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Relationship Finance by Banks and Non-Bank Institutional Investors: A Review within the Theory of the Firm

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Relationship Finance by Banks and Non-Bank Institutional Investors: A Review within the Theory of the Firm

by

Ettore Andreani and Doris Neuberger*

Abstract

In continental Europe, banks are more and more replaced by non-bank institutional investors in the financing and control of firms. This must not imply a shift to arm's length finance, if these institutional investors develop relationships with firms similar to the traditional long-term bank-firm relationship. The present paper differentiates between relationship banking and relationship investing within the theory of the firm and compares the financial and corporate control services provided by both arrangements.

JEL-Classification: G20, G30, L14, L22

Keywords: relationship banking, relationship investing, banks, institutional investors, corporate governance, theory of the firm

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1. Introduction

The financial landscape in Europe is subject to profound changes, driven by increasing wealth and population aging, advances in information technology and European integration. Demographic trends and a move towards funded pension systems will boost capital markets and enhance the ongoing shift from traditional bank intermediation to intermediation by non-bank institutional investors, mainly pension funds, mutual funds and life insurance companies (Davis 2003). Increasing competition between large publicly held companies for international capital market funds and between performance oriented asset managers for mobilizing savings put pressure on management to increase shareholder orientation and improve investor relations, in particular by the release of more public information. Since the professional institutional investors hold internationally diversified portfolios of investments, whose return is periodically evaluated against international benchmarks, their activities have induced an international standardization of investments policies and performance measurements (Moerland 1995). This puts the control–oriented financial systems with their reliance on insider control, long-term implicit contracts and stakeholder orientation under pressure, in particular regarding the role of banks as an effective instrument of control in such systems as the German and the Japanese ones (Neuberger, 2000).

This development may be seen as a move from continental European bank-based financial systems towards the Anglo-Saxon market-based system. According to a long and well established literature the contrast between a market-based and a bank-based financial system is exemplified by the contrast between short-termism and long-termism (Kaplan 1994). The Anglo-Saxon market-based system is characterized by a huge number of institutional investors who have a short-term approach on investment, focusing their attention on annual and inter-annual results and on return ratios, and by companies that finance themselves first of all through the capital market, while using bank loans mainly to finance day-to-day operations. On the contrary, the German and Japanese bank-based model is characterized by a small number of sizeable investors, mainly banks and insurance companies, which have a long-term investment approach and are less committed with investigating how the managers manage the company in the short run.[1] On the one hand they finance directly the companies' long-term investments through long term credits, on the other hand they are often among the

[1] See among others Allen/Gale (1995, 2000), Breuer (2001), Albert (1991), Guatri/Vicari (1994). Kaplan (1994) argues that empirical findings call into question the view that the relationship oriented systems of Germany and Japan are able to ignore current measures of performance.

biggest shareholders of the companies they have financed (Wenger/ Kaserer 1998). In this sense Carlin and Mayer (2000) argue that economies of scale in monitoring make banks more efficient monitors than individual market participants, in particular when good investments require the costly accumulation of available information on the quality and performance of borrowers. This is brought about especially in long-term bank-firm relationships.

Even if in Europe we observe a movement from bank-based financing to market-based financing with a growing role of non-bank institutional investors, this is not necessarily a shift from relationship finance to arm's length provision of finance. To the extent that institutional investors are active holders of shares and/or debt securities, they develop relationships with firms that may have features of the traditional bank-firm relationship (Perée/Riess 2003, p.24). Whether this shift from relationship banking to relationship investing will ultimately lead to efficiency gains, is an open question. In Germany, the general public is concerned about the dissolution of housebank relationships which are seen as valuable for the financing of small and medium-sized enterprises. At the same time, in the U.S. there is concern about the behavior of institutional investors, mutual funds being accused of hurting investors by pursuing their own goals (The Economist 2003a,b).

While the benefits and costs of institutional investors' relationships with firms are primarily examined within the corporate governance literature (Davis 2003) and the literature on efficient markets (Menkhoff 2002), the pros and cons of relationship banking are mainly discussed within contract theory (Boot 2000, Ongena/Smith 2000). The present paper attempts to integrate both forms of relationship finance within the theory of the firm. We will compare three alternative relationships: (1) relationship banking (or lending) as a close relationship between an industrial firm and a bank, resulting from long-term lending with inside information, (2) relationship investing as a close relationship between an industrial firm and a non-bank institutional investor, where direct control is exerted via large holdings of publicly traded shares or inside equity; (3) transaction finance (lending or investing) by publicly traded bonds or stocks on the capital market or by arm's length provision of finance by intermediaries.

The rest of the paper is organized as follows: Section 2 defines the different concepts of relationship finance and reviews the literature. In section 3 we review the relevant theories of the firm and use them to discuss the services provided by both types of relationship finance. Section 4 concludes.

2. Concepts of Relationship Finance and Literature Review

2.1, Transaction Finance, Relationship Finance and Intermediation

The provision of external finance to firms may be transaction-based or relationship-based. Transaction finance may be viewed as arm's length finance which typically involves one-time or short-term interactions of contracting partners without accumulation of confidential or private information. Thus, we define transaction finance as the provision of financial services by an investor or lender that

- focuses on a single transaction rather than multiple interactions with the same contracting partner;
- involves only publicly available information.

Transaction finance may be provided directly by individual investors who buy stocks or bonds issued by firms on the capital market. In this case, the investors share directly the risks of the projects financed, relying only on public information. Typically, their available funds are too small to make costly information gathering in a single firm profitable and at the same time reduce risk by holding a diversified portfolio of investments. Therefore, individual investors gain by delegating fund management and/or monitoring of borrowers to financial intermediaries who (1) are better informed and thus may realize a superior investment performance, (2) can diversify more broadly because they have larger funds, and (3) can reap economies of scale in investment management and/or monitoring of borrowers. In this case, direct finance is replaced by intermediated finance, where banks or non-bank financial intermediaries, so-called institutional investors, collect funds of individual investors to invest them in productive firms. The terms "financial intermediaries" and "institutional investors" are synonymous terms: institutional investors are investors in financial markets which are neither private households nor public institutions (Menkhoff 2002, p. 909). They comprise banks and non-bank financial intermediaries like mutual funds, pension funds, insurance companies or venture capital firms.

While non-bank financial intermediaries specialize in brokerage services (like transaction services, screening, certification), banks[2] provide more services of qualitative asset transformation (like monitoring, liquidity creation and claims transformation (see

[2] The term "bank" is used for banks that provide commercial banking services. Investment banks, which do not provide these services, are considered as non-bank financial intermediaries.

Greenbaum/Thakor 1995, Bhattacharya/Thakor 1993). Thus, as shown in figure 1, intermediation by banks differs in two important aspects from intermediation by non-bank institutional investors:

- On the liability side, banks typically take funds with standard debt contracts, called deposits, which are not only risk-free (because of diversification and deposit insurance), but also highly liquid (because of liquidity insurance). Non-bank institutional investors take funds with different risk-sharing contracts (e.g. mutual fund contracts, insurance contracts) and provide risk diversification, but not liquidity transformation.
- On the asset side, banks typically provide direct loans to firms whom they screen and monitor, while non-bank institutional investors invest in publicly traded bonds and shares or in private equity of the firms which they screen and monitor.

Both types of intermediated finance also involve transaction finance, if the loans provided by banks and the investments of non-bank institutional investors are made at arm's length, without gathering of proprietary information by repeated transactions with the same contracting partner. In the case of (typically) short-term, arm's length lending by banks we speak of transaction lending, in the case of bond holdings and/or share holdings by non-bank institutional investors we speak of transaction investing.

In contrast to transaction finance, we define relationship finance as the provision of financial services by an investor or lender that

- evaluates the profitability of his or her investments through multiple interactions with the same customer over time and/or across products;
- invests in customer-specific, often proprietary information (Boot 2000, p. 10).

Since such investments are typically made by financial intermediaries and not by individual savers, the term relationship finance can be equated with the term relationship intermediation.

