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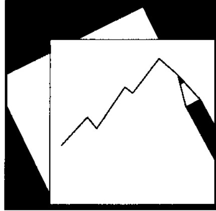

IMF Working Paper

The Reform of Italian Cooperative Banks: Discussion of Proposals

Eva Gutiérrez

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European Department

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Prepared by Eva Gutiérrez*

Authorized for distribution by James Daniel

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Abstract

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This paper argues that the governance framework of cooperative banks may hamper raising capital, particularly at time of distress, complicating the bank resolution process—especially for large banks—and may not provide adequate incentives to control banks' management. Reforms should preserve the positive characteristics that make cooperative banks a valuable addition to the Italian financial system, while providing enough flexibility and incentives for banks to adopt a suitable governance model. Our empirical analysis suggests that cooperative banks may enjoy a higher degree of monopoly power than commercial banks. Thus, regulations and the enforcement of antitrust policies should ensure a level playing field.

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Author's E-Mail Address: egutierrez@imf.com

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I. INTRODUCTION

Italian cooperative banks constitute an important segment of the Italian banking sector, and after recent merger activity some of the largest banks in Italy are cooperative banking groups. The presence of cooperative banks in the Italian financial system has positive effects as they mitigate credit-rationing to certain market segments, particularly SMEs. But the framework in which these banks operate needs to be updated to respond to the challenges posed by the emergence of large cooperative banks, and to further facilitate competition.

This paper reviews the framework in which cooperative banks operate, identify potential weaknesses, and provides recommendations for reform. We find that the governance framework of cooperative banks may hamper raising capital, particularly at time of distress, complicating the bank resolution process—especially for large banks—and may not provide adequate incentives to control bank management. To address these shortcomings, we propose a reform that includes several elements to improve governance while preserving the cooperative nature of the institution, as we found lack of compelling legal or economic support for mandatory conversion to limited company status.

The proposed reform is designed in a way that it can accommodate a variety of situations without complicating governance further. In particular, the reform should not impose practical changes in banks where shareholders do not deem increased participation of large investors as necessary or desirable to improve capital adequacy and bank performance. However, it should provide enough legal flexibility to allow for more prominent role for large investors if shareholders decide so. In addition, the reform should also provide incentives for the adoption of a suitable framework for the banks, within the scope provided by the law.

The main elements of the reform include (1) raising legal shareholder limits and limits on proxy voting, allowing the bylaws to adopt specific limits within the legal scope on a company case basis; (2) promoting the issuance of nonvoting shares and hybrid capital instruments; (3) reforming board composition and election procedures; (4) facilitating shareholder activism; and (5) imposing regulatory capital charges for governance risk. Many of these elements do not require legal amendments and thus should be relatively easy to implement.

The paper is organized as follows: Section II discusses the structure and features of the Italian cooperative banking sector and analyzes its performance; Section III discusses the case for governance reform and formulates reform proposals; Section IV estimates the degree of monopoly power enjoyed by different Italian banks (commercial, cooperative, and savings banks) and points out factors that could explain the results; Section IV concludes.

II. The Italian Cooperative Banking Sector

A. Structure of the Sector

The Italian cooperative banking sector comprises both *Banche Popolari*, (BPs) and *Banche di Credito Cooperativo* (BCCs). Together they account for about 30 percent of both loans and deposits of the Italian banking system, constituting an important segment among Italy's financial intermediaries as in other European countries. Since 1998 there has been substantial consolidation in the Italian cooperative banking sector (at that time there were 563 BCCs and 56 BPs). While some of the banks were liquidated and others converted in commercial banks, mergers accounted for the bulk of the decline in the number of entities since then.[1] Merger activity among cooperative banks recently intensified to exploit economies of scale. Currently, the fourth and fifth largest banks in Italy are BPs.

