# THE PARADOX OF BREADTH: THE TENSION BETWEEN EXPERIENCE AND LEGITIMACY IN TRANSITION TO ENTREPRENEURSHIP

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Abstract

We focus on the paradox generated when prospective entrepreneurs accumulate broad functional experience. On one hand, broad functional experience may facilitate an individual's pursuit of new ventures, as breadth enables the mastery of different skills and access to heterogeneous information and resources. On the other hand, such broad experience might hinder transition into entrepreneurship by imposing the threat of devaluation by key resource providers and thus undermining the legitimacy of entrepreneurial claims. To resolve this paradox, we introduce the notion of multiple category systems, which explains how a potential legitimacy discount of categorical membership can be avoided, when individuals are classified according to multiple categorical schemas simultaneously. Using the context of the music industry between 1990 and 2013, in which artists can launch independent record labels, we find that transition to entrepreneurship is most likely to occur when functional experience is broad but market experience is narrow: individuals have mastered a variety of skills but solicit few audiences. We further document that the paradox of breadth is attenuated when alternate methods of signaling legitimacy reduce the potential penalty of functional breadth and the corresponding need to develop narrow market experience.

Keywords: Entrepreneurship, Labor markets, Turnover, Legitimacy

A central question in organizational research is who launches new organizations (Aldrich and Ruef, 2006). Studies have shown that the success of an entrepreneurial entry, defined as the founding of a new organization by an individual, depends upon the founder's capabilities and skills (Lazear, 2004), as well as the legitimacy of their efforts in the eyes of external audiences (Aldrich and Fiol, 1994; Navis and Glynn, 2011). The former enables individuals to identify new-business opportunities and formulate strategies to exploit them; the latter increases the likelihood that these nascent ventures are endorsed by external stakeholders (e.g. investors, co-founders, customers, bankers, and potential employees), whose support determines the venture's survival (Martens, Jennings, and Jennings, 2007; Navis and Glynn, 2011; Wry, Lounsbury, and Jennings, 2014). In short, entrepreneurship requires both capabilities and legitimacy, which work together to provide founders with the ability to see opportunities and the means to pursue them.

But despite the rich research inquiry, the relationship between entrepreneurial skill and legitimacy in the context of launching a new organization remains poorly understood. Research in entrepreneurship has long equated entrepreneurial skill with broad functional experience (Lazear, 2004). The "Jack-of-All-Trades" hypothesis links the mastery of different job functions to a higher likelihood of entry (Lazear, 2004), as well as to more-favorable entrepreneurial outcomes (Åstebro, Chen, and Thompson, 2011). Scholars have argued that the ability to broker between different domains of expertise generates multiple advantages for individuals with broad experience: greater willingness and motivation to be one's own boss (Åstebro and Thompson, 2011), better opportunity recognition (Baumol, 2005), more novel ideas (Hargadon and Douglas, 2001; Burt, 2004), and reduced resource costs (Davidsson and Honig, 2003; Vissa, 2012). But while focused on the benefits of balanced skills, these theories did not consider the potential downsides of functional breadth with respect to the legitimacy of entrepreneurial appeal. Specifically, the prescription for diverse skills when entering entrepreneurship contradicts sociological research that finds consistent legitimacy discounts in the eyes of relevant audiences

to the appearance of generalism. Studies in this vein document that key stakeholders discount the quality of candidates who intend to enter the labor market because such candidates are perceived to be generalists or because audiences identify them as more ambiguous (Zuckerman et al., 2003), less committed (Leung, 2014), less qualified (Leung and Sharkey, 2014), and harder to make sense of than other candidates (Zuckerman, 1999; Leahey, 2007; Kennedy, 2008; Ruef and Patterson, 2009; Lo and Kennedy, 2014). And, in entrepreneurial settings, the appearance of specialization confers legitimacy (Navis and Glynn, 2010, 2011) and increases consumer appeal (Pontikes, 2012).

Given the contrasting findings of these literatures, it follows that functional breadth might impact transition into entrepreneurship in opposite ways, generating an acute paradox. On one hand, experience in a broad set of job functions (e.g., engineer, technician, musician) might facilitate entrepreneurial process, allowing the prospective entrepreneur greater self-reliance in identifying lucrative opportunities and formulating a strategy for their exploitation (e.g., Lazear, 2004). On the other hand, a history of switching job functions might hinder the transition into entrepreneurship by undermining the legitimacy of entrepreneurial claims; introducing confusion about a founder's suitability (Zuckerman et al., 2003; Roberts et al., 2013), commitment (Leung, 2014), or their depth of knowledge in the minds of external stakeholders they rely upon, including investors, prospective employees, bankers, and consumers (Thornton, 1999; Aldrich and Ruef, 2006). Paradoxically, the practices that allow prospective entrepreneurs to access the heterogeneous resources and information they require for entry may also diminish their perceived legitimacy, generating an unanticipated constraint on their ability to found new organizations. This tension between pursuing the breadth of skills required to launch a new venture and establishing the clarity and appropriateness of their experiences lies at the core of transition into entrepreneurship and is a primary determinant of whether or not an individual becomes a founder of a new organization.

To resolve this paradox, we propose that an individual's entry into entrepreneurship is most supported when broad functional experience allows for both entrepreneurial skill and legitimacy in the eyes of relevant stakeholders. In explaining how broad experience and legitimacy can be achieved simultaneously, we adopt the central insight of the psychological theory of cross-categorization. This theoretical perspective posits that, rather than being subject to a single classificatory system, individuals can be classified based on simultaneous categorization systems (Deschamps and Doise, 1978; Stangor et al., 1992). These multiple categorical memberships mitigate the potential legitimacy discount by rendering an unfavorable categorization less salient, as individuals can be re-categorized using an alternative classification system. The ability of evaluators to process multiple schemas reduces the significance of the prominent category (Vescio, Judd, and Kwan, 2004) and creates opportunities for categorical assignments to change (Gaertner et al., 1989; Dovidio et al., 1997). Significant to the question at hand, cross-categorization suggests that individuals can mitigate the presumptive discounting of "broad functional experience" by emphasizing "fitness" in other experiential domains.

Building on the theory of cross-categorization, we propose that the benefit of an association with different job functions can be amplified if the experience of prospective founders can also be categorized in an alternative way that signals specialized knowledge, commitment and, legitimacy. Specifically, studies of individual work experience identify engagement with a given market (e.g., music, healthcare, education) as a second salient attribute of experience (Zuckerman, 2003; Leung, 2014). Following the theory of cross-categorization, we therefore expect that the broad functional experience, favored by the "Jack-of-All-Trades" hypothesis, will facilitate transition into entrepreneurship when combined with a specialist market experience: that is, when individuals couple the mastery of a variety of job functions with evidence of specialization and commitment in a given market domain. This bifurcation recognizes that entrepreneurs can be defined by multiple aspects of their experience and clarifies that it is not the

pursuit of breadth *per se*, but this combination of ability and legitimacy that enhances the likelihood that an individual successfully identifies and exploits an opportunity for a new venture.

As further tests of our claim, we expect the hypothesized effect to be mitigated when alternate means of reducing legitimacy-based concerns are present: status, job-experience typicality, and audience orientation. Status provides the evidence of ability and clarity of identity (Phillips and Zuckerman, 2001; Merluzzi and Phillips, 2016) otherwise acquired through specialized experience, and the presumption of legitimacy affords high-status actors greater latitude on both dimensions. Typicality reduces the penalties of breadth by providing external audiences and resource providers with a frame to understand their work experience (Lo and Kennedy, 2015). Hence, we argue that evidence for broad job functions and narrow market domains manifest in an individual's experience will less likely drive entrepreneurial entry when individuals mitigate potential legitimacy concerns through alternative means—by attaining high status or being more typical. Finally, because audiences vary in their tolerance of breadth (Bowers, 2015), we propose that a prospective entrepreneur soliciting from a crowd receptive to breadth will be less likely to benefit from combining broad functional and narrow market experience.

