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# Acquihiring for Monopsony Power

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# ACQUIHIRING FOR MONOPSONY POWER\*

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ABSTRACT. It is often argued that startups are acquired for the sole purpose of hiring specialized talent. We show that the goal of such *acquihires* might be to shut down the most relevant labor market competitor. This grants the acquirer monopsony power over specialized talent. As a consequence, acquihiring may harm employees and be socially inefficient. We explore the robustness of these effects, allowing for private benefits associated with working at a startup, varying bargaining protocols, multiple employees with and without complementarities, and private information.

KEYWORDS: Acquiiring, acquisitions, monopsony power, specialized labor markets, competition policy.

*JELCodes* : J42, L13, M12

## 1. INTRODUCTION

Following Cunningham, Ederer, and Ma (2021), the notion of killer acquisitions has spurred a literature and entered the lexicon of both academics working in industrial organization and also policy-makers and commentators, especially in the context of big tech.<sup>1,2</sup> A killer acquisition prototypically entails shutting down the acquired firm’s projects, and reduces or eliminates product-market rivalry. Industry members and observers have argued that such acquisitions are motivated not by a desire to “kill” product market competition but instead reflect big firms’ hiring strategies.<sup>3</sup> Perhaps most famously, in 2010 Mark Zuckerberg claimed that “Facebook has not once bought a company for the company itself. We buy companies to get excellent people” (Hindman, 2010) and more broadly, skilled labor is central in the

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<sup>1</sup>Cunningham, Ederer, and Ma (2021) present evidence from pharmaceutical drug development. For empirical evidence on acquisitions in the tech sector, see Affeldt and Kesler (2021a,b), Ederer and Pellegrino (2023), Eisfeld (2022), Gautier and Lamesch (2021), Gugler, Szücs, and Wohak (2023), Jin, Leccese, and Wagman (2022), and Prado and Bauer (2022).

<sup>2</sup>There is a nascent theoretical literature on startup acquisitions, including Benkert, Letina, and Liu (2023), Cabral (2021, 2023), Fumagalli, Motta, and Tarantino (2020), Katz (2021), Letina, Schmutzler, and Seibel (2023), and Motta and Peitz (2021).

<sup>3</sup>See, for example, Barnett (2023).

tech sector.<sup>4</sup> The phenomenon of buying a small firm to acquire talent has been sufficiently established that the term “acq-hiring” or “acqui-hiring” has been in use since at least 2005 (Zimmer, 2010). More broadly, a literature notes that large firms might buy small firms primarily to obtain technical knowledge and capabilities.<sup>5</sup>

In this paper, we examine such acquihiring by supposing that when a large firm buys a small firm it has no interest whatsoever in the smaller firm’s patents, products, or technology; instead, it is only interested in the smaller firm’s specialized labor force. A fundamental puzzle in this case is why the larger firm should pay anything to the small firm’s shareholders (typically including venture capitalists) rather than paying only to hire the specialized talent. We propose a resolution to this puzzle. In doing so, we determine when and why large firms use acquihiring rather than direct hiring. In this way, we trace through both the extent to which this rationale for acquisition is plausible, and its implications for large firms, startups, and workers.<sup>6</sup>

We show that acquihiring allows the large firm and shareholders in the small firm to expropriate employees’ surplus. Thus, while an oft-mentioned concern regarding large tech firms buying small firms is the potential for such deals to reinforce monopoly power in the product market, we argue instead that acquihiring can be understood as a means of bolstering monopsony power in the specialized labor market. Thus, we suggest that the most common “defense” of acquihiring, that it is a hiring tool not meant to affect the product market, can itself be seen as a means of reducing competition *in the labor market*. Consequently, such behavior might be socially destructive (that is, acquihiring takes place even though maintaining the small firm and keeping workers there might be socially preferred).

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<sup>4</sup>A recent prominent example is the case of OpenAI, where Sam Altman was fired as CEO but concerns over staff retention led not only to the decision being reversed but also forced the resignation of OpenAI’s board. See <https://www.pbs.org/newshour/nation/sam-altman-reinstated-as-openai-ceo-with-new-board-replacing-the-one-which-fired-him> and <https://www.pbs.org/newshour/nation/sam-altman-reinstated-as-openai-ceo-with-new-board-replacing-the-one-which-fired-him> (retrieved on January 2, 2024).

<sup>5</sup>See, for instance, Arora, Fosfuri, and Gambardella (2001), Coff (1999), Puranam, Singh, and Zollo (2006), Ranft and Lord (2000, 2002); and on acquihiring more specifically, Chatterji and Patro (2014); and in the tech sector Ouimet and Zarutskie (2020), and Younge, Tong, and Fleming (2015).

<sup>6</sup>The literature including Coyle and Polsky (2013) and Nolan (2016) has proposed, and sometimes dismissed, alternative explanations for acquihiring. Coyle and Polsky (2013) informally discuss a solution based on social norms and informal sanctions. Other, seemingly natural, explanations include the difficulty in hiring a team, or the tax advantage of capital gains relative to employment income. However, teams of specialized workers are regularly hired directly, as documented in Groysberg and Abrahams (2007) and Marx and Timmermans (2017) and references therein; further, Boyacıoğlu, Özdemir, and Karim (2023) note that more than 20% of acquihired teams are broken up and integrated into the new firm rather than retained as a team. Moreover, the legality of tax shifting is questionable and may involve significant payment to investors who would not require compensation under direct hiring. Other explanations include that a founder with a relatively unsuccessful startup may save face by selling it. In the economics literature, Benkert, Letina, and Liu (2023) consider acquihiring for talent hoarding but do not allow for direct hiring.

Our analysis is predicated on the assumption that markets for specialized talent are thin: although workers may be productive at many firms, their *full* productive value can be unlocked only by a small number of firms.<sup>7</sup> At the same time, such knowledge workers are often invested and take pride in their employer’s mission and see their work at the “right” employer as a vocation.<sup>8</sup> Together, this suggests that there are only a small number of relevant employers, which may vary in their ability to fully harness a worker’s productive value and in their innate appeal to that worker.

In our baseline model, an employee enjoys her private benefits only at a startup but may have greater productive value at the acquirer. The acquirer may try to poach the employee directly (direct hiring) or first acquire the startup and then make a wage offer (acqui-hiring). We show that even though acqui-hiring requires compensating the startup for the loss of its business, the acquirer always prefers it to direct hiring. Under direct hiring, the employee continues to enjoy her private benefit, either directly by staying at the startup or indirectly through a higher wage at the acquirer. By contrast, acqui-hiring does not compensate the employee for her lost private benefit. In a sense, acqui-hiring involves the startup and the acquirer conspiring to expropriate the value of the employee’s private benefit.

