## FINANCIAL SLACK: A STRATEGIC CONTROL DECISION

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#### Abstract

Financial slack or debt capacity adds to the discretion of managers. For strategic reasons, this discretion is valuable in the event of unforeseen future investment opportunities. This paper investigates how this strategic allocation of control within the firm influences the choice among short-term debt, long-term debt, and equity. This analysis suggests that equity or long-term debt produces efficient investment decisions when relationship-specific assets exist and are unequally distributed. Otherwise, non-integration via short-term debt is preferred.

#### Introduction

Under certain conditions, it can be shown that corporate financing decisions do not affect the value of the firm.¹ This implies that firm managers should select capital budgeting projects independent of considerations about how the projects will be financed. Although this financing irrelevance theorem has become standard theory in capital budgeting and capital structure problems, we present it in our classrooms as a starting point in discussing corporate value maximization through financing decisions. By expanding the theoretical structure to include the uncertainty and transaction costs, financing issues such as financial slack or debt capacity become important strategic decisions that impact corporate value. This paper examines one perspective on how financial slack can affect corporate investment decisions, and hence corporate value. Specifically, we investigate the roles of debt and equity in allocating control within the firm.

The optimal allocation of control among the various parties within a firm is the primary problem of corporate governance. Coase's (1937) contribution to this problem is to see vertical integration as a governance mechanism, that is, an important function of backward or forward integration is to allocate or re-allocate control. Largely because of this view, many internal and external contractual arrangements have been described as vertical integration situations. Coase suggests

that transactions will be vertically integrated inside the firm whenever the costs are lower than the costs of market-oriented, non-integrated external transactions.

Williamson (1988) recognizes that since financial contracts are used to allocate control, the vertical integration framework can apply equally to financial contracting issues, including the debt/equity decision. Based on this perspective, forward and backward integration are competing governance structures for assets. Some assets are better controlled by the customer (i.e., managers). This is called backward integration and corresponds with equity financing since it allows managers enhanced control over investors (i.e., suppliers). Similarly, other assets are better controlled by the supplier. This is called forward integration and corresponds with debt financing since it allows debt holders enhanced control over managers.

In this control framework, there are two types of investors: debt holders and equity holders. Each type of investor acquires a different set of control rights over the firm's managers. Debt financing removes control rights from managers since they are forced to return capital to investors after a project's life span according to terms specified in loan and bond covenants. Unlike equity holders, debt holders stipulate to managers: 1) the timing and amount of cash flows (interest payments); 2) the maintenance of liquidity and other solvency tests; 3) and that certain creditors stand behind those debt holders in the event of bankruptcy. The debt holder — not the manager — retains control of how to spend the firm's cash flows in the future. Williamson (1988) argues that this important veto over future investment decisions gives debt holders a different and larger set of control rights than equity holders.

## The Allocation of Control Within the Firm

The specific rights given up by managers are made explicit with the rules-based governance structures established in debt contracts. Unlike equity, debt is unforgiving if the firm performs poorly. If a firm goes bankrupt, debt holders have the right to repossess funds and exercise their residual control rights about how the funds will be spent. Thus, under debt financing, investors possess a larger set of control rights than managers.

However, the cost of giving control to debt holders is a loss of control by managers. This loss of control may cause inefficient investment allocation decisions within the firm. In many circumstances, it is optimal to give managers control rights over future investment decisions. Equity financing performs this role. Unlike debt holders, who dictate that part of cash flows are used to pay bond coupons, equity investors agree to give managers wide latitude about spending present and future cash flows.

Internal and external corporate governance varies from firm to firm depending on the control needs of assets within the firm. Control is rarely absolute, either for the manager of the investor (debt holder or equity holder). However, to understand the potential control aspects of debt or equity, it is useful to view debt financing as a control-allocating mechanism giving all control to debt holders and

equity finance as a control-allocating mechanism giving *all* control to managers. This framework simplifies reality but highlights the implications of the control allocation of debt versus equity. In the framework of this simplified view, Exhibit 1 summarizes the vertical integration perspective as it applies to the financial contracting issue of debt versus equity financing.

