

Markets for Acquisitions on Digital Platforms: Information Leakage Risk and Non-Disclosure Agreements

Luca Gius¹, Aldona Kapacinskaite², and Margaux Mare²

¹Bocconi University

²INSEAD

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Abstract

How can platforms organize markets for ideas when sellers cannot rely on patents? We argue that such platforms face a safety–thickness trade-off: tools that make disclosure safer can also make matching thinner. We study non-disclosure agreements (NDAs) as a governance lever using detailed data from a large platform for business acquisitions. NDA use concentrates among higher-quality, established businesses. NDA users receive higher prices conditional on sale, but are also less likely to sell. After a platform policy change reduced frictions associated with NDA use, adoption rose sharply, entry shifted toward confidentiality-sensitive sellers, and exchange format moved away from auctions. The study contributes to the literature on markets for technology and digital platforms, showing that safer disclosure reshapes both market participant pool and exchange format.

1 Introduction

How can platforms help organize markets for ideas? Unmediated exchange of ideas suffers from many frictions that limit effective and safe matching between buyers and sellers (Arora et al., 2001; Gans & Stern, 2010; Agrawal et al., 2014). Digital marketplaces can mitigate the matching problem by diffusing richer information to more potential buyers, but this same diffusion risks intensifying misappropriation concerns (Dushnitsky & Klueter, 2011; Gius, 2023). Prior work suggests that patents and other formal IPRs offer one way to decouple these forces, making broad disclosure compatible with seller safety and thereby fostering platform-governed markets for ideas (Dushnitsky & Klueter, 2017); yet many commercially valuable ideas lack such protection. We argue and show that platforms organizing markets for *unpatented* ideas face a safety–thickness trade-off: tools that make disclosure safer can also make matching thinner, thereby reshaping which sellers participate on the platform, how they transact, how much information they reveal, and, ultimately, the number and value of transactions the platform mediates.

We develop this argument by drawing on two research streams. First, we draw on research on the disclosure paradox (Arrow, 1962), which clarifies seller-side incentives. Second, we build on platforms research, which focuses on how intermediaries create value by enabling matching (Rochet & Tirole, 2003). From the seller’s perspective, when broad disclosure is unsafe, high-quality sellers may avoid the marketplace (Akerlof, 1970), while those who participate choose how much information to reveal, to whom, and under what protections (Anton & Yao, 1994; 2002). From the platform’s perspective, the objective is to generate many valuable transactions, which requires attracting high-quality sellers while also supporting broad enough disclosure and buyer participation for matching to succeed. Prior literature suggests that successful platforms for ideas must encourage disclosure, while acknowledging that under some circumstances, sellers may have to opt for protective mechanisms such as non-disclosure agreements (NDAs) (Dushnitsky & Klueter, 2011). However, this possibility — that successful platforms for ideas require balancing non-disclosure with disclosure — remains underexplored. We study the circumstances driving this balance, by analyzing which businesses use NDAs, and how that affects their outcomes in the market.

When sellers do not rely on patents — likely a vast majority of transactions, given how rare patenting firms are (Mezzanotti & Simcoe, 2023) — they can protect confidential information either by limiting how much they disclose or by limiting who can access it, placing them on a depth–breadth frontier that ranges from limited disclosure to many buyers to extensive disclosure to a selected few.¹ Platform governance determines how costly or easy these regimes are to use. On the one hand, platforms can push sellers toward public disclosure and auction-based exchange, which supports broad bidding and price discovery (Einav et al., 2018) but may deter high-quality sellers. On the other hand, platforms can give sellers discretion over what to reveal and whom to admit as bidders, enabling more selective disclosure and private bargaining but potentially reducing broad buyer participation, inconsistent with auction design. NDAs move sellers toward the latter regime by making selective disclosure easier. However, because buyers may be reluctant to sign them, NDAs also reduce the number of buyers who can evaluate a listing. Making NDAs more institutionalized therefore affects both entry and behavior on a platform: it may attract more confidentiality-sensitive sellers,² but it also shifts participating

¹Prior work has studied a number of potential solutions along this frontier (Anton & Yao, 1994; 2002), although to our knowledge no theoretical or empirical work has explored how sellers choose between these various solutions.

²Theoretical work on this question is ambivalent, as the dissuasion effect of NDAs is also costlier for higher-

sellers toward deeper disclosure to fewer buyers and toward fixed-price listings that rely less on broad participation which is available via auctions. The effect of sellers using NDAs on platform performance is ambiguous even if the policy raises seller quality: deal value conditional on a sale may increase, while conversion and the number of completed transactions may fall.

In sum, we argue that in contrast to the openness and disclosure promoted by various platforms, NDAs as a governance lever give sellers greater control over potentially valuable information access. However, by raising buyer-side frictions, NDAs may reduce the likelihood of a sale and push sellers towards “deep and slow” negotiations rather than open auctions. Fostering safe disclosure thus creates a volume–value trade-off in which successful transactions may have higher average value, but fewer transactions may be completed.

To study the trade-off between safe disclosure and successful matching, we need variation in both how sellers disclose information to potential buyers and how transactions unfold in the marketplace. Satisfying either data requirement is difficult, as transactions involving confidential information and unsuccessful transactions typically go unrecorded, let alone cases that involve both. We bring some of the first empirical evidence on these questions using detailed data from a large platform for business acquisitions. The setting is especially well-suited to test our argument because digital businesses may have assets that are difficult to protect via disclosure-based rights, such as patents. Such assets are relatively easy to imitate once disclosed. We observe which sellers condition access to confidential listing information using a non-disclosure agreement, what information those NDAs protect, whether the sellers use auctions or fixed-price listings, whether the listing sells, and at what price, and rich characteristics of the seller’s business, including descriptions, financial information, and ex-post performance. To study the impact of platform governance decisions on NDA use, we exploit a policy change that standardized NDA templates and made NDA execution easier, allowing us to examine how facilitating protected disclosure affected seller entry, NDA use, transaction mode, and platform-mediated outcomes.

The findings support the safety–thickness tradeoff. First, we show that NDA use is disproportionately concentrated among higher-quality and more established businesses, and that NDAs are used mainly to protect financial information and, to a lesser extent, sensitive customer-related information. NDA users disclose more detailed information and receive higher prices conditional on sale, consistent with protected disclosure allowing selected buyers to better evaluate the business. At the same time, NDA users attract fewer bids and are less likely to sell, consistent with the idea that restricting information access makes matching thinner. Sellers also adapt their transaction mode to this disclosure strategy: NDA users are less likely to rely on auctions, which depend on broad buyer participation and price discovery, and more on fixed-price listings.

Second, we exploit a platform governance change that institutionalized the access of NDAs for higher quality buyers. We would expect that such change would be particularly attractive to higher quality businesses, if it is the case that they use NDAs to prevent potential information leakage. Platform-level results reinforce these seller-level patterns. After the policy change, NDA adoption rose sharply, especially among confidentiality-sensitive businesses.³ This response occurred through two channels: first, conditional on listing, confidentiality-sensitive businesses became more likely to use NDAs. Second, the entrant pool shifted toward confidentiality-sensitive businesses. The policy was also associated with a shift away from auctions and toward fixed-price listings. As a consequence, the policy reduced both the number of completed sales and the likelihood that any given listing would sell; however, successful transactions commanded

quality sellers (Anton & Yao, 2008).

³We define confidentiality-sensitive businesses as those whose pre-policy characteristics predict NDA use.

significantly higher prices, so estimated commission-based revenues increased substantially.

This paper contributes to several research streams, starting with markets for ideas and technologies (Arora et al., 2001). The theoretical literature on markets for ideas and technologies treats disclosure as a multi-dimensional strategic choice: sellers decide not only whether to reveal information, but also how much to reveal and how broadly to circulate it among potential buyers (Anton & Yao, 1994; 2002). Existing empirical work has largely examined whether appropriability mechanisms such as patents (e.g., Gans, Hsu, and Stern, 2008; Arora et al., 2001), reputation (Luo, 2014), and trade secrets (Cunningham et al., 2026) help firms transact. We bring these perspectives together by showing that NDAs reshape the depth–breadth trade-off in disclosure. They make more detailed disclosure feasible, but only by gating access to information. In doing so, they shift sellers toward transaction modes that can operate with a narrower and more selected buyer pool. This has important consequences for the effective design of multilateral trading mechanisms in markets for ideas.