As a result of the elimination of labor market competition, the employee is worse off under acqui-hiring. Surprisingly, the arrival of an acquirer (a competitor for the employee’s labor) can make the employee worse off.<sup>9</sup> Moreover, acqui-hiring can lead to an inefficient allocation since the acquirer and the startup do not internalize the employee’s private benefit.

Although private worker benefits play a key role in our baseline model, we show in a generalization that they are not required for acqui-hiring to arise nor for acqui-hiring to be inefficient and harmful to workers. In the absence of private benefits, the inefficiency involves employment at the firm with lower productive value. In this generalization, the novel economic force is the acquirer’s threat to attempt to poach the employee after a failed acquisition, which drives down the acquisition price and induces acqui-hiring even when it is inefficient. This force relies on and highlights an asymmetry in this setting reflecting market realities: the acquirer can remove a labor market competitor by acquiring the startup. By contrast, no similar strategy is feasible for a (small) startup that wants to remove the (big tech) acquirer as a labor market competitor.

In this generalization, and in extensions of the baseline model, we explore the impact of different bargaining protocols, multiple employees with and without complementarities, and

<sup>7</sup>In particular, competition with other potential acquirers would therefore dampen a firm’s desire to acqui-hire—in contrast to Benkert, Letina, and Liu (2023), for example.

<sup>8</sup>See, for example, Wiggli (2022) or the desire of the fictional Richard Hendricks in HBO’s *Silicon Valley* not to sell out to Hooli.

<sup>9</sup>Byford and Gans (2014) provide another example in which potential competition has unexpected results—the threat of potential competition raises prices. Their setting and mechanism is quite distinct from ours.

private information. These allow us to make more nuanced predictions on when acquiring occurs, and confirm that there may be socially excessive acquiring that harms employees.

The empirical literature on acquiring is developing. So far, it provides the following stylized facts: acquires are often relatively small deals, both in terms of value and number of workers, and workers who enter a firm through acquisition remain a while but for less than those directly hired. In particular, Chatterji and Patro (2014) by investigating press releases and through internet searches identify 98 tech acquires in the period 2009-2013, noting that an average deal involves around six workers, 90% of whom stay at the acquiring firm for more than a year and the 10th and 90th percentile transaction is 2.5 to 7.5 million dollars. This finding is consistent with our extension to multiple workers in Section 5, where we show that acquiring is more likely when the target firms are small.

Ng and Stuart (2022) and Kim (2020) study tech startups and draw on LinkedIn data and US Census data, respectively. Both compare the employment outcomes of workers who join a firm via acquisition to those hired directly. Ng and Stuart (2022) find that acquired employees stay for 1.75 years whereas comparable matched direct hires stay for 3.1 years. Kim (2020) finds that differences in tenure tend to manifest only after a couple of years but that over three years directly hired workers are 15% more likely to still be employed. Taken together, these papers suggest that acquired workers do indeed stay at the acquiring firm for a substantial period, though directly hired workers stay longer. Viewed through the lens of our analysis, the latter finding may reflect that workers with large private benefits at small startups are more likely to be hired through acquisition rather than directly, and so may be more likely to depart for a new startup in the future.

## 2. THE BASELINE MODEL

We consider a model with three players, a startup ( $s$ ), an employee ( $e$ ), and a potential acquirer ( $a$ ).<sup>10</sup> The employee is essential for the startup running its enterprise: with  $e$  in place,  $s$  generates a value of  $v_s$ . If instead, the employee works for the acquirer, she generates a value of  $v_a$ . When working at  $i = a$ ,  $s$ , the employee gets a wage  $w_i \geq \underline{w}$ ; when working at  $s$ , she gets an additional private benefit of  $b > 0$ . The private benefit  $b$  may reflect that knowledge workers in startups are often invested and take pride in their employer’s mission and see their work at the “right” startup as a vocation.<sup>11</sup> It may also include the excitement, opportunities, work environment, and status associated with working in a non-hierarchical

<sup>10</sup>One may think of  $s$  as representing venture capital or other investors with control rights.

<sup>11</sup>For example, the co-founders of WhatsApp walked away from hundreds of millions of dollars because they disagreed with the acquirer, Facebook, on privacy issues. See <https://amp.theguardian.com/technology/2018/apr/30/jan-koum-whatsapp-co-founder-quits-facebook> and <https://www.forbes.com/sites/parmyolson/2018/09/26/exclusive-whatsapp-cofounder-brian-acton-gives-the-inside-story-on-deletefacebook-and-why-he-left-850-million-behind/?sh=7aa6cef23f20> (retrieved on January 2, 2024).

and innovative company for which the employee is essential. Throughout we assume that  $\min\{v_a, v_s\} > b + \underline{w}$ .

The acquirer has two options to hire the worker. First, it can attempt to directly hire (or poach) the worker from the startup. Second, it can attempt to acquire by acquiring the startup and then hiring the worker. Acquiring the startup itself does not confer any benefits on the acquirer over and above the value generated by the employee,  $v_a$ .

The timing is as follows. First,  $a$  decides whether to engage in direct hiring or acquiring. Second, if direct hiring is chosen,  $a$  and  $s$  simultaneously make wage offers  $w_a$  and  $w_s$ , respectively, and  $e$  then chooses which offer to accept. If instead acquiring is chosen,  $a$  first makes a bid for the startup,  $p$ ; if  $s$  accepts,  $a$  makes a wage offer  $w_a \geq \underline{w}$ ; otherwise,  $s$  makes a wage offer  $w_s \geq \underline{w}$ .<sup>12</sup>

### 3. ANALYSIS

We now turn to the equilibrium analysis of our baseline model. Suppose the acquirer has chosen to attempt hiring the employee directly. As the startup is willing to pay up to  $v_s$  to retain the employee, and the employee enjoys the private benefit  $b$  only at the startup, direct hiring is successful only if  $w_a \geq v_s + b$ . Similarly, as the acquirer is willing to pay up to  $v_a$ , the following is immediate.<sup>13</sup>

**Lemma 1.** *Suppose the acquirer chooses direct hiring. Then, in the continuation equilibrium,*

- if  $v_a > v_s + b$ , the acquirer hires the employee at wage  $w_a = v_s + b$ ;
- if  $v_a < v_s + b$ , the startup retains the employee at wage  $w_s = v_a - b$ .

*The resulting outcome is efficient in that it maximizes total surplus.*

Now suppose instead that the acquirer has chosen acquiring. By declining the offer, the startup is able to retain the employee at wage  $\underline{w}$  and make a net profit of  $v_s - \underline{w}$ . To acquire the startup,  $a$  will thus have to bid at least  $v_s - \underline{w}$ . If  $a$  succeeds with the acquisition, it must pay  $\underline{w}$  to keep the employee. The following is immediate.