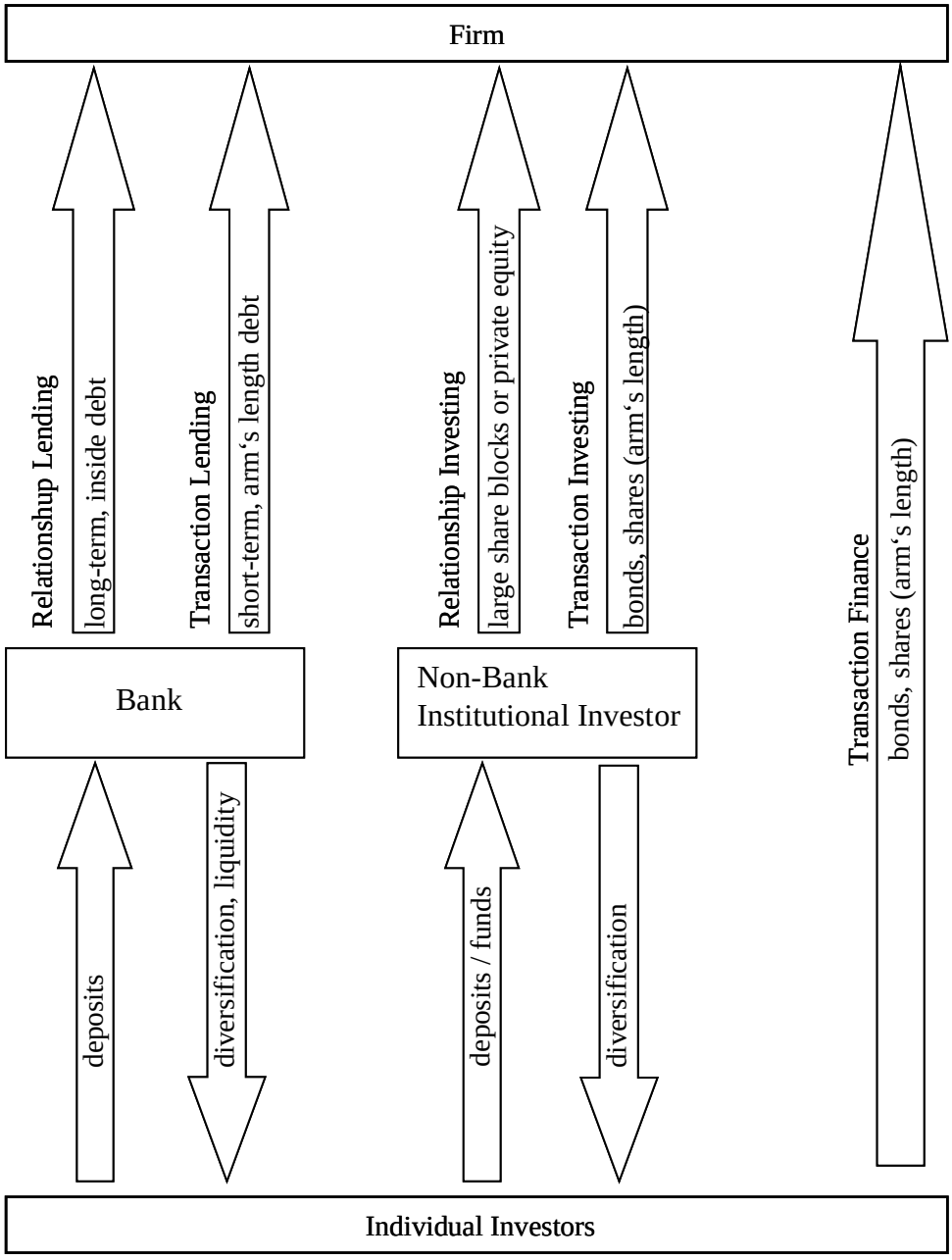

Figure 1: Intermediated vs. direct financing of firms

2.2 Relationship Banking

The term relationship banking is not sharply defined in the literature.[3] Mostly, it is used to describe lending relationships of (commercial) banks, but it has also been used to address customer relationships of non-bank financial intermediaries.

We define relationship banking as

- the above defined relationship intermediation

- provided by a bank.

Since close relationships between banks and their customers typically originate from the lending business, relationship banking and relationship lending can be used as synonymous terms. In the stricter sense, the term relationship lending only involves close relationships in lending, while the term relationship banking encompasses relationship lending and close relationships from other bank services.

A bank-customer relationship arises when the frequent provision of loans, and usually also of other services, leads to benefits that accrue through time to both the bank and the customer. Often the practitioners' view of a relationship is based on concepts like "trust", "commitment", "mutual understanding" and "professionalism", without pointing out specific advantages of such a relationship relative to alternatives (Ongena/Smith 2000). According to the modern theory of financial intermediation, the benefits of relationship banking arise mainly from a reduction of agency and information problems by unique contractual features of implicit, long-term contracts and by the use of information reusability over time. From the view of the bank, the proximity to the borrower facilitates its monitoring activity, thus minimizing the moral hazard problem of asymmetric information and providing a source of comparative advantage versus de novo lenders and capital markets who are less informed about the borrower (Boot 2000). From the view of the firm, an advantage of relationship banking is that the bank is not likely to withdraw as soon as the first problems occur, obtaining a kind of liquidity insurance over time. Moreover, relationship banking helps to reduce financing constraints due to asymmetric information. Monitored firms can finance new projects with less informative constraints, while unmonitored firms, which cannot defend the viability of each project to individual investors, must time investments to their liquidity or internally generated funds, or to the wealth of the entrepreneur (Frohlin 1998). These benefits

[3] For reviews see Boot (2000), Ongena/Smith (2000).

mainly accrue to small and medium-sized enterprises, which are informationally more opaque than large, publicly listed firms.

Beyond lending, relationship banking includes various other financial services, e.g. deposits, check, clearing and cash management services. They represent both a source of revenue and information for the banks (Boot 2000), and may help to evaluate better the riskiness of lending to a firm. The inside information accumulated by the bank in the course of a relationship represents "specific knowledge", i.e. knowledge that is transmitted between agents only at high cost[4] (Jensen/Smith 1985).

Let us review the benefits and costs related to information exchange. A borrower might reveal proprietary information to its bank that it would never have disclosed to the financial markets and at the same time could be "forced" to unveil some information, and to be closely monitored by the bank[5]. Because of long-term efficiency gains, the effects of bank affiliations may be more pronounced with time: for example attached firms' investment sensitivity to liquidity should be lower in the longer run, even if the evidence about this point is not unanimous (Frohlin 1998). At the same time the costs associated with the search for the most convenient bank in the retail fields are high and the expected return of search is low for most of the retail banking customers. As a consequence the demand for most of the standard retail banking services is likely to be characterized by "bank loyalty", i.e. the tendency to maintain a banking relationship after having chosen a bank (Neuberger 1998). As a matter of fact in order for the client to obtain a competitive offer from another bank, the de novo bank must be provided with references and other pertinent information, involving costs to the applicant and the bank, while the applicant cannot be sure that the savings associated with the new conditions can overcome the search costs. This is due both to the firm's difficulty in conveying information about its superior performance to other banks and to an adverse selection issue, that makes it difficult for one bank to attract another bank's best customers without attracting first the less desirable ones (Sharpe 1990). At least three costs are borne by banks when entering into and executing any debt contract with the firm: agency costs, deriving from ex ante information asymmetries, monitoring costs, linked to the control of the

[4] Without considering monetary costs it is sufficient to recall the opportunity costs of time spent by bankers in order to evaluate the project, visit the firm, keeping in touch with the entrepreneur, screening the balance sheets and so on.

[5] Hoshi/Kashyap/Scharfstein (1993). According to Stiglitz (1985) the nature of loan contracts enables the banks to focus their attention in information gathering about a particular set of issues, those associated with the probability of default and the net worth of the firm.

correspondence between the contract's clauses and the development of the financed project; and enforcement costs, deriving from ex post information asymmetries (Ferri/Messori 2000).

