Common Ownership, Employment, and Worker Mobility: Evidence from Venture Capital*

Mario Leccese† Zeyang Xue◇

Abstract

We study how common ownership shapes employment and the mobility of human capital across firms. We construct a novel dataset combining LinkedIn-based employment histories with venture capital (VC) investment data for U.S. ventures. Common ownership links firms that may otherwise compete for workers, but shared investors may also reduce matching frictions and facilitate worker reallocation across portfolio companies. We find that ventures with shared investors expand employment and experience higher turnover and job-to-job mobility. These changes are larger when the shared investor holds a board seat, consistent with active governance as an important channel. Worker moves are disproportionately more likely to occur between firms connected through a shared investor, and workers separating from commonly owned firms are significantly more likely to find a new job. Among workers reemployed locally, transition times are also substantially shorter when the destination is connected through a shared investor. Overall, our results suggest that common ownership can create an internal labor market across formally independent ventures, facilitating hiring, worker reallocation, and reemployment after separation.

Keywords: common ownership; labor market; venture capital; competition; innovation

JEL Codes: J60, L20, L40, O31

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†Boston University, Questrom School of Business. Email: leccese@bu.edu.

◇Boston University, Questrom School of Business. Email: zxue@bu.edu.

1. Introduction

This paper provides new evidence on how common ownership affects employment and worker mobility. Common ownership arises when investors hold stakes in multiple firms within the same industry and has become increasingly prevalent (Gutiérrez and Philippon 2016; Backus et al. 2021b), raising new questions about how overlapping financial interests shape firm behavior. A large literature shows that common ownership can soften product market rivalry and alter firms' innovation incentives (Azar et al. 2018; Antón et al. 2025), yet we know much less about its implications for the allocation of human capital, where the networks created by shared investors may influence how firms compete for, retain, and deploy workers. We address this gap by studying the venture capital sector. This sector is not only central to entrepreneurial growth and innovation (Kortum and Lerner 2000; Puri and Zarutskie 2012), but also one in which investors frequently hold stakes in multiple ventures within the same industry and geography (Eldar and Grennan 2021; Chen et al. 2010) and play active roles in monitoring and governance (Hellmann and Puri 2002; Bernstein et al. 2016; Gompers et al. 2020).

Understanding how common ownership affects labor-market dynamics is important for assessing its broader implications for firm growth and competition, especially in settings where human capital is central to innovation (Stolpe 2002; Rosenkopf and Almeida 2003; Agrawal et al. 2006) and competitive advantage (Coff 1997; Lippman and Rumelt 1982). This question is also increasingly relevant for antitrust policy. Recent antitrust enforcement debates have placed greater emphasis on labor-market considerations (Shapiro 2019), while agencies have also expressed growing concern about common ownership and minority investments.[1] These concerns are reflected in the 2023 Merger Guidelines, which separately address mergers involving competing buyers in labor markets and acquisitions involving partial ownership or minority interests.[2]

The existing literature on common ownership points to a potential negative effect on employment and worker mobility. If managers maximize shareholders' value, the presence of investors with financial interests in multiple firms that compete with one

[1] For example, the Federal Trade Commission held a hearing on common ownership in 2018, and the European Commission examined the potential effects of common ownership in Dow/DuPont and Bayer/Monsanto (Burnside and Kidane 2020).

[2] Guideline #10 of the 2023 Merger Guidelines states: "When a Merger Involves Competing Buyers, the Agencies Examine Whether It May Substantially Lessen Competition for Workers, Creators, Suppliers, or Other Providers." Guideline #11 of the 2023 Merger Guidelines states: "When an Acquisition Involves Partial Ownership or Minority Interests, the Agencies Examine Its Impact on Competition." Guidelines: https://www.justice.gov/atr/merger-guidelines.

another may reduce firms' incentives to compete aggressively. In labor markets, this logic implies that common ownership may soften competition for workers: portfolio firms may internalize worker diversion across commonly owned employers, becoming less willing to poach employees from one another. Ownership links may also facilitate collusion through "no-poach" agreements.[3]

However, we highlight a countervailing channel through which common ownership can increase employment and worker mobility: common investors may act as labor-market intermediaries. Even without direct control over hiring decisions, shared investors can transmit information about job opportunities, refer talent across portfolio companies, and facilitate worker redeployment after firm contractions or exits, thereby reducing search and matching frictions across otherwise independent firms. In this sense, common VC ownership may create an internal labor market across formally independent ventures, analogous to the way large organizations reallocate workers across units (Baker and Holmstrom 1995; Cestone et al. 2024).[4] This mechanism is visible in the recruiting infrastructure of the venture capital industry, where many VC firms maintain portfolio-wide job boards and talent networks that aggregate vacancies across independent portfolio companies.[5] Therefore, the net effect of common ownership on employment and worker mobility is theoretically ambiguous.

To provide evidence on how common ownership affects employment and worker mobility, we combine comprehensive venture capital (VC) investment data from PitchBook and VentureXpert with micro-level data on employee movements from Revelio Labs to construct a panel of ventures operating across industries and Core Based Statistical Areas (CBSAs). We focus on high-growth ventures that raised VC financing between 1990 and 2021, and collect information on their state of incorporation from VentureXpert and OpenCorporates.

We first examine whether ventures that start sharing investors with other ventures active in the same industry–CBSA (henceforth, "a local market") exhibit changes in employment and worker mobility. Becoming commonly owned is associated with an approximate 30% increase in venture employment and turnover rate relative to independent ventures. We also document a 42% growth in the likelihood of a job-to-job (J2J)

[3]For instance, in the early 2000s, several Silicon Valley firms entered into agreements not to recruit each other's employees (Gibson 2024). Herrera-Caicedo et al. (2025) shows that such agreements were associated with firms sharing a common leader, such as a board member.

[4]Appendix A offers a discussion of the theoretical foundation of our empirical analyses.

[5]As an example, Figure D.1 reports a screenshot of Andreessen Horowitz's portfolio jobs board. Although the public components of these platforms are accessible to workers outside the portfolio, they illustrate that investors actively organize labor-market information around their portfolio firms.

mobility event, defined as an employee leaving the firm and starting a new job within one year, with even larger effects for within-local-market J2J. These effects are economically large. As a benchmark, Johnson et al. (2023) estimates that banning non-compete agreements in a state where they are fully enforceable would increase high-tech worker mobility by roughly 60%. The corresponding mobility effect of common VC ownership is about 40% as large as moving from full non-compete enforceability to non-enforceability. These patterns are not driven solely by low-seniority personnel: common ownership raises the likelihood of C-suite replacement and expands the hiring of scientists and engineers. Moreover, J2J flows increase across all seniority levels and are especially pronounced among scientists and engineers.

To address potential endogeneity concerns arising from unobservable local-market, time-varying shocks that may affect both investors' incentives to engage in common ownership and firm labor outcomes, we exploit variation from the staggered adoption of corporate opportunity waiver (COW) statutes across nine U.S. states between 2000 and 2016. These laws authorize firms incorporated in adopting states to include charter provisions that release directors and investors from liability when they pursue business opportunities that could otherwise be viewed as belonging to the firm (e.g., Rauterberg and Talley 2017). Because VCs often hold board seats and have access to sensitive information about their portfolio companies, investing in multiple related ventures can expose them to potential conflicts of interest. By limiting directors' and investors' exposure to this litigation risk, COW statutes reduce legal frictions associated with investing in multiple firms within the same local market. Importantly, Eldar and Grennan (2024) provides evidence that COW adoption was not driven by lobbying efforts or broader economic trends, was narrowly targeted at limiting fiduciary-duty liability, and was unrelated to incorporation choices, reducing the concern that these statutes affect venture outcomes through channels other than common ownership.

We implement a stacked difference-in-differences design (Cengiz et al. 2019), constructing cohort-specific datasets around each COW law passage and estimating treatment effects within each cohort window. This design addresses the heterogeneity-induced biases that can affect conventional two-way fixed-effects DiD when treatment timing is staggered (Goodman-Bacon 2021). In the five years following COW adoption, firms incorporated in adopting states experience a 37% increase in common VC presence, accompanied by a 10.5% rise in employment, a 12.5% rise in turnover, and a 16% increase in the probability of worker mobility. Because COW statutes expand investors' discretion to favor one portfolio company over another when conflicts of interest arise,

the increase in common ownership suggests that venture capital investors deliberately create ownership structures that enable active management across portfolio firms. We also follow Eldar and Grennan (2024) and instrument for common VC ownership with a venture's incorporation in a COW-adopting state, with qualitatively similar results.

We then examine whether the effects of common ownership vary with the investors' ability to influence the governance of portfolio firms. If common investors facilitate labor reallocation by transmitting information, coordinating hiring, or actively connecting portfolio firms, their effects should be stronger when they have board representation. We find larger effects on employment and mobility when the shared investors sit on the board, consistent with an active governance channel.

Two sets of analyses help interpret the economic forces behind our findings. First, we examine whether worker flows are more likely to occur within investor networks. In a panel of venture pairs located in the same CBSA, a worker move from one firm to another is more likely when the firms share a VC investor, especially when they operate in the same industry and for innovation workers and C-suite executives. Workers separating from commonly owned firms are also more likely to have an observed subsequent job within 36 months and, conditional on the eventual destination, transitions to firms in the portfolio of the shared investor occur more quickly. Finally, C-suite executives leaving after an IPO are more likely to join connected portfolio firms from the set of potential local destinations. Together, these results are consistent with an internal-labor-market channel through which shared investors facilitate worker movements across formally independent ventures.

Second, we examine whether the associations between common ownership and firm labor outcomes vary with concentration in the VC-backed segment of the local labor market. If common ownership softens competition for workers, such effects should be more pronounced where workers have fewer outside options and commonly owned firms account for a large share of local employment. Measuring concentration with the Herfindahl–Hirschman Index (HHI) based on firms' employment shares within each industry–CBSA up to the year in which common ownership arises, we show that the documented increases in employment and worker mobility are systematically attenuated, but remain positive, in more concentrated local markets. This pattern is consistent with outside options shaping the consequences of common ownership: network intermediation may be less effective, or competition concerns more consequential, where workers face a narrower set of alternative employers.

Overall, our results show that common ownership has effects that extend beyond

product-market competition. In entrepreneurial labor markets, shared investors can function as intermediaries that facilitate hiring and worker mobility across independent ventures. Potential labor-market-power costs attenuate, but do not overturn, these effects.

Related Literature. Our analyses contribute to a large literature examining the effects of common ownership of public firms by institutional investors on prices (Azar et al. 2018), entry (Newham et al. 2025), innovation (Antón et al. 2025), and overall welfare (Backus et al. 2021a; Ederer and Pellegrino 2026). Closer to our work, Azar et al. (2022b) exploits a firm's inclusion in the S&P 500 index as a shock to the common ownership of its competitors in local labor markets. They conclude that common ownership reduces average annual earnings per employee and raises separation rates, but ultimately increases total employment in the local labor market.[6]

We complement this line of research by studying the VC industry, a different institutional setting characterized by the presence of investors with more significant control rights (Gompers et al. 2020) and by the existence of clear formal and informal mechanisms through which investors can monitor and influence the managerial strategy of their portfolio firms—such as the appointment of board representatives (Amornsiripanitch et al. 2019; Ewens and Malenko 2020).[7] In this context, we provide evidence of novel outcomes shaped by common ownership. By doing so, we also contribute to an emerging literature on common ownership in the VC industry, which has documented its effects on firms' ability to raise VC, exit rates, innovation efficiency, and the reallocation of financial and innovation resources within the portfolio (González-Uribe 2020; Li et al. 2023; Eldar and Grennan 2024; Leccese 2024).

Moreover, our paper relates to the literature on internal labor markets and labor reallocation within ownership networks. Prior work shows that conglomerates and business groups use internal labor markets to reallocate workers across organizational units or affiliated firms in response to shocks and changing business conditions, with implications for productivity and competitive advantage (Giroud and Mueller 2015; Tate and Yang 2015; Belenzon and Tsolmon 2016; Faccio and O'Brien 2021; Huneeus et al. 2021; Tate and Yang 2024; Cestone et al. 2024). Unlike conglomerates or business groups, commonly owned ventures do not typically share a common balance sheet, integrated human-resources departments, or a controlling shareholder. Instead, they are indepen-

[6] Relatedly, Emmens et al. (2024) studies how common ownership affects firms' automation decisions and the implications for employment. Moreover, Antón et al. (2023) shows that common ownership can shape managerial contracts, making them less performance-sensitive.

[7] A distinct but related literature studies the product market implications of interlocking directorates, highlighting how governance links across firms can affect competitive conduct (e.g., Barone et al. 2025).

dent firms connected through investors that hold minority stakes but may possess information about portfolio firms' labor needs and workers' skills. Our results show that such weaker ownership links can nevertheless generate labor-market intermediation, increasing within-portfolio flows and facilitating worker redeployment across portfolio firms following contractions or exits. In doing so, we show that internal-labor-market forces can arise not only inside conglomerates or business groups, but also in investor networks connecting independent firms.

Labor-market outcomes have also become central in antitrust. A first strand of research examines the effects of mergers on labor markets, showing that consolidation can depress wages, reduce match quality, and sometimes lead to layoffs (Arnold 2019; Prager and Schmitt 2021; Montag 2023; Shi 2024). A second strand focuses on collusive practices, such as no-poach and wage-fixing agreements, which restrict worker mobility and suppress wages (Krueger and Ashenfelter 2022; Callaci et al. 2024; Lafontaine et al. 2025; Delabastita and Rubens 2025). Particularly relevant to our setting, where VCs often hold board seats, Herrera-Caicedo et al. (2025) show that sharing a common leader, such as a board member, increases the likelihood of entering a no-poach agreement. We contribute to this literature by focusing on a different form of consolidation—common ownership—which has gained traction in antitrust debates. We examine its implications not only for employment but also for worker mobility, a key driver of knowledge diffusion and innovation (Dasaratha 2023).[8]

2. Data

We assemble a novel dataset that combines venture capital investment, workers' employment trajectories, and legal incorporation records. This section describes the data sources, the procedure used to merge them, the construction of the main variables, and some summary statistics.

