Senate of the Republic
6th Committee (Finance and Treasury)

Fact-finding inquiry into the use and scope of derivative instruments and securitizations in general government

Testimony of the Head of the
Structural Economic Analysis Department
of the Bank of Italy

Daniele Franco

Rome, 8 July 2009

Contents

1. Introduction and summary

The use of financial derivatives and recourse to securitization operations by regional, provincial and municipal administrations must be viewed in the context of local government borrowing and debt management policies.

Title V of the Italian Constitution provides that local authorities may only borrow funds in order to cover investment expenditure. Further, under the enabling Law 42/2009 on fiscal federalism, implementing Article 119 of the Constitution, all general government units must contribute to the attainment of national public finance objectives. This means that the borrowing policies of local authorities must be rigorous and transparent.

Debt management must seek to reduce the costs to the community, taking into account the risks associated with the transactions undertaken. Financial derivatives, where correctly used, can help reduce the risks connected with local government funding operations and stabilize the profile of expected charges.

In order to avoid opportunistic behaviour in employing financial derivatives, aimed, for example, at postponing some charges to future fiscal years, regulation is needed which, while respecting the autonomy of these authorities, establishes principles and effective constraints, in particular as regards the type of operations permitted. Careful monitoring is also necessary to discourage circumvention of the rules. In essence, it is a question of completing the set of regulations introduced over recent years.

Recourse to financial derivatives instruments implies relatively long-term commitments for local government finances. This must be appropriately shown in the accounts. More transparent public budgets can foster greater accountability on thee part of local authorities and more careful monitoring of their borrowing policies.

* * * * *

Sections 2 and 3 examine the derivatives market in general and the role of the Bank of Italy in supervising the use of derivatives. The parts which follow concentrate on local authorities. In particular, Section 4 examines the evolution of the legislation on recourse to the capital market by local authorities. Section 5 describes the evolution of local government debt. Section 6 briefly considers the securitization operations carried out by local authorities. Section 7 focuses on local authorities' derivatives transactions. Section 8 highlights some of the problematic aspects of these operations. Section 9 concludes with some reflections on possible future regulatory developments regarding local government recourse to derivatives.

2. The financial derivatives market[1]

2.1 Financial derivatives

These are contracts whose value is determined by the performance of other variables (share prices, interest rates, exchange rates, commodity prices, weather conditions, creditworthiness of one or more entities, etc.). Therefore, the term "derivative" indicates that the value of the instrument is derived from an asset or another underlying variable.

The main derivative financial instruments are: (i) futures and forward contracts, (ii) swaps (interest rate, currency, and credit default swaps), and (iii) options.

Futures and options contracts with standard features are traded on regulated markets. Swaps, forward contracts and non-standard options are traded in unregulated, "over-the-counter" (OTC) markets.

There are many different types of derivative contract. Financial engineering has produced complex products that can essentially be viewed as combinations of several basic (so-called plain vanilla) derivatives, and in this case the contracts are normally referred to as "exotic".

An instrument that is widespread, including among local authorities, is the interest rate swap (IRS). In its simplest form, it provides for the exchange between the parties, for a given period of time, of interest flows calculated on a reference monetary amount known as "the notional value". In particular, these contracts establish that one party will pay the other a flow of interest calculated on the basis of a fixed rate and will receive in exchange a flow of interest calculated on the basis of a variable rate, usually indexed to the performance of the rates on the money or financial markets.[2] Contracts may have additional clauses calling for the rate paid by one of the counterparties to be modified upon the occurrence of certain conditions. For example, contracts may provide for the variable rate to be restricted within a certain corridor ("collar"), with set maximum ("cap") and minimum ("floor") values. The combination of interest rate swaps with optional components complicates the evaluation of the contract in terms of both risk cover and economic advantage.

Contracts can also call for one party to pay a premium ("upfront") to the counterparty when the contract is signed.[3] This is reflected in the market value, calculated on the basis of current interest rates, and is negative for one of the parties immediately upon conclusion of the contract.

---

1 See the informal testimony given by the Director General of the Bank of Italy to the Sixth Standing Committee (Finance) of the Italian Chamber of Deputies on 6 November 2007 on "Problems raised by financial derivatives".

2 The interest payments due between the counterparties are settled on a net basis.

3 Contracts which establish at inception a market value of nil for both parties are called par contracts; those providing for positive or negative market values are called non par contracts.

Credit derivatives are among the most recently introduced types of instrument. They permit the insolvency risk on a given financial asset to be transferred from one party to another. The most widely used type of contract is the credit default swap (CDS), an instrument that gives the buyer the right to receive from the seller the nominal value of a security issued by a given company should the latter default. Since CDSs are traded only on unregulated markets, the characteristics of the single contracts can vary according to the bilateral agreements between the parties. As will be explained later, some types of derivative contracts (amortization swaps) entered into by local authorities are sometimes associated with CDSs.

2.2 Purposes and risks of using derivatives

There are two main reasons for using financial derivatives: to hedge risks and for speculation. In the first case, it is possible, by entering into a derivative contract, to take a position of opposite sign to the one that creates the risk to be hedged.[4] Speculative use of derivatives, on the other hand, is basically equivalent to placing a bet on the performance of the underlying asset. Where particularly complex financial structures are involved, it is hard to know whether the objective is simply to obtain hedging, as it is not easy to identify a stable relationship between changes in the value of the financial contract being hedged and changes in the value of the derivative.

For some time there has been broad consensus on the usefulness of derivatives for the good functioning of financial markets and hence on their legal admissibility. But in view of the high level of risk they entail for intermediaries and customers, trading in derivatives is governed by specific regulations and subject to controls.

Operations in derivatives entail taking not only the market risks associated with changes in the underlying variables but other risks as well: counterparty risks from possible breach of contract; legal risk from defects of contract documentation and violation of regulations; and operational risks from fraud, human error and procedural deficiencies.

The risks associated with derivatives may be substantial where the contractors' obligations increase if specified events occur.[5] In such cases, the leverage effect typical of derivative instruments, which

---

[4] An example may clarify the way in which derivatives can be used to hedge the risks associated with interest rate changes. Assuming a person has a debt of 100 on which he or she pays a variable rate of interest equal to the market rate, that person is exposed to the risk that the interest paid to service the debt may vary over time as market conditions change. That risk can be hedged by entering into a swap contract with a notional amount equal to the value of the debt (100). Under the contract, the person agrees to pay periodically a fixed amount (obtained by applying the fixed interest rate set in the contract to the notional amount), while the counterparty agrees to make variable payments (obtained by applying the market rate to the notional amount). Thus, the debtor will be able to make constant payments that do not depend on the future behaviour of market rates and can use the counterparty's payments to service the debt.

[5] This is the case, for example, of a swap in which one party pays a fixed rate of interest and the other a floating rate, equal, say, to the market rate. The contract can state that if the market rate rises above a given level, the variable *(continued)*

do not usually require the initial exchange of notional amount, is exacerbated to the point where the notional value of the contract becomes an unreliable indicator of the related risk.

For counterparties, evaluating the most innovative instruments – including credit risk derivatives and some contracts with hybrid features, often tailored to individual needs – is a complex matter. This is especially true in the case of instruments traded on unregulated markets. Here, counterparties may find it difficult to appreciate fully the risks associated with individual transactions, or even the value of the positions taken. These are the segments of the market on which the authorities need to focus most.

In the testimony given to this Committee last year,[6] the Governor of the Bank of Italy pointed out that "The experience of the crisis has confirmed that derivatives, and in general innovative instruments for the transfer of risk, are a double-edged sword. If used carefully and prudently, they allow operators to hedge and diversify risk and can help to reduce the fragility of the financial system; when used without adequate consideration of the risks, they permit the unchecked multiplication of financial leverage. At the same time the proliferation of complex instruments has clouded the distribution of risk for the market, regulators and operators themselves".

On that occasion the Governor outlined some measures to limit the undesirable effects of these instruments. In particular, "Transparency requires a drastic simplification and standardization of contracts; non-standard instruments are, by their nature, difficult to value. The degree of financial leverage must be limited by well-designed rules. In order to ensure appropriate incentives, at least in the case of credit derivatives, a part of the risk must be left explicitly with the originator.[7] Lastly, when derivatives are offered to the public, the protection of the weaker contractual party must be strengthened".

2.3 Size of the market in financial derivatives

Most derivatives contracts are concluded outside regulated markets directly between the parties to the trade. According to the Bank for International Settlements (BIS),[8] over-the-counter trading in derivatives grew steadily until the first half of 2008 and then declined in subsequent months as the

---

payments will become equal to the market rate multiplied by a coefficient higher than one.

6 See the testimony of the Governor of the Bank of Italy given on 21 October 2008 before the Sixth Committee of the Italian Senate as part of the "Fact-finding inquiry into the international financial crisis and its effects on the Italian economy".

7 The "originator" is the bank or other intermediary who took on the credit risk at the time the loan was granted.

8 See *Semiannual Over-The-Counter (OTC) Derivatives Markets Statistics*, Bank for International Settlements, Basel. The statistics are gathered on a consolidated basis from a sample of banks and financial intermediaries with registered head office in a G10 country.

financial crisis deepened.

A rough indicator of the volume of trading in derivatives is provided by the notional value of the contracts, *i.e.*, the reference value for calculating payments. At the end of 2008, the leading banks of the G10 countries reported a notional value of around €425,000 billion (about ten times global GDP), which represents an increase of 124 per cent from the end of 2004 (Table 1). This growth has been fostered by the rapid spread of new types of contract.

Derivatives whose reference variable is an interest rate account for about 70 per cent of all derivatives trading on unregulated markets reported by the leading G10 banks; over three quarters of them are interest rate swaps.

A gauge of the risk to operators is given by the market value, which represents the potential loss (in the case of a negative value) or profit (positive value) if the contract were terminated at that moment. According to the BIS survey, at the end of 2008 the gross market value, equal to the sum in absolute value of the positive and negative components was about €24,000 billion (against €6,900 billion in 2004).

In the years leading up to the financial crisis, the main contribution to the growth of derivatives trading came from contracts between financial institutions. The increase in contracts where one of the parties was a non-financial institution (*i.e.*, households, firms or general government) was less marked.

In Italy, too, banks have stepped up their derivatives activity in recent years, although the growth has been less rapid than on international markets. They have used derivatives mainly as risk management tools and to diversify their sources of income from trading. Buying and selling derivative instruments with customers serves to supplement the provision of more traditional bank and financial services.

Between the end of 2004 and the end of March 2009, the total notional value of derivative contracts entered into by banks operating in Italy[9] increased by 43 per cent, from €6.4 trillion to €9.2 trillion (Table 2). Most of the contracts have as reference parameter a financial market variable – interest rates, exchange rates or other financial indicators – and trading in credit derivatives remains limited.

At the end of this March, the gross market value of the contracts concluded by banks operating in Italy (equal to the sum, in absolute value, of the positive and negative market values) was

[9] Banks operating in Italy include banks registered in Italy and Italian branches of foreign banks. The figures quoted take account also of banks' intragroup operations, which, obviously, are not considered when analysing trades executed with local government departments.

€374 billion, compared to €209 billion in 2004 (Table 3). Contracts with resident financial counterparties (banks, financial companies and insurance firms) accounted for about 30 per cent, those with non-financial residents (firms, households and general government) for just 3.4 per cent, while the remainder of contracts were with non-residents.

The component with non-financial resident counterparties (amounting to €12.6 billion) breaks down into €8.3 billion with firms, €3 billion with general government and €1.3 billion with households. Around 60 per cent of the gross market value of contracts between Italian banks and general government entities pertained to central government and the rest to local government.

Between the end of 2004 and the end of March 2009, the balance between the positions with a positive market value and those with a negative value went from +€8.5 billion to -€0.6 billion.[10] In the same period, the balance vis-à-vis non-residents went from +€3.1 billion to -€8.2 billion, while the positive balance vis-à-vis resident counterparties rose from €5.3 billion to €7.6 billion. Within the latter component, the balance in respect of non-financial counterparties rose from €4.3 billion to €8.4 billion and that vis-à-vis general government alone from €0.3 billion to €2.7 billion.

The market value of derivatives becomes negative or positive according to the performance of the underlying financial variables in the period following the conclusion of the contract.[11] For example, in an interest rate swap, a reduction in market rates tends to reduce the value of the position of the party that has agreed to pay a fixed interest rate and, symmetrically, to increase that of the counterparty.

In some circumstances the market value of derivatives may be negative or positive at the start of the transaction, owing to implicit, and sometimes very considerable, fees that cause a misalignment between the contract conditions and the conditions prevailing on the market. Moreover, as noted earlier, a negative or positive market value can also be due to the premiums paid by one party to the other upfront. Generally, upfront payments are small and serve to guarantee that the contract is financially equitable at the time it is entered into. As will be explained in the following pages, contracts with an upfront payment are very important for general government entities, as they can provide them with a source of finance.

