Guideline Public Company Valuation and Control Premiums:

An Economic Analysis

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Abstract

There is a long running valuation debate regarding whether a control premium should be added to valuation based on guideline public companies because the share prices of the guideline companies represent marketable minority positions. This paper attempts to resolve that debate by developing a more complete economic model to analyze the issue. Based on the economic model, which highlights the potential motives for acquisitions, I conclude that no adjustment for a control premium is required to appraise a company on a current going concern basis. If the goal is to value a company at its highest value use, including as part of another company, then an adjustment to take account of the benefits of synergies, if there are any, is required. However, historical averages of acquisition premiums will overstate the proper adjustment.
1. Introduction

A standard method for appraising a company is to use guideline publicly traded companies as a valuation benchmark. The approach relies on the law of one price which states that similar assets should trade at similar prices. The method proceeds by identifying publicly traded companies deemed comparable to the appraisal target. The market values of the comparables are calculated using the share prices of the public companies. The values of the public companies are standardized by converting them to a multiple of an observable financial variable such as earnings before interest, taxes, depreciation and amortization, EBITDA. The average or median multiple for the group of comparables is then multiplied by the EBITDA of the appraisal target to arrive at an estimate of value.

Because the approach relies on the prices of shares traded in the public market, not on prices observed for corporate control transactions, the outcome is often referred to as a “marketable minority” estimate of value. In some instances, however, the goal may be to estimate the value of the company on a controlling basis. If control has value, then presumably some type of premium should be added to the marketable minority estimate produced by a guideline public company appraisal. The question of how large the premium should be and under what circumstances it should be added has been actively debated in the appraisal literature for decades.

To focus the analysis, only publicly traded companies are considered here. This distinction is important because, as Nath (2011) stresses, if a company is publicly traded then minority investors have control over their investment in the sense that it can be
immediately converted to cash by selling the shares in the open market. This ability to convert shares to cash at an observable price typically does not exist for private companies, a fact that may cause private company shares to trade at a discount. However, that is not the issue considered here. The issue is, whether when valuing a controlling interest in a public company, a premium must be added to the market prices at which minority holdings are traded in the stock market.

Nath makes a further distinction which is useful in light of the analysis to follow. He distinguishes control as an investment attribute - meaning an investor’s ability to convert shares to cash as discussed above - from management control, which is the ability to hire senior managers, oversee corporate operations, and determine whether a company should be sold and, if so, at what price. For all public companies, this second type of control is vested in the board of directors. In some cases, those boards may be elected by a large number of small shareholders and in other cases by a few large shareholders. In either case, however, the goal of the board should be to maximize the value of the outstanding shares. If directors pursue that goal, then transferring control from one board to another should have no impact on value unless the second board can utilize the assets in a way that the first could not. In that case, however, the value creation, and hence the ability to pay a premium, arises not from the transfer of control per se, but from the ability of the acquiring company and its board to more efficiently utilize the assets. This conclusion dovetails with the analysis presented below.
The issue can be illustrated by the “levels of value” diagram developed by Mercer (2007) and Pratt (2008) and reproduced as Figure 1.¹ According to Mercer and Pratt, the lowest level of value is that associated with a marketable minority holding. One level up, financial control represents the benefits associated with control, but without considering synergies that may arise in the context of a control transaction. As discussed below, in the finance literature this is often referred to as the benefit associated with replacing “bad management.” Adding the benefits of any synergies that a buyer could achieve if it had control leads to the top level of strategic control value. An actual transaction potentially involves both benefits of control so the acquisition premium will be the sum of the premiums associated with financial control and synergies as shown in Figure 1.

Many appraisers have taken Figure 1 to imply that if a guideline company valuation is performed the result is a marketable minority estimate of value. If the objective is to estimate the pro rata value of individual shares considered as part of the fair market value² of the total company, including control, Figure 1 apparently implies that an upward adjustment is required to eliminate the implied minority discount.

