by the participant thus eliminating the "fellow-customer risk." This new feature is expected to be ready by mid 2013.
- 17. One of the largest changes brought by the new rules is the need to improve CC&G's liquidity risk management framework. Principle 7 on liquidity risk requires an FMI to have a robust framework to manage its liquidity risks from its participants, settlement banks, nostro agents, custodian banks, liquidity providers, and other entities and to determine the amount and regularly test the sufficiency of its liquid resources through rigorous stress testing. The CCP currently stress tests its liquid resources when performing default tests once or twice a year. EMIR and Commission Delegated Regulations rules require CCPs to implement a liquidity management framework and define the minimum content of the liquidity plan. CC&G has started to work at the implementation of a detailed liquidity plan/ risk framework in line with the EMIR and ESMA regulatory requirements. This liquidity plan/risk framework will daily indicate the liquidity needs of CC&G in normal and stressed scenario and the availability of the liquidity resources.
- 18. When measuring its liquidity needs, CC&G will have to take into account the liquidity risk generated by the default of at least the two clearing members and their affiliates to which it has the highest exposures. Currently, when performing default tests, CC&G estimates the size of liquidity shortfall following the default of the participant and its affiliates that would generate the largest aggregate payment obligation to the CCP in extreme but plausible market conditions. Almost in line with the PFMIs, EMIR requires that the CCP must take into account the liquidity risk generated by the default of at least the two clearing members to which it has the highest exposures, when measuring its liquidity needs. To make it clear it complies with the PFMIs, CC&G should include in its rules that it takes into account the two clearing members and their affiliates with the highest exposures.

- **19**. Another significant change relates to liquid financial resources and the investment policy. Up to December 2012, CC&G deposited its entire cash margin and cash default fund at primary commercial banks as sight or time (short term) and sight deposits were mainly unsecured. In view of the EMIR rules, CC&G is progressively investing such cash in financial instruments. Indeed, EMIR limits liquid resources to cash deposited at a central bank of issue, cash deposited at authorized credit institutions, committed lines of credit, committed repos, and highly marketable financial instruments that are readily available and convertible into cash on a same-day basis using prearranged and highly reliable funding arrangements, including in stressed market conditions. Commission Delegated Regulations provide additional details including the need to collateralize at least 95 percent of cash deposits when made outside the central bank, going further than what the PFMIs require in Principle 7 on liquidity risk. In addition, such Regulations require that CCPs apply concentration limits for financial instruments in which their resources are invested. The concentration limits should apply at the level of: (i) individual financial instruments; (ii) types of financial instruments; (iii) individual issuers; (iv) types of issuers; and (v) counterparties used to deposit cash and financial instruments. CC&G needs to finalize it new investment policy, including concentration limits.
- 20. CC&G should enhance its default management simulation exercises by involving the main participants and relevant public authorities. Lehman and MF Global's defaults were handled rather smoothly: the defaulting institutions were indirect participants and their direct participants managed to terminate their activity in a few days. This showed that participants, CC&G and authorities were aware of the relevant procedures and were able to apply them properly. However, the Italian CCP has not faced a default of a direct participant in the past decade. Enhancing the default management simulation exercises would allow all stakeholders to check their state of readiness to handle crisis situations. The PFMIs (Principle 13 on participant default rules and procedures) require that the FMI should involve its participants and other stakeholders in the testing and review of the FMI's default procedures, including any close-out procedures. Such testing and review should be conducted at least annually or following material changes to the rules and procedures to ensure that they are practical and effective. Such tests should include all relevant parties, or an appropriate subset, that would likely be involved in the default procedures, such as members of the appropriate board committees, participants, linked FMIs, and relevant authorities. Commission Delegated Regulations require that a CCP shall, though conducting simulation exercises, verify that all clearing members, where appropriate, clients and other relevant parties including interoperable CCP are duly informed and know the procedures involved in a default scenario.
- 21. To comply with the PFMIs, CC&G will have to establish explicit rules and procedures to address potentially uncovered credit losses and liquidity shortfalls. Principle 4 on credit risk requires that CCP rules should address how potentially uncovered credit losses would be allocated. They could for example provide the possibility of calling for additional contributions from participants based on the relative size and risks of their portfolio (loss-sharing agreements). Principle 7 on liquidity risk requires CCP rules address unforeseen and potentially uncovered liquidity shortfalls. EMIR is less prescriptive on this issue and only says that a CCP may require non-

defaulting clearing members to provide additional funds in the event of a default of another clearing member, provided that clearing members have limited exposures toward the CCP. The current CC&G rules state that the maximum exposure of non-defaulting clearing members is limited to their contribution quotas to the default fund and that CC&G has no right to ask for further contributions. Therefore CC&G's rules need to be complemented to address potentially uncovered credit losses and liquidity shortfalls. This could be done in an internationally consistent way when the future regulatory framework for resolution of FMIs, whose work is currently being conducted at FSB level, is available.

#### 22. CC&G should ensure that it covers its current and future exposures to LCH Clearnet.

One of the most sensitive issues is the risk management of the link with the French CCP, in particular since it handles a substantial amount of cross-border transactions. The PFMIs require that each CCP in a CCP link arrangement should be able to cover, at least on a daily basis, its current and potential future exposures to the linked CCP and its participants, if any, fully with a high degree of confidence without reducing the CCP's ability to fulfill its obligations to its own participants at any time. The positions held by the two CCPs toward the link are currently imbalanced with the consequences that the bilateral inter-CCPs exposures have greatly increased. French and Italian authorities are concerned that the risk management measures in place may not fully address this situation. They have therefore asked both CCPs in jointly signed letters, to provide an in-depth and joint analysis of the risks created by the current imbalance. This analysis should be followed by propositions (compliant with EMIR requirements for interoperability arrangements) to adequately address the identified risks, if needed. The deadline defined by the authorities was September 2012, however, in March 2013, no propositions have been delivered and the issue is still under discussion. The final outcome will need to be compliant with the ESMA guidelines for establishing consistent, efficient and effective assessment of CCP's interoperability arrangements, which were published on March 15, 2013. These guidelines will clarify the competent authorities' obligations in relation to their assessments of interoperability arrangements. Finalizing this work is essential to maintain the link, which is of particular relevance for Italian banks.

## SUPERVISORY AND OVERSIGHT ARRANGEMENTS FOR CC&G

#### A. Overview of CC&G's Supervision and Oversight<sup>21</sup>

**23. The Italian supervisory framework is in line with the PFMIs.** The Italian law clearly identifies the respective responsibilities of the authorities: the supervision of CCPs and of the persons that manage central counterparty systems is carried out by BDI as regards stability and systemic risk containment,<sup>22</sup> and Consob, as regards transparency and investor protection. BDI and

 $<sup>^{21}\,\</sup>mbox{More}$  details on CC&G's supervision and oversight can be found in Appendix V.

<sup>&</sup>lt;sup>22</sup> As far as post-trading FMIs are concerned, BDI is entrusted with a supervisory authority, rather than an oversight one as it is the case for payment systems.