# Exhibit 1 Vertical Integration Summary

## Forward Integration

- Suppliers of capital (i.e., investors) control future investment decisions. Debt removes corporate cash flows from the manager's discretion.
- Long-term debt financing is a forward integration solution that allows investor control.
- Because the firm will make more efficient investment decisions, and investors have relationship-specific assets at risk, investors have an incentive to control future investment decisions

## **Backward Integration**

- Users of capital (i.e., managers) control future investment decisions. Equity allows managers to decide whether to keep or return corporate cash flows to investors.
- Equity financing is a backward integration solution that allows managerial control.
- Because the firm will make more efficient investment decisions, and managers have relationship-specific assets at risk, managers have an incentive to control future investment decisions.

#### Non-Integration

- Neither suppliers nor users are given control over future investment decisions.
- Short-term debt financing is a non-integration solution that allows joint control.
- If managers and investors have relationship-specific investments at risk, both have an incentive to retain control. An incentive for non-integration also arises if managers and investors have no relationship-specific investments at risk.

#### Why Investors Want Control

Investors want control of the firm to protect their investments. The suppliers of capital bear a unique relationship to the firm (Williamson, 1988, p. 304-307). Suppliers of labor, raw materials and products typically retain possession of their investment. If a firm attempts to consume the products of suppliers without satisfactory reimbursement, these suppliers have the option of retaking possession of their investments and redeploying them. Suppliers of capital have no such option, and are thus placed in a vulnerable position. Capital is a general-purpose purchasing power that can be quickly depleted or misappropriated.

The purchase of relationship-specific assets is one use of funds. If the firm fails to properly reimburse its suppliers of capital for their investments, these capital suppliers can retake possession of these relationship-specific assets. However, capital suppliers will be unable to sell these relationship-specific assets without a loss in value. These unique hazards faced by suppliers of capital may cause the large and varied set of contracts we observe in capital markets. Contracts with other input suppliers are less complicated because the contractual hazards are less serious. Thus, we should observe fewer and a less varied set of contracts in markets for products other than capital.

Protection for debt and equity holders comes in several forms. A board of directors exercising their fiduciary responsibility to the equity holders, covenants in debt contracts, and corporate charters are a few of the protection mechanisms for debt and equity holders. Equity investors are further protected from managerial abuse by the market for corporate control, which can be used to remove bad managers. However, this investor protection device is a last resort, to be used only after a complete breakdown of the internal protection mechanisms provided by debt and equity.

Because equity gives significant rights of discretion to managers, equity holders are the least-well protected suppliers of capital and receive a higher rate of return than debt investors. Because of these risks to equity holders, managers are willing to construct protective mechanisms to benefit equity holders. Managers are willing to do this because it lowers the required rate of return equity holders will charge for their funds. One important protective mechanism for equity holders is the board of directors. Managers organizing an enterprise can form a board of directors and give control of the board to equity holders. Without control of the board of directors, investors are reluctant to invest or require a higher rate of return for their investments. Even with a board of directors to protect the interests of equity holders, the managers control much of the firm since they continue to control most decisions.

#### Why Managers Want Control

Managers want control of the firm to protect their human capital investments. Like investors or other suppliers to the firm, managers have their own set of unique hazards when contracting with the firm. If managers develop marketable skills in their jobs, managers can look to the competitive managerial marketplace to protect them from exploitation by the firm. However, if managers develop relationship-specific skills that are valuable in one firm only, they cannot expect to be equally productive outside their current firm. If wages reflect marginal product, their wages will be highest in their current firm. Without an external managerial labor market, managers with relationship-specific skills are placed in a poor negotiating position when recontracting with the firm.

However, such hazards facing managers are often overlooked. Since managers are the central contractual agent, they are thought to operate the firm at the expense of others. Unusual financial contracts (e.g., golden parachutes) crafted by managers are viewed as attempts to add to management's all-powerful positions rather than for efficiency purposes.

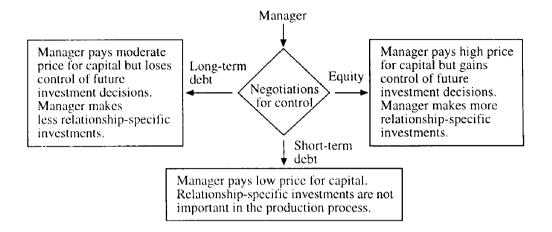
As the central contractual agent of the firm, managers are the natural candidates to control allocation decisions within the firm. Other participants in the firm — including investors — do not have access to as complete a set of information and would thus be inclined to make less efficient investment allocation decisions. Since equity grants the largest amount of managerial discretion, managers favor equity for maximum flexibility. Control rights are not costless, however. In exchange for the enhanced managerial discretion and the associated risks, equity holders require a higher return than debt holders.