Methodologically, assessing the impact of experiential breadth on transition into entrepreneurship hinges on identifying an empirical context in which both classificatory systems, based on job functions and market domains, can easily be decoupled. Scholars have generally studied those attributes in separation, focusing either on experience across market domains (Zuckerman et al., 2003; Navis and Glynn, 2010; Wry et al., 2014) or on functional variety (Ferguson and Hasan, 2013; Leung, 2014). We take advantage of the music industry as a particularly appropriate setting to test our theoretical arguments. In addition to frequently being the site of studies of classification (Sgourev and Althuizen, 2014), in this setting it is possible to empirically isolate multiple classificatory systems because founders are commonly categorized

with respect to job functions (e.g., performing, engineering, composing) and markets (e.g., Folk, Pop, Rock). Moreover, instances of entrepreneurship can be identified in this context, as individuals and teams set up independent record labels (Schwartz, 2009). Music artists may separate from established record labels to form new, independent labels with a goal of publishing their own and other artists' work. We test our hypotheses using data on the creation of an independent label by recording artists during the period 1990–2013.

Overall, our findings contribute to entrepreneurship theories and organizational research on categorization. With respect to the former, we revisit the well established notion that generalists are most likely to become entrepreneurs (e.g., Lazear, 2004; Elfenbein, Hamilton, and Zenger, 2010; Åstebro et al., 2011), by highlighting the potential constraints associated with legitimacy discount that generalists might trigger. With respect to the latter, we contribute to a further understanding of the contingent nature of the generalist discount (Rao et al., 2003; Lounsbury and Rao, 2004; Lo and Kennedy, 2015; Merluzzi and Phillips, 2016), by documenting that the penalty for perceived breadth is a product of multiple classificatory systems rather than the result of the presence or absence of a single categorization.

## THEORY AND HYPOTHESES

### The Tension in Functional Breadth and Legitimacy

A well-established line of research investigates the determinants of entrepreneurship, defined as an act of founding a new organization within a new or existing market (e.g., Thronton, 1999; Aldrich and Ruef, 2007) in order to exploit opportunities through the use of ample resources critical for starting a new venture (Shane and Venkataraman, 2000).[1] A fundamental notion in this research is that entrepreneurial entry depends on two key factors: an individual's objective ability to identify opportunities and formulate entrepreneurial strategy (e.g., Shane, 2012), and the

[1] Alternative forms of entrepreneurship, whereby entry does not require opportunity identification or resource mobilization, are not the focus of our study. Similarly, our definition of entrepreneurship does not pertain to instances in which entrepreneurship is not associated with launching of a new organization.

legitimacy of those efforts in the eyes of external audiences, such as investors, customers, and potential employees (Aldrich and Fiol, 1994; Navis and Glynn, 2011; Sine et al 2007; Zott and Huy 2007; Nagy et al 2012). But although ability and legitimacy serve a complementary function in facilitating the entrepreneurial process, there appears to be an acute tension between the two in the context of entrepreneurial entry.

A well-established body of work has equated entrepreneurial skill with broad functional background, or experience with multiple job functions. Such functional breadth is commonly thought to facilitate organizational founding and lead to more-favorable entrepreneurial outcomes upon entry (Åstebro et al., 2011). Scholars have posited two interrelated mechanisms. First, breadth of job functions increases the accumulation of human capital: simply put, employees with broad work experience accumulate an array of skills, which are valuable in transitions to self-employment (Lazear, 2004). Heterogeneous functional experience correlates with the knowledge and skill variety especially conducive to starting a new venture (Jehn *et al*., 1999). Compounding the effect of these benefits, the accumulation of juxtaposing experiences creates a structure in which novel opportunities are easier to recognize and entrepreneurial aspirations are more likely to emerge (Baumol, 2005). Similarly, performance of a broader range of commercial activities in one's current job increases the likelihood of entrepreneurship, either because a mastery of skills facilitates access to initial resources (Elfenbein, Hamilton and Zenger, 2010), or because individuals with a variety of skills are misfits in their parent organizations (Åstebro and Thompson, 2011).

Scholars have also theorized that broad functional experience reduces the costs of accessing resources, since entrepreneurs can perform a variety of tasks independently (Davidsson and Honig, 2003; Vissa, 2012). As Lazear (2005: 650) explains, "Even when entrepreneurs can hire others, they must be sufficiently well versed in a variety of fields to judge the quality of applicants." More generally, the returns to experience variety should be positive for

entrepreneurs, allowing individuals to recombine the knowledge and skills conducive to the formation of a new venture (Wu and Dokko, 2013). For example, balanced skills are particularly conductive to entrepreneurship because founders are usually responsible for a wide variety of functions, including identifying a value-creation opportunity in the market, formulating the conception of the basic product, and designing entrepreneurial strategy for a new venture. Conversely, functional specialization achieves the opposite effect by reducing opportunities for brokerage, access to unfamiliar ideas, and the ability of entrepreneurs to be self-reliant. Hence, the overall implication of this literature is that employees with broader functional experience, or those who have mastered a variety of skills, will reveal stronger aspirations and exert greater effort in an attempt to identify and exploit entrepreneurial opportunities.

But though the existing theories of entrepreneurship have emphasized the skill-based benefits derived from functional breath, these arguments have been less concerned with the legitimacy of entrepreneurial claims in the eyes of external audiences, and the specific influence of functional breadth on it. Yet functional breadth is unlikely to enhance the external perception of entrepreneurial efforts and thus result in securing endorsement of relevant stakeholders. Although prospective entrepreneurs need to persuade these key audiences, including initial hires, investors, customers, or upstream suppliers and downstream buyers, about the viability of an entrepreneurial opportunity, a broad history of job functions might pose significant risks for the legitimacy of a nascent entrepreneur, creating structural conditions that inhibit potential entry. The ecological theory of organizations has established that an individual's pursuit of functional breadth involves the risk of negative evaluation (for review see Hannan, 2010)—either because it increases ambiguity (Zuckerman, 1999; Zuckerman et al., 2003) or because it confers illegitimacy (Peterson, 1997; Merluzzi and Phillips, 2016). For example, actors entering the labor market in an attempt to demonstrate a range of jobs are discounted by casting directors precisely because the breadth of their skills reduces the external perception of their "fit" for a given role (Zuckerman et

al., 2003). And, in a study of Hollywood pitches, expert judges quickly dismiss the work of screenwriters who did not fit the creative prototypes they expected (Elsbach and Kramer, 2003: 298). Evidence of diverse work experience can also be interpreted as indicative of a lack of aptitude (Ferguson and Hasan, 2013) as well as a lack of commitment (Leung, 2014).

These discounts occur even in contexts, such as entrepreneurship (Pontikes, 2012; Wry et al., 2014), where novelty is generally valued. Given that future success of any nascent business is highly uncertain, the reliance of entrepreneurs upon signals of quality to substitute for tangible evidence increases their susceptibility to this threat of devaluation. A history of switching jobs may help identify opportunities or increase self-sufficiency, but it may also problematize an entrepreneur's ability to signal commitment, capability, and "fit" with the venture's aim, and therefore to secure audiences' endorsement, convincing employees, investors, or co-founders to follow them, or gain consumers' confidence. For example, venture capitalists and individual investors express a preference for candidates with "relevant expertise" or "depth of knowledge" (Shepherd, 1999)—each of which is undermined by evidence of individual dilettantism. Prospective co-founders or employees may similarly desire evidence a founder is fully committed but functional breadth is often interpreted as an inability to commit (Leung, 2014). More generally, the inherent challenge entrepreneurs must overcome in convincing investors, employees, and consumers of the value of their ambiguous and often-inchoate idea (Navis and Glynn, 2011) is compounded by being perceived as unfit, unfocused, or uncommitted. Consistent with the notion that functional breadth may not always be beneficial in an entrepreneurial context, Roberts et al. (2013) find that restaurants receive lower ratings from customers, if the founding head chef had experience as a restaurant owner. They suggest that such discount arises because spanning multiple domains (i.e., chef and owner) contributes to skill decay and a loss of focus, especially when these domains are in conflict. Similarly, Navis and Glynn (2010; 2011) propose that it is the evidence of specialization, rather than generalism, that helps establish the legitimacy

of entrepreneurial claims. Collectively, these studies suggest that the structural conditions for launching a new venture are unfavorable, even when prospective entrepreneurs reveal effort and motivation to found a new venture but fail to appear legitimate in the eyes of relevant audiences.

Overall, entrepreneurship theories emphasize the skill-related benefits of functional breadth in the context of entrepreneurial entry. But they neglect the critical role of establishing legitimacy at the pivotal time of entering entrepreneurship. As a result, they miss how functional breadth may simultaneously *enable* and *inhibit* entrepreneurial entry by fostering entrepreneurial skills on the one hand, and legitimacy concerns, on the other hand. As follows below, we theorize the conditions under which the apparent contradiction inherent in functional breadth dissolves.

