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Hostile takeovers and the market for corporate control

Countertrade—counterproductive?

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Hostile takeovers and the market for corporate control

Do hostile takeovers create new wealth? Or, do they simply move wealth from Column A to Column B, enriching some at the expense of others? The evidence is mixed

Diana L. Fortier

"In recent years, the tender offer takeover has been praised and damned with a ferocity suggesting that the survival of capitalism is at stake. The truth, as in most disputes with substantial metaphysical content, is more prosaic." F. M. Scherer, *Journal of Economic Perspectives*, Winter 1988, pg. 69.

The market for corporate control—firms competing for the rights to manage their corporate resources—has become an increasingly important element of the corporate landscape. Mergers and acquisitions have increased every year since 1982, reaching an all time high of 3,336 net announced transactions in 1986. (See Table 1.)

Although contested tender offers— hostile takeovers—only account for a small fraction of all merger and acquisition activity, they involve large publicly traded companies with substantial market values across many industries. The $12.8 billion aggregate dollar value of 15 successful hostile takeovers in 1987 accounted for 7.7 percent of the total dollar value of the 972 mergers and acquisitions for which such data were disclosed. Moreover, the number of unfriendly takeovers was higher in each of the past three years than in any of the previous eleven years.[1]

Hostile takeover activity has a substantial impact on corporate behavior. Indeed, organizations involved incur substantial costs and devote much time to developing defensive or offensive strategies. Such battles may also impose large costs on shareholders, creditors, management, employees, customers, and communities. These private and social costs of takeovers have recently spurred significant legislative interest in hostile takeovers and defensive tactics.[2]

This paper discusses the corporate control market by focusing on hostile takeovers as a mechanism for corporate control. It discusses the causes of hostile takeovers and the methods of defensive action by hostile takeover targets. It then analyzes their effects not only on the bidder and target shareholders but also on other stakeholders (e.g., management and employees). A final section reviews the evidence on the sources of takeover gains. Are such gains redistributions of wealth to one group at the expense of another or are they derived from improved efficiency? Finally, what does this evidence imply about the effect of hostile takeovers on social welfare?

Hostile takeovers: Why do they occur?

Hostile takeovers, those opposed by the target's board of directors, became an "accepted" part of the corporate control market in 1974 with Morgan Stanley and Company's representation of International Nickel Company of Canada in its hostile takeover of ESB, Inc. In a hostile takeover, a bid is made directly to the shareholders of the target rather than to the target's management. The acquirer obtains the needed

TABLE 1

Merger and acquisition statistics[1]

Year	Total mergers & acquisitions	Total tender offers		Contested tender offers: Total contested		Contested tender offers: Successful offers[2]		Contested tender offers: Target remained independent		Contested tender offers: Acquired by white knight	
		#	% of col. 2	#	% of col. 3	#	% of col. 4	#	% of col. 4	#	% of col. 4
1978	2,106	90	4.3%	27	30%	13	48%	8	30%	6	22%
1979	2,128	106	5.0%	26	25%	8	31%	9	35%	9	34%
1980	1,889	53	2.8%	12	23%	3	25%	3	25%	6	50%
1981	2,395	75	3.1%	28	37%	13	46%	6	21%	9	33%
1982	2,346	68	2.9%	29	43%	17	59%	10	34%	2	7%
1983	2,533	37	1.4%	11	30%	7	64%	1	9%	3	27%
1984	2,543	79	3.1%	18	23%	10	56%	6	33%	2	11%
1985	3,001	84	2.8%	32	38%	14	44%	9	28%	9	28%
1986	3,336	150	4.5%	40	27%	15	38%	10	25%	15	37%
1987	2,032	116	5.7%	31	27%	18	58%	6	19%	7	23%
Ten year total	24,309	858	3.5%	254	30%	118	46%	68	27%	68	27%

[1]Data refer to net announcements (completed or pending transactions) or publicly announced formal transfers of ownership of at least ten percent of a company's assets or equity where the purchase price is greater than or equal to $500,000 and one of the parties is a U.S. company. Tender offer data refer to tender offers for publicly traded companies. Successful offers refer to both fully and partially successful deals.

[2]Offers still pending as of year-end are also included in these totals.

SOURCE: W.T. Grimm, *Mergerstat Review,* selected years.

votes, gains control, and replaces existing management. But what factors need be present in the target and the bidder firms for hostile takeovers to occur?

Conflicts of interest between the target firm's management and shareholders lie at the root of the hostile takeover phenomenon. These conflicts result from the separation of ownership (shareholders) from control (management). Conflicts arise from management's desire to use the firm's resources to achieve outcomes that do not coincide with shareholders' interest, which is maximizing the net present value of the firm's future profits.

Economists term the lost profits arising from the separation of ownership and control, agency costs. Internal controls are generally sufficient to hold down these agency costs. But when agency costs become too high and internal controls, particularly the board of directors, have failed to protect the interests of shareholders from inefficient performance and non value-maximizing behavior of management, the firm is likely to become the target of a hostile takeover bid.[3]

Several factors can influence the level of agency costs. Often factors such as deregulation and increased competition create a need for valuation and restructuring of corporate assets in an effort to continue to maximize shareholder value. But sometimes current management fails to undertake the necessary steps to do so. New management without prior ties to employees or the community may be more objective and better able to adapt the firm's productive assets to its changing environment. Hostile takeovers are one way of effecting the necessary changes.[4]

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Firms that are undervalued by the market, that is, there is a mismatch between realizable asset value and stock price, for whatever reason, are prime takeover targets. It is often argued that firms with managements that concentrate on long-term investments (e.g., research and development) at the expense of short-term earnings are susceptible takeover targets. The premise to this explanation of hostile takeovers is that markets are short-sighted and poor current profits lead to stock undervaluations which create favorable takeover conditions. Agency costs arise here as the market puts more emphasis on current cash flows and management places greater weight on future cash flows. However, evidence does not support this "myopic market" hypothesis.[5]

Significant amounts of free cash flow also contribute to agency costs. Free cash flow is that cash flow in excess of the amount required to fund all projects that have a positive net present value when discounted at the relevant cost of capital. With high levels of free cash flow, managers may seek to secure their own position by making inefficient low-return investments rather than paying out the free cash flow to shareholders in the form of dividends.[6] Yet, it may be difficult to distinguish this behavior from prudent investing that turns out to be less profitable than expected.

Agency costs may also explain why some companies choose to initiate hostile takeovers. Companies with significant free cash flow and unused borrowing power may engage in unwarranted acquisition activity—paying significant premiums for targets to fulfill objectives other than value maximization. Acquisitions aimed at diversification, geographic expansion, or increased firm size may be pursued in order to further management's goals of self-entrenchment or "empire-building" rather than enrich shareholders. Thus, unwarranted acquisition activity not only explains why firms may become targets, but is also one explanation of bidder behavior in takeovers. This may also explain instances of negative returns to shareholders of acquiring firms—management benefits at the expense of shareholders.

Firms initiating hostile takeovers may also be victims of hubris. This "winner's curse" hypothesis asserts that takeovers may be motivated by the bidder's overestimation of the value of the target firm, when there may not be any true gains to be had.[7]

Defensive tactics—the target's response

Whatever the cause of the hostile takeover attempt, a target or potential target must respond. Data in Table 1 indicate that only 25 percent of all targets are successful in remaining independent. Another 25 percent are saved from the hands of the hostile bidder but are acquired under friendly terms by a "white knight." The remaining 50 percent ultimately fall prey to the hostile acquirer.

Despite the fact that few targets are successful at fending off hostile suitors, there are several defensive measures available to boards, managements, and shareholders to assist them in their efforts to maintain an independent organization or current management.

The best defense

It is often said that the best defense is a strong offense. In the case of hostile takeovers a firm's best defense is the restoration of a closer relationship between asset values and share price. Thus, increased returns to shareholders or increased price/earnings ratios may be the most effective and direct "defensive" measure for an organization. Indeed, taking actions to increase the firm's value (e.g., selling underperforming units) before someone else takes over and does so may also achieve the results of increased stock prices and possible shareholder gains.

An evaluation of the firm's business strategies, ownership composition, and capital structure is a prerequisite to achieving these goals. Internal restructurings have a dual benefit of improving shareholder value through a more efficient allocation of resources and reducing the need to rely on other more costly takeover defenses.

Employee stock ownership plans (ESOPs) and leveraged recapitalizations or leveraged cash-outs (LCOs), are among the commonly used methods of restructuring a firm's capital and equity position and subsequently building its takeover defenses.[8] Both of these methods have a positive impact on shareholder wealth through an

improved alignment of shareholder and management interests and shareholder tax benefits.