Second, we contribute to the classic literature on platform openness (Boudreau, 2011; 2017; Parker & Van Alstyne, 2017) by providing some of the first empirical evidence that platforms for ideas face a sharp openness–protection trade-off, likely more pronounced than in many other online marketplaces. In idea markets, as in many platform settings, some level of protection is usually necessary to sustain participation: without safeguards against uncertainty, opportunism, or misappropriation, high-quality sellers may avoid the platform or disclose too little for buyers to evaluate the opportunity. Yet when protection operates by restricting buyers’ access to information, as NDAs do, stronger safety can reduce market thickness. NDAs may attract higher-quality, confidentiality-sensitive sellers and induce deeper disclosure, but only by narrowing the pool of buyers who can evaluate and compete for the opportunity. This has two main consequences. First, the composition of marketplaces for ideas can be dynamic: seemingly mild governance changes can substantially affect how the platform is used, coordinating users toward different equilibria (Clough, 2026) and shaping entry from the bottom up in ways that may diverge from the platform’s own interests (Kapacinskaite & Mostajabi, 2024; Rietveld & Schilling, 2021). Platforms may need to choose between an open, high-volume model that democratizes entry and supports broad participation, and a more protected, curated model for higher-quality or more established ventures that require deeper disclosure to fewer buyers. Trying to serve both regimes with the same design may weaken both openness and protection (Cennamo & Santalo, 2013).

Finally, we contribute to a growing body of work on the strategic use of legal instruments (Castellaneta et al., 2017; Cunningham & Kapacinskaite, 2026; Starr et al., 2018) by providing large-sample evidence on how confidentiality agreements are used in granular market transactions. While prior related work has examined employment restrictions and trade secret laws at the state or industry level, we focus on NDAs — important yet understudied tools used across interactions with acquirers, investors, employees, partners, and potential customers — and show that they operate as transaction-level strategic instruments. We find that such bilateral agreements can have wide-ranging implications for what is disclosed, who participates, and how exchange is structured.

2 Literature review

This study builds on several strands of strategy research concerned with how firms exchange, protect, and appropriate value from proprietary knowledge. We draw on work on markets for

ideas and the disclosure paradox, on digital platforms and complementor strategy, and on the strategic use of legal instruments to govern knowledge exchange. These strands have developed in parallel, but converge on a common set of questions about how firms calibrate openness and protection when the assets being exchanged are intangible, imitable, and increasingly traded through platform-mediated environments. We discuss each in turn and use them to motivate our focus on how confidentiality tools shape disclosure, participation, and exchange format in digital markets for business acquisitions.

2.1 Markets for Ideas and the Disclosure Paradox

The exchange of intangible assets has long been recognized as a distinctive economic activity that resists the market structures that work well for physical goods. Arrow (1962) articulated the foundational problem: the value of information cannot be credibly conveyed to a potential buyer without revealing the information itself, at which point the buyer no longer has reason to pay for it. This "disclosure paradox" generates a persistent tension in markets for ideas, where sellers must reveal enough to attract buyers and support price discovery while retaining enough to capture value from a completed transaction (Anton & Yao, 1994, 2002; Arora & Gambardella, 2010; Gans & Stern, 2003).

Strategy scholars have developed a rich account of how firms navigate this tension. One line of work has examined the *sequencing* of disclosure, showing that sellers can protect value by releasing information in stages, offering coarse signals first and committing to fuller disclosure only once the buyer has committed to continued engagement (Arora, 1996; Nuvolari & Sumner, 2013). A related line emphasizes the role of reputation and repeated interaction: sellers who transact frequently, or who operate in communities where misbehavior is sanctioned informally, can rely on reputational capital to deter misappropriation (Luo, 2014). A third line highlights *secrecy and partial revelation*, where firms deliberately withhold core elements of their technology or business model while disclosing peripheral details sufficient to support negotiation (Katila, Rosenberger, & Eisenhardt, 2008). A fourth emphasizes formal legal protections, including patents, trade secrets, and non-competes (Castellaneta, Conti, & Kacperczyk, 2017; Marx, Strumsky, & Fleming, 2009; Starr, Prescott, & Bishara, 2018).

Taken together, these contributions offer a rich choice set for how sellers manage the intensive margin of disclosure—how much to reveal, in what sequence, and under what protections—within bilateral exchanges between identified counterparties. Our paper builds directly on this foundation and explores how the logic of the disclosure paradox extends to settings in which firms must decide not only how much to disclose, but whether to participate at all and through which format to transact. These decisions become of first-order importance when exchange is no longer bilateral but mediated by platforms that aggregate many participants and offer multiple transaction mechanisms. They also become especially salient in markets for digital businesses, whose value rests on digitally encoded and relatively easily replicable sources of competitive advantage, such as readily available customer funnels, monetization logic, or content libraries (vanAngeren, J., Vroom, G., McCann, B. T., Podoynitsyna, K., & Langerak, F., 2022). Because these assets are typically not covered by registered intellectual property rights and can often be imitated at low cost once understood, the disclosure paradox operates with particular intensity in this setting, and the mechanisms firms use to manage it deserve direct empirical scrutiny.

2.2 Digital Platforms and Complementor Strategy

A second strand of strategy research shifts attention from bilateral exchange to platform-mediated exchange. Platforms create value by reducing search costs and aggregating dispersed participants on two or more sides of a market (Rochet & Tirole, 2003; Parker & Van Alstyne, 2005; Hagiu & Wright, 2015). By making opportunities visible to a larger pool of potential counterparties, platforms improve the probability and quality of matches and generate cross-side network effects that reinforce participation over time. Work at the intersection of this strand and markets-for-ideas research has begun to examine how platform mediation reshapes the exchange of intangible assets, with Gius (2023) and Dushnitsky and Klueter (2017) documenting the emergence of online environments in which knowledge, business opportunities, and intellectual assets are listed, searched, and transacted at scale.

Platform-mediated exchange introduces two sets of dynamics that are central to our argument. First, the visibility that generates matching value also expands the audience of potential misappropriators. Where bilateral exchange exposes sensitive information to a small set of identified, vetted counterparties, platform listings can be inspected by anyone who meets minimal access criteria—including competitors, imitators, and parties with no genuine acquisition intent. The logic of the disclosure paradox therefore operates under conditions of expanded exposure, and the mechanisms developed for bilateral settings may map imperfectly onto platform environments, or at the minimum are exacerbated.

Second, research in this strand has increasingly emphasized that platform value depends not only on the level of participation but on its composition (Cennamo & Santaló, 2013; Rietveld & Eggers, 2018; Rietveld & Schilling, 2021). Which complementors join and which self-select into different behaviors on the platform determine whether the platform delivers high-quality matches. Because disclosure conditions influence both who is willing to list and who is willing to engage, they become a lever through which governance choices shape the composition of the market. Complementors, in other words, are not only recipients of platform governance but active participants in it.

More specifically, complementors may come to shape the exchange format dominating different types of transactions. Many digital platforms allow sellers to choose between multiple transaction mechanisms, most commonly fixed-price listings and auctions. A long tradition in economics has examined when auctions dominate posted prices and vice versa (Wang, 1993; Bajari & Hortaçsu, 2003), with key considerations including the dispersion of buyer valuations, the urgency of sale, the cost of running an auction, and the degree of product standardization. More recent work on online sales has added information-related considerations, noting that auctions generate price discovery through competitive bidding but also require broader exposure of the underlying asset (Chowdhury, Datta, & Dhar, 2019; Einav, Farronato, Levin, & Sundaresan, 2018).

From a platform perspective, auctions are often attractive because they generate visible activity, draw in larger pools of bidders, and strengthen the network effects on which platform value depends. From a seller perspective, however, auctions impose information costs that fixed-price listings do not: they require potentially longer and more public exposure, attract a broader and less filtered set of inquirers, and make it harder to screen participants before revealing proprietary detail. If confidentiality tools reduce the perceived cost of disclosure (by increasing the cost of misappropriation), they may shift the calculus between these formats, potentially in directions that diverge from the platform's own preferences. The interaction between confidentiality governance and exchange-format choice has received little empirical attention, and it is this in-

tersection that we investigate in this study by focusing on a specific form of a legal instrument: the Non-Disclosure Agreement (NDA).

2.3 Legal Instruments and the Governance of Knowledge Exchange

Strategy scholars have long recognized that isolating mechanisms—including legal ones—are central to the appropriation of rents from intangible assets (Teece, 1986; Liebeskind, 1997; Rumelt, 1984). Within this tradition, a growing body of work examines specific legal instruments and their strategic consequences. Research on non-compete agreements has shown that restricting employee mobility affects innovation, firm formation, and wages, with effects that vary across institutional contexts (Marx et al., 2009; Starr et al., 2018). Research on trade secret laws has shown that stronger protection encourages investment in knowledge-intensive activities but may also reduce patenting (Castellaneta et al., 2017; Contigiani et al., 2018). Recent work by Cunningham and Kapacinskaite (2026) examines trade secret use and generation directly, suggesting that reduced risk of knowledge leakage facilitates stronger reliance on trade secrets at the project level.