[10] During the period observed, the balance fell almost uninterruptedly until the final months of last year and then rose sharply in the months after. These movements can be put down in part to changes in the level and variability of the underlying financial indicators, including, in particular, short-term interest rates.

[11] A contract that is financially equitable should have a market value of nil at the time it is entered into.

3. The supervisory role of the Bank of Italy[12]

The regulatory framework for banking and financial supervision hinges on the Consolidated Law on Banking of 1993 and the Consolidated Law on Finance of 1998, which provide for the conduct of supervision by the Bank of Italy for the aspects relating to the stability of intermediaries and by Consob for matters concerning the protection of investors.

In terms of stability, the priority objective is to ensure that banks and financial corporations are capable of managing and controlling all the risks associated with the activities they perform.

When banks conclude derivative contracts directly with customers, they not only run financial risks, such as counterparty and market risks, but also legal and reputational risks. Reputational risks arise from the negative perception that customers can have of the propriety of the bank's conduct, whether or not its individual actions are censurable from a strictly legal perspective.

To address these risks, the regulations issued by the Bank of Italy oblige banks to comply with detailed and stringent rules, aimed at guaranteeing the quality of banks' organizational and governance structures on the one hand and their capital adequacy on the other.

Since the 1990s banks must adopt internal control systems to cover every area of activity, based on the principle of separation between control and operational functions, and to identify and monitor all the risks. The original rules have been strengthened over time in response to the growing risks associated with the diversification of customer operations and the use of risk transfer techniques, such as securitizations and derivatives.

In 2007 the Bank of Italy made it compulsory for intermediaries to establish a unit to verify compliance with the applicable laws. In several places, the supervisory provisions call for banks to take special precautions when entering new markets or offering new products. At the same time, safeguards in relation to corporate governance have been receiving growing attention, on the grounds that the proper operation of banks requires a high degree of accountability on the part of top management and an adequate structuring of corporate bodies.

To this framework Basel II adds specific rules on the procedures for measuring and controlling each category of risk, as well as on the quantity and quality of capital needed to cover them. The "second pillar" requires banks to assess their capital adequacy against all risks and the supervisory authority to validate the effectiveness of this process. The provisions prohibit banks from trading in derivative instruments when they are unable to measure and manage the attendant risks.

[12] See the informal testimony of the Director General of the Bank of Italy given on 6 November 2007.

The rules on transparency and intermediaries' conduct, aimed at safeguarding those who use investment services, are contained in the Consolidated Law on Finance and the implementing regulations laid down by Consob, which has sole responsibility for carrying out the necessary controls. With the entry into force of the MiFID implementing regulations, these rules have become more effective and detailed.[13]

The organizational and procedural aspects of the provision of investment services were also strengthened by the issue in October 2007 of a joint Bank of Italy-Consob regulation. In view of these areas of shared regulatory powers, the Consolidated Law on Finance confirmed the division of controls between the two supervisory authorities based on the principle of primary supervisory purpose. A memorandum of understanding establishes coordination and cooperation procedures for the efficient conduct of supervision and for limiting the burden on the supervised entities.

The MiFID implementing regulations calibrate the obligations relating to transparency, knowing the customer, and assessing the suitability of the service provided according to the category of client (retail, professional and qualified counterparties). In practice, the safeguards for local authorities will also depend on the regulation to be issued by the Minister for the Economy and Finance, after consulting the Bank of Italy and Consob, for the identification of public professional clients.[14]

In its supervision of Italian intermediaries, the Bank of Italy has repeatedly drawn attention to the risks stemming from trading in derivatives with general government counterparties. In 2002 and 2004, intermediaries were called on to comply fully with the rules on derivative transactions with local authorities.

These interventions were prompted by an awareness of the need for banks to adopt suitable practices to limit legal and reputational risks, which are added to the typical financial risks associated with the derivatives business.

The Bank focused on the most active intermediaries in the sector, repeatedly urging them to adopt marketing techniques for derivatives products based on full compliance with the supervisory provisions and sectoral rules. Where on- or off-site supervision has revealed shortcomings in the monitoring of these aspects, intermediaries have been asked to take the appropriate corrective measures and to tighten controls.

---

[13] See the testimony of the Director General of Consob before the Sixth Committee (Finance and Treasury) of the Senate given on 18 March 2009 as part of the "Fact-finding inquiry into the use and scope of derivative instruments and securitizations in general government".

[14] Article 6 of Legislative Decree 58/1998, as amended by Legislative Decree 164/2007 implementing the Markets in Financial Instruments Directive (MiFID), which introduced paragraph 2-*sexies*.

The same issues were examined in the Bank of Italy's survey on the use of derivatives in the Italian financial system, conducted in the second half of 2007 and coinciding with the beginning of the financial crisis.

On that occasion, alongside a request that all intermediaries verify the adequacy of their internal control systems, the main banking groups were subject to targeted inspections, including of their dealings with general government counterparties.

In particular, a check was conducted on the existence and reliability of the structures and procedures required for a proper assessment of customers' needs and their effective ability to understand the risks associated with derivatives. Special attention was also paid to how disputes with clients involving derivative transactions were handled.

The problems areas that emerged for some intermediaries[15] were brought to the attention of their management bodies, which were requested to take swift corrective action. Reports on the practices discovered were transmitted to Consob for matters falling within its competence, along with the firms' counter-arguments. In some cases it was decided to notify the competent public prosecutors' offices of the irregularities that emerged during the inspections.

4. Rules on recourse to capital markets by local government

4.1 Limits on borrowing

Article 119(6) of the Constitution (as amended by Constitutional Law 3/2001) stipulates that municipalities, provinces, metropolitan cities and regions may contract loans for the sole purpose of financing investment expenditure and at the same time excludes any ex ante State guarantee on such debts.[16]

The 2004 Finance Law defines what is meant by borrowing.[17] This currently comprises a range of technical forms, such as loans, the opening of credit lines, bond issues and several particular types of securitization. Recent legislation established that any upfront payments collected on the conclusion of derivative contracts also constitute a form of debt.

---

[15] Underestimation of the legal and reputational risks, purely formal verification of local authorities' compliance with the legislation on derivatives, and disproportion between the respective risks run by the parties to the contract.

[16] Article 30(15) of Law 289/2002 provides that: "Where local authorities contract loans to finance expenditure other than investment, in breach of Article 119 of the Constitution, all attendant acts and contracts shall be void. The regional jurisdictional divisions of the State Audit Office may impose on the public administrators who adopted the relevant resolution a fine equal to not less than five nor more than twenty times the official remuneration being earned at the time of the infringement".

[17] Article 3(17) of Law 350/2003 and subsequent amendments.

In addition to the constitutional restriction on its purpose, the law also establishes quantitative limits on borrowing, which differ between regions on the one hand and provinces and municipalities on the other. For ordinary-statute regions, the restriction is proportionate to the total amount of the annual amortization payments concerning capital and interest on loans and other forms of borrowing, which may not exceed 25 per cent of the total unearmarked tax revenues of the region.[18]

For the municipalities and provinces, instead, the limit is proportionate to interest payments only, which at present cannot exceed 15 per cent of current revenue under the first three titles (tax revenue, revenue from current transfers from public entities and non-tax revenue) in the financial statement of the penultimate year prior to the one in which the debt is expected to be incurred.[19] In the 1990s, as the fiscal autonomy of local authorities grew and interest rates fell, these limits gradually became less stringent.

Until the mid-1990s, Italian local authorities had debts almost exclusively with Cassa Depositi e Prestiti (CDP). These debts to CDP were often charged to them merely as a matter of form, since, as a rule, the resources for servicing the debt came from State transfers. For a long time, CDP operated in what amounted to a monopoly regime: local authorities could turn to other financial institutions only if CDP expressed its unwillingness to disburse the funds requested.

This situation changed in second half of the 1990s with the launch of administrative decentralization. In 1994, the law granted provinces and municipalities the right to issue bonds in order to finance their investments.[20] Until 1996, the year the implementing decree was issued (Ministerial Decree 420/1996), there were no issues. The regions, which since their establishment in 1970 were entitled to raise funds on the market, only began to exploit this possibility in the late 1990s.

In the years that followed, new debt instruments spread rapidly. One contributory factor was CDP's reference to market rates and to the cost of fund-raising when setting the interest rates on its loans to local authorities.[21]

---

[18] Article 10(2) of Law 281/1970 and subsequent amendments. The limits on borrowing for special-statute regions and the autonomous provinces are established by the respective accounting laws, which almost always provide for less strict restrictions than those in force in ordinary-statute regions.

[19] The limit has been changed several times in recent years. Initially set at 25 per cent, it was lowered to 12 per cent by the 2005 Finance Law and then to 15 per cent by the 2007 Finance Law.

[20] Article 35 of Law 724/1994.

[21] Moreover, with the issue of bonds local authorities retain a share, modified on several occasions, of the withholding tax on the interest paid to subscribers.

In the same period, laws aimed at regulating several specific aspects of recourse to borrowing by local authorities were introduced. The 2002 Finance Law[22] gave the Ministry for the Economy and Finance a coordinating role in accessing capital markets and introduced new rules for monitoring financial transactions involving provinces and municipalities. Moreover, with a view to facilitating their access to the bond market, it allowed them to issue bullet bonds (which provides for lump-sum repayment of the debt at maturity). This possibility was revoked by Law 133/2008.

4.2 Legislation on the use of financial derivatives

Until the beginning of this decade, the use of derivatives by local governments was not subject to a specific legislative framework. The only relevant provisions were those of Ministerial Decree 420/1996, which prohibited local authorities from issuing bonds incorporating options[23] and from modifying the structure of outstanding bonds through derivative instruments. In addition, for local government bond issues denominated in a foreign currency, the decree required the issuer to enter into a currency swap with an intermediary of proven reliability and experience so as to give certainty to future payments.

From 2001 onwards, a series of legislative acts were passed with a view to preventing excessive risk-taking and the improper use of derivatives. These measures revised and amended the provisions in force several times, partly to remedy the problems that had emerged during their application (Table 4).[24]

The 2002 Finance Law and the implementing decree of December 2003[25] established the frame of reference for the use of financial derivatives, which remained essentially unchanged until the summer of last year, when with the three-year budget the Government prohibited local authorities from entering into new derivative contracts pending the overall revision of regulation and in any case for one year.[26] The fundamental principles of the legislation applied up to last year and the main innovations introduced with the three-year budget are described below.

---

22 Article 41 of Law 448/2001.

23 Except for the possibility of issuing bonds convertible into shares of companies controlled by local authorities or bonds with warrants to subscribe shares of companies controlled by local authorities (Article 35(5) of Law 724/1994).

24 See the testimony of the Undersecretary of the Ministry for the Economy and Finance given on 25 February 2009 before the Sixth Committee (Finance and Treasury) of the Senate as part of the "Fact-finding inquiry on the use and scope of derivative financial instruments and securitizations in general government".

25 Ministerial Decree 389/2003.

26 Article 62(3) of Decree Law 112/2008, ratified with amendments as Law 133/2008, as amended by Article 3(1) of Law 203/2008.

Ministerial Decree 389/2003. – The decree and the subsequent explanatory circular[27] established that local authorities could sign derivative contracts only in respect to liabilities actually payable and then only of the plain vanilla type. Local authorities could purchase the following: 1) currency swaps hedging principal and interest payments; 2) interest rate swaps; 3) debt amortization swaps; 4) forward rate agreements; interest rate caps/collars; 5) combinations of the foregoing operations.[28]

In addition to the cases in which derivatives transactions were permissible, the decree envisaged two cases in which they were compulsory. One regarded borrowings in foreign currency, for which it became obligatory to hedge the exchange rate risk with an exchange rate swap. The other was that of bullet loans and bonds, for which it was obligatory to enter into an amortization swap if a special sinking fund had not been set up. The purpose of the latter requirement was to prevent the cost of amortization from being charged solely to the budget of the year of maturity of the loan.[29]

To minimize the risks – market, counterparty and concentration risks – associated with the use of these instruments, the contracts concluded by local authorities had to be indexed to monetary parameters of one of the G7 leading industrial countries, had to be concluded with financial intermediaries having an adequate credit rating[30] and, where the notional value exceeded €100 million, could not result in an exposure to a single counterparty in excess of 25 per cent of the total amount.

The decree also permitted other derivative transactions for debt restructuring purposes provided they did not: 1) defer the maturity of the original debt; 2) entail an upfront payment, *i.e.*, the sum of money settled upon conclusion of the contract, greater than 1 per cent of the notional value; 3) provide for the present values of the local authority's payments to follow a rising path.

Law 296/2006. – The 2007 Finance Law[31] made it mandatory for transactions in financial derivatives to be notified in advance to the Department of the Treasury. Prior notification, which is

---

27 Ministry for the Economy and Finance Circular of 27 May 2004.

28 See the testimony of the Central Manager for Corporate Affairs of ABI given on 1st April 2009 before the Sixth Committee (Finance and Treasury) of the Senate as part of the "Fact-finding inquiry on the use and scope of derivative financial instruments and securitizations in general government".