**Cross-Categorization: Functional and Market Experience**

Given that a successful entry hinges on establishing legitimacy – which functional breadth is likely to undermine by triggering a negative assessment of entrepreneurial efforts – a fundamental question is how to restore legitimacy in face of broad functional experience. Because categorical discounting is a cognitive process, restoring legitimacy requires a cognitive reassignment of a person or object from one class (i.e. dilettante) to another (i.e. entrepreneur). The psychological theory of cross-categorization offers one mechanism by which this restoration can occur. The theory posits that individuals are not assigned to a category on the basis of a single characteristic; rather, multiple criteria provide the basis for simultaneous categorization systems (Deschamps and Doise, 1978; Stangor et al., 1992). A "simple categorization" would suggest that we identify someone as "like us" if they share a single salient attribute (e.g. ethnicity or gender). By contrast, a theory of cross-categorization indicates that multiple factors participate in the initial classification (Hewstone, Islam, and Judd, 1993). Critically, the use of multiple category memberships to reach an assessment reduces potential bias, enhancing the legitimacy of those under evaluation. First, when evaluating fitness on the basis of a categorical membership, a combination of multiple characteristics reduces defaulting to an automatic response (Urban and

Miller, 1998). For example, in the context of directors' appointments to corporate boards, Zhu et al. (2014) argue that a new female board member can be initially assigned an "outsider" status because of her gender but come to acquire an "insider" status as the other board members recognize her as sharing many of their other attributes (e.g., education, ethnicity, work experience). In this case, gender differences are obvious and salient but become less unfavorable in the presence of shared secondary traits. A multiple categorization system leads to these instances of cognitive dissonance, where categorization based on one system may contradict a categorization based on other systems, thus decreasing potential discount from either category (Brown and Turner, 1979; Gaertner et al., 1989). In this way, multiple categorical memberships reduce the evaluative significance of any single membership, including the membership subject to a potential discount. This leads to greater positivity toward individuals who can be classified in more than one way (Vanbeselaere, 1991).

In evaluating entrepreneurs, the critical question involves how to determine value in the absence of evidence. The resulting answer hinges upon the perception of the evaluator; co-founders, investors, initial employees, and prospective consumers must all perceive the person as qualified, capable, and committed, if the entrepreneur is likely to successfully enter. Cross-categorization offers a mechanism by which the legitimacy concerns that accompany functional breadth may be moderated by evidence of specialization in another area of their work history. Evaluators looking for a means to assuage their doubts can use this alternate form of specialization (e.g. within an industry, organization, or market segment) as the evidence needed to reach a positive assessment of an entrepreneur's fit, their degree of commitment, or the value of their prior experiences. In addition, people who initially conclude that the entrepreneur is too risky to support, might re-categorize them in a more positive light, if alternative systems to categorize their work experience are available. The theory also implies that, rather than offering additional data points, multiple categorization systems will function as anchors for a change in

how resource holders classify the entrepreneur. An alternative system to classify experience may moderate the potential breadth penalty, reducing the appearance of dilettantism and correspondingly restoring the individual's identity as a legitimate entrepreneur. This will likely amplify the benefits of functional breadth by establishing the legitimacy of entrepreneurial claims and enhancing the structural conditions for entrepreneurial entry, more generally.

Cross-categorization is particularly likely to apply to job experience because experience can be categorized along multiple dimensions, raising opportunities for mitigating the potential discount and restoring legitimacy. Whereas theories of entrepreneurship have focused on functional experience, sociological work on categorization suggests that an individual's job experience can also be classified with respect to market domains (Zuckerman, 2003). Those who combine functional breadth with specialization in another experiential domain will be more likely to successfully reconcile the need for entrepreneurial skill and legitimacy at the pivotal stage of entrepreneurial entry. For example, in our setting, prior to becoming an entrepreneur, Justin Timberlake pursued a diverse set of job functions, including songwriting, performing as a backup singer, and production. At the same time, he remained staunchly within the Pop and R&B genres, thus constraining his market experience and establishing contrasting evidence of specialization. For classic Silicon Valley start-ups, this may imply that an individual who worked in a number of jobs, including business development, PR, and customer acquisition, will find it easier to establish their entrepreneurial legitimacy when their work experience has been accumulated within a single industry, creating the conditions favorable to entrepreneurial entry. For example, as stated by one entrepreneur, "Running a business requires wearing so many hats! But here's the problem: you cannot afford to just be a generalist. People will invest in you for the specificity of your skills. Products get purchased for the specific problem they solve. But forcing yourself to be solely a specialist isn't the answer either. Specialists have to rely on other people too much and bear too much risk that the market might change (…). The intersection of the two is where the

magic happens. Become an expert and a generalist at the same time, and you'll be unstoppable" (Barr, 2015).

Consistent with these examples, we expect that the perceptual risk associated with the pursuit of functional breadth will diminish for entrepreneurs with a specialist market experience. The simultaneously perceived generalized and specialist identities will enhance the legitimacy of entrepreneurial effort or diminish any potential discount of generalism, while also preserving the benefits of entrepreneurial capabilities. Ultimately, when individuals are able to combine entrepreneurial skill versatility, associated with broad functional experience, and legitimacy in the eyes of evaluators and resource holders, associated with broad market experience, they will be more motivated, more willing, and more able to successfully transition to entrepreneurship.

***Hypothesis 1****: The likelihood of entrepreneurial entry increases with functional breadth.*

***Hypothesis 2****: The positive impact of functional breadth on entrepreneurial entry will be amplified as market breadth declines.*

**Legitimacy: Status and Typicality**

Our core argument suggests that individuals are likely to become entrepreneurs when they develop entrepreneurial skill through broad functional experience, while also establishing their commitment and legitimacy in another experiential domain. To probe this deeper, we turn to investigating the heterogeneous effects of this combination on entrepreneurial entry. If our supposition is plausible, alternate means of establishing legitimacy should moderate the acuteness of competing demands, reducing the potential benefit associated with a specialized market experience.

Prior research suggests that an alternate method of attaining the benefits of generalization without incurring the costs is through a secondary signal of legitimacy. For example, attributes such as length of experience (Leung, 2014) or evidence of success (Smith, 2011) reduce evaluator's reliance upon specialization to identify quality and allow greater latitude to the focal

actors. Broadly, these studies imply that individuals are less likely to suffer breadth discounts, when they establish their legitimacy independent of audience identification.

One frequently identified means of establishing legitimacy is through the occupation of a high-status position within a community (Merton, 1968; Shane and Khurana, 2003). Status generates a signal of quality and meaning that helps limit the avoidance or devaluation that may arise through generalization (Phillips and Zuckerman, 2001). For example, the ability to decouple conformity and legitimacy enables high-status actors to pursue novelty by bridging categories (Leahey, Beckman, and Stanko, unpublished manuscript). Indeed, occupation of a high-status position motivates an interest in breadth (Peterson and Kern, 1996) and ultimately reduces the discount associated with displaying breadth (Zuckerman et al., 2003). This suggests that prospective entrepreneurs might not be equally subject to the pressure to specialize, with high-status actors capable of invoking their status to reduce concerns over ability or commitment that might result in a charge of illegitimacy. This insight that status functions as a moderator, allowing entrepreneurs to generalize and therefore to pursue functional breadth without the need to demonstrate a parallel specialization motivates our hypothesis:

> ***Hypothesis 3****: The moderating role of market breadth will be weaker for high-status actors.*

Another frequent means of establishing legitimacy is through the assembly of typical combinations. The conclusion that generalism is detrimental hinges on the expectation that audiences identify a set of experiences as being across categories rather than within a single category. However, categorical boundaries are non-constant with time, and just as old categories disappear, new ones can emerge that combine existing offerings (Rosa et al., 1999; Lounsbury and Rao, 2004). Initially these efforts beget penalties, but those penalties erode as the behavior becomes more prevalent, and as actions that were seen as combining different areas instead come to signify specialization in a new area (Kennedy, 2008). Indeed, pervasiveness of a new practice functions as a credible proxy for its legitimacy (Freeman and Hannan, 1977; Tolbert and Zucker,

1983). For example, nanotechnology began as a hybrid science that straddled distinct categories, but as the number of scientists working on nanotech grew, the perception that they were spanning classes disappeared (Lo and Kennedy, 2014). Similarly, French chefs adopting the techniques of Nouvelle Cuisine were initially penalized, but as the practice became widespread, the penalty disappeared as audiences accepted the legitimacy of the act (Rao, Monin, and Durand, 2003). In each case, combinations become less confusing, and less subject to penalty, the more frequently they occur. Although these particular studies describe combinations that cross-scientific or culinary boundaries, studies of career history find similar evidence that pursuing more common skill combinations reduces the penalty associated with breadth (Leung, 2014). These studies imply that functional breadth is more likely to appear legitimate and less likely to connote dilettantism or ineptitude when the combination of experiences is more typical. Hence, if narrow market experience serves to establish legitimacy of functional breadth, then we would expect the combination of functional and market breadth to be less salient when the set of job functions an individual performed is more common. The more typical the combination, the more likely audiences are to understand and accept their assembly, allowing the entrepreneur to achieve the gains of functional breadth without the accompanying risk of being perceived as too broad.