Non-disclosure agreements (NDAs) occupy a distinctive position within this family of legal instruments. Unlike non-competes and anti-poaching provisions, which bind employees, NDAs bind transaction counterparties—typically potential buyers, investors, or partners—and condition their access to information on a prior commitment to confidentiality. In M&A practice, NDAs are widely regarded as a first-line protection during due diligence, governing what buyers can do with information they receive, whom they can share it with, and for how long obligations persist (Bell et al., 2025; Suriyadi & Nur, 2025). Practitioner accounts emphasize their strategic importance in preserving competitive advantage during sale processes, particularly for firms whose value rests on information-intensive assets.

Despite this prevalence, NDAs have been remarkably difficult to study at scale. They are typically private bilateral contracts not disclosed in public filings, and most existing research on confidentiality protection in M&A relies on qualitative case evidence, legal commentary, or indirect measures inferred from public announcements. As a result, fundamental questions about NDAs remain largely unaddressed: how often they are used, what they contain, how firms using them differ from firms that do not, and how their use shapes market participation patterns and transaction outcomes.

Our setting allows us to address these questions directly. By observing NDA incidence and content behind the NDAs across a large number of listings on a digital platform for business acquisitions, together with detailed information on listing characteristics, participation, exchange format, and sale outcomes, we provide large-sample empirical evidence on how confidentiality instruments are used in platform-mediated markets. In doing so, we bring together strands of strategy research that have developed largely in parallel, and show that the management of proprietary information is not only a question of how much firms disclose, but of whether and how they choose to trade.

2.4 Seller-Level Disclosure Trade-offs

The above discussion suggests that firm heterogeneity plays a role in their reliance on non-disclosure agreements. Sellers of unprotected ideas face Arrow’s (1962) disclosure paradox: buyers need information to evaluate an opportunity, but disclosure can itself undermine the

seller's ability to appropriate value from that opportunity. This problem is especially acute for high-quality sellers. When quality cannot be assessed without inspecting sensitive information, higher-quality sellers have both more to reveal and more to lose from uncontrolled disclosure. Valuable sellers may therefore withhold information, avoid the market, or seek stronger protection before engaging, generating an adverse-selection problem in which the highest-quality opportunities may also be the hardest to trade (Akerlof, 1970).

NDAs are a natural response, but their effect is theoretically ambiguous. They can make sellers more willing to disclose sensitive financial, operational, or strategic information by conditioning buyer access on confidentiality commitments. Yet they are incomplete safeguards: violations may be difficult to detect, enforcement may be costly, and the requirement to sign may deter buyer engagement. Moreover, high-quality sellers need not always prefer confidentiality. Under some conditions, they may waive protection in order to signal confidence, attract more buyers, or intensify competition among potential acquirers (Anton & Yao, 2008). Whether high-quality sellers select into NDA use is therefore an empirical question.

NDAs may also affect how sellers organize disclosure. Prior theory points to two broad responses to the disclosure paradox: sellers may reveal little to many buyers, using partial disclosure to generate broad interest (Anton & Yao, 2002). Or they may reveal more to a selected few, using private interaction and control over further disclosure to support deeper evaluation and preserve bargaining leverage (Anton & Yao, 1994). NDAs complement the latter strategy. They support what we refer to as a “deep and slow” disclosure process in which sellers screen buyers, release richer information selectively, and retain greater control over access. This mode is less compatible with open auctions, which depend on broad exposure, rapid comparison, and competitive bidding, and more compatible with negotiated, one-to-one exchange. In other words, we expect the use of NDAs to affect not only the success likelihood of a transaction, but also the way the transaction is conducted in the first place.

2.5 Platform-Level Safety and Thickness

At the platform level, these seller-level choices aggregate into a governance trade-off between safety and market thickness. Platforms create value by making opportunities visible to many potential buyers, reducing search costs, and supporting matching across dispersed participants. Yet the same visibility that makes the market thick can also intensify sellers' concerns about imitation and misappropriation. The platform must therefore solve two problems jointly: it must make disclosure safe enough to attract valuable sellers, while keeping participation broad enough for buyers to evaluate opportunities and compete for them (Arora et al., 2001; Gans & Stern, 2010; Agrawal et al., 2014).

This trade-off matters because disclosure governance affects not only which sellers enter the platform, but also how they transact once inside it. Platforms can push sellers toward broad disclosure and auction-based exchange, supporting bidding and price discovery, or allow sellers to restrict access and disclose more selectively. In markets for unprotected digital businesses, broader disclosure may be precisely what confidentiality-sensitive sellers resist. NDA-based governance can therefore make participation safer for these sellers while shifting exchange away from open auctions and toward selective, negotiated disclosure. Building on this logic, we examine a platform policy change that reduced the frictions of using NDAs and develop predictions about how facilitating protected disclosure affects seller entry, NDA adoption, transaction format, and, ultimately, platform-mediated outcomes.

3 Theoretical background

Building on these different strands of strategy literature, we develop four predictions about how a reduction in the frictions associated with confidentiality tools should affect behavior on a digital platform for business acquisitions.

The first and most immediate implication of reduced frictions is that the tools themselves will be used more. In the markets-for-ideas tradition, formal legal instruments are only one of several mechanisms sellers can deploy to manage the disclosure paradox, and their use reflects a cost-benefit calculation (Arora, 1996; Luo, 2014; Katila et al., 2008). When executing a confidentiality agreement requires substantial effort—drafting, reviewing, approving individual counterparties, maintaining the paperwork—many sellers for whom the benefits of protection are modest will forgo the tool and rely on coarser alternatives such as partial or sequential disclosure, or reputation. Reducing these frictions lowers the threshold at which formal protection becomes worthwhile. We therefore expect the share of listings protected by confidentiality agreements to rise following the reduction in frictions.

Baseline hypothesis (Direct effect). Following a reduction in the frictions associated with executing confidentiality agreements, the share of listings that adopt such agreements rises.

The direct effect, however, is unlikely to be uniform across sellers. Strategy research on isolating mechanisms emphasizes that the incremental value of any protective instrument depends on the imitability of the underlying assets and the visibility of the information required to evaluate them (Teece, 1986; Liebeskind, 1997; Rumelt, 1984). Sellers whose value rests on easily replicable, information-intensive assets—detailed financials, customer acquisition channels, monetization logic—face an exacerbated disclosure paradox than sellers whose value is tied to assets that are harder to copy. For the former group, the reduction in frictions to use confidentiality agreements translates into a disproportionate increase in adoption. For the latter, the disclosure paradox is less binding.

This logic implies that aggregate adoption will be driven primarily by a subset of sellers for whom confidentiality is most consequential. Within the population of listings, we expect the effect of the reduction in frictions to be concentrated among confidentiality-sensitive businesses—those whose ex ante characteristics indicate a greater need for due diligence.

Hypothesis 1 (Intensive margin). Following a reduction in the frictions associated with executing confidentiality agreements, the rise in adoption of confidentiality agreements is concentrated among ex-ante confidentiality-sensitive businesses.

The intensive margin prediction concerns behavior among sellers who list on the platform. A parallel argument applies to the decision to list in the first place. Research on digital platforms emphasizes that platform value depends on which complementors choose to participate, and that governance choices—whether made by the platform or by the tools it makes available—shape the composition of entrants (Cennamo & Santaló, 2013; Rietveld & Eggers, 2018; Rietveld & Schilling, 2021). For sellers whose assets are sensitive to misappropriation, the disclosure paradox operates not only within a listing but prior to it: the prospect of exposing proprietary information to a broad and imperfectly filtered audience may be sufficient to deter listing altogether, pushing such sellers toward offline bilateral channels or non-participation.

When frictions of using confidentiality tools fall, the platform becomes a more viable venue for such sellers. The reduction shifts the calculus of participation for firms at the margin of listing on the platform, lowering the expected cost of exposure and making platform-mediated exchange compatible with the level of protection their assets require. We therefore expect the composition of entrants to shift toward confidentiality-sensitive businesses following the platform policy change, with such sellers accounting for a larger share of new listings than they did before.

Hypothesis 2 (Extensive margin). Following a reduction in the frictions associated with executing confidentiality agreements, the share of new listings accounted for by confidentiality-sensitive businesses rises.

Finally, lower frictions in using NDAs also likely affect the format through which they transact. Digital platforms for business acquisitions typically offer sellers a choice between two primary exchange formats: auctions, in which multiple buyers bid competitively over a defined window, and fixed-price listings, in which the seller posts a price and negotiates bilaterally with interested buyers. The economics literature has long recognized that these formats offer different tradeoffs between price discovery and control (Wang, 1993; Bajari & Hortaçsu, 2003; Einav et al., 2018; Chowdhury et al., 2019). Auctions are valuable when buyer valuations are dispersed and competitive bidding can surface the highest-value match; fixed-price listings are valuable when sellers place a premium on predictability, pacing, and control over whom they engage with.