Consob exercise close and continuous supervision over CC&G. The Italian law provides them with extensive regulatory, supervisory and enforcement powers. They gather comprehensive information and data on a periodic and ongoing basis in order to monitor all relevant risks. Italian authorities assess the CCP against the CPSS-IOSCO standards and regularly undertake on-site inspections. They engage in a dialogue with the CCP and require it to adopt specific measures to ensure the orderly, secure, continuous and efficient functioning of the services and systems. In particular, BDI, in agreement with Consob, may at any time require the CCP to increase its capital and financial resources. In case of necessity and as a matter of urgency, BDI shall adopt appropriate measures, including its acting in the place of the managers of the CCP. Italian authorities cooperate between them and with foreign authorities.

24. The current supervisory framework will be mainly confirmed when implementing the new European legislation and a supervisory college will be created. The current legal framework is being reviewed in order to implement the new European Regulation EMIR. Most provisions of EMIR became applicable in Europe with the entry into force, on March 15, 2013, of the Commission Delegated Regulations transposing the Regulatory Technical standards proposed by ESMA and EBA. A draft law is expected to be submitted to the new Parliament to replace the current national legal framework by making reference to EMIR, which as a Regulation, directly applies in all member states. It should also clarify which are the competent authorities for each function of the Regulation. It is expected to confirm the current distribution of responsibilities between BDI and Consob and designate Consob as the entry point for European authorities. The future law should also grant BDI, in agreement with Consob, the right to issue additional requirements on the CCP and require both authorities to formalize their cooperation arrangements. A supervisory college will have to be created within one month of CC&G's submission of a complete application; it will be chaired by BDI and include, in addition to the Italian competent authorities, ESMA, the competent authorities responsible for the supervision of the clearing members of the CCP that are established in the three member states with the largest contributions to the default fund of the CCP, and the competent authorities supervising CCPs with which interoperability arrangements have been established.

#### B. Main Issues in Relation to CC&G's Supervision and Oversight

25. The authorities should consider developing contingency plans to deal with a potential failure of CC&G when the ongoing discussions on this issue at the international and European level are completed. There are currently some legal provisions to deal with CC&G's potential insolvency since the CFLI says that if the CCP is declared insolvent, or its authorization is revoked, the Ministry of Economy and Finance shall put the CCP into compulsory administrative liquidation ("liquidazione coatta amministrativa"). The rules in connection with the compulsory administrative liquidation of banks apply (with some derogations) if compatible. The application of the provisions concerning commercial bankruptcy is expressly excluded. Beyond that, defining contingency policy and approach in advance will facilitate the authorities' intervention in the event of a crisis, and ultimately avoid a spillover effect. In particular, the authorities should identify in advance what resolution arrangements will apply to the CCP and in what manner. These would either allow the critical services of the CCP to be sustained or for the CCP's winding down in an orderly manner.

Development of contingency plans to address CCP failures is not a requirement under the PFMIs, and international discussions on this issue are still on-going at the Financial Stability Board's level, in particular on what should be the appropriate procedure for an orderly winding down or resolution of a CCP. <sup>23</sup> This crucial issue for financial stability is not specific to Italy and the Italian authorities intend to act according to their outcome and the related European stance.

- 26. BDI and Consob will have to formalize their cooperation arrangements, as required by the draft law. The current law requires appropriate coordination between BDI and Consob but no formal arrangements between them. The BI and Consob have entered into arrangements, via MoUs, to make this obligation operational in other fields, such as financial market supervision. Such a formal arrangement is likely to be needed in the near future for the supervision of the CCP too, as the related requirement is included in the draft Italian law that will replace the current regulatory and supervisory framework. This is in particular needed to define the respective roles of both authorities in crisis situations and to articulate their responsibilities given under EMIR, both in normal circumstances and in times of crisis (Consob will be the single entry point even in crisis situations whereas BDI is the lead supervisor as far as financial stability is concerned, will chair the supervisory college, and has the powers to step up in crisis situations).
- **27. Additional staff resources may be needed, in particular at Consob.** Indeed the unit competent for CC&G supervision at Consob has six full time resources; among them a dedicated team of two staff with a background in economics is exclusively devoted to supervise CC&G and specific skills are drawn on from other areas, such as the international relations, inspectorate, administrative sanctions and regulation. This may not be sufficient in view of the additional tasks brought by the new European regulatory framework in particular to comply with the new cooperation requirements (for example, Italian authorities will have to participate in several CCP supervisory colleges across Europe).
- 28. Italian authorities could consider posting their supervisory policies regarding CC&G on their websites. Responsibility C of the PFMIs requires that authorities should publicly disclose their relevant policies with respect to the regulation, supervision, and oversight of FMIs. Currently, there is no reference to such policy on Consob website and BDI website only says (both in Italian and English): "As far as market supervision is concerned, the CLFI entrusts BDI with supervisory responsibilities, in varying degree shared with Consob. BDI has regulatory powers with regard to post trading that are to be exercised in agreement with Consob." There is no link to more detailed documentation on BDI regulatory and supervisory policy and actions. The Italian law and the BDI and Consob Regulation and regulatory measures, which are publicly available, are rather detailed, but it would be beneficial to offer a more readable version on the authorities' websites, which could also provide the links to the relevant reports and legal documents.

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<sup>&</sup>lt;sup>23</sup> The PFMI identify a number of measures that FMIs should take to prepare for and facilitate the implementation of their own recovery or orderly wind-down plans, if needed. The potential necessity, design, and implementation of additional official resolution regimes for FMIs, have been the focus of separate CPSS-IOSCO work, which is building on the work by the FSB on effective resolution regimes for financial institutions. See in particular CPSS-IOSCO Recovery and Resolution of Financial Market infrastructures, Consultative Report July 2012.

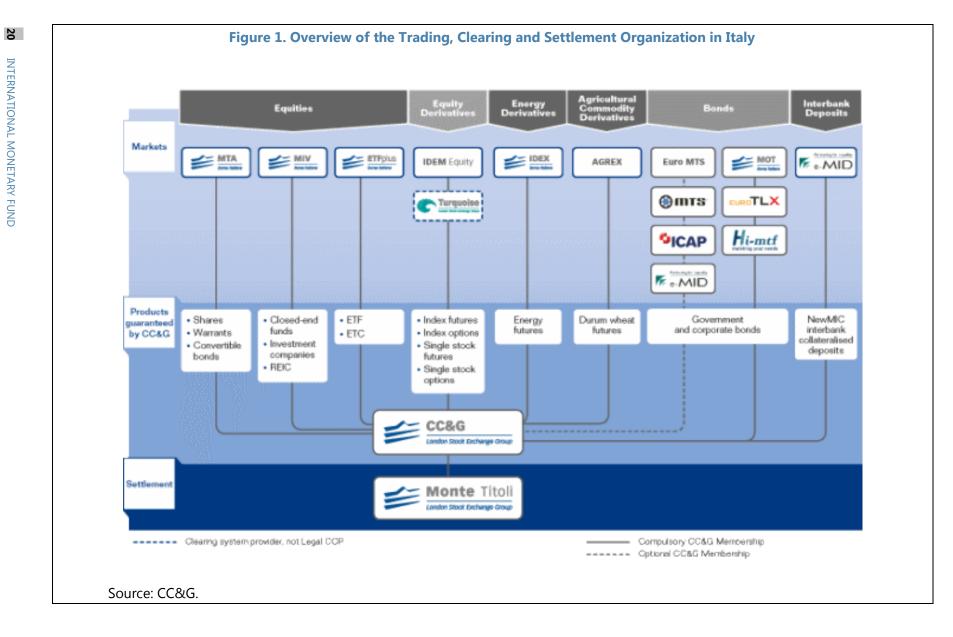
## Appendix I. Overview of CC&G, the Market it Serves, and It's Legal Framework

