UNIVERSIDAD CARLOS III DE MADRID working papers

Working Paper 03-07
Economic History and Institutions Series 03
February 2003

Economic History and Institutions Dept.
Universidad Carlos III de Madrid
Calle Madrid 126
28903 Getafe (Spain)
Fax (34) 91 624 9574

CORPORATE GOVERNANCE, MORAL HAZARD AND CONFLICT OF INTEREST IN ITALIAN UNIVERSAL BANKING, 1914-1933[1]

Stefano Battilossi[2]

Abstract

Universal banking is widely held to enjoy comparative advantages in corporate finance. Recent theories of financial intermediation argue that 'insider systems' are better suited to effectively deal with long-term growth and moral hazard problems. However, little attention (if any) is usually paid to corporate governance problems that are specific to universal banking.

How can banks' ownership structure and agency problems influence their ability to address long-term growth and moral hazard problems? Under which institutional arrangements, incentives and constraints can universal banking effectively realize its potential?

The paper looks at such issues through the experience of interwar Italy. The evolution of universal banking in the 1920s emerges as heavily exposed to potentially serious problems of moral hazard and conflicts of interest, due to inefficient corporate governance, lack of external controls and a moral-hazard-enhancing institutional set-up. These factors may distort bank managers' incentives, affect strategic trade-offs and lead to unsound banking.

The findings are consistent with that part of corporate governance literature which points to the potential for moral hazard and conflicts of interest inherent to universal banking and emphasise the conditional and historically-specific nature of its alleged benefits.

JEL classification: G21; G34.
Key words: Universal banking; Corporate governance; Italy.

[1] I am grateful to the participants in the session on 'Financial Markets and Corporate Governance' at the Business History Conference 48th Annual Meeting (Hagley Museum and Library, Wilmington, Delaware, 19-21 April 2002), and in particular to Richard Sylla, for their useful comments.
[2] Battilossi, Stefano. Department of Economic History and Institutions. Universidad Carlos III de Madrid. E-mail: battilos@clio.uc3m.es

Introduction

Universal banking is widely held to enjoy comparative advantages in corporate finance, relative to alternative institutional arrangements such as specialised banking. Recent theories of financial intermediation argue that financial systems in which universal banks provide most of outside corporate finance, are better suited to effectively deal with long-term growth and moral hazard problems. This view translates into the corporate governance literature in the form of the alleged superiority of the 'insider-system', typical of Germany (in the form of 'relationship banking') and Japan (based on a 'main bank' system), as opposed to the Anglo-Saxon 'outsider system' (Aoki and Patrick 1994; Franks and Meyer 1997; Prevezer and Ricketts 1999). Literature largely focuses on the role of universal banks as 'insiders' with substantial power to influence firms' strategic decisions. Due to commitment to long-term relationship (which expands the investment horizon of firms) and consistent monitoring of financed firms (which allows banks to collect information while providing firms with incentives to improve performance), bank-oriented institutional environments are believed more effectively to promote an efficient allocation of resources. In a information-based approach to corporate governance (i.e., a pecking-order framework), universal banks can optimise long-term, information-conducive contractual arrangements throughout the firm's life cycle. In this view, financial contracts that lower the costs of information and corporate governance are also supposed to reduce the cost of external finance and stimulate investment, thus contributing to economic growth in the long-run (Calomiris 2000).

Dominated as it is by the role of universal banks as insiders in firms' corporate governance, neither theoretical nor empirical literature has explicitly addressed the problem of corporate governance of universal banks so far. This is the main goal of this paper. Which are the agency problems that are specific to universal banks? How does banks' ownership structure influence their ability to address long-term growth and moral hazard problems? Under which institutional arrangements and constraints can universal banking more effectively realize its potential? The paper looks at those issues in the mirror of the failure of universal banks in interwar Italy. The collapse of the Italian German-style 'mixed banks' is traditionally explained as the consequence of extremely risky strategies (escalating equity

holding, high concentration of debt financing in a small group of firms, excessive reliance on central bank liquidity and foreign credit lines) undertaken in the context of the macroeconomic deflationary stock brought home by the 1925-26 stabilisation. Their destabilising potential proved unsustainable in the downturn cycle of 1930-33, thus requiring the state to intervene to bail-out and finally take over the banks (Toniolo 1980; Confalonieri 1994). Under many respects, the Italian case has strong similarities with other universal banks' failures in central Europe (see Schubert 1991 on the Austrian Credit-Anstalt for an example). However, the story also casts light on a banking system plagued by institutional inefficiencies, unresolved moral hazard problems, massive conflict of interest, widespread managerial misbehaviour and systematic monitoring failure. A structural bias towards unsound banking was evident in universal banking Italian-style well before the systemic crisis of 1931-32. The paper analysises this issue from a corporate governance perspective. Universal banks were characterised by a system of corporate governance based on kind of siamese twinship. The expression 'siamese twins' was minted by Raffaele Mattioli, a bank manager at the head of Banca Commerciale Italiana from the 1930s to the 1970s, to describe the intricate network of cross-ownership links between the mixed banks and their corporate customers which drove them to collapse in 1931-33. The basic concept may be translated into modern terms of moral hazard and conflict of interest. Section 1 reviews the theoretical literature on moral hazard and conflict of interest in universal banking, and raises the question – whose relevance seems underestimated in the dominant approach – of how universal banks' ownership structure may affect agency problems and their ability to realize their beneficial potential. Section 2 analyses the historical evolution of the Italian main universal banks (Banca commerciale italiana, BCI, and Credito italiano, CI) in the interwar period in the light of four critical issues: the market for corporate control of banks, internal controls, external controls and the institutional set-up, and the fundamental characteristics of the market for corporate control in the non-financial sector. Section 3 proposes an interpretation of the crisis of universal banking in Italy as a consequence of structural flaws in corporate governance. A simple model is presented here which elaborates on universal banking as a form of relational financing and analyses the trade-off banks face between different rent-seeking strategies. Section 4 concludes.

1. Theoretical Issues: Who Monitors the Monitor? A Review

There exists a widespread consensus that an 'insider system' of corporate governance, dominated by universal banks engaging in the full range of intermediation services (including brokerage and investment banking) and being allowed to hold equity in borrowing firms, to vote their shares and to act as directors, may bring a number of advantages. The potential conflict of interest between banks as lenders and banks as shareholders, due to different pay-off structures to debt and equity, entails a high potential cost of active bank involvement in running a firm (Krozner and Strahan 1999). However, the use of strip finance (debt-equity finance) is regarded as an effective strategy for a bank willing to lessen moral hazard (controlling riskiness of firms' strategy, monitoring and influencing managerial effort, as well as preventing distribuition of assets to shareholders at the disadvantage of creditors and innaccuracy in reported return realizations), obtain access to insider information (also through interlocking directorates) and commit the firm to long-term, exclusive business relationship (especially useful in case of restructuring) (Mayer 1988; Fisher 1990; for a review, Canals 1997). Moreover, also banks' ability to produce credible information about a borrowing firm's prospects at the benefit of the firm's non-equity stakeholders is seen to depend crucially on the structure of the bank's financial claim on the firm. Of course, an equity claim tends to align bank interest with the firm's owners against the firm's stakeholders, thus potentially undermining bank's credibility as delegated monitor. This however influence the bank's incentive to monitor and control the riskiness of the firm's investment policy. In this case, an equity claim can turn into an incentive to exercise significant control over the firm's investment choice, thus refusing to finance excessively risky projects. Indeed, some argue that exactly the opposite may happen, if the bank shares the firm owner's interest in taking excessively risky projects and shifting risk to the firm's non-equity stakeholders. For this reason Berlin, John and Saunders (1992) suggest that the optimal financial claim for an informed bank – i.e. a bank with substantial influence over the firm as its dominant source of financing and an informed investor – should be initially a mixed contractual claim including both debt and equity, as the appropriate instrument to enforce an efficient selection of project risk by the firm. Under

conditions of financial distress, a ceiling on equity holdings should be set in order to preserve bank's credibility in the eyes of non-equity stakeholders.