The distinction between valuation on a marketable minority versus a controlling basis has also come to play an important role in legal analysis. Because a majority of American companies are incorporated in Delaware, Delaware law plays a central role in adjudicating valuation disputes. With respect to control premiums involving publicly

¹ A fourth level of nonmarketable minority value is often added to Figure 1. That level is not considered here because the focus is on publicly traded companies.

² Throughout this article the well-known fair market value definition, as delineated in IRS Revenue Ruling 59-60, is used as the standard of value.
traded companies, two strands of law in Delaware are particularly important. The first is the Delaware appraisal statute which serves as the basis for adjudication of dissenting shareholder suits in mergers and acquisitions. As Matthews (2008) notes, the statute says that “the Court shall determine the fair value of the shares exclusive of any element of value arising from the accomplishment or expectation of the merger or consolidation.” Matthews goes on to observe that under Delaware law no adjustments are permitted for changes that might be made by a new control shareholder and the company must be valued as a going concern with the assets and opportunities it has currently in place. In other words, any synergies that might arise from a corporate control transaction cannot be included in the valuation. Accordingly, if a control premium is to be added to adjust for an implied minority discount, it should only take account of what is referred to in Figure 1 as financial control, not strategic control.

When interested parties are involved in a buyout transaction, the Delaware courts may choose to apply the “entire fairness” test, which is a higher standard. From a valuation perspective, the key part of the test is the fair price standard. As Gilson (1995) explains, the Delaware courts have ruled that when determining whether a price is fair under this standard the analyst must consider all relevant factors that may affect a company's stock value. One of those factors is the added price that a strategic buyer may offer for the firm. This includes the amount that such a buyer would pay for potential synergies.

Because the two standards differ with respect to the treatment of synergies, in the analysis that follows I consider both standards separately.
Figure 1 appears to imply that a controlling interest will always be more valuable than a minority holding. There is also apparent empirical support for the proposition. The majority of corporate control transactions involve the payment of premiums over the unaffected trading price of the target company. But this data can be misleading.

More than twenty years ago Nath (1990, 1994) and Cornell (1992) put forth the argument that control does not have value *per se*. Instead, the value of control arises because it carries with it the potential to take actions not being taken by current board of directors and management and, thereby, create value. If the potential for value creation is great enough, an acquirer will pay the premium necessary to acquire a controlling block of shares. However, as explained below, in the great majority of situations there is no such value associated with a change of control because current board and management are effectively maximizing the value of the company. In these situations, according to Nath and Cornell, the control premium is zero. This is consistent with the observation that only a tiny fraction of all listed companies are takeover targets.

A key development in the debate regarding control premiums was a series of decisions by the Delaware court which ruled that it was appropriate to add a control premium to adjust for the implied minority discount in dissenting shareholder appraisal cases. Matthews (2008) reports that “since 1995, the Chancery Court has added a control premium to offset the IMD (implied minority discount) in a substantial majority of the

\[ \text{\textsuperscript{3}} \] Whatever the motive for a transaction, a premium will generally be required to acquire a sufficiently large number of shares to effectuate a control transaction as long as the demand curves for individual stocks are not perfectly elastic. Evidence offered by Shleifer (1986), among others, indicates that demand curves are not perfectly elastic.
decisions in which it relied on guideline companies. In fact, in every case where petitioner’s expert adjusted for an IMD, the court accepted the concept.” These decisions by the court have been challenged by legal scholars including Booth (2001), Carney and Heimendinger (2003), and Hammermesh and Lawrence (2007) who present arguments similar to those of Nath and Cornell. To date, the issue remains a subject of dispute.

The goal of the current paper is to help resolve the debate by analyzing the control premium issue in the context of a more complete economic model. The economic analysis leads to two important conclusions. First, the analysis implies that under the Delaware appraisal standard a control premium should not be added to a guideline public company valuation. Second, although a premium should be added under the entire fairness standard, the appropriate premium is less than the average acquisition premium observed in historical control transactions.

The analysis proceeds as follows. The next section begins with a simple economic model to provide context for the valuation dispute. The model is then progressively generalized to make it more realistic.