ESOPs change the equity structure toward a greater proportional ownership by employees. Also, ESOPs may improve takeover defenses because the trustees of the voting stock of the ESOP are often controlled by management. LCOs, which require shareholder approval, increase firm leverage and management's proportional ownership. Efficiency and performance should improve under incumbent management as commitments to debt repayment reduce management's discretionary use of free cash flow. Hence, the agency costs of management/shareholder conflicts decline because default on debt service would have substantial negative financial impacts on management. In addition to increasing capital market scrutiny of the firm, the increased leverage also decreases the opportunity for a bidder to borrow against the assets of the firm to finance its acquisition.

Although size alone was once thought to be an effective takeover deterrent, it has become increasingly evident that it is no longer a reliable defense. Small firms may obtain acquisition resources for larger firms by issuing claims on the value of the target firm's assets, as with any other corporate investment. The ability to do this has been facilitated by the increase in financial market liquidity, particularly with increased acceptance of, and usage of, junk bonds.[9]

Antitakeover amendments

Despite an excellent offense, protection from hostile takeovers may still be difficult without some other line of defense. There are numerous defensive mechanisms or "shark repellents" available through corporate bylaws and charter amendments. Not all of these provisions require shareholder approval. (See Box.)

Yet, as defensive tactics develop, so too do methods to render them ineffective. As a result, antitakeover amendments do not generally halt takeovers, rather they make them more difficult, more costly, more time consuming, and may also be harmful to shareholders. Basically, these defensive tactics impose conditions that must be met before control can be changed, whether by tender offer, merger, or replacement of the board. For example, shareholder rights plans dilute the equity holdings of the bidder and fair price amendments increase the cost of acquisition.

A study of hostile takeover attempts in 1985 indicates that the most often used defensive measures of targets in those cases were acquisition by a white knight, recapitalization such as a stock buy-back, and litigation.[10] As noted earlier, leverage-increasing transactions such as recapitalizations can diminish the attractiveness of the target by decreasing the ability of the acquirer to borrow against the assets of the target to finance the acquisition. LCOs also enhance takeover defenses by reducing the agency costs created when high levels of free cash flow are available. Litigation serves as a defense by increasing the costs and uncertainty of takeover and thus deterring bidders.

The ability of a firm to defend itself is also affected by its state of incorporation. The powers of firms, shareholders, and managers are controlled by state statutes that define and regulate corporations. (See Table 2.) The constitutionality of state restrictions on takeovers was supported by an April 1987 Supreme Court ruling.[11]

Also affecting the battle lines between bidders and targets are administrative and regulatory requirements. Tender offer disclosure, delay rules, and regulatory approval periods slow the acquisition process. This usually gives targets additional time to build defenses and often leads to increases in multiple and preemptive bidding and auction contests, all of which tend to decrease bidder returns by increasing target premiums.[12]

The impact of antitakeover amendments

Several researchers have studied the impact of antitakeover amendments on targets' shareholders. Those amendments adopted by management without shareholder approval are in most cases found to be detrimental to shareholders. Although amendments requiring shareholder approval should be less likely to harm share-

TABLE 2

Provisions of state corporation laws in the Seventh District

State	Effective date	Statute	Code
Illinois	1985	Fair price amendment Nonmonetary factors	Ill. Rev. Stat. Chpt. 32, 7.85 & 8.85
Indiana	1986	Control share acquisitions Business combination	Ind. Code Ann. 23-1-43-(1-24)
Iowa	None	None	None
Michigan	1984	Fair price amendment	Mich. Comp. Laws Ann. 450.1775-1784
Wisconsin	1986 1987	Fair price amendment Anti-greenmail Business combination (sunset provision effective 9/10/91)	Wis. Stat. Ann. 180.725 & 180.726

Other states with the same provisions[1]

Fair price amendment: CT, FL, GA, KY, LA, MD, MS, NC, PA, VA, and WA

Business combination: AZ, DE, KY, MN MO, NJ, NY, and WA

Control share acquisitions: AZ, FL, HI, LA, MA, MN, MO, NV, NC, OH, OK, OR, and UT

Nonmonetary factors: AZ, ME, MN, and PA

Anti-greenmail: AZ, MN, and NY

[1]The specific characteristics of these provisions may vary across different states.

SOURCE: *State Takeover Statutes and Poison Pills,* Robert H. Winter, Robert D. Rosenbaum, Mark H. Stumpf, and L. Stevenson Parker, Vol. 3 of *Shark Repellents and Golden Parachutes: A Handbook for the Practitioner.*

holders, about half of them have also been found to result in significant negative abnormal returns to target shareholders. (See Box.)

Among the most common defensive devices that require shareholder approval are fair price amendments, which have been found to have no significant effects on shareholders, and classified boards and supermajority clauses, both of which have been found to have significant negative impacts on shareholder wealth. The poison pill, which does not require shareholder approval, has proven to be an effective and popular, yet controversial, defensive measure. However, its adoption has been shown to have significant adverse effects on shareholders.[13]

Why do shareholders approve amendments that may decrease shareholder wealth? Proponents of antitakeover amendments argue that such amendments are in the shareholders' interest by giving boards the power to ensure that the shareholder receives a fair price reflecting their maximum possible share of expected acquisition gains. Management, by acting as a negotiating agent for diffuse shareholder interests, is better able to hold out for the best price by reducing individual incentives to tender at too low a price. Of course, the composition of ownership will also affect the dispersion of shareholder interests. The greater the proportion of insider (management) stockholders, the more likely antitakeover amendments will be in the shareholders' interest.

According to this shareholder interest hypothesis, antitakeover amendments are a negotiating tool rather than a takeover deterrent. This argument seems to rest on the assumption that antitakeover amendments are ineffective at ultimately deterring take-

overs. It suggests that the adoption of antitakeover amendments should have a positive impact on stock prices not because of the antitakeover amendment per se, but from the anticipation of ultimate takeover and positive returns. However, many of these antitakeover provisions have been found to decrease shareholder value, and research provides weak support for the shareholder interest hypothesis.[14]

Opponents of antitakeover amendments argue that management may abuse their veto power and act in their own interests at the expense of shareholders. They view such amendments as detrimental because they can entrench current management, reduce shareholder wealth by deterring tender offers and potentially valuable takeover bids, or reduce their share of the takeover premiums due to the acquirer's increased transactions costs as a result of the amendments. In general, they argue that such amendments have a negative impact on the efficient allocation of real capital in the economy. A fall in equity values resulting from adoption of antitakeover amendments would support the managerial entrenchment hypothesis.[15]

One way of dealing with, though not eliminating, this shareholder/management conflict of interest is for the board to establish management compensation contracts with ownership stakes (e.g., stock options) to promote value-maximizing behavior by management.[16] Yet, boards often are not effective in controlling management behavior because the managers are able to create a board of directors loyal to management or with financial interests in maintaining existing management. Moreover, directors may lack sufficient information to determine the degree of value-maximizing behavior of management.

Ownership composition

A firm's ownership composition also influences its defensive position. The percentage of institutional holdings and insider holdings affect the ability to get shareholder approval of antitakeover provisions. The lower the percentage of institutional holdings and the higher the percentage of insider holdings, the more likely antitakeover measures, particularly those with negative wealth effects, will obtain shareholder approval.[17]

Although inside holders have financial interests to protect, they also have careers to be concerned about. Thus, inside holders may trade-off wealth accumulation for greater corporate control. Data suggest that the greater the percentage of insider holdings of the hostile target the better the target's chances of remaining independent. Institutional holders also have large economic interests to protect; however, data do not suggest that relatively large shares of institutional holdings are indicative of greater takeover vulnerability.[18]

Also of importance is the percentage of low-stake uninformed shareholders. The costs of assessing antitakeover amendments are high for uninformed shareholders and incentives are relatively low for low-stake holders. Thus, such shareholders tend to vote with management under the assumption that voting more often with management than against them is more likely, in the long run, to yield greater shareholder wealth.

Effects of hostile takeovers and policy implications

The previous actions have presented the major elements of the hostile takeover battle and, as with any battle, there will be a winner and a loser. However, the effects of the battle go beyond the direct combatants. The remaining sections will discuss the impact of hostile takeovers on various stakeholders: shareholders, management, labor, and society in general. Although conclusive evidence on the net economic welfare impacts of hostile takeovers is elusive, arguments for and against them are not.