29 The decree also provides that the amounts set aside in the sinking fund may be invested only in public debt securities or in bonds issued by public corporations of European Union member states. This rule has a number of problems. First is the considerable variance of creditworthiness across the states and public corporations of the European Union. Second, there is no concentration limit either by type of issuer or by individual issuer. Lastly, it excludes issuers with traditionally very low credit risk (for example, the World Bank and the European Investment Bank).

30 According to the Circular of 27 May 2004, "monetary parameter" was to be understood to mean a short-term interest rate, while "adequate credit rating" meant an investment-grade rating (not below BBB/Baa/BBB according to, respectively, Standard&Poor's/Moody's/FitchRatings, always considering the lowest rating in the case of multiple ratings).

31 Article 1, paragraph 737, of Law 296/ 2006, which added paragraphs 2-bis and 2-ter to Article 41 of Law 488/2001.

a legal condition for the enforceability of the contracts,[32] enables the Ministry for the Economy and Finance to assess where the transactions are in conformity with the law and to notify the State Audit Office of contracts in breach of the law for the measures within its competence. The 2007 Finance Law also required derivatives transactions to have the aim of reducing the final cost of the debt and reducing exposure to market risks.

Law 244/2007. – With the 2008 Finance Law,[33] Parliament introduced requirements of transparency and budgetary disclosure of derivatives transactions entered into by local authorities. The information necessary for compliance was to be specified by a decree issued by the Ministry for the Economy and Finance after consulting the Bank of Italy and Consob.

Law 133/2008. – The three-year budget last year called for: 1) the suspension of operations in derivatives pending a revision of the regulatory framework; 2) a ban on issuing bullet loans or bonds on the part of local authorities;[34] and 3) the inclusion of the upfront in borrowings, as indicated by Eurostat.

As part of the revision of the regulatory framework, which will have to be effected with one or more regulations issued by the Ministry for the Economy and Finance, rules must be laid down governing among other matters: 1) the eligible types of contract for financial derivatives and the implicit and explicit components admissible;[35] 2) the information that must be stated in the contracts (transparency); 3) the information that local authorities must supply in their budget and financial accounts (disclosure).

Law 203/2008. – The scope of regulatory reorganization was essentially confirmed by the 2009 Finance Law, which also provided for the possibility of restructuring outstanding derivatives contracts following a change in the underlying liabilities.

---

[32] Ministerial Decree 389/2003 only provided for subsequent notification to the Ministry for the Economy and Finance in one of the four three-monthly notifications on borrowing. Pursuant to Article 1(1), local authorities "… shall communicate within the 15th day of the months of February, May, August and November to the Ministry for the Economy and Finance, Department of the Treasury, Directorate II, the data regarding the net use of forms of short-term credit from the banking system, loans taken out with entities external to general government, derivatives transactions concluded and bonds issued as well as regarding securitization transactions concluded". For that matter, the Unified Conference decided that no sanction was to be applied in the case of untruthful or incomplete notification by local authorities.

[33] Article 1, paragraphs 381-384, of Law 244/2007. For an analysis of the application of the requirement with regard to disclosure in the budgets for 2008, see the testimony of the State Audit Office given on 18 February 2009 as part of the "Fact-finding inquiry on the use and scope of derivative financial instruments and securitizations in general government".

[34] It also established that the original maturity of an individual borrowing must be between five and thirty years.

[35] Ministerial Decree 389/2003 only referred to contracts in financial derivatives; it did not cover the implicit or explicit derivative components that may be contained in loan contracts concluded by local authorities.

The implementing measures are being drafted, the Bank of Italy collaborating in this with the Ministry for the Economy and Finance and with Consob. The new regulation's entry into force will automatically entail the repeal of the articles of Ministerial Decree 389/2003 that governed the use of derivatives by local authorities.

5. The growth of local government debt

A high public debt has characterized much of Italy's economic history (Figure 1). The local government component, however, has generally been modest. It attained significant size between the mid-1960s and mid-1970s, falling back to relatively more moderate levels in the 1980s. In the last decade the relative burden of local government debt has gradually increased, partly in connection with decentralization and with the new possibility for local authorities to use other financing instruments besides loans from CDP.

At the end of December 2008, local government debt amounted to €106.7 billion, or 6.4 per cent of Italy's public debt.[36] It was equal to 6.8 per cent of GDP, while total general government debt amounted to 105.7 per cent of GDP (Figure 2 and Table 5).

The ratio of local government debt to GDP rose significantly in the early years of this decade. This was partly due to the emergence of loans from the CDP in connection with its reclassification as a private sector entity in 2003.[37] By contrast, the last two years have seen a decline equal to 0.7 percentage points of GDP, reflecting the early termination of some securitizations of liabilities in the health sector, financed with advances from the state, and the change in the indebtedness of the companies of the Equitalia group.[38]

Since the end of the 1990s, local government debt has expanded in all parts of the country, but with geographical differences in its level and rate of growth (Figures 3 and 4, Tables 6 and 7). At the end of 2008 the ratio of local government debt to GDP in the various regions ranged from a high of

[36] Local government debt is calculated by the Bank of Italy according to the methodological criteria established in the Treaty on European Union and EU Council Regulation 1993/3605 as amended. Loans to local authorities whose repayment is directly charged to the state budget are included in the liabilities of the state sector. The Supplement to the Statistical Bulletin, *Local Government Debt*, published yearly by the Bank of Italy, provides detailed statistics on the evolution of the debt.

[37] See Banca d'Italia, *Economic Bulletin*, No. 38, 2004.

[38] In March 2008, consequent to an opinion issued by Eurostat, the companies of the Equitalia group to which tax collection activity had been delegated were included among the institutional units belonging to the general government sector. Given the essentially regional structure of the group's operations, the reclassification concerned the near totality of local government debt. See Banca d'Italia, Supplement to the Statistical Bulletin, *Monetary and Financial Indicators*, Public Finances, 14 October 2008.

14.1 per cent in Valle d'Aosta to a low of 3.4 per cent in Trentino Alto Adige. Per capita debt was highest in Valle d'Aosta (€4,754), lowest in Puglia (€1,044).

Regarding the composition of the debt by instrument, it should be noted that the marked increase in the loans component in 2003 was due to the inclusion of CDP loans (Figure 5). The securities component, negligible up to 1998, made up more than a quarter of local government debt in 2008 (1.9 per cent of GDP). Nearly two thirds of the securities are issued abroad; this contrasts with the issue policy of the Ministry for the Economy and Finance, which tends to place securities mainly on the domestic market.

In accordance with the budgetary rules adopted at European level, public debt does not include derivative financial instruments or liabilities connected with supplies of goods and services (*i.e.*, trade payables). The debt, calculated at face value, only includes the instruments classified among deposits, debt securities and loans. In the spring of 2008 Eurostat clarified that loans must include the advance (or upfront) payments received by general government entities at the time a derivatives contract is concluded. On the basis of the information provided by the Ministry for the Economy and Finance with reference to the central government sector, since Autumn of 2008 the Bank of Italy has proceeded to update public debt statistics in order to take the Eurostat guidelines into account.[39]

Regarding the upfronts received by local authorities, the Bank of Italy is now conducting a survey of the main Italian banks, which in an initial phase concerns the four years 2005-08. According to the information received from three of the four Italian banking groups with the largest derivatives dealings with local authorities, in the four years in question the upfront payments to local authorities amounted to about €41 million, of which nearly €36 million in 2005 alone. In the most recent years the size of the upfront payments thus appears to have been very modest. Above all the phenomenon has involved municipalities, which collected upfront payments of about €38 million in the four years (Table 8).

6. Local government securitizations

Securitizations have been an important phenomenon in the context of local government borrowing policies, albeit one that has basically run its course.

[39] The revisions have entailed an increase in the debt equal to €1.3 billion, €1.1 billion and €1 billion respectively in 2005, 2006 and 2007. See Banca d'Italia, Supplement to the Statistical Bulletin, *Monetary and Financial Indicators*, Public Finances, 14 October 2008.

In general, with a securitization a party (called the originator) transfers assets (real or financial, present or future) to a company (called the vehicle) which finances their purchase by issuing securities (Law 130/1999).

From the formal standpoint, securitizations of assets constitute a sale for the originator; however, in some cases they can conceal borrowing operations. In June 2002 Eurostat[40] clarified the criteria for recording securitizations undertaken by general government for the purposes of calculating net borrowing and debt. For the transaction to be treated as a transfer of assets and not as new debt, 1) the assets transferred must be on the public entity's book before the transaction is carried out, and 2) the risks associated with possession of the transferred assets must be passed on to the purchaser.[41] In 2007 Eurostat introduced more restrictive criteria.[42]

However, the transactions to which local authorities were parties mainly involved the securitization of trade credit receivables of private-sector agents from entities belonging to the health sector. They were conducted beginning in 2004 in connection with the difficulty some entities experienced in paying their suppliers.

The securitizations carried out in the health sector had some features in common. Regional executive boards promoted the conclusion of out-of-court settlements between health service providers (or their trade organizations) on the one side and local health units and hospital administrations on the other. The amount of the claims involved in each transaction was determined under certification procedures agreed by the parties. The creditors waived legal action to recover the claims. The certified claims were assigned by the suppliers to financial intermediaries and then securitized. The regional governments undertook (in some cases through "delegations of payment") to pay the securitization companies the amounts due for principal and interest in respect of the certified claims involved in the settlements; those amounts would later be used for repayment of the securities issued for the securitizations.

---

[40] See European Commission, *ESA95 Manual on Government Deficit and Debt. Securisation Operations Undertaken by General Government*, Luxembourg. It should be noted that for local authorities, which, as remarked above, can borrow only to finance investment, the notion of legally relevant debt, introduced with the Finance Law for 2004, transposed the European statistical rules into Italian legislation.

[41] For the purposes of applying the second criterion, it has been established by convention that a transfer of risk is sufficient if two conditions are met: a) the purchaser must stand to benefit from larger gains if the results are better than expected or runs the risk of losses if they are worse than expected; and b) there are no direct or indirect guarantees in favour of the special purpose vehicle from any general government entity.

[42] In particular, transfers of tax and social security credits and transactions containing clauses (such as payment of a deferred price, substitution of the transferred assets, guarantees) that significantly reduce the transfer of risk to the purchaser cannot be treated as true sales (Eurostat decision of 25 June 2007 concerning securitisation operations undertaken by general government).

With regard to the securitizations of trade receivables, in September 2006 Eurostat clarified that the liabilities connected with the restructuring of health sector entities' trade payables should be included in the public debt. Securitization of health sector entities' trade payables to agents belonging to the private sector can be a way to circumvent the constitutional ban on borrowing to finance current spending. Here, again, Italian legislation intervened ex post, by broadening the definition of borrowing to include the securitization operations of the health sector.[43]

Between 1999 and 2007, a total of 42 local government securitizations were carried out (the total for general government was 64); the securities issued amounted to €13.4 billion (€59.8 billion for general government as a whole). No operation of the kind has been carried out since 2007, following the legislative measures referred to above.

7. Local governmet operations in financial derivatives

This section examines the derivatives transactions of local authorities from two angles. The first part considers all the transactions conducted with banks operating in Italy. The second examines amortization swaps on bullet loans, which are mostly conducted with foreign intermediaries, on the basis of information transmitted by local authorities.

7.1 Transactions with intermediaries operating in Italy

Supervisory statistical reports to the Bank of Italy and reports to the Central Credit Register only cover transactions with intermediaries operating in Italy.[44] It is primarily the larger local authorities that also turn to intermediaries not operating in Italy, whose market share is about 60 per cent according to some estimates.[45] The figures given below should therefore be considered as understating the overall amount of operations by a wide margin.

---

43 Article 1, paragraph 739, of Law 296/2006.

44 Through statistical reports, banks transmit an information flow for supervisory purposes to the Bank of Italy. The reports are ordinarily monthly for balance sheet information, quarterly for prudential information and half-yearly for income statement information.
The Central Credit Register receives reports from banks and some financial intermediaries on the positions of their customers whose credit drawn exceeds €30,000 (the reporting threshold was €75,000 up to December 2008). Through this service the Bank of Italy provides participating intermediaries with useful, if not exhaustive, feedback for their assessment of customer creditworthiness and, in general, for the analysis and management of credit risk. Since January 2005 the Central Credit Register only records transactions in financial derivatives carried out by intermediaries operating in Italy that have an intrinsic positive value for the intermediary. The Bank of Italy uses the information on file with the Central Credit Register for activities relating to its institutional purposes.

45 See the testimony of the Undersecretary of the Ministry for the Economy and Finance and that of the Director General of Consob, given respectively on 25 February and 18 March 2009.

According to data from the Central Credit Register, the number of local authorities using derivative instruments, almost always interest rate swaps, surged from 349 to 669 between the end of 2005 and the end of 2007, before falling to 474 at the end of 2008. At the end of March 2009 the local entities using derivative financial instruments with counterparties operating in Italy numbered 496,[46] including 13 regions, 28 provinces and 440 municipalities (Table 9). At the same date, seven universities, three health sector entities (local health units and hospital administrations), three mountain communities, one theatrical association and one regional company operating in the road and highways sector were also using financial derivatives.