The following section uses the model to examine how the appropriateness of adjusting for an alleged minority discount depends on the motive for an acquisition. It is shown that only under the entire fairness standard is an adjustment required. The third section turns to the question of estimating the appropriate premium required to adjust guideline public company valuations. It is shown that the standard method of relying on an average of past acquisition premiums leads to a significant overestimation of the proper adjustment. The final section concludes and summarizes.

2. A simple economic model
To start, I begin with a simple perfect markets economic model. In this model, the economy is not impinged by random shocks and there is complete information so that all economic agents agree on everything. The combination of certainty and complete information means that all contracts can be perfectly monitored and enforced so that the principle-agent problem disappears. All economic agents, in particular corporate boards and management, do precisely what they promise to do. More specifically, every corporate board takes the proper steps to maximize shareholder value including selling the company if appropriate.

In such an ideal world, control rights over assets would be transferred immediately into the hands of the boards that could use them most productively. Once control rights were properly distributed, the market for corporate control would be in equilibrium and all merger and acquisition activity would cease. In this equilibrium, there would be no valuation distinction, on a pro rata basis, between “minority” holdings and “control” holdings because all corporate assets would be in the hands of the boards and managers who could maximize their value. Individuals would still trade shares to fund their consumption plans, but there would be no motive to transfer control from one board to another. More importantly, from an appraisal standpoint, the total market capitalization of every company would be at its maximum. Each individual share, whether held as part of a large block or not, would have a value equal to the (maximum) value of the company divided by the shares outstanding.

*Adding some uncertainty*

To add an element of realism, assume now that the economy is subject to periodic random shocks. Because of these shocks, it will no longer be the case that corporate
assets always will be in hands of the board that can maximize their value. For instance, a shock may take the form of a technological innovation such as the introduction of the internet browser with rights to that browser initially in the hands of the entrepreneurs who developed the technology. Assuming that those entrepreneurs do not have the financial clout and marketing experience to maximize the value of their innovation, a corporate control transaction will occur and rights to the browser will be transferred to the board of the corporation that values them most highly.

With complete information, however, there will not be meaningful acquisition premiums. Once the technology is developed, every investor will recognize its value and know the identity of the optimal acquirer. For instance in the preceding example, the price of the browser company’s stock will immediately jump to the value of the company to the acquirer except for a small discount sufficient to compensate the acquirer for the costs of completing the acquisition.

This remains a clearly counterfactual world. Indeed, it is the existence of acquisition premiums – pronounced differences between the price at which a transaction occurs and the pre-bid stock price that is at the center of the entire valuation controversy. To explain why control premiums are paid, further elaboration of the model is required.

Incomplete information

The solution to the problem is to allow for the existence of incomplete information. Unfortunately, taking account of incomplete information comes at the cost of significantly increased complexities. Those complexities raise issues that are too often ignored in the valuation literature. Most importantly, incomplete information means that economic agents will no longer have homogeneous beliefs. As a result, it no longer
makes sense to speak of expected cash flows, synergies, or values without reference to
the source of the beliefs. Every forward looking variable, in other words every element
required for a valuation, has to have an added subscript “i” to refer to the beliefs of a
particular economic agent or “m” to refer to market expectations.

Despite this complication, there will be instances in this paper when I will take
the viewpoint of the deity and speak, for instance, of actual future synergies. In a world,
of incomplete information there are not actual future synergies, only perceived future
synergies. Unfortunately, fully accounting for this diversity of viewpoints is beyond the
scope of this paper and generally beyond the scope of economic theory. It is necessary to
take some liberties in order to make the analysis comprehensible.

It is incomplete information that leads to acquisition premiums. The boards of
acquiring firms are willing to approve payment of a premium because they perceive that
the target company is worth more to them than as a stand-alone entity. However, the
willingness of an acquiring board to pay more than the current trading price is not enough
to explain acquisition premiums. It must also be the case that other investors fail to
recognize the value enhancement associated with sale of the target to the acquirer prior to
the first bid. If the other investors recognized the added benefits associated with a change
of control, the price of the target would already reflect the expected acquisition because,
as described in the previous section, the transaction would be anticipated.