In universal banking systems, bank-customer relationships encompass commercial banking. A common source of costly information is the placement of bank directors on the firms' board of directors, as best exemplified by the German stylized tradition of having bankers on the boards of non-financial companies (Frohlin 1998). Even if Baums (1994) argues that seats on the supervisory boards don't seem to provide always better information than a large creditor has, the "information gathering activity" of the single board member and the information access of large creditors rest on various specific features and cannot be generalized. Having one or more of its managers on a client firm's board is likely to provide the financial institution access to proprietary information as well as some influence over the firm's actions (Booth/Deli 1999). The presence of bankers on boards has been considered also as a "credible message" of a close firm-bank relationship (Schäfer 2003). [6]. A banker may also be appointed on the board in order to signal to other banks that an expert in bank debt is on the board to protect creditors, a role that could be performed both by affiliated and unaffiliated bankers (Booth/Deli 1999). As a matter of fact it is quite difficult to distinguish between commercial bankers supplying expertise and commercial bankers monitoring lending relationships. Berglöf and Sjögren (1998) investigated the case of a bank providing loans to a borrower while an investment company, controlled by the bank[7], holds a relevant block in the borrowing company.

Some authors (Albert, 1991; Guatri/Vicari 1994, Albach 1997) underline another by-product of relationship banking, the stability in the control of the firm and a reduction of the myopia of some institutional investors, for example through a higher dividend retention and a lower interest in the annual and infra-annual pay out ratio, thus providing evidence for a strict preference for the "pecking order of financing" .

[6] The message is credible, because on the one hand the bank risks its own funds, and on the other hand the bank risks its "standing", i.e. its external image within the financial community.

[7] In particular they use the term "related ownership" in order to refer to holdings owned within a sphere of influence.

2.3 Relationship Investing

We define relationship investing as

- the above defined relationship intermediation

- provided by a non-bank institutional investor.

The term "relationship investing" has been used to describe the shareholder activism of non-bank institutional investors in the control of publicly traded companies (Chidambaran/John 1998, Gillan/Starks 2000). Even if they mostly invest in publicly traded securities, institutional investors may obtain firm-specific, private information by multiple interactions with the same corporate customer over time. Such relationships are likely to arise, if large share blocks are held in a single corporation: they increase the incentive to invest in information gathering and monitoring through control rights and may provide special information rights by a representation on the firm's board.[8]

While this only applies to the financing of large corporations, the term "relationship investing" may also be used to describe the activities of non-bank institutional investors such as investment banks or venture capital firms in providing inside or private equity to smaller, non-listed firms. The partnership between a venture capitalist and an entrepreneur is characterized by the accumulation of firm-specific, proprietary information during the start-up and growth phase of the firm, where the venture capitalist provides screening and certification, funding, monitoring and management expertise. A venture capital contract has the following features: the entrepreneur cannot "walk away" after obtaining financing, the venture capitalist gains control of the firm after buying out the entrepreneur if a minimum performance requirement is not met, and both partners receive equity payoffs, if control remains with the entrepreneur (Greenbaum/Thakor1995, pp.68). [9]

Thus, equity contracts are the key financial instrument of relationship investing. Even if both equity and debt contracts may be written by banks as well as non-bank institutional investors, we focus on debt contracts in the case of relationship banking and on equity contracts in the

[8] However, the value of large share blocks may not only be maximized by a tighter control over managers, but also by extracting transfers from small shareholders, a process generally addressed within the frame of "private benefits of control"(La Porta et al. 1999).

[9] As a matter of fact the role performed by German housebanks at the end of the 19th century could be considered as a first kind of venture capitalism, thus representing an ideal link between relationship banking and relationship investing. Already at the beginning of 20th century Riesser (1905) provides wide evidence about the role of German banks in financing railways and iron industry, that could be considered the start-up industries of that time.

case of relationship investing. While bank loans, but not investments in equity are necessary for relationship banking, investments in equity, but not bonds are necessary for closer relationships between non-bank institutional investors and firms.

Non-bank institutional investors have become increasingly important as equity holders both in the American and European financial markets. The equity ownership of investment trusts and advisors and pension funds increased dramatically during the last years, and enjoys a high level of internationalization, both on the management side (the asset management companies) and on the investment side (where the investors invest). In particular some public pensions funds began to abandon their traditional passive shareholder role and became more active participants in the governance of their corporate holdings (Gillan/Starks 2000, Woidtke 2002).

Institutional investors that hold publicly traded shares use different mechanisms of corporate control: they may exercise their pressure on firms both by selling shares in underperforming firms or in firms that don't follow international recognized corporate governance standards ("Wall Street Walk") and by exercising direct control over the incumbent management of the respective firms ("voice") (Drobetsz/Shillhofer/Zimmermann 2003). Qualified investors often negotiate directly with the managers and submit shareholder proposals only if the negotiations don't have any relevant effect (Gillan/Starks 2000). When shares are held for a longer time institutions will become aware of the use and consequences of discretionary accounting, thus reducing incentives for the earning management (Chung/Firth/Kim 2002).

Institutional investors are willing to pay significant premiums for well governed companies, or significant discounts for bad governed ones (McKinsey&Co. 2000). The body of the research has focused on the virtues of institutional investors in forcing management to focus on economic performance and eschewing opportunistic self-serving behavior, even if some research underlined the myopia of those who focus on the short-term performance of the firm to the detriment of its longer-term prosperity (Chung/Firth/Kim 2002)[10]. The primary emphasis of activist shareholders has been to focus on the poorly performing firms in their portfolio and to pressure the management of such firms for improved performance, thus enhancing shareholder value (Gillan/Starks 2000). Moerland (1995) argues that the excessive functioning of the market for corporate control with practices such as corporate raiding, crude hostile takeovers or junk bonds, has lost importance having been partially replaced by active

[10] For an overview on the empirical evidence see Menkhoff (2002).

investors' diplomacy and persuasion as disciplining mechanisms. This could represent a turnover in respect of the role traditionally addressed to hostile takeovers (Manne 1965, Jensen 1986).

The different types of institutional investors differ with respect to their monitoring incentives and capabilities. Pound (1988) notes that institutional investors such as banks should be effective monitors because they have frequent business contact to their clients, even if they might become entrenched and support incumbent managers. For example, business relationships between banks and management are likely to be associated with voting behavior that is conductive to continuance of the relationships, thus being supportive of management proposals, as are banks sharing one or more directors with the firm. Director interlocks between banks and firms are related to the outcome of the vote, with affiliated banks supporting management proposals, and unaffiliated ones opposing them (Payne/Millar/Glezen 1996). According to these conflicts of interests, investment or pension funds could be better monitors than banks or insurers, even if they also face some of these conflicts (Charny 1995).

Empirical evidence shows that the results of negotiations and shareholder proposals are associated with the sponsor identity, which seems to sort out a leading effect, with a "leader" making the first step, and the other investors following the leader approach: this is generally recognized in the role of some prominent institutions, as for example the American CALPERS. Moreover the identity of the sponsor could be analyzed distinguishing two different groups, i.e. big individual investors and institutional investors. Proposals sponsored by the first group generally garner fewer votes, while the impact of the second group enjoys the above described lead effect (Gillan/Starks 2000).

3. Relationship Finance within the Theory of the Firm

3.1 Theories of the Firm Relevant for Relationship Finance

To work out the services provided by the different sorts of financial relationships, we resort to different theories of the firm. Broadly, we may differentiate between the neoclassical and the contractual theories of the firm. In the neoclassical economic school, a firm is just described by efficient relationships between inputs and outputs, using the concept of a production function. Even if this black-box concept cannot explain the functions of intermediaries, we will use it to describe which inputs to firm production are provided by different forms of external finance.

The contractual theories of the firm, which have been developed along with the theory of incomplete markets since the 1970s, yield explanations both for the existence of financial intermediaries and their contractual relationships with firms. Despite their heterogeneity, they have the common focus of explaining firms as organizations under two aspects: first, the substitution of short-term contracts on the product markets by long-term contracts between input owners, and second, the substitution of market mechanisms by hierarchy.[11] They may be broadly divided into two groups: principal-agency theory and transaction-cost theory.

The principal-agent theory deals with bilateral contractual relationships between two partners, the principal and the agent, which are affected by problems of asymmetric information, i.e. the principal cannot directly observe the activities of the agent or the agent has more relevant information than the principal..[12] The focus is on designing an optimal contract which will motivate the agent to share his private information so that the action expected by the principal will be effectively realized. The classical agency-theory problem was posed by Berle and Means in 1932 for the public company with dispersed shareholders, where the separation between owners (principals) and managers (agents) causes agency costs by suboptimal control of the management. Within this theory, firms have been considered as "…simply legal fictions which serve as a nexus for a set of contracting relationships among individuals" (Jensen/Meckling 1976, p.325). It has been applied both to explain financial intermediation as an optimal nexus of contracts and the problems of optimal corporate control.

