Employment Versus Subcontracting: The Real Tradeoffs

By many accounts, subcontracting is in vogue, whereas traditional employment relationships are in decline. Ten years ago, freelancers, independent subcontractors, and the like accounted for about 10% of the labor force; today, they constitute 25%. Of the 23 million net new jobs generated in the United States since 1974, 60% have been for freelancers and subcontractors. The phenomenon appears especially strong in the large publicly traded firms—although revenue growth in *Fortune* 500 companies has kept up with the GNP, these companies have added virtually no new jobs since the early 1970s, increasingly becoming what *Business Week* calls "hollow corporations."

The growth of subcontracting, we will argue in this article, cannot be easily reconciled with traditional "control" theories of employment, which have other weaknesses as well. We will, therefore, sketch an alternative—and broader—theory that is more consistent with recent experience. In our theory, the employment relationship will be seen as a mechanism to encourage investment in firm-specific assets rather than to ensure control over employee behavior. And, we will take into account managerial preferences in choosing between employment and subcontracting.

Traditional Control Hypotheses

According to existing theory, firms enter into employment relationships because of their need for control in the face of uncertainty. Simon (1976) claims, for example, that employment relations arise because of the combination of "uncertainty as to which future behaviors would be advantageous to the employer, and a greater indifference of the employee as compared with the

employer (within the former's area of acceptance) as to which of these behaviors he carried out. When the secretary is hired, the employer does not know what letters he will want her to type, and the secretary has no great preference for typing one letter than another. The employment contract permits the choice to be postponed until the uncertainty is resolved, with little cost to the employee and great advantage to the employer."

Simon's view is limited in that it explains what is transacted (secretarial input hours instead of letters), but not how it is transacted (e.g., why firms hire permanent rather than temporary secretaries).

Williamson (1985) extends Simon's hypothesis to argue that a firm's control over its employees is greater than over its subcontractors. This claim evokes instant sympathy from anyone who has dealt with plumbers and building contractors, but it is undermined by many counterexamples. For example, we observe that in-house legal counsel, strategic planners, et al. are often less accommodative of frequent assignment redefinition and less willing to work on weekends or cancel vacations than are "outside" lawyers and management consultants.

Williamson apparently ignores the reputational compulsions that autonomous vendors such as management consultants, investment bankers, and lawyers confront when responding to their clients' needs; in-house staff, who have attained a quasi-monopolistic position, do not necessarily face the same reputational pressures. "The customer is always right" can be as strong an injunction as "obey thy boss"—greater control does not necessarily result from the employment relationship.[1]

Control theories of employment also fail to explain the massive substitution of in-firm employment by subcontracting and the use of temporary labor that has taken place since 1982. It appears unlikely that employment has declined because firms now have less need for control

1. Greater control over physical assets (e.g., an oil well), however, may be achieved through internalization (i.e., vertical integration) because it is easier to exercise property rights over physical rather than intellectual capital.

over the uncertain behavior of their work force, when, as **Table 1** shows, macroeconomic volatility has increased as has, reputedly, technological uncertainty (although hard data are difficult to acquire).

An Alternative View: Financing Firm-Specific Capital

The traditional theories, we believe, are flawed because they focus on the wrong problem that employment is supposed to solve. Continuity, not control, is the key benefit of employment. Continuity can lead to the creation of valuable firm-specific human assets, and, we will show, it is often better fostered by employment relationships than by subcontracting.

Most ongoing relationships that involve the supply of labor lead, to a greater or lesser extent, to the creation of what Williamson (1985) would call firm-specific human capital—skills that are "imperfectly transferable across employers." For example, by working continuously for one firm, an engineer gains knowledge (e.g., of her firm's informal communication channels, projects, and customers) that is valuable to her firm, but not to other employers.

Each firm must, in one way or another, pay for its own firm-specific skills because by definition, they are of value to no other firm.[2] Making a full, advance cash payment is risky; unlike inanimate capital, human capital cannot be alienated, and it is difficult for a firm to ensure that an employee paid to develop skills today will wholeheartedly utilize those skills to benefit the firm in the future.