**Lemma 2.** *Suppose the acquirer chooses acquiring. Then, in the continuation equilibrium,*

- if  $v_a > v_s$ , the acquirer offers  $p = v_s - \underline{w}$  for the startup, the offer is accepted, and the employee is hired by the acquirer at wage  $\underline{w}$ .
- if  $v_a < v_s$ , the acquirer offers  $p = v_a - \underline{w}$  for the startup, the offer is declined, and the employee is retained by the startup at wage  $\underline{w}$ .

<sup>12</sup>We consider the case in which the acquirer can engage in direct hiring after a failed acquisition in Section 4.

<sup>13</sup>Throughout we focus on equilibria in undominated strategies in which a firm does not bid more than its willingness to pay.

The resulting outcome is efficient if  $v_a \geq v_s + b$  or  $v_a < v_s$ , and inefficient if  $v_s < v_a < v_s + b$ .

Comparing the acquirer's payoffs from direct hiring and acquihiring yields the following result.

**Proposition 1.** *If the acquirer hires the employee, which happens when  $v_a > v_s$ , then it does so through acquihiring. However, the employee always prefers direct hiring.*

*Proof.* From Lemma 1, the acquirer's payoff from direct hiring is given by  $\max\{0, v_a - v_s - b\}$ . From Lemma 2, the acquirer's payoff from successful acquihiring is  $v_a - \underline{w} - p = v_a - \underline{w} - (v_s - \underline{w}) = v_a - v_s$ , which is strictly larger than  $\max\{0, v_a - v_s - b\}$ , because  $v_a > v_s$  (which must be the case for acquihiring to be successful) and  $b > 0$ .

Under direct hiring, the employee gets a payoff of  $v_s + b$  if  $v_a \geq v_s + b$  and  $(v_a - b) + b = v_a$  otherwise. Under acquihiring, she gets only  $\underline{w} < \underline{w} + b < \min\{v_s + b, v_a\}$ . ■

Acquihiring arises whenever the employee is more productive at the acquirer than at the startup. However, it is inefficient when  $v_a < v_s + b$ . This means that for acquihiring to be inefficient requires that the difference in the employee's productivity at the two firms is smaller than the employee's private benefit at the startup,  $v_a - v_s < b$ . When this condition holds, in the absence of acquihiring, the worker would be retained at the startup, enjoy a higher wage, and reap her private benefit.

The employee prefers direct hiring over acquihiring.<sup>14</sup> Furthermore, she is made worse off by the acquisition. The reason is that, following the acquisition, the employee earns  $\underline{w}$  and does not get any private benefit, whereas in the absence of the acquirer she would get a payoff of  $\underline{w} + b$ .

Direct hiring entails intense competition for the employee, leading to a high wage. Moreover, for the acquirer to successfully poach the employee, its wage offer must compensate the worker for the loss in the private benefit,  $b$ , resulting in a wage of  $v_s + b$ . By contrast, successful (or failed) acquihiring allows the firm hiring (or retaining) the employee to act as a monopsonist and pay only  $\underline{w}$ . Acquihiring can thus be seen as a tool for expropriating the employee. Of course, the acquirer has to pay the startup a price for its acquisition, corresponding to the profit that it would earn if it turned down the offer,  $v_s - \underline{w}$ , but it does not need to compensate the worker for the loss of her private benefit,  $b$ , paying a wage of only  $\underline{w}$  and leading to a total expenditure of  $v_s$ .<sup>15</sup>

<sup>14</sup>This is consistent with the finding that employee turnover rates increase following an acquisition (Kim, 2020; Loh, Khashabi, Claussen, and Kretschmer, 2019; Ng and Stuart, 2022). Kim (2020) argues that employees have no control and may have little knowledge regarding an acquisition, highlighting the example of Eric Jackson, who in his book "The Paypal Wars" describes his state of shock at finding out about the deal on CNBC's breaking news.

<sup>15</sup>If private benefits were absent,  $b = 0$ , the acquirer would be indifferent between acquihiring and direct hiring. Acquihiring would not be inefficient if it were to take place but would make the employee worse off.

The potential inefficiency arises here because the worker cannot pledge to accept a lower wage than  $\underline{w}$  in return for remaining at the startup and enjoying her private benefit,  $b$ . An alternative assumption is that the employee would no longer enjoy her private benefit at the startup at a wage below  $\underline{w}$ .<sup>16</sup>

This discussion suggests that for acquihiring to arise, both private benefits and a lower bound on wages must be present. Below, we present extensions of the model that highlight that acquihiring can arise even in the absence of these features, and remains an inefficient means of expropriating employee surplus.

#### 4. BARGAINING OVER THE ACQUISITION PRICE

In this section, we consider a generalization of our baseline model where the acquirer and the startup engage in bargaining over the acquisition price. We extend the model in two ways. First, rather than the acquirer making a take-it-or-leave-it bid for the startup, we now assume Nash bargaining where the acquirer has bargaining power  $\alpha$ . Second, rather than assuming that the acquirer disappears following a failed bid, we allow the acquirer to engage in direct hiring with probability  $\delta$ .<sup>17</sup> Note that this collapses to our baseline model at  $\alpha = 1$  and  $\delta = 0$ .

As we show, this generalization can make acquihiring even more attractive for the acquirer. In particular, when the acquirer has a lot of bargaining power ( $\alpha$  large) and can credibly threaten the startup with fierce competition for the employee in case of a failed acquisition ( $\delta$  large), the acquisition price will be low. As a consequence, even when the employee does not enjoy any private benefit at the startup,  $b = 0$ , the acquirer may now strictly prefer to acquihire, and acquihiring may be inefficient.

If the acquirer chooses to engage in direct hiring, the analysis is exactly as in the baseline, and Lemma 1 applies. If the acquirer chooses to engage in acquihiring but acquihiring does not take place, then with probability  $\delta$  the ensuing subgame involves direct hiring, with the outcome as described in Lemma 1, whereas with the remaining probability the worker is retained by the startup at wage  $\underline{w}$ . In the event that acquihiring fails, denote the continuation payoffs (and, hence, the bargaining threatpoints) of the acquirer and startup by  $t_a$  and  $t_s$ , respectively. If bargaining over the acquisition price succeeds, this generates a joint payoff for the two firms of  $v_a - \underline{w}$ . Nash bargaining implies that the acquisition occurs whenever

<sup>16</sup>There are several reasons why this may be the case; for example, the employee might find herself less able to enjoy the private benefits when she is too poor; a lower wage may lead her to feel undervalued, or change the way that she feels the startup perceives her, and so on. Moreover, one might reasonably think of  $\underline{w}$  as determined when the worker was originally hired at the firm and reflecting competition from alternative employers; nominal wage rigidity ensures that this remains a floor on future wages.

<sup>17</sup>Alternatively, this probability can be thought of as reflecting delay and discounting.



the surplus  $v_a - \underline{w} - [t_a + t_s]$  is positive, and determines how this surplus is split. We obtain the following counterpart to Lemma 1.