This optimally structured claim may allow the bank to mitigate conflict of interest between the firm and its fixed claimants. Empirical investigations tend to confirm such view. Gorton and Schmid (2000), for example, do not find any evidence of German banks extracting private value to the detriment of firms, or using proxy voting to the detriment of other shareholders; in turn, firms' performance is positively correlated to concentration of equity control rights in the banks' hands. Similarly, universal banks are believed to improve efficiency of financial markets. Gande et al. (1997) argue that net-certification effect of bank underwritings (benefits of having better information outweighing potential conflict of interest) should dominate, especially if debt security issue by borrowing firms is not related to repayment of existing bank debt. The history of the US financial system seems to support this vision. In the pre-Glass-Steagall epoch, for example, securities underwritten by commercial banks showed a better default record, which is interpreted as evidence of a net certification effect to investors (Ang and Richardson 1994, Kroszner and Rajan 1994, Puri 1996).

However, a different perspective can be adopted. Baums (1994) casts doubts on the actual ability of universal banks to produce the potential benefits of a German-style insider system, either in terms of corporate finance or in terms of corporate governance. He also emphasises that taking equity in firms may simply represent a growth strategy based on rent-seeking (in the form of exclusivity of normal banking business: an attitude typical of house-banks with long-term relationship, large equity-holding in firm, special responsibility of the bank in times of financial distress, representation of the bank in the firm's board of director). Walter (1996) stresses that large universal banks may be able to extract economic rents from the market by application of market power (an issue that attracted little investigation by empirical studies so far), thus leading to oligopoly, if not prevented by regulation and international competition. On theoretical grounds, Boyd, Chang and Smith (1998) show that, under universal banking, taking equity positions and assuming control rights may attenuate banks' incentives to control moral hazard problems, as they can share more easily the benefits of 'misallocating' funds (for example, by incentivating transactions between firms in which they hold control rights). Moreover, moral hazard problems may

assume particular gravity under specific economic conditions – namely, low real return on savings, high returns on misallocated funds, scarcity of funds and large equity holding (which allow banks to extract additional surplus from borrowers). Moral hazard problems tend to be exacerbated under conditions of State deposit insurance: more specifically, equity holdings align the incentives of banks and borrowers, potentially at the expenses of the insurer.

Finally, potential for conflict of interest in universal banking is endemic. Walter (1996) provides a long list of possible conflict-of-interest situations: (a) stuffing fiduciary accounts. A bank acting as an underwriter and unable to place securities in a public offering (therefore exposed to potential underwriting loss) may seek to ameliorate this loss by 'stuffing' unwanted securities into accounts managed by its investment department. (b) bankruptcy-risk transfer. A bank with loans to a firm whose bankruptcy risk has increased (to the private knowledge of the banker), may induce the firm to issue bond or equities (underwritten by its securities unit) to an unsuspecting public; proceeds are then used to pay-down the bank loan. In this case the bank transfers debt-related risk to outside investors. (c) third-party loans. To ensure successful underwriting, a bank may make favourable loans to third-party investors on condition that funds are used to purchase securities underwritten by the bank itself. (d) tie-ins. A bank may force a firm to buy its securities products under threat of credit-rationing.

The problem is therefore that universal banks may well be able to get better information, but also have incentives to exploit information asymmetries to misrepresent this information to the market or to extract extra surplus from client firms (Gande et al., 1997). As a consequence, a need arises for specific mechanisms to control conflict of interests (i.e., disincentives to exploit such conflicts). These may be: (a) market-based (market-reputation and competitio as disciplinary mechanisms); (b) regulation-based ('firewalls' between types of activities); (c) internal (loyalty, professional conduct, respect to the institution's long-term survival). On balance, the view that moral-hazard-reducing behavior should be considered as intrinsic to the nature of universal banking appears unjustified. Universal banking is equally exposed to potential benefits and risks. Country- and historically-specific factors – such as institutional set-up, legal environment, level of economic development, patterns of corporate governance – are what determine the final

outcome. As Aoki correctly argues, 'there is probably no financial system that is the most efficient throughout all stages of development and across different economies with diverse characteristics. Recognizing this will make the comparative institutional analysis of financial systems one of the most important research agenda items for understanding the workings of advanced, developing, and transforming economy' (Aoki 1994, 140).

A major weakness of the existing literature is insufficient attention to universal banks as financial intermediaries with specific agency problems and related systems of incentives and controls. Does the ownership structure of a universal bank matter? How is this translated into the bank's corporate governace? Can agency problems, moral hazard and potential conflict of interests affect the bank's ability to efficiently perform its multiple role of financier and monitor?

We assume that, in universal banking as elesewhere, shareholders' utility function is biased towards maximisation of the bank's value (risk-neutrality, diversification, efficiency, adaptation to changing market and economic structure through innovation, high profitability). On the contrary, managers have incentives to opportunistic behavior (maintainance and expansion of power), which may lead to risk concentration, sluggish management, maintanance of cost and organisational inefficiencies (e.g., expansion of lending volume in order to cover operation costs, thus taking in further risk), or preservation of privileges in asymmetric informations (to influence strategic decisions). Within such framework, different ownership structures produce different agency problems. Dispersed ownership (such as in the case of public companies) entails high monitoring costs for individual shareholders and large discretion of management, since only large stockholders have strong enough incentives to monitor firm's management (Schleifer and Vishny, 1986). This situation can be mitigated to some extent by the presence of institutionalised shareholders coalitions or strong institutional investors, while the market for corporate control can provide managers with incentives in line with shareholders interest. On the other side, an ownership structure based on a coalition of strong stockholders may be in better position to exercise effective strategic leadership, limit managers' opportunistic behaviour and provide stronger incentive to managerial efficiency. However, there exists also the risk of opportunistic behaviour of controlling stockholders. This may lead to conflict of interests, especially in the presence of a relationship banking

connection. In this case the utility function of controlling stockholders may incorporate a bias towards maximising the volume of credit and services obtained from the bank at the minimum cost, rather than maximising banks' value. The existence of interlocking directorates may even lead to magnifying conflicts of interest. Controllers and/or managers may use corporate banking and underwriting activities to benefit themselves at the expense of the solvency of the bank (i.e., to 'loot' the bank), for example through underpricing of services (Shull and White 1998, 17).