Introducing confidentiality into this choice changes the tradeoff in a specific way. Auctions derive their value from the breadth of bidder participation and the information generated when many buyers compete simultaneously. Limiting access through confidentiality agreements narrows this pool: each interested buyer must execute an agreement before meaningful evaluation, and the friction of doing so deters casual or exploratory bidders. What remains is a smaller, more filtered set of participants, with less scope for the bidding dynamics that make auctions attractive in the first place. Fixed-price listings, by contrast, are well-matched to such limited access. They accommodate sequential bilateral engagement, preserve the seller’s control over who receives information and in what order, and do not depend on broad simultaneous participation to generate value. Conditional on choosing to sell under confidentiality, sellers therefore have reason to prefer fixed-price listings over auctions.

A parallel extensive-margin channel reinforces this prediction. Sellers drawn onto the platform by the reduction in frictions (H2) are likely disproportionately confidentiality-sensitive. Their outside option is less likely to be a competing online auction and more likely to be offline bilateral bargaining—possibly broker-mediated sales, private outreach to known acquirers, or access via professional networks. Even once on the platform and protected by a confidentiality agreement, these sellers are likely to carry over the bilateral logic of their outside option and select fixed-price listings rather than auctions. Both channels—within-seller reallocation and compositional entry—reinforce the choice of fixed-price bargaining over auctions.

Hypothesis 3 (Exchange format choice). Following a reduction in the frictions associated with executing confidentiality agreements, confidential selling shifts disproportionately toward fixed-price listings rather than auctions.

In sum, these predictions outline the logic of how a single change in the governance of proprietary information propagates through a platform market. Reduced frictions raise aggregate adoption of confidentiality tools (baseline hypothesis), with the response concentrated among

sellers for whom the disclosure paradox matters the most (H1). The same underlying sensitivity that drives within-platform adoption also reshapes who enters the platform (H2). Finally, the choice of exchange format responds to the same logic, with confidential selling favoring the bilateral exchange format whose informational properties are most compatible with limited access (H3). This set of predictions frames the management of proprietary information as a lever that operates across multiple dimensions simultaneously: disclosure within a transaction, participation in the market, and the format through which exchange is conducted. These predictions provide the structure for the empirical analysis that follows.

4 Empirical setting

In this study, we use data from FLIPPA, a leading digital platform for buying and selling digital businesses. FLIPPA is specialized in the exchange of digital ventures such as e-commerce stores, mobile applications, SaaS businesses, websites, blogs, and domain assets. The platform operates by charging sellers a commission of up to 10% of the final sale price and facilitates transactions between founders pursuing an early exit and interested acquirers. Unlike traditional brokers that focus mainly on large, established businesses, FLIPPA covers a broader segment of the market, including smaller and earlier-stage digital ventures.

In practice, acquisitions involving early-stage digital businesses place buyers in a structurally disadvantaged informational position. These acquisitions typically involve young firms with little operating history and occur between parties with no prior relationship or opportunity for in-person verification. Buyers must therefore evaluate listings using incomplete and seller-mediated disclosures, inferring business quality from indirect indicators such as product architecture, domain traffic composition, search visibility, monetization structure, and operational scalability. This makes due diligence in this context particularly difficult. Buyers must assess assets whose value depends on information disclosed by the seller. Yet sellers have strong incentives not to disclose such information, reflecting the disclosure paradox: revealing granular details about customer acquisition channels, strategic positioning, proprietary processes, or financial performance risks exposing the core drivers of their competitive advantage. Moreover, the digital nature of these businesses exacerbates disclosure risks, as their sources of competitive advantage are often easily imitated once revealed.

A key feature of FLIPPA is that it allows sellers to restrict access to confidential information by requiring interested buyers to sign an NDA before viewing the full listing. The decision to use an NDA is entirely optional and made unilaterally by the seller when the listing is posted. Buyers who decline to sign can access the public listing but are excluded from detailed financial statements, analytics, supplier relationships, and other proprietary operational information provided in separate attachments. This design allows us to observe whether sellers restrict access to information—typically unobservable in marketplace settings—and the specific content shielded behind NDAs, providing granular insight into selective disclosure behavior and marketplace outcomes.

Prior to October 2021, the NDA process on the platform required sellers to manually review and approve each buyer’s request before granting access to confidential listing details, creating friction for both parties and potentially deterring buyers from initiating the process altogether. In October 2021, the platform introduced FLIPPA Legal, a partnership with ContractsCounsel that made standardized NDA templates and legal due-diligence services directly available within the platform, substantially lowering the administrative burden associated with executing confiden-

tiality agreements. This was followed in April 2022 by the introduction of automatic NDA acceptance for buyers who had completed purchasing-power verification, eliminating the manual approval step entirely for screened buyers. Taken together, these changes reduced the frictions associated with signing NDAs, making access to confidential listings faster and easier.

Our main dataset consists of 246,661 businesses listed for sale on FLIPPA between January 2010 and December 2024. Listings are sold either through auctions or fixed-price formats, and sellers can choose whether to require an NDA to access detailed information. Table 1(a) includes standardized listing characteristics that remain visible to all potential buyers regardless of NDA use. These variables capture observable features such as listing format, seller characteristics, age, financial performance, and sale outcomes, illustrating the substantial heterogeneity of digital businesses transacting on the platform. For 28,886 listings, Table 1(b) includes information on additional materials that sellers may disclose in the listing. This information remains publicly visible when no NDA is required but becomes accessible only to buyers who sign the agreement when an NDA is imposed. These variables capture the presence and content of detailed disclosures, including financial documents, operational details, analytics tools, and other proprietary information.

Together, these data provide a detailed view of both sellers' disclosure choices and the competitive environment in which digital acquisitions take place. The October 2021 policy change provides a clear source of variation: a discrete, platform-level shock that reduced the frictions associated with signing NDAs for buyers without altering sellers' underlying incentives to require confidentiality. This allows us to trace in a before-and-after design how reduced frictions affect NDA adoption, the composition of entrants, and the exchange formats through which confidential listings are transacted.

Table 1. Summary statistics*Panel A. Main listing sample*

Variable	N	Definition	Mean	SD	Median	95th pct.
<i>Listing and seller characteristics</i>						
NDA	246,661	Indicator equal to 1 if NDA required to access full listing.	0.014	0.117	0.000	0.000
Auction	246,661	Indicator equal to 1 if the listing format is an auction (vs. fixed price).	0.807	0.395	1.000	1.000
U.S. seller	246,661	Indicator equal to 1 if seller located in United States.	0.319	0.466	0.000	1.000
<i>Business characteristics</i>						
Business age (years)	244,447	Years between the business's founding date and the start of the sale.	1.48	2.66	0.42	6.81
No reported revenues	246,661	Indicator equal to 1 if monthly revenue is zero or unreported.	0.659	0.474	1.000	1.000
No reported profits	246,661	Indicator equal to 1 if monthly profit is zero or unreported.	0.658	0.474	1.000	1.000
Monthly revenue (USD)	84,011	Average monthly revenue in the 12 months before the sale opened among listings reporting a nonzero value.	4,191	177,938	201	11,113
Monthly profit (USD)	84,375	Average monthly profit in the 12 months before the sale opened among listings reporting a nonzero value.	2,040	175,442	153	5,124
<i>Marketplace outcomes</i>						
Sold	246,661	Indicator equal to 1 if the business is sold within the listing's fixed-duration sale window.	0.549	0.498	1.000	1.000
Transaction price (USD)	135,512	Recorded transaction price among sold listings.	1,962	24,103	165	5,000
No bid	198,938	Indicator equal to 1 if an auction listing receives zero bids.	0.221	0.415	0.000	1.000
Bid count	198,938	Number of bids received (auctions only).	7.121	13.182	3.000	30.000

Notes: Panel A summarizes the main sample of operating-business listings posted on FLIPPA between January 2010 and December 2024. Domains, iOS and Android applications, and instant-sale listings are excluded. Business age is measured at the start of the listing. Monthly revenue and profit are seller-reported and summarized conditional on a nonzero reported value. Transaction price is observed only among sold listings; bid count and the no-bid indicator are observed only for auctions.