Beyond the 'nexus of contracts view' (Alchian/Demsetz 1972, Jensen/Meckling 1976, Fama 1980), another view is that firms are characterized by more than the legal status, since they provide a solution to moral hazard in teams (Alchian/Demsetz 1972, Holmström 1982). This view emphasizes the technology of team production, where marginal products are costly to measure, and shows the circumstances under which it may be optimal to appoint a monitor who has the rights to the residual income of the team. Another view of team production has been provided by Aoki (1986, 1988) and Marschak/Radner (1972), who consider a firm as a group of input owners with a common goal. According to this view, team production does not serve to prevent opportunism, but to gather and share information under uncertainty. It emphasizes "…the image of a firm which must develop its resources by learning new

[11]For overviews see Cheung (1983), Foss/Lando/Thomsen (2000), Krafft/Ravix (1998), Richter/Furubotn (1997)
[12]See Jensen/Meckling (1976), Alchian/Demsetz (1972), Fama (1980), Holmström (1982).

informational relations before being able to use them" (Krafft/Ravix 1998, p. 248).[13] Since incomplete information is the central problem of external finance, we will use also this theory to study the functions of financial relationships.

The transaction-cost theory is based on the question posed by Ronald Coase in 1937: when do firms produce to their own need (backward, forward or lateral integration) and when do they procure in the market? It explains the use of markets for some transactions and the use of hierarchical forms of organization for others by transaction-cost differences between markets and hierarchies (Williamson 1988, p. 568). In contrast to the principal-agent theory, the focus is not on the ex ante incentive alignment of contracts under asymmetric information, but on the ex post governance of incomplete contracts. Since not all contingencies can be contractually covered, contracts are incomplete, and there is a need of adaptation to changing circumstances. This applies above all to long-term contracts such as the long-term loan contracts between banks and firms. Like long-term labor contracts, they are likely to be implicit.[14] An implicit contract describes complex agreements, written and tacit, which govern the exchange of services when various types of specific investments inhibit the mobility of production inputs, and opportunities to shed risks are limited by imperfect markets for contingent claims (Azariadis 1990, p. 132). It results from bargaining of the contractual partners over sharing the returns of their relationship-specific investments in various possible future circumstances (Azariadis 1990, p. 138). By forming such relational contracts, the parties generally commit to some common goal rather than to a specific course of conduct (Boatright 2002).

Within the transaction-cost theory, the property rights theory of the firm focuses on the allocation of ownership as the possession of residual control rights, i.e. rights to control the uses of assets under contingencies that are not specified in the contract. It considers a firm as a collection of jointly-owned assets (Grossman/Hart 1986, Hart/Moore 1990, Hart 1995) and is relevant for the question of optimal corporate control. The second major branch of transaction-cost theory is the governance structure approach of Williamson (e.g. 1975, 1979, 1985, 1988). Its basic idea is to assign transactions to alternative governance structures on the

[13]This team theory has been considered as an extension instead of an alternative to the principal-agent theory, since the agents are still optimizing, making their decisions on the basis of imperfect information, where the variables designating the optimum form of organization are all known (Krafft/Ravix 1998, p. 251).

[14]According to Frank Knight (1921), labor contracts are implicit in the sense "…that inherently 'confident and venturesome' entrepreneurs will offer to relieve their employees of some market risks in return for the right to make allocative decisions" (Azariadis 1990, p. 133).

basis of their transaction properties, which are determined above all by the degree of asset specificity. In long-term financial relationships, asset specificity results from the acquisition of private information.

Figure 2 illustrates the relevance of the different contractual theories of the firm for the explanation of financial contracts, intermediaries and relationships, which we will review in more detail below. After a view on the neoclassical production function (3.2), we will discuss financial intermediation as a nexus of contracts (3.3), relationship intermediation as team production (3.4), corporate control rights of financiers (3.5) and the governance of incomplete financial contracts (3.6). The results are summarized in table 1.

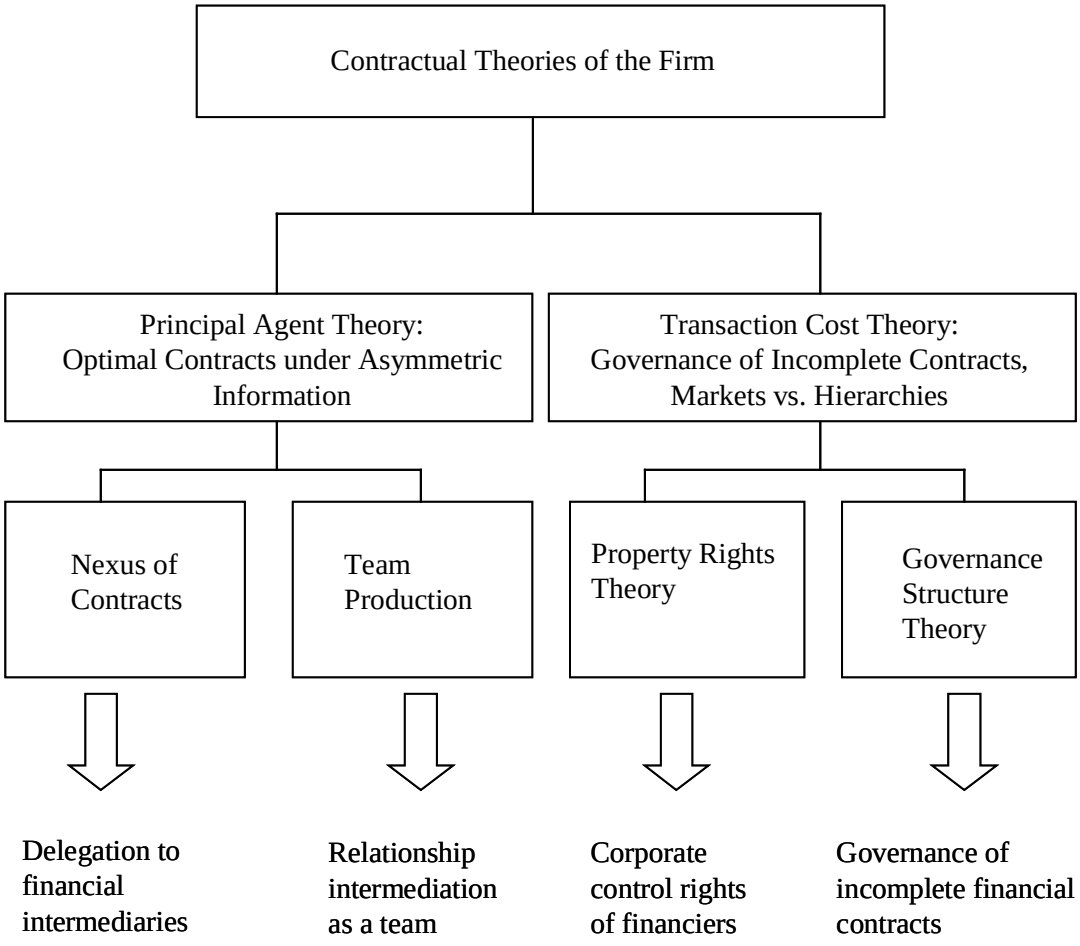

Figure 2: Explanation of financial contracts and intermedianies by contractual theories of the firm

Table 1: Comparison of Different Financing Relationships

Provision of Services	Relationship Banking	Relationship Investing	Transaction Finance
Inputs to Firm Production: q = f(risk, information)	insolvency risk, inside information	residual claim risk, inside information	insolvency risk or residual claim risk, outside information
Nexus of contracts by delegation	banks as delegated monitors: - economies of scale in contracting and monitoring - liquidity creation with disciplinary mechanism of runs - agency costs between bank and depositors	non-bank institutional investors as delegated monitors: - economies of scale in contracting and monitoring - agency costs between institutional investor and fund owners	direct contracts, no delegation
Team Production	cooperation between bank and borrower: - information - risk sharing	cooperation between venture capitalist and firm: - information - risk sharing	no cooperation
Corporate control	reduction of agency costs of debt and equity	reduction of agency costs of equity	high agency costs of external finance
Governance of incomplete contracts	implicit loan contracts with state-dependent claims: - intertemporal contract design - renegotiability: insurance in distress states incentives: - reputation - collateral problems: - hold-up - soft budget constraint	explicit equity contracts with state-dependent claims - - incentive: - long-run profit maximization problems: - hold-up - soft budget constraint	explicit contracts with state-independent or state-dependent claims

3.2 Financial Contracts and the Production Function of a Firm

The usual neoclassical production function relates firm output to capital and labor inputs, which are financed by the firm's revenues. In this case of internal finance, contracts with external financiers are irrelevant. However, if the scarcity of internal funds limits production, external finance is a further production factor with positive marginal returns. Financial contracts with external financiers differ with respect to two fundamental inputs which they provide: bearing of risk and information. Therefore, we consider the more general production function

$q = f(\text{risk}, \text{information})$,

with q as output and f as the neoclassical production function.