The winners: Target shareholders

Evidence from short-period merger event studies (covering the few weeks around a takeover announcement) clearly indicate that stockholders of target firms benefit by receiving positive abnormal returns—gains above those that would have occurred had the stock followed overall market movements. A recent study conservatively estimates the gain to target shareholders from takeovers of publicly traded

Takeover and defense tactics*

There are numerous tactics for taking over corporations. Even more numerous are the modes of defense against takeovers. Following is a list of the major actions available to the offensive and defensive players of this increasingly popular enterprise, corporate takeover. The defensive tactics are grouped according to their impact on shareholder wealth, as indicated by research to date.

TAKEOVERS

■ ***Leveraged buyout:*** heavily debt-financed buyout of shareholder equity often by incumbent management.

■ ***Merger:*** bidder negotiates with target management on the terms of the offer which is then submitted to a vote of the target's shareholders.

■ ***Proxy contest:*** by a vote of the shareholders a dissident group tries to gain a controlling position on the board.

■ ***Tender offer:*** bidder makes offer to shareholders for some or all of the target's stock.

Friendly: offer supported by the target company's management.

Unfriendly (hostile): offer opposed by target management.

DEFENSIVE TACTICS

(Shareholder approval required)

No impact or no evidence of impact on target shareholder wealth

■ ***Dual-class recapitalizations:*** restructure equity into two classes with different voting rights with the goal of providing management or family owners with voting power disproportionately greater than provided by their equity holdings under a one-share, one-vote rule; typical dual class firm is already controlled by insiders and the recapitalization may also provide needed capital without dilution of control and without harm to the stock value.

■ ***Fair-price provision:*** a supermajority provision which applies only to nonuniform two-tier hostile takeover bids; insures that all shareholders selling within a certain time period receive the same price; the usual determination of fairness is the highest price paid by the bidder for any of the shares it has acquired in the target during a certain time period; has a low deterrence value and is not detrimental to stock values.

■ ***Rights of shareholders:*** restricts rights of shareholders to vote on issues between annual meetings or at special shareholder meetings (e.g., only supermajority vote of the shareholders or the president of the board may call a special meeting).

Positive impact

■ ***Leveraged recapitalization or leveraged cash-out:*** a change in capital structure and equity ownership, retaining a publicly traded company; financial leverage is increased significantly as the company replaces the majority of its equity with debt so that a raider can not borrow against the assets of the firm to finance an acquisition; management (insiders) in essence receives a stock-split and proportional increase in ownership as all but inside shareholders receive a large one-time payout in cash or debt securities and continued equity interest in the restructured company.

Negative impact on target shareholder wealth

■ ***Change state of incorporation:*** stringency of state antitakeover laws vary; may harm shareholders because it reduces takeover chances; may benefit states as they increase the likelihood of keeping jobs with strict state laws.

■ ***Reduction in cumulative voting rights:*** increases management's ability to resist a tender offer but appears to reduce shareholder wealth. (Cumulative voting rights allow a group of minority shareholders to

elect directors even if the majority opposes because each shareholder is entitled to cast a number of votes equal to the number of shares owned multiplied by the number of directors to be elected—thus one could accumulate votes for a particular director or group of directors.)

■ ***Staggered directors or classified board:*** directors are broken into classes (usually three groups) with only one class being elected each year; works best with limit on number of board members; makes it difficult for a substantial shareholder to change all of the board at once without approval or cooperation of the existing board, but also makes any change of directors more difficult; also lowers the effectiveness of cumulative voting; has impact of significant negative abnormal returns.

■ ***Supermajority clause:*** increases the number of votes of outstanding common stock needed to approve changes in control to two-thirds or nine-tenths from a majority of one-half (director must also be removed for cause); found to have significant negative stock-price effects around their introduction and on average they appear to reduce shareholder wealth; important to have an escape clause (provision allowing for simple majority vote) so that friendly offers are not also foreclosed; almost always combined with a lock-in provision.

■ ***Lock-in provision:*** prevents circumvention of antitakeover provisions; most common provision requires a supermajority vote to change antitakeover amendments or limits the number of directors; has impact of a significant negative abnormal return.

(Shareholder approval not required)

Negative impact on target shareholder wealth

■ ***Litigation by target management:*** a win by target may harm shareholders in that chances of acquisition may be lost or lowered—this may be reflected by a fall in share price, whereas the acquisition is likely to have increased share prices (examples: charges of securities fraud, antitrust violations, or violations of state or federal tender offer rules); delays control fight, yet also gives management time to find a friendlier deal.

■ ***Shareholder rights plans or poison pills:*** do not require majority voting approval by shareholders; are triggered by an event such as a tender offer, or by the accumulation of a certain percentage of target's stock by a single stockholder; trigger allows target shareholders with rights to purchase additional shares or to sell shares to the target at very attractive prices; can be cheaply and quickly altered by target management yet makes hostile takeovers very expensive by diluting the equity holdings of the bidder, revoking his voting rights or forcing him to assume unwanted financial obligations; different types include: flip-over, flip-in, back-end, and voting plans; generally harmful to stock values; judicial approval of certain types of plans (e.g., flip-in and back-end) is still not clear.

■ ***Target block stock repurchases or greenmail:*** target repurchases, at a premium, the hostile bidders block of target's stock; often results in substantial fall in stock returns for the target or reduced shareholder value from foregone takeover potential as opposed to normally positive stock price effects of a repurchase of stock by a nontargeted firm; yet evidence indicates that a net positive stock price may result from the initial hostile bidder purchase (positive impact) to the target repurchase (negative effect); benefits returns for bidder firm shareholders; practice is controversial and has been challenged in federal courts, congressional testimony, and SEC hearings.

*For empirical evidence of the effects of defensive tactics and the market for corporate control see footnote 14 of the text.

companies between 1981 and 1986 to be 47.8 percent, or an estimated dollar value of $134.4 billion. Additionally, the average premium on all mergers and acquisitions in 1987 was 38.3 percent whereas the average for hostile takeovers that year was 42.7 percent.[19]

Bidder shareholders may gain or lose

For the acquiring firm, the results from the same studies are not so unequivocal. They indicate that on average there is no significant short-period effect, positive or negative, on shareholder returns, and, if anything, there is at best a slight positive impact on the acquirer's share value.[20] Evidence from longer-period event studies (one to three years) suggests that increases in target stock prices during takeovers overestimate the post-merger increase in firm value. Despite this overvaluation, recent research concludes that the average successful tender offer results in a statistically significant positive revaluation of the combined firm. Such increases have been fairly consistent over time. However, bidder gains have been diminishing over the last two decades while target returns have increased.[21] Thus, it appears that on average takeovers and mergers enhance shareholder value.

While it is concluded that mergers and acquisitions enhance shareholder value, this conclusion does not imply that such value is derived entirely, or at all, from increased efficiency (e.g., resource reallocation, removal of inefficient management, or economies of scale or scope).

Sources of gain: Improved efficiency or wealth redistribution

Although easily measured, shareholder gains do not provide an accurate measure of welfare gains. If takeover gains are a result of wealth transfers, then the increase in share prices overstates the efficiency gains of takeover. Shareholder gains must be weighed against the losses of other stakeholders such as management and employees.

As opponents of hostile takeovers argue, takeover gains result primarily from wealth redistributions: one stakeholder's gain—the target shareholder—is at the expense of another's economic loss—such as the target employee or bondholder. In the extreme, such takeovers are merely costly and disruptive restructurings of corporations that provide no social benefits. Preventing such takeovers would, it is argued, improve economic welfare.

Proponents argue that takeovers provide net gains to society by reducing the agency costs related to management/shareholder conflicts, which, in turn, improves resource allocation and efficiency and encourages value-maximizing behavior. Thus, attempts to prevent a free corporate control market would have negative effects.

Overall, research is not conclusive on the sources of takeover gain and indicates that gains from redistribution as well as increased efficiency may be occurring. The sources of gain vary from deal to deal, from industry to industry, and from year to year. Studies have addressed the wealth transfers to target shareholders from target bondholders, government, and target labor.

One version of the redistribution theory asserts that the gain of one class of security holders comes at the expense of another. For example, bondholder values may decline as common shareholder values increase. This example may be more relevant to highly leveraged transactions in which corporate bond prices may fall and yields rise as increased leverage contributes to uncertainty about the acquirer's ability to service its debt. Despite some recent examples of such behavior related to leveraged buy-outs, studies of both mergers and leveraged buy-outs have failed to find consistent support for this theory.[22] Moreover, when such redistributions have occurred, the increase in shareholder value often more than offsets the fall in bond values. Thus, takeovers appear to result in net gains to investors as a group. In general, target shareholders' gains do not occur at the expense of either bidder shareholders or other classes of target or bidder investors.