#### The Control Decision: A Flow Chart

Suppose, for example, that a manager (or investor) devises a business opportunity in which several suppliers are needed. Some suppliers provide assets that are redeployable, and other suppliers provide relationship-specific assets. Managers will be able to contract for redeployable assets easily and without contractual hazards. For relationship-specific assets including funds from capital suppliers, contracts must be carefully written to protect these suppliers. The manager can either issue long-term debt, short-term debt or equity. If the manager issues long-term debt, he pays a moderate cost of capital but gives away some future decision rights. If he issues equity, he keeps future decision rights but must pay a higher cost of capital. Short-term debt has the lowest cost of capital and is neutral with respect to future control rights. To decide between these alternatives, the manager values future decision rights and determines whether the added cost of long-term debt or equity is justified. Exhibit 2 presents the flow chart describing the manager's problem. We assume that relationship-specific assets are important in the production process. Thus, profits are assumed to depend on the amount and distribution of relationship-specific investments between managers and investors. Since production efficiency depends on relationship-specific assets, profits are assumed to increase as relationship-specific investments increase.

According to the Exhibit 2, the debt/equity decision depends critically on the payoffs associated with each set of (relationship-specific) investment decisions.

**Exhibit 2 The Managers's Decision: The Optimal Allocation of Control** 



Note: A similar flow chart would describe the parallel decision by an investor whether to acquire control of the firm's investment decisions.

To maximize firm profits, the financing decision that generates the most profitable set of investments will be selected. If investors secure future control rights with long-term debt financing, investors are willing to make larger relationship-specific investments. They are willing to do this because their control rights guarantee that others cannot confiscate the economic rents arising from their relationship-specific investments. Alternatively, if managers secure future control rights with equity financing, they are willing to make large relationship-specific investments since their control rights guarantee that no one will be able to confiscate their rents.

To maximize profits, the financial contracts of the firm will be written to encourage the manager or investor who adds the most value to the firm from relationship-specific investments. The manager or investor making the largest relationship-specific investment has the largest incentive to acquire control. Since the manager or investor does not want others to make decisions that make his relationship-specific investments worthless, he places himself in an increasingly vulnerable position if he does not acquire control. If he does not have control, the confiscation of economic rents by investors or others is a credible threat. The larger the investments in relationship-specific assets, the more he will pay to acquire control rights.

This willingness to pay larger and larger sums to acquire control rights lessens the desire of the other party to retain control rights. The size of these sums, however, will be limited by the productivity associated with the relationship-specific investments. The investor or manager able to extract the greatest productivity from the acquisition of control rights will pay the highest sums to acquire control. If the manager or investor is unwilling to pay a sufficiently high price to acquire control over future investment decisions, he has two choices. First, he can sell his control rights and reduce his relationship-specific investments. This limits his exposure to the confiscation of his economic rents. Second, he can sell his control rights but continue to make the technologically-efficient amount of relationship-specific investments and rely on alternative mechanisms to prevent confiscation of his rents. To the degree that alternative mechanisms are inadequate, he will make the first choice and continue to underinvest in the otherwise optimal amount of relationship-specific investments.

Finally, if technology dictates that no relationship-specific investments are needed in the production process, the manager and investor are indifferent to acquiring control. If no relationship-specific investments are needed, there is no risk of confiscation. The confiscation of rents is implausible without relationship-specific assets. If threatened, either side can costlessly redeploy their assets in a competitive market that pays a wage equal to their marginal product. The manager and investor are indifferent about control. Neither the manager nor investor will pay for complex vertically integrated financing contracts like long-term debt or equity. Less expensive non-integrated solutions similar to short-term debt financing will be observed. Like spot markets, short-term debt does not require costly relationships. Spot markets lower transaction costs because they specialize in standardized contracts that require no relationship between the supplier and the customer.