Taking account of the impact of incomplete information, research on mergers and
acquisitions has identified five motives for acquisitions. It turns out that the motive for
an acquisition has important implications for whether a premium should be added to a
guideline public companies valuation, so each needs to be examined in some detail.
3. Motives for Acquisitions

Extensive academic research in the 1980s identified five motives for mergers and acquisitions. They are: 1) synergies; 2) market undervaluation of the target; 3) overvaluation of the target by a potential acquirer; 4) bad management of the target company; 5) rent seeking on behalf of the management and the board of the acquiring company. It is important to distinguish the impact of each of these motives because they have different implications regarding whether a premium should be added to guideline valuations and, if so, how much. Those implications differ, furthermore, depending on whether the valuation is conducted according to the Delaware appraisal standard or the entire fairness standard. For clarity, I consider each of the five motives in isolation. Of course, actual transactions can involve a combination of several or all the motives.

Synergies

To analyze synergies, I assume that the synergies perceived by the parties to the transaction do, in fact, exist. As noted earlier, in a world of incomplete information I am taking a privileged viewpoint outside of the model to reach this conclusion. No actual economic agent would know for sure whether or not the synergies were real. Given the existence of synergies, Figure 2 presents a simple schematic of a transaction. Company X is the target with equity value, X, and Company Y is the acquirer with market value, Y. If Y acquires X, the aggregate value of the combination is X+Y+S, where S

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4 An early review of this literature is contained in Jensen and Ruback (1983). A more recent review is offered by Weston, Mitchell and Mulherin (2003).
represents the synergies. These synergies should be broadly interpreted. They include all benefits associated with the transfer of control of corporate assets from the board of one company to the board of another including cost savings, revenue enhancements (such as cross selling), and economies of scale.

In a transaction, the perceived synergies are divided between the target and the acquiring firm with the target receiving the acquisition premium, P, and the acquiring firm receiving the synergies net of the premium, S-P. The division of the value of the synergies between the target and the acquirer depends on factors including the fraction of shares to be acquired, the existence of other potential bidders and targets, and negotiating skills of the executives and boards of the two firms.

Recall that for synergies to explain the existence of significant acquisition premiums, it must be the case that the synergies are recognized only by the acquirer, the target, and perhaps a few other economic agents. If recognition of the synergies is widespread, the market price of the target will impound the benefits associated with the acquisition and the target’s pre-bid price will equal the acquisition value net of the costs of completing the acquisition.

If acquisition premiums reflect payments for synergies that are not already reflected in the stock market price, because they require transfer from control of one board to another to be realized, then whether or not a premium should be added to guideline companies valuation depends on the appraisal standard. If the goal is to value the company on an “as is” operating basis as called for by the Delaware appraisal standard, then a premium related to synergies should not be added to a guideline public

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5 Transactions costs are excluded for simplicity.
company valuation. If the goal is to estimate the greatest value that could be achieved if the firm were sold to the company that values it most highly, as the entire fairness standard appears to require, then a premium associated with the synergies should be added to the guideline public company valuation.

*Market undervaluation of the target firm*

Once again, the analysis begins by taking a perspective outside of the model and assuming that the market does in fact undervalue the target firm and that the board of the acquirer has an unbiased estimate of the extent of that undervaluation. Clearly, most investors do not share the viewpoint of the acquirer or the market price would be higher. Nonetheless, the assumption here is that the acquirer is correct and most of the other market participants are wrong.

Given that assumption, the acquiring board will be willing to offer a price up to the fair market value of the firm, less costs and a fair profit to the acquirer, to purchase the target company. It follows that, if the maximum premium the acquirer would be willing to pay is added to the current market price of the target, the result is a price approaching the price at which the company’s stock should have traded if the market was not misinformed. What adding the premium does is eliminate the undervaluation and, thereby, bring the appraised value of the target company into line with the values of the guideline public companies.