Table 1. Cooperative Banking Sector in Selected European Countries
(As of end December 2006)

	Number of banks	Loans market share	Deposits market share
Austria	666	35	31
BCCs	438	7	8
BPs 1/	38	20	22
France	79	40	46
Germany	1255	16	12
Italy	478	44	31
Netherlands	188	39	26
Spain	83	5	5
U.K.	n.a	1	1

Source: European Association of Cooperative Bank

1/ Market shares include banks controlled by BPs.

Popolari banks tend to be much larger than BCCs, partly reflecting the mutualistic nature of BCCs and the restriction to geographical expansion (see Table 2). The largest BCC accounts only for 0.21 percent of banking system loans and 0.31 percent of system deposits. According to the 1993 Banking Law, BCCs shall grant credit primarily to their members, but a similar restriction—characteristic of cooperative structures—does not apply to BPs. BCCs shares are nontradable as they do not reflect the value of the firm because profits are mostly devoted to a reserve fund. In contrast, BPs shares are listed in the stock exchange and only 10 percent of profits have to be devoted to reserves. Nonmembers may hold BP shares, enjoying property rights attached to the shares, but they cannot vote or exert other rights of control.

However, BCCs and BPs share some of the intrinsic cooperative features (see Table 2). Notably, decision making is based on one member-one vote; ownership rights are limited (EUR 50,000 in case of BCCs and 0.5 percent of capital in the case of BPs, while institutional investors may hold percentage of capital up to the limit provided for in their

[1] The 2003 special Fitch report on Italian BCCs indicates that mergers between BCCs were in many cases the result of weaker, troubled banks being acquired by a stronger BCCs or BPs, operations, which were often coordinated by regional authorities with support from the supervisory authorities or industry associations.

bylaws, which cannot exceed 10 percent) to ensure that contributions are similar; and new membership applications have to be approved by the Board.[2] Typically, BCCs are consumer cooperatives while BPs are closer to worker cooperatives.

Table 2. Main Features of Italian Cooperative Banks

	Banche Popolari (BPs)	Banche di Credito Cooperativo (BCCs)
Mutualistic features	No.	According to the Banking law (Art. 35), they shall grant credit primarily to their members. Credit operations with members need to account for at least half of the risk weighted assets of the bank. For stability reasons Bank of Italy (BoI) can establish exceptions.
Regional limits to expansion	No.	The Banking Law (Art. 35) establishes that the bylaws shall contain provisions governing their geographical operating limits, established on the basis of the criteria laid down by the BoI. According to these criteria, banks can expand to an adjacent region if they have more than 200 members in that region.
Tradability of shares	Yes.	No.
Voting rules	One man, one vote (Banking Law, Art. 30).	One man, one vote (Banking Law, Art. 34).
Limits to shareholder participations	0.5 percent of capital for individuals. Undertaking of collective investment in transferable securities may hold percentage of capital up to the limit provided for in their bylaws (Banking Law, art. 30), which cannot exceed 10 percent (BoI regulations).	Euro 50,000 per member (Banking Law, Art. 33). No distinction between individuals or legal entities.
Limits to collection of proxies	The Civil Code requires the maximum number of proxy votes to be 10 (Art. 2539).	The Civil Code requires the maximum number of proxy votes to be 10 (Art. 2539); the BCCs association recommends a maximum of three proxy votes for each member.
Membership requires board approval	Yes. Nonmembers may still hold shares but only enjoy property rights and cannot vote or exert other member rights (Banking Law, Art. 30).	Yes.
Profit allocation	BPs must allocate at least 10 percent of net profits to the legal reserve. Profits not allocated to the legal reserve, other reserves, as per bylaws or distributed among members must be distributed to charity (Banking Law, Art. 32).	The Banking Law (Art. 37) requires BCCs to allocate at least 70 percent of annual net profit to reserves. In addition, a total of 3 percent of the net profit shall be paid into a special mutual aid fund (Fondo Sviluppo SpA, set up by Federcasse and Conf cooperative) for the promotion and development of cooperation.
Conversion to joint stock company	They can convert into joint stock companies if the members decide so. For stability reasons BoI can authorize conversion or merger with another entity resulting in conversion to public company. In this case, the smaller quorum required by the bylaws for any of these actions shall apply (Banking Law, Art. 31).	To change status the bank has to be liquidated and what would be left after liquidation of a BCC should also be paid into Fondo Sviluppo. BoI, in the interest of creditors and where considerations of stability are involved, shall authorize mergers between banche di credito cooperativo and banks of different nature, which result in the formation of banche popolari or banks having the form of joint stock company (Banking Law,Art. 36).