Moreover, asymmetric information in favor of managers cannot be completely eliminated, due to limited access of directors to independent sources of information and subject to their ability to effectively manage information flows. Due to possible inefficiencies in the working of both market and internal controls, it is all important that bank managers are subject to external institutional controls, in the form of regulation, monitoring and supervision by monetary authorities. On balance, external (either market or institutional) and internal controls are fundamental in order to prevent the emergence of bank crisis caused by inadequate conduct by managers as to (1) risk forecasting/control, (2) efficient organisational structure, (3) profitability (Baravelli 1998). How does corporate governance affect bank managers' performance under these three aspects?

2. Siames Twinship: Moral Hazard and Conflicts of Interest in Italian Universal Banks

Recent literature on universal banking, dealing almost exclusively with the post-1945 period, found little empirical evidence of moral hazard and conflict of interest. The case of Italian mixed banks in the 1920s and 1930s, in turns, provides plenty of it. The paper focuses exclusively on the two major universal banks of the period, Banca commerciale italiana (BCI) and Credito italiano (CI). BCI and CI, both founded in the 1890s, were organized in the form of fully-integrated universal banks, providing a broad range of financial services (short-term and long-term credit; issue, underwriting and placement of securities) under a single corporate structure supported by a single capital base. This corresponds to a Type-A universal bank, following Walter's taxonomy of organisational patterns (Walter 1996, 2). Both banks experienced rapid growth. In 1910, BCI and CI's fund raising (fiduciary deposits and current accounts) accounted for 48.5% of total fund

raising of joint-stock banks (società ordinarie di credito) and 14.3% of total fund raising of the banking system as a whole. In 1936, their quotas had reached 54.3% and 21.8% of fund-raising of joint-stock banks and total banks, respectively. (Data from Banca d'Italia, Ufficio Ricerche Storiche, 1996).

BCI and CI, both based in Milan and with considerable branch networks (91 branches for BCI, 70 branches for CI in the late 1920s), provided by far the lion's share of long-term lending and corporate finance services to a rapidly expanding industrial sector. Contemporary observers publicly denounced 'the competition to capture firms', the imposing dimension reached by the four major mixed banks – beside BCI and CI, the Banca Italiana di Sconto, an aggressive universal bank founded in 1914 and operating as main bank of the mechanical group Ansaldo, and the Banco di Roma, a second-rank institution based in Rome – and the absolute dominance of such 'bank quadrumvirate' in the allocation of credit (Bachi 1919). Concentration in corporate banking further increased in the early 1920s as a consequence of the collapse of the BIS and the crisis of the Banco di Roma, which had to be bailed out by the Banca d'Italia, the central bank. BCI and CI assumed an indirect control participation in the Banco di Roma, although resisted the Banca d'Italia's requests to get directly involved in the management of the bank. In addition, CI took direct control of – and finally (1930) merged with – the Banca Nazionale di Credito (BNC), a bank created in 1924 to manage part of the large equity holdings of the liquidated BIS. The leading role of BCI and CI in corporate banking was further strengthened after they jointly took over the Società per le Strade Ferrate Meridionali (also called 'Bastogi'), a former railway company turned (after the railway nationalisation of 1905 and thanks to the large liquidity provided by state indemnities) into a financial intermediary with a broad range of activities in corporate banking and a large portfolio of equity holdings in public utilities. Post-war universal banking was therefore characterised by keen duopolistic competition among BCI and CI. (A detailed, massive account of the period 1914-1933, based on a twenty-year archive investigation, is in Confalonieri 1994. For a concise outline of facts and interpretations, see Toniolo 1995).

How large was the potential for moral hazard and conflicts of interest in Italian universal-banks after FWW? This section provides a tentative answer to such question by focusing on four corporate governance key-issues, whose critical relevance emerges from the literature

reviewed above: (1) the market for corporate control in the financial sector; (2) internal controls on agency problems; (3) the institutional set-up of universal banking (regulation and external controls); (4) the role of universal banks in the market for corporate control in the non-financial sector.

1. Ownership structure and the market for corporate control in the financial sector.

The interwar expansion of BCI and CI took place in a situation of sedated market discipline in the top banking sector. During the war, large industrial groups, such Ansaldo and Fiat, used large liquidity provided by wartime profits to launch unsuccessful hostile take-overs on BCI and CI. In the course of a four-years tug-of-war and in order to prevent further take-over threats, the ownership structure of both banks was 'armoured' by concentrating their control in two bank-holdings (Comofin and Cofina respectively), whose capital was owned partly by the banks themselves, partly by a group of 'allied' bankers and industrial companies. At least in the case of BCI there exists evidence that the bank extended third-party loans to its 'allies' in order to facilitate purchases of Comofin shares. Moreover, since 1926 BCI financed Comofin's purchases of BCI shares, in the attempt to stabilise the market value of its shares: this finally led Comofin to hold 93% of BCI shares (Confalonieri 1994, 52-69). This strategy of financial engineering had two main consequences: (1) it effectively insulated BCI and CI from the potential disciplinatory device provided by the market for corporate control; (2) by giving 'allied groups' (i.e., industrial corporations financed and sometimes participated by the banks) a role of controlling stockholders, it magnified the potential for the emergence of conflicts of interest and moral hazard behavior. From 1920 onwards, new equity issues and stocks of old equities of BCI and CI were largely purchased by Comofin and Cofina, usually with funds provided by the banks themselves (through credit lines or purchases of holdings' equities). At the end of the 1920s this meant that the banks largely owned their own capital (a strategy largely practiced by Austrian and German banks). The capital/asset ratio of the two banks was virtually zero (Confalonieri 1994, 549-551).

2. Internal controls.

Changes in the ownership structure of BCI and CI had a strong impact also on agency costs. Before FWW, the ownership structure of both banks included many of the founding foreign banks and Italian investors. Over time, the weight of foreign stockholders gradually

declined but large presence of foreign (mainly German, Swiss, French) directors and managers kept guaranteing a regular and effective control of managers by shareholders, together with a relative insulation from domestic economic and political pressures (Hertner 1991; Confalonieri 1994, 112-119). For this period, Fohlin (1998a) found little empirical evidence that affiliation to BCI sensibly improved firms' liquidity sensitivity of investments. This suggest that the bank was not pushing the growth rate of affiliated firms far beyond the rate permitted by the firm's cash flow. (Replicating the test for the period 1919-1932 should allow us to detect whether banks' behavior changed after the war: this will form the subject of a future paper).

The concentration of the control of BCI and CI in the two bank-holdings, as mentioned above, radically increased potential for conflict of interest. In fact, the two bank-holdings were controlled by industrial companies that were financed by the two banks and in which the banks held equity positions. The controlling group of BCI was formed by a coalition of private bankers and industrial firms (group Marsaglia), among which many were financed and participated by BCI itself. Similarly, the controlling group of CI was formed by a group of small private banks, large public utilities groups (Edison, La Centrale) and large industrial corporations (Fiat, Pirelli, Snia). Controlling stockholders were massively represented by top managers and directors in the banks' boards. As a consequence of cross-shareholdings and interlocking directorates, in both cases firms enjoyed a significant influence on the banks' strategic decisions and, as controlling stokholders, were in charge of monitoring bank managers. Potential for conflicts of interest intensified, and pressure stemming from double loyalty was bound to escalate, especially in cases of firms hit by negative shock and financial distress (Kroszner and Strahan 2001). The absence of effective internal controls contributed to make things worse. The Auditing Board ('collegio sindacale'), the body in charge of internal controls, enforced legal rather than functional control as a matter of tradition; moreover, its members were selected by the board of directors. A further breach of the traditional corporate governance pattern was the abolition of statutory constraints on equity holdings. In the case of BCI, the original statute set a ceiling to equity holdings (government and other public bonds and participations in other banks excluded) of 30 per cent of paid-up capital plus reserves. Between 1920 and 1923 the management proposed – and the controlling stockholders accepted – the complete

liberalisation of equity holdings, thus obtaining virtually uncostrained discretion (Confalonieri 1994, 464-466).