2.1. Data sources

Our primary data on venture capital investments comes from PitchBook and VentureXpert (LSEG Data & Analytics). Both datasets report detailed information on financing

[8] A distinct body of work studies how non-compete agreements shape labor market outcomes, consistently finding that stricter enforceability reduces mobility and suppresses wage growth (Marx et al. 2009; Balasubramanian et al. 2022; Johnson et al. 2025). Common ownership is an alternative channel influencing similar outcomes in the VC ecosystem, where investor coordination rather than contractual restrictions governs worker reallocation.

rounds, including the identity of the investee and investors, the date and type of each round, the investee's headquarters ZIP code, and an industry classification. PitchBook assigns each venture to one of 41 industries, while VentureXpert uses a related but non-identical proprietary taxonomy. Because our measure of common ownership relies on consistent industry definitions, we manually construct a crosswalk between the two taxonomies (Appendix Table C.1).[9] To assign ventures to local labor markets, we map headquarters ZIP codes to Core Based Statistical Areas (CBSAs) using ZIP-code–level definitions from the U.S. Census Bureau.[10]

Data on employment, job transitions, and worker characteristics come from Revelio Labs, which extracts individual employment histories from LinkedIn profiles. Revelio provides start and end dates for each position, worker moves across employers, and educational and skill information. These data have been widely used in recent work, including studies of labor markets, firm dynamics, and entrepreneurship.[11]

Our identification strategy uses the staggered adoption of corporate opportunity waivers across U.S. states, which requires reliable information on ventures' incorporation states. We obtain this information from VentureXpert and from OpenCorporates, the largest global open database of legal entities. OpenCorporates provides firm-level registration and incorporation records.[12]

2.2. Sample construction and key variables

Our dataset combines venture investment histories, worker-level employment data, and incorporation records. We begin with the universe of ventures that raised at least one VC round between 1990 and 2021 in either PitchBook or VentureXpert. Because PitchBook provides rich recent coverage while VentureXpert offers substantially deeper pre-2007 coverage, we merge the two sources to obtain the most comprehensive longitudinal dataset available for VC-backed ventures.

We treat PitchBook as the primary dataset and merge in venture and investor records from VentureXpert. Ventures appearing in both sources are linked using fuzzy matching on firm names combined with exact matching on headquarters state. Ventures found

[9] We rely on PitchBook's "Industry Group" and VentureXpert's "Primary Industry Sub-Group" in the baseline analyses and show robustness to using more granular classifications.

[10] This data is available at https://www.census.gov/geographies/mapping-files/time-series/geo/tiger-line-file.html.

[11] See, for example, Hacamo and Kleiner (2022), Bernstein et al. (2023), Jeffers (2023), Amanzadeh et al. (2024), Chen et al. (2025), Kwan et al. (2025).

[12] We gratefully acknowledge OpenCorporates for providing free academic access through its Public Benefit Project; data are available at https://opencorporates.com/use-cases/academia.

only in VentureXpert are retained to expand historical coverage. Investor identities are matched by fuzzy name matching and exact matching on investor location to ensure consistency in venture–investor relationships.

To link ventures to worker-level employment histories, we follow a two-stage procedure. First, when PitchBook reports a LinkedIn URL, we match firms to Revelio using the exact URL. Second, for firms without a LinkedIn URL, we employ fuzzy matching on firm names combined with exact matching on headquarters state.

The merged dataset integrates (i) venture characteristics and investment histories from PitchBook and VentureXpert, (ii) worker mobility and employment outcomes from Revelio Labs, and (iii) incorporation-state information from VentureXpert and OpenCorporates.

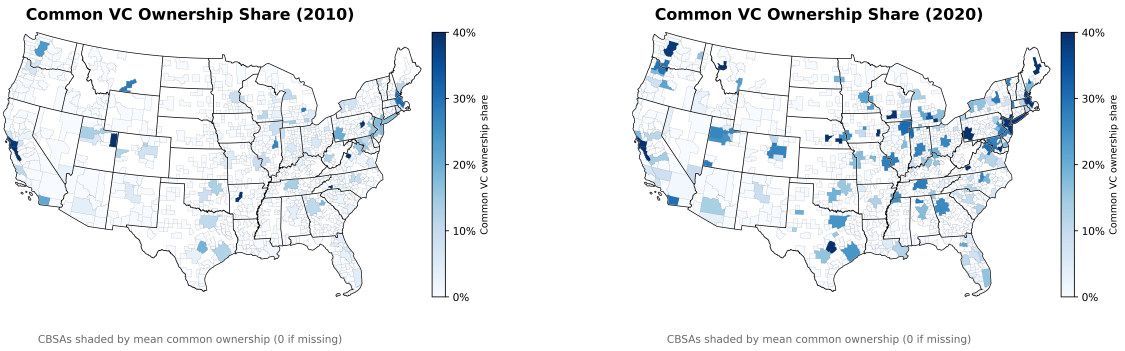
Final Sample. We construct our firm–year panel considering all years in which a venture is active as a private firm. A venture exits the sample when it undergoes an IPO or when acquired. When these dates are unavailable, we follow Li et al. (2023) and assume that a venture is written off from an investor's balance sheet if it receives no new financing for five years after its last round. The year in which a venture enters our sample is the founding year when reported, and the year of first investment otherwise. The final sample includes 70,551 ventures across 39 industries and 567 CBSA.

Our measure of common ownership is a binary indicator, *Common VC*, equal to one if venture i shares at least one VC investor with another active venture in the same CBSA–industry–year. We drop CBSA–industry–years with only one active venture because neither common ownership nor worker mobility can be defined in such local markets.

Common ownership has expanded broadly across U.S. local labor markets. Figure 1 maps the share of VC-backed ventures with common ownership across U.S. CBSAs in 2010 (Panel a) and 2020 (Panel b). In 2010, common ownership was already present in a wide range of CBSAs—including established entrepreneurial hubs such as the San Francisco Bay Area, Boston, and New York, but also smaller markets in the Midwest, South, and Mountain West. By 2020, common ownership has expanded substantially, with meaningful shares now visible across most of the country. While the highest concentrations of common ownership remain in major hubs (with within-local market shares reaching 30–40%), the phenomenon is geographically widespread: approximately half of the ventures in our sample experience common ownership at some point during their life-cycle within our sample.

Using Revelio data, we define several firm-year outcomes. *Employment* is the number

FIGURE 1. Common ownership U.S. CBSAs, 2010 vs. 2020



A. 2010 B. 2020

Notes: Each circle represents a CBSA; size indicates the number of VC-backed ventures and shading reflects the share of those ventures with at least one common-VC investor.

of workers employed by the firm in a year. *Turnover Rate* equals the number of workers separating from the firm in a year divided by the average of the firm's employment at the start and end of that year. To capture worker mobility, we count workers who leave the focal firm and join another employer in the same or following year, and construct $\mathbb{1}\{J2J\}$ is a binary variable equal to one whenever afirm-year exhibits a positive count. $\mathbb{1}\{\textit{Internal J2J}\}$ is constructed similarly but restricts these transitions to moves within the same CBSA–industry. For example, if a worker employed at a biotech venture in Boston leaves the firm and joins another biotech venture in Boston within a year, we classify the move as an internal J2J. By contrast, if the same worker moves to a biotech firm in New Jersey or to a non-biotech firm in Boston, the move is coded as a J2J but not as an internal J2J.

Table 1 reports summary statistics. The average venture in our sample employs 36 workers and experiences a turnover rate of 12% per year. Moreover, the average venture has 0.76 prior VC investors, a cumulative investment of approximately $7.5 million, and is 15 years old at the time of observation. A nontrivial fraction of firms exhibit common ownership: 16% of firm-years feature at least one common investor; this figure falls to 2% of firm-years when conditioning on common investors who also sit on the firm's board.[13]

Worker mobility is sizable on the extensive margin—23% of firm-years record at

[13]Figure D.2 compares the distribution of cumulative VC investment for firm-years where common ownership is observed against all the others, restricting attention to observations with positive cumulative VC investment. The distributions are similar, which is consistent with the fact that common ownership is not simply concentrated among the most heavily funded ventures.

TABLE 1. Summary Statistics

	Obs	Mean	SD	p10	p50	p90
Common VC	1081109	0.162	0.37	0.00	0.00	1.00
Common VC with Board Seat	1081109	0.022	0.15	0.00	0.00	0.00
Employment	1081109	36.011	100.41	1.00	7.00	73.00
Turnover Rate	1030961	0.123	0.21	0.00	0.01	0.34
$\mathbb{1}\{\text{J2J}\}$	1081109	0.232	0.42	0.00	0.00	1.00
$\mathbb{1}\{\text{Internal J2J}\}$	1081109	0.010	0.10	0.00	0.00	0.00
$\mathbb{1}\{\text{Innovator J2J}\}$	1081109	0.035	0.18	0.00	0.00	0.00
C-Suite Move	1081109	0.002	0.05	0.00	0.00	0.00
Cumulative VC Investment	1081109	7.481	32.63	0.00	0.00	10.00
VC Investor Count	1081109	0.760	1.77	0.00	0.00	3.00
Firm Age	1081109	14.812	11.38	3.00	12.00	32.00

Notes: This table presents the summary statistics at the firm-year level.

least one job-to-job transition—but transitions within the same industry-CBSA occur in only 1% of firm-years. We additionally examine the mobility of two worker categories of particular interest: scientists and engineers (which we label as "innovators"), and senior executives (C-Suites). These categories are substantively important because innovators carry technical knowledge central to entrepreneurial ventures, while executives shape firm strategy and governance. They also help address a potential data-coverage concern: while LinkedIn-based data may underrepresent low-skill workers who maintain less active profiles, coverage is particularly strong among skilled employees—the workers who constitute the bulk of the labor force in high-growth, innovation-driven ventures and whose mobility is most relevant for our analysis. In our sample, 3.5% of firm-years record an innovator transition and 0.2% record a C-suite move.

3. Empirical Framework

We estimate the effect of common VC ownership on firm hiring and worker mobility using three complementary empirical approaches. We first estimate a firm-level panel specification that exploits within-firm changes in common VC exposure. We then use the staggered adoption of Corporate Opportunity Waiver (COW) statutes as a source of plausibly exogenous variation in the legal costs associated with investing in related

firms. After having analyzed the implications of COW statutes in a stacked difference-in-differences (DiD) design, we use COW eligibility as an instrument for common VC ownership.

3.1. Firm-level panel specification

For each firm j operating in industry n and CBSA c in year t, we use ordinary least squares (OLS) to estimate:

$$y_{j,n,c,t} = \mu_j + \alpha_{c,t} + \gamma_{n,t} + \beta \cdot \text{CommonVC}_{j,t} + \mathbf{X}'_{j,t}\Lambda + \varepsilon_{j,n,c,t}, \tag{1}$$

where $y_{j,n,c,t}$ denotes one of four outcomes: log employment, the turnover rate, an indicator for any J2J move, and an indicator for any within-market J2J move. The variable $\text{CommonVC}_{j,t}$ equals one if firm j shares at least one VC investor with another firm in the same industry-CBSA in year t. Firm fixed effects, μ_j, absorb time-invariant differences across firms. CBSA-year fixed effects, $\alpha_{c,t}$, absorb time-varying local shocks, while industry-year fixed effects, $\gamma_{n,t}$, absorb shocks common to firms in the same industry and year. The vector $\mathbf{X}_{j,t}$ includes controls for investor characteristics. Standard errors are clustered at the industry-CBSA level.

While Equation (1) exploits within-firm variation in common ownership while flexibly controlling for local and industry-specific shocks, it remains subject to endogeneity concerns. Venture capitalists financing multiple firms in the same industry–CBSA may select ventures with different growth prospects, different risk profiles, or recent unobservable shocks that also affect hiring and worker mobility. We therefore complement this specification with variation from the staggered adoption of Corporate Opportunity Waiver (COW) statutes. We describe our approach below.

3.2. Corporate Opportunity Waiver laws and common VC ownership

COW statutes allow firms to waive the corporate opportunity doctrine, reducing the risk that fiduciaries face liability when they pursue business opportunities that may overlap with those of another firm. In the venture capital setting, these statutes reduce legal uncertainty for investors and directors involved with multiple firms operating in related business areas. These laws were implemented by nine U.S. states in a staggered fashion between 2000 and 2016. Table D.1 provides details on these amendments.

Our empirical strategy builds on Eldar and Grennan (2024), which provides extensive qualitative and quantitative institutional evidence on the origins and implications

of COW statutes. They show that the primary motivation for the adoption of COWs was to eliminate legal uncertainty surrounding fiduciary duties, rather than to respond to lobbying or broader economic trends. Their analyses further indicate that these laws had the main objective to shield investors and directors from liability when managing or investing in multiple firms with overlapping business opportunities. These institutional features mitigate concerns that COW statutes directly affected employment or worker mobility through channels unrelated to common ownership. Moreover, they survey venture lawyers to analyze the extent to which state incorporation decisions are endogenous. Specifically, while one may be concerned that high-growth ventures are more likely to incorporate in Delaware, Eldar and Grennan (2024) shows that incorporation decisions are largely driven by the familiarity of legal counsel with Delaware law and not by differences in substantive provisions such as COW statutes.