> ***Hypothesis 4****: The moderating role of market breadth will be weaker for actors with a more typical set of job functions.*

**Audience Receptivity**

The prior hypotheses hinge on the assumption that prospective entrepreneurs with broad experiences are less likely to establish legitimacy and are thus less willing and able to enter entrepreneurship. If this presumption is accurate, then a given audience's willingness to tolerate breadth will also moderate the relationship between breadth and entry. Audiences predisposed to favor breadth offer an alternate resolution for the breadth tension by allowing prospective entrepreneurs to acquire a variety of skills without risk of incurring a penalty. For example,

venture capitalists may treat evidence of breadth as a proxy for novelty (Wry et al., 2014), just as "high-brow" consumers may use their acceptance of atypical products to signal their erudition. For members of these groups, an entrepreneur's breadth of experience may be less likely to suggest an inability or lack of commitment than it would to an audience that equated specialization with ability. Given the evidence that different entrepreneurial (Pontikes, 2012) and music (Peterson & Kern, 1996) audiences exhibit significant preferences for or against specialization, our argument implies that, for entrepreneurs with broad functional experience, the benefits of a narrow market experience will be weaker when audiences tolerate breadth.

> ***Hypothesis 5****: The moderating role of market breadth will be weaker for actors appealing to more receptive audiences.*

## DATA & METHODS

### Empirical Context: The Music Industry

Drawing plausible inferences is challenging because it hinges on finding a large-scale sample in which job experience could be easily decoupled into job functions and market domains. Here, we take advantage of a novel empirical context: the music industry. Because of the clarity of an audience–producer dynamic, cultural markets have repeatedly been used as sites to investigate the role of categorical claims on the success of actors, movies, and musicians (Zuckerman et al., 2003; Hsu, 2006; Hsu, Negro, and Perretti, 2012). Cultural markets also offer useful sites for the study of entrepreneurship because venturing activity is observable when artists form new organizations and new teams to develop a product under uncertain conditions (Hirsch, 1972).

To test the hypotheses, we use hand-collected data on music artists' career histories, with a focus on singers (i.e., solo singers and bands). Musicians have attracted particular attention as entrepreneurs, from popular accounts of the business practices of the Grateful Dead, to academic studies of why music producers are entrepreneurs rather than employees (Peterson and Berger, 1971). Large, established record labels function as production companies, which finance the costs of development, promotion, and distribution of a number of works. Such companies

provide an artist with a large, up-front payment used by the artist to create the album and to cover living expenses. Labels then connect artists to the full array of creative professionals required to bring an album to fruition, including composers, sound engineers, producers, sound mixers, background vocalists, and musicians. Despite the active role of established record labels in developing and promoting talent, some artists decide to forgo the complementary assets of the major and launch an independent label. Consider Cake, a band that left a major record label, Columbia Records, and started an independent label in 2004, Upbeat Records. Cake left a major label, but leaving small labels may also precede instances of entrepreneurship. Like in any other instance of entrepreneurship, a new label survival will depend on the founder's ability to identify opportunities, secure access to capital and other resources (e.g., space and equipment), hire employees (e.g., sign other artists and hire music producers), bring new products to the market (i.e., promote music albums and develop distribution deals), and gain market share through successful music sales (Schwartz, 2009). The cost of founding a label is estimated at $1-10 million depending upon the scale of the venture (some, like J records, began with over $100m in funding), and new labels can require more than a dozen full-time employees (Garrity, 2001). In addition to the obvious challenge of creating a product, founders confront IP issues (i.e. what art can be on an album cover, how close can one song approximate another), complicated royalty and licensing deals, distribution and promotional concerns, and pressure to identify and sign viable new acts. Given these obstacles, entrepreneurship here involves significant financial and reputational risks to the founder. As an example, the founder of Redemption Records noted, "I put out a good band with a niche and knew how to exploit that scene. I continued making money until 95' – the first time I took some big financial risks and had financial losses. I had to struggle. But because I took the risks, I got the most notoriety for the label and interest from other companies" (Schwartz, 2009: 50).

**Sample Construction and Characteristics**

The authors constructed the database by gathering and combining multiple data sources. The first dataset set was obtained in 2013 from *Nielsen SoundScan,* the official source of sales records in the music industry. The company provides comprehensive coverage of every single album released by an artist, including information on the album's release date, album's label's name, distribution sources, and sales. It also collects weekly sales data using the primary tracking and information system for record sales in retail stores across the US and Canada. Data on album sales are made available to subscribers, including the well-known *Billboard* music charts. These data were further supplemented with hand-collected information extracted primarily from Allmusic.com in 2013. The AllMusic database serves as a prominent music guide, licensed and used in point-of-sale systems by a large number of music retailers. The website displays comprehensive information on artists' names, genres, credits, music styles, tones, moods, themes, biographies, reviews, and ratings. Using this source, we were able to collect additional information on artists and their albums, including data on artists' music styles, credits, and awards. Information on the artists' gender and other demographics was extracted from multiple online data sources, including Zoominfo and artists' websites. Finally, artists' and album names obtained from the different databases were disambiguated, using automatic string matching, and potential name variations were checked by hand to resolve any spelling inconsistencies.

We focus on music artists (i.e., bands and solo artists) registered with *Nielsen SoundScan*. Because Nielsen follows registered artists only, the sample covers commercially relevant music but is not limited to superstar artists. The sample is drawn from a pool of artists who released their first album no earlier than 1990. From this population, Nielsen has provided us with a genre-based stratified random sample of artists. To reflect the popularity of different music styles, we follow Obelholzer-Gee and Strumpf (2007) and set the sample share of a genre equal to its

fraction of CD sales each year, based on the *SoundScan* estimates. Within each genre, we randomly select individual artists. Using this method ensures that a sample is representative of all commercially relevant artists and albums, allowing us to draw meaningful inferences about music production. For each artist selected, we obtained the artist's entire discography, including the titles of albums released and the release dates.[2] The database includes the artist's own discography as well as credits an artist received on albums released by other artists. Given the data structure, we used artist-year as the unit of analysis. The data includes 804 transitions to entrepreneurship for 3,997 artists (solo artists and bands) over the period between 1990 and 2013. The total number of observations is 13,856.

**Dependent Variables**

***Entrepreneurship.*** Entrepreneurial entry is an indicator variable that captures whether an artist launched a new, independent record label in a given year. However, we exclude individuals who founded a record label but who lacked a track record in the industry either because (a) their previous jobs lay outside the music industry, (b) they did not classify as music artists, or (c) they had never worked before. This category of individuals is omitted because the data do not track the characteristics of founders before they entered the music industry; similarly, we have no information on non-artist founders. Hence, the definition of "entrepreneurship" for this study involves the founding of an intra-industry spinoff (Klepper, 2007).