3. External Controls and Institutional Set-Up

External controls and regulatory constraints were virtually absent until 1926. Joint-stock banks were subject only to the Commercial Code of 1882, which entailed neither specific requisites nor obligations as to the establishment of banks or the exercise of banking (with few exceptions, such as foreign currency trade). Banks' statutes were totally free to set the range of activities conducted by the bank. There was no external supervision whatsoever, a part from the obligation to report monthly balances to the Tribunal and the Ministry of Agriculture, Industry ad Commerce. There was no rule imposing standard accounting layout: balance sheets' heterogeneity was large and made checking directors' responsibilities a hard task. This reflected more general flaws of the Code, which set very loose regulation as to syndication of equity holdings, cross-holdings, stock-pyramiding (largely blamed in the contemporary literature as 'metodo della catena', or chain of corporations – see Einaudi 1921), internal controls and penalties for directors and managers' misbehaviour.

A structural change in institutional set-up occurred after the banking reform of 1926, which established a sector-specific legal framework for banking. Establishment of new banks, opening of branches and mergers became subject to official authorisation by the Ispettorato per la difesa del risparmio or the Ministry of Finance, after consultation with the Banca d'Italia. All banks were imposed new regulations as to maximum credit to individual customers, minimum net capital-and-reserves/deposit ratios, formation of reserves. Supervision by the Banca d'Italia was also introduced in the form of periodical, standardised reports of balances, and direct enquiries. However, the reform's main purpose was to rationalise the periphery of the banking system, affected in the past decade by uncontrolled proliferation of banking institutions at local level and by totally unregulated competition for depositors. The Bank of Italy officially ruled out the possibility that central bank' supervision could entail either controls on the quality of credit granted by banks, or any explicit or implicit insurance of depositors. Moreover, there exists evidence that in fact no credible supervision was ever implemented on large universal banks, which continued to

enjoy the privileges of a 'special regime' based on personal, non-institutionalised, top-level relationships with monetary and political authorities (Confalonieri 1994, 431-450).

Actually the central bank contributed to increase the potential for moral hazard behavior in the system. The Banca d'Italia espoused a very liberal attitude as supervisor and lender of last resort, both by providing large liquidity to banks under financial distress as well as by intervening to bail them out after full-blown crises broke out (such as in the case of the Società Bancaria Italiana in 1907 and the Banca Italiana di Sconto in 1920-21). Subsequently, the central bank – through two special-purpose institutions (CSVI, Consorzio sovvenzioni valori industriali, and ILI, Istituto Liquidazioni Industriali) – maintained substantial equity holdings in industrial groups once controlled by collapsed banks, and provided industrial credit to large corporations. Giving in to political pressures, the Bank also used to press large mixed banks to intervene with credit facilities in favor of distressed firms of 'national interest'. In a number of cases, in the early 1920s the CSVI assisted large banks by accepting to grant credit facilities against the purchase of part of their equity portfolio. (Confalonieri 1994, 431-443) Moreover, the central bank negotiated with top managers and controlling shareholders of BCI and CI the active involment of the two banks in the settlement of bank crisis. It is therefore reasonable to suppose that the systematic provision of liquidity to the system by the central bank – hardly accompanied with intensified regulation and supervision – led universal banks to perceive the risk of industrial finance as diminishing (Tilly 1998, 17). This may have helped pave the way to the rapid escalation of banks' involvement in corporate finance, either in the form of long-term lending or equity holding. It is generally accepted that a strong record of access to bail-out in periods of liquidity strain tends to secure a public subsidy in the form of a 'too-big-to-fail' guarantee. As known, government-induced moral hazard may contribute not only to distort bankers' incentive ('head I win, tail you lose') but also to transmit such distortion onto non-financial firms controlled by banks (Walter 1996; Boyd 1999). Government-induced moral hazard may in fact induce bankers to rationally seek out gambling opportunities by selecting risky investments and financing them in a risky manner. Moreover, due to keen competition in corporate banking, there was no cooperation between the major banks in sharing information as to cumulation of risky positions. The large universal banks also resisted the proposals advanced by the Banca d'Italia, and

supported by the Bank Confederation, as to the creation of a central institution with the purpose of gathering information as to the total amount of loans granted to individual firms by all banks. (Confalonieri 1994, 800-801)

4. Universal banks and the market for corporate control in the non-financial sector

The quarter of century prior to the systemic crisis of 1931 was characterised in Italy by a structural change in the financial system. The equity capital stock rose from 10 to 40% of GDP, thus catching up with advanced industrialised economies (Conti 1993). Large as well as medium-size industrial groups emerged with ownership structures based on holding companies whose purpose was to insulate the firm from the market for corporate control. Group organisations were dominated by controlling minority structures, i.e. intra-group cross-ownership and stock-pyramiding. Holding companies, occasionally incorporated as limited partnerhips (to maintain control entirely in the hands of founding families, such as the Agnelli, Pirelli and their minor peers), were sitting at the top of corporate groups whose extension tended to increase as a function of strategies of diversification and external growth (through mergers and acquisitions) pursued by the commanding firm. Some of these groups (such as the electric giant Edison) turned into large conglomerates, with activities spanning from public utilities to different industrial sectors, from real estate to insurance. Intra-group as well as inter-group cross-ownership and stock-pyramiding emerged as the basic characteristics of the Italian market for corporate control (Bianco and Casavola, 1995; Battilossi 2000). BCI and CI plaid a critical role in the organisation of such coalition-based system, as co-founders of new firms, stockholders, and members and managers of syndicates of controlling stockholders. The explicit purposes of this agreements were to guarantee the firms from any risk of take-over and to preserve the stability of the controlling group (‘sindacati di blocco’); usually stockholders’ coalitions also committed themselves to jointly intervene in the stock market in order to stabilise the price of the syndicated equities (‘sindacati di acquisto-vendita e di difesa dei corsi’) (Confalonieri 1994). Moreover, universal banks largely dominated in the stock exchange market. The reform of 1913 had imposed binding constraints of independent brokers; thus universal banks not only emerged as the only market makers, but also enjoyed a dominant position within the body in charge with the supervision of the market (Deputazione di Borsa) (Baia Curioni 1995, 300-330). The Bank of Italy explicitly supported universal banks’

dominance. In 1926, in the wake of the downward slump of the stock market that followed 'Quota 90' stabilisation, the central bank deployed moral suasion to force BCI and CI into a special-purpose joint investment trust (Softit) with the task of pegging the price of equities of public utilities and industrial groups controlled by the banks (Confalonieri 1994, 603-604).