In light of the foregoing, a premium should *not* be added to a valuation based on guideline companies under either the Delaware appraisal or entire fairness standards. Remember that it is only the target company that is assumed to be undervalued, not the guideline companies. Consequently, the guideline companies valuation produces an
estimate of fair market value that exceeds the depressed pre-bid price of the target. Adding a premium to the guideline company value amounts to double counting the impact of the undervaluation. If a premium were to be added, it should be added to the pre-bid price of the target, not the guideline company valuation, to avoid double counting.

It is worth noting that confusion can arise because in an actual transaction a takeover premium will be reported by the data services. However, the reported premium is measured relative to the depressed price of the target company, not the fair prices of the guideline public companies.

*Overvaluation of the target by a potential acquirer*

Another possibility is that the acquirer believes that there are synergies and/or the target company is undervalued, but is in fact incorrect. As Roll (1986) notes, a transaction will result if only one potential acquirer misvalues the target or overestimates future synergies. The framework for analyzing this scenario, which Roll refers to as the “hubris hypothesis for takeovers” is the same as that for synergies. The difference is that the benefit from combination, S, that the acquirer perceives does not, in fact, exist.

Roll observes that the hubris hypothesis can be distinguished from the synergies explanation by examining what happens to the combined value of the target and the acquirer following announcement of an acquisition. The synergies explanation implies that the value of both companies increases – the target by the premium, P, and the acquirer by S-P. Under the hubris hypothesis, S is zero so the value of the acquirer should fall by P.
Based on a comprehensive empirical analysis, Roll finds that the hubris hypothesis is consistent with much of the data on premiums paid in control transactions. Whereas target company values typically rise in response to acquisition bids, it is not uncommon for the value of acquirers to fall. As Aktas, de Bodt and Roll (2010) note, a dramatic example is the Microsoft bid for Yahoo. On announcement of the bid, Yahoo jumped 48%, but Microsoft fell 6.6%. Because the market capitalization of Microsoft was much larger than Yahoo, the combined value of the two companies actually declined consistent with Roll’s hubris hypothesis.

If the hubris hypothesis is correct, the acquisition premium does not reflect true value associated with the target firm, but simply the mistaken beliefs of the misguided board of the acquiring company. Assuming that the goal of an appraisal is to estimate fair market value, adding a premium associated with misguided hubris on the part of an acquirer is not appropriate. For instance, it does not make economic sense to allow shareholders to claim that an existing offer is inadequate because some misinformed acquirer may make a greater offer in the future. This conclusion holds under both the appraisal standard and the entire fairness standard.

**Bad target management**

Bad target management as a motive for takeovers is actually a type of synergy. The synergy arises because a change of control becomes the vehicle for replacing the incompetent board and its appointed managers and, thereby, improving corporate performance. The reason for separately considering bad management is that many authors, including Booth (2001) and Damodaran (2006), argue that the value of control, excluding the value of synergies, is measured appropriately by the benefits obtained from
replacing bad management. For instance, Damodaran (2006), states that, “It is important at this stage that we keep the value of synergy apart from the value of control. The value of control is the incremental value that an acquirer believes can be created by running a target more efficiently.”

Whereas the distinction between the value of synergies and the value of control based on the replacement of inefficient management is clear in theory, its implementation in practice is another story. To solve the problem, Damodaran suggests doing two discounted cash flow analyses. One based on financial projections prepared assuming that the current management remains in place and the other premised on a shift in management to the acquiring firm. These two sets of projections, it is important to stress, differ only with regard to the change in management without exploiting any other synergies. The value of control is the difference between the two valuations.

The problem with Damodaran’s suggestion is that it requires financial projections for the target company based solely on a change in management. Such projections are virtually never available to an appraiser. It is conceivable that Damodaran’s approach could be employed internally by the acquiring firm, but the acquiring firm would hardly make such projections available to anyone else. To the extent that acquiring firms release any projections, they generally reflect the total benefits associated with the transaction, including synergies, not just the impact of replacing bad management. Indeed, one can only imagine the public relations and legal issues associated with releasing a set of projections that solely involves replacing “bad management.” The issues are particularly thorny in a world of incomplete information in which bad management cannot be unambiguously identified.
If the motive of a transaction is solely removal of bad management, then a premium should not be added to a guideline company valuation under either the appraisal or entire fairness standard. Presumably, the persistence of bad management is rare in a competitive economy. Assuming the guideline public companies are typical, the prices of those companies will reflect average management. As a result, the situation is similar to that for market undervaluation. In transactions a premium will be paid, relative to the pre-bid target company price to reflect the benefits associated with removing bad management. However, if that premium is measured with respect to typical guideline public companies which are not badly managed, it will be zero on average. Therefore, adding a premium to a guideline public company valuation amounts to double counting the beneficial impact of removing bad management.