**Explanatory Variables: Classification**

***Functional Breadth.*** The primary independent variables used in this study measure the breadth of prior functional and market experience for each artist. To assess *functional breadth,* we followed prior literature and measured the degree to which an actor's credited skills were

[2] An artist's discography excludes products with the same-recorded work but in a different format (e.g., LP, CD, Cassette, SACD, Gold Disc, Piano Roll) or with a different product barcode. For example, The 7 Method group has released three albums, including "I'll Change Tomorrow" (2003), "2004 Demo" (2004), and "Roses like Razorblades" (2006).

concentrated within a single job function (e.g., Åstebro and Thompson, 2011; Ferguson and Hasan, 2013). Accordingly, we used the Herfindahl index of the form:

$$F_{iy} = 1 - \left( \sum_{n=0}^{8} \left( \frac{X_{niy}}{T_{iy}} \right)^2 \right)$$

where the functional generalism ($F$) for artist $i$ in year $y$ is 1 minus the sum of the square of proportional membership, defined by the count of credits $X$ in category $n$ divided by the total number of credits $T$. To calculate this, we counted every credit an artist received in a given year across the eight most common categories—Producer, Composer, Performer, Instrumentalist, Primary Artist, Vocal Talent, Technical, Non-Music (generic)—for each year they were in the sample. We focused on those jobs because they are most conducive to founding and running an entrepreneurial label. We assessed whether an artist held multiple functions within the industry, such as performer, composer, instrumentalist, or a producer, because the album-production process requires deep expertise in these different areas. For example, expertise in music performance and composition are particularly valuable because label founders are often in charge of scouting and selecting new artists to sign to a label (Schwartz, 2009).[3] Similarly, an artist's technical knowledge facilitates label founding because founders are in charge of choosing a studio and its technical aspects, hiring engineers to mix and record music, or selecting a manufacturer (Schwartz, 2009). Finally, an artist's previous engagement in non-music related jobs might indicate expertise in other areas conducive to entrepreneurship, including financing, sales, marketing, or distribution. Indeed, the founder of Victory Records noted that founders are often in charge of multiple functions, many of which are not related to music: "I had to learn bookkeeping, maintaining an accounts receivable, collecting, paying people on time, vendor relations, overall organization of a business, sales, marketing, promotion.

[3] A founder of Roc-A-Fella Records notes: "You have to have your business correct. Be knowledgeable of it –know when you are getting jerked or when somebody is trying to pull something where it's not as lucrative for you as it is for them. Get with some talent that you are 100 percent confident in." (Schwartz 2009: 322).

Even layout and design. I did everything" (Schwartz, 2009: 46). More generally, founding a new label has often been described as "overwhelming" because it involves "many non-musical things to do" and "working longer hours than anyone else" (Schwartz, 2009: 145).

Because a single artist can appear in varying capacities across multiple albums in a given year, a count of these credits captures the concentration of their skills better than a coarse indicator does. We defined the count of credits (*X)* as the sum of all credits from the start of the sample through year *y* for each skill category *n.* Using a proportional measure in the Herfindahl (rather than the count) constrains the generalism measure between 0 and 1, with a higher score indicating greater generalization.

***Market Breadth.*** We define *market breadth* as the degree to which an artist holds membership in multiple genres. To estimate this, we again use a Herfindahl index that sums the squared proportional membership in each of the principal music genres.[4] This measure is therefore constrained between 0 and 1, where a lower score indicates a narrower market experience (i.e., greater concentration), with a score of 0 indicating that an artist has concentrated entirely within a single genre through that point in their career. We define market breadth (*M)* for artist *i* in year *y* as 1 minus the sum of their squared proportion of claims *C* (out of all the claims they had made *T* across the genres considered) for each genre *g:*

$$M_{iy} = 1 - \left( \sum_{g=0}^{19} \left( \frac{C_{giy}}{T_{iy}} \right)^2 \right)$$

We collected album genre identification from the label and from data provided by the music website Allmusic.com. This site allows audience members to self-generate 'tags' for an album creating a measure of the external perception of an artist's market position. Research on the music industry equates genre with market segment such that promotional channels are often

[4] We considered the following genres: Pop, Country, Rock, Alternative/Indie, R&B, Rap, Folk, Classical, Gospel/Religious, Broadway/Show, Jazz, Dance/Techno, Reggae, Latin, World, Metal, Other (e.g., Comedy, Yodeling, Nature).

organized around genre, critics are bound by genre, and labels themselves often use claims of genre knowledge to gain funding. Music entrepreneurs are often advised to choose a narrow niche (i.e., focus on a single market segment) when founding a new label. For example, Schwartz (2009) argues: "When you begin your label, choose your brand and stick with it. Don't put out a country record one week and a hop-hop record next week. (...) people are attracted to buying those records since they have an idea what to expect from them" (Schwartz, 2009: 83).

Our data allow for greater variation than labels indicate, as record labels traditionally constrain artists to a single genre, while user-generated content allows us to capture differences between sole and partial members. Each tag was treated as a single vote for a particular subgenre; then, in keeping with recent studies (Hsu, Hannan, and Kocak, 2009), we aggregated subgenres into one of principal genres recognized by the NEA; thus, "Blue-Eyed Soul" is counted as Soul and "Gangsta Rap" as Rap. In the event that a subgenre indicated two or more genres (e.g., Country Rock, Dance-Pop), it was considered an equal vote for both genres. The NEA genre classifications were selected because they have been widely used in prior research on musical genres and therefore allow for clear comparisons with prior findings, and because they strongly correlate with the categories used by record labels, stores, and online vendors (e.g., iTunes) to direct consumers. Recent studies in musicology affirm that, despite continued claims that genres are disappearing, they remain a salient means of organizing consumption and establishing expectations among audiences and critics (Negus, 1999). For robustness, we also obtained data on genres from *Nielsen SoundScan;* a cross-check showed consistent genre tags across the two data sources.

Some examples may help illustrate how we measure breadth along these dimensions. Consider first the aforementioned Justin Timberlake: Mr. Timberlake began his career as one of five members of the band 'N Sync, slowly diversified into writing for others, performing as primary and backup singer, and production. Thus his functional breadth increased over time,

potentially facilitating successful entry into entrepreneurship. Similarly, Jack White identified with a single genre (Rock) for the majority of his early career but developed functional breadth as a composer, sound engineer, writer, and performer all prior to launching the label Third Man Records. By contrast, Eric Church, a successful performer during the same period, pursued market breadth—singing Rock, Pop, R&B, and Country songs—but eschewed functional breadth (all of his credits are concentrated in a small number of categories) and never launched his own label. Therefore, Timberlake and White received low breadth scores in functional experience, but their scores increased over time; Church received a low breadth score for functional experience but his breadth score in market experience increased over time.

**Moderating Variables**

***Status.*** We consider an artist's commercial success as well as critical acclaim to measure his or her status in the music industry. Prior research has found that music artists who achieve greater commercial success are perceived as occupying higher status and having greater prestige (Oliver, 2004). Past research has recognized that record sales are the principal measure of commercial success (Anand and Peterson, 2000; Cox, Felton, and Chung, 1995). Accordingly, for each individual or band in our sample, we obtained record sales data from the *Nielsen SoundScan* database. For each record album in the sample, we identified the corresponding commercial sales. We then constructed a time-varying, cumulative sum of record sales between time $t_0$ through time $t_y$ for each artist in our sample. To mitigate the influence of outliers, we took a natural logarithm of this measure.

As another measure of commercial success (and therefore status), we considered whether any given artist's work was published in a compilation album. A compilation album is a release made up of tracks by various artists (and include soundtracks, label samplers, and theme albums) or by a single (and include greatest hits or sampler of an artist's career). Various-artist compilations typically gather commercially successful songs that share a common theme or a

genre. Single-artist compilations typically gather an artist's or a band's best known songs. Hence, songs that achieved a significant commercial success or are considered a major contribution to music are more likely to be featured in a compilation album. Our measure, *Artist's Count of Compilation Albums,* computes a time-varying cumulative count of compilation albums between time $t_0$ through time $t_y$ for any given artist in the sample. We take the natural logarithm of this measure to mitigate the influence of outliers.

***Typicality***. To estimate the functional typicality, we considered the frequency with which any functional profile appeared across all observations. We follow Ruef and Patterson (2009) and Leung (2014) to measure typicality (*T),* as shown in the following equation:

$$T_{iy} = \left(\frac{F_{iy}}{N}\right)$$

For each of the eight functional categories, artists were given a binary score that indicated whether they had (1) or had not (0) been credited with that function on any albums from $t_0$ through $t_y$. Each functional combination *F* was then calculated to determine the frequency with which it appeared across all observations *N*. These measures were updated annually, allowing for artists to become more or less original in their functional breadth across time. A higher score indicates greater typicality of an artist's set of experiences, with each score constrained between 0 (no one else demonstrated this combination in any year) and 1 (every other artist demonstrated this combination in every year).