Table 1 (continued). Summary statistics*Panel B. Recorded-disclosure sample*

Variable	N	Definition	Mean	SD	Median	95th pct.
<i>Listing description</i>						
Description length (characters)	27,931	Number of characters in the listing description.	3,370	2,878	2,636	8,907
Mention of customer list	28,886	Indicator equal to 1 if the listing description mentions a customer or client list.	0.212	0.408	0.000	1.000
<i>Attached files</i>						
Any attachment	28,886	Indicator equal to 1 if the listing includes at least one attached file.	0.797	0.402	1.000	1.000
Sharing of customer list	28,161	Indicator equal to 1 if the listing shares customer- or client-list information through an attached file.	0.017	0.130	0.000	0.000
Sharing of P&L	28,161	Indicator equal to 1 if the listing shares profit-and-loss information through an attached file.	0.114	0.318	0.000	1.000

Notes: Panel B summarizes the recorded-disclosure sample. Description measures are derived from listing text. Recorded materials are publicly accessible in non-NDA listings and gated behind the agreement in NDA listings. Private information exchanged after buyer contact is not observed.

5 Results

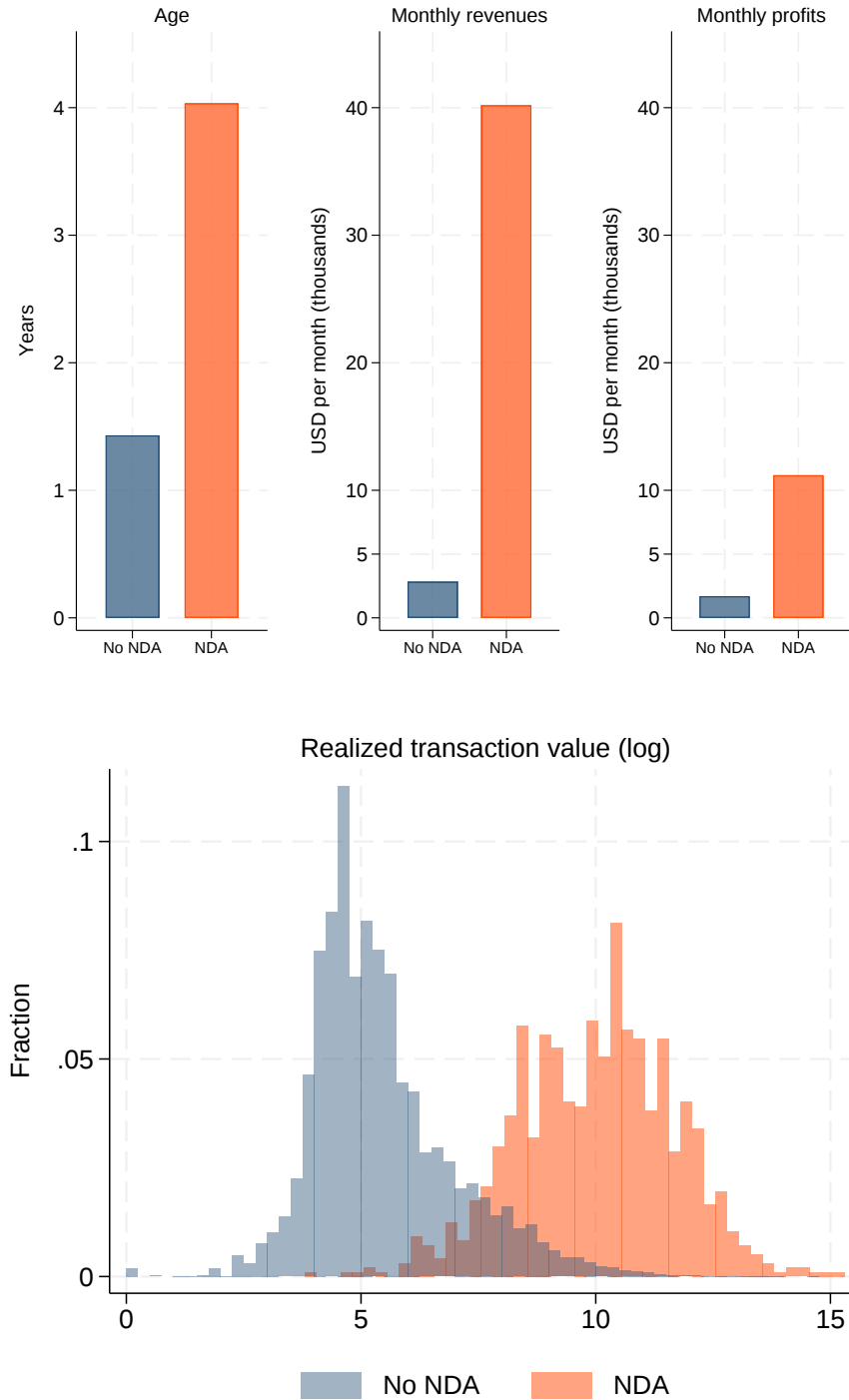
5.1 Stylized facts on NDA use

The theory predicts that confidentiality can protect proprietary information at the cost of market thickness. We begin by documenting a set of stylized facts that speak to this trade-off. NDA users bring more established and more valuable businesses to FLIPPA, yet their listings are less likely to sell. We show that this gap reflects both lower participation in NDA-protected auctions and NDA users' greater reliance on fixed price, a format with a lower average sale rate. We then ask why these sellers nevertheless favor fixed price. The results indicate that NDAs erode much of the sale advantage of auctions, while fixed-price exchange accommodates a longer and more selective disclosure process.

The first fact concerns who uses NDAs. Figure 1 shows that NDA users bring substantially more established and more valuable businesses to FLIPPA. Their businesses have operated for 4.0 years on average, 2.6 years longer than businesses listed without an NDA. Among businesses reporting positive financial values, NDA listings have average monthly revenue of approximately \$40,200 and average monthly profit of \$11,700, compared with \$2,800 and \$1,800, respectively, among other listings. Among completed transactions, the distribution of realized prices is also shifted sharply toward higher values for NDA listings.

Although they account for less than 2% of listings, NDA users are therefore valuable complements. Their businesses broaden the set of established, high-value assets available to prospective buyers and generate larger commissions when they sell. Completing these transactions is particularly important to FLIPPA, whose revenue increases with the final sale price.

Figure 1. Businesses listed with NDAs are more established and more valuable



Notes: The top panels report mean business age and mean reported monthly revenue and profit by NDA status. The revenue and profit panels exclude listings with zero or missing reported values. The bottom panel plots the distribution of $\ln(\text{realized transaction price})$ among sold listings. All comparisons are unconditional.

Yet these valuable listings are substantially less likely to sell. In the common estimation sample, the sale probability is 51.4% for listings without an NDA and 29.4% for listings with one, a difference of 22.0 percentage points. Figure 2 attributes 11.3 percentage points of this gap to seller and business characteristics and another 3.0 percentage points to differences across industries, property types, and listing months. Even after accounting for these differences, NDA listings remain 7.7 percentage points less likely to sell. We refer to this conditional difference as the NDA penalty. It comes on top of an already thin market for more established, higher-revenue businesses.

Table 2. NDA listings are less likely to sell

	(1) Sold	(2) Sold	(3) Sold	(4) Sold
NDA	-0.220*** (0.013)	-0.190*** (0.010)	-0.077*** (0.010)	-0.025** (0.011)
Log business age			-0.041*** (0.003)	-0.031*** (0.002)
Log revenues			-0.026*** (0.001)	-0.020*** (0.001)
U.S. seller			0.007 (0.005)	0.010** (0.005)
Auction				0.257*** (0.015)
N	83,955	83,955	83,955	83,955
Industry FE	No	Yes	Yes	Yes
Property type FE	No	Yes	Yes	Yes
Year-month FE	No	Yes	Yes	Yes

Notes: Listing-level linear probability models. The dependent variable equals one if the listing sells within its sale window. All columns use the common sample of 83,955 listings with positive reported business age and revenue. Column (1) reports the raw NDA difference. Column (2) adds industry, property-type, and listing-year-month fixed effects. Column (3) adds log business age, log monthly revenue, and a U.S.-seller indicator. Column (4) adds an auction indicator. Standard errors clustered by listing year-month are reported in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