Given that individuals are risk-averse, risk can be considered as a scarce production factor with a positive marginal productivity (Sinn 1986). Along this line of reasoning the production function coincides with the efficiency line of the capital asset pricing model. The supply of the factor risk can be increased by different risk-bearing institutions or organizations such as insurance and stock markets, financial intermediaries, but also special financing relationships. It depends on the type of the contract: in a standard debt contract, the lender has a constant interest and capital claim and bears the risk that the borrower cannot repay. In the case of insolvency, the whole property rights on the firm are transferred to the lender. In an equity contract, on the other hand, the equity owner has a state-dependent claim on the residual in solvent states, bearing the residual claim risk.

As a second production factor we consider information as the knowledge or competence of the financier to allocate the funds to their best possible use. We presume that a financier is better informed if he has gathered not only publicly available information but also inside or private information about the state and the prospects of the firm. The higher this stock of information, the lower is the information asymmetry between the firm and its financier and the lower are the concomitant agency costs of external finance. Like a technical or an organizational progress, an increase in information may be described by an outward shift of the production function rather than a move along its frontier.

From a macroeconomic perspective, the above production function may be used to describe the contributions of a whole financial system to an economy's production capacity. According to Hellwig (2000), following the way paved by Jensen (1986), the main problem of a financial system is not the scarcity of funds, but rather the misallocation of funds, e.g. by retained

earnings, hidden reserves, disposal of assets or opportunistic behavior of managers in the presence of asymmetric information. In such an economy the task of the financial system is not only to channel the funds from households to firms, but also to channel the funds within the corporate system, from firms with excessive cash flow to firms with insufficient funds or from X-inefficient firms to more efficient ones. The allocative competence of a financial system thus depends on its ability to reduce information asymmetries and provide possibilities of risk sharing and information sharing.

Given the above definitions of relationship banking and relationship investing, both kinds of relationship finance are superior to transaction finance in providing inside information, while they differ with respect to the provision of risk bearing. Being based on debt financing, relationship banking bears above all insolvency risk, while the equity-based relationship investing bears above all residual claim risk.

3.3 Financial Intermediation as a Nexus of Contracts

Within the agency-theoretic nexus of contracts view, firms come into existence as intermediaries that reduce the number of direct market contracts between individuals and the associated contracting and monitoring costs. Likewise, the existence of financial intermediaries, and their special relationships with contracting partners, can be explained by their functions of delegated contracting and monitoring on behalf of individual investors. If they have gathered specific information about borrowers or investment projects, the reusability of this information can be used to reap economies of scale in long-run relationships.

The new theory of financial intermediation (developed since Diamond 1984, Caloromis/Kahn 1991, Allen 1990) shows that banks are financial intermediaries which can solve specific information and incentive problems in the relationships with savers and investors better than this could be done by non-bank financial intermediaries or direct financing. Within the theory of asymmetric information, Diamond (1984) shows that a special role of banks is to minimize the agency costs between borrowers and lenders by monitoring the borrowers at low cost, while Diamond and Dybvig (1983) find another special function of banks in their role of transforming illiquid assets into liquid liabilities, providing insurance against liquidity risk with private information to agents.

Diamond and Rajan (2001) show that relationship lending is the best way to create efficient monitoring and maximum liquidity simultaneously. Real assets or projects are illiquid,

because the entrepreneur can always threaten to withhold his specific skills in the future and thus capture a rent. A relationship lender who has gained knowledge about the project has a better liquidation threat than any other financier and thus can extract a larger fraction of the cash flows generated. When the relationship lender is a bank, issuing demand deposits, it cannot hold up depositors by not paying them the promised amount. Demand deposits are fixed claims with a sequential service constraint, where the depositors get their money back until the bank runs out of money. Any attempt by the bank to extort a rent from depositors by threatening to withdraw her specific abilities would cause a run, where the depositors demand back their money simultaneously without renegotiating. Hence, the fragility of the bank's deposits ensures that the bank provides the maximum amount of credit it can offer.[15]

Non-bank institutional investors, in contrast, do not create liquidity and hence do not have this disciplinary mechanism of runs. A depositor of a mutual fund has the right to seize that proportion of assets that equals his proportion of total deposits. Thus, the holdings are marked to market and the mutual fund is run-proof. If mutual funds are actively engaged in monitoring, providing relationship investing, depositors are not able to discipline them and the managers may capture rents. This applies also to insurance firms that unlike banks, provide payments only when liquidity needs are observable and verifiable.[16] Also investment banks or venture capitalists differ from commercial banks in this respect: because their value lies largely in future transactions, they cannot be efficiently cut out of the deal, hence demand deposits are unlikely to provide discipline (Diamond/Rajan 2001, pp. 317).

A problem with both relationship banking and relationship investing is that the delegation of monitoring to an intermediary involves by itself agency costs, so-called delegation costs. In the case of relationship banking, they arise from the asymmetric information between bank managers and bank depositors/shareholders, while in the case of relationship investing, they arise from the asymmetric information between institutional investors and their funds' beneficial owners. According to Diamond (1984), the delegation costs for bank depositors go to zero, if the bank is large enough to diversify its loan portfolio so that the depositors are

[15]In a world of uncertainty, it is optimal for the bank to finance itself not only by deposits, but also by outside capital, which is a softer claim that can be renegotiated in bad times (Diamond/Rajan 2000).

[16]Only life insurance companies may have partly demandable claims that allow withdrawal of a fixed amount even if the insurable event does not occur, making them prone to runs.

shielded from credit risk.[17] This results from the debt contracts of banks, so that a similar conclusion cannot be drawn for the equity contracts of (non-bank) institutional investors.

While the theory of financial intermediation is unanimous about optimal debt contacts, it is indeterminate about the effects of delegated monitoring in the case of sub-optimal equity contracts (Schneider 2000, p. 215). Institutional owners function as principals to corporate managements and as agents for their beneficial owners or, in their intermediary role of monitoring for beneficial owners, as 'agents monitoring other agents'. Within this 'nexus agency model' it has been argued that institutional investors are complex organizations which pursue their own goals and the goals of their stakeholders apart from those of beneficial owners (Schneider 2000). Additional agency costs result from detrimental incentives that divert the behavior away from maximizing investment performance: especially the requirement to conform with short-term evaluations leads to short-term orientation, distorted risk consideration and useless activities (Menkhoff 2002). Whether these additional agency costs outweigh the cost reductions brought about by intermediation (portfolio diversification, better corporate monitoring) cannot be answered a priori, because it depends on the effectiveness of the legal and regulatory environment and the governance mechanisms in protecting the interests of the beneficial owners. Empirical studies that concentrate on non-bank institutional investors that invest in US stock portfolios show that their investment performance is usually below the market benchmark. While they realize advantages of diversification, they fail to realize information advantages. The benefits of improved corporate governance go along with costs of generating short-term strategies, increased volatility and less sensitivity toward social issues in the managed companies. The agency costs depend on the type of institutional investor, e.g. pension funds having higher agency costs than mutual funds (Menkhoff 2002, 2001, Schneider 2000).