The consequences of such historical pattern were far-reaching. Due to proliferation of cross-ownerhips and stock-pyramids, industrial growth was characterised by a structural scarcity of actual risk capital. Moreover, in many cases paid-up capital could represent only a small part (1-to-3/10) of the nominal value of authorised capital. This entailed that bank credit provided the fundamental lever of industrial expansion. Large universal banks bore most of the burden, only marginally assisted by state-owned specialised institutions, created in 1919-1925 (Crediop, Icipu). These raised funds by issuing state-guaranteed bonds and provided long-term mortgage to public utilities and large industrial corporations, thus relieving part of the mounting pressure on universal banks. In 1926-27 temporary relief came also from bonds issued by some major industrial groups in the American financial market, which allowed firms to consolidate part of their bank debt.

The inherent riskiness of debt finance dominance was further exacerbated by two of the emerging, moral-hazard-enhancing characteristics of the industrial system. First, there was a large presence of 'empire builders', i.e. entrepreneurs and managers with a strong preference for indiscriminate implementation of investment projects (provided that they were not cash constrained). Hart and Moore (1995) suggest that,under incomplete contracts, debt repayments may provide a cash constraint which tends to discipline corporate managers' behavior, thus leading to optimal investment policy. However, such debt-based disciplinary device may be inhibited. If bank managers do not pursue bank's value maximisation, relationship banking may contribute to relax the binding effect of debt finance (under roll-over guarantee) or undermine the potential role of bankruptcy as a credible threat, thus increasing the risk of moral hazard by firm managers. If flaws in bank corporate governance are such that inhibit the ability or willingness of controlling shareholders to constrain bank managers, relational financing may provide a channel for a self-reinforcing vicious circle of moral hazard behavior.

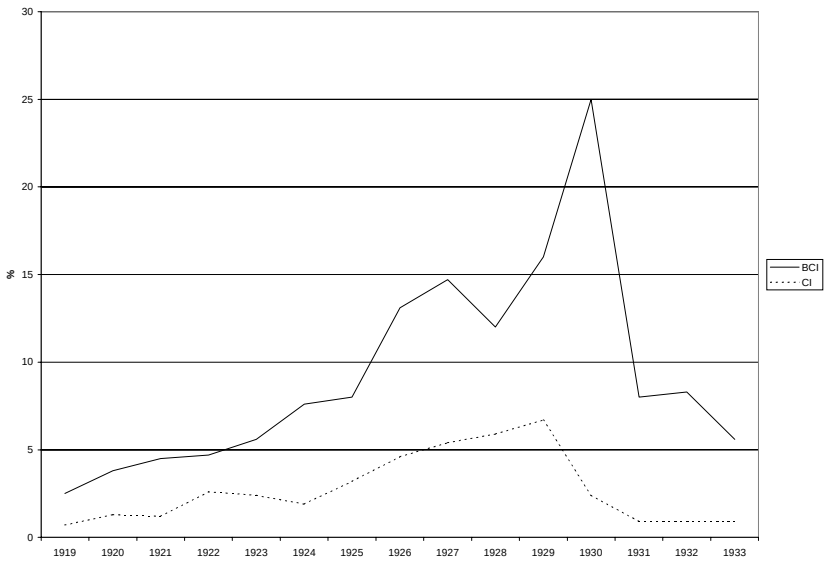
Second, exposure to moral hazard was further increased by the prevalence of 'minority controlling structures' (MCS). Bebchuk et al. (1999) suggest that, by separating control rights from cash-flow rights, MCS may combine incentive problems typical of dispersed ownership and controlled structures, thus radically distorting controllers' incentives. Agency costs may increase at a sharply rising rate as the size of cash flow rights in the hands of the controlling stockholders decreases. In fact, controlling stockholders are entrenched (i.e., insulated from the market for corporate control) but internalize only a small part of the value effects of their investment decisions. Thus, the burden of mitigating agency costs is shift onto non-electoral constraints of corporate governance, such as reputation or legal protection of minority stockholders. This may be translated into increasing inefficiency in the choice of project investments (i.e., controllers may give preference to projects with larger private benefits of control than to projects with higher total value) as well as in the decisions on scope (as the liquidation of a firm entails a loss of private benefits of controls, controllers may tend to expand the firm's scope – hence a possible incentive from CMS to conglomeral evolution). Bebchuk et al. (1999, 25-26) also stress the importance of debt financing by skilled monitors as a commitment device for CMS controllers: debt discipline may in fact deter the inefficient appropriation of private control benefits. In this case, the autonomy of the bank from the borrowing firm represents a fundamental condition. Obviously this is not the case when banks themselves have ownerhsip structures in which financed firms enjoy minority controlling stockholding, as it was the case of Italian universal banks.

The conclusion is straightforward: the universal bank-based system of corporate governance emerged in the 1920s was heavily exposed to potentially high levels of moral hazard and conflicts of interest, as a consequence of (1) inhibition of disciplining constraint through the market for corporate control in the financial sector; (2) large potential for conflicts of interest due to the ownership structure of universal banks based on controlling minorities formed by financed and participated firms (siamese-twinship); (3) loose disciplinary constraint through internal controls on bank managers; (4) virtual absence of external controls by the central bank; (5) moral hazard-enhancing attitude by the central bank; (6) a business environment characterised by bank-dependent firms and exposure to high risks of dominance of private benefits of control and inefficient investment selection.

3.Universal Banking as Relational Finance: A Rent-Seeking Hypothesis

The proximate cause of the crisis of BCI and CI between 1928 and 1932 was the financial distress brought home by concentration of mounting credit exposure towards a small group of large borrowers, and the unsustainable burden of increasing equity holdings, whose value was rapidly collapsing as a consequence of (1) the downward spiral of the stock exchange under post-1926 deflation, and (2) the emergence of widespread corporate crises. The experience of the two banks, however, was pretty different. Archival evidence shows that BCI was much more prone to cumulate equity holdings than CI. In 1929 the ratio of total non-financial equity holdings (including equities 'parked' in confidential accounts and captive financial companies) to total assets of the two banks was at 16 per cent for BCI but only 6.7 per cent for CI.

Figure 1
Total Equity Holdings (1) as % of Total Assets of BCI (2) and CI (3), 1919-1933



(1) Total Equities('partecipazioni e titoli') in portfolio of parent banks (including confidential accounts) and captive financial companies. Bank equities are excluded. CI portfolio includes industrial bonds. CI equity holdings in 1930-33: participations in banks only.
(2) Total assets as in official balance sheet.
(3) Total assets as in internal balance sheet.
Source: Archival data published in Confalonieri, 1994, Appendices.