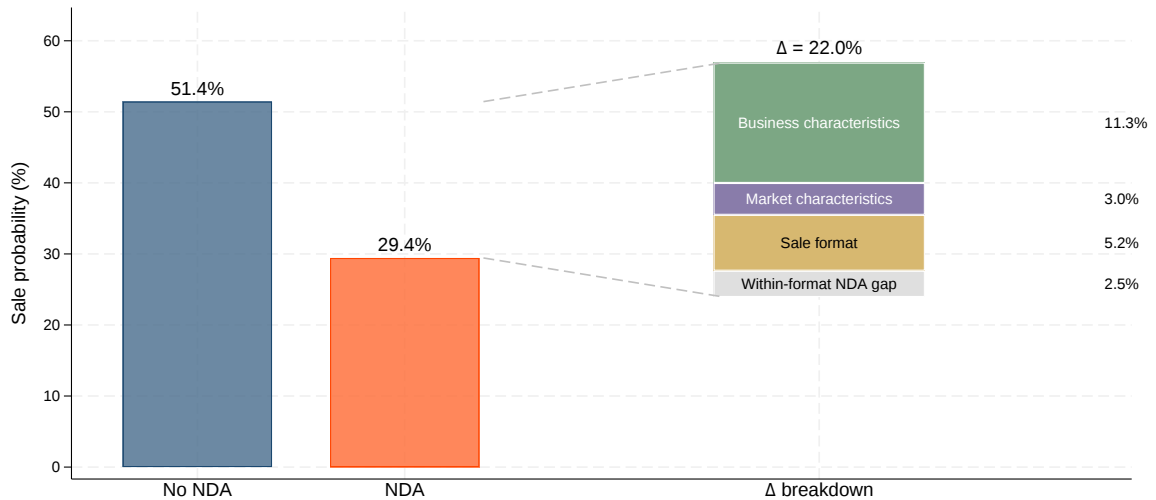
One source of the NDA penalty is reduced buyer participation. NDA-protected auctions receive 6.2 fewer bids and are 13.6 percentage points more likely to receive no bid. This pattern is consistent with buyer aversion: requiring an NDA raises the cost of learning about the business before a prospective buyer can decide whether to bid. Because auctions create value by attracting many buyers at the same time, the NDA works directly against the participation on which the format relies.

A second source is sale-format choice. NDA users are 20.4 percentage points less likely to choose an auction after accounting for seller, business, and market characteristics. This choice is consequential because auctions have a 25.7-percentage-point higher average sale rate than fixed-price listings. In the accounting shown in Figure 2, sale format accounts for 5.2 percentage points, or 68%, of the 7.7-percentage-point conditional NDA gap. The remaining 2.5 percentage points arise within sale formats. NDA users therefore face reduced participation when they use auctions and are also more likely to avoid auctions altogether.

Table 3. NDA-protected auctions receive fewer bids, and NDA users choose auctions less often

<i>Panel A. Buyer participation in auctions</i>			<i>Panel B. Sale-format choice</i>		
	(1) Bid count	(2) No bid		(1) Auction	(2) Auction
NDA	-6.188*** (0.732)	0.136*** (0.017)	NDA	-0.448*** (0.026)	-0.204*** (0.009)
Log business age	-0.506*** (0.098)	0.025*** (0.002)	Log business age		-0.035*** (0.003)
Log revenues	1.194*** (0.058)	0.001 (0.001)	Log revenues		-0.024*** (0.002)
U.S. seller	-0.456** (0.195)	0.004 (0.004)	U.S. seller		-0.012*** (0.003)
N	64,461	64,461	N	83,955	83,955
Industry FE	Yes	Yes	Industry FE	No	Yes
Property type FE	Yes	Yes	Property type FE	No	Yes
Year-month FE	Yes	Yes	Year-month FE	No	Yes

Notes: Panel A restricts the sample to auction listings. Column (1) reports total bid count; Column (2) reports an indicator equal to one if the listing receives no bid. Bid count records bids rather than unique bidders. Panel B estimates an indicator equal to one for auction and zero for fixed price. Column (1) reports the raw NDA difference; Column (2) adds log business age, log monthly revenue, a U.S.-seller indicator, and industry, property-type, and listing-year-month fixed effects. The Panel A models include the same controls and fixed effects. Standard errors clustered by listing year-month are reported in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Figure 2. Accounting for the NDA sale gap

Notes: The first two bars report mean sale probabilities for non-NDA and NDA listings in the Table 2 estimation sample. The stacked bar accounts for the 22.0-percentage-point raw difference using the sequential specifications in Table 2. Market characteristics equal the change in the NDA coefficient between Columns (1) and (2); seller and business characteristics equal the change between Columns (2) and (3); sale format equals the change between Columns (3) and (4); and the within-format NDA gap is the remaining coefficient in Column (4). The components depend on the order in which the control blocks enter and constitute an accounting exercise rather than a causal mediation decomposition.

Why do NDA users favor fixed price despite its lower average sale rate? The first reason is that confidentiality substantially reduces the advantage of an auction. Among listings without an NDA, the adjusted sale probability is 56.9% in auctions and 30.2% under fixed price, a difference of 26.6 percentage points. Among NDA listings, the corresponding probabilities are 44.3% and 33.7%, a difference of only 10.6 percentage points. The auction advantage is therefore 16.1 percentage points smaller under an NDA. Put differently, requiring an NDA removes roughly 60% of the sale advantage ordinarily associated with auctions. NDA sellers still perform better in auctions than under fixed price, but they give up much less by moving away from the auction format.

Table 4. The sale advantage of auctions is smaller under an NDA

<i>Panel A. Sale-probability interaction</i>		<i>Panel B. Adjusted sale probabilities</i>		
	(1) Sold		Auction	Fixed price
NDA	0.035*** (0.012)	No NDA	56.9%	30.2%
Auction	0.266*** (0.014)	NDA	44.3%	33.7%
Auction × NDA	-0.161*** (0.020)			
Log business age	-0.032*** (0.002)			
Log revenues	-0.019*** (0.001)			
U.S. seller	0.009* (0.005)			
N	83,955			
Industry FE	Yes			
Property type FE	Yes			
Year-month FE	Yes			

Notes: Panel A reports a listing-level linear probability model of sale. Fixed price is the omitted sale format. The coefficient on NDA therefore reports the adjusted NDA difference within fixed-price listings. The coefficient on Auction reports the auction–fixed-price difference among non-NDA listings. The Auction × NDA coefficient reports how that difference changes when an NDA is used. Panel B reports adjusted sale probabilities implied by the Panel A model. All specifications include log business age, log monthly revenue, a U.S.-seller indicator, and industry, property-type, and listing-year-month fixed effects. Standard errors clustered by listing year-month are reported in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

The second reason is different. Fixed price is better suited to the disclosure process described by the theory. Sellers of sensitive businesses may prefer to screen prospective buyers, bargain bilaterally, and release information as negotiations proceed rather than disclose enough information to many buyers at once. Fixed price provides this setting. If it complements NDA use in this way, the longer and more selective disclosure associated with NDAs should be concentrated in fixed-price listings.

Table 5. NDA-related disclosure is slower and more selective under fixed price*Panel A. Transaction duration and breadth of disclosure*

	Log transaction duration	Log description length	Any attachment
NDA	0.489*** (0.062)	0.384*** (0.026)	0.059*** (0.013)
Auction	-0.999*** (0.041)	0.302*** (0.022)	0.093*** (0.010)
Auction $\times$ NDA	-0.323*** (0.074)	-0.332*** (0.039)	-0.080*** (0.020)
Log business age	0.115*** (0.005)	-0.046*** (0.008)	-0.021*** (0.003)
Log revenues	-0.005 (0.004)	0.039*** (0.006)	0.005** (0.003)
U.S. seller	-0.006 (0.012)	-0.017 (0.014)	-0.007 (0.005)
N	42,502	27,906	28,861
Industry FE	Yes	Yes	Yes
Property type FE	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes

Panel B. Content of disclosure

	Mention of customer list	Sharing of customer list	Sharing of P&L
NDA	0.062*** (0.015)	-0.001 (0.004)	0.109*** (0.014)
Auction	-0.033*** (0.012)	0.011*** (0.003)	-0.009 (0.009)
Auction $\times$ NDA	-0.032 (0.020)	0.001 (0.006)	-0.069*** (0.019)
Log business age	0.020*** (0.002)	0.001 (0.001)	0.029*** (0.003)
Log revenues	0.038*** (0.003)	0.002*** (0.001)	0.029*** (0.002)
U.S. seller	0.017*** (0.006)	0.004** (0.002)	0.018*** (0.004)
N	28,861	28,136	28,136
Industry FE	Yes	Yes	Yes
Property type FE	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes

Notes: Transaction duration is measured in days and observed among successful sales. Description length is measured in number of characters; we exclude listings with no description. Models include NDA, an auction indicator, their interaction, log business age, log revenues, a U.S.-seller indicator, and industry, property-type, and listing-year-month fixed effects. Standard errors are clustered by listing year-month. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

We explore this pattern in Table 5. Among completed fixed-price transactions, NDA listings remain open approximately 63.1% longer than listings without an NDA. Their descriptions are 46.8% longer, while the probability of including any attachment rises by 5.9 percentage points. The corresponding NDA differences in auctions are considerably smaller: transaction duration increases by 18.1%, description length by 5.3%, and the probability of including an attachment falls by 2.1 percentage points. The prolonged, narrative-intensive disclosure process associated with NDAs is therefore concentrated in fixed-price exchange.