[2] See European Commission (2001) for a detailed discussion of the typical features of cooperative institutions in the EU.

The Italian cooperative banking sector is far less integrated than others in Europe. The *Associacione Nazionale fra le Banche Popolari* represents the interests of BPs, providing research and analysis as well as advice on strategic issues. Network cooperation is limited mostly through the field of payment systems. BCCs are fully autonomous in their decisions but cooperate intensively through network institutions. BCCs are grouped into 15 regional federations, which report to *Federcasse*, the national association. The regional federations provide technical assistance and internal auditing to their members. *Federcasse* is in charge of the strategic planning and institutional affairs. In addition, a national network—*Credito Cooperativo*—helps BCCs to exploit economies of scale by providing services and products for distribution through its member BCCs. To this end, BCC *Gestioni Crediti* manages nonperforming loans, *Ceseoop* and *Incra* provide back-office services, and *Iccrea* acts as the BCCs' own bank, managing the liquidity of the system and operating in securities markets. BCCs deposits are covered by a specific deposit guarantee fund. *Banca Sviluppo*, also owned by network, acquires and manages BCCs in difficulty to prevent problems deteriorating to the point that the fund needs to be activated.

B. Sector Performance

Cooperative banks' performance compares favorably with that of other banks. Solvency ratios are similar—or higher in the case of BCCs—to those of the whole system, and nonperforming loans ratios are comparable or lower (see Table 3). Only profitability indicators seem lower, probably due to their smaller average size and the provision of more traditional financial services (Ianotta, et al, 2006).[3] In a context of increased competition, both BPs and BCCs have increased their market share in the last years.

Table 3: Italian Banks Performance Indicators
(Average 2006–04)

	Banking system	Banche Popolari	Banche di Credito Cooperativo
Solvency ratio	11.0	10.4	16.3
Tier 1 ratio	8.1	7.7	15.5
ROE 1/	10.2	7.5	7.4
NPL ratio 2/	6.2	5.1	6.3

Source: Bank of Italy.

1/ Average 2003–05.

2/ Loans past due 180 days. Average 2003–05.

Empirical studies have found that Italian cooperative banks are more cost-efficient than commercial banks, although their profitability is lower. Using cross sectional data on more than 700 Italian banks, Turati (2004) estimated cost functions and derived cost efficiency scores. The results indicated that BCCs and BPs were more efficient than commercial banks, in line with the results of a similar study on the German banking system by Altunbas, et al (2001). Girardone, et al (2004), also found higher cost efficiency scores for BCCs and BPs using a different functional form for the cost function, and controlling for risk of default and output quality using a panel data. Their estimates of economies of scale suggest that BPs and

[3] Moreover, cooperative banks are not for-profit institutions and thus more focused on the provision of services. This is especially the case for BCCs, which unlike BPs cannot be quoted in the stock exchange as shares are not tradable and have to devote over 70 percent of profits to reserves and special funds.

BCCs could achieve further cost reductions. However, Song, et al (1995) argue that to fully evaluate firm efficiency is important to combine both cost efficiency estimates and profitability.

The presence of cooperative banks also seems to have a positive effect on the solvency of the banking system. Using data from several banking systems, including Italy, Hesse and Cihàk (2007) found that: (1) cooperative banks are more stable than commercial banks due to the lower volatility of their returns, and that (2) the overall impact of a higher cooperative presence on bank stability is positive. In addition cooperative banks have higher capital ratios.