Rent seeking on behalf of the management and board of the acquiring company

When information is incomplete, contracts cannot be perfectly monitored and enforced. As a result, a principal-agent problem emerges. Agents have an incentive to take advantage of incomplete information to pursue their own objectives as well as those of the principal. In the case of corporations, it was recognized early on by Berle and Means (1932) that those in control of a company, that is the board and its appointed senior managers, would have an incentive to pursue their own interests at the expense of shareholders. More recently, Jensen and Meckling (1976) showed that agency costs can significantly impact the management of a corporation. In the realm of mergers and acquisitions, the agency problems arises because there a host of potential ways in which directors and managers can benefit from acquisitions that fail to increase value for
shareholders. These include control over a larger asset base, increased compensation, added access to perks, and greater power and visibility. In pure rent seeking transactions, directors and managers pursue acquisitions that are not intended to enhance, and may even be expected to reduce, shareholder value in order to advance their own interests.

In a management rent seeking transaction, the premium offered to the target firm can be thought of as a tax paid by the shareholders of the acquiring firm for the benefit of the acquiring company’s directors and managers. Because the premium is unrelated to the value of the target firm, it should not be added to a guideline companies valuation under either the appraisal or the enhanced fairness standard.

Summary of motives analysis

The results of the motive analysis are summarized in Table 1. The table shows that with respect to the appraisal standard there is no need to adjust a guideline public company valuation for a control premium no matter what the motive for a control transaction. Under the entire fairness standard, broadly interpreted, an adjustment is required to account for the impact of expected synergies. This leads to the problem of attempting to estimate the proper adjustment. Given currently available data, the solution to that problem is far from straightforward. As shown in the next section, the simple approach of using historical acquisition premiums typically overstates the proper adjustment.

4. Estimating the proper premium for adjusting guideline company valuations

Due to data limitations, many appraisers and courts have taken a short-cut to estimating the “control” premium used to adjust for the implied minority discount. The

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6 See, for example, Jensen (1986) or Shleifer and Vishny (1989).
short-cut equates the control premium with the average difference between the price of the target firm’s stock a specified number of days before the first announcement of a control transaction (the unaffected stock price) and the price at which a deal is consummated. In other words, the control premium is equated to the average acquisition premium. This is convenient because data on acquisition premiums are widely and easily available. Firms including S&P Capital IQ, FactSet MergerStat, and Thomson Reuters SDC Platinum provide electronic data showing acquisition premiums measured relative to the stock price of the target 1-day, 1-week, and 1-month prior to the first public announcement of the transaction.

With respect to the appraisal standard, the short-cut is not conceptually correct. A major component of the acquisition premium is synergies which, according to the appraisal standard, should not be included in a “going concern” valuation. But the problem is more serious than that. Table 1 shows that under the appraisal standard the appropriate adjustment to a guideline public company valuation is zero no matter what the motive for a control transaction. Consequently, adding the historical average acquisition premium will improperly inflate a guideline public company valuation.

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As Schwert (1996) demonstrates, estimating the unaffected stock price can be a complicated exercise because information regarding a possible takeover tends to leak into the market, causing the target company’s stock price to rise. One solution to the problem is to move backward in time and use the stock price of the target well before the announcement of the first bid. The problem with this approach is that the longer the gap between the date the stock price is observed and the first announcement of the transaction, the more difficult it is to adjust for stock price movements unrelated to the transaction. These issues are important, but are not the focus of the current paper, so I assume that the unaffected stock price is chosen properly.
Turning to the entire fairness standard, Table 1 shows that the only difference compared to the appraisal standard is the treatment of synergies. Assuming that the entire fairness standard requires valuation of the target company in its best use, including as part of another company, a guideline public company valuation needs to be adjusted upward to take account of the portion of the synergistic value that the target can expect to realize in a control transaction.