We use a stacked DiD design (Cengiz et al. 2019) to estimate the effect of COW adoption on: (i) the prevalence of common VC ownership; (ii) firm hiring and worker mobility. This approach addresses concerns that arise in conventional two-way fixed-effects estimators with staggered treatment timing (Goodman-Bacon 2021; De Chaisemartin and d'Haultfoeuille 2020). For each adoption cohort $g \in \{2000, 2001, 2003, 2005, 2006, 2007, 2011, 2014, 2016\}$, corresponding to the year in which a state adopted a COW statute, we construct a cohort-specific dataset containing treated firms incorporated in the adopting state and control firms incorporated in states that never adopted COW statutes. We observe firms in a symmetric window from five years before to five years after COW adoption, $[g-5, g+5]$, and then stack the cohort-specific datasets.

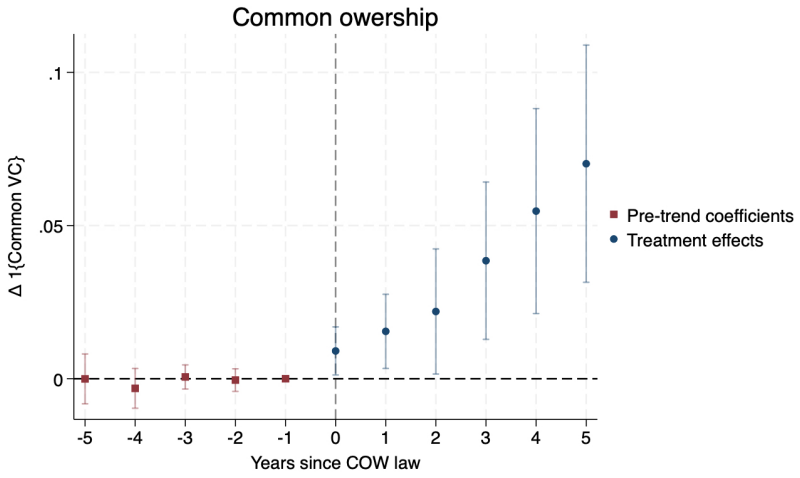
We estimate the following event-study specification:

$$Y_{j,t,g} = \sum_{\substack{k=-5 \\ k\neq -1}}^{5} \beta_k \, \mathbf{1}\{t-g=k\} \cdot D_{j,g} + \mu_j + \gamma_{n,t} + \delta_{g,t} + \mathbf{X}'_{j,t}\Lambda + \varepsilon_{j,t,g}, \tag{2}$$

where $D_{j,g}$ equals one for firms incorporated in the state adopting a COW statute in cohort g. The omitted period is $k = -1$. The fixed effect μ_j absorbs time-invariant firm heterogeneity, $\gamma_{n,t}$ absorbs industry-year shocks, and $\delta_{g,t}$ absorbs shocks common to all firms in a given cohort stack and calendar year. Standard errors are clustered at the state of incorporation level.

Figure 2 reports event-study coefficients from Equation (2) using the common VC indicator as the outcome. The pre-treatment coefficients are small and statistically indistinguishable from zero, suggesting that treated and control firms followed similar

FIGURE 2. COW law adoption and common VC ownership



Notes: Event-study coefficients from Equation (2), estimated using the common VC indicator as the outcome. The reference period is $k = -1$. Confidence intervals are based on state-of-incorporation cluster-robust standard errors.

trends before COW adoption. After adoption, common VC ownership rises steadily, consistent with the interpretation that COW statutes reduce the legal costs of overlapping VC investments.

Because never-treated firms can appear in multiple cohort-specific stacks, we also estimate a more saturated specification that replaces firm fixed effects with firm-by-cohort fixed effects and adds CBSA-year fixed effects. This alternative allows each firm to have a separate baseline in each adoption window and controls flexibly for local labor-market shocks. We report these estimates in Appendix Figure B.1. The saturated specification yields a similar effect of COW adoption on common VC ownership.

3.3. Instrumental variables specification

Finally, we follow Eldar and Grennan (2024) and use eligibility for a Corporate Opportunity Waiver as an instrument for common VC ownership. Let $Z_{j,s,t}$ be an indicator equal to one if firm j is incorporated in state s and that state has adopted a COW statute by year t. For a firm headquartered in state h and operating in industry n, the first-stage equation is

$$CommonVC_{j,s,h,n,t} = \pi Z_{j,s,t} + \alpha_h + \gamma_{n,t} + X'_{j,t}\Lambda_1 + u_{j,s,h,n,t}, \tag{3}$$

where α_h denotes headquarters-state fixed effects, $\gamma_{n,t}$ denotes industry-by-year fixed effects, and $X_{j,t}$ contains the baseline controls for investor characteristics.

For each labor-market outcome $Y_{j,s,h,n,t}$, the corresponding second-stage equation is

$$Y_{j,s,h,n,t} = \beta \widehat{CommonVC}_{j,s,h,n,t} + \delta_h + \eta_{n,t} + X'_{j,t}\Lambda_2 + \varepsilon_{j,s,h,n,t}, \tag{4}$$

where $\widehat{CommonVC}_{j,s,h,n,t}$ is the predicted value from Equation (3). Thus, both stages include headquarters-state and industry-by-year fixed effects, as well as the same set of investor controls. We estimate Equations (3) and (4) by two-stage least squares and cluster standard errors at the state-of-incorporation level.

The relevance condition requires COW eligibility to affect the probability of common VC ownership. Figure 2 provides strong support for this condition by showing that COW eligibility increases common VC ownership.

The exclusion restriction requires that, conditional on headquarters-state fixed effects, industry-by-year fixed effects, and investor controls, COW eligibility affects employment and worker mobility only through its effect on common VC ownership. This condition would be violated if COW adoption directly changed firms' financing, governance, or personnel decisions independently of common ownership, or if firms incorporated in adopting states experienced unobserved changes in labor-market outcomes that are not captured by the included fixed effects and controls. We rely on the institutional evidence in Eldar and Grennan (2024), which shows that the statutes were narrowly directed at fiduciary-duty liability, were not adopted in response to broader economic conditions or lobbying by affected firms, and did not systematically alter ventures' incorporation choices. We also report stacked reduced-form estimates of the effect of COW adoption on the main labor-market outcomes, allowing us to examine whether outcome changes emerge only after adoption. The absence of differential pre-trends in the first-stage event study supports the timing and relevance of the instrument, but does not by itself establish the exclusion restriction. We therefore interpret the IV estimates as complementary to the stacked difference-in-differences evidence.

4. Common VC Ownership, Employment, and Mobility

This section summarizes our findings on the effects of common VC ownership on firm hiring and the mobility of human capital. Appendix B reports robustness checks using a saturated stacked COW specification, alternative common-ownership definitions,

TABLE 2. Common ownership, employment, and worker mobility

	(1) Employment	(2) Turnover	(3) $\mathbb{1}\{\text{J2J}\}$	(4) $\mathbb{1}\{\text{Internal J2J}\}$
CommonVC	0.275***	0.0372***	0.105***	0.0160***
	(0.0162)	(0.00398)	(0.00610)	(0.00169)
Observations	826,413	826,413	826,413	826,413
Adj. R-squared	0.851	0.236	0.360	0.104
Mean DV	2.17	0.12	0.25	0.01
Firm FE	Yes	Yes	Yes	Yes
Industry-Year FE	Yes	Yes	Yes	Yes
CBSA-Year FE	Yes	Yes	Yes	Yes

Notes: OLS estimates of Equation (1). Standard errors clustered at the industry-CBSA level in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Delaware-exclusion specifications, and a post-2010 sample restriction.

4.1. Baseline results

Table 2 presents our baseline estimates. When a venture begins sharing a VC investor with another venture operating in the same local market, firms significantly expand employment. The effect is economically large: common ownership increases employment by approximately 30%, corresponding to roughly twelve additional employees at the average firm in our sample. Theory and evidence link firm growth to greater worker reallocation, as expanding employers attract workers from contracting firms (Burdett and Mortensen 1998; Postel–Vinay and Robin 2002; Moscarini and Postel-Vinay 2017). We document that common ownership increases turnover by 3.7 percentage points from a baseline of 12% and raises the probability of observing a J2J transition by 10.5 percentage points relative to a baseline of 25%. The mobility effects are not limited to movements across local labor markets. Column (4) shows that common ownership also increases within-market transitions, defined as workers moving between firms operating in the same industry–CBSA market. Taken together, these findings suggest that common ownership is associated with both firm expansion and greater labor-market dynamism, rather than worker retention or labor-market foreclosure.

To benchmark the magnitude of these mobility effects, we compare them to estimates

from the literature on non-compete agreements. Johnson et al. (2023) find that banning non-compete agreements significantly increases worker mobility in high-tech industries. Because their outcome is the number of J2J transitions rather than the probability of any J2J event, we re-estimate Equation (1) using the corresponding count outcome. We find that common VC ownership increases the number of J2J transitions by approximately 26%.[14] This effect corresponds to roughly 40% of the change in mobility associated with moving from full non-compete enforceability to non-enforceability. While smaller in size than the effect of non-competes enforcement, the magnitude is nonetheless substantial, particularly given that common ownership operates through a comparatively informal organizational channel rather than a direct change in labor-market regulation.

The results thus far establish that common ownership increases hiring and worker mobility. An important question, however, is whether these effects are concentrated among particular categories of workers. This distinction matters because the movement of technical and managerial talent is likely to have different implications for firm performance, innovation, and organizational change. Table 3 therefore examines heterogeneity across worker types.

Common VC ownership increases the probability that a firm hires a scientist or engineer by 7.5 percentage points and the probability of replacing a member of the C-suite by 2.8 percentage points (columns 1 and 2). Mobility rises throughout the organizational hierarchy, with statistically significant increases for innovators, junior employees, middle-management personnel, and senior employees. Although the largest increase in mobility is observed among junior workers in absolute terms, the baseline mobility rate is considerably lower for senior personnel, implying even larger relative effects at the top of the organization. Common VC ownership also changes workforce composition, increasing the share of junior employees while reducing the share of senior employees (Table D.6). Finally, in Appendix E, we ask whether these firm-level effects translate into changes in local market outcomes. Aggregating to the industry–CBSA–year level and exploiting variation in the share of commonly owned ventures, we find that common ownership raises total employment and worker mobility within a local market.

Overall, the results indicate that common ownership affects both the hiring and reallocation of human capital across a broad range of worker categories, including employees whose skills and responsibilities are likely to be particularly important for innovation and firm strategy.

[14] This result, together with other robustness analyses replacing binary outcomes with count outcomes estimated using Poisson Pseudo-Maximum Likelihood (PPML), is reported in Table D.3 of the appendix.

TABLE 3. New hires and worker mobility by worker type

	New Hires		Mobility			
	(1) Any Hired Innovator	(2) Any C-suite Replacement	(3) Any Innovator J2J	(4) Any Junior J2J	(5) Any Mid-Seniority J2J	(6) Any Senior J2J
Common VC	0.0748***	0.0282***	0.0287***	0.0761***	0.0440***	0.00859***
	(0.00678)	(0.00186)	(0.00239)	(0.00358)	(0.00225)	(0.000769)
Observations	826,413	826,413	826,413	826,413	826,413	826,413
Adj. R-squared	0.452	0.154	0.328	0.208	0.226	0.057
Mean DV	0.238	0.043	0.038	0.189	0.067	0.011
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry-Year FE	Yes	Yes	Yes	Yes	Yes	Yes
CBSA-Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: OLS estimates of Equation (1). Standard errors clustered at the industry-CBSA level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

4.2. Stacked difference-in-Differences and instrumental variable estimates

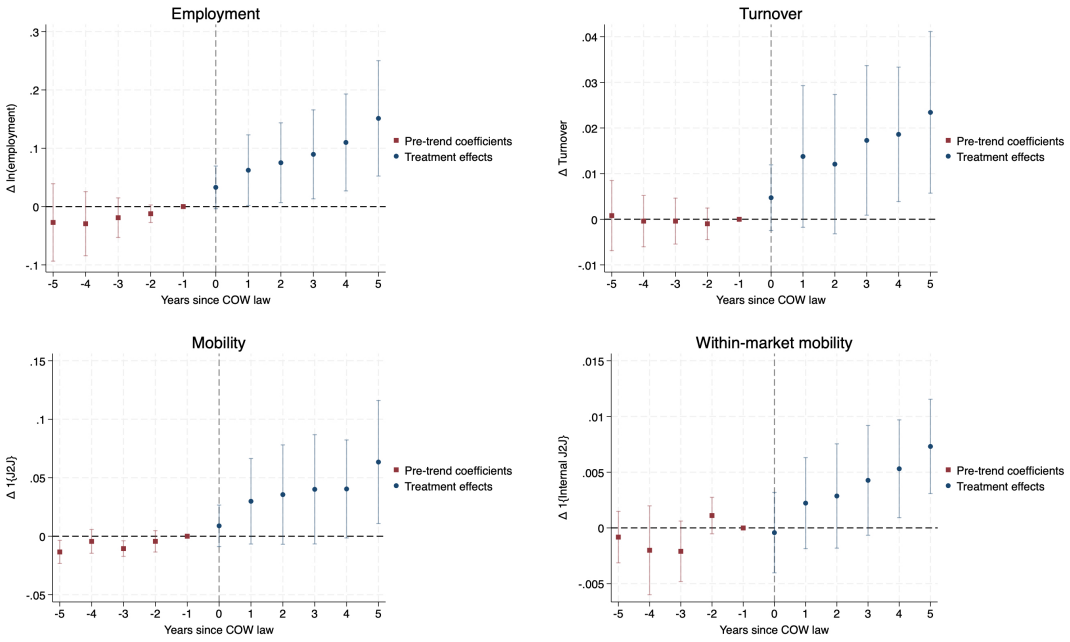
The baseline results above document robust associations, but they cannot be interpreted as causal effects of common ownership on hiring and worker mobility. We therefore turn to the stacked difference-in-differences specification in Equation (2). This design compares firms incorporated in states that adopt COW statutes to similar firms incorporated in states that never amended their corporate laws to allow for COWs, before and after the institutional change.