Nevertheless, individual cooperative banks do enter in distress. While the cooperative governance rules—in particular rules regarding profit allocation—result in higher average capital ratios, cooperative banks are not immune to shocks or events that could wipe out capital buffers. Since 2000, when several cooperative banks—including one BP—were under special administration, Bank of Italy has initiated more than 20 special administration procedures, virtually all pertaining to BCCs.

III. Discussion of Governance Reform Proposals

A. The Case for Governance Reform

Although cooperative banks performance compares favorably with that of other banks on average, individual cooperative banks occasionally do enter in distress as illustrated by history. The increasingly large size of the cooperative banks, especially the newly formed BPs, raises concerns regarding the resolution of potential distress situations given some of the cooperative governance rules.

In particular, the cooperative governance framework limits the range of options for resolving systemically important banks as it makes raising capital more difficult for these banks. Ownership limits combined with restricted voting rights might prevent raising capital from existing and new members, particularly at time of distress when large investors are more likely to provide capital injections. In the past, resolution of cooperative banks typically involved the merge or acquisition of the weak cooperative bank by another cooperative bank. However, this resolution mechanism is more difficult to apply to a large systemic bank, as the other cooperative banks might not be able to absorb it. While the Italian Banking Law allows in cases of stability concern for conversion to public company statutes if shareholders

decide so, shareholders might not approve conversion in anticipation of public capital injection, particularly if the bank is systemically important.[4]

In addition, the cooperative governance structure limits shareholders control over management. Decision making in cooperative banks is based on one member-one vote, and ownership limits ensure that contributions are similar. The resulting diffusion of ownership exacerbates, according to agency cost theory, owner-manager conflicts. Small shareholders typically do not have the incentive to exert effective control over management and the management-appointed board. Moreover, some effective mechanisms of management control such as the threat of takeover are virtually nonexistent due to the voting rule. Indeed in Italy, a series of reported episodes in BPs have raised questions regarding their cooperative governance model.[5]

Concerns that the cooperative governance framework might not be adequate, particularly for large banks, have prompted several legislative initiatives for reform of BPs, all of which stalled due to lack of consensus. The initiatives ranged from governance reform within the cooperative framework to mandatory conversion to limited company status. All contemplated increasing shareholder limits and simplifying the process for accepting new members. Most of the proposals that maintain the cooperative status would also grant institutional investors the right to appoint board members. The most radical reform substitutes the current one person-one vote system with a one share-one vote system, increases the number of proxy votes up to a maximum of 50, and transforms the bank into a joint stock company (of limited responsibility if not listed). A compromise reform, which included the reform elements common to all proposals plus an increase in the number of proxies also failed to gather enough support.

While currently BPs have a comfortable solvency position, changes in the legal framework should not be left for distress times. The availability of a wide range of tools and mechanisms to facilitate raising bank capital form markets reinforces confidence in the banking system and reduces the costs of dealing with an insolvent bank. Delays brought about by the need of changes in the legal framework may result in recourse to public money.

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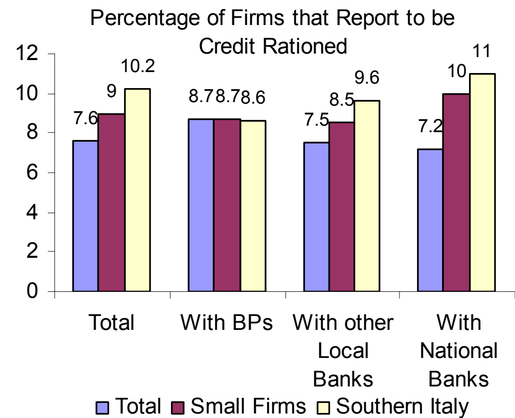
[4] If capital cannot be raised quickly, the bank would have to be put under special administration procedure, which could negatively affect perceptions regarding the stability of the system, particularly if the bank under administration is systemically important.

[5] See for example, *Popolari, Basterebbe una Riforma de Due Righe*, by Franco Locatelli in *Il Sole 24 ore*, December 16, 2007.