The degree of concentration of risk was also different, i.e. much higher at BCI than at CI. Different characteristics of controlling coalitions may have plaid a role in determining this result. The majority of groups with a controlling position in CI (Edison, La Centrale, Fiat) had rapidly developed autonomous and advanced financial management functions (capital and debt management, access to capital market, rationalisation of intra-group control and financial connections, group banking). This reflected a characteristic evolution of electric companies in Europe as well as in the USA (Storaci and Tattara 1998). As a consequence, this groups enjoyed a notable degree of autonomy and financial independence from the bank: potential for conflict of interest was lower and incentives to control moral hazard by managers stronger. Quite opposite was the case for BCI. Here many of the 'allies' with controlling rights or interlocking directorate connections, such as Terni, Sip, Montecatini, maintained a strong financial dependence on the bank, with large leverage and reduced autonomous financial functions. (An exception was Sade, an electric group owned by the Volpi family and equipped with advanced financial management and strong international connections). In this case, the potential for moral hazard problems, opportunistic behavior and conflicts of interest was much higher. The BCI management enjoyed large strategic autonomy and could embark on extremely risky ventures. The late acquisition of control rights in Ilva, a giant steel-maker (1928-29), and Italgas, a troubled gas public utility with chemical interests (1931), both in dire financial straits and with serious restructuring problems, delivered the final blow to the bank and was a clear manifestation of unconstrained moral hazard behavior by BCI managers (Confalonieri 1997, 111-164 and 562-596).

However, both in BCI and CI systematic shirking allowed bank managers to disguise in part the escalation of equity holdings through a number of technical artifices: stuffing fiduciary or reserved accounts, or dividing equity portfolio in small parcels parked in a number of captive financial companies (explicitly referred to as 'financial boxes'). No attempts were made to re-organize equity holdings along functional lines – for example, by transforming financial boxes into sectoral or specialised holdings with more sophisticated functions as to financial management, control and auditing of participated firms.

Discussions about organizational reform, considering the opportunity of a more articulated structure, with the shifting of corporate banking and financial management activities to specialized subsidiaries, functioning as holdings or investment trusts, and the consequent transition from fully- to partially-integrated universal bank, only emerged after 1928-29 (Battilossi 2000, 338-345).

More generally, there exists clear evidence of banks' failure in developing adequate monitoring power. Corporate monitoring and control require special expertise, concentrated resources, and a broad scope as to cross-sectional coverage and time horizon (Aoki 1994, 109). Pre-war monitoring of client firms was based on a large network of trustees ('fiduciari') (Fohlin 1998). The escalation of commitment, the increased sophistication of corporate structures and management, the prevalence of group organisations, requested banks to develop new organisational and technical capabilities. However a credible response became apparent only under the mounting pressure of liquidity strain in 1928-29. Then BCI established technical and financial/accounting units specifically devoted to monitoring and supervising industrial customers ('Ufficio tecnico finanziario', subsequently 'Segreteria industriale'). Even more timid was the attempt made by CI, which in 1928 established a small trustee company with the purpose of analysing the situation of financed firms. Indeed, contemporary informed insiders expressed severe opinions on the sluggish attitude of the two banks as to modernisation of techniques of business analysis and control, organisational capabilities in monitoring, and technical coordination with financed firms. Documents by IRI, the state-owned holding company which came to control the banks in 1933-34, denounced the banks' 'agnosticism' as a major factor contributing to the collapse of many firms (Battilossi 2000, 319-333).

How was it that banks accepted to massively refinance firms in distress while moreover escalating equity holdings from 1926 onwards? Did unconstrained moral hazard and conflict of interest contribute to the escalation of unsound banking practices? There are three possible, not mutually excluding explanations for this strategy: (1) information; (2) insurance; (3) market power. We briefly examine them in sequence.

(1) We can assume that in a non-transparent system with creative accounting, relaxed disclosing rules and low corporate accountability, a bank could access vital information as to borrowing firms only by turning from outsider into insider, i.e. by changing the nature of

its participation in the global governance of financed firms from stakeholders (as creditors) to stockholders. As to concentration, this might be explained as a strategy to optimise the use of scarce monitoring resources and bank-specific knowledge as to sectors and groups. However, the ability to extract and process information depends critically on the ability to develop adequate organisational capabilities. Universal banks (BCI in particular) and some of their 'allied' groups were endowed with the necessary human capital and technical knowledge: an indirect demonstration is that in fact, in 1932-33, the backbone of IRI management – unanimously recognised as of top-standing quality – was formed by managers coming from the technical units of the banks. Nonetheless, universal banks proved unable to timely exploit their human capital endowment. If escalation of equity holding was fundamentally information-driven, why the organisational adjustment of monitoring capabilities was so sluggish? Which was the inhibiting factor?

(2) Insurance. Equity holding was actively searched for by banks as a form of insurance against declining value of their claims on firms. In the context of the economic and stock market boom of 1922-25, inflationary expectations provided banks with an incentive to pad their portfolio with equity holdings, while reducing the urgency of liquidating equity holdings inherited from postwar settlement (Toniolo 1994, 58-59). However, if equity holding was eminently a post-war conjunctural strategy, we would expect banks rationally to anticipate the effects of stabilisation and return to Gold, thus liquidating a significant part of their equity portfolio in the market at historically-high prices. On the contrary, the evidence is that this was not the case: banks' equity portfolios continued to expand. How can we explain this apparently irrational behavior?

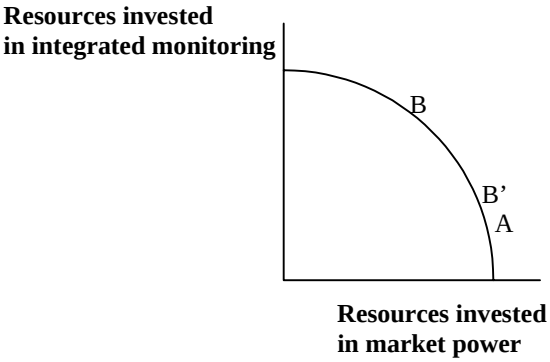
(3) Market power. Universal banking is one possible form of relational financing. As Aoki and Dinç (2000) emphasise, relational financing is usually associated to rent-seeking strategies by banks: the financier is expected to make additional financing in uncontractible states contingent on expectations of future rents over time. When relational financing becomes institutionalised – i.e., established as a self-enforceable, dominant form of financing in corporate finance – this tend to generate and sustain expectations of financiers and corporate borrowers. Banks are willing to keep their commitment (Mayer 1988; Hellwig 1991) as they expect to obtain rent opportunities in the long term. Adapting the framework provided by Aoki and Dinç (2000, 25-28), we can assume that rents may stem

from: (a) information advantages (whence strong incentives to invest in integrated – i.e., ex ante, interim and ex post – monitoring, which requires substantial equity holdings); the effect is stronger when firms have an exclusive relation with the bank which entails the provision of different financial services; (b) market power, i.e. the ability to extract surplus from borrowers as well as to obtain a surplus of projects to finance (whence strong incentives to expand lending to, and taking equity positions in, current borrowers or provide lending to, and taking equity positions in, a growing number of firms as less favourable terms). (Aoki and Dinc include also reputation as a source of future rents: we leave this element aside for the moment). The spiralling vicious circle between bad debts, consolidation of credits into equity holdings (in order to guarantee the value of the existing clains) and further refinancing (in order to avoid the collapse of the firms) represents a classical relational financing trap of 'throwing good money after bad': the bank's exposure ends up reaching such a magnitude that the creditor is eventually 'captured' by the borrower.