Figure 3 shows little evidence of differential pre-trends across any of the four outcomes. The coefficients in the years preceding COW adoption are economically small and statistically indistinguishable from zero. After adoption, employment, turnover, and worker mobility increase gradually and persistently. The absence of detectable pre-trends alleviates concerns that firms incorporated in adopting states were already experiencing different labor-market trajectories before COW adoption.

The timing of the effects is also informative. The gradual post-adoption response is consistent with mechanisms that take time to operate, including the formation of new ownership links and the subsequent transmission of information across portfolio firms.

Table 4 reports instrumental variable (IV) estimates using COW adoption as an instrument for common VC ownership. The first stage is strong: COW adoption increases common VC ownership by 10.9 percentage points, with a KP Wald F-statistic of 103.22.

FIGURE 3. Stacked DiD: employment, turnover, and mobility



Notes: The figure reports event-study coefficients from the stacked DiD specification in Equation (2). The omitted category is the year before COW adoption. Panels report effects on log employment (top left), turnover rate (top right), any J2J mobility (bottom left), and within-market J2J mobility (bottom right). Vertical bars report 95% confidence intervals. Standard errors are clustered at the state of incorporation level.

The second-stage estimates are positive and statistically significant across all outcomes, reinforcing the conclusion that common ownership increases employment and worker mobility.

The IV estimates are larger than the corresponding OLS estimates.[15] We interpret these magnitudes with caution for two reasons. First, the non-instrumented estimates may be downward biased if omitted factors are negatively correlated with common VC ownership but positively correlated with firm-level employment growth and worker mobility.[16] Second, under the usual local average treatment effect interpretation, the IV estimates capture the effect for firms whose likelihood of becoming commonly owned is shifted by COW adoption. These compliers are likely to be firms for which actual

[15] It is not uncommon for IV estimates to be larger than OLS estimates. For example, Samila and Sorenson (2011) estimates the effect of VC on total MSA-level employment and finds IV estimates around five times larger than the corresponding OLS estimates.

[16] For example, safer or more obviously scalable ventures may be more likely to attract capital without relying on overlapping investors, while common ownership may arise precisely when investor coordination, monitoring, or legal constraints are more salient.

TABLE 4. Instrumental variable estimates

	First Stage	Second Stage			
	(1) CommonVC	(2) Employment	(3) Turnover	(4) 𝟙{J2J}	(5) 𝟙{Internal J2J}
Z	0.109***				
	(0.011)				
CommonVC		1.210**	0.197***	0.469***	0.052***
		(0.526)	(0.025)	(0.126)	(0.004)
Obs	831,171	831,171	831,171	831,171	831,171
KP Wald F	103.22				
R-square Adj	0.31				
Mean DV	0.195	2.17	0.12	0.25	0.01
Industry-by-year FE	Yes	Yes	Yes	Yes	Yes
HQ State FE	Yes	Yes	Yes	Yes	Yes

Notes: Column (1) reports the first-stage estimate of COW adoption on common VC ownership. Columns (2)–(5) report second-stage IV estimates using COW adoption as an instrument for common VC ownership. All specifications include industry-by-year and HQ-state fixed effects. KP Wald F reports the Kleibergen–Paap F-statistic. Standard errors, clustered at the state of incorporation level, are reported in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

and prospective investors' litigation risk previously constrained overlapping ownership or portfolio management activities. The larger IV estimates can therefore also reflect treatment effect heterogeneity: common ownership may have especially large effects when legal frictions were binding and the reform meaningfully expanded investors' ability to shape the governance of portfolio firms.

Taken together, the OLS, stacked difference-in-differences, and IV estimates point in the same direction: common VC ownership increases firm employment and worker mobility. The IV results are therefore best interpreted as evidence that these patterns are not solely driven by selection into common ownership.

4.3. The Role of Governance: Board Representation

We next examine whether the effects of common VC ownership are stronger when shared investors have greater ability to influence portfolio-firm decisions. If firms act to maximize shareholder profits, commonly owned firms can be shown to place positive weight on the profits of other firms in the investor's portfolio (Rotemberg 1984; O'brien and Salop 1999). This weight depends on both cash-flow rights and control rights.

Although these weights are not directly observable, board representation provides a

TABLE 5. The role of board representation

	(1) Firm Employment	(2) Turnover Rate	(3) Any J2J	(4) Internal J2J	(5) C-Suite Replacement	(6) CEO Replacement
CommonVC with Board Seat	0.716***	0.080***	0.202***	0.052***	0.070***	0.018***
	(0.043)	(0.007)	(0.014)	(0.008)	(0.006)	(0.002)
CommonVC without Board Seat	0.189***	0.022***	0.080***	0.012***	0.023***	0.006***
	(0.013)	(0.003)	(0.004)	(0.001)	(0.002)	(0.001)
Observations	826,413	826,413	826,413	826,413	826,413	826,413
R-square	0.87	0.25	0.43	0.20	0.25	0.16
Mean DV	2.17	0.12	0.25	0.01	0.04	0.01
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry-by-year FE	Yes	Yes	Yes	Yes	Yes	Yes
CBSA-by-year FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table reports OLS estimates of Equation (1). *CommonVC with Board Seat* equals one when the focal firm shares a VC investor with another venture in the same industry–CBSA and at least one shared investor holds a board seat at the focal firm. *CommonVC without Board Seat* equals one when the focal firm shares a VC investor with another venture in the same industry–CBSA but no shared investor holds a board seat at the focal firm. All specifications include firm, industry-by-year, and CBSA-by-year fixed effects. Standard errors clustered at the industry-CBSA level are reported in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

natural proxy for investor influence. Board seats give investors greater capacity to monitor managers, advise founders, transmit information across portfolio firms, and shape hiring and personnel decisions. We therefore decompose common VC ownership according to whether a shared investor holds a board seat at the focal firm. Specifically, we construct two mutually exclusive indicators. *CommonVC with Board Seat* equals one when the focal firm shares a VC investor with another venture in the same industry–CBSA and at least one shared investor holds a board seat at the focal firm. *CommonVC without Board Seat* equals one when the focal firm shares a VC investor with another venture in the same industry–CBSA but no shared investor holds a board seat at the focal firm. Then, we run regressions similar to that in Equation 1 including both *CommonVC with Board Seat* and *CommonVC without Board Seat* simultaneously as covariates in the model. The results of these analyses are reported in Table 5. The estimates should not be interpreted as the causal effect of board representation. Rather, they illustrate how the association between common ownership and firm hiring and labor-mobility outcomes changes when shared investors have formal channels to monitor, advise, and influence portfolio firms.

We find that the associations between common ownership and firm outcomes are substantially stronger when the shared investor holds a board seat at the focal firm. Common ownership is associated with employment growth even in the absence of formal

board representation, but the magnitude is nearly four times larger when the shared investor sits on the board. Similar patterns appear for turnover, overall J2J mobility, and within-market J2J mobility. For example, the estimated association with turnover is 8 percentage points with board representation, compared with 2.2 percentage points without it.

We also examine whether common ownership with board representation is associated with changes at the top of the organization. Columns (5) and (6) show that C-suite and CEO replacement become more likely after common ownership when the shared investor holds a board seat. Common ownership with board representation is associated with a 7 percentage point increase in the probability of C-suite replacement and a 1.8 percentage point increase in the probability of CEO replacement, compared with 2.3 and 0.6 percentage points, respectively, for common ownership without board representation. These patterns suggest that board representation is also associated with greater investor influence over managerial and organizational decisions.

5. Internal Labor Markets across Firm Boundaries

Common ownership can create governance and information links among independent firms. We argue that these links can generate an internal labor market across firm boundaries: a setting in which shared investors facilitate matching between workers and jobs across portfolio companies without integrating the firms under common majority control. Prior research on interorganizational networks shows that such ties foster trust, repeated interaction, and information exchange (Gulati 1998; Ahuja 2000). A related literature in labor economics and sociology documents that social networks improve screening and match quality by expanding access to candidates and transmitting credible information about worker ability (Granovetter 1973; Montgomery 1991, 1992).[17]

Venture capital investors are well-positioned to play a similar role across portfolio firms because they often possess detailed information about their investees, their personnel, and their hiring needs. When multiple ventures share the same investor, this informational advantage can reduce uncertainty about prospective matches and facilitate the redeployment of workers to firms where their skills are more valuable. On the worker side, entrepreneurial firms are difficult to evaluate, and workers may have limited information about job quality and growth prospects (Bryan et al. 2026). On the

[17] Consistent with this view, empirical evidence shows that referrals give firms access to otherwise untapped worker pools and mitigate information asymmetries about candidate quality (Beaman and Magruder 2012; Brown et al. 2016; Dustmann et al. 2016; Hensvik and Skans 2016; Pallais and Sands 2016).

employer side, common ownership can reduce screening and hiring frictions by making information about worker capabilities more visible within the portfolio network. Importantly, these mechanisms need not rely on direct control over hiring decisions. Instead, they operate through increased visibility of job opportunities and worker capabilities via shared board members, advisors, and overlapping professional networks.

To test this mechanism, we construct a dataset of venture pairs located in the same CBSA and estimate the likelihood that at least one worker moves between them in a given year as a function of whether the pair shares a common VC investor. Specifically, we use OLS to estimate the following regression:

$$\begin{aligned} \mathbb{1}\{Mobility\}_{i,j,t} = \alpha_{i,j} \; + \; \alpha_t \; + \; \beta \cdot SharedVC_{i,j,t} + \\ + \gamma \cdot (SharedVC_{i,j,t} \times SameInd_{i,j}) \; + \; \varepsilon_{i,j,t} \end{aligned} \tag{5}$$

where $\mathbb{1}\{Mobility\}_{i,j,t}$ is a binary variable equal to one if at least one worker moves between firms i and j, in either direction, during year t; $SharedVC_{i,j,t}$ equals one if the two firms share an investor at t, while $SameInd_{i,j}$ equals one if they operate in the same industry. We also include dyad and year fixed effects, thereby absorbing yearly shocks as well as all persistent pair characteristics such as industry similarity, geographic proximity, or unobserved relational ties. Standard errors are clustered at the CBSA level.[18]

The results in column 1 of Table 6 show that two ventures are significantly more likely to exchange workers when they share a common investor. This effect is larger when the two ventures operate in the same industry, where worker skills are likely to be more transferable (column 2). We then examine whether this pattern is concentrated among workers for whom information frictions are likely to be especially important. Specifically, we repeat the analysis for mobility events involving innovation workers—scientists and engineers—and C-suite executives. These workers are likely to possess more specialized, firm-specific, or strategically valuable knowledge, making external hiring more informationally sensitive. They are also the positions over which VC investors are most likely to have relevant information. Columns 3–6 of Table 6 show that sharing a VC increases the dyad-year probability of mobility for both innovation workers and C-suite executives, with stronger effects for within-industry dyads.

Having shown that common ownership increases worker flows across portfolio

[18] As a robustness check, we replace the dyad fixed effects with origin-by-year and destination-by-year fixed effects. This addresses the concern that the result is driven by firm-year shocks correlated with the shared-ownership tie rather than by the shared tie itself; the trade-off is that this specification no longer absorbs time-invariant pair match quality. The estimates are robust (Table D.4).

TABLE 6. Within-portfolio worker mobility

VARIABLES	(1) 𝟙{Mobility}	(2) 𝟙{Mobility}	(3) 𝟙{Mobility}	(4) 𝟙{Mobility}	(5) 𝟙{Mobility}	(6) 𝟙{Mobility}
SharedVC	0.000396***	0.000310***	0.000074***	0.000058***	0.000011***	0.000009**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Multiplier	4.4×	3.4×	7.4×	5.8×	5.5×	4.5×
SameInd × *SharedVC*		0.000294***		0.000054***		0.000006**
		(0.000)		(0.000)		(0.000)
Multiplier		3.3×		5.4×		3.0×
Sample	Full	Full	Innovators	Innovators	C-suites	C-suites
Observations	479,695,002	479,695,002	479,695,002	479,695,002	479,695,002	479,695,002
Mean DV	0.00009	0.00009	0.00001	0.00001	0.000002	0.000002
Dyad FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Each observation is a dyad of ventures in a given year. *Multiplier* reports the coefficient divided by the dependent variable mean within the estimation sample, expressing the treatment effect as a multiple of the baseline rate. Standard errors clustered at the CBSA level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

firms, we next ask whether these networks improve workers' reemployment prospects following separation. Table 7 presents two complementary analyses. We first examine the extensive margin of reemployment using a worker–origin firm–year-of-separation panel that includes all workers leaving an origin firm, including those for whom we do not observe a subsequent job within 36 months. The dependent variable in column (1) equals one if the worker begins another job within that window. The key regressor, *CommonVC*, indicates that the origin firm shares a VC investor with at least one other venture in the same industry and CBSA at the time of separation. Origin-firm fixed effects absorb persistent differences in workers' reemployment prospects across firms, while separation-year fixed effects absorb aggregate labor-market conditions.

Column (1) of Panel A shows that an origin firm's connection to such a portfolio network is associated with an 11.7 percentage-point increase in the probability of observed reemployment within 36 months, relative to a sample mean of 54.8%. The estimates remain similar when we restrict the sample to workers leaving firms whose employment declines by at least 50% or 70% (10.7 and 10.4 percentage points, respectively). Thus, the relationship is not confined to workers separating from stable or expanding firms. Because a firm's contraction may itself reflect financing or restructuring decisions by its investors, however, we interpret these estimates as evidence on reemployment following contraction rather than as insurance against an exogenous displacement shock.