B. A Proposal for Reform

Desirable reform features

An effective reform should address the shortcomings of the cooperative governance framework while preserving the characteristics that make cooperative banks efficient and stable and justify their existence. Cooperative banks were created to provide financial services to market segments in the community that otherwise would have had not been able to access them. Thus, cooperative banks have a business model based on relationship banking and strong regional orientation. That business model mitigates existing credit constraints for Italian SMEs, as the proportion of firms that report to be credit rationed is lower among customers of cooperative banks.



Source: ISAE (2007)

Note: Small Firms are those with less than 50 workers.

The reform should also provide enough flexibility to accommodate a wide range of existing and foreseeable situations without complicating governance further. In particular, the reform should not necessarily affect the status quo of those banks whose current framework does not raise concerns regarding—present or future—capital adequacy. However, for the banks where governance raises concerns, the reform should provide incentives for the adoption of a more appropriate governance framework, providing a legal framework that allows for rapid changes in the governance rules if need to improve solvency and/or facilitate resolution arises.

Taking into account the desirable reforms features discussed above, the proposal for reform includes several elements to improve governance while preserving the cooperative nature of the institution. Not all of these elements require legal amendments, and thus they should be relatively easy to implement. The main proposals, discussed in this section, include (1) raising legal shareholder limits and limits on proxy voting, allowing the bylaws to adopt specific limits within the legal scope on a company case basis; (2) reforming Board composition; (3) facilitating shareholder activism; (4) promoting the issuance of nonvoting shares and hybrid capital instruments; and (5) imposing regulatory capital charges for governance risk. While mandatory conversion to limited company status—as proposed by some Italian parliamentarians—could in principle solve some of the drawbacks of the cooperative governance framework, we do not found enough support of that policy neither on economic nor on legal ground basis.

Box 1. Pros and Cons of Mandatory Conversion to Joint Stock Company

Demutualization (i.e. abandonment of the cooperative structure and conversion to joint stock company) could in principle solve some of the drawbacks of the cooperative framework; large shareholders with the power to control the institution would enhance control over management, and investors would be more attracted to participate in the capital of an institution if decision making is proportional to the shareholdings.

Nevertheless, there is not enough evidence as to justify mandatory demutualization for all firms on the basis of economic efficiency gains. In fact, the European Commission recently abandoned plans to restrict nonproportional voting corporate structures in the EU as they found that a compelling economic case could not be made (European Commission, 2007b). Also, in October 2004, the Commission concluded that the voting rule and shareholder limits in BPs did not violate EC treaties regarding free capital mobility. Moreover, most European legal systems recognize the "inherent right to self regulation" under which corporations should be able to organize themselves as they see fit. Precedents for mandatory demutualization are not easily found in the EU; even the U.K.'s Building Societies Act of 1986—which prompted the largest demutualization process in Europe—left the choice of the corporate structure to the shareholder assembly.

There is only perhaps one case in which conversion to a joint stock company could be mandatory: in case of prolonged capital shortfalls and as a last recourse if it were to be necessary to facilitate bank resolution without using public funds. In all other cases shareholders should be able to maintain the cooperative structure, but in the case the general assembly decides so, the process of conversion to joint stock company should be as simple as possible.

Facilitating the scope for raising capital

An essential component of the reform requires amending legislation to increase shareholdings limits for investors and limits to proxy voting, while allowing the company bylaws to set the specific limits for both items depending on the needs of the company and shareholders' preferences. This reform, which might not imply any practical change in banks governance framework, provides additional flexibility to facilitate the entrance of large investors without transforming the cooperative nature of the firm, if shareholders decide so.

Increasing shareholder limits for investors, including extending the limits for collective investment funds to other institutions such as insurance companies and foundations, and

limits for collection of proxies would facilitate raising capital and enhance control over management. Proxy contests, in which corporate activists try to persuade shareholders to delegate their votes to them in support of their position, or higher proxy limits, would help concentrating voting power temporarily. Higher shareholding limits, combined with the possibility of concentrating voting power, enhance the incentives for large investors to participate in the capital of an institution by facilitating decision making to be more proportional to the shareholdings.