The notional value, according to supervisory statistical reports, grew rapidly in recent years, rising from about €0.1 billion at the end of 2000 to about €33 billion at the end of 2006; a reduction in local entities' operations in derivatives was recorded at the end of 2007 and began to grow more pronounced in the second half of 2008 in connection with the freeze introduced by the three-year budget in the summer of that year. At the end of March 2009 the notional value amounted to €24.5 billion. The market share of the first three banking groups by notional value of derivatives operations with local authorities exceeded 70 per cent.

The notional value also diminished as a proportion of total local government debt, from 33.3 per cent at the end of 2005 to 22.6 per cent in March 2009.

The negative market values, which approximate the amount local authorities would have to pay to the intermediaries if the outstanding operations closed at the reporting date, grew from about €2 million at the end of 2000 to nearly €1.1 billion at the end of March 2009. The largest exposure is that of the municipalities (€0.6 billion), followed by the regions (€0.4 billion) and the provinces (€0.1 billion).[47] By contrast, the positive market value in favour of the entire local government sector is negligible (€85 million this March).

As to the geographical distribution, the local authorities with the largest derivatives exposure are those of the region of Campania (€229 million), followed by those of Piedmont and Lazio (respectively €185 million and €126 million; Table 10).

A market value that is persistently negative for local authorities regardless of the evolution of interest rates could reflect not only an inability to forecast future market trends but also the use of

[46] The increase from 474 to 496 in the first quarter of 2009, which involves municipalities, probably reflects the lowering of the Central Credit Register monitoring threshold from €75,000 to €30,000 as of January 2009.

[47] Overall, entities other than regions, provinces and municipalities were exposed (negative market value) for €21 million.

derivatives to satisfy liquidity needs.[48] Available information does not enable us to distinguish between these two factors. Analyses conducted on individual derivatives contracts could allow a more accurate assessment of the reasons for local authorities' recourse to structured finance.

Between the end of 2005 and March 2009, the ratio of the negative market value to total debt followed an upward trend, rising from 0.7 to 1 per cent for the local government sector as a whole. The increase regarded the regions (from 0.5 to 0.9 per cent) and municipalities (from 0.8 to 1.2 per cent); the ratio for the provinces held at 1.3 per cent. For some local authorities, the ratio of negative market value to total debt reached significantly high levels.[49]

7.2 Derivatives in connection with bullet bonds

A derivative that has grown increasingly popular among local authorities in recent years is the amortization swap.[50] As we have seen, in connection with bullet bonds, the Finance Law for 2002 required local governments either to set up a sinking fund or else to take out an amortization swap to prevent the repayment from falling entirely on the budget of the year when the bond matures.

The sinking fund, managed by an intermediary with a sufficiently good credit rating, gets its resources thorough regular deposits of financial assets by the local entity, which remains their owner, is subject to the related market and default risks and receives any interest earnings.

In practice, local authorities have generally discarded sinking funds in favour of amortization swaps, thanks among other things to their relative simplicity and speed of execution.

With an amortization swap, the local government undertakes to make regular payments to the

---

[48] As remarked earlier, liquidity can be procured by means of a derivative either through the upfront payment by the bank to the entity that concludes the contract or through a revision of the entity's payments that defers a part of them to the most distant fiscal years (the entity receives a net flow of resources in the initial period of the contract and is a net payer in the subsequent years). Concerning the latter case, the ban introduced by Ministerial Decree 389/2003 on derivatives contracts providing for the present values of the local authority's payments to follow a rising path reduced local authorities' leeway for rescheduling their debt but did not prevent them from using transactions of this type in order to procure liquidity.

According to the results of a simulation of a 30-year, constant-instalment loan with an interest rate of 5 per cent, if the rescheduling through the swap takes place after the payment of the first instalment and provides for constant present values of the payments by the entity (in compliance with Ministerial Decree 389/2003), the amount in euros of the second instalment will be equal to 55 per cent of the constant instalment envisaged by the old amortization plan. The instalment provided for by the new amortization plan will be smaller than the constant instalment under the old plan through the fourteenth year; from the fifteenth year on it will be larger, and the thirtieth instalment will be more than twice as large.

[49] In March 2009 it stood at about 5 per cent for two regions and 3 per cent for two others; for the remaining regions it was below 1 per cent.

[50] Testimony of the State Audit Office, 18 February 2009.

intermediary comprising both principal and interest.[51] For its part, the intermediary undertakes to pay out an interest stream calculated on the original face value of the bond and a final amount that the government uses to redeem it at maturity. The amortization swap contract may provide that the intermediary hold the amounts received from the public body in a special collateral account. These amounts can be held as liquidity or invested in securities. The securities deposited in the collateral account belong to the intermediary, who is also legally entitled to any remuneration on them (Figure 6).

In recent years the Bank of Italy has monitored Italian local authorities' amortization swaps. The study, conducted at those authorities that have issued bond, is intended to produce statistics on local government debt.[52] The data, which presumably cover the majority of such swaps, indicate that at the end of March 2009 there were 76 swap contracts outstanding, signed by 27 local administrations (10 regions, 8 provinces and 9 municipalities; Table 11) with 18 counterparties, almost all of them large foreign investment banks. The operations reported will have financial effects over a very long period (the first contract matures in November 2009, the last in July 2057) and refer to bond issues with a face value of €14.3 billion. Taking the instalments already paid by these authorities, the debt still to be amortized at 31 March 2009 amounted to €11.2 billion.[53]

The survey confirmed that it tends to be only large local authorities (regions, some provinces, and capital cities) that resort to bullet bonds and, consequently, only they that have amortization swaps. Some 66 per cent of the total initial nominal value pertains to regions, 6 per cent to provinces and 28 per cent to municipalities. By geographical area, 75 per cent was in the Centre and North; 68 per cent of swaps were under contracts signed in 2005-2008. About 40 per cent of the nominal value was accounted for by swaps maturing between 2026 and 2035 and another 30 per cent after 2036.

Amortization swaps are often accompanied by contracts under which the bond issuer guarantees the bank against default by any of the issuers of the securities deposited in the collateral account, which in essence amounts to a credit default swap. In the case of such an agreement, even though the issuing authority is not the legal owner of the securities (as it is in a sinking fund), it nevertheless assumes the credit risk on them, which is tantamount to taking a speculative position.

---

[51] The interest is calculated on a nominal amount that diminishes gradually over the course of the loan, based on the repayments of principal.

[52] According to European methodology, local authorities' debt considers outlays in connection with amortization swaps for bullet loans.

[53] The swaps' market value for the local governments' balance sheets is positive and increasing over time, given their regular instalment payments. The value is annulled at the contract's maturity, when the bank pays the face value over to the local authority.

The provision of a guarantee to the bank as part of an amortization swap raises some problems. For instance, it threatens to neutralize the hedge deriving from the swap, if the public entity has to pay in case of default by the issuers of the collateral securities. What is more, since it is the counterparty (the bank) that selects the securities to deposit (albeit from among contractually specified eligible asset classes), it does not seem correct for the local government to bear the default risk. And finally, Ministerial Decree 389/2003 does not specify credit default swaps among the derivatives that local authorities may use.

8. Problems in the use of derivatives by local government

A part of Italian local government debt is at variable rate, and it also includes some liabilities denominated in currencies other than the euro.[54] To hedge against changes in the foreign exchange and financial markets, local authorities may find it useful to resort to instruments permitting advance determination of future interest obligations. Hedging of this kind can be obtained with derivatives such as currency and interest rate swaps.

There are three main problems with local governments' use of financial derivatives: the great complexity of the contracts, their accounting opacity (the future obligations do not appear in the governments' accounts), and the possibility of improper use (for instance, to procure liquidity).

Derivatives are complex financial instruments. Assessment of the economic advantage and of the related risk profile requires a high level of financial expertise, both for the structuring and for the monitoring of the contracts. On this, the examples mentioned by the Director General of Consob on 18 March can be recalled. Some sub-national entities, provinces and municipalities in particular, may well lack the instruments and expertise to evaluate such transactions. This complexity makes it difficult even to estimate the actual cost of the transactions. In derivatives contracts, in fact, not all the costs are specified. Some clauses that have a substantial impact on the economic benefit of the contract are incorporated within the various base components that determine payments due in various future scenarios. And in general, this greater complexity corresponds to higher costs than for more traditional financial instruments.

The present system of public accounting makes the representation of derivatives in financial statements highly opaque. The future obligations are not recorded in the budget and do not affect the indicators that are relevant to today's budget rules. By recourse to derivative instruments a local

[54] At the end of 2008 non-euro debt came to 1.8 per cent of the total local government debt.

authority may temporarily improve its accounts, at the expense of future years, when debt repayment falls due. The transparency of the public accounts is reduced.

Finally, financial derivatives can be used improperly, not to hedge risks but to procure additional financial resources. When the contract gives the local authority a positive net flow of resources in the initial stages and a negative net flow thereafter, then the derivative comprises an implicit loan from the bank. In general, this loan component, like its costs, is not explicitly specified in the contract. The overwhelming predominance of negative over positive net market values (see Section 7.1) and their low correlation with market interest rates suggest that some of these governments have used derivatives in order to procure additional financial resources beyond those raised through traditional borrowing channels.

9. Some final considerations

The enabling law on fiscal federalism, approved on 29 April 2009, lays down guidelines for determining decentralized tax resources, fiscal equalization and coordination between levels of government. The measure sets general principles for transparent relations between institutional levels of government in determining public finance targets and to ensure cooperation of all general government bodies in maintaining fiscal discipline. Accounting rules consistent with the Stability and Growth Pact and reward and sanction mechanisms work in this direction.

In this context, the debt policies of local authorities ought to be governed by rigour and transparency.

In recent years financial derivatives and securitizations were significant elements in the financing of regions, provinces and municipalities. At present, recourse to securitizations appears to have been terminated; transactions like those carried out in the past would violate the constitutional precept (Article 119) that debt be incurred solely in order to finance investment. The use of derivative instruments has been suspended pending the enactment of new rules.

As noted, financial derivatives can reduce the risks of local authorities' debt and make the profile of expected obligations more stable. Yet these instruments raise a number of serious problems – they can also be used to put some charges off to future budget years, and they can diminish the transparency of the public accounts. This suggests that the eligible types of instruments should be limited and that disclosure requirements should be instituted. In both these regards, this means continuing along the path taken in years past.

Other countries too have faced the problem of regulating the use of derivatives by local authorities. In different institutional frameworks, the regulations on this matter have generally been characterized by great prudence.

Types of transaction. – First of all, it must be specified that local governments may use derivatives solely and exclusively to hedge risks. Ministerial Decree 389/2003 established that they could conclude derivatives contracts only against liabilities effectively due, that these contracts had to be of the plain vanilla type, and that they could not postpone the due date of the original debt. A limit was also set on the upfront payments and constraints were placed on the scheduling of payments by local authorities. These rules remain necessary and should perhaps be tightened somewhat further. For example, on the temporal distribution of obligations, consideration should be given to banning time structures that entail an increasing path for the authority's payment flow.

The decree envisaged two cases in which derivatives were compulsory: borrowing in currencies other than the euro and loans with repayment of the entire principal at maturity (unless a sinking fund was established). In view of the large size of the euro-area financial market, a ban on local government borrowing in other currencies might well be considered. Note that the Ministry for the Economy and Finance itself borrows overwhelmingly in euros.[55]

Greater potential benefits could derive from the possibility of issuing bullet loans. This could help foster the development of a secondary market in local government bonds. In fact, the progressive amortization of such bonds gradually reduces the volume outstanding, to the detriment of the market's liquidity.[56] And the less liquid bonds could prove less attractive for some investors, such as institutional investors.[57] However, it has been observed that in Italy these benefits have not been obtained.[58] This strengthens the case for the ban on bullet loans introduced in the three-year budget. If it were in any event considered desirable to allow this type of issue, other solutions precluding derivatives could be weighed.[59]

---

[55] At the end of 2008 non-euro debt amounted to 2.4 per cent of Italian central government debt; and 94 per cent of this non-euro borrowing was hedged by currency swaps.

[56] When amortization takes place via the redemption of a portion of securities selected by lottery, institutional investors could demand a yield premium against the call risk.

[57] In the US, where there is a large secondary market in municipal bonds, issues are mainly of other types than amortizing bonds. In the four years from 2005 through 2008 state and local governments made average annual issues of $460 billion. At the end of 2008 the outstanding face value of these bonds, issued by more than 50,000 issuers, was nearly $2.7 trillion (more than 15 per cent of GDP).

[58] See the testimony of the Undersecretary for the Economy and Finance, 25 February 2009.

[59] For example, to minimize costs and contain risks, amortization swaps could be banned, and local authorities could be required to create a sinking fund consisting exclusively of central government securities with maturity consistent with that of their own bond issue.

Transparency. – Contract transparency is essential to an informed use of these instruments. The public budget costs stemming from their subscription must be made evident.