Instead, firms can more prudently make a number of implicit commitments to reward employees as they provide their skills in future periods. Rewards can include favored promotion opportunities and job and income security.[3] Thus, the firm can finance its unique human capital

2. In contrast, "portable" skills will be paid for (not including paid lunches) by the employee to whom they "belong."
3. Some of these promises, though valuable to employees, cost the firm nothing; thus, it acquires assets without fully offsetting liabilities, thereby increasing shareholder wealth.

not with its shareholders' equity or external borrowing, but by the liabilities it incurs vis-à-vis its employees.

This arrangement aligns firm/employee incentives and ensures that commitments are not one-sided. Employees are promised a share of the gains and some protection during difficult periods, provided they stay with the firm and do not opportunistically exploit the unique skills they possess. The need to finance firm-specific skills changes a hierarchical, master-servant relationship into a partnership, or co-investment.[4]

Securing the Promises

The firm's promises are secured primarily by its reputation. Legal enforcement of contracts involving human skills is extremely difficult; it may be apparent whether or not certain commitments were kept, but impossible to prove a breach in a court of law. Performance, in Krep's (19--) terms, may be "observable," but not "verifiable."

However, a firm has strong economic reasons to build and maintain a reputation for keeping its promises. Opportunistic behavior vis-à-vis a single employee may have great multiplicative effects. The firm that reneges on a no-layoff policy just once not only hurts its ability to attract new employees, but it also deters existing employees from continuing to invest in firm-specific knowledge and, perhaps, encourages them to start contacting headhunters![5]

Indeed, a reputation for keeping promises is a valuable intangible asset, which (like a brand name) can act as a barrier to entry. Consider, for example, an industry such as mainframe computers in which the employers need employees with firm-specific knowledge (e.g., salespeople who understand the firm's product line). A new entrant will face difficulties in persuading

4. And, as in many ongoing partnerships, the accounts may not be fully settled in every period. For example, although the firm may not make a full payment for specific skills, if may initially provide employees with an "advance." Conversely, employees may defer returns on their "investment" in individual periods.

5. Symmetrically, the unreliable employee, whose resumé bears evidence of excessive job hopping, is looked upon with disfavor by potential employees and may have to accept poorer paid or dead-end employment.

employees to make the investment in firm-specific knowledge because it cannot make promises of future payoffs that are as credible as the incumbent's. It may be forced to give away considerable equity, thus making entry unattractive to a venture capitalist.

Advantage of Employment over Subcontracting

But what is so special about employment? Why cannot a firm make promises to subcontractors as easily as to employees? The difference, we will see below, lies in the social characteristics of firms that make commitments to employees more credible than those to subcontractors.

Employees belong to a close-knit social group that communicates information quickly. Terminating—or altering the terms of—a relationship with an employee has adverse reputational consequences throughout the firm, whereas disappointing a subcontractor, who can give the firm a bad name only among his acquaintances, may not matter as much. Consequently, to compensate for the added risk of employer opportunism, outside suppliers of services to a firm may demand more of the payment for specific assets to be made in advance and in cash, unlike employees, who may be paid partly in guarantees and advancement opportunities, some of which may be free to the firm.[6] Therefore, at least in the short term, subcontracting may be a more expensive proposition.

The greater commitment implicit in the employment relationship has been reinforced and institutionalized by custom. Just as getting married is a stronger public statement than "going out together," entering into an employment relationship has come to signify a stronger public

6. This system, incidentally, makes the relationship more master-servant and less a partnership. And because more of the payment for specific assets is made in advance, the need for the subcontractor to have a reputation for delivering in future periods becomes greater. This need may explain why suppliers who seek to build relationships may be more anxious to please than employees.

commitment to maintaining continuity than hiring a subcontractor. Commitment, too, has reduced the current cash costs of employment, for equivalent levels of asset specificity.[a]

Disadvantages of Employment over Subcontracting

The main disadvantage[7] of the employment relationship (like its primary advantage) is due to the close social interaction of employees. The interaction creates expectations of internal equity which hinder the development of optimal employment relationships in jobs involving very low—or very high—levels of firm-specific skills.