3.4 Relationship Intermediation as Team Production

As argued by Alchian and Woodward (1987, p. 118), "…long-term, or what the law calls relational, contracts are essential to continuity of teamwork with dependent resources". Moreover, "Teamwork seldom appears without a nexus of contracts, and a nexus of contracts

[17] In Diamond's model of financial intermediation, banks are all deposit funded. In reality, bank deposits are not risk-free and the remaining risk is borne by the bank's shareholders (and a deposit insurance fund). However, the shareholders only have the incentive to monitor the bank managers, if they hold large blocks in the respective bank. At least in Germany, where the big stock banks are mostly held in dispersed ownership, this does not seem to be the case. It is an open question whether this monitoring problem may be solved by (bank or non-bank) institutional investors.

seldom appears in the absence of teamwork " (Alchian/Woodward, 1987, p.111). Hence, long-term contracts of financial intermediaries should involve elements of team production.

According to Aoki, the capability of the firm of having positive economic returns rests on "the willingness of the employees to cooperate and the ability of the employer to adapt and monitor production effectively under uncertainty" (Aoki 1984, p.30). A cooperative team or organization could be considered a system for allocating the resources better than a sequel of unique transactions, above all due to the saving of risk cost, the reduction of shirking and the enhancement of informational efficiency in regulating the formation and utilization of the team element of human resources (Aoki 1984, p. 30). Cooperation in production is a cooperation between suppliers of inputs (Alchian 1993, p. 367). Applied to relationship banking, we may consider it as a cooperation within a team constituted by the bank and the firm in supplying risky capital and information. Within such a team, the borrowing firm must be willing to provide information about investment opportunities and risks to the bank, which in turn provides capital and risk bearing to the firm. According to Alchian and Woodword (1987), teams arise where information is costly: gathering information about the borrower is likely to be a very resource expensive process, and relationship banking rests on information cost savings.

The informational efficiency of utilizing special human resources in lending relationships is not only brought about by the bank's inside information, but also by social interactions between loan officers and firm managers which may create mutual understanding and trust. Empirical studies on relationship lending in Germany show that such social interactions do indeed lead to more favorable lending terms for small and medium-sized firms (Harhoff/Körting 1998, Lehmann/Neuberger 2001). Differences in this sort of team production brought about by different histories or development levels might explain why we observe lending gaps between different regions of the same country (Ferri/Messori 2000, Lehmann/Neuberger/Räthke 2004).

Critics of this view of relationship lending as a cooperative team argue that banks can exploit influenced firms, being able to earn profits in excess of the competitive level. According to the team theory, external agents are necessary to induce efficient equilibrium in team production settings. However, while external agents may be necessary, they cannot sustain an efficient outcome if the internal members of the team don't have some assurance that their product will not be expropriated (Falaschetti 2002). According to Köke (2001), ownership concentration and bank debt, as well as market discipline reflected by product market

competition, are positively related to productivity growth. However, creditor influence depends on a strong position measured as a large fraction of bank debt. Thus, the reduction of bank lending, for example through increasing securitization or issue of corporate bonds, could negatively affect the banks' incentives or ability to monitor (Köke 2001).

Also relationship investing can involve a kind of team production, considering the cooperation between firms and institutional investors to share information and equity risks. This applies above all to the relationships of firms with venture capitalists, but less to those with institutional investors that invest only in publicly traded shares and are less likely to have long-term, social interactions with firm managers. As already mentioned above, these institutional investors do not seem to reap efficiency gains by information advantages.

3.5 Corporate Control Rights of Financiers

According to Berle and Means (1932) conflicts of interest arise between managers and residual claimants when risk bearing is separated from management of the firm. Here we face the problem that the monitoring activity has the nature of a public good. Every shareholder is aware of the fact that it is too expensive for him to exercise an effective monitoring activity on the management, and that at the same time all the other shareholders would take advantage of his efforts, giving rise to a free riding process (Stiglitz, 1985). In the public company, characterized by the so-called absent property (Galbraith 1958), the residual claimants try to solve the problem by delegating the management of the firm to a group of people who professionally do it, the managers, while their relationship is regulated by a contract, that just gives some guidelines to the directors (Berle/Means, 1932). The result of this contract is that the corporation is managed through an agency relationship between the shareholders on the one side and the managers on the other, going along with agency costs.[18] The so-called consumption of agency goods by managers may include not only the consumption of perquisite, but also avoiding effort, avoiding risk, building empires, establishing golden parachutes, subsidizing their favorite activities, discriminating in lay off and implementing strategies to increase the managers' control and to reduce the probability of takeovers. Managers' consumption of agency goods reduces the firms' financial performance and can be undertaken only to the extent that the managers are able to resist principals' disciplining

[18] Jensen and Meckling (1976) define agency costs as the sum of the costs of structuring, administering and enforcing contracts, plus the residual loss. Agency costs include all costs frequently referred as contracting costs, transaction costs, moral hazard costs and information costs (Jensen/Smith 1985).

The reduction of agency costs by different control rights of the external financiers are the main objects of corporate governance studies[19]. The role of banks and non-bank institutional shareholders' activism arises due to the conflict of interests between managers and shareholders, and to the free rider problems connected with the lack of incentives for small investors in monitoring. Investors with large blocks appear to be the only ones which have the incentives to undertake such monitoring activities, as it is more likely that the large shareholders' increased return from monitoring is sufficient to cover the associated monitoring costs (Gillan/Starks 2000).

When a firm is financed partially with debt moral hazard arises, because the equity holders don't bear the full consequence of negative outcomes, while enjoying the full positive consequences of their decisions. The main sources of conflicts are a redistribution from bondholders to stockholders that would arise from an increase in dividend payout, higher leverage, substitution of high-risk for low risk projects (asset substitution), and underinvestment in projects that would yield a higher benefit to bondholders (Jensen/Smith 1985). This bondholder vs stockholder conflict would not be solved simply by giving the bondholders control over the firm: bondholders would have incentives to pay too few dividends, issue too little debt, and choose projects with too little risk. Within the theoretical frame of state-dependent control, the control over the firm should be exerted by shareholders in non-default states and by creditors in default states. In the event of the borrower's default, it is efficient to delegate the control to banks, to bundle the creditors' claims and reduce costs of free-riding by bondholders (Aghion/Bolton 1992, Neuberger 2000, p.14). In non-default states, corporate control should be exerted by financial intermediaries that hold large blocks, thus bundling the interests of dispersed shareholders and preventing actions of firm managers against the interests of minority shareholders and bondholders. This may also be done by banks via voting rights from equity holdings, proxy voting rights or supervisory board mandates. Equity holdings by banks reduce their incentives to pose creditor over shareholder interests, providing a solution to the bondholder vs. shareholder conflict (Stiglitz 1985).[20]

Thus, relationship banking may reduce not only the agency costs of external debt by monitoring borrowers in long-term relationships, but also the agency costs of external equity. However, given the fact that a bank's debt claims are mostly bigger than its share blocks in a

[19]Schleifer/Vishny (1997), La Porta et al. (1999)

[20]For a further argument in favor of simultaneous lending and shareholding by banks see Neuberger/Neumann (1991).

firm, it is rational for it to act primarily in the creditor interests, and the effectiveness of banks as actively monitoring in the shareholder interests is still an open question (Boehmer 2000). As shown by Chirinko and Elston (1996), one of the advantages of bank influence over firms is that, at least in the German environment, banks reduce agency costs associated with corporate control and at the same time lower finance costs due to superior information and more effective monitoring of management activity. Anyway, according to Schäfer (2003) relationship banking and a bank's control over a firm "are just the two sides of the same coin": she provides examples on how this "domination" could affect the management incentives and the banks' incentives to monitor the managers of the "supposed to be" controlled company.

Demsetz and Villalonga (2001) argued that the greater is the degree to which shares are concentrated in the hands of outside shareholders, the more effectively management behavior should be monitored and disciplined. This seems to be the case for the role of banks as external monitors in Continental Europe. Dherment-Ferere et al. (2001) found a positive disciplining effect of qualified banking share blocks, while Lehmann and Weigand (2000) found that financial institutions as largest shareholders of traded corporations enhanced profitability. Baums (1994) argues that the presence of major lenders in the board could represent by itself a limit of managers' ex post moral hazard. When the stock market is (ab-)used by managers the awareness of being monitored can reflect in an excessive myopia of the managers, i.e. in the willingness of improving the company's results (e.g. by creative accounting, sudden appreciation of assets, manipulation of the accounting data), in order to show their capability as business leaders. The presence of long-term shareholders prevents such behavior, at least as long as they perform a real monitoring activity.