# The Conventional Treatment of Financial Slack and the Strategic Allocation of Control within the Firm

Ross, Westerfield and Jaffe (1993), Brealey and Myers (1991) and Jensen (1986) recognize that debt financing reduces the discretion of managers either through increased financial distress or the loss of financial slack. For example, Ross, Westerfield and Jaffe (1993, p. 475-479) list taxes, risk, asset type, and financial slack as real world influences of a firm's capital structure. Brealey and Myers (1991) list taxes, financial distress costs, pecking order, and financial slack. According to Brealey and Myers (1991, pp. 447-448), financial slack is important because "in the long run, a company's value rests more on its capital investment and operating decisions than on financing. Therefore, you want to make sure your firm has sufficient financial slack, so that financing is quickly accessible when good investment opportunities arise. Financial slack is most valuable to firms that have ample positive-NPV growth opportunities. That is another reason why growth companies usually aspire to conservative capital structures." Also, Jensen (1986, p. 324) concludes that "debt reduces the agency costs of free cash flow by reducing the cash flow available for spending at the discretion of managers. These control effects of debt are a potential determinant of capital structure."

As mentioned above by Ross, Westerfield and Jaffe (1993), another factor thought to influence capital structure is the asset type. More specifically, Williamson (1988) suggests that the existence of relationship-specific assets impacts the choice between debt contracts and equity. Relationship-specific assets are assets that have value when used in a specific relationship. For example, bankers must decide whether to develop expertise about a specific firm. This expertise is valuable if a long-term relationship develops between the firm and the bank. However, if the banking relationship fails, the value of this expertise about a specific firm is reduced. When relationship-specific assets are redeployed, owners of relationship-specific assets incur a transaction cost or loss.

A transaction that includes substantial relationship-specific assets ties two contracting parties together in a bilateral monopoly relationship. Before the relationship-specific assets are sunk, each side can deal with many traders in a competitive market. Once the relationship-specific investments are sunk, one or both sides have assets at risk that become worthless if the bilateral relationship fails. Relationship-specific assets discourage or prohibit frequent recontracting. Neither can walk away without incurring losses. Williamson calls this the "fundamental transformation" of contracting. What is initially a market-based contracting problem becomes a bilateral monopoly problem after relationship-specific investments are sunk. If assets are not relationship-specific, capital market-based contracting modes (e.g., auctions) will be more efficient. However, if relationship-specific assets are significant, governance-based contracting modes (e.g., internal organizations) will be efficient.

Using slightly different language, Brealey and Myers (1991) and Masulis (1988) also recognize that relationship-specific assets influence financial contracting choices such as the debt/equity decision. These authors suggest that relationship-specific assets increase the cost of financial distress, which influences the debt/equity decision.

"The costs of distress are likely to be greater for firms whose value depends on growth opportunities or intangible assets. These firms are more likely to forgo profitable investment opportunities and, if default occurs, their assets may erode rapidly. Hence firms whose assets are weighted toward intangible assets should borrow significantly less, on average, than firms holding assets you can kick" (Brealey and Myers, 1991, p. 448).

"The size of particular debt instruments outstanding and the characteristics of the debt contract appear to be related to the firm's level of tangible assets, the extent of specialization of these assets. . . . In short, the theory and evidence on optimal capital structures seems to be uncovering significant interdependencies between firm investment and financing decisions. . . . Many questions remain unanswered. . . . How do various features of a firm's securities and other contracts affect managerial incentives and firm operating efficiency?" (Masulis, 1988, p. 90).

#### **Conclusions**

Vertical integration is a mechanism suggested by Coase and Williamson to allocate control within the firm. If one investigates the consequences of investments in relationship-specific assets, and views debt and equity within a vertical integration framework, a control rationale for debt and equity emerges. Relationship-specific investments create hazards for managers and investors when they contract with each other. Since debt and equity contracts outline the boundaries of control between managers and investors, debt and equity contracts can be used to reallocate control. This reallocation of control mitigates some of the problems caused by relationship-specific assets.

Using this control framework, two results emerge. First, the manager or investor making the largest investments in relationship-specific investments has the largest incentive to acquire control. Equity for the manager and long-term debt for the investor are avenues to acquire this control. Secondly, if technology dictates that no relationship-specific investments are needed in the production process, the manager and investor will be indifferent to acquiring control. In this case, short-term debt will be the least-costly financing choice, and thus the most appropriate source to use.