Standardized data processed by a shared, transparent methodology and reported in public budgets and financial statements can provide greater certainty concerning local authorities' future expenditures and thereby permit more effective financial planning. This would benefit the quality of their management and the monitoring of the public finances.[60]

The publication of accurate statistics would allow a better evaluation not only of the financial sustainability of individual local authorities but also of the overall state of the public finances in Italy. In an increasingly decentralized system, exhaustive and timely data on local government finances can only become more and more important in the future.

Transactions in being. – As for derivatives transactions already undertaken, the first necessity is to clearly determine the size and characteristics of the contracts. As the hearings of this Committee have made clear, at present there is no source of complete information on this topic. It would therefore be desirable for the new regulations to make the financial reporting requirements for these bodies retroactive, extending them to transactions undertaken in years past. This should facilitate the identification of still-open positions and the adoption of appropriate remedial measures.

Cost containment. – In the future, as general government moves towards budget balance, in keeping with the medium-term targets set in the Economic and Financial Planning Documents of recent years and the rules of the European Union, the share of overall public debt accounted for by sub-national governments may trend gradually upwards. Local authorities, in fact, are allowed to borrow in order to fund investment. This possible "decentralization" of the debt should be prevented from increasing the cost of borrowing by diminishing liquidity and decreasing economies of scale. To cope with this problem the Finance Law for 2005 introduced the possibility of pooled bond issues.[61] In view of the comparatively high costs of derivative instruments and the considerable financial

[60] According to the Undersecretary for the Economy and Finance in his testimony on 25 February 2009, the introduction of the requirement of prior notification of the Ministry in the Finance Law for 2007 has already brought a more prudent and responsible attitude on the part of local governments in their use of derivatives.

[61] Law 311/2004, Article 1(68), governing joint bond issues by more than one local authority.

expertise required for their correct valuation, strategies to exploit scale economies and aggregate risk management should be taken into consideration.

TABLES AND FIGURES

Table 1

Derivatives traded on non-regulated markets
by the leading banks of the G10 countries
(billions of euros and percentages)

Risk Category / Instrument	Notional value				Gross market value[1]			
	Dec.'98	Dec.'04	Dec.'08	% change 2004-08	Dec.'98	Dec.'04	Dec.'08	% change 2004-08
Total contracts	**68,122**	**189,874**	**425,352**	**124.0**	**2,741**	**6,905**	**24,351**	**252.7**
Foreign exchange contracts	15,278	21,503	35,750	66.3	667	1,135	2,815	147.9
Forwards and forex swaps	*10,233*	*10,977*	*17,649*	*60.8*	*416*	*472*	*1,244*	*163.5*
Currency swaps	*1,911*	*6,037*	*10,580*	*75.3*	*170*	*547*	*1,141*	*108.7*
Options	*3,134*	*4,489*	*7,520*	*67.5*	*81*	*116*	*429*	*269.8*
Interest rate contracts	42,425	139,859	300,839	115.1	1,421	3,977	13,236	232.8
Forward rate agreements	*4,882*	*9,389*	*28,212*	*200.5*	*12*	*16*	*110*	*572.8*
Interest rate swaps	*30,759*	*110,588*	*235,765*	*113.2*	*1,280*	*3,600*	*11,908*	*230.8*
Options	*6,784*	*19,882*	*36,862*	*85.4*	*129*	*361*	*1,217*	*237.3*
Equity-linked contracts	1,262	3,219	4,666	44.9	200	366	800	118.7
Forwards and swaps	*124*	*555*	*1,173*	*111.3*	*37*	*56*	*243*	*334.9*
Options	*1,138*	*2,664*	*3,494*	*31.1*	*163*	*310*	*557*	*79.7*
Commodity contracts	346	1,060	3,181	200.2	36	124	686	454.4
Gold	*148*	*271*	*284*	*4.7*	*11*	*23*	*46*	*98.8*
Other commodities	*198*	*789*	*2,897*	*267.4*	*25*	*100*	*640*	*537.2*
Credit default swaps (CDS)	-	4,696	30,084	540.7	-	98	4,061	4.044.1
Single-name instruments	-	*3,757*	*18,488*	*392.2*	-	*82*	*2,655*	*3.137.9*
Multi-name instruments	-	*939*	*11,596*	*1.135.0*	-	*16*	*1,406*	*8.689.7*
Unallocated	8,811	19,538	50,832	160.2	417	1,205	2,753	128.4

Source: Bank for International Settlements, *Semiannual Over-The-Counter (OTC) Derivatives Markets Statistics.* The survey provides for the semiannual collection of statistics on OTC derivatives on a consolidated basis from a sample of banks and financial intermediaries having their head office in G10 countries.

[1] The gross market value is equal to the sum of the absolute values of the positive and negative market values.

Table 2

Financial and credit derivatives of banks operating in Italy – notional values (1)

(billions of euros and percentages)

	December 2004		December 2005		December 2006		December 2007		December 2008		March 2009		% change 2004-08
	amount	% comp.	amount	% comp.	amount	% comp.	amount	% comp.	amount	% comp.	amount	% comp.	
Financial derivatives	**6,331**	**100.0**	**7,486**	**100.0**	**7,492**	**100.0**	**7,663**	**100.0**	**8,995**	**100.0**	**8,965**	**100.0**	**42.1**
of which:													
residents	*2,074*	*32.8*	*2,408*	*32.2*	*2,394*	*32.0*	*2,443*	*31.9*	*2,885*	*32.1*	*2,876*	*32.1*	*39.1*
non-residents	*4,257*	*67.2*	*5,077*	*67.8*	*5,098*	*68.0*	*5,220*	*68.1*	*6,110*	*67.9*	*6,089*	*67.9*	*43.5*
Credit derivatives	**60**	**100.0**	**97**	**100.0**	**124**	**100.0**	**189**	**100.0**	**226**	**100.0**	**195**	**100.0**	**273.3**
of which:													
residents	*6*	*9.3*	*9*	*9.8*	*10*	*8.5*	*3*	*1.5*	*6*	*2.4*	*6*	*3.0*	*–1.7*
non-residents	*55*	*90.7*	*88*	*90.2*	*113*	*91.5*	*187*	*98.5*	*220*	*97.6*	*189*	*97.0*	*301.5*

Source: Bank of Italy, supervisory reports.

(1) Banks operating in Italy stands for banks authorized in Italy plus the Italian branches of foreign banks.

Table 3

Financial and credit derivatives of banks operating in Italy – market values[1]

(millions of euros and percentages)

	December 2004		December 2006		December 2008		March 2009	
	amount	% comp.	amount	% comp.	amount	% comp.	amount	% comp.
					Financial derivatives			
Positive market value[2]	**100,393**	**100.0**	**84,207**	**100.0**	**157,785**	**100.0**	**180,515**	**100.0**
Resident counterparties	42,375	42.2	37,960	45.1	64,273	40.7	67,160	37.2
General government	*599*	*0.6*	*1,471*	*1.7*	*2,692*	*1.7*	*2,770*	*1.5*
Banks, financial & ins. cos.	*34,798*	*34.7*	*31,124*	*37.0*	*52,806*	*33.1*	*56,417*	*31.3*
Firms	*5,400*	*5.4*	*4,232*	*5.0*	*6,846*	*4.3*	*7,190*	*4.0*
Households	*913*	*0.9*	*478*	*0.6*	*1,150*	*0.7*	*467*	*0.3*
Other	*665*	*0.7*	*655*	*0.8*	*780*	*0.5*	*317*	*0.2*
Non-resident counterparties	58,018	57.8	46,247	54.9	93,512	59.6	113,355	62.8
Negative market value[3]	**91,970**	**100.0**	**90,991**	**100.0**	**167,338**	**100.0**	**181,133**	**100.0**
Resident counterparties	37,044	40.3	41,605	45.7	56,866	34.3	59,605	32.9
General government	*338*	*0.4*	*150*	*0.2*	*193*	*0.1*	*192*	*0.1*
Banks, financial & ins. cos.	*32,990*	*35.9*	*34,152*	*37.5*	*52,342*	*31.5*	*55,596*	*30.7*
Firms	*1,523*	*1.7*	*1,382*	*1.5*	*961*	*0.6*	*1,092*	*0.6*
Households	*714*	*0.8*	*1,269*	*1.4*	*435*	*0.3*	*861*	*0.5*
Other	*1,480*	*1.6*	*4,652*	*5.1*	*2,895*	*1.7*	*1,864*	*1.0*
Non-resident counterparties	54,926	59.7	49,385	54.3	110,472	65.7	121,529	67.1
					Credit derivatives			
Positive market value[2]	**91**	**100.0**	**820**	**100.0**	**6,799**	**100.0**	**6,205**	**100.0**
Resident counterparties	1	0.9	701	85.5	198	2.9	182	2.9
General government	-	-	*10*	*1.2*	*90*	*1.3*	*73*	*1.2*
Banks, financial. & ins. cos.	*1*	*0.9*	*691*	*84.3*	*107*	*1.6*	*108*	*1.7*
Non-resident counterparties	90	99.1	119	14.5	6,583	96.8	6,023	97.1
Negative market value[3]	**61**	**100.0**	**148**	**100.0**	**6,495**	**100.0**	**6,183**	**100.0**
Resident counterparties	2	2.9	*1*	0.7	105	1.6	92	1.5
General government	-	-	-	-	-	-		-
Banks, financial & ins. cos.	*2*	*2.9*	*1*	*0.7*	*105*	*1.6*	*92*	*1.5*
Non-resident counterparties	59	97.1	147	99.3	6,360	97.9	6,058	98.0
					Financial and credit derivatives			
Gross market value[4]	**192,514**	**100.0**	**176,165**	**100.0**	**338,417**	**100.0**	**374,035**	**100.0**
Resident counterparties	79,422	41.3	80,267	45.6	121,442	35.9	127,039	34.0
General government	*937*	*0.5*	*1,631*	*0.9*	*2,975*	*0.9*	*3,034*	*0.8*
Banks, financial & ins. cos.	*67,791*	*35.2*	*65,968*	*37.4*	*105,140*	*31.1*	*112,213*	*30.0*
Firms	*6,923*	*3.6*	*5,614*	*3.2*	*7,807*	*2.3*	*8,282*	*2.2*
Households	*1,627*	*0.8*	*1,747*	*1.0*	*1,585*	*0.5*	*1,328*	*0.4*
Other	*2,145*	*1.1*	*5,306*	*3.0*	*3,723*	*1.1*	*2,213*	*0.6*
Non-resident counterparties	113,092	58.7	95,898	54.4	216,927	64.1	246,964	66.0

Source: Bank of Italy, supervisory reports.

(1) Banks operating in Italy stands for banks authorized in Italy plus the Italian branches of foreign banks. The data shown include banks' intragroup transactions; it should be remembered that these obviously do not count for the analysis of transactions carried out with local authorities.

(2) The market value is positive for the bank and negative for the counterparty. Market value means the intrinsic value; as of December 2008, following the change in the structure of supervisory reports, the reference is to the fair value.

(3) The market value is negative for the bank and positive for the counterparty. Market value means the intrinsic value; as of December 2008, following the change in the structure of supervisory reports, the reference is to the fair value.

(4) The gross market value is equal to the sum of the absolute values of the positive and negative market values.