The increase in shareholder value resulting from hostile takeovers could also be a redistribution from the government to shareholders. Hostile takeovers may generate tax savings without any underlying efficiency gains. Thus, government becomes

another stakeholder in the takeover battle. But the evidence indicates that tax benefits have been only a minor force behind takeovers.[23]

Another form of redistribution espoused recently is that shareholder gains come at the expense of labor through long-term labor contract concessions which reduce employment or wages. Evidence from small firm acquisitions (not hostile takeovers) does not support assertions that acquisitions have an overall negative effect on labor in terms of lower employment and wages.[24] However, hostile takeovers usually involve large organizations and create a fear that both explicit and implicit commitments by target management to labor will be broken following the takeover. A notable example is Carl Icahn's hostile purchase of TWA which resulted in improved management and shareholder premiums worth $300 to $400 million, but also resulted in wealth transfers to Icahn from three labor unions which one researcher valued at $600 million or one and a half times the takeover premium.[25] In this case, it would appear that shareholders gained principally at the expense of labor. The unanswered question is whether such labor concessions are simply wealth transfers or actually enhance efficiency.

Labor-related inefficiencies may result from the inability of management to respond appropriately to factors, such as technological developments, which decrease the demand for labor, or result from failure to deal successfully with a labor force that wields market power. In either case, these inefficiencies create conditions ripe for hostile takeovers, which in turn become the mechanism by which efficiency is enhanced. This does not mean that labor will always be a casualty in a hostile takeover battle. Takeover activity, and hence the fear of takeover, may be favorable to labor in that efficiency gains at potential target companies can lead to job preservation and greater long-run growth and employment.

Economic efficiency theories argue that net gains may occur from increases in economic efficiency achieved through major restructurings and better management of corporate assets. Takeovers can reduce agency costs and result in more efficient capital investments by subjecting the firm to the scrutiny of the capital markets and by reducing resources under management control. Benefits accrue when target shareholder wealth that had been appropriated to target management, employees, suppliers, or customers under non value-maximizing behavior is reallocated to target shareholders and the acquirer upon acquisition.

Business line financial data has been used to test the efficiency enhancement theory of takeovers by analyzing the *ex post* financial performance of acquiring firms. Two implications of the theory that takeovers increase efficiency due to improved management have been tested. First, the target's pre-takeover profits should be less than its industry peers', and second, *ceteris paribus*, post-takeover profitability should be relatively higher than pre-takeover profitability.

Examining these hypotheses, Scherer found that targets were slight underperformers relative to their industry norm, but that "operating performance neither improved nor deteriorated significantly following takeover," and "there is no indication that on average the acquirers raised their targets' operating profitability net of merger-related accounting adjustments."[26]

Generally, studies using accounting data to analyze post-takeover performance do not clearly support the economic efficiency theory of takeover gains. Unless this inconclusiveness can be attributed to measurement problems associated with the use of accounting data or the lack of coordination in the use of market and accounting data in analyzing shareholder gains and the sources of those gains, one must question whether there are any true wealth gains derived from the supposed improved management and efficiency subsequent to takeover.

While operational efficiencies may be elusive, it appears that financial market inefficiencies do create opportunities for takeover gains. If takeovers lead to the revaluation of undervalued firms, the cost of raising additional capital will be lower and more investment will take place. Several studies have tested the market undervaluation hypothesis. Evidence on it is mixed.

Empirical evidence using stock price data do not generally support the theory that target firms are victims of undervaluation. Stock prices of targets successful at fending off hostile bidders decline to approximately pre-bid levels. That is, the tender offer process does not reveal to the market significant new information about the intrinsic value of the target such that substantial price adjustments (increases) occur due to prior undervaluations of the target by the market. It is not merely the information generated from putting a firm into play, but the actual acquisition and expected gains that result in positive stock returns.[27]

However, an analysis of market valuation of large, multidivisional targets using business line financial data as well as market data provide somewhat different results. If the sum of the liquidation or replacement value of the firm's parts is greater than the market value of the firm as a whole then it is undervalued by the market. It is argued that this provides incentive for takeover by creating opportunities to improve performance and add value by divesting the target of certain units whose assets are more productively managed elsewhere. This has been the strategy in the recent takeovers of many conglomerates formed by previous diversification acquisitions.

Recent research suggests "that there is some undervaluation in the market as a whole, which can probably be attributed to underpricing of both multi-industry companies and small companies." Further, this undervaluation is proportional to the number of firm divisions and is more prevalent in certain industries and organizations with low institutional holdings.[28]

Conclusion

Although contested tender offers are a small fraction of all merger and acquisition activity, the target and bidder costs of fighting a hostile battle and the slight chances of targets remaining independent, as well as the attendant social costs of the fight, magnify the importance of understanding and dealing with the corporate control market.

A successful and profitable takeover depends on the extent to which the target firm is undervalued, the inefficiency of target management, the cost of overcoming the target's takeover defenses, the ability of the acquirer to transfer wealth from other stakeholders, and the ability of the bidder to divert some gains from the target shareholders.

Target shareholders are definite winners in the hostile takeover battle. Bidder shareholders, on average, have equal probabilities of gaining or losing and, at best, obtain modest gains.

However, the source and quantification of the gains to target shareholders remain elusive. Research does not provide clear support for the hypothesis that there are real efficiency gains from takeovers. Support for the several versions of the wealth redistribution theory is mixed. Wealth transfers are most likely to have negative effects on target management.

What is clear, however, is that net shareholder gains are not an accurate measure of welfare gains resulting from takeovers. Only with additional research can the social and economic welfare implications and policy directives regarding hostile takeovers be more precisely drawn.

Footnotes

[1]Data on net merger and acquisition announcements are from *Mergerstat Review* 1978-1987. (Chicago: W. T. Grimm & Co.) Of the 2,032 net merger and acquisition announcements in 1987, there were only 972 in which the dollar value of the deal was disclosed.

[2]For instance, S. 1323 and S. 1324, 100th Cong. 1st sess. (1987) (amending Section 14 of the Securities Exchange Act of 1934, 15 U.S.C.).

"Securities Regulation, Hostile Corporate Takeovers: Synopses of Thirty-Two Attempts," United States General Accounting Office, March 1988, GAO/GGD-88-48FS, a study of 32 hostile takeover attempts in 1985 provides data indicating that, although financial-advisory-related service fees totaled approximately $60 million, this is only a minor fraction of the total value of the deals. Nonetheless, that data also indicate that in successful hostile takeovers, the target spent approximately twice as much as the bidder on such services.

[3]For a sample of papers dealing with the value maximization hypothesis, see Eugene F. Fama and Michael C.

Jensen, "Organizational Forms and Investment Decisions," *Journal of Financial Economics*, Vol. 14, No. 1, (March 1985), pp. 101-119; Eugene F. Fama, E. and Martin H. Miller, *The Theory of Finance*, (Hinsdale, Ill.: Dryden Press, 1972), Chapter 2; and Paul Asquith, Robert F. Bruner, and David W. Mullins, Jr., "The Gains to Bidding Firms from Merger." *Journal of Financial Economics*, Vol. 11, No. 1-4, (April 1983), pp. 121-139. Andrei Shleifer and Robert W. Vishny, "Value Maximization and the Acquisition Process," *Journal of Economic Perspectives*, Vol. 2, No. 1, (Winter 1988), pp. 7-20, examine the failure of internal control mechanisms as one explanation of hostile takeovers.

[4]Randall Morck, Andrei Shleifer, and Robert W. Vishny, "Characteristics of Targets of Hostile and Friendly Takeovers," in Auerbach, *Corporate Takeovers*, pp. 101-136 study the characteristics of hostile takeover targets and suggest that hostile takeovers occur in declining industries and those in a state of change, where management is slow to adjust to the changing environment for whatever reasons--e.g., to maintain their control or to protect employees from pay reductions or job eliminations.

[5]Michael C. Jensen, "Takeovers: Their Causes and Consequences," *Journal of Economic Perspectives*, Vol. 2, No. 1, (Winter 1988), pp. 55.; Randall J. Woolridge, "Competitive Decline and Corporate Restructuring: Is a Myopic Stock Market to Blame?," *Journal of Applied Corporate Finance*, Vol.1, No. 1, (Spring 1988), pp. 26-36 finds that a myopic market is not to blame as "common stock prices react positively to announcements of corporate strategic investment decisions and the market appears to place considerable emphasis on prospective long-term developments in valuing securities." See also Bronwyn H. Hall, "The Effect of Takeover Activity on Corporate Research and Development," Alan J. Auerbach, ed., *Corporate Takeovers: Causes and Consequences*, (Chicago: University of Chicago Press, 1988), pp. 69-100; John J. McConnell and Chris J. Muscarella, "Capital Expenditure Decisions and Market Value of the Firm," *Journal of Financial Economics*, Vol. 14, 1985, pp. 523-553; and Jeremy C. Stein, "Takeover Threats and Managerial Myopia," *Journal of Political Economy*, Vol. 96, No. 1, (Feb. 1988), pp. 61-80.