We next examine the speed of the transition among workers who obtain a subsequent

TABLE 7. Common ownership and worker transitions following separation

VARIABLES	(1) 𝟙{next job in 36m}	(2) 𝟙{next job in 6m}	(3) 𝟙{next job in 6m}	(4) log days to new job	(5) log days to new job
Panel A: All Firms					
CommonVC	0.11692***				
	(0.006)				
SharedVC × *SameInd*			-0.02589		0.15360*
			(0.018)		(0.084)
SharedVC		0.04905***	0.06120***	-0.27162***	-0.34372***
		(0.008)	(0.009)	(0.037)	(0.051)
SameInd		0.05219***	0.05244***	-0.31004***	-0.31153***
		(0.003)	(0.003)	(0.018)	(0.017)
Observations	12,373,780	1,234,438	1,234,438	1,234,438	1,234,438
Adj. R-squared	0.366	0.068	0.068	0.086	0.086
Mean DV	0.548	0.567	0.567	3.69	3.69
Panel B: Contracting firms					
CommonVC	0.10700***				
	(0.010)				
SharedVC × *SameInd*			-0.01654		0.04275
			(0.041)		(0.218)
SharedVC		0.08574***	0.09424***	-0.32318***	-0.34517**
		(0.021)	(0.035)	(0.080)	(0.154)
SameInd		0.03432**	0.03491**	-0.28056***	-0.28208***
		(0.014)	(0.014)	(0.062)	(0.061)
Observations	209,460	33,398	33,398	33,398	33,398
Adj. R-squared	0.391	0.243	0.243	0.280	0.280
Mean DV	0.662	0.591	0.591	3.63	3.63
Panel C: Severely contracting firms					
CommonVC	0.10401***				
	(0.012)				
SharedVC × *SameInd*			0.01115		0.22627
			(0.086)		(0.474)
SharedVC		0.07307**	0.06698	-0.28617**	-0.40964
		(0.035)	(0.072)	(0.135)	(0.338)
SameInd		0.09090***	0.09040**	-0.43883***	-0.44902**
		(0.033)	(0.036)	(0.166)	(0.176)
Observations	69,907	11,228	11,228	11,228	11,228
Adj. R-squared	0.381	0.315	0.315	0.337	0.337
Mean DV	0.682	0.580	0.580	3.71	3.71
Sample	All Workers	Workers with observed next job	Workers with observed next job	Workers with observed next job	Workers with observed next job
Origin FE	Yes				
Year FE	Yes				
Origin-Year FE		Yes	Yes	Yes	Yes
Destination FE		Yes	Yes	Yes	Yes

Notes: The unit of observation in column (1) is a worker–origin firm–year-of-separation; the sample includes all workers separating from their firm at least 36 months before the end of the data, including those for whom no subsequent job is observed. Columns (2)–(5) are estimated at the worker–origin–realized destination–year-of-separation level on the sample of workers with an observed subsequent job at a firm in the origin's CBSA within 36 months. CommonVC equals one if the origin firm shares a VC investor with another venture in the same industry–CBSA at separation; SharedVC equals one if the origin and the realized destination share a VC investor in year t; Same Industry equals one if they operate in the same industry. Log days to new job is defined as ln(1 + days between separation and the start of the next position). Panel B restricts to movers from firms experiencing an employment decline of at least 50%. Panel C restricts to movers from firms experiencing an employment decline of at least 70%. Standard errors, clustered at the CBSA level, are in parentheses.

job at a firm in the origin firm's CBSA within 36 months. Columns (2) and (4) estimate regressions of the following form at the worker–origin–realized-destination–year-of-separation level:

$$Y_{w,i,j,t} = \alpha_{i,t} + \delta_j + \beta \cdot SharedVC_{i,j,t} + \gamma \cdot SameInd_{i,j} + \varepsilon_{w,i,j,t}, \tag{6}$$

where the dependent variable is either a binary variable equal to one when worker w is reemployed within 6 months or the number of days to starting a new job (in logs). *SharedVC* is one if the origin and destination firms (i, j) share an investor in year t, while *SameInd* is an indicator capturing whether i and j operate in the same industry. Origin-by-year fixed effects compare workers leaving the same firm in the same year, while destination-firm fixed effects absorb persistent differences in the attractiveness of prospective employers. Columns (3) and (5) also include the interaction between *SharedVC* and *SameInd*.

In Panel A, moving to a destination that shares a VC investor with the origin is associated with a 4.9 percentage-point increase in the probability of beginning the new job within six months. The corresponding log-duration estimate implies a roughly 24% shorter transition. The estimates remain economically large among workers leaving contracting firms: shared ownership is associated with increases of 8.6 and 7.3 percentage points in six-month reemployment for workers leaving firms contracting by at least 50% and 70%, respectively, and with transitions that are approximately 28% and 25% shorter. Same-industry transitions also occur more quickly, although the interaction estimates provide little evidence that the shared-VC advantage in transition speed is systematically stronger within industry.[19] Overall, workers leaving firms connected to a local portfolio network are more likely to have an observed subsequent job and, conditional on the eventual destination, transitions to connected firms occur more quickly, including following sharp firm contractions.

Finally, we examine whether shared investors facilitate the reallocation of top managers following successful liquidity events. This analysis is motivated by evidence from internal labor markets in business groups, where joint ownership helps reallocate workers endowed with general management skills in response to changing business conditions (Huneeus et al. 2021). Following an IPO, C-suite executives may leave the focal

[19] Because columns (2)–(5) condition on the realized destination, they identify differences in transition speed conditional on destination rather than the effect of shared ownership on destination choice. Table 6 addresses the destination-flow margin, while Table D.5 below considers an explicit set of potential destinations for executives leaving post-IPO firms.

firm, and their experience may be particularly valuable to other entrepreneurial firms seeking managerial talent. We therefore focus on C-suite executives leaving firms after an IPO and ask whether they are more likely to join another firm connected to the origin through a shared VC investor.

We construct a dataset at the worker-firm of origin-potential destination-year of separation (w, i, j, t) level, where the potential destinations represent a worker-specific choice set consisting of VC-backed firms located in the same CBSA as the origin firm that had the IPO.

$$Y_{w,i,j,t} = \alpha_i + \gamma_j + \delta_t + \beta \cdot SharedVC_{i,j,t} + \varepsilon_{w,i,j,t}, \tag{7}$$

where the dependent variable equals one if the focal executive joins a given potential destination, and the key regressor ($SharedVC$) indicates whether, as of year t, the potential destination firm j has received capital from at least one VC investor that was among the investors financing the origin firm i before its IPO. Table D.5 shows that executives leaving post-IPO firms are more likely to join connected portfolio firms. Because this analysis includes potential destinations that are not chosen, it also provides direct evidence on the destination-choice margin and complements the transition-speed results in Table 7.

Taken together, the dyadic mobility, reemployment, transition-speed, and post-IPO destination-choice results are consistent with an internal-labor-market channel through which shared investors facilitate the movement of human capital across formally independent ventures. The evidence supports an active intermediation interpretation, although it does not by itself establish that the resulting matches are more productive or improve workers' overall welfare.

6. Common Ownership and Labor-market Competition

Common ownership may prompt managers at portfolio firms to internalize the negative externalities that their hiring decisions impose on other commonly owned ventures. For instance, a manager may refrain from raising wages if doing so would poach employees from another firm in their investor's portfolio. This internalization can reduce effective competition for workers and attenuate the benefits of common ownership documented so far. Such behavior may arise through explicit or tacit collusion (e.g., "no-poach" agreements) or simply through implicit alignment of incentives induced by managers' maximization of shareholders' value.

A key determinant of labor-market power is employer concentration. When a small

number of employers account for a large share of local employment, firms may be able to pay wages below workers' marginal revenue product and restrict employment relative to the competitive benchmark (Robinson 1969). Consistent with this view, recent studies document a negative relationship between employer concentration and wages (Azar et al. 2022a; Benmelech et al. 2022).[20]

In our setting, local market concentration provides a natural way to assess whether common ownership attenuates competition for workers. In fragmented markets, workers employed by portfolio firms retain many outside options beyond the investor's portfolio. These outside options discipline commonly owned firms, which must still compete with the broader market to attract and retain talent. As concentration rises, a smaller number of firms account for a larger share of local employment, and workers have fewer outside options. If common ownership reduces competition among portfolio firms, its effects should therefore be strongest in already concentrated labor markets, where workers face a more limited set of alternative employers. Thus, the positive employment and mobility effects of common ownership should attenuate in more concentrated local markets.

To test this prediction, we compute an industry-CBSA HHI as:

$$BaseHHI_{n,c} = \sum_{j} s_{j,\tau}^2,$$

where $s_{j,\tau}$ is firm j's employment share in industry-CBSA (n, c) in year τ, defined as the first year in which the cell exhibits any common VC ownership. Figure D.3 displays the distribution of this measure. We then interact $BaseHHI_{n,c}$ with $CommonVC$ and re-estimate Equation (1).

The results in Table 8 show that the effects of common ownership depend systematically on local market structure. As employer concentration increases, the positive effects of common ownership on employment and worker mobility become significantly smaller. Although the interaction coefficients are not statistically significant at the 10% level for turnover, the results indicate that outside options shape the effect of common ownership. At the same time, the implied marginal associations between common ownership and the outcomes considered remain positive across relevant concentration levels, including at the commonly used benchmarks for a highly concentrated market (e.g., 1,800 or 2,500).

These patterns can be explained by the fact that access to specialized human capital,

[20] Beyond concentration, monopsony power can also arise in markets with many potential employers if workers face frictions that limit job mobility (Burdett and Mortensen 1998; Jarosch et al. 2024) or if worker preferences are heterogeneous, as in Lamadon et al. (2022). For a comprehensive overview of monopsony theories and related policy responses, see Azar and Marinescu (2024).

TABLE 8. Local market concentration: HHI heterogeneity

	(1) ln(Employment)	(2) Turnover	(3) 𝟙{J2J}	(4) 𝟙{Internal J2J}
CommonVC × *BaseHHI*	-0.101*	-0.00957	-0.0690***	-0.0240***
	(0.0602)	(0.0131)	(0.0216)	(0.00719)
CommonVC	0.298***	0.0394***	0.121***	0.0216***
	(0.0255)	(0.00620)	(0.00890)	(0.00299)
Observations	826,413	826,413	826,413	826,413
Adj. R-squared	0.866	0.236	0.423	0.192
Firm FE	Yes	Yes	Yes	Yes
Industry-by-year FE	Yes	Yes	Yes	Yes
CBSA-by-year FE	Yes	Yes	Yes	Yes

Notes: This table reports OLS estimates of Equation 1 augmented with an interaction between common ownership and the local labor market concentration (*BaseHHI*). *BaseHHI* is computed as $\sum_j s_{j,\tau}^2$, where $s_{j,\tau}$ is firm j's employment share in the cell in year τ, the first year the cell exhibits any common-VC ownership. Standard errors, clustered at the industry-CBSA level, are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

uncertainty about firm quality, and search frictions are particularly important among VC-backed ventures, leaving common investors with substantial scope to help firm growth and facilitate worker mobility. Although our HHI measure does not capture all potential employers in the broader industry-CBSA, it is likely to be informative about concentration within the startup labor market if workers attracted to innovative, VC-backed firms perceive these employers as distinct from larger incumbents or non-VC-backed firms (Bar-Isaac et al. 2025).

Overall, consistent with competition effects becoming more important when outside options are limited, this analysis suggests that labor-market-power forces become more relevant in concentrated local markets, but they do not overturn the increase in employment and mobility effects of common ownership for most markets in our sample.

7. Conclusion

This paper studies how common VC ownership shapes employment and worker mobility. Combining venture-capital investment data with worker employment histories, we find that common ownership is associated with greater employment, turnover, and job-to-job mobility. COW adoption increases common ownership and is followed by

similar increases in labor-market outcomes, with substantially larger effects when shared investors hold board seats.

We further show that worker moves are disproportionately more likely between firms connected through a shared investor, and workers separating from commonly owned firms are also 11.7 percentage points more likely to have an observed subsequent job within 36 months, including after sharp contractions. Among workers reemployed locally, transition times are about 24% shorter when the destination is connected through a shared investor. These patterns are consistent with common ownership creating an internal labor market across firm boundaries through active portfolio intermediation. The effects are smaller in more concentrated local markets, suggesting that the consequences of common ownership depend on market structure. Overall, our findings suggest that common ownership can affect labor markets not only by changing firms' incentives to compete for workers, but also by shaping the allocation of human capital across firms.

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ONLINE APPENDICES

A. Theoretical Background

This section outlines how common ownership can shape firm hiring and worker mobility. Wages enter the framework as firms' strategic choice variable, but we do not use wage outcomes to distinguish among the mechanisms empirically. The goal is not to provide a complete formal model with testable predictions, but to highlight the countervailing forces linking ownership structures to the labor-market outcomes examined in our analyses.

Baseline environment. Workers choose among potential employers based on wages and non-wage attributes. Let a worker's utility from joining firm j depend on the offered wage w_j and on a firm-specific component a_j that captures job characteristics. Because employers are differentiated, each has some wage-setting power. On the firm side, let the marginal product of a new hire be y and the hiring cost be h. The profit of firm j can be written as

$$\pi_j = (y - h - w_j)s_j(w),$$

where $s_j(w)$ denotes the firm's employment share and w is the vector of wages offered by all firms. The firm chooses w_j to balance the benefit of attracting more workers against the cost of paying a higher wage.[1]

Common ownership and portfolio internalization. Suppose that some investors hold stakes in multiple firms operating in the same local market. For simplicity, we summarize the strength of common ownership with a scalar $\kappa \in [0, 1]$, which captures the extent to which decisions at one portfolio firm internalize the profits of other firms in the investor's portfolio. The objective of a portfolio firm f can therefore be expressed as

$$\Omega_f = \pi_f + \kappa \sum_{g \in \mathcal{P} \setminus \{f\}} \pi_g, \tag{1}$$

where $\mathcal{P}$ denotes the investor's portfolio. When $\kappa = 0$, the firm maximizes only its own profit. As κ increases, the firm places greater weight on the effects of its decisions on other portfolio companies.[2]

[1] This setup is consistent with a differentiated-employer model with logit labor supply.