Table 4

Evolution of the legislation on the use of derivatives by local authorities

Legislative measures	Main contents		
	obligations/prohibitions	**types of eligible contracts**	**transparency/disclosure profiles**
Ministerial Decree 420/1996	1) compulsory exchange rate swaps for foreign currency bonds 2) ban on issuing bonds incorporating options		
Law 448 (Article 41) Ministerial Decree 389/2003 Ministry for the Economy and Finance Circular of 27 May 2004	1) derivatives only against liabilities effectively payable 2) compulsory exchange rate swaps for foreign currency loans 3) compulsory swaps/sinking fund over against bullet loans 4) the upfront may not exceed 1% of the notional value 5) ban on extending the maturity of the original debt 6) ban on providing for the present values of the local authority's payments to follow a rising curve	1) possibility of issuing bullet loans 2) only plain vanilla derivatives 3) derivatives only against liabilities effectively payable 4) eligible transactions: interest rate swaps, currency swaps, FRAs, caps, collars, and combinations thereof; amortization swaps; other debt-restructuring derivative transactions	1) monthly monitoring by the Ministry for the Economy and Finance
Law 296/2006 (Article 1, paragraph 737, which added paragraphs 2-bis and 2-ter to Article 41 of Law 448/2001)	1) derivatives only against liabilities effectively payable		1) prior notification to the Ministry for the Economy and Finance 2) notification to the State Audit Office of transactions in breach of the law
Law 244/2007 (Article 1, paragraphs 381-384)			1) transparency of derivative contracts 2) disclosure, including in the balance sheet, of derivative transactions 3) provision for a Ministry for the Economy and Finance regulation after consulting the Bank of Italy and Consob
Law 133/2008 (Article 62)	1) suspension of trading in derivatives pending a reorganization measure (and at least for one year) 2) ban on issuing bullet loans 3) the upfront constitutes public debt		1) provision for a Ministry for the Economy and Finance regulation, after consulting the Bank of Italy and Consob, to govern: - the types of contract for financial derivatives and for eligible implicit and explicit derivative components - the transparency aspects of contracts and disclosure in the balance sheet
Law 203/2008	contains a reformulated version of Article 62 of Law 133/2008	1) possibility of restructuring the derivative contract following change in the underlying liability	

Table 5

Local government debt: by instrument and type of authority[1]

(millions of euros and percentages)

	2003	2004	2005	2006	2007	2008
Securities	**14,035**	**18,890**	**24,911**	**31,216**	**30,712**	**30,229**
issued in Italy	3,846	6,066	9,537	10,827	10,651	10,554
issued abroad	10,189	12,824	15,374	20,390	20,061	19,676
MFI loans[2]	**31,113**	**31,726**	**33,381**	**71,351**	**69,734**	**71,114**
resident institutions	29,737	30,384	32,049	69,499	67,469	68,817
non-resident institutions	1,376	1,342	1,332	1,852	2,265	2,297
Other[3]	**23,499**	**23,723**	**29,010**	**8,269**	**10,034**	**5,341**
LOCAL GOVERNMENT DEBT	**68,647**	**74,339**	**87,302**	**110,837**	**110,480**	**106,685**
as a percentage of GDP	*5.1*	*5.3*	*6.1*	*7.5*	*7.2*	*6.8*
Debt of the regions[4]	**24,869**	**27,738**	**31,415**	**42,537**	**44,828**	**41,419**
of which: securities	9,018	10,944	11,322	16,257	15,840	15,127
issued in Italy	*442*	*826*	*947*	*1,092*	*1,034*	*992*
issued abroad	*8,575*	*10,118*	*10,374*	*15,165*	*14,806*	*14,136*
of which: MFI and CDP loans[2]	13,314	13,837	15,239	18,791	19,537	21,516
resident institutions	*12,516*	*13,096*	*14,427*	*17,621*	*18,319*	*20,345*
non-resident institutions	*798*	*741*	*812*	*1,170*	*1,218*	*1,171*
Debt of the Provinces[5]	**4,790**	**5,685**	**7,281**	**8,652**	**8,826**	**9,054**
of which: securities	1,132	2,027	3,256	3,656	3,744	3,777
issued in Italy	*681*	*1,237*	*2,254*	*2,630*	*2,592*	*2,643*
issued abroad	*451*	*790*	*1,002*	*1,025*	*1,151*	*1,135*
of which: MFI and CDP loans[2]	3,578	3,582	3,954	4,929	5,034	5,223
resident institutions	*3,558*	*3,532*	*3,854*	*4,805*	*4,869*	*5,003*
non-resident institutions	*19*	*50*	*100*	*123*	*165*	*221*
Municipal debt[6]	**33,318**	**35,286**	**40,820**	**45,243**	**46,561**	**47,494**
of which: securities	3,839	5,866	10,232	11,203	11,014	11,214
issued in Italy	*2,676*	*3,950*	*6,234*	*7,004*	*6,909*	*6,809*
issued abroad	*1,162*	*1,916*	*3,998*	*4,199*	*4,104*	*4,405*
of which: MFI and CDP loans[2]	28,864	28,857	29,954	33,460	35,229	35,966
resident institutions	*28,305*	*28,306*	*29,534*	*32,901*	*34,347*	*35,060*
non-resident institutions	*558*	*551*	*420*	*559*	*882*	*906*
Debt of other entities	**5,670**	**5,630**	**7,786**	**14,405**	**10,265**	**8,717**

[1] Rounding may cause discrepancies in totals.

[2] MFI aggregates do not include the national central bank, which is prohibited from granting any form of credit to general government (Article 101 of the Treaty establishing the European Community); as of September 2006 Cassa Depositi e Prestiti S.p.A. has been included among the MFIs and the loans it has granted to general government since then have been recorded under MFI loans.

[3] Mainly loans issued by the Cassa Depositi e Prestiti S.p.A. before August 2006, securitizations for the part considered to be loans according to the criteria established by Eurostat, and other minor items.

[4] Includes the autonomous provinces.

[5] Includes the metropolitan areas.

[6] Includes the unions of municipalities.

Table 6

Local government debt: by geographical area[1]

(millions of euros and percentages)

	2003	2004	2005	2006	2007	2008
North-West	**17,440**	**18,628**	**22,393**	**30,601**	**29,511**	**29,161**
of which: securities	3,329	4,328	6,851	9,333	9,141	9,286
issued in Italy	*1,575*	*2,433*	*3,290*	*3,645*	*3,597*	*3,538*
issued abroad	*1,754*	*1,895*	*3,562*	*5,689*	*5,544*	*5,748*
of which: MFI and CDP loans[2]	13,859	14,066	15,329	21,006	20,168	19,664
resident institutions	*13,685*	*13,942*	*15,212*	*20,896*	*20,065*	*19,568*
non-resident institutions	*174*	*124*	*117*	*110*	*103*	*96*
North-East	**11,792**	**12,655**	**14,463**	**16,809**	**16,262**	**16,484**
of which: securities	2,083	3,053	4,291	5,467	5,513	5,478
issued in Italy	*1,181*	*1,560*	*2,326*	*2,471*	*2,474*	*2,561*
issued abroad	*902*	*1,493*	*1,965*	*2,996*	*3,039*	*2,917*
of which: MFI and CDP loans[2]	9,550	9,394	9,904	11,082	10,581	10,876
resident institutions	*9,425*	*9,268*	*9,769*	*10,892*	*10,340*	*10,607*
non-resident institutions	*125*	*125*	*135*	*190*	*241*	*269*
Centre	**20,568**	**22,396**	**25,396**	**32,483**	**31,393**	**28,821**
of which: securities	4,277	5,283	6,234	6,878	6,952	6,711
issued in Italy	*667*	*851*	*1,559*	*1,891*	*1,856*	*1,815*
issued abroad	*3,611*	*4,431*	*4,675*	*4,988*	*5,097*	*4,896*
of which: MFI and CDP loans[2]	14,532	14,910	16,088	20,423	19,763	20,564
resident institutions	*14,195*	*14,462*	*15,676*	*19,803*	*18,803*	*19,554*
non-resident institutions	*337*	*448*	*412*	*621*	*960*	*1,009*
South	**12,068**	**13,652**	**17,122**	**21,620**	**23,554**	**23,922**
of which: securities	1,722	3,329	4,373	6,539	6,423	6,318
issued in Italy	*305*	*1,066*	*2,117*	*2,341*	*2,266*	*2,193*
issued abroad	*1,417*	*2,263*	*2,256*	*4,199*	*4,157*	*4,126*
of which: MFI and CDP loans[2]	10,210	10,192	11,272	13,077	13,167	14,327
resident institutions	*10,095*	*10,061*	*11,035*	*12,836*	*12,725*	*13,896*
non-resident institutions	*115*	*132*	*237*	*241*	*442*	*432*
Islands	**6,779**	**7,008**	**7,928**	**9,325**	**9,760**	**8,298**
of which: securities	2,624	2,898	3,162	2,998	2,684	2,435
issued in Italy	*119*	*155*	*246*	*479*	*459*	*446*
issued abroad	*2,505*	*2,742*	*2,916*	*2,518*	*2,226*	*1,989*
of which: MFI and CDP loans[2]	3,204	3,257	4,151	5,750	6,179	5,784
resident institutions	*2,579*	*2,754*	*3,774*	*5,110*	*5,689*	*5,326*
non-resident institutions	*624*	*503*	*376*	*640*	*490*	*458*
Local government debt	**68,647**	**74,339**	**87,302**	**110,837**	**110,480**	**106,685**
as a percentage of GDP	*5.1*	*5.3*	*6.1*	*7.5*	*7.2*	*6.8*

[1] Rounding may cause discrepancies in totals.

[2] MFI aggregates do not include the national central bank, which is prohibited from granting any form of credit to general government (Article 101 of the Treaty establishing the European Community).

Table 7

Local government debt at 31 December 2008 : by region and instrument[1]
(millions of euros)

	Securities issued in Italy	Securities issued abroad	Loans granted by resident MFIs and CDP spa[2]	Loans granted by non-resident MFIs	Other liabilities[3]	Total
Piedmont	1,461	2,224	8,930	-	64	12,679
Valle d'Aosta	-	424	172	-	3	599
Lombardy	1,381	2,446	8,861	80	124	12,892
Trentino-Alto Adige	58	15	1,028	-	6	1,107
Veneto	1,050	1,428	4,033	-	43	6,553
Friuli-Venezia Giulia	80	1,425	1,433	-	16	2,954
Liguria	696	654	1,605	16	20	2,991
Emilia Romagna	1,373	49	4,113	302	33	5,870
Tuscany	1,032	456	4,691	114	41	6,334
Umbria	224	738	927	-	12	1,901
Marche	235	435	1,912	81	16	2,677
Lazio	324	3,267	12,025	815	1,477	17,908
Abruzzo	429	1,040	1,051	-	728	3,247
Molise	8	236	215	-	3	461
Campania	632	2,181	6,422	262	2,498	11,995
Puglia	675	641	2,829	87	26	4,258
Basilicata	133	28	617	83	5	865
Calabria	316	-	2,761	-	18	3,095
Sicily	339	1,052	3,872	391	65	5,718
Sardinia	108	937	1,454	67	14	2,579
Total	**10,554**	**19,676**	**68,951**	**2,297**	**5,208**	**106,685**

[1] Rounding may cause discrepancies in totals.

[2] MFI aggregates do not include the national central bank, which is prohibited from granting any form of credit to general government (Article 101 of the Treaty establishing the European Community); as of September 2006 Cassa Depositi e Prestiti S.p.A. has been included among the MFIs and the loans it has granted to general government since then have been recorded under MFI loans.

[3] Mainly loans issued by Cassa Depositi e Prestiti S.p.A. before August 2006, securitizations for the part considered to be loans according to the criteria established by Eurostat, and other minor items.

Table 8

Upfronts paid to local authorities in the period 2005-08

(number of contracts and millions of euros)

	2005		2006		2007		2008		2005-08	
	number of contracts	amount	number of contracts	amount	number of contracts	amount	number of contracts	Amount	number of contracts	amount
Regions	2	2.1	-	-	-	-	-	-	2	2.1
Provinces	2	0.1	2	0.1	5	1.3	-	-	9	1.5
Municipalities	83	33.6	57	3.7	12	0.6	1	0.1	153	37.9
Total	**87**	**35.8**	**59**	**3.8**	**17**	**1.8**	**1**	**0.1**	**164**	**41.5**
of which: Centre and North	*26*	*30.3*	*33*	*1.3*	*6*	*0.1*	-	-	*65*	*31.7*
South and Islands	*61*	*5.5*	*26*	*2.5*	*11*	*1.7*	*1*	*0.1*	*99*	*9.8*

Source: Bank of Italy survey.

The data refer to three of the main Italian banking groups in terms of derivative business with local authorities.

Table 9

Financial derivatives entered into by local authorities with banks operating in Italy[1]
(millions of euros, number and percentages)

	Dec.'05	Dec.'06	Dec.'07	Dec.'08	Mar.'09
Notional value	29,057	33,041	31,520	26,053	24,499
Positive market value[2]	248	140	120	89	85
Negative market value[3]	600	737	902	1.061	1.079
Regions	*156*	*264*	*116*	*360*	*364*
Provinces	*92*	*63*	*96*	*119*	*120*
Municipalities and unions of municipalities	*343*	*408*	*686*	*570*	*574*
Other	*9*	*2*	*4*	*13*	*21*
Number of local authorities	349	588	669	474	496
Regions	*7*	*10*	*11*	*13*	*13*
Provinces	*25*	*29*	*31*	*32*	*28*
Municipalities and unions of municipalities	*310*	*540*	*619*	*415*	*440*
Other	*7*	*9*	*8*	*14*	*15*
Bank counterparties					
number	*45*	*46*	*44*	*38*	*34*
market share of the three largest groups	*66.1*	*69.6*	*70.1*	*70.5*	*71.7*
Notional value/Local government debt	33.3	29.8	28.5	24.4	22.6
Negative market value/Local government debt	*0.7*	*0.7*	*0.8*	*1.0*	*1.0*
Regions	*0.5*	*0.6*	*0.3*	*0.9*	*0.9*
Provinces	*1.3*	*0.7*	*1.1*	*1.3*	*1.3*
Municipalities and unions of municipalities	*0.8*	*0.9*	*1.5*	*1.2*	*1.2*
Other	*0.1*	*0.0*	*0.0*	*0.1*	*0.2*

Source: Banca d'Italia, supervisory reports; for the number of local authorities the Central Credit Register, which since 2005 has received monthly reports on the financial derivatives transactions of intermediaries operating in Italy exceeding the reporting threshold (which was reduced from €75,000 to €30,000 in January 2009), i.e. the claims on clients (positive market value for the bank). Since January 2005 the Central Credit Register has collected data on the business of intermediaries operating in Italy in financial derivatives with an intrinsic value positive for the intermediary.