[6]See Michael C. Jensen, "Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers," *American Economic Review*, Vol. 76, No. 2, (May 1986, Papers and Proceedings, 1985), pp. 323-329.

[7]Richard Roll, "The Hubris Hypothesis of Corporate Takeovers." *Journal of Business*, Vol. 59, No. 2, (April 1986), pp. 197-216.

[8]For a series of articles discussing methods of and effects of corporate restructuring including Employee Stock Option Plans and Leveraged Cash-outs, see *Journal of Applied Corporate Finance*, Vol. 1, No. 1, (Spring 1988). For evidence of stock price reactions to capital structure changes generally indicating a direct correlation between changes in leverage and stock prices, see Michael C. Jensen and C. W. Smith Jr., "Stockholder, Manager and Creditor Interests: Applications of Agency Theory," in E. Altman and M. Subrahmanyam, eds., *Recent Advances in Corporate Finance*, (Homewood: Richard Irwin, 1985), pp. 93-131.

[9]Although 30-40 percent of the junk bonds issued since 1985 have been used in acquisition-related financing, these junk-bond-financed transactions only accounted for approximately 8 percent of total merger financings in 1986, up from 4.3 percent in 1985. *(Mergers and Acquisitions*, 1987).

[10]GAO, Securities Regulation.

[11]Supreme Court of the United States, *CTS Corp. v. Dynamics Corporation of America*, 107 S Ct 1637(1987). Appeal from the United States Court of Appeals for the Seventh Circuit, No. 86-71. Argued March 2, 1987 and decided April 21, 1987. This decision reverses prior court trends and raises the possibility that state legislation may have a substantive impact on corporate control contests. The case upheld one form of takeover statute, the Indiana control share acquisition provision. For an invalidation of a state control share statute on constitutional grounds, see *RTE Corporation* v. *Mark IV Industries*, Civ. Action No. 88-C-378 (E.D. Wis.) May 6, 1988. Also see Lynn E. Browne and Eric S. Rosengren, "Should States Restrict Takeovers?" *New England Economic Review*, Federal Reserve Bank of Boston, (July/August 1987), pp. 13-21, for a discussion of state antitakeover laws.

[12]Sanford J. Grossman and Oliver D. Hart, "Takeover Bids, the Free-Rider Problem, and the Theory of the Corporation." *Bell Journal of Economics*, Vol. 11, No. 1, (Spring 1980), pp. 42-64 discuss the ability of bidders to gain from takeover, and Andrei Shleifer and Robert W. Vishny, "Greenmail, White Knights, and Shareholders' Interest," *Rand Journal of Economics*, Vol. 17, No. 3, (Autumn 1986), pp. 293-309 discuss the accumulation of shares prior to full disclosure.

The Williams Act, a 1968 amendment to the Securities and Exchange Act of 1933, Public Law No. 90-439, 82 Stat. 454 (July 29, 1968) as amended in 1970 Public Law No. 91-567, 84 Stat. 1497 (December 22, 1970) governs tender offers with disclosure, offer period and other procedural requirements, as well as antifraud provisions. It was intended to protect shareholders by allowing sufficient time and information to properly analyze a tender offer.

[13]For empirical evidence of the effects of defensive tactics and the market for corporate control see Greg A. Jarrell, James A. Brickley, and Jeffery M. Netter, "The Market for Corporate Control: The Empirical Evidence Since 1980," *Journal of Economic Perspectives*, Vol. 2, No. 1, (Winter 1988), pp.49-68; Gregg A. Jarrell and Annette B. Poulsen, "Shark Repellents and Stock Prices, The Effects of Antitakeover Amendments Since 1980." *Journal of Financial Economics*, Vol. 19, No. 1, (Sept. 1987), pp. 127-168; John Pound, "The Effects of Antitakeover Amendments on Takeover Activity: Some Direct Evidence," *The Journal of Law and Economics*,

(Oct. 1987), pp. 353-367; and Michael Ryngaert, "The Effect of Poison Pill Securities on Shareholder Wealth," *Journal of Financial Economics*, Vol. 20, No. 1-2, (January/March 1988), pp. 127-168.

[14]Scott C. Linn and John J. McConnell, "An Empirical Investigation of the Impact of 'Antitakeover' Amendments on Common Stock Prices," *Journal of Financial Economics*, Vol. 11, No. 4, (April 1983), pp. 361-399.

[15]Harry DeAngelo and Edward M. Rice, "Antitakeover Charter Amendments and Stockholder Wealth," *Journal of Financial Economics*, Vol. 11, No. 1-4, (April 1983), pp. 329-359 find weak support for the managerial entrenchment hypothesis.

[16]Kevin J. Murphy, "Corporate Performance and Managerial Remuneration: An Empirical Analysis," *Journal of Accounting and Economics*, Vol. 7, No. 1-3, (April 1985), pp. 11-42 found a positive relationship between stock performance and managers' pay; and James A. Brickley, Sanjai Bhagat, and Ronald C. Lease, "The Impact of Long-Range Managerial Compensation Plans on Shareholder Wealth," *Journal of Accounting and Economics*, Vol. 7, No. 1-3, (April 1985), pp. 115-130; and Hassan Tehranian and James F. Waegelein, "Market Reaction to Short Term Executive Compensation Plan Adoption," *Journal of Accounting and Economics*, Vol. 7, No. 1-3, (April 1985), pp. 131-144 find introductions of incentive-based compensation programs cause stock price increases. The problem of management performance not achieving cost minimization and profit maximization at the expense of shareholders (absentee owners) was first identified by Adolf A.Berle, Jr. and Gardiner C. Means, *The Modern Corporation and Private Property*, 1932, (New York, New York: Macmillan, 1932).

[17]Jarrell and Poulsen, "Shark Repellents and Stock Prices." Today, institutional investors account for approximately 66 percent to 75 percent of equity ownership and trading compared to about 5 percent in the early 1960s.

[18]GAO, Securities Regulation. 1985 data indicate that insider holdings averaged 21.8 percent for nine targets of unsuccessful takeover attempts and averaged 4.8 percent and 9.5 percent, respectively, for nine successful takeovers and seven targets acquired by white-knights. T. Boone Pickens, Jr., "Professions of a Short-Termer," *Harvard Business Review*, Vol. 64, No. 3, (May/June 1986), pp. 77 states that takeover targets from 1981-1984 averaged 22 percent institutional ownership compared to a market average of 35 percent.

[19]Bernard S. Black and Joseph A. Grundfest, "Shareholder Gains From Takeovers and Restructurings Between 1981 and 1986: $162 Billion is a Lot of Money," *Journal of Applied Corporate Finance*, Vol. 1, No. 1, (Spring 1988), pp. 5-15; Michael C. Jensen and Richard S. Ruback, "The Market for Corporate Control," *Journal of Financial Economics*, Vol. 11, No. 1-4, (April 1983), pp. 5-50; Roll, "The Hubris Hypothesis of Corporate Takeovers"; Jarrell, Brickley, and Netter, "The Market for Corporate Control: The Empirical Evidence Since 1980," *Journal of Economic Perspectives*, (Winter 1988), pp. 49-58; Michael Bradley, Anand Desai, and E. Han Kim, "Synergistic Gains from Corporate Acquisitions and Their Diversion between the Target and Acquiring Firms," Working Paper, School of Business Administration, University of Michigan, 1987; and Asquith, Bruner, and Mullins, Jr., "The Gains to Bidding Firms from Merger."

[20]Jensen and Ruback, "The Market for Corporate Control" provides an extensive review of corporate control market studies and finds shareholders of acquirers do not lose; and Roll, "The Hubris Hypothesis of Corporate Takeovers" finds statistically insignificant results showing that acquirers, on average, do lose on bid announcements. Jarrell, Brickley, and Netter, "The Market for Corporate Control: The Empirical Evidence Since 1980" updates and confirms the earlier Jensen and Ruback (1983) study.

