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Bank Financing and Shareholder Wealth

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This article shows that European firms do their shareholders a disservice if they use bank financing, especially if that financing comes with restrictive covenants and floating interest rates. The restrictive covenants discourage expansion and the floating interest rates make the firm's cash flows less stable. The better way to finance the firm is with fixed-rate bonds. With bond financing, the covenants are less restrictive and the firm's interest expense is more stable.

The simulation approach which the authors have developed gives estimates of how much each attribute of the financing affects the company's share price. The effects that they found are large — for example, choosing fixed-rate bond financing over floating-rate bank financing adds 17.4 per cent to the stock price. Interest expense is an important component of cost in the author's simulation, and making it fixed instead of floating brings enough stability to the firm's cash flow to deliver a large increase in the stock price. Also, postponing a new factory, as managers might do to avoid violating the restrictive covenants of bank loans, lowers the stock price 19.7 per cent. In the simulation, the firm has adequate capacity at the beginning, but in many scenarios becomes capacity-constrained after one or two years. Stock market investors gain if the company buys the factory sooner, because they place a high value on growth and market share. © 2001 Published by Elsevier Science Ltd.

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When a company borrows money from a bank, the loan agreement often imposes covenants restricting the company's freedom to expand. When the same company sells bonds, the covenants are usually fewer and less binding. Bank loan covenants are usually expressed as ratios that cannot be exceeded, while bond covenants are usually expressed in terms of priority and subordination.

Bank financing was competitive with bond financing for centuries but now suffers disadvantages. These include the Basle Accord capital requirements for banks, which tend to make bank loans more expensive than bond financing. Other disadvantages relate to the bank's maturity mismatch if it gives long-term fixed-rate financing to a borrower. Banks can push this cost onto the borrower by readjusting the borrower's interest rate periodically, or they can price the loan high enough to cover the cost of hedging against increases in the bank's cost of funds. But inescapably banks suffer as providers of long-term financing because their depositors are risk-averters who seek short-term, guaranteed investments. Bond buyers, in contrast, are desirous of holding longer-term paper, or at least are willing to hold it. Depositors at the typical bank insist on shorter terms for repayment.

The most important disadvantage, however, has come to the fore only recently, but is now preeminent, and concerns the effect that the type of financing has on the borrower's share price. Day-to-day stock market performance is now a key factor for the prosperity and survival of every publicly-quoted company. Often when an industrial company borrows from a bank, the company chooses floating-rate terms, in effect betting that the cost of interest rate readjustments will be lower than the bank's alternative quote for fixed-rate financing. The floating interest rate may indeed be cheaper over time, but it increases the uncertainty of the borrower's future cash flows. The borrower then looks riskier to a perspicacious buyer of shares, so choosing bank financing with floating interest rate over bond financing with fixed rates has a cost to shareholders. Moreover, the company that habitually uses bank financing may defer expansion and choose slower growth to avoid falling into violation of restrictive covenants on its bank financing. Deferring expansion is another effect of choosing bank financing that may hurt the company's share price.

The costs of these differences between bank financing and bond financing can be modeled and quantified in a way that takes several differences into account

and estimates the reduction in the company's stock price that these differences cause.

In Europe bank financing has been the predominant mode and in the US bond financing has had a larger market share. The choice of mode has corresponded to the size of the borrower and the form of ownership. Very large companies bypass banks and issue bonds; smaller and closely-held or family-owned firms go to banks for financing. Firms that do not list on any stock exchange avoid the continual scrutiny and pressure that public shareholders bring to bear. Those firms typically borrow from banks, and those firms' primary interface with the capital markets is through their lead bank; the bank's need to protect its own stability is paramount over the shareholders' need for the company's stock to be as high as possible at all times. Consequently the closely-held firm willingly accepts the bank loan with restrictive covenants that crimp the firm's flexibility in choosing among expansion paths, and also pays slightly more for financing, and accepts more interest rate risk. In contrast, the publicly-held firm's primary interface with the capital markets is through an investment bank; the publicly-held firm prefers to issue bonds, and resists covenants that constrain its latitude to expand, and chooses to issue fixed-rate bonds so that investors will be more able to forecast its cash flows. The publicly-held firm's objective is continually to maximize the market price of its common shares.

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On the Continent bank financing provides an especially large share of total medium-term financing to corporations, and bond financing a relatively smaller share.[1] In consequence many large, publicly-listed European corporations have medium-term bank borrowings that entail restrictive covenants. This is due to the historically larger role of universal banks in European capital markets, and the historically smaller role of corporate bond markets. The share prices of some European firms, however, in the model developed here, are held down when the borrower chooses floating-rate bank financing with restrictive covenants.

An Example: A Manufacturing Firm Buys a New Factory

To see the effect that loan covenants and the other distinct attributes of bank financing can have on share price, consider this example. A European manufacturing company is buying a new factory, and will pay for it by getting medium-term, floating-rate bank financing or by selling fixed-rate bonds. The manufacturing company is growing rapidly, and does not have a large base of stockholders' equity. It has one factory that it bought in 1995, another that it bought in 1998, and is considering buying another as the end of the year 2000 approaches. The company's shares are publicly listed, and officers and directors control only 20 per cent of the shares.

The new factory costs $50 million and there are two offers for financing on the table. Although demand is growing rapidly, there is only a small probability that the new factory will be needed in 2001, a higher probability that it will be needed in 2002, and a virtual certainty that it will be needed in 2003. The forecasted demand makes it look prudent to give the order to buy the new factory immediately. It will be installed in 2001. Shareholders are willing to accept the risk of overcapacity in the short run, to protect against the possibility of being unable to satisfy the demand.

The alternative is to defer buying the factory until 2003. It would be installed in 2004 and by that time would very definitely be needed. Management has to decide before Christmas of 2000 what to do, and wants to choose an expansion policy that will maximize the company's stock price. Stockholders have enough information to model the company's future cash flows, and will bid up the price of the company's stock if they like the decision management makes.

The authors' web-site Posting[2] shows one scenario of the company's operating statement for the six years 2000–2005. Since many of the items in the operating statement have a random component, the possibility exists that the expansion will cause the company to fall out of compliance with the restrictive covenants of its financing during the years 2001 or 2002. This possibility of falling into violation of the restrictive covenants would argue against buying the factory in 2000. If the company will use bank financing, its management might choose to delay the purchase of the new factory until 2003.

Management's dilemma is to decide between the risk of falling into violation of the bank loan covenants, and the risk of losing future sales revenue, in the event that demand grows rapidly. Computing the effect on the company's stock price is a good way of balancing the reasons for caution against the arguments for aggressiveness.

Results of a Simulation[2]

Simulation reveals the effects of the purchase and financing decisions on the company's stock price. The