Promises about future payoffs made to a particular employee should optimally reflect the value of the firm-specific assets that the employee is required to possess. Strong commitments about future payoffs have to be made if substantial investment in firm-specific skills has to be financed. If, however, specific assets are not required, no long-term commitments need be made; the accounts between firm and employee can be settled at the end of each time period or discrete transaction. And indeed, making long-term promises when none are called for is not in the firm's best interests.

To a certain extent, firms do discriminate between employees with different firm-specific skills. For example, foreign exchange traders will often work under different implicit employment contracts than account officers or managers in the same bank. Traders, whose skills are highly portable, will usually be paid for current performance and will receive relatively few commitments about continuity or income security. But, managers and account officers (who may or may not receive lower current compensation than traders), will be promised future promotions and job and income security to encourage them to develop the firm-specific skills they need.

7. Assuming that the firm does have a choice, we exclude from the discussion below cases in which employment is simply infeasible, for example, when the firm has violated past promises and *cannot* recruit employees, or when there are supplier indivisibilities, and no single firm can fully utilize the agent who possesses certain skills.

Social factors do, however, impose limitations on the extent to which firms can treat employees differently. Employees tend to compare themselves more with the colleagues they interact with in the firm rather than with the labor market outside, even though, from a technical point of view, the latter comparison might be more appropriate. Employers, therefore, cannot easily limit promises (e.g., of lifetime employment) only to those employees whose jobs involve a high level of firm-specific knowledge, without disrupting the firm's social fabric.[b] Thus, firms may end up "overpaying" (making unnecessary long-term promises) for jobs that involve low skill specificity.

With subcontracting relationships, in which the interaction between different vendors is limited, the firm can more easily avoid making unnecessary promises. Consequently, we should expect to see a firm using subcontractors for those services involving low-skill specificity, compared with the average of other services the firm requires.[8]

Firms may also favor subcontracting when they need specific assets, but are unwilling to incur the greater long-term liability implicit in an employment relationship. Firms may thus be prepared to pay a subcontractor a premium (as described in the previous section) for the right to leave the relationship and the specific asset developed, with a lower reputational penalty.[9]

Environmental Influences

Two factors we saw above influence the choice between employment and subcontracting: the value of the firm-specific skills to be secured and the long-term commitment a firm is willing to make to secure firm-specific skills. If the value of firm-specific assets is low or the firm is

8. In theory, this advantage of subcontracting should also apply when very high levels of asset specificity are involved. In practice, however, only a few jobs involve exceptionally high specificity; because special–and confidential–deals can be made for a smaller number of such employees, the limited range of employment relations is not a major problem demanding a subcontracting solution.

9. A third–and relatively minor–reason for subcontracting is that it may be the only way to secure the services of some individuals who are unwilling to accept the social and other norms of the firm. "Fast-track" MBAs, for example, will not accept jobs with what they perceive to be bureaucratic industrial companies, but will quite enthusiastically serve such organizations as outside consultants.

unwilling to make long-term commitments—and is prepared to pay a short-term premium instead—then subcontracting will be favored. Otherwise, the firm will enter into employment contracts.

The desirability and feasibility of securing firm-specific skills and a firm's willingness to make long-term commitments are influenced in turn by the environmental conditions such as uncertainty of technology and demand, the ability to communicate reputations, track records of other employers and employees, and social reinforcement skills.

Instead, under uncertainty, firms will try to use "portable" or general-purpose instead of specific skills. Therefore, uncertainty will favor greater subcontracting. Even when a firm cannot "design out" specific skills, uncertainty may lead it to pay a premium to an outside contractor in exchange for a weaker commitment to continue the relationship, as, for example, IBM apparently did[10] when it entered the PC market. If, however, uncertainty is low and contingent downside commitments to employees are not perceived to pose a high risk, a firm may choose to avoid paying a premium to an outside contractor and instead form employment relationships.