**Lemma 3.** *Suppose the acquirer chooses acquihiring. Then, in the continuation equilibrium,*

- *if  $v_a > v_s + b$ , the acquirer makes an offer for the startup which is accepted, and the employee is hired by the acquirer at wage  $\underline{w}$ .*
- *if  $v_a < v_s + b$ , no acquisition takes place when  $v_s + \delta(b + \underline{w}) > (1 + \delta)v_a$ . Instead when  $v_s + \delta(b + \underline{w}) < (1 + \delta)v_a$ , the acquirer makes an offer for the startup which is accepted, and the employee is hired by the acquirer at wage  $\underline{w}$ .*

*Proof.* Suppose first that  $v_a > v_s + b$ . Using Lemma 1, we have  $t_a = \delta[v_a - (v_s + b)]$  and  $t_s = (1 - \delta)(v_s - \underline{w})$ . Hence,  $t_a + t_s = (1 - \delta)(v_s - \underline{w}) + \delta[v_a - (v_s + b)]$ , which is strictly smaller than  $v_a - \underline{w}$ , implying that there is agreement over an acquisition price. The acquisition price  $p$  (which is also  $s$ 's payoff) is given by

$$\begin{aligned} t_s + (1 - \alpha)[v_a - \underline{w} - (t_a + t_s)] &= \alpha t_s + (1 - \alpha)[v_a - \underline{w} - t_a] \\ &= \alpha(1 - \delta)(v_s - \underline{w}) + (1 - \alpha)[v_a - \underline{w} - \delta[v_a - (v_s + b)]] \\ &= \alpha(1 - \delta)(v_s - \underline{w}) + (1 - \alpha)[(1 - \delta)v_a - \underline{w} + \delta(v_s + b)] \\ &= [\alpha(1 - 2\delta) + \delta]v_s + (1 - \alpha)(1 - \delta)v_a - (1 - \alpha\delta)\underline{w} + (1 - \alpha)\delta b. \end{aligned}$$

The acquirer's payoff in this case is given by  $v_a - \underline{w} - p$ , which can be written as

$$v_a - \underline{w} - p = [\alpha(1 - \delta) + \delta]v_a - \alpha\delta\underline{w} - [\alpha(1 - 2\delta) + \delta]v_s - (1 - \alpha)\delta b$$

Suppose, second, that  $v_a < v_s + b$ . Using Lemma 1, we have  $t_a = 0$  and  $t_s = (1 - \delta)(v_s - \underline{w}) + \delta[v_s - (v_a - b)]$ . Hence,  $t_a + t_s = (1 - \delta)(v_s - \underline{w}) + \delta[v_s - (v_a - b)]$ , implying that the acquisition takes place when  $(1 + \delta)v_a > v_s + \delta(b + \underline{w})$ . If it does, the acquisition price  $p$  is

$$\begin{aligned} t_s + (1 - \alpha)[v_a - \underline{w} - (t_a + t_s)] &= (1 - \delta)(v_s - \underline{w}) + \delta[v_s - (v_a - b)] \\ &\quad + (1 - \alpha)[(1 + \delta)v_a - v_s - \delta(b + \underline{w})] \\ &= \alpha v_s + (1 - \alpha - \alpha\delta)v_a + \delta\alpha b - (1 - \alpha\delta)\underline{w} \end{aligned}$$

Again, the acquirer's payoff is given by  $v_a - \underline{w} - p$  where  $p$  is the acquisition price in this case, which can be written as

$$v_a - \underline{w} - p = \alpha[(1 + \delta)v_a - v_s - \delta(b - \underline{w})].$$

■

It can easily be verified that when an acquisition takes place, the acquisition price  $p$  is not only decreasing in the bargaining parameter  $\alpha$  but also in the probability of direct hiring following a failed acquisition,  $\delta$ . Indeed, the more likely is the prospect of rent-dissipating

competition for the employee after a failed acquisition, the lower is the acquisition price that the startup is willing to accept.

Now consider the earlier stage where the acquirer chooses whether to initiate the process by first attempting an acquisition or instead by proceeding immediately to direct hiring. Comparing the profits associated with each option yields the following result.

**Proposition 2.** *Suppose  $0 < \alpha\delta < 1$ . Then, the acquirer hires the employee through direct hiring if  $v_a > \bar{v}_a$ , where*

$$\bar{v}_a \equiv v_s + b + \frac{\alpha}{(1-\alpha)(1-\delta)}[\delta(v_s - \underline{w}) + b] > v_s + b,$$

*and through acquihiring if  $\underline{v}_a < v_a < \bar{v}_a$ , where*

$$\underline{v}_a \equiv \frac{v_s + \delta(\underline{w} + b)}{1 + \delta} < v_s.$$

*No hiring occurs if  $v_a < \underline{v}_a$ . The employee always prefers direct hiring over acquihiring.*

*Proof.* Suppose, first, that  $v_a \geq v_s + b$ . From Lemma 1, the acquirer earns a payoff of  $v_a - v_s - b$  when hiring directly and, as in the proof of Lemma 3, a payoff of  $[\alpha(1-\delta) + \delta]v_a - [\alpha(1-\delta) + \delta(1-\alpha)]v_s - \alpha\delta\underline{w} - (1-\alpha)\delta b$  when engaging in acquihiring. Comparing the two, yields that direct hiring is preferred when

$$v_a > v_s + b + \frac{\alpha}{(1-\alpha)(1-\delta)}[\delta(v_s - \underline{w}) + b] \equiv \bar{v}_a.$$

Note that the expression on the right-hand side of this equation, which we define as  $\bar{v}_a$ , is larger than  $v_s + b$ , implying that direct hiring is indeed preferred if  $v_a$  is larger than  $\bar{v}_a$ .

Suppose, second, that  $v_a < v_s + b$ . From Lemma 1, the acquirer would fail to hire if attempting to hire directly but following Lemma 3 would profitably acquihire when  $v_a > [v_s + \delta(b + \underline{w})]/(1 + \delta) \equiv \underline{v}_a$ .

Finally, to see the last assertion, note that the worker's payoff is  $\underline{w}$  under acquihiring, whereas it is at least  $\underline{w} + b$  under direct hiring. ■

There are several features of this result that deserve comment. First, in contrast to the baseline model, the acquirer might prefer to hire directly rather than engage in acquihiring. This is unsurprising: if the surplus associated with acquihiring is split through the bargaining process, so that the startup captures much of the surplus under acquihiring, the acquirer may prefer to hire directly instead. The following result shows how the choice between the two modes of hiring is affected by the bargaining power parameter,  $\alpha$ .