- **29. CC&G** (Cassa di Compensazione e Garanzia) is part of the London Stock Exchange Group (LSE). CC&G was founded in March 1992 as a subsidiary of Borsa Italiana, which is now fully owned by the London Stock Exchange Group. The company is subject to management and coordination of the London Stock Exchange Group Holdings (Italy) Ltd.—Italian branch. The company is an Italian joint-stock company (Società per Azioni) equipped with an administration and control system based on the presence of a Board of Directors and a Board of Statutory Auditors.
- 30. CC&G's coverage is domestic, and for the Italian market, the CCP is systemically important, as it clears all the cash and derivatives markets operated by Borsa Italiana (but no **OTC derivatives).** The activity of CC&G, originally limited to listed derivative financial instruments, now also extends to the share market, where the interposition of a central counterparty is compulsory, and to the markets for Italian government securities, where it is optional. Traders of government securities on MTS,<sup>24</sup> EuroMTS and BrokerTec<sup>25</sup> may sign up for central counterparty service, becoming members of either CC&G or the French central counterparty, LCH Clearnet SA. Therefore CC&G covers a broad range of trading venues and asset classes: shares, warrants and convertible bonds listed on MTA market, ETFs and ETCs listed on ETFPlus, stock and index futures and options listed on IDEM Equity (Italian Derivatives Market) as well as energy futures listed on IDEX, futures on durum wheat on AGREX, closed-end funds, investment companies and real estate investment companies listed on MIV, Italian government bonds listed on MTS, EuroMTS, ICAP BrokerTec and Repo e-MID, Italian government bonds and corporate bonds listed on MOT, EuroTLX and Hi-MTF. CC&G also provides a guarantee service on the NewMIC interbank collateralized deposits market (see Figure 1 for an overview of trading, clearing and settlement organization in Italy).
- 31. In terms of the value of turnover (Euro 2,817 billion in 2011), CC&G is among the four CCPs that dominate the Euro area market. As far as cash (outright) securities transactions cleared are concerned, it ranks after EuroCCP in the Nederlands (Euro 6,142 billion), LCH Clearnet SA in France (Euro 5,960 billion) and Eurex Clearing in Germany (Euro 3,253 billion). Taking into account the repos clearing activity, CC&G ranks third, behind LCH Clearnet SA and Eurex.

<sup>&</sup>lt;sup>24</sup> MTS (Società per il Mercato Telematico dei Titoli di Stato S.p.A.) is part of the LSE group and provides wholesale electronic trading of Italian government bonds and other types of fixed income securities.

<sup>&</sup>lt;sup>25</sup> BrokerTec, from the ICAP group, is an MTF for European fixed income markets, regulated by the FSA in the United Kingdom.

<sup>&</sup>lt;sup>26</sup> Source: ECB website.



32. CC&G takes on the counterparty risk from the moment of contract execution, acting as the buyer to every seller and as the seller to every buyer, and guaranteeing final settlement. CC&G's activities include forcible execution of contracts that are not settled for lack of securities (buy-ins) or for lack of liquidity (sell-outs) to guarantee the successful completion of transactions when they reach the expiry date set by the market.

Membership

- **33.** There are three types of membership: general clearing member, individual clearing member and non-clearing member. Only general clearing members and individual clearing members participate in the system as counterparties of CC&G (direct participants), while non-clearing members participate in the system through a general clearing member (indirect participants). General clearing members become counterparties of CC&G for proprietary and/or clients and/or non-clearing members' transactions. Individual clearing members become counterparties of CC&G for proprietary and/or clients' transactions. Non-clearing members stipulate an agreement with a general clearing member so that the latter becomes counterparty of CC&G for the non-clearing member's proprietary and/or client transactions. In February 2012, for the bonds market segment, there were 14 general clearing members, 44 individual clearing members, and 26 non-clearing members.
- **34. Both resident and non-resident institutions may become members of CC&G.** Members include: (i) EU and non-EU banks and investment firms authorized to provide investment services in Italy; (ii) banks and investment firms that provide investment services in Italy subject to mutual recognition and; (iii) other members of the markets guaranteed by the CC&G which, as non-clearing members, have signed an agreement with a general clearing member. In February 2012, for the bonds market segment, there were 84 participants, of which 14 were not based in Italy (of which 10 were non-clearing members). Only two general clearing members were nonresident: ABN AMRO Clearing Bank N.V. and Citibank International PLC.

Link between CC&G and LCH Clearnet SA

35. CC&G has been involved since 2002 in a clearing link with LCH.Clearnet SA for the Italian government bonds traded on MTS markets, a link that was subsequently extended to BrokerTec trades. This allows participants in the MTS and EuroMTS markets to choose between CC&G's services and those of LCH.Clearnet and avoid them to have to participate in both CCPs. A substantial amount of cross-border transactions is handled through the link (more than 50 percent of the Italian bond segment activity is processed through the link), and CC&G can be considered systemically important in the French jurisdiction like LCH.Clearnet SA is in the Italian jurisdiction.

Legal and regulatory framework

36. CC&G is regulated under the Italian legislation (Consolidated Law on Finance) and implementing regulations issued by BDI in agreement with Consob. CC&G is incorporated in

Italy as a "società per azioni" and as such is subject to the relevant provisions contained in the Italian Civil Code. In addition, CC&G is regulated by specific legal provisions and regulations issued by the BDI and Consob relating to CCPs.

#### **Box 1. CC&G's Legal and Regulatory Framework**

CC&G's operations are currently governed by the following laws and regulations:<sup>1</sup>

- the Consolidated Law on Finance—Legislative Decree (D.Lgs) 58/1998 (TUF);
- the Settlement Finality Law (Legislative Decree 210/2001), implementing Directive 98/26/EC; the provisions issued by the BDI in agreement with Consob on December 10, 2002 in compliance with the Settlement Finality Law designating CC&G as a "system" for the purposes of the Settlement Finality Law;
- Legislative Decree 170/2004 implementing Directive 2002/47/EC on financial collateral arrangements;
- the provisions issued by the BDI and Consob on February 22, 2008 in compliance with the Consolidated Law on Finance and the Settlement Finality Law; and
- CC&G's detailed operational procedures that discipline, inter alia, margins and other risk management measures, are defined in its Rules, approved by BDI in agreement with Consob, and its Instructions, issued by CC&G itself.

**37.** The current legal framework will be reviewed in the next months in order to implement the new European legislation on OTC derivatives, central counterparties and trade repositories (EMIR of July 4, 2012). Most of the provisions of EMIR, together with the implementing measures, developed by ESMA and EBA and adopted by the European Commission, entered into force on March 15, 2013. A draft law is expected to be presented to the new Parliament right after the February general elections to replace the current national legal framework by making reference to EMIR, which as a regulation, directly applies in all member states. It should also clarify which are the competent authorities for each function of the regulation. It is expected to mainly confirm the current distribution of responsibilities between BDI and Consob and designate Consob as the entry point for European authorities. The future law is also expected to grant BDI, in agreement with Consob, the right to issue additional requirements on the CCP.