Obviously, the relative weight assigned by bank strategies to different rents (information VS market power) depends on the existing balance between controlling stockholders and managers' utility preferences, as it is determined by historically- and institutionally-specific factors. This balance may change across economies and over time. Indeed, while we can expect that in the long run a bank will invest resources in order to exploit both sources of rents, in the short-run there might well be a trade-off between intensifying efforts in conquering market power and devoting resources to seek information rents through integrated monitoring. We can also assume that, as managers may be more concerned with banks' growth rather than profitability, corporate governance may have important consequences. Feeble controls or collusion of stockholders with managers may imply that moral hazard tend to lead to a growth-oriented strategy mainly based on market power rent-seeking. On the contrary, if stockholders' interests prevail, we may expect a bank to invest more in information-intensive rents while accepting to grow at at lower rate. However, if controlling stockholders have distorted incentives, e.g. because of conflicts of interest, their utility function will lie much closer to – or event coincide with – that of managers.

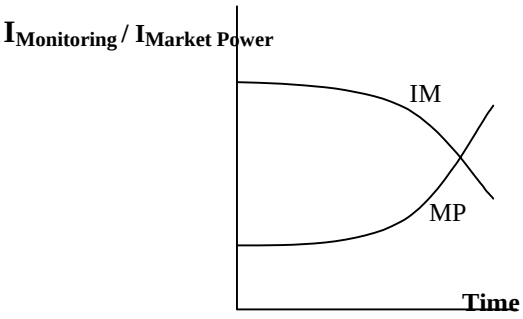
The intuition behind the suggested trade-off is represented in Figure 2.

Figure 2
Rent-Seeking Trade-Off: Market Power VS Integrated Monitoring



Let's suppose a universal bank operating under budget constraint. The bank faces a trade-off between investing resources to seek rents stemming from market power (i.e. a larger volume of business from existing customers and a surplus of projects to finance from potential customers) and, in turn, investing resources to seek rents stemming from information (i.e. better quality of business from current and potential customers thanks to efficient integrated monitoring). Bank managers' utility preferences will tend to privilege market power (point A). Bank stockholders' utility preferences, in turn, will tend to privilege monitoring power, as they have a stake in managing and controlling moral hazard (point B). However, if stockholders have only loose control on managers' moral-hazard behavior, or their incentives are distorted by conflict of interest, their preferences will lie much closer to those of managers (point B'). Thus the bank's corporate governance structure influences the final allocation of resources between market-power and information rent-seeking. This in turn will determine on which sources of rents the pattern of growth of the bank will be based more, initially at least. We can also expect that, in the long-run, the relative intensity of market-power- and information-rents will tend to balance, as corporate governance adjusts to the bank's performance. This is represented in figure 3. The MP and IM schedules represent two different cases of universal bank strategies, one based initially on the search for market-power rents (low ratio of investment in monitoring power to investment in market power) and the other based on the search for monitoring rents (high ratio of investment in monitoring power to investment in market power).

Figure 3
Strategies of Growth in Universal Banking: Market Power and Integrated Monitoring



Adapting such hypothesis to history, it is possible to explain the pattern of development chosen by Italian universal banks – based on the escalation of commitment, refinancing and equity holding, irrespective of economic deflation and with only slow and late adjustment of monitoring power – as the consequence of a strategy fundamentally based on market-power rent-seeking, in the context of keen duopolistic competition not only in corporate banking but also in the market for corporate control. Not by chance the two banks attempted to obtain from customers an exclusive relationship, as a guarantee of being able to appropriate future customer-specific rents. After FWW, changes in corporate governance structures provided BCI and CI with strong incentives to move along the initial, flat part of a MP schedule of unsound banking. The outbreak of crisis and its solution – the introduction of institutional firewalls between commercial and investment banking, and the reallocation in the hands of the State of property rights on both banks and large part of the non-financial corporate sector once controlled by banks – prevented them from any possibility of future reform.

This obviously does not imply that possible contribution by other factors should be ruled out. Banking culture may be a point in case: indeed, one of the major experts of banking history in Italy described the situation as the consequence, among others, of a misperception due to bankers' 'true obsession' for tangible capital assets, rather than prospective business and cash-flow, as the base for assessing borrowers' creditworthiness (Confalonieri 1990, 76-86). Moreover, for banks with mounting liquidity constraint – as BCI and CI were, due to creeping confidence crisis of depositors in joint-stock banks, the

increasing competition by regional and local banks, and the two banks' reluctance to resort to central bank credit (apart from episodes of acute illiquidity) – capturing new firms was instrumental to the expansion of the current-account component of fund raising. Other possible factors to take into account are potential benefits of expanded banking, such as synergies/economies of scope (increased efficiency from combination of activities) and diversification/stabilisation (diversification of income streams with reduction of unsystematic risk and bankruptcy/insolvency risk). It is questioned however whether diversification actually may decrease or increase insolvency risk – for example, when a bank's entry in corporate and investment banking involve the ownership and operation of a few specific activities. In this case, Shull and White (1998, 16-18) suggest that, if the bank's management capabilities are insufficient, the bank's solvency may be at risk.

4.Conclusion.

The paper argues that the trade-off between potential benefits and risks of universal banking has to be evaluated in the light of institutionally- and historically-specific conditions. Theory suggests that potential for moral hazard behavior and conflict of interest in universal banks is high. An efficient bank corporate governance is fundamental in order to control the adverse consequences of such potential. History may provide evidence in this connection. The evolution of the two main universal banks in interwar Italy emerges as a case in which both internal and external factors converged in determining a system of bank corporate governance prone to unconstrained moral hazard, systematic conflicts of interest and inefficient selection of investment projects. As a consequence, in the 1920s Italian universal banks moved rapidly towards unsound banking, characterised by continuous refinancing of distressed firms, escalation of equity holdings and failure to develop effective integrated monitoring. Different characteristics of banks' controlling coalitions possibly contributed to exacerbate or mitigate the effects of this common pattern of development. The paper analyses this case by focusing on universal banking as a form of relational finance based on rent-seeking strategies. The failure of Italian universal banks can be explained as the consequence of a strategy of growth fundamentally driven by a search for market power rents, in the context of sustained industrialisation, rapid growth of equity capital stock, and keen duopolistic competition by banks both in corporate banking

and in the market for corporate control in the non-financial sector. The paper suggests that the characteristics of the two banks' ownership and corporate governance structures lay at the roots of their final collapse in the early 1930s.

REFERENCES

-Ang J.S., Richardson T., 1994, 'The underwriting experience of commercial bank affiliates prior to the Glass-Steagall Act: A re-examination of evidence for passage of the act', *Journal of Banking and Finance*, 18 (...), 351-395.

-Aoki M., 1994, 'Monitoring Characteristics of the Main Bank System: An Analytical and Developmental View', in M. Aoki and H. Patrick, eds., *The Japanese Main Banking System. Its Relevance for Developing and Transforming Economies* (Oxford), 109-141.

-Aoki M., Dinç S., 'Relational Financing as an Institution and Its Viability under Competition', in M. Aoki, G. R. Saxonhouse, eds., Finance, Governance, and Competitiveness in Japan (Oxford), 19-42.

-Aoki M., Patrick H., 1994, eds., *The Japanese Main Banking System. Its Relevance for Developing and Transforming Economies* (Oxford).

-Bachi R., 1919, *L'Italia Economica nel 1919* (Milano-Roma).

-Baia Curioni S., 1995, *Regolazione e Competizione. Storia del Mercato Azionario in Italia (1808-1938)* (Bologna).