**Corollary 1.** *Acquihiring is more likely, and direct hiring less likely, to occur, the larger is the acquirer's bargaining power,  $\alpha$ :  $\bar{v}_a$  is strictly increasing in  $\alpha$ , while  $\underline{v}_a$  is independent of*

$\alpha$ . In the limit, if hiring occurs it is always through acquihiring:

$$\lim_{\alpha \rightarrow 1} \bar{v}_a = \infty.$$

Second, the acquirer's threat to engage in fierce competition for the worker in case of a failed acquisition drives down the acquisition price to such a low level that the acquirer might engage in acquihiring even when it would not find it worthwhile to hire the worker directly. As the following result shows, this means that acquihiring becomes more attractive as the probability of direct hiring after a failed acquihire goes to one. In the limit, the acquirer will always prefer acquihiring over direct hiring; this holds independently of the division of bargaining power.

**Corollary 2.** *Acquihiring is more likely, and direct hiring less likely, to occur, the larger is the probability of direct hiring after a failed acquihire,  $\delta$ :  $\bar{v}_a$  is strictly increasing in  $\delta$ , while  $\underline{v}_a$  is strictly decreasing in  $\delta$ . In the limit, if hiring occurs it is always through acquihiring:*

$$\lim_{\delta \rightarrow 1} \bar{v}_a = \infty.$$

The mechanism underlying this result also highlights an asymmetry in the model that mirrors the one between big tech acquirers and small startups. Acquihiring can be thought of as paying a competitor not to engage in competition for the employee (where, of course, the price of doing so depends on the nature of the bargaining game) but it is only the acquirer who, through acquisition, can prevent the startup from competing for the worker. By contrast, the startup has no means to ask the acquirer to credibly agree not to compete for the worker in the future.<sup>18</sup>

Third, consider the impact of a change in the private benefit  $b$  on the acquirer's decision of whether and how to hire the employee. For example, one may consider concerns over big tech as inducing a higher status associated with working at the startup. An increase in  $b$  leads to an increase in the acquisition price  $p$ , as can be seen in the proof of Lemma 3. The reason is that, as  $b$  increases, the startup can offer a lower wage under direct hiring in case acquihiring fails and so requires a greater compensation. This increase in the acquisition price implies that acquihiring becomes relatively unattractive compared to no hiring ( $\underline{v}_a$  is increasing in  $b$ ). However, since direct hiring occurs only probabilistically after a failed acquisition, the acquisition price does not increase at the same rate as the wage under direct hiring. This implies that acquihiring becomes more attractive compared to direct hiring ( $\bar{v}_a$  is increasing in  $b$ ).

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<sup>18</sup>Indeed, about 15 years ago, big tech giants such as Apple, Google, Intel and Adobe agreed not to poach employees from each other while continuing to poach talent from smaller tech firms. These no-poaching agreements were later discovered and deemed illegal and big tech had to pay \$415 million in fines; see, for instance, <https://www.cnet.com/tech/tech-industry/apple-google-others-settle-anti-poaching-lawsuit-for-415-million/> (retrieved on November 22, 2023).

Fourth, note that, here, whenever the acquirer brings in the employee through direct hiring, this is efficient (that is  $v_a > v_s + b$ ). However, acquirhiring can be inefficient. In the baseline model, this inefficiency relies on private benefits at the startup. In this extended model this is not required. That is, even when the employee earns no private benefits from working at the startup ( $b = 0$ ), acquirhiring can still occur although the employee is more productive at the startup ( $v_s > v_a$ ). Indeed, we have  $\underline{v}_a < v_s$ , no matter how small is  $b$ .

This can be illustrated by comparing the baseline model with no private benefits (where  $\alpha = 1$  and  $\delta = 0$ , and  $b = 0$ ) to the extreme case where the acquirer is always present as a labor market competitor ( $\alpha = 1$  and  $\delta = 1$ ). With no private benefits, productive values are the only source for inefficiency. In the baseline model where  $v_a < v_s$ , as in Lemma 2 the acquisition price offered is  $v_a - \underline{w}$  but the startup declines the offer, and retains the worker at a wage of  $\underline{w}$ . Instead when the acquirer is always present in case the startup turns down the opportunity of acquisition, the startup must still compete with the acquirer and so retains the worker at the (higher) wage of  $v_a$  (recall that there are no private benefits in this example). As a consequence, the acquirer can offer a lower acquisition price of only  $v_s - v_a$  which will be accepted (and allow the acquirer to earn profits of  $v_a - (v_s - v_a) - \underline{w}$ ). Since these profits can be positive even though  $v_a < v_s$ , inefficient acquirhiring can arise—in this case because the threat of labor market competition drives down the acquisition price.

Finally, as in the baseline model, when an acquisition takes place, this creates monopsony power over the employee, who is worse off than under direct hiring and indeed (when there are private benefits to working in a startup) is worse off than she would be in the absence of the acquirer. This is consistent with apparent dissatisfaction of many startup employees on finding their employer acquired.<sup>19</sup> Of course, to the extent that a founder may both earn a wage and earn a partial share in proceeds from a sale, founders may be more sanguine about the prospect of an acquirhire—all the more so the higher the share of the bargaining surplus that the startup earns as a result of the sale (that is the lower is  $\alpha$ ).

One might wonder whether our result that acquirhiring harms employees would change if the employee held an equity stake in the startup. As we argue in Section 7, the answer is no, unless the equity contract confers a form of control rights and not just a share of the startup's value.

## 5. MULTIPLE WORKERS

Our analysis so far considers the case of a single employee. In practice, even though target firms are small, they employ several workers who often function as a team. Indeed, Chatterji

<sup>19</sup>See Footnote 14. Kim (2020) excludes founders in the analysis but notes case study evidence showing that decisions may reflect idiosyncratic founder preferences (Graebner and Eisenhardt, 2004; Graebner, Eisenhardt, and Roundy, 2010).

and Patro (2014) note that an average deal involves around six workers. In this section, we therefore consider two extensions of the baseline model that involve multiple workers. In the first, workers make independent contributions to overall value creation. This allows us to explore how the decision to acquire depends on the size of the startup. In the second, workers need their teammates to be productive, that is, their contributions are complementary, which changes the nature of direct hiring.

**5.1. Workers Independent in Production.** Suppose now that the startup has  $n_s$  employees, each with an independent productive value of  $v_s$ . The acquirer can productively employ up to  $n_a$  employees, each of whom has an independent productive value of  $v_a$ . That is, the total productive value of  $k \leq n_s$  employees at the acquirer is  $\min\{k, n_a\}v_a$  while at the startup it is  $kv_s$ .

Suppose the acquirer engages in direct hiring. It would approach  $\min\{n_a, n_s\}$  employees, offering each a wage of  $w_a = \min\{v_a, v_s + b\}$ . For each of these employees, Lemma 1 applies, implying that hiring is successful when  $v_a > v_s + b$ .