(1) Banks operating in Italy stands for banks authorized in Italy plus the Italian branches of foreign banks.

(2) The market value is positive for the bank and negative for the counterparty. Market value means the intrinsic value; as of December 2008, following the change in the structure of supervisory reports, the reference is to the fair value.

(3) The market value is negative for the bank and positive for the counterparty. Market value means the intrinsic value; as of December 2008, following the change in the structure of supervisory reports, the reference is to the fair value. The breakdown between the various categories of local authority uses weights derived from the reports to the Central Credit Register.

Table 10

Financial derivatives entered into by local authorities: regional distribution of the negative market value and the number of authorities[1]

(millions of euros and number)

	Negative market value[2]					Number of local authorities				
	Dec.'05	**Dec.'06**	**Dec.'07**	**Dec.'08**	**Mar.'09**	**Dec.'05**	**Dec.'06**	**Dec.'07**	**Dec.'08**	**Mar.'09**
Piedmont	96	170	115	180	185	10	19	20	17	16
Valle d'Aosta	-	-	-	-	-	-	-	-	-	-
Lombardy	110	67	90	95	102	42	59	66	44	51
Trentino-Alto Adige	1	3	5	0	0	1	7	8	3	2
Veneto	16	19	35	67	71	29	48	52	44	43
Friuli-Venezia Giulia	2	5	10	5	7	7	17	21	17	16
Liguria	8	5	5	9	13	7	12	11	10	12
Emilia Romagna	50	26	25	65	61	28	37	41	31	29
Tuscany	16	30	43	48	58	31	58	62	41	38
Umbria	14	19	36	26	25	11	25	30	19	24
Marche	14	12	18	13	14	23	29	28	27	27
Lazio	17	33	72	129	126	26	35	43	35	38
Abruzzo	11	16	29	32	30	12	22	22	20	19
Molise	15	7	2	19	15	2	3	4	1	2
Campania	147	207	201	207	229	37	56	66	43	47
Puglia	39	47	59	19	15	26	52	56	43	48
Basilicata	2	4	5	9	12	6	10	12	7	8
Calabria	6	25	63	55	50	15	33	44	29	33
Sicily	32	37	76	74	58	27	51	65	31	30
Sardinia	3	7	14	8	7	9	15	18	12	13
Total	**600**	**737**	**902**	**1,061**	**1,079**	**349**	**588**	**669**	**474**	**496**

Source: Bank of Italy, supervisory reports and Central Credit Register.

(1) Banks operating in Italy stands for banks authorized in Italy plus the Italian branches of foreign banks.

(2) The market value is negative for the local authority and positive for the bank. Market value means the intrinsic value; as of December 2008, following the change in the structure of supervisory reports, the reference is to the fair value. The breakdown between the various categories of local authority used weights derived from the reports to the Central Credit Register. Since 2005 the Central Credit Register has received monthly reports on the exposures to financial derivatives of intermediaries operating in Italy exceeding the reporting threshold (which was reduced from €75,000 to €30,000 in January 2009), *i.e.*, the claims on clients (positive intrinsic value for the bank).

Table 11

Local authority amortization swaps
(millions of euros)

	number of entities	number of contracts	original notional value	notional value to be amortized at end-March 2009
Regions	10	33	9,409	6,745
of which: Centre and North	*6*	*23*	*6,372*	*4,772*
South and Islands	*4*	*10*	*3,038*	*1,973*
Provinces	8	26	799	705
of which: Centre and North	*6*	*24*	*743*	*656*
South and Islands	*2*	*2*	*56*	*49*
Municipalities	9	17	4,064	3,769
of which: Centre and North	7	14	*3,559*	3,312
South and Islands	2	3	*505*	458
Total	**27**	**76**	**14,272**	**11,220**
of which: ***Centre and North***	***19***	***61***	***10,673***	***8,740***
South and Islands	***8***	***15***	***3,599***	***2,480***
Year contract concluded				
1999	2	2	128	20
2000	1	1	157	90
2001	1	1	279	169
2002	1	2	1,028	469
2003	4	5	2,301	1,529
2004	3	6	734	569
2005	5	12	2,141	1,975
2006	10	22	3,729	3,521
2007	9	20	2,322	1,484
2008	2	5	1,453	1,393
Total[(1)]	**37**[(1)]	**76**	**14,272**	**11,220**
Year contract expires				
2009-2015	6	7	1,672	703
2016-2025	12	14	2,596	1,871
2026-2035	14	34	5,650	4,468
from 2036 on	6	21	4,354	4,177
Total	**38**[(2)]	**76**	**14,272**	**11,220**

Source: Bank of Italy survey of local authorities that have issued bonds. The data collected should cover a large proportion of the phenomenon.

(1) The total is larger than the total number of authorities that have used amortization swaps (27) because some concluded more than one transaction in different years.

(2) The total is larger than the total number of authorities that have used amortization swaps (27) because some have contracts expiring in different years.

Table 12

Main general government budget indicators[1]

(as a percentage of GDP)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
General government											
Revenue	46.2	46.4	45.4	45.0	44.5	45.1	44.5	44.2	45.8	46.9	46.6
Expenditure[2][3]	49.0	48.1	47.4	48.1	47.4	48.6	48.0	48.5	49.2	48.4	49.3
of which: *interest payments*	*7.9*	*6.6*	*6.3*	*6.3*	*5.5*	*5.1*	*4.7*	*4.6*	*4.6*	*5.0*	*5.1*
Primary surplus	5.1	4.9	4.3	3.2	2.7	1.6	1.2	0.3	1.3	3.5	2.4
Net borrowing	2.8	1.7	2.0	3.1	2.9	3.5	3.5	4.3	3.3	1.5	2.7
Borrowing requirement net of privatization receipts	3.3	3.4	3.5	5.0	3.1	4.2	4.2	5.3	4.0	1.9	3.1
Debt	114.9	113.7	109.2	108.8	105.7	104.4	103.8	105.8	106.5	103.5	105.7
Local authorities											
Revenue	13.1	13.1	13.6	14.2	13.9	14.4	14.5	14.7	14.6	15.3	15.4
Expenditure[2][3]	13.4	13.7	13.8	14.5	14.7	14.9	15.4	15.5	15.8	15.1	15.6
of which: *interest payments*	*0.4*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.2*	*0.2*	*0.3*	*0.3*	*0.3*
Primary surplus	0.1	–0.3	0.2	0.1	–0.5	–0.1	–0.7	–0.6	–1.0	0.5	0.1
Net borrowing	–0.2	–0.6	–0.1	–0.3	–0.8	–0.4	–1.0	–0.8	–1.2	0.1	–0.2
Borrowing requirement net of privatization receipts	0.1	0.5	0.5	0.1	0.3	1.9	0.4	0.9	1.6	0.0	–0.2
Debt	2.4	2.9	3.2	3.2	3.4	5.1	5.3	6.1	7.5	7.2	6.8

Source: The items of the general government consolidated accounts are based on Istat data.

[1] Rounding may cause discrepancies in totals.

[2] This item includes the proceeds of sales of public real estate with a negative sign.

[3] The figure for 2000 does not include the proceeds of the sale of UMTS licences, which are deducted from expenditure in the national accounts.

Table 13

Main local authority budget indicators[1]

(as a percentage of GDP)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Regions											
Revenue	8.5	8.2	8.9	9.4	9.1	9.5	9.4	9.7	9.5	10.1	10.3
Expenditure[2][3]	8.5	8.4	8.7	9.5	9.1	9.5	9.7	9.7	10.0	10.0	10.4
of which: *interest payments*	*0.1*	*0.0*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*
Primary surplus	0.1	–0.2	0.3	0.0	0.1	0.1	–0.2	0.0	–0.4	0.2	0.0
Net borrowing	0.0	–0.2	0.2	–0.1	0.0	0.1	–0.3	–0.1	–0.5	0.1	–0.1
Debt	1.1	1.3	1.4	1.4	1.5	1.9	2.0	2.2	2.9	2.9	2.6
Provinces											
Revenue	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8
Expenditure[2][3]	0.6	0.6	0.6	0.7	0.8	0.8	0.9	0.8	0.8	0.8	0.8
of which: *interest payments*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Primary surplus	0.0	0.0	0.0	0.0	–0.1	–0.1	–0.1	–0.1	–0.1	0.0	0.0
Net borrowing	0.0	0.0	0.0	0.0	–0.1	–0.1	–0.1	–0.1	–0.1	0.0	–0.1
Debt	0.1	0.1	0.1	0.1	0.2	0.4	0.4	0.5	0.6	0.6	0.6
Municipalities											
Revenue	3.9	4.0	3.9	4.0	4.0	4.0	4.2	4.1	4.2	4.0	4.2
Expenditure[2][3]	4.2	4.3	4.1	4.2	4.3	4.3	4.4	4.3	4.2	4.2	4.3
of which: *interest payments*	*0.3*	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*	*0.1*	*0.1*	*0.1*	*0.2*	*0.2*
Primary surplus	0.0	–0.1	0.0	0.0	–0.1	–0.1	–0.1	–0.1	0.1	0.0	0.1
Net borrowing	–0.3	–0.3	–0.2	–0.2	–0.3	–0.3	–0.3	–0.2	–0.1	–0.2	–0.1
Debt	1.1	1.2	1.3	1.3	1.3	2.5	2.5	2.9	3.0	3.0	3.0

Source: The items of the general government consolidated accounts are based on Istat data.

[1] Rounding may cause discrepancies in totals.

[2] This item includes the proceeds of sales of public real estate with a negative sign.

[3] The figure for 2000 does not include the proceeds of the sale of UMTS licences, which are deducted from expenditure in the national accounts.

Figure 1

General government debt by subsector
(percent of GDP)

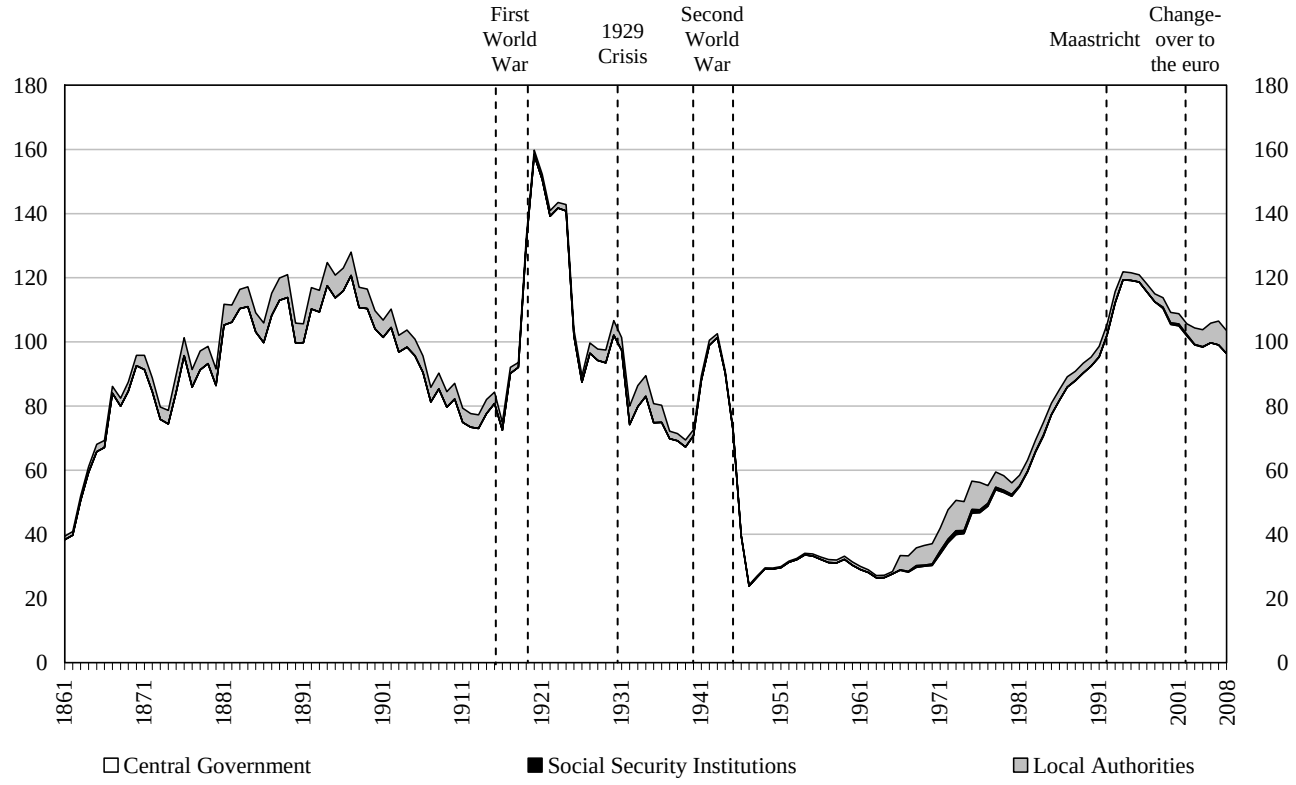


Figure 2

Local government debt by type of authority
(percent of GDP)