There are examples within EU members of higher legal shareholder and proxy limits for cooperative credit institutions; according to the Spanish law, institutional investors can hold up to 20 percent of the capital and individuals 2½ percent, and a member can receive proxies up to the shareholding limits. Moreover, the Spanish legislation imposes the same proxy limits on all cooperative institutions (i.e., the limits cannot be lowered in the bylaws), and it allows for multiple votes per member, up to a limit proportional to the capital holding, if stipulated in the bylaws. Despite the scope provided in legislation for the participation of large investors, Spanish cooperative credit institutions—*Cajas Rurales*—remain regional oriented institutions focused on retail and SMEs market segments and with a relationship-lending business model.

In addition to raising shareholder limits, promoting the issuance of innovative equity instruments could help raise capital and improve market discipline. As cooperative banking becomes more capital-intensive, cooperative banks require additional sources of capital to complement retained earnings. Many French cooperatives have issued nonvoting equity, and some cooperatives have experimented with equity-like debt instruments and hybrid types of securities. Promoting the issuance of nonvoting preference shares—as in the case of France's Credit Agricole—and/or members' certificates in the case of BCCs, as done by Netherlands' Rabobank, could facilitate raising capital, improve market discipline, and help develop Italian capital markets.

Enhancing control over management

The second element of the reform envisions reforming board composition and procedures for its election in order to enhance control over bank management. Many of these reforms do not require legal amendment and could be promoted by the network institutions and regulators through the issuance of codes of governance. Specifically, only shareholders who are not members of the board should be allowed to propose board candidates to prevent that a management-appointed board, passively ratified by the general assembly, becomes a simple mechanism to provide a stamp of approval for management decisions. Constraints on the selection of board members—who must typically come from within the membership—should be removed, while election committees could improve the quality of candidate board members. However, care would need to be taken to ensure that such means do not impede the democratic functioning of cooperatives. The banks could also benefit from a system that allows shareholders to ratify single board members rather than for a whole list of representatives.

Legal amendments to grant large investors the right to appoint a representative at the board would mitigate agency problems by ensuring the presence of professionals with enhanced incentives, given their bigger stake, to monitor management. In the case of BCCs, board membership of representatives of network institutions could provide substantial expertise to the organism of control. To the extent that the network needs to ensure the solvency and liquidity of member banks, it will need to monitor the activities of members, which would complement market and supervisory oversight.

Encouraging shareholder activism could also help enhance control over management. A straightforward policy is to raise the effectiveness of "voice" mechanisms and to reduce their cost, for example, by promoting corporate voting by mail and/or electronic voting in line with good governance practices.[6] To encourage shareholder participation in key votes, incentives could be provided to those voting or delegating their vote to increase the legitimacy of the decision. The recently introduced class action regulation, if well designed, could also provide adequate incentives to management in the face of prospective shareholder lawsuits.

Providing buffers against governance risks

Finally, supervisors should raise capital requirements for banks whose governance framework raises concerns regarding future stability. Under the recently introduced Basel II capital accord, Pillar II provides supervisor discretion to impose additional capital charges to account for a variety of risks. Thus, the risks discussed arising from cooperative governance structure could be partly mitigated through additional capital charges that lower the probability of bank insolvency in the event of severe shocks.[7] Capital charges for governance risks are thus useful tools—to all banks, cooperative or not— regardless of whether the legal framework for cooperative banks is reformed. In addition, capital charges would provide incentives for banks to adopt more suitable governance framework within the flexibility provided by the new legislation.

Table 4: Summary of Reform Proposals

	Banche Popolari (BPs)	Banche di Credito Cooperativo (BCCs)
Reform Banking Law an Civil Code provisions on shareholding and proxy limits	X	
Promote the issuance of new capital instruments	X	X
Reform board composition and election procedures	X	X
Enhance shareholder activism	X	X
Capital charges for governance risk	X	X

[6] The recent EU Directive/2007/36/EC introduced minimum standards to ensure that shareholders of companies whose shares are traded on a regulated market have simple means to vote at a distance. See http://www.europarl.europa.eu/oeil/file.jsp?id=5302652.