Also in market-based financial systems with less control rights of banks, relationship banking lowers agency costs of external finance. Jensen (1986) argues that debt financing reduces free cash flow and therefore has a disciplinary effect on management: managers can use high leverage to signal credibly that they maximize profits. Likewise, any disciplinary impact creditors have on management should be the greatest when a large fraction of debt is bank debt. This is backed by empirical evidence: stock prices respond positively and significantly especially to announcements of bank loans (James 1987), and the cost of issuing public securities is significantly lower for firms with borrowing relationships to banks (James/Wier 1990, Datta et al. 1999). This evidence about the uniqueness of bank loans makes clear that relationship banking is superior to relationship investing in reducing agency costs of external

finance: non-bank institutional investors may only lower agency costs of external equity by active monitoring in the interest of shareholders.

3.6 Governance of Incomplete Financial Contracts

Transaction cost theory focuses on the ex post governance of incomplete contracts to answer Coase's question about the boundaries between firms and markets. Incompleteness of contracts means that not all contingencies are contractually covered, and is the more relevant the longer the term of the contract.

Relationship finance is by definition long-term finance and thus carries the feature of a firm described by Coase: "A firm is likely therefore to emerge in those cases where a very short term contract would be unsatisfactory. It is obviously of more importance in the case of service -labor- than it is in the case of buying commodities" (Coase, 1937, p.392). This applies to the financial services provided by banks and non-bank institutional investors.

The long-term nature of these services is above all inherent in relationship lending. Like long-term labor contracts, these loan contracts may be perceived as implicit contracts, in which banks offer to relieve their borrowers of some market risks in return for the right to make allocative decisions. They result from bargaining between the bank and the borrowing firm over sharing the returns of their relation specific (informational) investments. Within this frame relationship banking represents a specific asset whose value cannot be independent from the firm itself.

The provision of risk by an implicit long-term loan contract implies that the bank's claims are no longer state-independent. One benefit of relationship lending is seen in its intertemporal contract design. The basic idea is that the long-term binding of the borrower to the bank enables the bank to compensate losses in some periods by gains in other periods.[21] This permits the funding of loans (relationship loans) that are not profitable for the bank from a short-term perspective but may be profitable if the relationship with the borrower lasts long enough (Boot 2000)[22], enabling e.g. long-term investment projects (Ongena/Smith 2000). Long-term relationships make possible value-enhancing intertemporal transfers in loan pricing, with the bank charging different interest rates according to different business situations of the borrower, even if in the long run the total amount of interests paid is equal to

[21] See e.g. Greenbaum et al. (1989), Petersen/Rajan (1995). For a detailed discussion of the theoretical literature see Elsas (2001, pp.56).

[22] Boot/Thakor (2000, p. 683) provide a further definition of a relationship loan as "a loan that permits the bank to use its expertise to improve the borrower's project payoff".

the case of a fix interest rate contract. Moreover when firms have financial or industrial problems they look for help by their relation bank or housebank. They know that their housebank, having made costly investments in order to build up a long-term relationship, would not have an advantage in letting the client go bankrupt (Macey/Miller 1995, Das/Nanda 1999). Indeed, housebanks are more committed to their clients, providing more finance if the firm faces sudden and temporary difficulties (Elsas/Krahnen 1998, p. 1284). Another aspect of intertemporal contract design is given by the refinancing of the banks by standard debt (deposit) contracts. Through long term commitments to their borrowers, banks can compensate losses in some periods by gains in other periods, facilitating intertemporal risk diversification (Allen/Gale 2000): systematic risk may not be diversified at a specific point in time, but across generations by long-term, long living banks.

Since an incomplete contract does not specify rules for each possible state of the world, the optimal contract should be structured to provide incentives to both parties to take mutual beneficial actions. In relationship lending, this is done by the possibility of renegotiations (Elsas 2001, p. 19). While in the case of arm's length debt the borrower cannot credibly commit to liquidate its firm in a distress situation, the power of its housebank to renegotiate will lead to more efficient decisions about firm liquidation or continuation (Rajan 1992). This can be interpreted as a kind of insurance service provided by the housebank: the ex ante choice of relationship lending prevents negative value effects of opportunistic behavior by one contract partner, which cannot be prevented by alternative financial arrangements (Elsas 2001, p. 26).

According to Chemanur and Fulghieri (1994) banks use the ability to renegotiate as a means to acquiring reputation. Reputation building provides the bank with the incentive to establish a long-term relationship with a firm.[23] In their model, banks also have the choice between liquidating the firm when distressed or renegotiating the loan contract. Banks wishing to establish a reputation for financing productive firms, monitor the firms more intensively, which in turn leads to more efficient continuation decisions in renegotiations (Ongena/Smith 2000). Bester/Scheepens (1996, p. 571) underline that the advantages connected with establishing a debt history can in the long-run overcome the costs associated with an initial debt. Their result goes against the first argument of the pecking order hypothesis of Myers and Majluf (1984), according to which internal finance should be preferred to bank debt. They

[23]Generally, reputation is an incentive mechanism for long-term implicit contracts: "if somebody deviates from the terms of the contract, the deviation becomes widely known, and the deviant finds it difficult to locate trading partners in the future" (Azariadis 1990, p. 138).

consider the decision to finance an investment by bank debt rather than by internal funds. In taking into account the costs associated with bank debt, side by side with the advantages of establishing a positive debt history, we expect that if the bank relationship is publicly observable, the reputation for both the bank and the firm improves as the length of the relationship increases.[24]

On the one hand, bank relationships are credible signals since the bank places its own wealth at the borrower's disposal (Collin 1997), and also its own reputation (Stiglitz 1985). On the other hand, the longevity of the relationship should not be informative for new entrants since competitors don't know the prices and the terms associated with the relationship. Thus the incumbent bank may have a long relationship with a very risky borrower only because the bank is able to be compensated by an appropriate interest rate (Greenbaum et al. 1989).[25]

Another incentive for banks to enter a lending relationship is collateral provided by the borrowing firm. Longhofer and Santos (1998) show that by increasing the seniority of the bank's debt claims, inside collateral provides incentives for efficient monitoring in distress situations, since in such states the most senior claimant benefits first from improving the quality of the firm, "…and it is in such states that the true value of relationship lending comes to light. If banks are made junior to other creditors, they will have little incentive to build a relationship that might allow them to determine the value of such an investment" (Longhofer/Santos 1998, p. 2). If there are more than one debt claimant, it may be optimal to determine the structure of seniority strategically ex ante, anticipating future renegotiations in which conflicts between the different claimants are likely to cause net welfare losses. Such losses may be reduced by allocating ex ante the strongest bargaining position to the debt claimant which is expected to have the highest bargaining power ex post, by increasing his or her seniority (Welch 1997). Banks and especially inside banks are likely to be such claimants, because they have comparative advantages vis-à-vis bondholders or outside banks in organizing distress situations, having built up law departments or special reorganization capacities. Hence, housebanks with the most inside information should obtain the highest seniority position by inside collateral (Elsas 2001, p. 191).

[24]Also the status of the committed part (e.g. an international bank vs a regional one) may be a source of reputation (Schäfer 2003), or at least of creditworthiness (Chirinko/Elston 1996, Collin 1997, Ferri/Messori 2000).

[25]Within the frame of implicit contracts a similar result may be obtained in the labor market where the unknown variable is the workers' productivity: a very low productivity can be compensated by an even lower wage. In a lot of labor intense industries, cooperatives among the workers arise, among others, due to the signaling problems connected with employees' productivity (Dow 2003).

The cost of collateralization may further explain while it should be more important in long-term lending relationships. Lenders must evaluate and monitor collateral and bear the related administrative expenses. Given that evaluation costs and security registration fees represent fix costs, paid just once, the costs per unit time can be reduced by increasing the length of the lending relationship. At the same time collateralization imposes high costs to the borrower because it limits his or her freedom in using the collateral. As argued by Parlour and Rajan (2001), collateral can be considered as a commitment on the part of a borrower to accept only one contract, because usually the same collateral can be used to secure just one loan.