<sup>&</sup>lt;sup>1</sup> Laws and authorities' provisions are published in the official journal "Gazzetta Ufficiale della Repubblica Italiana" and are also available on BDI and Consob websites (www.bancaditalia.it; www.consob.it), in both Italian and English.

## **Appendix II. The European Regulation on OTC Derivatives, Central Counterparties, and Trade Repositories (EMIR)**

- 38. In July 2012, the European Parliament and Council issued a Regulation, known as European Market Infrastructure Regulation (EMIR), to govern the OTC derivatives markets, the activities of CCPs,<sup>27</sup> linkages between CCPs, and the features of instruments to be cleared, in the same way for all EU countries. This takes into account the lessons from the financial crisis, and is in line with the objective outlined in the September 2009 G20 meeting, calling for the improvement of OTC derivatives markets. With this legislative initiative, the EU is moving from a "light-handed regulation" to a more ambitious and comprehensive regulatory policies, in line with the new CPSS-IOSCO Principles for FMIs, as far as CCPs are concerned. Specifically, EMIR introduces: (i) a clearing obligation for eligible OTC derivatives with measures to reduce counterparty credit risk and operational risk for bilaterally cleared OTC derivatives; (ii) common rules for central counterparties; (iii) a reporting obligation for OTC derivatives; (iv) rules on the establishment of interoperability between CCPs; and (v) the concept of data trade repositories.
- **39.** Regarding CCPs, the new Regulation, which is directly applicable in all Member States, <sup>28</sup> is setting harmonized stringent requirements. One objective of EMIR is to establish a common EU framework for CCPs, promoting the integration, safety and efficiency of the EU clearing space. It introduces a passport for CCP services, relying on national authorization and supervision of CCPs, with a strengthened role for European Securities and Markets Authority (ESMA). <sup>29</sup> It sets up common, stringent risk and governance standards for CCPs. It defines common requirements and procedures for establishing a right for CCPs to become interoperable provided that risks are addressed and competent authorities approve the link. <sup>30</sup> It requires CCPs to offer indirect participants the possibility of having their margins placed in segregated accounts (omnibus or individual). European CCPs will have to comply with all the requirements laid down in EMIR as well as regulatory and implementing technical standards developed by ESMA and EBA and issued by the Commission as Delegated Regulations.
- **40. Most of the regulatory and implementing technical standards have been adopted in December 2012 by the European Commission.** They entered into force on March 15, 2013 as Commission Delegated Regulations. The adoption of these technical standards finalizes requirements for the mandatory clearing and reporting of transactions, in line with the EU's G20 commitment made in Pittsburgh in September 2009. One technical standard submitted by ESMA on

<sup>&</sup>lt;sup>27</sup> Currently, CCPs provide services on a European basis, but remain regulated at national level, as there is no community legislation covering CCPs.

<sup>&</sup>lt;sup>28</sup> As with any other EU Regulation, their provisions will be directly applicable (i.e. legally binding in all member states without implementation into national law) from the day of entry into force.

<sup>&</sup>lt;sup>29</sup> ESMA in particular is in charge of developing most of the detailed rules.

<sup>&</sup>lt;sup>30</sup> In view of the complexity of derivatives markets and the early stage of development of CCP clearing for OTC derivatives, EMIR does not extend the provisions on interoperability to instruments other than cash securities.

the specific point of colleges for central counterparties on March 31 has not been endorsed yet and will be adopted at a later stage. However, this will not affect the timing of authorization of CCPs under EMIR. Therefore, after the date of entry into force, all the CCPs established in the EU will have six months to submit their application for authorization under EMIR (until September 2013). Their competent authorities, in coordination with the supervisory college, will then have six months to determine whether or not to authorize the CCP.

- **41.** Commission Delegated Regulations on requirements for central counterparties are well detailed and in line with the CPSS-IOSCO Principles for FMIs. In particular, they govern margins and default funds requirements, liquidity risk controls, the default waterfall, collateral requirements, the investment policy, and the stress testing and back testing models. For example, they provide details of the margin requirements, including the minimum confidence interval to be covered by margins, the appropriate look-back period and the appropriate liquidation period. They also define criteria for determining the types of collateral considered highly liquid as well as the appropriate valuation haircuts to be applied and the circumstances in which commercial bank guarantees can be acceptable by CCPs as collateral. In addition, EBA regulatory standards specify requirements regarding the capital, retained earnings and reserves of European CCPs to cope with a wide range of risks stemming from CCPs activities that are not covered by margins and default funds contributions.
- 42. Under EMIR the national authorities remain the competent authorities for CCPs, with new roles for ESMA and the ESCB. Each member state shall designate a competent authority that is responsible for the authorization and supervision of the CCP established in its territory, in cooperation with the college of that CCP, which includes ESMA. The responsibilities of ESMA increase under EMIR. Its new competences include the development of binding technical standards in close consultation with the ESCB. ESMA is due to fulfill a coordination role between competent authorities and across supervisory CCP colleges to build consistent supervisory practices and eventually settling disagreements between authorities. ESMA will have increase emergency powers. On an annual basis, ESMA shall conduct a peer review analysis of the supervisory activities of all competent authorities and initiate and coordinate EU-wide assessments of the resilience of CCPs. EMIR also acknowledges the role of the ESCB in the oversight of CCPs. The increased role of the ESCB includes participation in the CCP colleges as overseer and central bank of issue.

#### **Appendix III. Subset of the PFMIs Used As A Reference**

#### Credit and liquidity risk management

Principle 4: Credit risk

An FMI should effectively measure, monitor, and manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes. An FMI should maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence. In addition, a CCP that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would potentially cause the largest aggregate credit exposure to the CCP in extreme but plausible market conditions. All other CCPs should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would potentially cause the largest aggregate credit exposure to the CCP in extreme but plausible market conditions.

Principle 5: Collateral

**44.** An FMI that requires collateral to manage its or its participants' credit exposure should accept collateral with low credit, liquidity, and market risks. An FMI should also set and enforce appropriately conservative haircuts and concentration limits.

Principle 6: Margin

**45.** A CCP should cover its credit exposures to its participants for all products through an effective margin system that is risk-based and regularly reviewed.

Principle 7: Liquidity risk

**46.** An FMI should effectively measure, monitor, and manage its liquidity risk. An FMI should maintain sufficient liquid resources in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate liquidity obligation for the FMI in extreme but plausible market conditions.

#### Default management

Principle 13: Participant-default rules and procedures

**47.** An FMI should have effective and clearly defined rules and procedures to manage a participant default. These rules and procedures should be designed to ensure that the FMI can take timely action to contain losses and liquidity pressures and continue to meet its obligations.

Principle 14: Segregation and portability

**48.** A CCP should have rules and procedures that enable the segregation and portability of positions of a participant's customers and the collateral provided to the CCP with respect to those positions.