The appropriate adjustment under the entire fairness standard depends on whether the company being valued has already been identified as a takeover target. Consider first the situation where the company is a known target. In that situation, under the entire fairness standard, it is appropriate to add a premium to reflect the portion of the value of the synergies that the selling company can capture. However, the historical average acquisition premium is an overstated measure of the proper adjustment. The problem is that actual transactions will reflect all five motives, possibly in combination, not just synergies. Consequently, the historical average acquisition premium will overstate the required adjustment for three reasons. First, the historical information provided by the data services is the acquisition premium measured with respect to the pre-bid price of the target company. But in the cases of market undervaluation and bad management, the pre-bid target price is depressed compared to the guideline public companies. If the guideline companies, which are not undervalued, are used as the base for calculating the premium, the required adjustment is zero on average. Second, according to the hubris hypothesis, the acquisition premium represents a valuation error on the part of the acquirer. Assuming that the goal of the appraisal is to estimate fair market value, basing the appraisal on the erroneous judgment of an idiosyncratic acquirer is inconsistent with the
informed willing buyer standard of fair market value. Finally, according to the rent seeking hypothesis, the board and management of the acquiring company are willing to pay a premium for the target company for the purpose of increasing their own wealth and power even though no shareholder value is created. If there is no value creation associated with acquisition of the target, then from a fair market valuation standpoint it is inappropriate to adjust a guideline company valuation because the “willing buyer” has a conflict of interest.

These problems could be solved if the motives for transactions could be isolated, but there are no current data that makes that possible. Consequently, the benefits associated with synergies cannot be distinguished from the impact of the other motives, all of which push up observed acquisition premiums. Thus, while it is clear that the average acquisition premium will overstate the benefits that target companies can expect to realize from synergies, given current data limitations there is no way to estimate the precise extent of the bias.

Alternatively, if the company being appraised is not currently the target of a control transaction, there is no reason to assume that the potential synergies associated with its possible acquisition are greater than the potential synergies associated with possible acquisitions of the guideline companies. Because both the target and guideline company stock prices will reflect the same (relatively remote) probability that an acquirer will appear, no adjustment for synergies is required. Therefore, when a transaction is not currently anticipated, none of the motives for an acquisition imply that a premium for control should be added to a guideline public company valuation.
4. Summary and conclusions

This article addresses the long running debate regarding whether guideline public company valuations should be adjusted upward to reflect the value of control, or equivalently whether there is a marketable minority discount. The argument developed here is that the resolution of that debate requires an analysis grounded in an economic model that takes account of the motives for mergers and acquisitions. When the problem is analyzed within that framework, two conclusions emerge depending on the choice of appraisal standard. If the goal of the appraisal is to estimate the fair market value of a company exclusive of added value associated with synergies that may be realized in a control transaction, the analysis implies that no upward adjustment of a guideline public company valuation is required to account for control. On the other hand, if the goal is to estimate the maximum value that could be obtained, including any additional value from synergies associated with a sale of the company, then an adjustment to take account of the value that could be realized from synergies is required. However, the appropriate adjustment is less than the historical acquisition premiums observed in precedent transactions. Premiums in precedent transactions may reflect motives for the acquisitions in addition to synergies – motives for which an adjustment to a guideline public company valuation is inappropriate. As a result, if the adjustment is based on historical acquisition premiums, the estimated value of the target company will be overstated.
REFERENCES

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Figure 1
Levels of Value

Strategic Control Value

Financial Control Value

Marketable Minority Value

Premium associated with synergies

Control premium without synergies

Acquisition Premium
Figure 2

Sharing of Synergies in a Control Transaction

- Company X
  The target

- Company Y
  The acquirer

Premium, $P$, to target shareholders

Merged Company
$X + Y + S$ (synergies)

$S - P$ to the acquiring company
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