[2] In principle, κ depends on the full ownership and governance structure, including investors' equity stakes and the weights that managers place on different shareholders' interests (Rotemberg 1984). Because these details are not observed in our data, we treat κ as a reduced-form measure of the intensity of

Common investors may influence portfolio firms through formal governance rights, monitoring, advice, and repeated interaction with managers. Board representation, in particular, can increase investors' ability to transmit information across firms and to shape hiring and personnel decisions. Common ownership may therefore affect labor-market outcomes both by changing firms' incentives to compete for workers and by creating coordination benefits across portfolio companies.

Labor-market frictions and network synergies. Workers may have difficulty identifying high-quality employment opportunities, especially at entrepreneurial firms whose prospects and working conditions are uncertain (Bryan et al. 2026). Employers likewise face uncertainty about workers' skills, productivity, and suitability for particular positions. Shared investors may reduce these frictions by transmitting information about vacancies, worker capabilities, and portfolio firms' personnel needs. They may also facilitate referrals, make job opportunities more visible, and help firms identify workers whose skills are transferable across portfolio companies.

These mechanisms need not rely on investors directly controlling individual hiring decisions. They may operate through shared board members, advisors, portfolio-wide job boards, and overlapping professional networks.[3] Prior work on interorganizational networks shows that repeated ties can foster trust and information exchange (Gulati 1998; Ahuja 2000), while research on labor-market networks shows that referrals and social connections can improve access to candidates and reduce information asymmetries about worker ability (Granovetter 1973; Montgomery 1991, 1992; Beaman and Magruder 2012; Brown et al. 2016; Dustmann et al. 2016; Hensvik and Skans 2016; Pallais and Sands 2016).

We summarize these potential benefits with a coordination-synergy term $\lambda(\kappa)$, where

$$\lambda(0) = 0 \qquad \text{and} \qquad \lambda'(\kappa) > 0.$$

The term $\lambda(\kappa)$ can be interpreted as increasing the surplus generated by a worker–firm match, either by raising match productivity or by reducing search, screening, and hiring costs. The objective of portfolio firm i can then be written as

$$\Omega_i = \big[y - h - w_i + \lambda(\kappa)\big] s_i(w) + \kappa \sum_{j \in \mathcal{P}\setminus\{i\}} \big[y - h - w_j + \lambda(\kappa)\big] s_j(w). \tag{2}$$

common ownership.

[3] These channels are particularly salient in venture capital, where investors are active, well connected, and frequently involved in the governance of their portfolio firms.

Implications for wages and employment. Portfolio firm i chooses w_i to maximize Equation (2). The first-order condition is

$$(3) \quad -s_i(w) + \big[y - h - w_i + \lambda(\kappa)\big]\frac{\partial s_i(w)}{\partial w_i} + \kappa \sum_{j \in \mathcal{P}\setminus\{i\}} \big[y - h - w_j + \lambda(\kappa)\big]\frac{\partial s_j(w)}{\partial w_i} = 0.$$

Define

$$\eta_i \equiv \frac{\partial s_i(w)}{\partial w_i} > 0$$

as the slope of firm i's labor supply and define

$$D_{j \to i} \equiv -\frac{\partial s_j(w)/\partial w_i}{\partial s_i(w)/\partial w_i}$$

as the fraction of workers attracted by a wage increase at firm i who would otherwise have worked at portfolio firm j. The wage-setting condition can then be written as

$$(4) \qquad w_i = y - h + \lambda(\kappa) - \frac{s_i(w)}{\eta_i} - \kappa \sum_{j \in \mathcal{P}\setminus\{i\}} D_{j \to i}\big[y - h - w_j + \lambda(\kappa)\big].$$

The first term captures the coordination synergies generated by the ownership network. By improving match productivity or reducing recruiting costs, a larger $\lambda(\kappa)$ increases the surplus associated with hiring a worker and can encourage portfolio firms to expand employment. The second term is the standard monopsony markdown arising from differentiation across employers. The final term captures *internalized worker diversion*. A wage increase at firm i attracts some workers who would otherwise have been employed by other portfolio firms. Because the common owner places positive weight on those firms' profits, firm i has a weaker incentive to raise wages to recruit workers away from them.

Common ownership therefore creates two countervailing forces. Coordination synergies can increase the gains from hiring and expand employment, while portfolio internalization can soften competition for workers and attenuate firms' incentives to recruit from one another. The net effect on employment depends on the relative strength of these forces. We do not use the framework's wage predictions to distinguish among these mechanisms empirically. Instead, the framework motivates our analysis of whether common ownership increases or decreases firm employment and whether the effects vary with investors' governance rights and local market structure.

Mobility and reallocation across portfolio firms. Although the framework above is static, the coordination-synergy mechanism has a natural interpretation in a dynamic search-and-matching environment. Shared investors may increase the arrival rate or quality of potential worker–firm matches by transmitting information about vacancies, worker capabilities, and portfolio firms' personnel needs. They may also reduce the time required for a departing worker to locate another employer. These mechanisms can increase job-to-job mobility and accelerate worker redeployment, particularly between connected firms for which a shared investor possesses relevant information.

Greater observed mobility, however, is not by itself sufficient to establish improved match quality or greater worker welfare. In job-matching models, turnover can arise when initially uncertain or low-quality matches are revealed and dissolved (Jovanovic 1979). Search frictions may also generate gross worker reallocation as workers correct prior mismatch, so that a larger number of transitions need not imply that the underlying matching process is more efficient (Moscarini and Postel-Vinay 2017). In our setting, common investors may increase mobility by improving workers' access to valuable opportunities, but they may also replace personnel, terminate existing matches, or redirect workers across portfolio companies.

The larger effects associated with board representation and executive replacement make investor-directed personnel reallocation a particularly relevant alternative to a pure reduction in search frictions. Our empirical analysis therefore establishes whether common ownership changes employment and worker flows and whether workers are disproportionately reallocated toward connected firms. It does not separately identify whether the additional transitions reflect improved matching, portfolio restructuring, or reduced labor-market rivalry, nor does it by itself determine the welfare consequences of the observed reallocation.

B. Robustness and Sensitivity Analyses

This appendix reports robustness checks for the main empirical results. We focus on the core outcomes in the paper: log employment, turnover, any job-to-job (J2J) mobility, and within-market J2J mobility. The checks assess sensitivity to fixed-effect saturation in the stacked COW design, alternative definitions of common VC ownership, Delaware incorporation, and post-2010 data coverage.

B.1. Saturated stacked COW specification

Our baseline stacked specification includes firm fixed effects, industry-year fixed effects, and cohort-year fixed effects. Because never-treated firms can appear in multiple cohort-specific stacks, we also estimate a more saturated specification that replaces firm fixed effects with firm-by-cohort fixed effects and adds CBSA-year fixed effects:

$$(5)\quad Y_{j,n,c,t,g} = \sum_{\substack{k=-5 \\ k\neq -1}}^{5} \beta_k \mathbf{1}\{t-g=k\} \times D_{j,g} + \mu_{j,g} + \alpha_{c,t} + \gamma_{n,t} + \delta_{g,t} + \mathbf{X}'_{j,t}\Lambda + \varepsilon_{j,n,c,t,g}.$$

The firm-by-cohort fixed effects, $\mu_{j,g}$, allow each firm to have a separate baseline level in each adoption cohort stack. The CBSA-year fixed effects, $\alpha_{c,t}$, absorb time-varying local labor-market shocks.

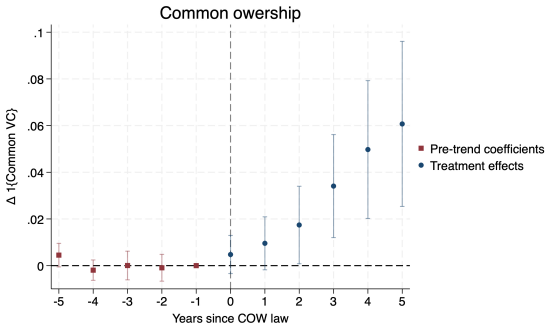
Appendix Figure B.1 reports the corresponding event-study estimates. The saturated specification yields a similar first-stage effect of COW adoption on common VC ownership. The estimates for the main employment, turnover, and mobility outcomes are less precise, but display broadly similar post-adoption patterns. We therefore use the more parsimonious specification in Equation (2) as the preferred stacked specification and interpret Equation (5) as a sensitivity check.

B.2. Alternative definitions of common VC ownership

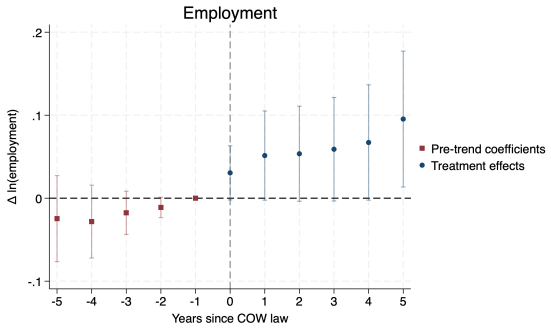
The baseline measure of common VC ownership is an indicator equal to one if a firm shares at least one VC investor with another firm in the same industry-CBSA-year. We assess the sensitivity of the main firm-level results to three alternative definitions.

First, we use a continuous measure equal to the share of a firm j's VC investors $\mathcal{V}_{j,t}$

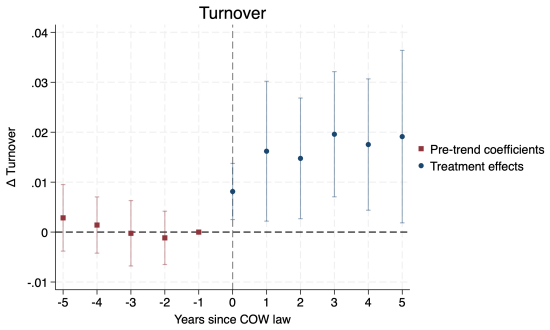
FIGURE B.1. COW event studies with firm-by-cohort and CBSA-year fixed effects



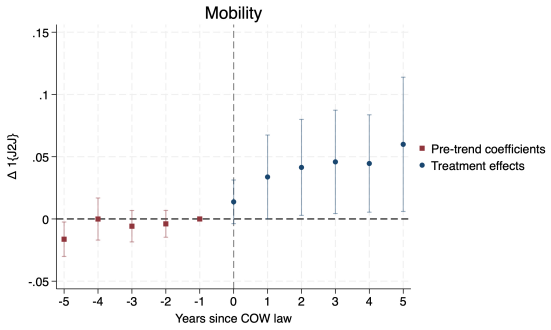
(a) Common VC ownership



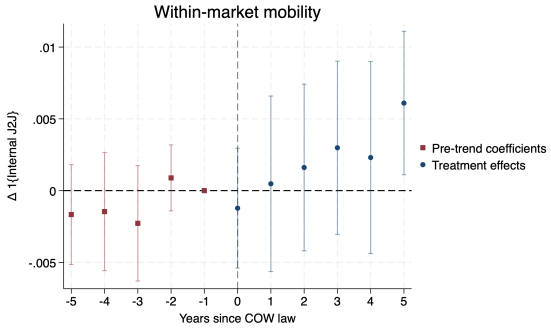
(b) Log employment



(c) Turnover



(d) Any J2J mobility



(e) Within-market J2J mobility

Notes: This figure reports event-study coefficients from the saturated specification in Equation (5). The specification includes firm-by-cohort fixed effects, CBSA-year fixed effects, industry-year fixed effects, and cohort-year fixed effects. The reference period is $k = -1$. Confidence intervals are based on state-of-incorporation cluster-robust standard errors. The figure reports the common-ownership first stage and the primary outcomes used in the main analysis.

that also invest in another firm in the same market:

(6)

$$CommonVCShare_{j,t} = \frac{\#\{v \in \mathcal{V}_{j,t} : v \text{ also invests in at least one firm in } j\text{'s market}\}}{\#\mathcal{V}_{j,t}}.$$

TABLE B.1. Firm-level estimates using alternative common ownership definitions

	(1) Employment	(2) Turnover	(3) 𝟙{J2J}	(4) 𝟙{Internal J2J}
CommonVC (Baseline)	0.275***	0.0372***	0.105***	0.0160***
	(0.0162)	(0.00398)	(0.00610)	(0.00169)
CommonVCShare	0.150***	0.020***	0.052***	0.011***
	(0.008)	(0.002)	(0.002)	(0.002)
CBSA-only *CommonVC*	0.213***	0.024***	0.098***	0.009***
	(0.012)	(0.003)	(0.004)	(0.001)
HQ-state-by-industry *CommonVC*	0.212***	0.023***	0.091***	0.012***
	(0.014)	(0.003)	(0.004)	(0.001)
Firm FE	Yes	Yes	Yes	Yes
Industry-by-year fixed effects	Yes	Yes	Yes	Yes
CBSA-by-year FE	Yes	Yes	Yes	Yes

Notes: This table reports estimates from Equation (1) using alternative measures of common VC ownership along with the baseline. Each row reports a separate set of regressions. The headquarters-state-by-industry measure is based on firms' operating location, not state of incorporation. Standard errors are clustered at the industry-CBSA level. *** p<0.01, ** p<0.05, * p<0.1.