The content of disclosure follows the same logic. Within fixed price, NDA listings are 10.9 percentage points more likely to include a P&L attachment and 6.2 percentage points more likely to mention a customer list. By contrast, the probability of sharing a customer-labelled file does not increase. The corresponding P&L difference is also smaller in auctions, at +4.0 percentage points. NDA sellers therefore provide more narrative and financial information without placing customer-level files on the listing page. Combined with the longer transaction duration, this pattern indicates that information is released selectively and that the material most exposed to appropriation is reserved for later stages of bilateral negotiation.

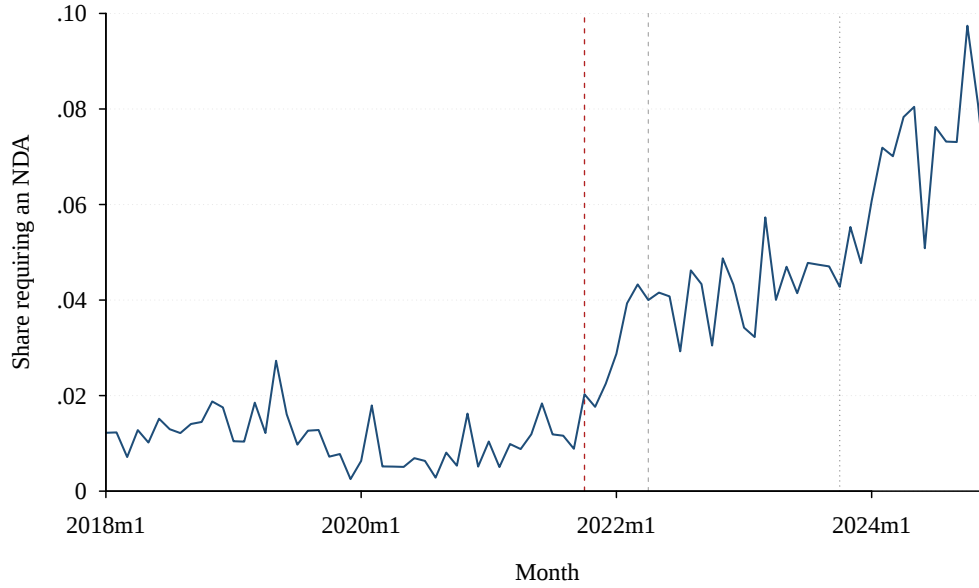
These results explain why fixed price is central to confidential exchange. NDA use weakens the participation advantage of auctions, while fixed price provides the setting in which sellers can extend negotiations and sequence disclosure. Sale format is therefore part of the confidentiality strategy itself.

5.2 The October 2021 reduction in NDA frictions

Next, we analyze the October 2021 shock, which reduced the frictions associated with using NDAs on FLIPPA. To capture its heterogeneous impact on sellers that are more versus less sensitive to confidential disclosure, we construct a predicted NDA-propensity score using a multi-modal neural network trained exclusively on pre-shock listings, predicting NDA adoption from ex-ante listing characteristics observable before the confidentiality decision is made. This ensures that the score captures the structural sensitivity of the business rather than any endogenous response to the October 2021 policy change. We define confidentiality-sensitive businesses as those whose score meets or exceeds the 95th percentile of the pre-shock score distribution. The score diagnostics retained in the validated run show that observed NDA adoption rises sharply in the upper pre-shock score ventiles. They also show that the top 5% group has substantially higher revenues and profits than the platform average and is more likely to mention sensitive assets and formal intellectual property in listing descriptions. This profile is consistent with sellers selecting into NDA use based on the sensitivity of their underlying assets: businesses whose value rests on large, financially significant, and easily imitable assets face a steeper disclosure paradox and are, accordingly, more likely to seek confidentiality protection when listing on the platform.

Turning to the dynamic evidence, Figure 3 plots the overall share of confidential listings over time. Pooled NDA adoption rises from 1.08% before October 2021 to 5.12% afterward. The confidential share rises sharply and persistently following the policy change. The timing of the break coincides precisely with the platform’s introduction of standardized NDA templates and streamlined buyer signing procedures, and there is no comparable pre-period trend that would suggest the increase was already underway. This pattern is consistent with Hypothesis 1: reducing the frictions associated with executing confidentiality agreements leads to a broad increase in their adoption.

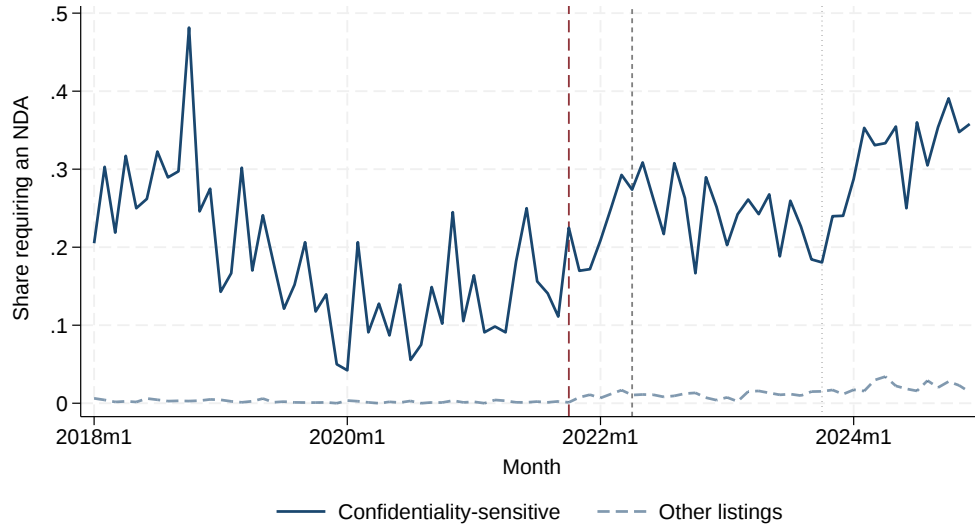
Figure 3. NDA adoption rises sharply after October 2021



Notes: The figure reports the monthly share of eligible listings that require an NDA. The denominator is all eligible listings posted in the month. The red dashed line marks October 2021, when FLIPPA introduced standardized NDA templates and associated legal support. The gray short-dashed line marks April 2022, when NDA access became automatic for purchasing-power-verified buyers. The gray dotted line marks October 2023, when the Premium tier was introduced.

Figure 4 disaggregates NDA adoption by business type, separately tracking the confidential share over time among confidentiality-sensitive businesses—the top 5% of the pre-shock propensity score distribution—and all other listings. Two patterns emerge. First, even before the policy change, the top 5% group adopts NDAs at substantially higher rates than the rest of the platform, which is consistent with the selection pattern documented in Figure 1: businesses facing a steeper disclosure paradox were already more likely to seek confidentiality protection before frictions were reduced. Second, and more strikingly, the two groups respond very differently to the October 2021 shock. Among confidentiality-sensitive businesses, pooled NDA adoption rises from 17.24% before the policy change to 27.63% afterward. Among all other listings, the corresponding rate remains low, increasing from 0.23% to 1.45%. This divergence is consistent with Hypothesis 2: the reduction in frictions does not uniformly raise NDA adoption across all sellers, but instead unlocks latent demand among the businesses for whom confidentiality is most consequential—those that were most likely to benefit from protection but for whom the pre-shock frictions were binding enough to deter adoption.

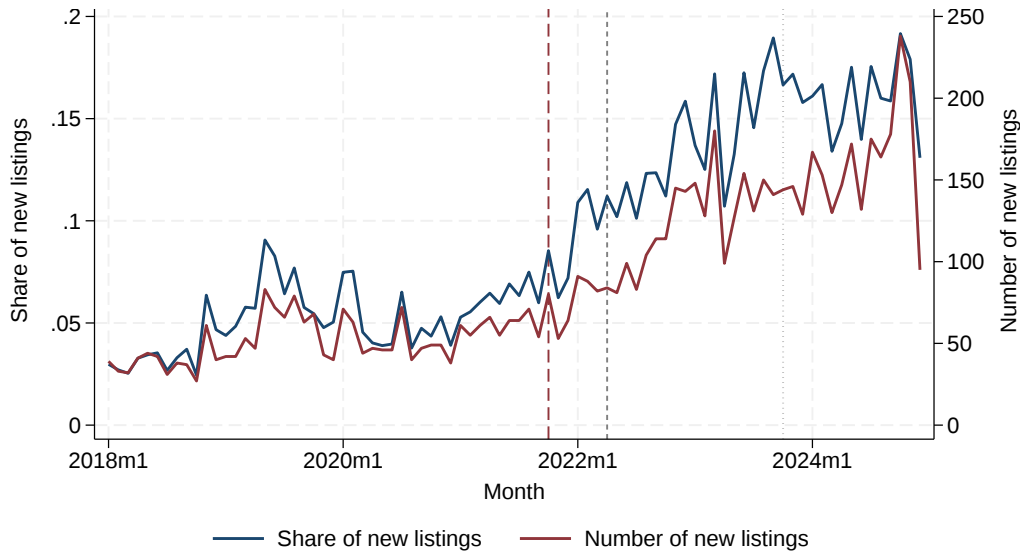
Figure 4. NDA adoption rises disproportionately among confidentiality-sensitive businesses



Notes: Each line reports the monthly share of listings within the indicated group that require an NDA. Confidentiality-sensitive listings are those at or above the 95th percentile of the predicted NDA-propensity distribution estimated using pre-October 2021 listings and ex ante listing characteristics. The threshold is fixed at its pre-October 2021 value throughout the sample. Other listings fall below this threshold. The vertical lines mark the platform changes described in Figure 3.