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[22]Debra K. Dennis and J. McConnell, "Corporate Mergers and Security Returns," *Journal of Financial Economics*, Vol. 16, No. 2, (June 1986), pp. 143-187; Kenneth Lehn and Annette B. Poulsen, "Sources of Value in Leveraged Buyouts," in *Public Policy Towards Corporate Takeovers*, (New Brunswick, NJ: Transaction Publishers), 1987; Paul Asquith and E. Han Kim, "The Impact of Merger Bids on the Participating Firms' Security Holders," *Journal of Finance*, Vol. 37, No. 5, (December 1982), pp. 1209-1228; and "Buyouts Devastating to Bondholders," *New York Times*, October 26, 1988.

[23]Alan J. Auerbach and David Reishus, "Taxes and the Merger Decision," in J. Coffee and Louis Lowenstein, eds., *Takeovers and Contests for Corporate Control*, (Oxford: Oxford University Press, 1987); D. Breen, "The Potential for Tax Gains as a Merger Motive," Federal Trade Commission, Bureau of Economics, July 1987; and Lehn and Poulsen, "Sources of Value in Leveraged Buyouts."

[24]Andrei Shleifer and Lawrence Summers, "Hostile Takeovers as Breaches of Trust," in Auerbach, *Corpo-*

rate Takeovers, pp. 33-68; and Charles Brown and James L. Medoff, "The Impact of Firm Acquisitions on Labor," in Auerbach, *Corporate Takeovers*, pp. 9-32. In Bernard S. Black and Joseph A. Grundfest, "Shareholder Gains From Takeovers and Restructurings Between 1981 and 1986: $162 Billion is a lot of Money," on pg. 7 the authors noted that "Yago and Stevenson also find 'no evidence that unsolicited deals had systematically different effects than friendly transactions'."

[25]Andrei Shleifer and Lawrence Summers, "Hostile Takeovers as Breaches of Trust," pg. 50.

[26]Scherer, "Corporate Takeovers: The Efficiency Arguments," pp. 75-76; and David J. Ravenscraft and F. M. Scherer, "Life After Takeover," *The Journal of Industrial Economics*, Vol. 36, No. 2, (December 1987), pp. 147-156.

[27]Michael Bradley, Anand Desai, and E. Han Kim, "The Rationale Behind Interfirm Tender Offers: Information or Synergy?," *Journal of Financial Economics*, Vol. 11, 1983, pp. 183-206. Frank H. Easterbrook and Gregg A. Jarrell, "Do Targets Gain from Defeating Tender Offers?," *New York University Law Review*, 1984, Vol. 54, pp. 277-299 show that stock returns of targets of defeated hostile bidders fall to approximately pre-bid levels. Sanjai Bhagat, James Brickley, and Uri Lowenstein, "The Pricing Effects of Inter-Firm Cash Tender Offers," *Journal of Finance*, Vol. 42, 1987, pg. 965-986 find that increased valuations of target firms are too large to be explained solely by adjustments for prior undervaluations.

[28]See Dean LeBaron and Lawrence S. Speidell, "Why are the Parts Worth More than the Sum? 'Chop Shop,' A Corporate Valuation Model." *The Merger Boom*, Federal Reserve Bank of Boston, pp. 78-101; and Michael E. Porter, "From Competitive Advantage to Corporate Strategy," *Harvard Business Review*, Vol. 65, No. 3, (May/June 1987), pp.43-59.

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Countertrade—counterproductive?

Costly, inefficient, and disruptive, countertrade is still a significant factor in modern international trade, mainly because of political and economic policy distortions

Jack L. Hervey

It started, perhaps, with a couple of Stone Age hunters. An agreement between the two to share the bounty of their daily hunt worked well until the day one bagged a pheasant and the other, an elephant. On that day the need for a more efficient mechanism for exchange became apparent.

Over time, forms of "money" were developed to help solve this discontinuity in the value of exchanged goods. This led to more efficiently functioning markets in which these exchange discontinuities were no longer a major problem.

Nonetheless, in modern times barter and its numerous derivations, which have conceptually been gathered together under the rubric "countertrade," have gained renewed stature in international trade. This has occurred despite the fact that international money and credit markets have attained unparalleled levels of sophistication.

Where readily acceptable forms of money exchange and viable credit facilities are available, markets shun cumbersome and inefficient barter-type transactions. But, international liquidity problems and government restrictions on the operation of markets have prompted many less developed countries (LDCs) and nonmarket economies (NMEs),[1] as well as industrial countries, to promote "creative" trade transactions that circumvent the normal exchange medium of modern markets.

What is countertrade?

The term countertrade does not tell us much about what it is, or is not. As the concept has evolved it has taken on a broad range of meanings. At present, the term "countertrade" includes practices that go well beyond the simple barter of goods. Indeed, the literature on countertrade leads one to suspect that more and more trade forms are being defined as countertrade. It has been defined to include transactions that range from the basic barter of goods to offsetting hard-currency cash transactions that take place over long periods of time.[2]

In the definition of countertrade, intent is the key. A goods-for-cash deal with no strings attached is not classified as countertrade. A goods-for-goods deal is countertrade. But, a goods-for-hard-currency deal is countertrade *if* the seller agrees to make an offsetting purchase at some future date. Strings, however long, make the difference. Countertrade is tied trade.

Countertrade agreements take several basic forms:

1. Barter;
2. Compensation or buy-back;
3. Counterpurchase;
4. Offset; and
5. Switch trading, an activity that often accompanies countertrade as an adjunct to any of the previous four forms.

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Barter is the oldest form of exchange transaction and involves the direct exchange of goods or services without recourse to currency. Although currency is not a part of the transaction, participants in international barter must establish, nevertheless, the relative price of the goods or services exchanged. They must then determine an implicit exchange rate in order to set the relative value of quantities to be traded.

Barter, in the strict commodity-for-commodity sense, is not currently a widely used form of countertrade. This attests to the widespread understanding by trade participants of the basic economic inefficiencies associated with countertrade, especially when taken to the barter extreme.

Nonetheless, even the United States government has formally embraced barter, particularly to assist in the disposal of surplus agricultural products. In the Agricultural Act of 1949, again in the Agricultural Trade Development and Assistance Act of 1954 (also known as Public Law 480 or the Food for Peace program), and most recently in the Food Security Act of 1985, legislation specifically sanctioned barter trade.

PL 480 set the procedure for the U.S. Department of Agriculture, through its Commodity Credit Corporation (CCC) to dispose of surplus U.S. agricultural products, especially wheat, cotton, and dairy products. During the 1950s and 1960s the act facilitated exchange of these surplus domestic food staples for storable foreign nonfood products, especially goods that could be added to the U.S. strategic stockpile.[3] Title I of the act provided for the sale of commodities for local (nonconvertible or "soft") currencies, which were required to be used to purchase goods or services in the local economy. Such transactions might be considered to be on the fringe of barter. Title III provided for the strict goods-for-goods barter.

During the period 1950 to 1973, when the barter program was suspended after CCC-held surpluses ran out, $6.6 billion in surplus agricultural products were bartered for materials added to the government's strategic stockpile, goods and services for overseas military operations, and AID projects.[4]

When the agricultural surplus once again became burdensome in the 1980s, political interest in barter arrangements once again arose. During the early 1980s, for example, several barter arrangements were carried out between the CCC and the government of Jamaica—the U.S. government traded dairy products, wheat, and rice for bauxite.[5]

Outside the United States, proposals for and completed barter arrangements appear to be common. In particular, Middle East oil-exporting countries engage in the barter of crude oil for goods and services. A typical example is a recent contract for the construction of an oil pipeline in Iraq by the South Korean firm Hyundai Engineering. According to reports, about 90 percent of the more than $200 million pipeline cost is to be paid for in oil with the remainder in cash.[6]

Buy-back agreements became common during the 1960s with the advent of major economic development projects in the NMEs and the LDCs. Large industrial projects built by Western firms occasionally have been "financed" in this manner. The purchasing NME or LDC country buys the plant. In turn, the plant is paid for by selling to the Western firm (i.e., the exporting company buys back) some portion of the output of the plant over an extended period.

Several Eastern European industrial development projects have been financed in this manner. One of the best known projects of this type was the USSR's purchase of fertilizer plants and technology during the early 1970s from Occidental Petroleum. The plant and equipment were paid for by the subsequent importation by Occidental of nitrogen fertilizers produced at the facilities. In another case, General Electric sold machines for the production of medical equipment and the license to produce such equipment to Poland. Payment was in the form of electrocardiogram meters.[7]

Counterpurchase agreements, as the name implies, involve standard hard-currency transactions between the seller and buyer. The tie in the transaction is that, in order to make the sale, the seller (usually an industrial-country firm) agrees to a "return" purchase, that is, to counter-

purchase with hard currency a minimum quantity of specified goods or services from the buying country (a developing or nonmarket country) within a specified period. Failure by the seller to meet its counterpurchase requirement often results in substantial penalties.