[7] Bank of Italy already imposes higher capital solvency ratios to certain institutions, but they are not explicitly linked to governance risks.

IV. Cooperative Banks and Competition

Some recent studies have explored the relationship between cooperative banks and competition. A recent EC report on Retail Banking (EC, 2007a) pointed out some elements that could potentially increase the degree of monopoly power of European cooperative banks. In particular: (1) the existence of barriers to entry due to the cooperative voting rule;[8] (2) regulations that discriminate in favor of cooperative banks; (3) practices that restrict competition through network cooperation; and (4) tolerance of the antitrust authorities in the enforcement of regulations due to the benefits brought about by cooperation and the banks connection with local politicians.

To explore whether Italian cooperative banks enjoyed a higher degree of monopoly power than competitors we estimated empirically the H-statistic for different types of institutions. The H-statistic developed by Panzar and Rose is an indicator of the underlying market structure, and it is defined as the sum of the elasticities of total income with respect to factor prices. Assuming that: (1) firms' cost functions are linearly homogeneous in factor prices; (2) factor prices are exogenous to the individual firm; (3) the elasticity of the perceived demand of the individual firm is nondecreasing in the number of rivals; and (4) free entry and exit, in the long-run equilibrium (without exit or entries) a perfect competitive environment is characterized by a value of the H-statistic equal to 1. The reason is that in perfect competition, firms operate at minimum average costs, which is also equal to the price. Thus, increases in factor prices lead to a proportional increase in prices and firm revenues. Negative values of the H-statistic are consistent with a monopoly; increases in factor prices translate into marginal cost increases. As the monopoly equalizes marginal cost to marginal revenue, output and firm revenues decline. Positive values, but smaller than 1, are consistent with monopolistic competition.

The main limitations to this methodology arise from its assumptions, in particular the assumption that the system is in long-run equilibrium, and the fact that factor prices are exogenous to the firm. The application to the banking sector can be particularly problematic because part banks' loans are fixed rate and thus increases in factor prices would not automatically translate in price adjustments, biasing the estimates in favor of monopolistic competition. Comparisons among estimates for different banking sectors need to take into account the difference in the structure of loan portfolios. Ideally, results used with this methodology should be cross-checked with analysis based on more disaggregated data.'

We computed the H-statistic using the coefficients estimates of the following equation

[8] Entry in regional markets with strong customer-bank relationships typically requires takeover of an established bank network. But cooperative banks' voting rule shields them from hostile bids. The recent appearance of large BP groups sheltered from takeovers thus raises competition concerns.

$$yit = \alpha_i + \sum_j \beta_j X_{it}^j + \sum_k \delta_k z_{it}^k + \sum_l \gamma^l w_{it}^l + u_{it} \qquad (1)$$

where y denotes interest and fee revenues as these are the revenues that can be more easily adjusted by the bank, X is the vector of factor prices, Z is the vector of variables that determine the bank capacity, and w is the vector of bank specific variables. X variables include the price of deposits, labor ,and capital approximated by the ratio of interest expenses to total funds, the ratio of personal expenses to total assets, and the ratio of other provisions to fixed assets. The scale variables include total assets and the ratio of capital to total assets, while the w vector includes the ratio of loans to total assets and the ratio of deposits to total funds.

Equation (1) was estimated with the variables in logs using Italian banks data (2000–06) from Bankscope for the entire banking system, cooperative banks (given the small number of observations for BPs we estimated jointly for both BPs and BCCs), commercial banks, and saving banks. Results are reported in Table 5. The F-test for the H-statistic being equal to 0 is in all cases rejected. We also test for perfect competition, i.e., prob(H=1), and rejected in all cases, which suggest a monopolistic competition structure. Finally, we estimated equation (1) with data for both commercial and cooperative banks, interacting the coefficients with a bank-type dummy to test for the difference in the H-statistic. We found that the estimates of the H-statistics for cooperative and commercial banks are indeed statistically different. Following the same approach we also found that the H-statistics for savings and commercial banks are statistically different, but the difference between the H-statistic for cooperative and savings banks is not statistically different from zero at the 5 percent level. These results, which suggest that cooperative (in these case mostly BCCs) and savings banks enjoy higher degree of monopoly power than commercial banks, coincide with those of similar studies (see Hempell, 2002, for an application to German banks).