These benefits of relationship banking, however, go along with costs due to two problems: the hold-up problem and the soft budget constraint problem. The hold-up problem results from the information monopoly the bank generates in the course of lending, that may allow it to make loans to the borrower at non-competitive terms in the future. Sharpe (1990) argues that bank relationships arise in competitive loan markets because a bank, which has privately observed customer quality, can "lock in" the customer, and charge above-cost interest rates, while Greenbaum, Kanatas and Venezia (1989) provide a further explanation when considering the costs borne by the firm in searching for competing bank offers. Because of this "central conflict between commitment and competition" (Mayer 1988, p. 1179), the informational advantage of the inside bank is a "double-edged-sword" (Rajan 1992, p. 1369, see also Elsas 2001, p. 48).

The soft budget constraint problem results from the potential lack of toughness of the bank in enforcing credit contracts that may come alongside with relationship banking proximity (Boot 2000). This refers to the possibility that a relationship bank is unable to commit not to refinance unprofitable projects ex post, in particular when the borrower faces financial problems. In time of financial distress a relationship bank may extent further credit even to unprofitable projects in the hope of recovering its initial loan (Guatri/Vicari, 1994). Dewatripont and Maskin (1995) argue that multiple banking may represent a solution, as it offers a way for banks not to commit to refinance unprofitable projects, or worst, gambling for resurrection projects, while Bolton and Scharfstein (1996) show that multiple banking complicates debt renegotiations due to communication problems and asymmetry of information among the different creditors.[26] As a consequence Carlin and Mayer (2000) argue that multibank systems are superior in imposing tough budget constraints on inefficient

[26] Alchian (1993) argues that in every situation where we find a party that depends from a single supplier the input user could protect himself through a multiple suppliers agreement, even if at higher costs than a contract that restrains the single supplier from not performing as promised.

projects but the other side of the coin is, they are too myopic and fail to sustain efficient long term projects characterized by short term uncertainty.

The feature of a long-term, incomplete contract applies also to relationship investing, however with a different contract design implying different risk-sharing and informational properties. Capital issued as public equity is a long-term claim with no other right but to liquidate the equity-financed project at any point in time. The decision to do so by selling shares is mainly based on public information. The use of private information by institutional investors is restricted by insider trading regulations, in particular in order to avoid that managers and relevant shareholders collude in order to trade at the expense of "uninformed" or "small" shareholders (Maug, 2002). Dherment-Ferere, Köke and Renneboog (2001) underline that little corporate monitoring is to be expected from institutional investors, because, due to insider trading regulation non public corporate information may temporarily reduce the liquidity of an institution's investments.

In contrast to relationship banking, relationship investing on the capital markets does not go along with implicit contracts. The state-dependent claims to the residual are explicitly defined by the equity contract. Institutional investors bear equity risk (and as bondholders also debt risk) without providing insurance services by intertemporal smoothing or renegotiability. However, by gathering information and exercising direct control over the management, they reduce moral hazard risk to the benefit of individual shareholders or fund holders, providing insurance against this risk in non-distress states. The incentive for relationship investing is likely to be long-run profit maximization rather than reputation. Since the building up of a close relationship with a firm involves costs, institutional investors should only make such relationship-specific investments if they are compensated for these costs by higher returns in the future, given by a higher shareholder value and lower losses from liquidating unprofitable investments. Reputation as an incentive mechanism may be only important in an implicit contract, if the time horizon is fairly long or the future is fairly important relative to the present (Azariadis 1990, p. 138). Even if we consider the insurance against moral hazard risk provided by relationship investing as an implicit contract, the right to liquidate the equity investment at any time is likely to shorten the time horizon relative to that of a long-term lender. Of course, this argumentation does not apply to venture capitalists or other investors in long-term, private equity.

To the extent that relationship investing involves a binding of an institutional investor to a firm, the hold-up problem and the soft budget constraint problem arise here, too. Such a

binding may be caused by the holding of large blocks. Traditionally one way for unsatisfied shareholders of an underperforming firm is to sell out the shares. The fact is that often the holdings are so large that the shares cannot be sold without driving the price down and suffering further losses, so they are less marketable (Chung/Firth/Kim 2002). As a consequence institutional investors face a trade off between keeping underperforming shares and suffering a long-term (comparative) loss or selling out the shares and suffering a sudden loss. If they keep the shares, they find themselves in a hold-up situation and the firm managers may exploit their lock-in by opportunistic behavior. Proponents of institutional investors' activism argue that as a consequence such activity focuses on the long term and in doing so it helps management to improve long-term performance. As in the case of relationship banking, the binding is a "double-edged-sword". The soft budget constraint problem may arise from a potential lack of toughness of the relationship investor in controlling managers on behalf of shareholders. Opponents of the institutional investors' activism maintain that the activism detracts from the primary duties of asset management's managers, which is managing money for investors or other beneficiaries (Gillan/Starks 2000). Jarrow and Leach (1991) note that fiduciaries are confronted with conflicting interests and must determine whether to maximize their own wealth or that of the beneficiaries (Jarrow/Leach 1991): some authors note that institutions, who maintain business relationships with firms, may be biased in favor of management in matters pertaining to control[27].

On the other hand, an open question is still if relevant institutional investors have the incentives to build up relevant shareblocks and thereafter to exercise an effective monitoring activity on the company. Admati, Pfleiderer and Zechner (1994) demonstrate that in equilibrium the monitoring activity is below the optimal level. The fact is that every investor, no matter if it is institutional or private, faces a trade-off between the benefits of diversification and the benefits associated with monitoring a firm. On the contrary a shareholder which does not hold any relevant blocks cannot be considered as a suitable monitor, given the well know contrast between the private costs of monitoring and the public good feature of monitoring benefits. Maug (1998, p. 89) demonstrates that the probability of monitoring increases in the liquidity of the market, since the liquidity of markets allows also large investors to benefit from monitoring, and helps to overcome the free-rider problem.

[27]Coffee (1991). A very good example is provided by Berglöf and Sjögren (1998) which presented a model with a bank proving loans to a borrower while an investment company, controlled by the bank, holds a relevant block in the borrower company. Baums (1996) and Baums and König (1997) find a high correlation between the underwriting and investment policy of bank controlled investment companies (Publikumsfunds) and the role of the bank as coordinator of the IPO.

4. Conclusion

The shift from bank intermediation to intermediation by non-bank institutional investors which we observe in continental Europe has invoked concern about the dissolution of valuable long-term bank-firm relationships and their replacement by arm's length finance. However, non-bank institutional investors are also actively engaged in the firms they finance, providing a kind of relationship finance. The present paper reviewed the literature on both kinds of relationship finance to examine their relative merits. Within the theory of the firm, we made a comparison along the following criteria:

- provision of the input factors risk and information
- provision of delegated monitoring by intermediation
- enhancement of productivity by team production
- reduction of agency costs by corporate control
- governance of long-term, incomplete contracts.

We found that while relationship banking and relationship investing are both superior to transaction finance in providing these services, none of them is superior to the other in all respects. They tend to be complements rather than substitutes, their relative merits depending both on the type of the intermediary and the type of the firm to be financed. The comparative advantage of relationship investing by venture capital firms lies in the provision of equity (bearing of residual-claim risk) to innovative, start-up firms, whereas relationship banking has its comparative advantage in the debt financing (bearing of insolvency risk) of informationally opaque small and medium-sized firms in more mature markets or traditional industries. For these firms, relationship banking delivers unique monitoring and insurance services by implicit contracts.

Large companies, on the other hand, may profit from relationship finance by both banks and non-bank institutional investors (insurance firms, pension funds, mutual funds), if these hold large blocks of their publicly traded shares to exercise corporate control. Here, however, non-bank intermediaries seem to be an imperfect substitute for banks: First, their incentives to actively invest in long-term relationships are lower because of a conflict between the use of inside information and the liquidity of their investments. Secondly, their disciplinary effect on management tends to be lower than that of banks. Third, since they do not provide liquidity, they are less disciplined by their depositors to provide efficient delegated monitoring. The

costs of delegation to non-bank institutional investors are comparatively high, because they have more scope to pursue their own goals apart from those of their funds' beneficial owners.

Finally, the pros and cons of the different forms of relationship finance depend on the liquidity of the respective financial market and on the regulatory environment. The present paper just developed a theoretical framework for more comparative research in this regard.

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