Suppose, instead, the acquirer engages in acquiring. It would have to pay a price of  $p = n_s[v_s - \underline{w}]$  to acquire the startup, resulting in a profit of  $\min\{n_a, n_s\}[v_a - \underline{w}] - p$ . Note, that in writing this expression we assume that after acquiring the firm, the acquirer would choose not to retain all the workers when  $n_a > n_s$ .

Comparing the payoffs from direct hiring and acquiring, we obtain the following result.

**Proposition 3.** *If  $v_a > v_s + b$ , acquiring occurs if*

$$\frac{n_a}{n_s} > \frac{v_s - \underline{w}}{v_s - \underline{w} + b}$$

*and direct hiring of  $\min\{n_a, n_s\}$  employees occurs if the inequality is reversed.*

*If  $v_a < v_s + b$ , acquiring occurs if*

$$\frac{\min\{n_a, n_s\}}{n_s} > \frac{v_s - \underline{w}}{v_a - \underline{w}},$$

*and no hiring occurs if the inequality is reversed.*

*Proof.* Suppose that  $v_a > v_s + b$ , and note that the acquirer earns positive profits of  $\min\{n_a, n_s\}(v_a - v_s - b)$  if it pursues direct hiring. Instead pursuing an acquire leads to profits for the acquirer of  $\max\{0, \min\{n_a, n_s\}(v_a - \underline{w}) - n_s(v_s - \underline{w})\}$ . Given that direct hiring ensures positive profits, acquiring is preferred if and only if  $\min\{n_a, n_s\}(v_a - \underline{w}) - n_s(v_s - \underline{w}) > \min\{n_a, n_s\}(v_a - v_s - b)$ . Observe that if  $\min\{n_a, n_s\} = n_s$  then this condition always holds. This, along with basic algebra, then gives the first condition in the statement of the result, and the logic above ensures that direct hiring of  $\min\{n_a, n_s\}$  employees otherwise occurs.

Suppose instead that  $v_a < v_s + b$ , and note that direct hiring earns zero profits for the acquirer and hence never occurs. Acqui-hiring occurs if and only if  $\min\{n_a, n_s\}(v_a - \underline{w}) - n_s(v_s - \underline{w}) > 0$ . Algebra gives the second condition in the result. ■

Direct hiring occurs only if  $n_a < n_s$  and  $v_a > v_s + b$ . That is, the acquirer must have a high productive value of employees but require relatively few. The intuition is straightforward: by choosing to engage in direct hiring, the acquirer avoids paying for employees it can not productively employ. In addition, note that when direct hiring occurs, it is efficient, but as in the baseline model, acqui-hiring may be inefficient.

To the extent that individual acquirers' demands for this type of labor have increased, acqui-hiring becomes more attractive compared to direct hiring, implying that employees are more likely to be expropriated.

**5.2. Workers Essential for Production.** We now consider the case where employees are perfect complements; that is, all employees are essential for any production to take place. This allows the acquirer (and the startup) to engage in divide-and-conquer hiring strategies that reduce the wages associated with direct hiring. Despite this, we argue that acqui-hiring is always preferred by the acquirer, as in our baseline model. In contrast to the baseline model, banning acqui-hiring does not guarantee an efficient outcome.

Suppose there are two employees,  $e$  and  $f$ , with private benefits  $b^e$  and  $b^f \geq b^e > 0$ , respectively. If both work at the startup, they jointly produce  $2v_s$ ; if both work at the acquirer, they jointly produce  $2v_a$ ; otherwise, they do not produce anything. In the last case (in which one worker is poached and one remains at the startup), the retained employee receives her wage but she does not get any private benefit at the startup, as the startup is no longer productive, so that the employee no longer enjoys a sense of pride in its mission.

Given their perfect complementarity, employees potentially face a coordination problem when deciding which wage offer to accept at the direct hiring stage. In what follows, we assume that when facing multiple equilibria they coordinate on one that is Pareto-efficient in terms of their payoffs. To give an example, suppose that the acquirer and the startup offer employee  $i$  wages  $w_a^i$  and  $w_s^i$ , respectively, with  $\underline{w} \leq w_s^i < w_a^i < w_s^i + b^i$ . In this case, there are two equilibria: one in which both  $e$  and  $f$  join the acquirer and one in which both stay at the startup. Our assumption implies that they coordinate on the latter, which both prefer, since each employee  $i$  gets payoff  $w_s^i + b^i$  rather than  $w_a^i$ .

This implies that, if the acquirer wishes to poach through direct hiring, it must ensure that, in equilibrium, it is a dominant strategy for one of the employees to accept its offer. Knowing this, the other employee will not enjoy her private benefit if she stays at the startup, implying that the acquirer does not need to compensate her for the loss of her private benefit. This

suggests that the acquirer will divide and conquer by “targeting” the employee with lower private benefit,  $e$ , so as to avoid compensating  $f$  for the loss of her higher private benefit. This reasoning yields the following result.

**Lemma 4.** *Suppose the acquirer chooses direct hiring. Then, in the continuation equilibrium,*

- *if  $2v_a > 2v_s + b^e$ , the acquirer hires both employees at wages  $w_a^e = 2v_s + b^e - \underline{w}$  and  $w_a^f = \underline{w}$ ;*
- *if  $2v_a < 2v_s + b^e$ , the startup retains both employees at wages  $w_s^e = 2v_a - b^e - \underline{w}$  and  $w_s^f = \underline{w}$ .*

*Proof.* Suppose first that  $2v_a > 2v_s + b^e$ . The total wage bill offered by the startup cannot exceed  $2v_s$ . To successfully poach, the acquirer has to offer at least the same wage to both employees, plus compensation for the loss in private benefit to the (targeted) employee whose benefit is smallest,  $e$ , ensuring that she finds it dominant to accept the offer. Both the acquirer and the startup must offer at least  $\underline{w}$  to the other employee,  $f$ . As a result, the startup is willing to offer up to  $2v_s - \underline{w}$  to  $e$ , implying that the acquirer finds it profitable to offer (slightly more than)  $2v_s - \underline{w} + b^e$ , leading to the outcome described in the first part of the lemma.

Suppose second that  $2v_a < 2v_s + b^e$ . The acquirer is willing to offer up to  $2v_a - \underline{w}$  to attract  $e$ . The startup can profitably counter by offering  $b^e$  less, leading to the outcome described in the second part of the lemma. ■

As (successful) direct hiring by the acquirer compensates only one employee for the loss in private benefit, the resulting outcome may be inefficient.

**Corollary 3.** *Suppose the acquirer chooses direct hiring and is successful in poaching. This outcome is inefficient if  $2v_s + b^e + b^f > 2v_a$  and efficient if the inequality is reversed.*

Suppose now the acquirer engages in acquihiring. The reasoning underlying Lemma 2 applies, and the acquirer earns  $2[v_a - v_s]$  if this is positive, and zero otherwise. Comparing this outcome to that under direct hiring, as described in Lemma 4, yields the following result.