Williamson, who ignores reputational effects and asserts that employees respond better to changing situations than do subcontractors, reaches the opposite conclusion.

The Ability to Communicate Reputations Investments in firm-specific skills are based on trust and become unattractive if the trustworthiness of individuals and firms cannot be easily verified. Restrictions on the interchange of information (e.g., by laws that make it difficult to get candid and honest references or commitments of high geographic mobility) will force firms to turn to portable skills and therefore to subcontracting.

Track Records of Other Employers and Employees If many employers or employees have reneged on commitments (e.g., if many firms have violated no-layoff policies or workers have

10. IBM also adopted "open-system architecture," which transferred the risk and reward of providing product enhancements to outside vendors. IBM had an even lower implicit commitment to such vendors than it did to its "direct" suppliers.

used their firm-specific skills to extract ex-post rents, an atmosphere of distrust will be created which will hinder investments in firm-specific skills and therefore encourage subcontracting.[11]

Social Reinforcement Investments in firm-specific skills—and therefore in employment relationships—are facilitated if social sanctions against "defectors" are strong.[c]

We can now relate the growth of subcontracting to several environmental changes that we suspect have taken place in the last decade. The most important (and, relatively speaking, the best documented) is greater uncertainty, but other factors may also have played a part: Potential employers and employees believe that they have been taken advantage of in the past and do not trust each other as much; social reinforcement of employment relations has declined; and, legal barriers and high mobility have made it more difficult to communicate reputations.

To complete our story, we turn next to changes in managerial attitudes toward subcontracting.

Managerial Influences

Thus far we have implicitly assumed decisions made by a firm with a view toward maximizing returns for its shareholders. In fact, a firm does not negotiate the terms of its relationships; its managers are responsible for choosing between subcontracting and employment. And, as we shall see below, managers may favor the option that is contrary to shareholder interests.

Generally speaking, managers of firms protected by high barriers to entry favor employee rather than subcontractor relationships. Managers' incentives to hire more subordinates are similar to their incentives "to cause their firms to grow beyond the optimal size" (Jensen 19__). More subordinates apparently satisfy psychological needs, increase a manager's social status within the firm, and, sometimes, when compensation is linked to a position's responsibility, as measured

11. Hence, the behavior of individual employers and employees may create positive or negative externalities.

by the number of the reporting employees, provide tangible economic rewards.[12] But by hiring employees when subcontractors could be used (e.g., for jobs that require no firm-specific skills), managers may destroy shareholder wealth by creating intangible liabilities that are not offset by equivalent intangible assets.

However, managers may favor market relationships excessively if they have reason to believe that the greater fixed costs implicit in employment relationships might jeopardize their firm's solvency or "financial self-sufficiency" (the need to go to the capital markets).[13] Some shareholders can diversify away the risks of bankruptcy and have no interest in self-sufficiency, whereas managers cannot and do (Donaldson 19__). Consequently, a managerial bias toward subcontracting, motivated by the desire to avoid fixed costs, is not necessarily in keeping with shareholder interest; it is in fact equivalent to wasting investment opportunities.

The extent to which managers will unduly favor one or the other relationship to the detriment of shareholders is influenced by the balance of power between top managers and shareholders. This balance depends upon factors such as what Donaldson calls the firm's financial self-sufficiency, the concentration of the equityholders, and the attractiveness of their investment alternatives.

In summary, we can predict that when managers are optimistic that their firm's barriers to entry and financial self-sufficiency are secure, they will favor employment relationships, whereas if they are pessimistic, they will favor the market alternatives. The implementation of both biases will be tempered by the balance of power between shareholders and managers; when shareholders have more power over the senior managers of a firm, managerial biases will be held

12. Besides, the benefits and risks of using employment relations are asymmetrical, especially for a middle-level manager. Consider the point of view of a manager who works for a firm with no-layoff policies and is responsible for implementing the firm's entry into a new business. If the manager hires new employees instead of using subcontractors, he gains the psychological and material benefits of empire building. If the new business thereafter sours, it is the manager's bosses and, ultimately, the shareholders who must bear the costs of honoring promises to the employees hired, rather than the manager who hired them.