***Audience Receptivity.*** Following prior research (Peterson and Kern, 1996), we proxy for audience receptivity to breadth with income and education, specifically the percentage of a given genre's audience that was college-educated or high-income (over median US income):

$$Audience\ Income_j = \sum \left(I_i \times S_i \times C_{ij}\right)$$

where $I_i$ is the percentage of fans of genre *i* earning more than the US median, $S_i$ is the size of the audience for that genre (% of all fans that list this genre as the 'best'), and $C_{ij}$ is an indicator for

whether or not album *j* was listed in genre *i.* Peterson & Kern (1996) find that contemporary elites define themselves by evidence of their omnivorousness, where earlier elites tried to establish their difference by the exclusivity of their taste. As Bryson (1996) explains, signaling an openness to diversity has become the new way in which high-brow people affirm their social status and differentiate themselves from lower-status individuals that are presumably more close-minded. In effect, this research suggests that demographic and cultural shifts in the United States have made openness to variety a means of signaling elite standing. As such, individuals with higher levels of education and income are generally found to be more tolerant to evidence of breadth than typical audiences (Bryson 1996; Goldberg 2011). Data on audience education and income were drawn from the 2012 Survey of Public Participation in the Arts.[5] For artists who span multiple genres, we calculate the average income and education for any given audience.

***Other Controls.*** We include a number of individual-level controls. First, we control for gender because women are less likely to transition to entrepreneurship than men (Dobrev and Barnett, 2005). The *Female* dummy is coded 1 if the solo vocalist or the principal band vocalist is a female, and 0 otherwise.[6] We also include a control for a band, to account for the possibility a team structure might influence the propensity to launch a new venture. Artists' names were used to identify a band because names (the first and the last name) are often unambiguously associated with either an individual (e.g., Adrian Raso) or a band (e.g., Adrian Brown & Friends). For all other names (e.g., The Cure), the distinction between band and solo artists was determined by hand-collecting biographic data from Allmusic.com and other online resources when the former did not include artists' biographic information. The *Band* dummy is coded 1 if the artist is a band rather than a soloist, and 0 otherwise. Moreover, we controlled for an artist's tenure in the firm

[5] Although the data on audience receptivity is cross-sectional, past research shows that while individual preferences may change the audience-level characteristics associated with any specific music genre tend to be stable over time (for review see, Garcia-Alvarez et al. 2007).

[6] For bands where identifying a principal vocalist is challenging, *Female* dummy is equal to 1 if all vocalists are females.

and in the job. Prior research has shown a negative influence of job tenure on inter-organizational mobility, including entrepreneurship (e.g., Haveman and Cohen, 1994). We constructed two variables: (a) tenure in the current firm as dating from the first year an artist was recorded as having been associated with a given record label, and (b) tenure in the job as dating from the first year an artist was recorded as having worked in the music industry (i.e., first appear in the dataset). These variables were measured in years. Because both measures were highly skewed, we took a natural logarithm to mitigate the influence of outliers. To account for potential non-linearity, we included quadratic terms for industry tenure and firm tenure. Finally, we accounted for an artist's productivity by including a cumulative count of albums produced by any given artist between time $t_0$ through time $t_y$. We took a natural logarithm of this measure to reduce the influence of outliers.

Our models also include firm-level controls. To account for firm size, the key distinction to consider is between the "major" and "independent" record labels. Hence, we classified each artist as being affiliated with either a "major" or an "independent" label, based on the label's name. Main record labels are considered "major" and include EMI Records, Vivendi Universal Records, Warner Brothers Records, and Sony BMG, as well as their subsidiaries. For example, an album was classified as being released by a "major," if the release was attributed to Fonovisa, Universal's subsidiary. To verify this classification, we additionally obtained the list of independent (non-major) labels from *Nielsen SoundScan* for the period between 1990 and 2004. We matched those lists with our data to determine independent labels. We further controlled for the firm's (i.e., record label's) diversification by measuring an annual count of albums released by the label. On one hand, diversified firms may be open to implementing new ventures and enhancing an employee's initiative to pursue a new venture internally. On the other hand, diversified firms may be less likely to assimilate new ventures because of a higher probability of cannibalizing existing ventures by any new venture.

Finally, we include the dummy variable *Post 99,* coded 1 if the year is equal to or greater than 1999. The advent of digitization brought a shift from physical to digital music production, with the advent of Napster, a pioneering peer-to-peer file-sharing Internet service. File-sharing technology and low-priced recording software made the core resources (e.g., recording studios and distribution) obsolete, potentially facilitating entry into entrepreneurship. We account for this technological shift that might have influenced the rate of entrepreneurial entry.

**Model Specification**

As described above, each observation is an artist-year and the hazard of entrepreneurship is estimated using the Cox regression analysis, which accounts for time-dependence. We modeled the hazard rate using semiparametric Cox models (Cox, 1972), a common approach used to model competing risk-survival data (e.g., Box-Steffensmeier and Jones, 2004). The Cox model takes the form:

$$h(t)=q(t)\exp\{\propto' X(t)\}$$

where $h(t)$ is the hazard rate of transitioning to a venturing destination at time *t; q (t)* is a (possibly time-dependent) unspecified baseline rate; *X (t)*is a vector of covariates, some of which may vary over time; ∝' is the vector of coefficients corresponding to covariates.[7] A notable feature of the Cox model is that it provides high-quality estimates even when many observations are right-censored (Tuma and Hannan, 1984). By contrast, discrete-time analyses discard information on censored events, potentially leading to biased estimates (Blossfeld and Rohwer, 1995). With event-history analyses, it is possible to alleviate an important concern that temporal variations in the probability of job transfers (inside or outside the firm) may bias the estimates. The dependent variable in our analyses is instantaneous rate of transition to entrepreneurship,

[7] An important advantage of the Cox model is that this analysis technique does not make any particular assumptions about the effect of time on the hazard rate. Instead, the coefficient estimates measure changes in the baseline rate due to the covariates in *X*, assuming that *q(t)* does not depend on the covariates and that all such changes are proportional. This model was particularly appropriate for our analyses, because the initial non-parametric results fit no simple parametric formulation and reveal no clear pattern regarding the effect of time on the hazard rate.

defined as:

$$r_m(t) = \lim_{dt \downarrow 0} prob\left(\frac{t \leq T < t + dt | T \geq t}{dt}\right)$$

where $r_m(t)$ is the hazard rate of movement from one state to another, and prob(.) is the probability of movement between times *t* and *t +dt,* given that an individual is in the sample at time *t.* This means that each individual is at risk of pursuing a start-up. We defined duration as the time (in years) elapsed since an individual enters the sample or the time since the last transition. Since virtually all individuals are represented more than once, this may lead to inflated *t*-statistics of the effects of individual-level characteristics. We therefore adjusted for clustering standard errors at the individual level to provide robust-variance estimates (Lin and Wei, 1989). Finally, an important concern might be that certain music genres may be associated with norms that encourage risk taking and entrepreneurship. Hence, we augmented our specification with a music-genre-fixed estimator to alleviate the possibility that our results may be contaminated by unobserved attributes of music genres.[8]

## RESULTS

### Main Results

Table 1 presents the descriptive statistics and correlation matrix. In table 2, we turn to the main analyses and explore the association between functional breadth and transition into entrepreneurship. Column 1 presents a univariate regression of transition into entrepreneurship, estimating the association between functional breadth and entrepreneurial entry. As predicted in H1, the coefficient on functional breadth is positive and statistically significant at the 0.1% level. In column 2, we estimate the hazard of transitioning into entrepreneurship with additional controls included. Individual-level covariates influence entrepreneurship in several ways.

[8] We included dummy variables for the principal music genres, including: Pop, Country, Rock, Alternative/Indie, R&B, Rap, Folk, Classical, Gospel/Religious, Broadway/Show, Jazz, Dance/Techno, Reggae, Latin, World, Metal, Other.