**Proposition 4.** *If the acquirer hires the employees, which happens when  $v_a > v_s$ , then it does so through acquihiring. However, employee  $e$  always prefers direct hiring and  $f$  is indifferent.*

Under direct hiring, the acquirer must compensate the targeted employee  $e$ , but not the non-targeted employee  $f$ , for the loss in private benefit. Under acquihiring, neither employee is so compensated. As a result, acquihiring is cheaper, leading to Proposition 4. Note also that, compared to direct hiring, there is a wider range of parameters for which inefficiencies

arise. As in the baseline model, employees are worse off than they would be in the absence of the acquirer.

## 6. PRIVATE INFORMATION

In this section, we extend the baseline model by introducing private information. This has two novel implications.

First, while the presence of such private information does not affect acquiring, it softens wage competition under direct hiring. This makes direct hiring cheaper than before, implying that acquiring is not always chosen. A further implication, and in contrast to our earlier results, is that when direct hiring occurs it might be inefficient.

Second, in the baseline model, the lower bound on wages,  $\underline{w}$ , prevents the startup from fully extracting the employee's surplus. Private information on the magnitude of that private benefit plays a similar role, even in the absence of a lower bound on wages.<sup>20</sup>

In particular, we now assume that the employee's private benefit,  $b$ , is uniformly distributed on  $[0, B]$ , with  $B < \min\{v_a, v_s\}$ . To avoid corner solutions, we also assume that  $v_s - B < v_a < v_s + 2B$ . Crucially, we assume that the employee has private information on the realization of  $b$ .

Additionally, we dispense with the constraint that wages must exceed  $\underline{w}$  and, instead, assume that the employee has an outside option, yielding a payoff that is normalized to zero. This means that when the startup is a monopsonist, an employee with private benefit  $b$  would be willing to stay at any wage  $w_s \geq -b$ .

From this it follows that a monopsonistic startup hiring only an employee with a private valuation exceeding  $b$  would set a wage  $w_s = -b$ , successfully hire with probability  $(B-b)/B$ , and earn profits of  $(v_s + b)(B-b)/B$ . Because  $v_s > B$  implies that the derivative of these profits with respect to  $b$  is negative for all  $b \in [0, B]$ , it follows that the startup would set a wage of  $w_s = 0$ , hire with probability one, and earn profits of  $v_s$ . Similarly, when the acquirer is a monopsonist, it will set a wage of  $w_a = 0$  to match the employee's outside option. Hence, Lemma 2 for acquiring applies, with  $\underline{w} = 0$ .

Turning to direct hiring, suppose that the employee faces wage offers  $w_a$  and  $w_s$ . This means that an employee with  $b < w_a - w_s$  prefers the acquirer's offer whereas an employee with  $b > w_a - w_s$  prefers the startup's offer. If  $w_a \geq 0$  and  $0 < w_a - w_s < B$ , then  $w_a$  maximizes the acquirer's profit  $(v_a - w_a)(w_a - w_s)/B$  and  $w_s$  maximizes the startup's profit  $(v_s - w_s)(B - w_a + w_s)/B$ . We obtain the following result.

<sup>20</sup>Alternatively, moral hazard on the part of the employee at the startup would also prevent the startup from fully extracting all of the employee's rents.



**Lemma 5.** *Suppose the acquirer chooses direct hiring. Then, in the continuation equilibrium, the wage offers are*

$$w_a = \frac{2v_a + v_s - B}{3} > 0 \quad \text{and} \quad w_s = \frac{2v_s + v_a - 2B}{3} > 0.$$

*The probability that the acquirer's wage offer is accepted is given by*

$$0 < \frac{v_a - v_s + B}{3B} < 1.$$

*The acquirer's profit is*

$$\frac{(v_a - v_s + B)^2}{9B}.$$

*Proof.* From the first-order conditions of profit maximization, we have

$$w_a - w_s = v_a - w_a$$

and

$$B - w_a + w_s = v_s - w_s.$$

Solving these two equations simultaneously, we obtain the expressions for the wages in the statement of the lemma. These wages are both positive, following our assumption that  $\min\{v_a, v_s\} > B$ . Our assumption  $v_s - B < v_a < v_s + 2B$  ensures that the probability of the acquirer poaching the employee is interior, that is,  $0 < (w_a - w_s)/B < 1$ . Substituting for wages in the acquirer's profit function,  $(v_a - w_a)(w_a - w_s)/B$ , yields the expression for the profit in the statement of the lemma. ■

The uncertainty about the realization of the employee's private benefit  $b$  softens competition in a way that is reminiscent of product differentiation. This implies that both the acquirer and the startup offer less than the productive value to the employee:  $w_a < v_a$  and  $w_s < v_s$ . This further implies that, generically, there is an inefficiency associated with direct hiring. While a social planner would prefer that an employee for whom  $b > v_a - v_s$  remains at the startup, under direct hiring an employee with  $b > w_a - w_s$  is retained. In general, there may be too much or too little retention, as typically  $v_a - v_s \neq w_a - w_s$ . It is straightforward to verify that there is too much retention if  $v_a > v_s + B/2$  and too little retention if the inequality is reversed.

Comparing the acquirer's profits from acquiring and direct hiring yields the following result.

**Proposition 5.** *The acquirer engages in acquiring if  $v_a > \hat{v}_a$ , where*

$$\hat{v}_a \equiv v_s + \frac{7 - 3\sqrt{5}}{2}B > v_s.$$

If  $v_a < \widehat{v}_a$ , the acquirer engages in direct hiring, and poaches the employee with probability

$$\frac{v_a - v_s + B}{3B}.$$

The employee always prefers direct hiring.

*Proof.* The result follows immediately by comparing the acquirer's profit under acquihiring,  $v_a - v_s$ , and that under direct hiring, as derived in Lemma 5. There are two values of  $v_a$  at which the profits are equalized:  $\widehat{v}_a$  and  $v_s + (7 + 3\sqrt{5})B/2$ , and profits under acquihiring is larger when  $v_a$  is between these values. The result follows by noting that  $v_s + (7 + 3\sqrt{5})B/2 > v_s + 2B$ , thus violating our assumption that  $v_a < v_s + 2B$ .

Under acquihiring, the employee earns zero, while under direct hiring she earns a strictly positive wage and may receive a private benefit. ■

To see why direct hiring is preferred by the acquirer when  $v_a$  is not too large, consider the case where  $v_a = v_s$ . If the acquirer chooses acquihiring, it earns zero. If the acquirer chooses direct hiring, it is competing with the startup which, as discussed above, always offers a wage  $w_s < v_s$ . Hence, by offering a wage  $w_a$  between  $w_s$  and  $v_a$ , the acquirer can attract employees with low realizations of the private benefit, and earn positive profit.