13. Just as they may forgo the use of debt.

in check, and when shareholders have no influence over management, the firm may enter into more employment—or subcontracting—relationships than is economically optimal.

This gives us two additional managerial hypotheses to explain the growth of subcontracting which are especially apropos of large publicly owned firms:

1. With lower economic growth and increased foreign competition, managers' concerns have turned from empire building to survival and independence. Correspondingly, managerial preferences may have changed from an excessive use of employment relations to an excessive use of subcontracting.

2. Increased shareholder power[d] and the threat of takeovers may be compelling managers to bring the distribution of market and employment relationships into greater congruence with the shareholder interest. Subcontracting may be substituting for employment in jobs that do not involve firm-specific investments. In the process, the firm's implicit liabilities are brought into line with its intangible assets, eliminating the liabilities that were incurred for purely managerial reasons.

Conclusions

Although we have focused on the relatively narrow question of employment versus subcontracting, the ideas may easily be applied to extend the implicit "theory of the firm" developed by Grossman and Hart (19__).

Grossman and Hart argue that the difficulties in establishing contracts between buyers and sellers of goods whose production requires relation-specific assets can be reduced by concentrating the ownership between the upstream seller and downstream buyer. And the firm is a means of realizing these efficiencies of concentrated ownership.

The Grossman/Hart argument rests on the right of the owners of the specific asset to use it as they please, and this construction obviously fails when the specific asset is a skill that cannot be owned by a firm. Our theory suggests that when human skills are involved, instead of concentrated ownership, we need a partnership[14] between the firm that needs skills and the

14. A partnership is proclaimed by entering into an employment relation.

person who effectively controls them; instead of legal enforcement of property rights, we have reputational incentives.

And the firm becomes a means for efficiently securing reputations through pooling; it can procure services that require specific skills more easily than an individual because it is recognized as having many such relationships "at risk." The same logic applies also on the marketing side. Customers may prefer to develop ongoing relationships with a firm rather than an individual, even when there are no production economies of scale because they know that the firm with many customers will suffer substantial penalties if it is seen to exploit any single relationship. Logic obviously does not rebut the Grossman/Hart argument; rather, it complements it, because the problem of specific assets exists both for tangible physical assets, which can be legally controlled, as well as intangibles, which cannot.

References

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Notes

[a]Some professions—such as law and accounting—can, however, reduce the advantages of employment. These professionals (like individual firms) form a close-knit social group through which opportunism by or against the members is quickly communicated. Custom and professional codes have also made forming a professional relationship to be as serious a commitment as entering into an employment contract.

[b]In order to maintain this discrimination without high cost, the demarcation between the classes of employees must be clear, relatively unambiguous, and socially acceptable. The distinction between "union" and "nonunion" historically provided this distinction in industrial firms. Many firms are finding that terms such as clerical, supervisory, middle management, and top management do not provide operative discrimination. Combined with the increased legal pressures relating to fulfillment of implicit employment contracts and the economic obsolescence of many supposedly versatile managers, there are many problems of implementing the traditional mechanisms for differentiating between those who are employees hired for transactional convenience and those who are subject to promissory relationships.

[c]Foreign firms, for example, have found it difficult to break into the Japanese financial market because they cannot hire away experienced bond traders from local firms. There is little indication that Japanese traders are less mercenary than their counterparts in Europe or the United States; rather, the social pressures against quitting a reliable job, as the following incident suggests, can be overwhelming: After protracted negotiation, a foreign investment bank convinced a trader in Tokyo to switch jobs. The Japanese employer was greatly upset but could not persuade the trader to reconsider his decision. The trader's father was then contacted; this indirect approach proved rather more effective.

[d]The balance of power has shifted considerably toward shareholders and away from managers because: 1) The financial self-sufficiency enjoyed by firms has declined because of depressed demand and increased foreign competition. 2) Shareholder concentration has increased due to institutionalization of stock ownership. 3) Investors enjoy attractive substitute investments in the government bond market.