Second, we define common ownership using a broader CBSA-only market definition, which requires shared VC ownership with another firm in the same CBSA but not necessarily the same industry. Third, we define markets using headquarters-state-by-industry cells rather than industry-CBSA cells. This state-by-industry measure uses firms' operating location, not state of incorporation.

Appendix Table B.1 reports estimates of Equation (1) using these alternative measures. Each row reports a separate specification. The results assess whether the main estimates are driven by the binary common-ownership definition or by the baseline industry-CBSA market definition.

Table B.2 reports corresponding first-stage estimates from the stacked COW design using the alternative common-ownership measures as outcomes. This table tests whether COW adoption increases broader or more intensive measures of overlapping VC ownership.

B.3. Excluding Delaware-incorporated firms

Delaware is a central state of incorporation for venture-backed firms. As a sample-composition check, we re-estimate the main firm-level panel specification after excluding

TABLE B.2. COW adoption and alternative common ownership measures

Outcome	Estimate	Standard error	Observations
CommonVC (Baseline)	0.0353***	0.0125	1,579,029
CommonVCShare	0.0342**	0.0132	1,579,029
CBSA-only *CommonVC*	0.0576***	0.0173	1,579,029
HQ-state-by-industry *CommonVC*	0.0348**	0.0157	1,579,029

Notes: This table reports average post-adoption effects from the stacked COW design using alternative common ownership measures as outcomes. The specifications include the fixed effects from Equation (2). Standard errors are clustered at the state-of-incorporation level. *** p<0.01, ** p<0.05, * p<0.1.

TABLE B.3. Estimates excluding Delaware-incorporated firms

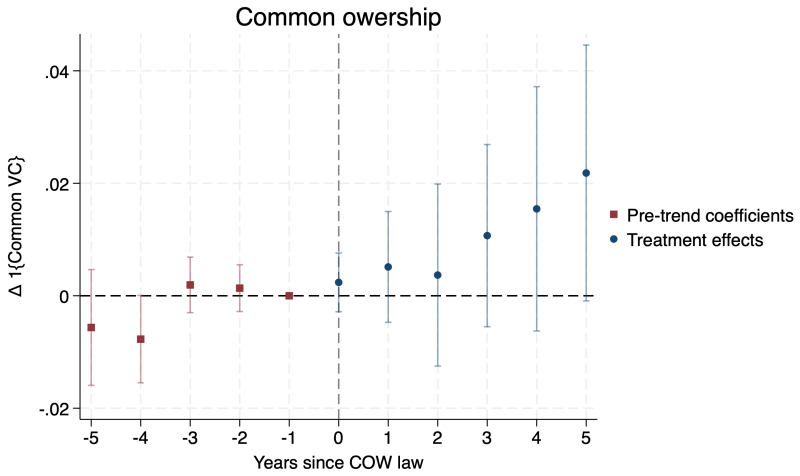
	(1) Employment	(2) Turnover	(3) $\mathbb{1}\{\text{J2J}\}$	(4) $\mathbb{1}\{\text{Internal J2J}\}$
CommonVC	0.159***	0.0184***	0.0802***	0.0149***
	(0.0161)	(0.00355)	(0.00581)	(0.00181)
Observations	533,792	533,792	533,792	533,792
R-squared	0.875	0.225	0.416	0.161

Notes: This table reports estimates from Equation (1) excluding Delaware from the sample. All specifications include firm, CBSA-year, and industry-year fixed effects, along with the baseline investor controls. Standard errors are clustered at the industry-CBSA level. *** p<0.01, ** p<0.05, * p<0.1.

Delaware-incorporated firms. Table B.3 reports the results. The estimates are similar to the baseline estimates, indicating that the main panel results are not driven by firms incorporated in Delaware.

This exercise is distinct from excluding Delaware in the COW design: because COW eligibility is assigned by state of incorporation, dropping Delaware from the COW analysis removes an important source of legal variation and changes the relevant estimand. Here, we instead ask whether the baseline within-firm relationship between common VC ownership and firm outcomes is driven by Delaware-incorporated firms. Nonetheless, in Figure B.2 we report the COW first-stage event study after excluding Delaware-incorporated firms. The estimated effect remains positive but is less precise as excluding Delaware-incorporated firms removes an important source of COW-induced variation and should be interpreted as a diagnostic.

FIGURE B.2. COW law adoption and common VC ownership excluding Delaware-incorporated firms



Notes: Event-study coefficients from Equation (2), estimated using the common VC indicator as the outcome. The reference period is $k = -1$. Confidence intervals are based on state-of-incorporation cluster-robust standard errors. Delaware-incorporated firms (i.e., $g = 2000$) are excluded from the sample.

B.4. Post-2010 sample

We re-estimate the main firm-level specifications on the post-2010 sample. This restriction addresses concerns that employment, worker mobility, and investor links are measured more consistently in later years. Appendix Table B.4 reports estimates of Equation (1) using only post-2010 observations.

We use this restriction for the firm-level panel rather than the stacked COW event study. Many COW adoptions occurred before 2010, and imposing a post-2010 restriction would mechanically remove pre-treatment observations for several cohorts and alter the interpretation of the event-study design.

TABLE B.4. Estimates in the post-2010 sample

	(1) Employment	(2) Turnover	(3) $\mathbb{1}\{\text{J2J}\}$	(4) $\mathbb{1}\{\text{Internal J2J}\}$
CommonVC	0.260***	0.0281***	0.0893***	0.00981***
	(0.0137)	(0.00476)	(0.00649)	(0.00143)
Observations	418,992	418,992	418,992	418,992
R-squared	0.909	0.261	0.476	0.260

Notes: This table reports estimates from Equation (1) restricting the sample to post-2010 observations. All specifications include firm, CBSA-year, and industry-year fixed effects, along with the baseline investor controls. Standard errors are clustered at the industry-CBSA level. *** p<0.01, ** p<0.05, * p<0.1.

C. Details on Industry Crosswalk Construction

This appendix describes the construction of the industry crosswalk between PitchBook and VentureXpert. The purpose of the crosswalk is to harmonize industry classifications across the two data sources. Because PitchBook and VentureXpert use different industry taxonomies, we map each VentureXpert industry category to the closest corresponding PitchBook industry category.

We construct the crosswalk at the broad industry level. Table C.1 reports the resulting mapping. The first column lists PitchBook industries, and the second column lists the corresponding VentureXpert industries. The mapping is many-to-one because VentureXpert often uses more granular categories than PitchBook. Thus, multiple VentureXpert industries may map to the same PitchBook industry.

The matching procedure proceeds in three steps. First, we standardize industry labels across the two data sources. We harmonize common abbreviations and closely related terms, remove punctuation, and remove generic words that do not distinguish industries, such as "other" and "related." Second, we compare each VentureXpert industry category with candidate PitchBook industries based on semantic similarity between industry labels and the underlying economic activities they describe. Third, we assign each VentureXpert industry to the PitchBook industry that best captures its primary activity.

In most cases, the mapping is straightforward. For example, VentureXpert com munication-related categories such as *Data Comm.*, *Wireless Communications*, *Satellite Comm*, and *Telephone Rel.* are mapped to PitchBook's *Communications and Networking*. VentureXpert biotechnology-related categories such as *Biotech Research*, *Biotech-Human*, *Biotech-Animal*, and *Biotech-Industrial* are mapped to PitchBook's *Pharmaceuticals and Biotechnology*. Medical diagnostics, biosensors, and medical/health products are mapped to PitchBook's *Healthcare Devices and Supplies*, while medical/health services are mapped to PitchBook's *Healthcare Services*.

For ambiguous categories, we manually review the automated match and assign the VentureXpert category to the PitchBook industry that best reflects its substantive economic activity. For instance, internet-related categories are classified based on whether they primarily correspond to software, retail, communications infrastructure, or media content. This procedure preserves the VentureXpert industry information while allowing VentureXpert observations to be classified consistently using the PitchBook industry taxonomy.

TABLE C.1. Pitchbook and VenturExpert Industry Crosswalk

Pitchbook Industry	VenturExpert Industry
Agriculture	Agricultural, Forestry
Chemicals and Gases	Chemicals and Materials
Commercial Products	Scientific Instrumentation
Commercial Products	Industrial Products, Other
Commercial Products	Manufacturing
Commercial Products	Industrial Automation
Commercial Products	Laser Related
Commercial Products	Electronics Equipment
Commercial Products	Industrial Equipment
Commercial Services	Business Services
Commercial Services	Industrial Services
Communications and Networking	Telephone Rel.
Communications and Networking	Data Comm.
Communications and Networking	Satellite Comm
Communications and Networking	Fiber Optics
Communications and Networking	Wireless Communications
Communications and Networking	Internet Communications
Communications and Networking	Facsimile Trans
Communications and Networking	Internet Services
Communications and Networking	Comm. Other
Communications and Networking	Commer. Comm.
Computer Hardware	Computers Hardware
Computer Hardware	Computer Peripherals
Construction (Non-Wood)	Construction
Consumer Non-Durables	Food and Beverage
Energy Equipment	Power Supplies
Energy Equipment	Batteries
Energy Services	Energy, Conservation

Continued on next page

TABLE C.1 – *Continued from previous page*

Pitchbook Industry	VenturExpert Industry
Energy Services	Energy, Enhanced Recovery
Exploration, Production and Refining	Oil & Gas Exploration
Healthcare Devices and Supplies	Biotech Equipment
Healthcare Devices and Supplies	Medical Diagnostics
Healthcare Devices and Supplies	Biosensors
Healthcare Devices and Supplies	Med/Health Products
Healthcare Services	Med/Health Services
IT Services	Internet Programming
IT Services	Computer Services
IT Services	Computer Programming
IT Services	Turnkey Integrated Systems and Solutions
Media	Internet Content
Other Business Products and Services	Other
Other Consumer Products and Services	Consumer Services
Other Consumer Products and Services	Consumer, Other
Other Consumer Products and Services	Consumer Products
Other Energy	Energy, Alternative
Other Energy	Energy, Coal
Other Energy	Energy, Other
Other Financial Services	Financial Services
Other Information Technology	Computer Other
Other Information Technology	Electronics, Other
Other Materials	Pollution and Recycling
Pharmaceuticals and Biotechnology	Biotech-Industrial
Pharmaceuticals and Biotechnology	Biotech Research
Pharmaceuticals and Biotechnology	Biotech Other
Pharmaceuticals and Biotechnology	Pharmaceutical
Pharmaceuticals and Biotechnology	Biotech-Animal
Pharmaceuticals and Biotechnology	Biotech-Human

Continued on next page

TABLE C.1 – *Continued from previous page*

Pitchbook Industry	VenturExpert Industry
Pharmaceuticals and Biotechnology	Medical Therapeutics
Restaurants, Hotels and Leisure	Entertainment and Leisure
Retail	Retailing Related
Retail	Internet Ecommerce
Semiconductors	Semiconductors/Other Electronics
Semiconductors	Optoelectronics
Software	Internet Software
Software	E-Commerce Technology
Software	Computer Software
Software	Digital Imaging and Computer Graphics
Transportation	Transportation
Utilities	Utilities

Notes: This table reports the industry crosswalk between PitchBook and VentureXpert. The first column reports the PitchBook industry category, and the second column reports the corresponding VentureXpert industry category. The crosswalk is many-to-one because VentureXpert often uses more granular categories than PitchBook. Therefore, multiple VentureXpert industries may map to the same PitchBook industry.

D. Additional Figures and Tables

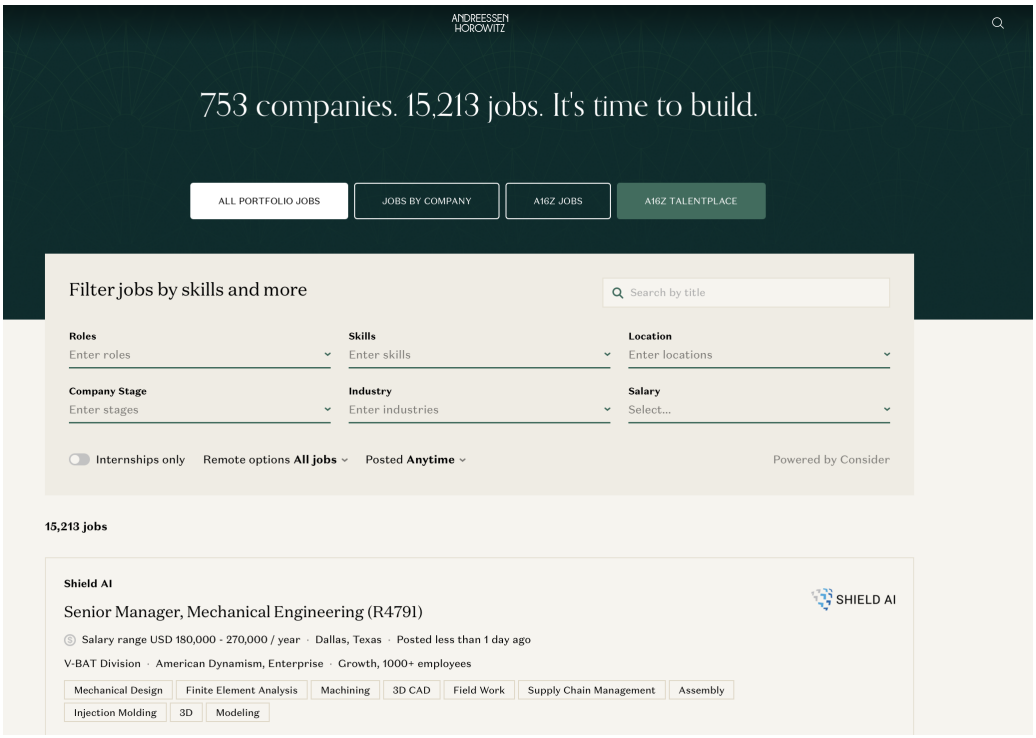
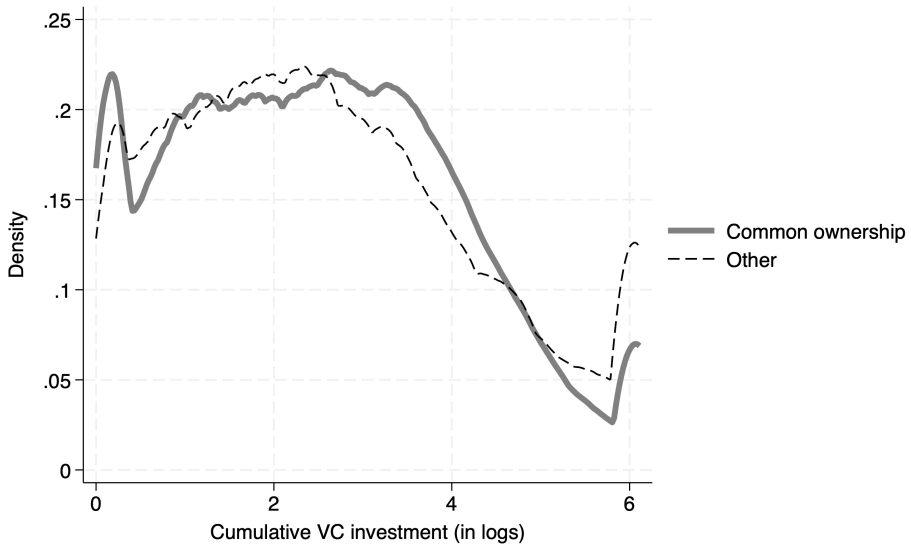