-Banca d'Italia, Ufficio Ricerche Storiche, 1996, *I Bilanci delle Aziende di Credito 1890-1936*, a cura di F. Cotula et al. (Rome-Bari)

-Baravelli M., 1998, 'Assetto proprietario, controlli esterni e interni e performance delle banche', in G. Airoldi, G. Forestieri, eds., *Corporate Governance. Analisi e Prospettive del Caso Italiano* (Milan).

-Battilossi S., 2000, 'Banche miste, gruppi di imprese e società finanziarie, 1914-1933', in G. Conti, S. La Francesca, eds., *Banche e Reti di Banche nell'Italia Postunitaria* (Bologna), 307-350.

-Baums T., 1994, 'The German Banking System and Its Impact on Corporate Finance and Governance', in M. Aoki and H. Patrick, eds., *The Japanese Main Banking System. Its Relevance for Developing and Transforming Economies* (Oxford), 409-449.

-Bebchuk L., Kraakman R., Triantis G., 1999, 'Stock Pyramids, Cross-Ownership, and Dual-Class Equity: The Creation and Agency Costs of Separating Control from Cash Flow Rights', *NBER Working Paper*, 6951.

-Berlin M., John K. and Saudners A., 1992, 'Universal banking: should banks hold equity in borrowing firms?', *New York University Salomon Center Working Paper*, S-92-45.

-Bianco M., Casavola P., 1995, 'Il mercato del controllo delle imprese: questioni teoriche e carfatteristiche del modello italiano', *Rivista di Storia Economica*, XII, 3, 392-397.

-Boyd J.H., 1999, 'Expansion of commercial banking powers...or, universal banking is the cart, not the horse', *Journal of Banking and Finance*, 23 (...), 655-662.

-Boyd J.H., Chang C., Smith B.D., 1998, 'Moal hazard under commercial and universal banking', *Journal of Money Credit and Banking*, 30 (3), Part 2, 426-468.

-Calomiris C., 2000, *U.S. Bank Deregulation in Historical Perspective* (Cambridge).

-Canals J., 1997, *Universal Banking. International Comparisons and Theoretical Perspectives* (Oxford).

-Confalonieri A. 1990, 'Considerazioni sull'esperienza del Credito Italiano, 1914-1933', in *Il Credito Italiano e la Fondazione dell'IRI* (Milan)
-Confalonieri A., 1994, *Banche Miste e Grande Industria in Italia 1914-1933*, v.1 (Milan)
-Confalonieri A., 1997, *Banche Miste e Grande Industria in Italia 1914-1933*, v.2 (Milan)
-Conti G., 1993, 'Finanza di impresa e capitale di rischio in Italia (1870-1939), *Rivista di Storia Economica*, X (3), …….
-Daems, H., 1977, *The Holding Company and Corporate Control* (Leiden-Boston)
-Diamond D., 1984, 'Financial intermediation and delegated monitoring', *Review of Economic Studies*, 51, 393-414.
-Einaudi L., 1921, 'Il sistema della catena', now published in L. Einaudi, *Cronache Economiche e Politiche di Un Trentennio, 1893-1925*, v. 6 (Turin), 183-187.
-Fohlin C., 1998, 'Fiduciari and Firm Liquidity Constraints: The Italian Experience with German-Style Universal Banking', *Explorations in Economic History*, 35, 83-107.
-Fohlin C., 1999, 'Capital Mobilisation and Utilisation in Latecomer Economies: Germany and Italy compared', *European Review of Economic History*, 2, 139-174.
-Franks J., Mayer C., 1997. 'Corporate Ownership and Control in the UK, Germany and France", *Journal of Applied Corporate Finance*, 4.
-Gale D., Hellwig M., 1985, 'Incentive-compatible debt contracts: the one-period problem', *Review of Economic Studies*, 53, 647-663.
-Gande A., Puri M., Saunders A. and Walter I., 1997, 'Bank underwriting of debt securities: modern evidence', *The Review of Financial Studies*, 10 (4), 1175-1202.
-Gorton G., Schmidt F.A., 2000, 'Universal Banking and the Performance of German Firms', *Journal of Financial Economics*, 58, 29-80.
-Hertner P., 1984, *Il capitale tedesco in Italia dall'Unità alla Prima Guerra Mondiale. Banche miste e sviluppo economico italiano* (Bologna)
-Hertner P., 1991, 'Foreign capital in the Italian banking sector', in R. Cameron, V.I. Bovykin, eds., *International Banking 1870-1914* (Oxford)
-Hoshi T., Kashyap A. and Scharfstein D., 1991, 'Corporate Structure, Liquidity, and Investment', *Quarterly Journal of Economics*, 106 (1), 33-60.
-Kroszner R.S., Rajan R.G., 1994, 'Is the Glass-Steagall Act justified? A study of the US experience with universal banking before 1933', *American Economic Review*, 84 (...), 810-832.
-Kroszner R.S., Strahan P.E., 1999, 'Bankers on Boards: Monitoring, Conflict of Interest, and Lender Liability', *NBER Working Paper*, 7319.
-Kroszner R.S., Strahan P.E., 2001, 'Throwing Good Money after Bad? Board Connections and Conflicts in Bank Lending', *NBER Working Paper*, 8694.
-Mayer C., 1988, 'New issues in corporate finance', *European Economic Review*, 32, 1167-1183.
-Mayer C., 1990, 'Financial Systems, Corporate Finance, and Economic Development', in R.G. Hubbard, ed., *Asymmetric Information, Corporate Finance and Investment* (Chicago).
-Prevezer M., Ricketts M., 1999. "Corporate Governance: The UK Compared with Germany and Japan", in N. Dimsdale, M. Prevezer, eds., *Capital Markets and Corporate Governance* (Oxford).
-Puri M., 1996, 'Commercial banks in investment banking: conflict of interest or certification role?', *Journal of Financial Economics*, 40, 373-401.
-Shleifer A., Vishny R.W., 1986, 'Large Shareholders and Corporate Control', *Journal of Political Economy*, 94 (3), 461-488.

-Shull B., White L. J., 1998, 'Of firewalls and subsidiaries: the right stuff for expanded bank activities', *New York University Salomon Center, Working Paper*, S-98-10.
-Tilly R., 1998, 'Universal Banking in Historical Perspective', *Journal of Institutional and Theoretical Economics*, 154, 7-38.
-Toniolo G., 1980, *L'Economia dell'Italia Fascista* (Rome-Bari)
-Toniolo G., 1990a, *An Economic History of Liberal Italy, 1850-1918* (Routledge)
-Toniolo G., 1990b, 'Crisi bancarie e salvataggi: il Credito Italiano dal 1930 al 1934', in *Il Credito Italiano e la Fondazione dell'IRI* (Milan)
-Toniolo G., 1994, *One Hundred Years 1894-1994. A Short History of the Banca Commerciale Italiana* (Milan)
-Toniolo G., 1995, 'Italian Banking 1919-1939', in C. Feinstein, ed., *Banking, Currency and Finance in Europe between the Wars* (Oxford).
-Walter, I., 1996, 'Universal banking: a shareholder value perspective', *New York University Salomon Center, Working Paper*, S-96-49.

***