Because of reduced financial slack or debt capacity, textbooks frequently recognize that debt financing reduces the discretion of managers. This strategic decision of how to allocate control within the firm has potentially serious consequences. The loss of control by managers (or investors) can lead to sub-optimal investment decisions.

Our findings have practical implications that can be summarized as follows:

- Under debt financing, investors (debt holders) possess a larger set of control rights than under equity financing. Consequently, the manager's decision rights are limited which may cause inefficient investment decisions within the firm.
- Debt financing allows debt holders to dictate that cash flows are used to pay bond coupons instead of reinvested in new projects.
- Equity investors, unlike debt holders, agree to give managers more latitude about spending present and future cash flows.
- In exchange for giving up control, equity holders expect and demand to receive higher rates of return than debt holders because of the higher risk they are facing.
- Managers want control in order to protect their relationship-specific human assets. The more specialized they become, the less marketable they will be and the higher degree of control they will demand.
- As a manager's talents become specific to a single firm, the manager will prefer the use of equity.
- If technology dictates that no relationship-specific investments are needed in the production process, managers and investors will be indifferent to acquiring control because there is no risk of confiscation.

#### **Endnotes**

<sup>1</sup>These conditions include: certainty, competitive markets, costless transactions, and no taxes. See Martin, Cox, and MacMinn (1988, p. 67-85) for a formal proof and discussion of this irrelevance theroem.

<sup>2</sup>Control is the set of rights to purchase, direct, and sell assets within the firm. The set of control rights is divided among the participants in the firm, specifically managers and investors. Corporate governance suggests that control rights are allocated differently between managers and investors across firms. Vertical integration includes backward and forward vertical integration.

<sup>3</sup>It is certainly debatable whether a debt holder or equity holder has a larger set of control rights. It is difficult to compare whether the debt holder's power to concretely stipulate future cash flows with interest and principal repayment schedules is greater than the equity holder's power to hire and fire managers. In addition, a large equity block holder can have significant control rights over a wide range of managerial actions.

<sup>4</sup>Legally and operationally, control often defines ownership. For equity financed firms, one could say that managers "own" the firm because managers control important future investment decisions. Likewise, for heavily debt-financed firms, the debt holders could be said to "own" the firm since they implicitly control how future cash flows will be spent. Although this definition of ownership sounds unconventional, it is generally consistent with standard usage. Tax rulings, for example, have traditionally held that ownership is essentially a question of control. Despite the existence of a long-term lease, the Internal Revenue Service considers a building to be "owned" by the tenant whenever the tenant exercises control over a much larger set of decisions than the titleholder, who has given up effective control in exchange for a cash payment.

<sup>5</sup>For labor suppliers, this is true to varying degrees. It has been pointed out to me that some faculty members are paid for *past* efforts and therefore these faculty members cannot repossess their efforts.

<sup>6</sup>This same idea is expressed by Shleifer and Vishny (1989) in their management entrenchment hypothesis.

<sup>7</sup>Other suppliers also extract protection mechanisms such as a seat for labor on the board of directors, mandatory arbitration of disputes, or specialized contract covenants. For example, coal suppliers for steel mills require steel company managers to sign complicated and detailed long-term contracts when they have relationship-specific assets at stake (Joskow, 1987 and 1985). If relationship-specific assets are at risk, other suppliers will attempt to align incentives to protect themselves from specific risks. For a discussion of how conflicts of interest can be mitigated by contractual innovations within the corporation, see Jensen and Meckling (1976).

<sup>8</sup>The control problem is also a problem for an investor, who must also determine whether to acquire control of the firm.

<sup>9</sup>Conventional financial thought has long recognized the importance of eliminating poor investment decisions. For example, Myers (1977) emphasizes the importance of future investment decisions to firm value, and the costly effects of managerial underinvestment caused by debt financing. Myers also stresses the importance of relationship-specific investments and suggests that a large portion of firm value arises from intangible assets and the future investment opportunities made possible by these intangible assets. Myers, however, described a different cause for underinvestment. He suggested that since debt financing allows much of the potential benefit from these projects to accrue

to bondholders, managers of debt-financed firms will underinvest relative to equity-financed firms.

10 Other works in this area include Joskow (1987, 1985), Brickley and Dark (1987), Monteverde and Teece (1982), and Klein, Crawford and Alchian (1978).