Principle 16: Custody and investment risks

**49.** An FMI should safeguard its own and its participants' assets and minimize the risk of loss on and delay in access to these assets. An FMI's investments should be in instruments with minimal credit, market, and liquidity risks.

Principle 20: FMI links

**50.** An FMI that establishes a link with one or more FMIs should identify, monitor, and manage link-related risks.

## Responsibilities of central banks, market regulators, and other relevant authorities for financial market infrastructures

Responsibility A: Regulation, supervision, and oversight of FMIs

**51.** FMIs should be subject to appropriate and effective regulation, supervision, and oversight by a central bank, market regulator, or other relevant authority.

Responsibility B: Regulatory, supervisory, and oversight powers and resources

**52.** Central banks, market regulators, and other relevant authorities should have the powers and resources to carry out effectively their responsibilities in regulating, supervising, and overseeing FMIs.

Responsibility C: Disclosure of policies with respect to FMIs

**53.** Central banks, market regulators, and other relevant authorities should clearly define and disclose their regulatory, supervisory, and oversight policies with respect to FMIs.

Responsibility D: Application of the principles for FMIs

**54.** Central banks, market regulators, and other relevant authorities should adopt the CPSS-IOSCO *Principles for financial market infrastructures* and apply them consistently.

Responsibility E: Cooperation with other authorities

**55.** Central banks, market regulators, and other relevant authorities should cooperate with each other, both domestically and internationally, as appropriate, in promoting the safety and efficiency of FMIs.

#### Appendix IV. Current CC&G's Risk Management Framework

General framework and default waterfall

- 56. CC&G's financial risk management framework is based on supervisory capital requirements for its members, initial and variation margins, default funds and CC&G's own funds. First, CC&G specifies supervisory capital requirements for its members, which are set according to Section of membership (e.g., share, bond Sections). As far as general clearing members are concerned, capital requirements depend on the number of non-clearing members they represent. Then, CC&G monitors clearing members' positions in real time. Initial margins are called on a daily basis to cover the liquidation costs that the CC&G would incur in the event of a member's default if it were forced to close the open positions. If the uncovered exposures vis-à-vis CC&G (stemming from large variations of prices and/or net positions) overshoot pre-set thresholds, intraday margins are collected. In addition, there are four default funds: one for the equities and derivatives markets, one for the energy derivatives market, one for the bond market, and a recently created one for the agricultural futures market. These cover risks associated with exceptional price/interest rate movements. While margins are intended to cover the risk under normal market conditions, the default funds cover the risk under extreme conditions. Finally, CC&G may rely on its own funds, which amount around Euro 100 million.
- 57. In case of default of a member, all resources deposited by the defaulted entity are used first (first margins and then its contribution quota to the default fund), then CC&G's own assets, up to euro 5 million (for each event default), then the contributions to the default fund pertaining to the non-defaulting members and finally other assets of CC&G. For each default event, the maximum contribution to the default fund of non-defaulting members equals their single contributions. The maximum exposure of non-defaulting Clearing Members is limited to their contribution quotas to the pertinent default fund. CC&G has no right to ask for further contributions.

Initial margins

58. CC&G measures and monitors credit exposures collecting margin on a daily basis. Margins are calculated every evening on the end-of-day open positions (marked at daily settlement prices) and are collected the following morning. Initial margins can be placed in cash (euros) or in euro-denominated securities, which can be MTS-traded Italian, French or German government bonds. Settlement occurs in the TARGET2 Real Time Gross Settlement System by direct debit on the members' central bank accounts and in the Monte Titoli central securities depository (CSD), which

uses a Delivery versus Payment (DvP) settlement mechanism in relation with TARGET2.

**59. CC&G** uses four systems for margin calculation and risk management: (a) the Options Clearing Corporation's theoretical Intermarket Margining System methodology (TIMS) for the margining of Equity Derivatives Section; (b) Equity Risk Management—a TIMS like in-house developed application for the margining of cash equity settlement; (c) Method for Portfolio Valuation—an in-house developed application for the margining of bond settlement; (d) Margins for

Electric Market—an in-house developed application for the margining of electricity futures; (e) Margins for Wheat Futures. Initial margin parameters are determined by margin algorithms based on confidence levels, holding periods and look back periods.

- **60.** For each cash instrument outside the bond market, the daily actual one and two days price variations measured on the daily settlement prices calculated by the Exchange are examined. For equities, ETFs, ETCs, closed end funds, warrants and convertible bonds traded on MTA, long time series are used (up to more than 20 years) whenever possible. In detail, a number of time brackets ranging from six months to 10 years, plus one for the whole time series are defined; for each time bracket a specific coverage level is defined. <sup>31</sup> The coverage level applied is set at 99.7 percent (99.4 percent for two days price variations) for the six months bracket and is progressively reduced to 99.0 percent for one day price variations (98.4 percent for two days price variations) for longer time brackets in order to limit the impact on margin levels of price variations occurred in a distant past.
- 61. For the bond market segment, in accordance with the Sovereign Risk Framework that has been in force since July 2012, the confidence levels have been set considering each country's band and riskiness level. As the country credit worthiness deteriorates, margin parameters are calculated applying gradually increasing confidence levels and holding periods (see Table 2 below). The country creditworthiness is measured by a set of market based indicators which dynamically identify countries whose creditworthiness is deteriorating compared to their peers, using a data base of more than 50 sovereign issuers, therefore avoiding to much reliance on credit agencies' ratings. In March 2013, Italy was in B4L5 (penultimate layer from the top).
- **62. In 2012, on a daily average, initial margins amounted to euro 9.8 billion; mainly for the government bond segment.** Indeed, around 80 percent of margins were related to bonds and repos; around 15 percent to equity derivatives, around 5 percent to cash equities and 0.3 percent to energy derivatives.

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<sup>&</sup>lt;sup>31</sup> Margin requirements must cover the CCP potential future exposure to its participants in the interval between the last margin collection and the close-out of positions following a participant default. Potential future exposure is the maximum exposure estimated to occur at a future point in time at a high level of statistical confidence. The confidence level applies to the estimated distribution of future exposure.