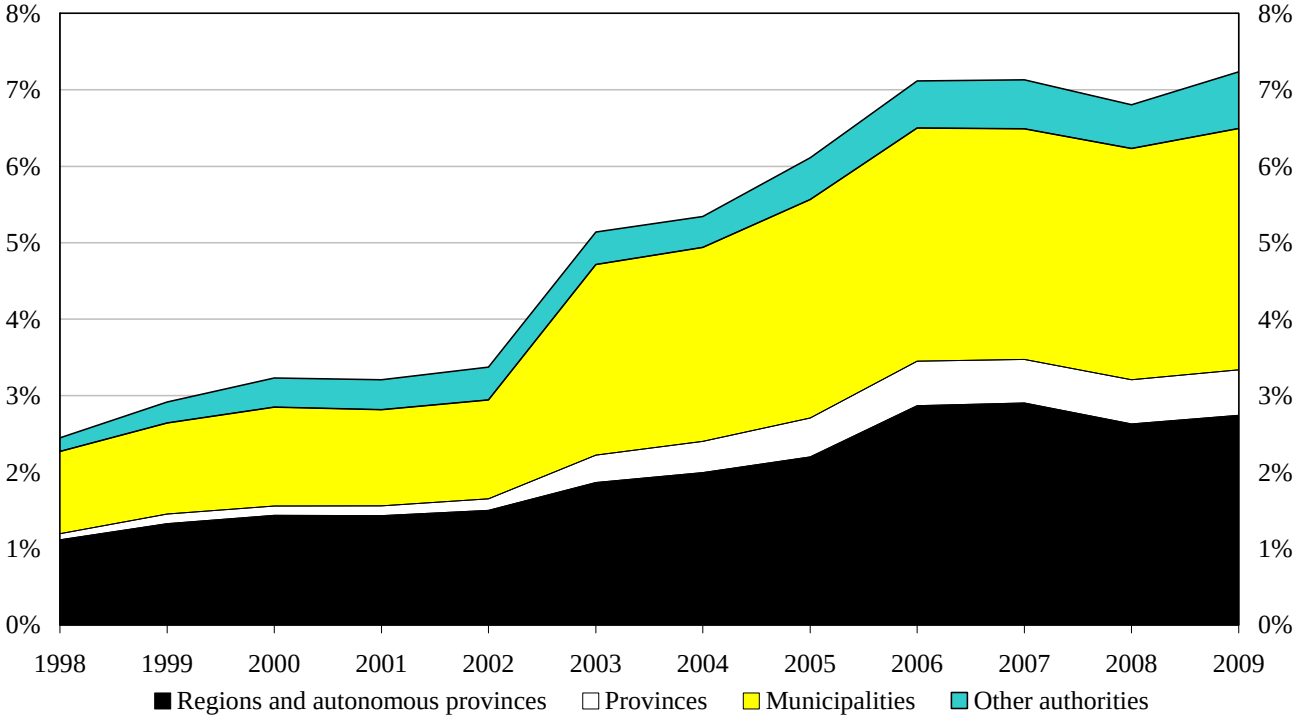


Figure 3

Local government debt by geographical area
(percent of GDP of the reference area)

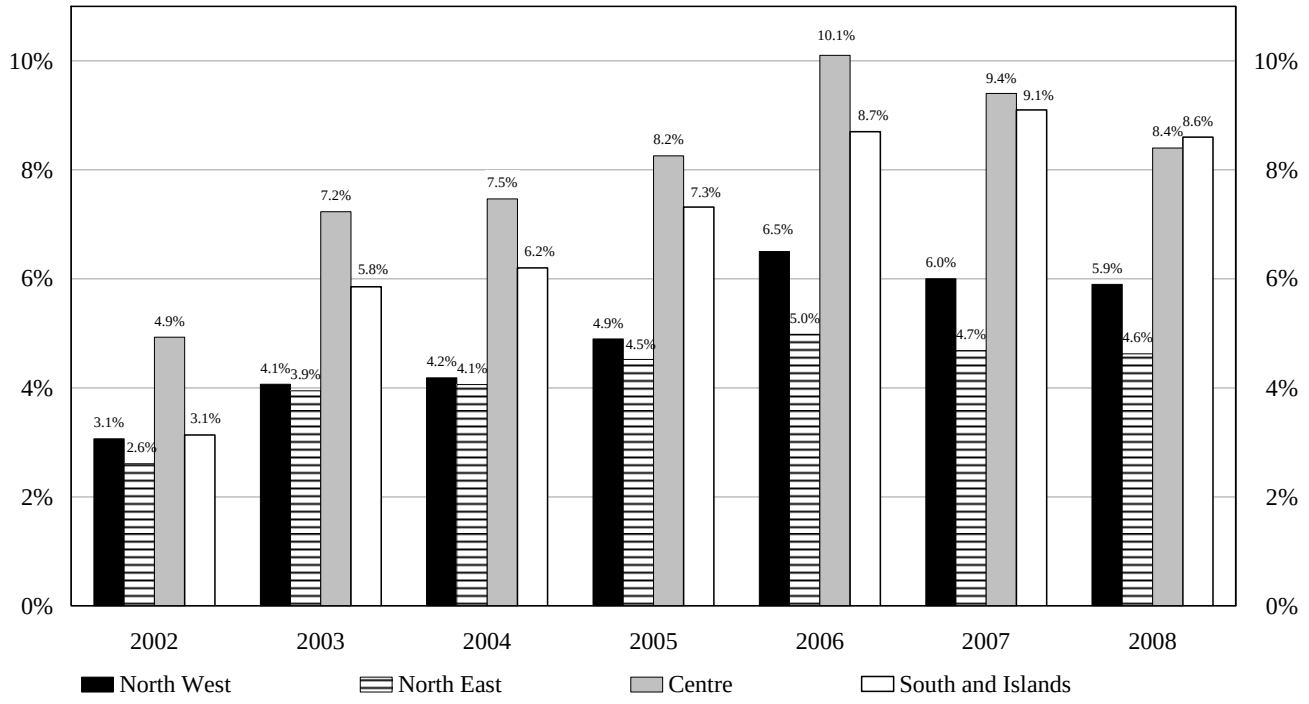
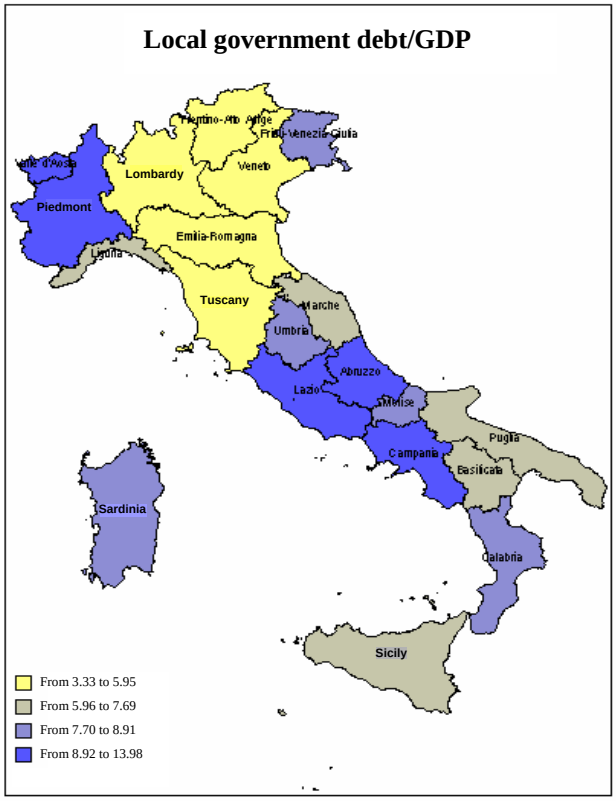


Figure 4

Local government debt: regional distribution



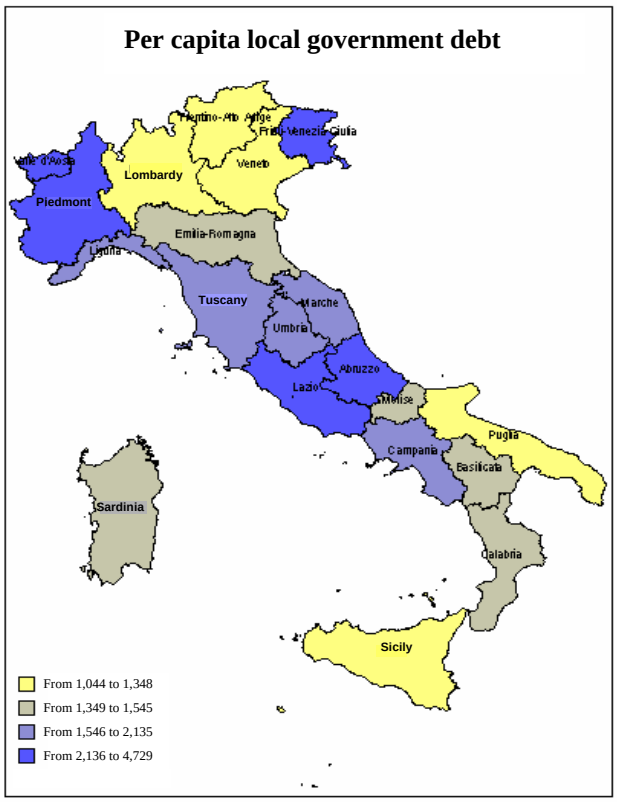


Figure 5

Local government debt by instrument
(percent of GDP)

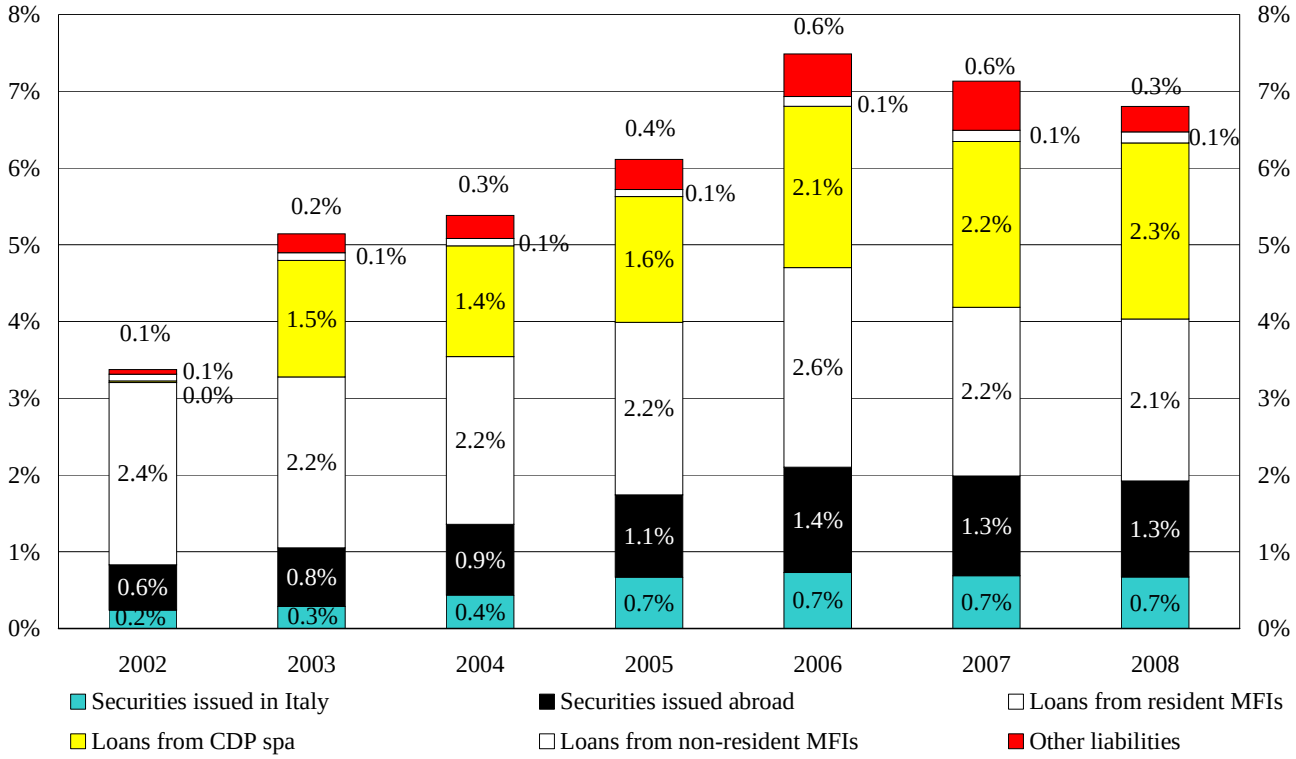


Figure 6

Diagram of an amortization swap with CDS