A typical, but hypothetical, example of such a transaction might have a U.S. construction equipment company selling $10 million in road construction machinery to the Indonesian government (a country that in fact actively engages in countertrade). This hypothetical contract calls for the U.S. company to be paid in U.S. dollars. The contract also calls for the U.S. company to buy from Indonesia a minimum of $8 million in Indonesian-sourced goods within a period of five years. This contract would constitute an 80 percent counterpurchase agreement, (the agreement could call for a $12 million, or 120 percent, counterpurchase). The counterpurchase agreement would most likely exclude petroleum—a product that Indonesia has no difficulty selling for dollars on world markets—from the permitted counterpurchase items. If the U.S. company fails to meet the $8 million counterpurchase, the contract might specify a penalty of the difference between the contracted amount and actual purchases, plus some percentage of the contracted counterpurchase.

The catch to this type of agreement is that the "specified goods" to be counterpurchased, especially nontraditional goods from an LDC or NME country, may be of the type for which a ready market has not been established. Counterpurchase agreements are increasingly appearing in combination with offset agreements.

Offset agreements are an increasingly common form of countertrade. Offsets are unique in that they are more likely to involve (but are not restricted to) transactions between industrial countries—often a firm in one country and the government of another country. As a condition for a firm to sell its product in the second country, the government of the second (buying) country requires that some portion of the final output be produced in that country, or the buying government may request that the seller firm assist in marketing or in finding a market for other goods made in the buying country.

Sales of commercial aircraft or military equipment, where portions of the product are made in the purchasing country, are among the most common forms of this type of countertrade. For example, in 1987 the U.S. aircraft manufacturer Boeing concluded a sale of AWACS (airborne early warning systems) aircraft with the French government with the offset, in part, being that the aircraft would be outfitted with French-built Snecma engines.[8] Other examples include the U.S. sale of F-15 fighter aircraft to Japan with the offset that the airframe and other components are built in Japan. Commercial U.S. jet aircraft are often purchased by airlines in the U.K., but with the stipulation that they be outfitted with British Rolls-Royce engines.

Switch trading is not a specific form of countertrade in the same sense as the above categories. However, it is often a part of these transactions in that switch trading identifies a second or subsequent stage in a countertrade transaction.

For example, consider a hypothetical case where a U.S. exporter enters into a countertrade, let's say barter, agreement and accepts $5 million in indigenous art objects in exchange for $5 million in exports of natural-gas-powered electrical generators. The U.S. firm is unable to use the goods directly (its halls are already covered with pictures from a previous transaction) and lacks the marketing expertise or retail outlets to market the goods directly. Rather, the firm simply wishes to get rid of the goods as quickly as possible and "get its money out." This is done by enlisting the aid of a switch trader.

The switch trader buys the art at a discount for $4.75 million (the U.S. exporter knew the goods would be sold at discount so it attempted to build some or all of the discount into the price of its exported goods). Now, the switch trader accepts the obligation of finding a home for the goods.

In some cases the switch trader may have to go through several additional countertrade transactions before all countertrade obligations are settled and a

final hard-currency transaction is completed. The art objects may be traded for canned hams and the canned hams for steel bars and the steel bars for dollars. Each of these steps cuts the margin the switch trader receives, so its final profit depends importantly on its negotiating skill in the trades and on its knowledge of the market for the goods it is trading.

The allure of countertrade

The primary reasons for countertrade fall into three areas:

1. Countertrade provides a trade financing alternative to those countries that have international debt and liquidity problems.
2. Countertrade relationships may provide LDCs and NMEs with access to new markets. Countertrade may also provide a positive competitive element for those exporting companies willing to engage in it.
3. From a trade perspective, countertrade fits well conceptually with the resurgence of bilateral trade agreements between governments.

Debt and hard currency issues. Central to the expanded use of countertrade in recent years is the shortage of hard-currency reserves available to the LDCs and NMEs. Countries in this situation find it difficult to service their foreign debt obligations. Thus, they often face difficulty in attracting foreign capital in the form of international credits to finance imports and foreign investment to finance domestic development projects. This development hearkens back to the reason countertrade (barter) occurred in the first place—the lack of (or breakdown in) a system of monetary exchange.

Such debt problems have prompted some governments to impose austerity measures on their domestic economies and restrictions on the use of scarce foreign exchange to acquire certain types of imports. Sometimes, external authorities such as the International Monetary Fund, the World Bank, and foreign commercial bank lenders insist on such measures as a condition for the extension of additional international credits. Countertrade transactions, which can avoid hard-currency exchange, may be utilized to circumvent such restrictions.

When a country's economy (like those of Eastern Europe) is not "plugged into" the exchange system of the rest of the world, its ability to purchase goods or services from the rest of the world is strictly limited, in the short- as well as long-term, by its ability to generate convertible currencies through conventional export sales to convertible currency countries. For the NMEs this has typically meant a shortage of convertible currency. They have responded by requesting countertrade provisions in many of the trade transactions entered into with Western companies. The argument supporting these transactions is that countertrade has facilitated an increase in world trade.

The rebuttal to this argument is that, if the world market really wanted the NME product or service that was the key to the transaction, that product or service, if competitive, could have been sold in the world market for convertible currency without the disruptive strings of countertrade. Furthermore, by avoiding the costly machinations of countertrade the NME would have received a higher price for its export, paid a lower price for its import from the Western exporter, or some combination of the two. In the longer-term, if not in the short-term, the NME would be better off had it utilized conventional markets instead of countertrade.

A potentially more serious issue arises with respect to the relationship of countertrade to the debt-ridden LDCs (in some cases this also applies to the NMEs). At the first stage, the issue of the use of countertrade by these countries is the same as outlined above for the NMEs. But the second stage is more critical. If the debt burden for one of these countries becomes so great that it is forced to default on its international borrowing obligations, its capital inflow from international markets would likely dry up.

The question then arises: Without this capital (i.e., credit) inflow, would not imports of food and manufactured goods on which these countries depend cease? Not necessarily. Initial disruptions in trade would occur, of course. But, "collateralized countertrade" trade would take over

(the term seems redundant, yet it emphasizes the tie of goods-to-goods). International trade would continue. It would be more costly in terms of the real resources that would have to be committed by the LDC. Consequently, the volume of trade would decline from what it otherwise would be. But, other things remaining equal (a major concern likely would be political stability), the LDC's economy would continue to engage in international trade.

Importantly, the structure of the relationship between the defaulting country's domestic and international economy would be substantially altered, after default. It can be argued that because the LDC's imports would be tied closely to its transfer of real resources abroad in the form of exports, there would be a strong incentive on the part of the LDC's government to arrange the composition of imports so that they would be tied closely to the support of domestic economic development. In this context, a countertrade framework, in place as a contingency for reducing the external disruption to the international trading system from a major default on international debt by the LDCs, may have merit. Even so it is a costly and inefficient contingency.

New markets and competitive issues. The LDCs and NMEs may also choose to promote countertrade transactions as a means to break into new markets with, for them, nontraditional exports. In the process they attempt to take advantage of the more sophisticated marketing knowledge or the greater name acceptance of the countertrade partner.

Such a transaction may develop as follows: An LDC enters into a counterpurchase agreement to purchase irrigation equipment from a multinational company. The multinational agrees to counterpurchase a specified value of goods from the LDC within three years. However, the goods available for counterpurchase are limited to manufactured goods of a type that the LDC has not traditionally exported but for which it is attempting to build an international market, for example, automotive parts or consumer electronics. Additionally, the LDC only proposes goods for which the multinational company has world-wide markets and marketing knowledge. The multinational's use or marketing of the LDC's nontraditional exports will ease the product's entry into the world market and may add credibility to the LDC's bid to become an exporter of a nontraditional product.

Export firms in industrial countries provide another reason for the increased attractiveness of countertrade. As the various forms of countertrade gain greater acceptance in the marketplace, export firms may use their own willingness to accept countertrade proposals as a key competitive element in transactions. The more successful the export firm is in engaging in and carrying out countertrade transactions, whether through internal expertise or external contacts, the better its position against firms not so endowed when it competes for transactions in which countertrade is a required or desirable condition imposed by the importing country.

The resurgence of bilateralism. The world trade environment has changed dramatically in the post-World-War II period. According to GATT (General Agreement on Tariffs and Trade) estimates, the real volume of trade, as measured by exports, increased nearly ten-fold from 1950 to 1987.[9] During the post-war period, trading nations of the noncommunist bloc completed seven "rounds" of multilateral trade negotiations that were directed toward reducing the number of restrictions on and distortions to international trade.