Some of the factors identified by the EC report as sources of monopoly power for cooperative banks do not seem to play a role in Italy. Unlike French cooperative banks, Italian cooperative banks do not have exclusive rights to commercialize certain products. BPs do not have any tax advantage, and cooperative banks in other EU countries (i.e., Spain) have a more preferential tax treatment than Italian BCCs.[9] However, consideration could be given to fully equalizing the tax treatment of BCCs and other banks by taxing mandatory contributions to legal reserves, especially when capital accumulated exceeds regulatory requirements.

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[9] As in the case of BCCs, Spanish cooperative banks' profits devoted to legal reserves and social funds are not taxed. But in addition, in the case of Spanish credit cooperatives, other profits of not allocated to these funds are taxed at a 25 percent rate, lower than the 35 percent tax rate applied to commercial banks profits.

However, several antitrust investigations regarding information exchange between BCCs belonging to the same regional federations forbade practices that were found to facilitate market-sharing settlements (Banca d'Italia, 2006). Cooperation, while necessary to exploit economies of scale and better service customers, should not result in competition restrictions such as market-sharing or price-fixing.

Table 5: Italian Banks Revenue Functions: Estimation Results
(Standard errors robust to heteroskedasticity reported in brackets)

	Overall sample	Cooperative banks	Commercial banks	Savings banks
Factor prices				
Funds	0.33	0.27	0.41	0.32
	[9.43]	[9.93]	[4.35]	[9.38]
Labor	0.21	0.17	0.39	0.02
	[4.98]	[3.95]	[3.55]	[0.21]
Fixed capital	0.00	0.00	0.02	-0.01
	[0.70]	[0.00]	[1.48]	[-0.83]
H statistic	0.55	0.44	0.82	0.33
p(F-test)	0.00	0.00	0.00	0.00
Total assets	0.98	0.97	1.07	0.66
	[-31.61]	[-46.19]	[-8.23]	[-4.09]
Capital to total assets	0.05	0.07	0.05	-0.19
	[1.92]	[2.33]	[0.72]	[-2.95]
Loans	0.25	0.29	0.11	0.34
To total assets	[6.00]	[9.18]	[12.39]	[2.27]
Deposits	0.03	0.05	0.11	-0.03
To total funds	[0.70]	[1.23]	[1.16]	[-0.212]
Memorandum item:				
Number of observations	1406	1089	202	89

Source: Own estimates from Bankscope data.

V. Conclusions

The governance framework of cooperative banks may hamper raising capital, particularly at time of distress, complicating the bank resolution process—especially for large banks—and may not provide adequate incentives to control the banks' management. The proposals for reform put forward in the paper aim to preserve the positive characteristics that make cooperative banks play a valuable role in the Italian financial system, while providing enough flexibility and incentives for banks to adopt a suitable governance model.

The proposed reform is designed in a way that it can accommodate a variety of situations; it would not necessarily affect the status quo of those banks where increased presence of large investors is not considered necessary, but it provides legal flexibility to facilitate participation of large investors if shareholders of BPs decide so. In addition, it includes other

elements, applicable both to BPs and BCCs, which do not require legal amendments, and thus should be easier to implement.

Our empirical analysis suggests that cooperative banks seem to enjoy a higher degree of monopoly power than commercial banks. To explore this result, more empirical work based on disaggregated data would be necessary. As pointed out by the recent EC report on Retail Banking, regulations should ensure a level playing field for all banking institutions, and antitrust authorities even-handedly enforce competition legislation.

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