To see why acquihiring is preferred by the acquirer when  $v_a$  is large, consider the boundary case where  $v_a = v_s + 2B$ . Under direct hiring, the startup offers a wage equal to its full productive value,  $w_s = v_s$ , while the acquirer pays  $v_s + B$  and attracts any type of employee. By contrast, the acquirer has to bid only (slightly more than)  $v_s$  to acquire the startup and hire the employee at a wage of zero.

The following result compares welfare under acquihiring and direct hiring. It shows that, while either may be more efficient than the other, direct hiring is always more efficient whenever it is chosen in equilibrium; this is not true for acquihiring. In that sense, the insight from the baseline model—that there tends to be socially excessive acquihiring—carries over to this setting.

**Corollary 4.** *Acquihiring is more efficient than direct hiring if  $v_a > v_s + (4/5)B$ , whereas direct hiring is more efficient if the inequality is reversed. Hence, whenever direct hiring occurs it is more efficient than acquihiring; by contrast, if*

$$\frac{7 - 3\sqrt{5}}{2} < \frac{v_a - v_s}{B} < \frac{4}{5},$$

*acquihiring occurs in equilibrium despite being less efficient than direct hiring.*

*Proof.* Let  $b^* \equiv (v_a - v_s + B)/3$  denote the employee type who, in the direct hiring equilibrium, is indifferent between accepting the acquirer's offer and the startup's offer. The change in

social welfare from moving to acquiring from direct hiring entails a change in productive value of  $v_a - v_s$  and a loss of private benefit  $b$  for all worker types  $b > b^*$  (who would otherwise be retained by the startup). This change can be written as

$$\begin{aligned} \frac{B - b^*}{B}(v_a - v_s) - \int_{b^*}^B \frac{b}{B} db &= \frac{B - b^*}{B}(v_a - v_s) - \frac{B^2 - b^{*2}}{2B} \\ &= \frac{B - b^*}{2B} \left( 2(v_a - v_s) - \frac{v_a - v_s + B}{3} - B \right), \end{aligned}$$

where the second equality makes use of the definition of  $b^*$ . This expression is strictly positive if and only if  $v_a > v_s + 4B/5$ , and strictly negative if the inequality is reversed.

From Proposition 5, acquiring is chosen in equilibrium if  $v_a - v_s > (7 - 3\sqrt{5})B/2$ , while direct hiring is chosen if the inequality is reversed. As  $(4/5)B > (7 - 3\sqrt{5})B/2$ , it follows that whenever direct hiring is chosen in equilibrium, it is more efficient than acquiring, while the reverse is not true. ■

## 7. IMPLICATIONS

In our analyses above there are three participants, each concerned about their own well-being. Here we discuss practical implications of our analysis for each of these participants.

Consider first the acquirer. Most simply, we have identified when acquiring can be more profitable than direct hiring as a talent-acquisition strategy. Furthermore, we have shown that the acquirer may lower the cost of an acquire—and hence improve its own profits—if it can credibly threaten to bid aggressively to directly hire employees in case a proposed acquisition breaks down. In other words, a commitment to pursuing talent aggressively can make the target firm more agreeable to a low acquisition price, and therefore make it unnecessary to offer high wages.

Now consider the startup. In many cases, as may seem natural, the startup suffers from the arrival of the acquirer (which constitutes additional competition for scarce talent). However, given that an acquirer is present, the prospect of acquiring itself can never be bad for the startup: the startup's profits are always at least as high as they would be if direct hiring were the only option for talent acquisition.<sup>21</sup> And, in other cases, the startup can benefit from the arrival of the acquirer. This can happen when private benefits are positive and the employee is transferred in equilibrium to the acquirer. Then, acquiring is preferred

<sup>21</sup>To see the logic, consider the model with bargaining from Section 4. If direct hiring is the equilibrium outcome, then the possibility of acquiring is irrelevant. But when acquiring is the equilibrium outcome, the bargaining threat points associated with a breakdown in bargaining are those associated with the prospect of direct hiring; thus, so long as the startup has some bargaining power, its payoff exceeds that of the direct hiring threat point.

by the acquirer, as this allows the expropriation of the private benefit, and a startup with bargaining power may also benefit from this expropriation.

A further implication is that the startup may benefit when private benefits are larger. The reason is that, in the range where acquihiring is the equilibrium, higher private benefits lower the threat point of the acquirer and hence raise the acquisition price at the bargaining stage.

Finally, consider the employee. Acquihiring makes the employee worse off, for two reasons. First, it restrains the wage competition that would otherwise occur under direct hiring, and second, the employee no longer enjoys her private benefits (and is not compensated for their loss). Furthermore, even though the acquirer is a potential competitor for the employee's labor, their mere presence can make the employee worse off, because of this expropriation of her private benefits.

A natural question is whether the employee's assessment of acquihiring would change if she had an equity stake in the startup. The answer depends on whether this stake conveys control rights, in particular the right to veto a potential acquisition. If so, then the worker can only benefit from the prospect of acquihiring, and hence can only benefit from the presence of the acquirer. But when the employee's equity stake carries no such control rights, then our message remains the same: the prospect of acquihiring rather than direct hiring harms the employee, although she can either benefit or suffer from the presence of the acquirer.<sup>22</sup> Of course, when there are multiple workers who differ in their equity shares (for example, a founder with a large stake and other workers with minimal stakes) then a worker with a large stake may benefit from acquihiring—but at the expense of other workers.

## 8. CONCLUSION

We have proposed a theory of acquihires for monopsony power. Unsurprisingly, when an acquisition is successful, wages are low and employees with specialized talent suffer. In itself, this does not explain why such acquisitions take place, as the acquirer must instead compensate the startup for the sale of its business. Our theory identifies two distinct mechanisms for why an acquirer may prefer to compensate the startup through acquihiring rather than the employee through direct hiring. The first, introduced in the baseline model, is that acquihiring is cheaper than direct hiring because it does not require the acquirer to compensate the employee for the loss of her private benefit. The second, presented in Section 4, is that the potential for intense competition under direct hiring reduces the acquisition

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<sup>22</sup>To see this, first note that if acquihiring leads to an efficient allocation,  $v_a \geq v_s + b$  then the acquirer would have to pay the worker  $v_s + b$  under direct hiring and would only prefer acquihiring if the total payout is lower (of which the worker receives only a share of the acquisition price). Instead, if  $v_a < v_s + b$ , then under direct hiring the worker would earn  $v_a$ , whereas under acquihiring the acquirer would never pay out more than this in total.

price, and thereby makes acquiring more profitable than direct hiring. Under both mechanisms, acquiring not only harms employees but also leads to inefficiencies by misallocating specialized talent.

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