From the standpoint of multilateral trade, the freeing of international trade in terms of reduced tariff and nontariff barriers has taken great strides during the last three decades. Furthermore, the international community is continuing its efforts towards freeing world commerce from the costly distortions that still stifle the efficiency of international trade transactions. To that end the members of the GATT are currently engaged in the eighth round of multilateral trade negotiations.

Ironically, as the most obvious of the world trade distortions have dissipated over time, other restrictions and distortions that had gone unnoticed—indeed, may have been ineffective when the more onerous restric-

tions were in place—have taken on new importance. Some may not be easily dealt with in a multilateral environment.

The response to this difficult environment has been a resurgence of (regression toward) the bilateral and reciprocal trade agreements common to the late 1930s when governments were attempting to dry themselves out after a binge of protectionism earlier in the decade. In short, the negotiation of conditional trade relationships between two governments has once again become an important element of trade policy. While bilateral arrangements may be more desirable than the continued trade restrictions they displace, they are only partial solutions to the problem.

Unfortunately, bilateral agreements between governments often take on the characteristics of countertrade. Examples include "voluntary marketing agreements" in which one party agrees to restrict the volume of its exports in exchange for the other party's agreement to guarantee a certain level of access to its market. Such marketing agreements—in effect they are quotas—are as trade restrictive and distortive of trade patterns as surely as legislated quotas are. The only ingredient lacking in such voluntary agreements, in terms of the similarity to countertrade, is the transfer of goods or services.

Thus, it can be argued that, while the official position of industrial-country governments in general is to discourage countertrade, the example they set is less than consistent. Indeed, many industrial-country governments directly encourage countertrade offset agreements, especially for military equipment.

The shortcomings of countertrade

1. Countertrade has a high inherent transaction cost.
2. Countertrade limits competitive markets.
3. Countertrade contributes to market distortions that lead to inappropriate economic planning.

Inefficiency in transaction costs. The underlying weakness of countertrade as a mechanism of trade and exchange is its inefficiency. The indivisibility of goods made barter inefficient, for example, and forced those involved with such trade to search for a better way. Barter gave way to goods/services-for-money exchange, which permitted transactions to incorporate divisibility as well as time-shifting. The opportunity for more convenient (i.e., efficient), multiparty trade, became a reality.

A major factor in the expansion of world trade during the last half of the 20th century has been the emergence of a few widely accepted currencies, especially the U.S. dollar, as settlement currencies for international transactions. The development of international credit markets to support trade depended upon the fact that transactions could be entered into without undue concern by the parties involved as to the delivery of the specific quantity and quality of goods and the timeliness of payment. A key characteristic of this type of market is that the channels of communication and exchange are well defined and relatively simple.

As a consequence of this clarity and simplicity, such markets are efficient. Specifically, the direct and indirect costs involved in the process of exchange account for a relatively small portion of the total cost of the transaction.

Such efficiency is not present in the conditional transactions that make up countertrade. The inefficiency cost must be borne by one or more of the parties involved.

Many countertrade transactions are entered into because the importing country is unable to obtain financing in the international markets and is short of hard-currency reserves. The lack of access, or limited access, to the credit markets may be due to restrictions on the country, placed as a condition for specific new lending by the International Monetary Fund (IMF) or foreign commercial banks. In this environment countertrade is sometimes viewed by an LDC government as a means of engaging in trade without the cost of entering the international finance markets.

While it is correct that countertrade may mean that the international financial markets may not have to be tapped, it is not correct to assume that there are no financing costs associated with a countertrade

transaction. In fact, due to the complexity associated with carrying out a countertrade transaction, the cost is higher than if the LDC had had access to those credit markets. Moreover, countertrade may end up subverting the capital and austerity restrictions that in some cases are a part of an IMF/LDC lending agreement.

In countertrade the costs of financing are shifted. They become implicit rather than explicit. The seller may absorb this cost in the form of accepting the obligation to buy and use or resell goods it otherwise would not accept (thus reducing its return on the transaction). Alternatively, the seller may build the transaction's finance costs into the price the buyer must pay. The finance costs are there, though hidden.

Limiting competition. There is another implicit cost when countertrade is required by the LDC or NME buyer as a condition of the transaction. Countertrade limits the potential number of sellers in the market. Not every seller firm is willing or able to engage in countertrade, thus, a LDC or NME buyer that insists on countertrade as part of a trade package limits its potential for obtaining a competitive product, service, or price. The fact is, engaging in countertrade costs the LDC or NME economy more in terms of real resources than a straight commercial transaction.

Market distortions and false signals. Developing countries may not have well developed international marketing facilities. As a result they often find it difficult to break into international markets with goods and services that are nontraditional for their economy.

In other cases an LDC or NME may choose to develop a new domestic industry by buying the technology and plant from abroad. Domestic demand may not be adequate for an efficient plant size. In response, they may opt for a larger, more efficient (but possibly from a world supply view, redundant), plant with the expectation of placing the marginal production on the international market.

Under such conditions counterpurchase or buy-back agreements may be sought by the LDC or NME to finance the importation of plant and equipment for a new industry (as in a buy-back agreement) or general imports (as in a counterpurchase agreement). The LDC or NME also may be seeking a more knowledgeable partner to handle the international marketing of goods for which it does not have the expertise.

The difficulty with this approach is that countertrade may be used to get goods onto the international market that would not "make it" under usual conditions and will not be competitive once the buy-back agreement expires. Further, the industrial country firm that accepted the countertraded goods may dump them, which would be disruptive to international markets. The result may be that the LDC or NME producer may falsely interpret the signals and overestimate the real market demand for the dumped goods as being stronger than a longer-term, unsubsidized, market can bear.

Moreover, the secondary consequences of countertrade transactions are not benign. The inefficiencies of countertrade—the false price signals that result in the building of redundant plant and equipment—tend to promote the establishment of bureaucracies within governments and private firms that have "bought into" countertrade. In turn, these bureaucracies have a vested interest in maintaining the economic distortions that undergird the growth in countertrade.

Summing up

Countertrade is a significant factor in modern international trade. In its different forms it is used as a marketing tool, as a competitive tool, as a tool to restrict trade alternatives, and as a tool to tie the trade of one country to another country. Countertrade in a modern world economy with highly developed goods, capital, and financial markets appears on its face to be an incongruous development. Countertrade is a costly, inefficient, and disruptive anomaly. Yet observers of international trade suggest that the volume of countertrade is growing.

Countertrade takes place in a world of imperfection where government and industrial political and economic policies distort the relationships between and within the goods, capital, and financial markets. Recognizing the imperfections and the limitations these policies impose on trade, some

buyers and sellers conclude that the countertrade framework offers a viable, and even apparently necessary, alternative form of transaction. However, the thought occurs: The recent growth in countertrade may well be a reflection of, as well as a contribution to, the emerging nontariff distortions in the world economy. If the trade and financial distortions currently imposed on the world economy were to be substantially reduced, would not countertrade go the way of the Stone Age hunter?

Footnotes

[1]The term "nonmarket economies" (NMEs) refers to those countries where state central planning performs the function of price and output determination. It refers specifically to the communist bloc countries of Eastern Europe and South East Asia.

[2]Taken to an extreme, a recent article in *Countertrade & Barter* referred to negotiations between Canada and the United States concerning the free trade agreement as follows: "The Canada-US pact, while proving that the high art of horsetrading is very much alive, shows, moreover, that 'free trade' is really nothing more than countertrade elevated to the broadest bilateral ground and injected with a heady dose of political will." "Ultimate Countertrade," viewpoint in *Countertrade & Barter*, No. 16, October/November 1987, p. 7.

[3]Lawrence W. Witt, "Development through Food Grants and Concessional Sales," in *Agriculture in Economic Development*, edited by Carl K. Eicher and Lawrence W. Witt (New York: McGraw Hill), 1964, pp. 339-359.

[4]Hearings on Countertrade and Offsets in International Trade, U.S. Congress, House Subcommittee on International Economic Policy and Trade, Committee on Foreign Affairs, 100th Cong., 1st Sess., June 24 and July 10, 1987, p. 120.

[5]Ibid., pp.138-139.

[6]"Deals," *Countertrade & Barter*, No. 16, October/November 1987, p. 51.

[7]Ronald J. DeMarines, *Analysis of Recent Trends in U.S. Countertrade*, U.S. International Trade Commission, USITC Publication 1237, March 1982, pp. 48-49.

[8]"AWACS-ING Poetic," *Countertrade & Barter*, No. 13, April/May 1987, p. 9.

[9]From *International Trade*, (Annual) General Agreement on Tariffs and Trade, various issues.

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