FIGURE D.1. A venture capital firm's portfolio jobs board

Notes: Screenshot of the Andreessen Horowitz (a16z) portfolio jobs board, accessed in April 2026, available at https://jobs.a16z.com/jobs. The board aggregates open positions across a16z portfolio companies and allows candidates to filter by industry, company stage, location, skills, and salary. Headline counts of listed companies and open positions reflect the date of access and change over time.

FIGURE D.2. Distribution of cumulative VC investment, by common ownership status



Notes: This figure plots kernel density estimates of cumulative venture capital investment (in logs) for ventures in the sample, separately by common ownership status. The solid grey line corresponds to venture-years where at least one common VC investor is observed (common ownership); the black dashed line corresponds to all other venture-years. Cumulative VC investment is measured in millions of USD and transformed as ln(1 + cumulative VC investment). The sample is restricted to ventures with strictly positive cumulative VC investment. Densities are estimated using an Epanechnikov kernel.

TABLE D.1. Summary of Corporate Opportunity Waiver Timeline

State incorp	Effective Date	By Charter	By bylaws	By Board action	Covers directors	Covers Shareholders
DE	7/1/2000	Yes	Possible	Yes	Yes	Yes
OK	11/1/2001	Yes	Possible	Yes	Yes	Yes
MO	10/1/2003	Yes	Possible	Yes	Yes	Yes
KS	1/1/2005	Yes	Possible	Yes	Yes	Yes
TX	1/1/2006	Yes	Possible	Yes	Yes	Yes
NV	10/1/2007	Yes	Possible	Yes	Yes	Yes
NJ	3/11/2011	Yes	Possible	Yes	Yes	Yes
MD	10/1/2014	Yes	Possible	Yes	Yes	No
WA	1/1/2016	Yes	No	No	Yes	Yes

Note: This table provides the summary information of the states that amended their corporate laws explicitly to allow COWs (Source: Rauterberg and Talley (2017)).

TABLE D.2. Average effects of COW adoption

	(1) Employment	(2) Turnover	(3) $\mathbb{1}\{\text{J2J}\}$	(4) $\mathbb{1}\{\text{Internal J2J}\}$
COW	0.1006*	0.0148**	0.0422*	0.0041**
	(0.0501)	(0.0066)	(0.0226)	(0.0018)
Observations	1,579,029	1,579,029	1,579,029	1,579,029
Adj. R^2	0.892	0.195	0.406	0.157
Firm FE	Yes	Yes	Yes	Yes
Cohort×Year FE	Yes	Yes	Yes	Yes
Industry×Year FE	Yes	Yes	Yes	Yes

Notes: This table reports estimates of the average post-adoption effects from the stacked COW design on the main outcomes considered in the study. Standard errors are clustered at the state-of-incorporation level. *** p<0.01, ** p<0.05, * p<0.1.

TABLE D.3. Common ownership, employment, and worker mobility

VARIABLES	(1) J2J Count	(2) Internal J2J Count	(3) Count hired innovator
CommonVC	0.230***	0.705***	0.292***
	(0.0273)	(0.0638)	(0.0362)
Observations	613,708	73,008	483,191

Note: PPML estimates of Equation (1). Standard errors clustered at the industry-CBSA level in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table D.4. Robustness analysis on within-portfolio worker mobility

VARIABLES	(1) 𝟙{Mobility}	(2) 𝟙{Mobility}	(3) 𝟙{Mobility}	(4) 𝟙{Mobility}	(5) 𝟙{Mobility}	(6) 𝟙{Mobility}
SharedVC	0.000214***	0.000148***	0.000045***	0.000033***	0.000005***	0.000003**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
SameInd × *SharedVC*		0.000236***		0.000044***		0.000007***
		(0.000)		(0.000)		(0.000)
Sample	Full	Full	Innovators	Innovators	C-suites	C-suites
Observations	1,809,801,970	1,809,801,970	1,809,801,970	1,809,801,970	1,809,801,970	1,809,801,970
Mean DV	0.00009	0.00009	0.00001	0.00001	0.000002	0.000002
Origin-Firm-by-Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Destination-Firm-by-Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Each observation is a origin firm and destination firmin a given year. Standard errors clustered at the CBSA level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table D.5. Post-IPO C-suite redeployment

VARIABLES	(1) CEO Move	(2) C-Suite Move	(3) CEO Move	(4) C-Suite Move
SharedVC	0.00026	0.00751***	0.00013	0.00614*
	(0.001)	(0.003)	(0.001)	(0.003)
Observations	1,192,737	1,192,737	1,190,361	1,190,361
Adjusted R-squared	0.086	0.068	0.118	0.092
Mean DV	0.0009	0.0047	0.0009	0.0047
Origin FE	Yes	Yes	No	No
Destination FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	No	No
Origin-Year FE	No	No	Yes	Yes

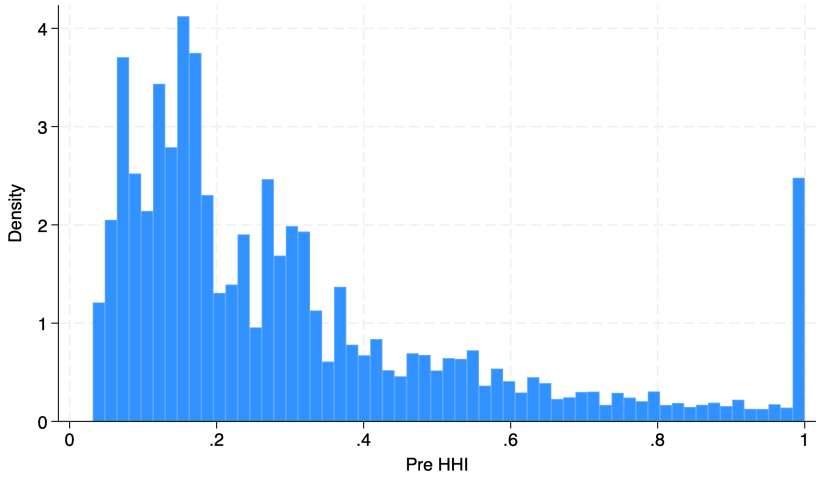
Notes: The unit of observation is a worker–origin firm–potential destination firm–year-of-separation combination (w, i, j, t). The sample is restricted to CEOs (columns 1 and 3) or C-suite executives (columns 2 and 4) who depart their firm after an IPO; potential destination firms are all firms located in the same CBSA as the origin firm. The dependent variable is an indicator equal to one if the worker moves from the origin to the destination firm. The coefficient reported is that on *SharedVC*, which equals one if, by year t, the potential destination has received funding from at least one VC investor that financed the origin firm before its IPO. All specifications include destination effects. Columns 1 and 2 also include origin-firm and year of separation fixed effects, while the last two columns replace these with origin-firm-by-year fixed effects. Standard errors, clustered at the CBSA level, are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

TABLE D.6. Workforce composition by seniority

	Share of workforce		
	(1) Junior	(2) Mid-seniority	(3) Senior
CommonVC	0.013***	0.002	-0.022***
	(0.002)	(0.002)	(0.002)
Observations	826,413	826,413	826,413
Adj. R-square	0.62	0.60	0.65
Mean DV	0.52	0.32	0.11
Firm FE	Yes	Yes	Yes
Industry-Year FE	Yes	Yes	Yes
CBSA-Year FE	Yes	Yes	Yes

Notes: This table reports estimates of Equation (1) separately by worker seniority. Columns (1)–(3) use as outcomes the share of the firm's workforce classified as junior, mid-seniority, and senior, respectively. All specifications include firm fixed effects, industry-by-year fixed effects, and CBSA-by-year fixed effects. Standard errors, reported in parentheses, are clustered at the industry-CBSA level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

FIGURE D.3. Distribution of *BaseHHI*



Notes: This figure plots the distribution of pre-period local labor market concentration across industry-CBSA cells. Concentration is measured by the Herfindahl-Hirschman index, $\text{PreHHI}_{n,c} = \sum_j s^2_{j,\tau}$, where $s_{j,\tau}$ is firm j's employment share in industry-CBSA cell (n, c) in year τ, the first year the cell exhibits any common-VC ownership.

E. Common VC Ownership and Aggregate Outcomes: Correlational Evidence

The firm-level evidence shows that commonly owned ventures expand employment and experience greater worker mobility. We next ask whether these effects translate into broader local-market expansion or instead reflect reallocation across firms within the same local labor market. To do so, we aggregate the firm-level panel to the industry–CBSA–year level and examine whether markets with greater exposure to common VC ownership also exhibit higher aggregate employment and mobility.

We define $CommonVCShare_{n,c,t}$ as the fraction of active ventures in industry–CBSA (n, c) and year t that share at least one investor with another active venture in the same local market. This measure ranges from zero, when no local ventures share an investor, to one, when every local venture shares at least one VC with another venture in the same industry–CBSA. We construct three local-market outcomes: total employment (in logs), the mobility rate, and the internal mobility rate.

We estimate the following regressions:

$$y_{n,c,t} = \alpha_{n,c} + \alpha_{n,t} + \alpha_{c,t} + \beta \cdot CommonVCShare_{n,c,t} + \varepsilon_{n,c,t}, \tag{7}$$

where $y_{n,c,t}$ is one of the three outcomes above, while $\alpha_{n,c}$, $\alpha_{n,t}$, and $\alpha_{c,t}$ are industry-CBSA, industry-year, and CBSA-year fixed effects, respectively. Consequently, β is identified from changes over time in the prevalence of common ownership within an industry–CBSA, after netting out permanent differences across local markets, industry-year shocks, and CBSA-year shocks. We estimate Equation (7) by OLS when the outcome is log total employment. For mobility outcomes, we estimate Poisson pseudo-maximum likelihood (PPML) specifications with local-market employment included as an exposure variable. This approach accounts for the fact that worker transitions are count outcomes that mechanically scale with market size and allows us to interpret the estimates as semi-elasticities of the underlying mobility rate rather than changes in the number of transitions.

Table E.1 reports the results. A one-standard-deviation increase in *CommonVCShare* is associated with a 10.4% increase in total local-market employment. This finding indicates that the firm-level employment gains are not merely offset by contraction among other ventures in the same industry–CBSA. Instead, markets with greater exposure to common VC ownership experience higher aggregate employment among VC-backed ventures.

TABLE E.1. Common VC Ownership and Local-Market Labor Outcomes

	(1) Total Employment	(2) Mobility Rate	(3) Internal Mobility Rate
CommonVCShare	0.673***	0.195**	1.479***
	(0.0735)	(0.0862)	(0.268)
+ 1SD	10.40%	2.91%	24.29%
+ Avg. *CommonVCShare*	3.12%	0.90%	6.99%
Method	OLS	PPML	PPML
Observations	81,827	77,797	77,797
Adj./Pseudo R-squared	0.87	0.901	0.407
Mean DV	374.28	1.89%	0.01%
Industry-CBSA FE	Yes	Yes	Yes
CBSA-Year FE	Yes	Yes	Yes
Industry-Year FE	Yes	Yes	Yes

Notes: This table reports industry–CBSA–year estimates of Equation (7). *CommonVCShare* is the fraction of active ventures in an industry–CBSA–year that share at least one investor with another active venture in the same industry–CBSA. Column (1) uses log total employment as the outcome. Columns (2)–(3) estimate PPML specifications for mobility-rate outcomes with employment as an exposure variable; coefficients are semi-elasticities of the corresponding mobility rate. All specifications include industry–CBSA, industry-by-year, and CBSA-by-year fixed effects. Standard errors are clustered at the industry–CBSA level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

We also find economically meaningful increases in worker mobility. A one-standard-deviation increase in *CommonVCShare* is associated with a 2.9% increase in the overall mobility rate and a 24.3% increase in the internal mobility rate. Thus, the mobility effects documented at the firm and dyad levels are also visible in the aggregate local-market data. Markets with more common ownership experience greater worker flows across ventures, especially within the same industry–CBSA.

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