	Table	2. Ma	rgin Pa	aramet	ers of	the So	vereigi	n Risk	Frame	work		
Confidence Levels from B1L1 To B3L2	Lookback Period											
Holding period	> 10 Years	10 Years	9 Years	8 Years	7 Years	6 Years	5 Years	4 Years	3 Years	2 Years	1 Year	6 Months
1 Day	99,50%	99,55%	99,60%	99,65%	99,70%	99,75%	99,80%	99,80%	99,80%	99,80%	99,80%	99,80%
2 Days	99,40%	99,40%	99,45%	99,50%	99,55%	99,60%	99,65%	99,70%	99,70%	99,70%	99,70%	99,70%
3 Days	99,00%	99,00%	99,00%	99,05%	99,10%	99,15%	99,20%	99,25%	99,30%	99,35%	99,40%	99,50%
Confidence Levels B3L3	Lookback Period											
Holding period	> 10 Years	10 Years	9 Years	8 Years	7 Years	6 Years	5 Years	4 Years	3 Years	2 Years	1 Year	6 Months
1 Day	99,50%	99,55%	99,60%	99,65%	99,70%	99,75%	99,80%	99,80%	99,80%	99,80%	99,80%	99,99%
2 Days	99,40%	99,40%	99,45%	99,50%	99,55%	99,60%	99,65%	99,70%	99,70%	99,70%	99,70%	99,70%
3 Days	99,00%	99,00%	99,00%	99,05%	99,10%	99,15%	99,20%	99,25%	99,30%	99,35%	99,40%	99,50%
Confidence Levels B3L4	Lookback Period											
Holding period	> 10 Years	10 Years	9 Years	8 Years	7 Years	6 Years	5 Years	4 Years	3 Years	2 Years	1 Year	6 Months
1 Day	99,50%	99,55%	99,60%	99,65%	99,70%	99,75%	99,80%	99,80%	99,80%	99,80%	99,80%	99,99%
2 Days	99,40%	99,40%	99,45%	99,50%	99,55%	99,60%	99,65%	99,70%	99,70%	99,70%	99,70%	99,99%
3 Days	99,00%	99,00%	99,00%	99,05%	99,10%	99,15%	99,20%	99,25%	99,30%	99,35%	99,40%	99,50%
Confidence Levels from B3L5 To B4L2	Lookback Period											
Holding period	> 10 Years	10 Years	9 Years	8 Years	7 Years	6 Years	5 Years	4 Years	3 Years	2 Years	1 Year	6 Months
1 Day	99,50%	99,55%	99,60%	99,65%	99,70%	99,75%	99,80%	99,80%	99,80%	99,80%	99,80%	99,99%
2 Days	99,40%	99,40%	99,45%	99,50%	99,55%	99,60%	99,65%	99,70%	99,70%	99,70%	99,70%	99,99%
3 Days	99,00%	99,00%	99,00%	99,05%	99,10%	99,15%	99,20%	99,25%	99,30%	99,35%	99,40%	99,99%
Confidence Levels B4L3  Holding period	> 10 Years	10 Years	9 Years	8 Years	7 Years	Lookbac 6 Years	k Period 5 Years	4 Years	3 Years	2 Years	1 Year	6 Months
1 Day	99,50%	99,55%	99,60%	99,65%	99,70%	99,75%	99,80%	99,80%	99,80%	99,80%	99,80%	99,99%
2 Days	99,40%	99,40%	99,45%	99,50%	99,55%	99,60%	99,65%	99,70%	99,70%	99,70%	99,70%	99,99%
3 Days	99,00%	99,00%	99,00%	99,05%	99,10%	99,15%	99,20%	99,25%	99,30%	99,35%	99,40%	99,99%
4 Days	99,00%	99,00%	99,00%	99,05%	99,10%	99,15%	99,20%	99,25%	99,30%	99,35%	99,40%	99,99%
Confidence Levels B4L4						Lookbac	k Period					
Holding period	> 10 Years	10 Years	9 Years	8 Years	7 Years	6 Years	5 Years	4 Years	3 Years	2 Years	1 Year	6 Months
1 Day	99,50%	99,55%	99,60%	99,65%	99,70%	99,75%	99,80%	99,80%	99,80%	99,80%	99,80%	99,99%
2 Days	99,40%	99,40%	99,45%	99,50%	99,55%	99,60%	99,65%	99,70%	99,70%	99,70%	99,70%	99,99%
3 Days	99,00%	99,00%	99,00%	99,05%	99,10%	99,15%	99,20%	99,25%	99,30%	99,35%	99,40%	99,99%
4 Days	99,00%	99,00%	99,00%	99,05%	99,10%	99,15%	99,20%	99,25%	99,30%	99,35%	99,40%	99,99%
5Days	99,00%	99,00%	99,00%	99,05%	99,10%	99,15%	99,20%	99,25%	99,30%	99,35%	99,40%	99,50%
Confidence Levels B4L5	Lookback Period											
Holding period	> 10 Years	10 Years	9 Years	8 Years	7 Years	6 Years	5 Years	4 Years	3 Years	2 Years	1 Year	6 Months
1 Day	99,50%	99,55%	99,60%	99,65%	99,70%	99,75%	99,80%	99,80%	99,80%	99,80%	99,80%	99,99%
2 Days	99,40%	99,40%	99,45%	99,50%	99,55%	99,60%	99,65%	99,70%	99,70%	99,70%	99,70%	99,99%
3 Days	99,00%	99,00%	99,00%	99,05%	99,10%	99,15%	99,20%	99,25%	99,30%	99,35%	99,70%	99,99%
4 Days	99,00%	99,00%	99,00%	99,05%	99,10%	99,15%	99,20%	99,25%	99,30%	99,35%	99,40%	99,99%
5Days	99,00%	99,00%	99,00%	99,05%	99,10%	99,15%	99,20%	99,25%	99,30%	99,35%	99,40%	99,99%
Confidence Levels From B5L1 To B5L5	Lookback Period											
Holding period	> 10 Years	10 Years	9 Years	8 Years	7 Years	6 Years	5 Years	4 Years	3 Years	2 Years	1 Year	6 Months
1 Day	99,50%	99,55%	99,60%	99,65%	99,70%	99,75%	99,80%	99,80%	99,80%	99,99%	99,99%	99,99%
2 Days	99,40%	99,40%	99,45%	99,50%	99,55%	99,60%	99,65%	99,70%	99,70%	99,99%	99,99%	99,99%
3 Days	99,00%	99,00%	99,00%	99,05%	99,10%	99,15%	99,20%	99,25%	99,30%	99,99%	99,99%	99,99%
4 Days	99,00%	99,00%	99,00%	99,05%	99,10%	99,15%	99,20%	99,25%	99,30%	99,99%	99,99%	99,99%
5Days	99,00%	99,00%	99,00%	99,05%	99,10%	99,15%	99,20%	99,25%	99,30%	99,99%	99,99%	99,99%
Source: BDI												

#### *Intraday margins*

**63.** In addition to margins calculated every evening, CC&G routinely calculates intra-day margins, based on real-time positions and real-time prices at least once during the trading day. The same margining methodologies (TIMS for equity cash and derivatives; MVP for bonds) and parameters as for the overnight calculations apply. If the uncovered exposures vis-à-vis CC&G (stemming from large variations of prices and/or net positions) overshoot pre-set thresholds, intraday margins are collected. For the cash markets (equities and bonds) the mark to market variation margin is a refresh of the initial margin and therefore flows from the loss making position of one clearing member to the CCP. They can therefore be covered by securities as collateral. For futures and options contracts, the variation margin is calculated separately and moves from clearing member to clearing member in cash. In 2012, intraday exposures generated intraday margins calls for a total of euro 55 billion.

#### Default funds

64. In addition to margin requirements, CC&G has established segregated default funds, one for each asset class. There is one for equity (cash and derivatives) markets, one for government bonds markets (cash and repo), and one for energy markets. A fourth default fund for agricultural futures has just been introduced. The size of each default fund is maintained to a level that allows covering the default, under stress test conditions, of at least the participant with the highest exposure, but usually the default funds cover at least the three largest exposures in each clearing Section. For the equity default fund, the simultaneous default of a number of low-capitalized members—in addition to the most exposed member—is also considered. The contributions of the default funds among clearing members are calculated based on the ratio of their initial margins with the total of initial margins collected for a given market segment. According to the rule, at least 60 percent of default fund contribution must be in cash, the remaining part can be bank guarantees. In practice, currently almost all is in cash, and only a small amount is bank guarantees (in the form of letters of credit). CC&G directly debits its members on their central bank accounts for their default fund contributions. In the event of a draw-down of the default fund, a member must replenish its contribution to the default fund in order to continue to operate in the market, if not, it must withdraw.