Industry tenure is negatively correlated with the probability of becoming an entrepreneur, although the quadratic term is positive and statistically significant, indicating a curvilinear relationship between the number of years in the industry and transition into entrepreneurship. Firm tenure is positively associated with transition into entrepreneurship but the coefficient is not statistically significant. Female artists are more likely to become entrepreneurs, whereas bands are less likely to. The results further reveal the impact of firm-level covariates on entrepreneurship. Consistent with prior literature (e.g., Sørensen, 2007; Elfenbein et al., 2011; Kacperczyk, 2012), the coefficient on the "major" record label is negative and statistically significant at the 0.1% level, suggesting that artists affiliated with established record labels are less likely to leave and launch their own music ventures. Finally, the hazard of becoming an entrepreneur increases after 1999, the advent of music digitization.

********Insert Table 1 about here********

As can be further seen in column 3 of table 2, the influence of functional breadth on transition to entrepreneurship is mitigated when interacted with breadth of market experience; the coefficient is negative and statistically significant at the 1% level (column 3). This effect continues to be negative and significant at the 1% level even when we include other covariates in the model (column 4). That is, functional breadth continues being positively associated with entry into entrepreneurship, but this effect is mitigated by broad market experience. A one-standard-deviation increase in the level of functional breadth increases the hazard that an employee will transition to entrepreneurship by 31% [exp(0.9229 * 0.30) – 1]. More simply, prior to entry, a typical entrepreneur in our sample has spanned 2.6 music genres, whereas a typical non-entrepreneur has spanned 3 music genres. Similarly, a typical entrepreneurs has spanned 1.4 job functions, whereas a typical non-entrepreneur has spanned 1.1 job functions.[9]

[9] In additional analyses, we tested whether including functional and market breadth and the interaction between the two improves the fit of the model. To do so, we applied the lrtest for the full model against the model with only controls. We obtained *Chi-squared* = 48.99 ($p$<0.000) with 3 degrees of freedom. This

Finally, following Greene (2009), we explore the marginal effect of the interaction term graphically by plotting predicted probabilities for various values of the interacted variables, with other covariates held constant. Figure 1 graphs the predicted transition to entrepreneurship by functional breadth and market breadth for low, medium, and high values of market breadth. Graphing the interaction term verifies that the effect of functional breadth on transition to entrepreneurship increases most progressively for lowest levels of market breadth, with functional breadth most likely to result in transition to entrepreneurship when market breadth reaches the lowest values. Overall, these results support our main hypotheses, suggesting individuals with broad functional experience are more likely to enter entrepreneurship when they also have a specialist market experience.

********Insert Table 2 and Figure 1 about here********

**Cross-Sectional Heterogeneity: Mechanisms**

***Legitimacy.*** We examined whether the interaction term between functional breadth and market breadth was moderated by other measures that might influence legitimacy assessments. In table 3, we focus on cross-sectional heterogeneity and assess the joint impact of functional and market breadth across an individual's status. Columns 1-6 estimate such models with two different measures of commercial success, to indicate an artist's status in the industry. We begin by considering cumulative record sales. In columns 1 through 2, we estimate the baseline specification within the subsamples of high-status artists (i.e., at-or-above-the-median record sales) and low-status artists (i.e., below-the-median record sales), respectively.[10] As expected, the interaction between functional and market breadth is not statistically significant for high-status actors (column 1) but is negative and statistically significant at the 0.1% level for low-status actors (column 2). Column 3 re-estimates this specification on the full sample to directly compare

result suggests that adding these predictor variables together (not just individually) results in a statistically significant improvement in model fit.

[10] Our results are robust to alternative cut-off points, including top 10%, top 20%, top (and bottom) 30% performers (i.e., as measured by annual album sales or the count of compilation albums).

the results in columns 1 and 2. When interacted with status, the joint impact of functional and market breadth is positive and statistically significant at the 1% level. This finding indicates that the joint negative impact of functional and market breadth on entrepreneurship is indeed mitigated for artists with higher status, as indicated by higher record sales.

In columns 4-6, we re-estimate these baseline specifications using an artist's cumulative count of compilation albums to measure status. Columns 4-5 report the estimates for the subsamples of higher-status artists (at-or-above-the-median count) and lower-status artists (below-the-median count), respectively. Consistent with our prediction that the benefits of narrow market experience might be less valuable for higher-status actors, the interaction term is not statistically significant in this subsample (column 4). By contrast, the interaction between functional and market breadth is negative and statistically significant at the 5% level for lower-status artists (column 5). Finally, these results hold when we re-estimate the models on the full sample. As can be seen in column 6, the coefficient on the interaction term is positive and statistically significant at the 5% level, indicating that the benefits of combining broad functional and narrow market experience are mitigated for artists of higher status, as proxied for by the count of compilation albums.

********Insert Table 3 about here********

In table 4, we assess whether the joint influence of broad functional and narrow market experience is moderated by the typicality of the functional combination. In columns 1 and 2, we estimate the baseline specifications within the subsamples of artists with a more typical (at-or-above the median) or less typical (below the median) combination of job functions. As can be seen in column 1, the joint impact of functional and market breadth is not statistically significant in the subsample of more typical artists, consistent with the notion that individuals with broad functional experience benefit less from narrow market experience, when functional combination is more typical. Column 2 re-estimates this baseline within the subsample of artists with lower

typicality. Conversely, within this subsample, the joint impact of functional and market breadth continues being negative and statistically significant at the 1% level. Finally, to compare the two samples directly, column 3 re-estimates the baseline specification on the full sample. The joint impact of market and functional breadth is mitigated as the typicality of the functional combination increases, as indicated by the positive and statistically significant coefficient ($p < 0.1$). Overall, these results show that the mitigating impact of market breadth on the positive impact of functional breadth is partly driven by those artists who exhibit less typical combinations of job functions, presumably because key resource providers perceive such prospective entrepreneurs as less legitimate.

********Insert Table 4 about here********

Table 5 reports the findings on the moderating impact of audience receptivity. We consider the share of audience with an advanced degree and high income as measures of audience receptivity. Columns 1-3 report results for advanced degree as a measure of audience receptivity. We begin by re-estimating the baseline specifications within the subsamples of high-receptivity (at-or-above and the median) and low-receptivity (below-the- median) audience, respectively. As can be seen in column 1, the joint impact of functional and market breadth is not statistically significant for audiences with higher levels of receptivity (i.e., high education levels). However, column 2 shows that, within the subsample of less breadth-receptive audience, the joint impact of functional and market breadth on entrepreneurship is negative and statistically significant at the 0.1% level. Finally, in comparing these two subsamples directly, column 3 reports the estimates on the full sample. Consistent with the analyses in columns 1-2, the joint negative impact of functional and market breath is mitigated for an audience with generally higher levels of education, as indicated by the positive and statistically significant coefficient on the interaction term between market and functional breadth and audience receptivity ($p < 0.1$). In columns 4-6, we further investigate the heterogeneous effects of audience receptivity but focus on income.

Column 4 reports the estimates for the subsample of high-income audience (at-or-above the median) and, consistent with our prediction, the coefficient on the interaction term is not statistically significant. Column 5 reports the estimates for the subsample of low-income audience (below the median), and consistent with our prediction, the coefficient on the interaction is negative and statistically significant at the 0.1% level. Finally, column 6 reports the estimates for the full sample, lending support to the earlier findings: the negative effect of the interaction between functional and market breadth is dampened when the audience's income is higher, as indicated by the positive and statistically significant coefficient on the triple interaction term ($p<0.05$).[11] Overall, the results support our prediction, indicating that the negative joint impact of functional and market breadth is amplified for more-discerning consumers.

********Insert Table 5 about here********

**Supplemental Analyses**

***Selection:*** An important inferential challenge pertains to the fact that unobserved individual-level traits, such as taste for variety and experimentation, may motivate individuals to self-sort into a greater number of job functions as a form of experimentation. This concern is particularly severe because past research has established that experimentation often precedes entry into entrepreneurship (Chatterji et al., 2016). If this is the case, then sorting processes could spuriously generate an association between functional breadth and transition into entrepreneurship. However, if our results reflect an individual's proclivity to experiment, we would expect that those who exhibit greater functional breadth should also exhibit greater market breadth. Yet because functional breadth fosters entrepreneurial entry when market experience is narrow rather than broad, this kind of sorting is unlikely to be a concern.

[11] In additional (unreported) analyses, we re-estimated the baseline specifications using median disposable income and college degree as alternate measures of consumer receptivity to breadth. The estimates were quantitatively and qualitatively comparable.