Figure 5 examines whether the policy change affected not only the behavior of existing sellers but also the composition of new entrants. It tracks both the share and the count of new listings accounted for by confidentiality-sensitive businesses over time. Before October 2021, this group accounts for a relatively stable and modest share of new listings. After the shock, both the count and the share of confidentiality-sensitive entrants rise noticeably and persistently, indicating that the platform began attracting a different type of seller following the reduction in frictions. This is consistent with the mechanism underlying Hypothesis 3: sellers whose assets are most sensitive to misappropriation face a particularly acute disclosure paradox when deciding whether to list on a public platform, and the prospect of broader exposure to potential appropriators may have been sufficient to deter them from participating altogether before the shock. When frictions on confidentiality tools fall, the platform becomes a more viable venue for exactly these sellers, as they can now gate access to sensitive information at lower cost. Critically, because the confidentiality-sensitive group is defined using a score threshold fixed on pre-shock data and estimated from pre-shock listing characteristics, the post-shock increase in their share reflects a genuine shift in the composition of entrants rather than any mechanical artifact of how the group is constructed.

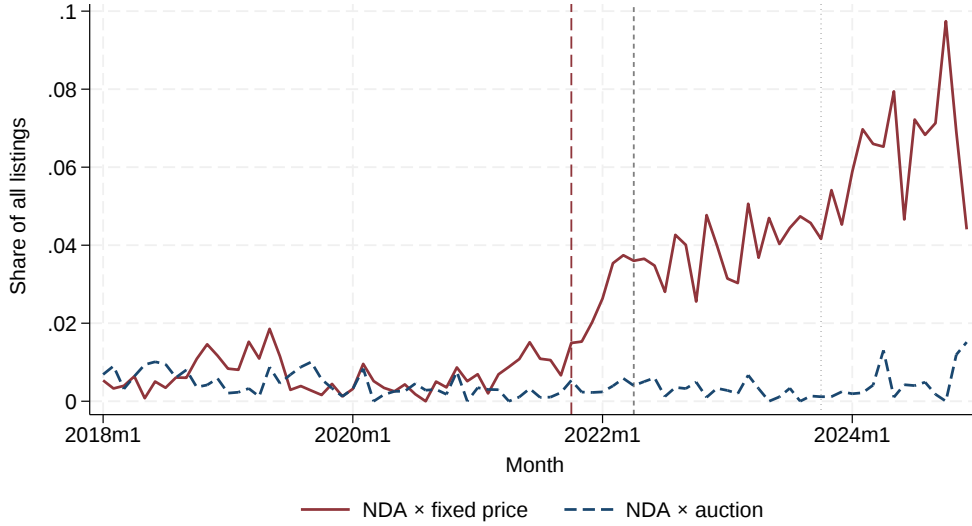
Figure 5. Entry by confidentiality-sensitive businesses rises after October 2021



Notes: The share series, shown on the left axis, reports the monthly fraction of all eligible new listings classified as confidentiality-sensitive. The count series, shown on the right axis, reports the monthly number of confidentiality-sensitive listings. Confidentiality-sensitive listings are defined using the fixed pre-October 2021 threshold described in Figure 4. The vertical lines mark the platform changes described in Figure 3.

Finally, Figure 6 examines how confidential listings are transacted, plotting the share of all listings that are both confidential and sold through fixed-price formats versus confidential and sold through auctions. The pattern is striking. Before the policy change, both series are low and virtually indistinguishable from each other, reflecting the limited overall use of NDAs in the pre-shock period. After October 2021, the two series diverge sharply: the share of confidential fixed-price listings rises persistently and substantially, while the share of confidential auction listings remains flat and close to zero throughout the post-period. This means that essentially all of the post-shock growth in NDA adoption is accounted for by fixed-price listings—confidential auctions do not meaningfully increase at all. This pattern is consistent with Hypothesis 4 and with a tension between confidentiality and auction-based exchange: requiring buyers to sign an NDA before accessing listing information creates a barrier that may deter the broad and simultaneous participation on which auctions depend to generate value. Under these conditions, fixed-price appears to be the preferred format for confidential transactions.

Figure 6. Post-2021 growth in NDA adoption is concentrated in fixed-price listings



Notes: Each line reports the monthly share of all eligible listings that both require an NDA and use the indicated sale format. The denominator is all eligible listings, not only NDA listings. The measure is based on the listing’s sale format and does not condition on a completed sale. The vertical lines mark the platform changes described in Figure 3.

Taken together, these results support all four hypotheses and paint a consistent picture of how reduced frictions propagate through a platform market. The October 2021 policy change triggers a broad increase in NDA adoption, concentrated among the businesses that face the steepest disclosure paradox. The same sensitivity that drives within-platform adoption also reshapes who enters the platform, with confidentiality-sensitive businesses accounting for a growing share of new listings after the shock. Finally, the format through which exchange is conducted responds to the same underlying logic: confidential selling shifts overwhelmingly toward fixed-price listings, suggesting that confidentiality and auction-based exchange are in fundamental tension. Across all three margins—disclosure, participation, and exchange format—the management of proprietary information emerges as a strategic lever that shapes not only the terms of individual transactions but the structure of the market as a whole.

6 Conclusion

As digitally mediated markets for business assets continue to expand, understanding how disclosure is governed under conditions of expanded visibility becomes increasingly important for strategy research. This paper examines how a reduction in the frictions associated with confidentiality tools propagates through a platform market for digital business acquisitions, tracing its consequences across three distinct margins: the intensive margin of information disclosure, the extensive margin of participation, and the format through which exchange is conducted.

Using detailed data from FLIPPA, a leading digital platform for buying and selling digital businesses, and exploiting a platform-level policy change that substantially lowered the administrative burden of executing NDAs, we document four consistent findings. First, the share of listings protected by confidentiality agreements rises sharply and persistently following the policy change, consistent with the prediction that reduced frictions lower the threshold at which formal protection becomes worthwhile. Second, this increase is not uniform: it is concentrated

almost entirely among confidentiality-sensitive businesses — those that are larger, more profitable, and whose value rests on information-intensive and easily imitable assets. These are precisely the sellers for whom the disclosure paradox is steepest, and for whom the pre-shock frictions were most binding. Third, the composition of new entrants shifts following the policy change, with confidentiality-sensitive businesses accounting for a growing share of new listings, indicating that the platform became a more viable venue for sellers who had previously been deterred by the prospect of broad, unprotected exposure. Fourth, and most strikingly, essentially all of the post-shock growth in NDA adoption is accounted for by fixed-price listings — confidential auction listings show no meaningful increase — indicating a fundamental tension between confidentiality and auction-based exchange.

Taken together, these findings advance our understanding of how firms manage proprietary information in platform-mediated markets in three ways. For research on markets for ideas, they show that the disclosure paradox operates not along a single dimension but simultaneously across disclosure intensity, market participation, and exchange format. For research on digital platforms and complementor strategy, they show that confidentiality tools can reshape platform architecture from the bottom up: by pulling sellers toward fixed-price formats and away from auctions, confidentiality governance may reduce the network effects on which platform value depends, creating a tension between the interests of the platform and those of the complementors who populate it. For research on legal instruments, they provide the first large-sample evidence on the incidence, content, and transaction-level consequences of NDAs in a market setting, showing that confidentiality agreements function not merely as passive protections but as active strategic levers that reshape who participates and how exchange is structured. More broadly, these results suggest that the management of proprietary information is not a constraint imposed on strategic choices but a strategic instrument in its own right — one that shapes not only the terms and outcomes of individual transactions but the structure of the markets in which firms compete.

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