Stress tests

- **65.** In order to test the sufficiency of its total financial resources, CC&G carries out stress tests. The stress tests, executed separately for the various market segments, are intended to measure the vulnerability—under extreme market circumstances—of its guarantee system in case of risk factor variations of exceptional magnitude—larger than those covered by the initial margining system—but nevertheless reasonably possible. Stress tests are performed on a daily basis and can be performed on an ad hoc basis. The stress test methodology is publicly available on CC&G website.
- 66. The stress test methodology is based on a historical scenario, which is, where necessary, combined with a hypothetical scenario. The historical scenario evaluates the

consequences of an event, equal to the largest shock registered in a sufficiently long time span on the financial markets considered. In this respect, as an example, CC&G includes price variations occurred since September 2001 in its equities stress test. The hypothetical scenario evaluates the consequences of a number of hypotheses, which are considered realistic under extreme circumstances although lacking of historical precedents in recent times. The adopted scenarios are fully reexamined and revised at least once a year.

Collateral

**67. CC&G only accepts as collateral euro cash and Italian, French and German government bonds listed on the MTS bond market.** These are instruments with a low credit and market risk and no currency risk. On an exceptional basis, equities are accepted only when they are the underlying of short call options or short futures positions on the same security. Bonds are daily valued at their market price (average market price determined by MTS). A conservative haircut is applied to all bonds covering extreme declines in asset value over a multi-day period. Haircuts are a function of the margin intervals applied to the instrument guaranteed by CC&G and are therefore based on statistical analysis of the specific sovereign curve. In February 2013, the haircuts were the same for French and German Government bonds (from 3.5 percent for less than one year in terms of time to maturity, to 20 percent for over 10 years) and more conservative for Italian Government bonds (from a range between 2.50 percent and 7.25 percent for 0 to 15 month durations, to 30 percent for over 15 years). They had not been changed since August 2012. Custody services are provided by Monte Titoli S.p.A, the Italian CSD. CC&G does not re-use deposited financial instruments collateral, except when needed to deal with a participant's default.

Risk management arrangements for the link with LCH Clearnet SA

their respective members, i.e. cross border trades covered by the link, CC&G and LCH.Clearnet SA interpose themselves between the original counterparties as for any domestic trade. Consequently, they are reciprocally liable for the settlement of their bilateral net positions and not in contractual relation with the clearing members of the other CCP. The two CCPs have agreed to harmonize their margining procedures to avoid margin arbitrage from the participants. Margins are calculated and deposited by each CCP on the aggregated net position of the other CCP (in this way the linked CCPs do not pose any additional risks to each other with respect to any other clearing participant). Both CCPs are reciprocally exempted from contributing to the linked CCP's default fund (in this way the default of a participant in one CCP will not affect the assets of the other CCP deposited with the first, thus mitigating contagion between the two systems). To compensate for the lack of contribution to the clearing fund, the two CCPs exchange an additional initial margin, of equal amount and of the same nature as "regular" margins.

Liquid financial resources

69. CC&G has a range of liquidity sources at its disposal to meet its payment obligations, even in case of extreme market conditions. The first available source is the cash provided by

participants for their margins and default funds' contributions. Then CC&G can use unquaranteed credit lines with a range of commercial banks as well as guaranteed credit lines with a pool of commercial banks allowing CC&G access to central bank intraday liquidity based on a tri-party agreement. The CCP may also conduct repo transactions using securities deposited as collateral or, in case the repo market is not functioning well, directly access the central bank credit line (also overnight) using securities deposited as collateral according to the ESCB rules. Indeed, the March 17 guideline of the European Central Bank allows the ECB Governing Council to decide whether, as a precautionary measure, overnight credit may need to be made available in TARGET2 to eligible CCPs that are not licensed as credit institutions, but that are established in the euro area; subject to supervision and/or oversight by competent authorities; comply with the oversight requirements for the location of infrastructures offering services in euro, have accounts in the Payments Module (PM) of TARGET2; have access to intraday credit. CC&G is eligible to obtain the Governing Council authorization to access overnight credit facility as long as it provides eligible collateral as defined for ESCB credit operations. The overall amount of margins and default funds is about EUR 10 billion. Furthermore CC&G may activate up to EUR 900 million of committed and uncommitted credit lines. Finally, its own assets amount to EUR 100 million.

- **70. CC&G** is developing a liquidity plan/risk framework compliant with EMIR/ESMA requirements. This liquidity plan/risk framework will daily indicate the liquidity needs of CC&G in normal and stressed scenario and the availability of its liquidity resources. Currently, CC&G estimates the size of liquidity shortfall following the default of the participant and its affiliates that would generate the largest aggregate payment obligation to the CCP in extreme but plausible market conditions when performing default tests. The last default test was done in December 2012 and the next is expected to be organized during the first semester of 2013.
- 71. CC&G's qualifying resources are collected and invested only in euro. Investments are in the form of sight deposits with commercial banks and European Government bonds. CC&G may also deposit funds in its TARGET2 account, open in the books of BDI (which is not remunerated). CC&G investment policy is progressively moving towards full compliance with EMIR requirements. Until December 2012, sight deposits were mainly unsecured and made with 15 to 20 Italian banks (some of which were at the same time credit lines providers), which has been a source of concern for a number of external stakeholders. In particular, in December 2011, Standard and Poor's put LSE's rating under observation because of the credit risk incurred through CC&G's investment policy. Since then, CC&G has been progressively switching to financial instruments.

#### Appendix V. Current CC&G's Oversight and Supervision

- 72. The Italian law clearly identifies the respective responsibilities of each authority: the supervision of CCPs and of the persons that manage central counterparty systems is carried out by BDI as regards stability and systemic risk containment, and Consob, as regards transparency and investor protection. According to article 77 of the Consolidated Law on Financial Intermediation (CLFI-Legislative Decree no. 58 of February 24, 1998), BDI is the lead supervisor for CC&G and acts in agreement with Consob.
- **73. Italian authorities have extensive regulatory powers conferred to them by primary legislation.** In particular, the Regulation on Post-trading issued jointly by BDI, and Consob on February 22, 2008, determines: (i) the financial resources of managers of clearing and guarantee systems; (ii) the system manager's organization requirements; (iii) general criteria for the admission, exclusion and suspension of participants; and (iv) the general criteria based on which the system manager may directly participate in foreign clearing and settlement systems. The operating rules of the clearing house must be approved by BDI in agreement with Consob. The authorities check that the clearing house fulfils certain requirements (a minimum capital level, as well as rules on accounting and segregation); and the company's operational rules comply with official regulations and will ensure the system's efficiency, soundness and stability.
- 74. Italian authorities have the power to ask, on a general and an ad hoc basis, any type of relevant data and information in view to perform their respective responsibilities. They receive: an annual report on the organizational structure and risk management (whose minimum content is established in the Regulation on Post-Trading); an annual report on technological and IT structures; changes in the composition of the governing bodies and in the company share register; documents related to the calling of the shareholders' meeting and a copy of the minutes of the resolutions of the shareholders' meeting; annual financial statements; proposed amendments to bylaws; notifications concerning corporate officers; proposed amendments to CCPs Operating Rules; business plans and strategies (with specific indication of timing and means of implementation) submitted to the board, as well as copy of any material arrangements with third parties submitted to the board. Moreover, CC&G must promptly inform BDI and Consob of any event considered useful with a view to ensuring the secure, orderly and continuous functioning of its systems.
- **75. BDI supervises CC&G on an ongoing basis.** CC&G provides real-time observations and periodic information flows to BDI, and Consob has access to the abovementioned data through BDI. The central bank has developed an electronic monitoring system in order to monitor, on an intraday basis risk parameters such as exposures and margins, both on aggregated level and at the level of each participant.
- 76. Italian authorities assess the CCP against the CPSS/IOSCO standards and carry out on-site inspections. The CLFI grants them the right to carry out on-site inspections for supervision purposes. The latest one was organized at the end of 2012 to follow-up on previous recommendations and to make a preliminary gap analysis with EMIR requirements. The previous one was conducted four years before, in 2008. It is in 2008 too that the latest assessment against