<sup>11</sup>With bilateral monopoly, there are quasi-rents that must be divided through a bargaining process. When quasi-rents exist, the potential for opportunism is greater since competition and market discipline is removed. These quasi-rents are generated by the relationship-specific assets.

<sup>12</sup>In Joskow's (1985, p. 105) words, "anonymous spot markets fail because the sinking of relationship-specific investments transforms a large-numbers bargaining situation ex ante into a small-numbers bargaining situation ex post in which one or both parties have an opportunity to extract a portion of the quasi-rent stream associated with specific investments. To induce the parties to make optimal investments ex ante, some method must be found to constrain the ex-post hold-up and haggling problems that would emerge if the parties relied on repeated bargaining over the terms of trade ex post. In principle this can be accomplished if the parties can costlessly contract on the specific investments that they agree to make, the quantities they agree to deliver, and the prices that they agree to pay when various contingencies arise as the contractual relationship plays out over time. They are likely to be able to do so only imperfectly, however. Furthermore, long-term contracts themselves may introduce costs and performance problems of their own. Internal organizations or vertical integration is viewed as a method for overcoming some of the problems associated with long-term contracts, although vertical integration may intorduce costs of its own as well. The ultimate choice of governance structure requires balancing the costs and benefits of these alternative governance systems."

#### References

Brealey, Richard A. and Stewart C. Myers. <u>Principles of Corporate Finance.</u> Fourth Edition. New York: McGraw-Hill, 1991.

Brickley, James and Federick H. Dark. "The Choice of Organizational Form: The Case of Franchising." <u>Journal of Financial Economics</u> 18 (1987): 401-420.

Coase, Ronald H. "The Nature of the Firm." Economica 4 (November 1937): 386-405.

Fama, Eugene and Michael C. Jensen. "Separation of Ownership and Control." Journal of Law and Economics 26 (June 1983): 301-26.

Grossman, Sanford J. and Oliver D. Hart. "The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration." <u>Journal of Political Economy</u> 4 (1986): 691-719.

Jensen, Michael C. "Agency Costs of Free Cash Flow, Corporate Finance and Takeovers." American Economic Review (May 1986): 323-329.

Jensen, Michael C. and William H. Meckling. "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure." <u>Journal of Financial Economics</u> 4 (1976): 305-360.

Joskow, Paul L. "Contract Duration and Relationship-specific Investments: Empirical Evidence from Coal Markets." <u>American Economic Review</u> 77 (March 1987): 168-185.

Joskow, Paul L. "Vertical Integration and Long-term Contracts: The Case of Coal Burning Electric Generating Plants." <u>Journal of Law, Economics and Organization</u> 1 (Fall 1985): 33-80.

Klein, Benjamin, R. A. Crawford, and A. A. Alchian. "Vertical Integration, Appropriable Rents, and the Competitive Contracting Process." <u>Journal of Law and Economics</u> 21 (October 1978): 297-326.

Martin, John D., Samuel H. Cox Jr., and Richard D. MacMinn. The Theory of Finance Evidence and Applications. New York: Dryden Press, 1988.

Masulis, Ronald W. The Debt/Equity Choice. New York: Ballinger, 1988.

Monteverde, Kirk and David Teece. "Supplier Switching Costs and Vertical Integration in the Automobile Industry." <u>Bell Journal of Economics</u> 13 (Spring 1982): 206-13.

Myers, Stewart C. "Determinants of Corporate Financing." <u>Journal of Financial Economics</u> (November 1977): 147-176.

Ross, Stephen A., Randolph W. Westerfield, and Jeffrey F. Jaffe. <u>Corporate Finance</u>. Third Edition. Homewood. IL.: Irwin, 1993.

Shleifer, Andrei and Robert W. Vishny. "Management Entrenchment: The Case of Manager-specific Investments." <u>Journal of Financial Economics</u> 25 (November 1989): 123-139.

Titman, Sheridan and Roberto Wessels. "The Determinants of Capital Structure Choice." The Journal of Finance 43 (March 1988): 1-19.

Williamson, Oliver E. "Corporate Finance and Corporate Governance." <u>Journal of Finance</u> 3 (July 1988): 567-591.

Williamson, Oliver. The Economic Institutions of Capitalism. New York: Free Press, 1985.