CPSS/IOSCO standards was conducted. The outcome has been published. CC&G was found to fully comply with all the Recommendations for CCPs, except the one on operational risk for which minor improvements were required, which were implemented in 2011.

- 77. Italian authorities benefit from strong enforcement powers. They may engage in a dialogue with the CCP and eventually require it to adopt specific measures to ensure the orderly, secure, continuous and efficient functioning of the services and systems. In particular, BDI, in agreement with Consob, may at any time require the CCP to increase its capital and financial resources. It happened in February 2012 when BDI sent a letter to the CCP, inviting it to consider the need to increase its own funds in view of the recommendations of the Basel Banking Committee for Banking Supervision and the requirements of the forthcoming European legislation on CCPs (EMIR). As a result, CC&G increased its reserves by euro 35 million to euro 100 million in June 2012.<sup>32</sup> In addition, and although it has not happened until now, they can impose sanctions: the CLFI provides for financial penalties (a pecuniary administrative fine of from euro 2,500 to euro250,000) that apply to persons managing CCPs or performing administrative or management functions in a CCP, in case of non-compliance with laws or regulations. Finally, in case of necessity and as a matter of urgency, BDI shall adopt appropriate measures, including its acting in the place of the managers of the clearing and guarantee systems.
- **78.** Dedicated staff resources, both in BDI and Consob are entrusted with the task of regulating and supervising CC&G. BDI has a dedicated team of 14 staff to oversee the posttrading infrastructures incorporated in Italy (Monte Titoli, the Italian CSD, and CC&G) and participate in the cooperative oversight on the worldwide foreign exchange (FX) settlement system, Continuous Linked Settlement (CLS) 33 The team has been reinforced with three persons in 2012 since the implementation of the new European supervisory framework for CSDs and CCPs necessitates additional resources in particular to comply with the new cooperation requirements (for each CCP, for example, a supervisory college will need to be created, with the participation of relevant foreign authorities). There is a very low turnover, allowing a high level of expertise. BDI's experts have various backgrounds: economics, legal, operations, IT, statistics. Specific skills are drawn on from other areas, such as the BDI's legal and inspection departments. The unit competent for CC&G supervision at Consob is the post-trading office, with six full time resources. Among them, two people—one senior, highly experienced officer, and one junior, with economics background—are exclusively devoted to CC&G supervision. Specific skills are drawn on from other areas, such as international relations, inspectorate, administrative sanctions and regulation.
- 79. BDI and Consob are required to share information and co-ordinate between themselves, for the sake of supervision efficiency and to minimize costs for the CCP. The cooperation is mandated under the CLFI: Consob and BDI are required by law to cooperate in order

<sup>&</sup>lt;sup>32</sup> The remaining part of 2011 earnings that amounted to euro120 million, was distributed to the shareholder, Borsa Italiana.

<sup>&</sup>lt;sup>33</sup> With three support staff, and 11 sharing their time on international and European cooperation, supervision and post-trading analyses and policy support for BDI's senior management.

to facilitate the exercise of the authorities' respective tasks. To this end they may not invoke official secrecy in their mutual relations. For example, the law requests BDI to approve the regulation governing post-trade issues and any subsequent amendments in agreement with Consob. In concrete terms, cooperation is ensured by, inter alia, information flows, including proposals, opinions, assessments, common understandings, exchange of data held in databases, and regular meetings. In addition, the two latest on-site inspections were carried on jointly by both authorities according to their respective competences. During periods of market stress, the cooperation becomes more intense: Consob and BDI are more frequently in touch, by email, phone or non-routine physical meetings, in order to face the stress situation.

- 80. A special Committee for the protection of financial stability, the *Comitato per la salvaguarda della stabilita financiaria*-CSSF, was set up in 2008 between the Ministry of Economy and Finance, Consob, BDI, and the Insurance Supervision authority. The objective of the committee is twofold: (i) preventing financial crisis with potential systemic effects, through the identification of main risks and vulnerabilities of the financial system; the evaluation of possible measures to limit such risks and the risk of contagion to other systems; the preparation of contingency plans and the performance (twice a year) of simulation exercises and stress test, and (ii) facilitating coordination of actions for the management and resolution of crisis. The protocol requires bi-annual crisis simulation exercises. The parties to the protocol are required to exchange all information necessary to achieve such objectives. The Committee must meet at least twice a year, and extraordinary meetings may be convened. So far, the work of the committee has focused on crisis work.
- 81. Cooperation with foreign authorities is provided for under law provisions and specific cooperative arrangements. According to Article 4 of the CLFI, the authorities have extensive powers of cooperation with foreign authorities. Consob has signed several bilateral and multilateral Memoranda of Understanding (MoU) for the exchange of information, including the IOSCO MoU. In addition, an ad hoc MoUs is in force between Italian authorities (Consob and BDI) and French authorities (Banque de France, Autorité de Controle Prudentiel, Autorité des Marchés Financiers) to manage the supervision of the link between CC&G and LCH Clearnet SA. According to the MoU, authorities commit themselves to exchange information and keep each other informed of any major change regarding their national legal framework of supervision and oversight of securities clearing and settlement systems. Authorities are also committed to inform each other promptly about irregularities in the conduct of the CCPs, including meeting the requirement of fitness and proper. Both French and Italian authorities have the possibility to request information from CC&G and LCH Clearnet SA: authorities' cross-border requests can be transferred either indirectly through the local authorities or directly to the CCP, although the domestic authority should be informed. Each local authority remains responsible for its CCP.
- **82.** The cooperation between Italian and French authorities is increased during periods of market stress and crisis situations. For instance, closer cooperation was put in place in November 2011, when some concerns emerged following a substantial increase in margins by LCH Clearnet SA. As a result, a letter co-signed by all authorities was sent in January 2012 to both CCPs to request

#### **ITALY**

them to provide jointly a sovereign risk framework fulfilling a number of specific criteria, which was done in the following July.