Nonetheless, we investigate this possibility empirically. We leverage mergers as a quasi-natural experiment because they are relatively exogenous to unobserved individual traits that might be potentially correlated with sorting into job functions. In the music industry, "majors" frequently acquire independent labels to expand their portfolio of offerings and artists. For example, in 2014, Sony took the lead to close the deal by acquiring Century Media. Until that point, Century Media was one of the best-known independent heavy rock labels in the world. Although target firms may not be subject to post-merger integration, others may undergo strong integration processes, following an acquisition. Past studies have shown that mergers often result in workforce instability, triggered by employee turnover and internal job shifts. Given this evidence, we expect that an acquisition of an independent label may reduce or increase one's functional breadth (e.g., Larsson and Finkelstein, 1999), as individuals become re-allocated to different jobs and functions following the acquisition. Importantly, such change in functional breadth is likely exogenous because individuals with a taste for experimentation are unlikely to purposely self-sort into organizations at higher risk of acquisition. Using the data between 1990 and 2013, we identified 480 relevant mergers of indie labels by majors. To estimate their effect on functional breadth, we construct an indicator variable equal to 1 for the period in which a firm is post-merger and 0 for the period in which a firm is pre-merger. To isolate the impact of merger, we limit our analyses to 2 years, following the acquisition. The advantage of this analytical approach is that it allows us to examine changes in functional breadth between individuals in treatment firms, affected by the merger, and individuals in control firms, unaffected by the merger.

We use the difference-in-differences (DID) methodology, a highly conservative approach that divides the sample of firms into treatment and control groups, the latter encompassing individuals who did not experience mergers but who would potentially be subject to the same time trends. Using the control sample as a benchmark differentiates any non-merger-related

trends from the data. Operationally, we captured the effect of strategic change due to a merger by estimating the following model:

$$C_i = u + \beta_1 Merger_i + \beta_2 Treament_i + \beta_3 Merger_i \times Treatment_i + \beta_4 Controls + \varepsilon_i$$

where *C* is the outcome variable that may be subject to merger, *Merger* is an indicator variable equal to 1 for observations 2 years after the merger and 0 before the merger, *Treatment* is an indicator variable equal to 1 if record label *i* was affected by the merger and 0 for firms in the control group, and *Controls* is a vector of covariates affecting the outcome variable *C.* In this specification, the coefficient of primary interest is the interaction of *Merger* and *Treatment,* which captures the differential effect of the two types of firms around mergers. Our estimation strategy included two stages. In the first stage, we estimated a DID model to verify that artists associated with record labels affected by mergers did experience change in their functional breadth relative to artists associated with record labels unaffected by mergers.

Results presented in table 6 suggest two important conclusions. First, column 1 uses functional breadth as the dependent variable. Estimates reported in this column show a negative and statistically significant coefficient on the interaction between *Merger* and *Treatment* indicators ($p<0.001$). This suggests that mergers act as a negative shock to functional breadth in the treatment group. That is, artists affiliated with independent labels that were acquired by majors experience a decrease in functional breadth relative to artists affiliated with independent labels that were not acquired by majors. We interpret this results as suggesting that individuals become more specialized following an acquisition by a larger record label. Second, our results are consistent with the main analyses: a negative coefficient of *Merger* × *Treatment* indicates that an exogenous reduction in functional breadth decreases the propensity to become an entrepreneur ($p<0.05$).

In column 3 of table 6, we additionally assuage the concern about self-selection by re-estimating the baseline specifications in table 2 but now including an individual fixed-effect

estimator. By estimating the results "within an individual," we restrict our analyses to those who eventually transitioned to entrepreneurship. As can be seen in column 3, including individual dummies decreases the magnitude of the coefficient on functional breadth by 19% and the coefficient continues being positive and statistically significant at the 5% level. Similarly, including individual dummies in the model decreases the coefficient on the interaction term between functional and market breadth by 19% and the coefficient continues to be statistically significant at the 10% level.[12] Together, these analyses provide additional confidence that functional breadth is causally related to employee propensity to become an entrepreneur and that the observed effects are unlikely to arise because of systematic selection along unobserved individual traits.

********Insert Table 6 about here********

***Hierarchy of Categorical Systems.*** Our argument suggests that the well-established benefits of functional breadth upon entering entrepreneurship (Lazear, 2004) are enhanced when individuals also have a specialist market experience. Based on the cross-categorization theory, two distinct mechanisms may account for this finding. First, functional and market experience may be equivalent, equally-salient categorical memberships (Brewer, 2000). This would imply that the two categories function as substitutes, in which case we would expect an alternate combination of a narrow functional experience and a broad market experience to also increase the probability of entrepreneurial entry. Alternatively, there might exist a hierarchical ordering of these categorical systems, with one system being superordinate and the other being subordinate. This would imply that the superordinate category mitigates the downsides of a subordinate category (Berry, 1984; Brewer, 2000; Huo et al., 1994), in which case we would expect that only a unidirectional combination facilitates entrepreneurial entry: that of specialist market experience

[12] Including individual dummies in the models limits the analyses to actors who eventually transitioned to entrepreneurship, resulting in the reduction of sample size. Although reducing the sample size decreases statistical significance, the results remain quantitatively and qualitatively similar.

(superordinate category) and a broad functional experience (subordinate category). Although either of the processes may underlie our findings, we conduct additional analyses to distinguish between them.

We re-estimate the baseline analyses within the subsamples of low functional and low market breadth. In column 1 of Table 7, we estimate the impact of functional breadth within the subsample of artists with low market breadth (below the median). Consistent with prior results, we find that functional breadth continues being positive and statistically significant at the 0.1% percent level. In column 2, we consider the alternate combination and estimate the impact of market breadth within the subsample of artists with low functional breadth (below the median). However, the coefficient of market breadth is negative and statistically significant at the 0.1% level. This indicates that, within the subsample of higher functional specialization, entry into entrepreneurship increases with greater market specialization. Hence, the benefits of breadth due to variety are less likely achieved when breadth is only based on market experience and not on functional experience. This implies that our results are unlikely to reflect categorical equivalence, whereby either combination of broad and narrow experience fosters entrepreneurial entry.

The results above suggest that categorization based on market experience is more salient than categorization based on functional experience. To additionally investigate the perceived hierarchy of these categorical systems in the music industry, we surveyed 1,000 respondents using Amazon's Mechanical Turk service to test whether individuals perceive either function or market as more pertinent in classifying an artist's experience.[13] Each respondent was given a brief biography of a hypothetical artist and asked, "If this *music artist* wants to describe his experience, what would you recommend they use as the primary and secondary categorization tool?" Respondents had to pair the "primary" and "secondary" designation either with genres (e.g., pop

[13] We only considered respondents with a 95% approval rating, 100 prior HITs approved, and who resided within the United States. We also excluded any who tried to repeat the survey, those who failed either of two attention checks, those who completed the survey too quickly or slowly, and those who reported any problems with the survey. This left a total of 940 respondents (65% male, 87% listen to music "daily").

and rock) or job functions (e.g., song writer, technician, instrumentalist). Respondents were nearly twice as likely to recommend using genres than job functions ($p$<0.001). The results confirm the earlier claim and show that subjects perceive the two forms of experience as non-equivalent, with market experience being a superordinate category and functional experience being a subordinate category. This additional finding is consistent with the notion that broad market experience might reflect a more fundamental breach that could not be mitigated by functional specialization.

********Insert Table 7 about here********

**Robustness**

This section presents various robustness checks and extensions of our baseline analysis. The underlying specification is the one used in column 1 of table 2, unless otherwise specified. The results are represented in tables 7 and 8.

***Solo Artists.*** An important concern may be that bands are subject to different pressures than individuals are. Specifically, because bands are composed of multiple individuals, resource holders may expect greater functional breadth and therefore apply a lesser discount to bands. Though bands constitute a relatively small share of our sample (18%), for robustness, we re-estimate the baseline specifications while excluding bands from our analyses. As can be seen in columns 3-4, the results are quantitatively and qualitatively similar. In column 3, the coefficient on functional breadth continues being positive and statistically significant at the 0.1% level. In column 4, we re-estimate the same specification but interact functional breadth with market breadth: the coefficient is negative and statistically significant at the 10% percent.

***Ex-Post Performance.*** The underlying tenet of our theory is the notion that broad functional experience and narrow market experience in concert facilitate an ex-ante entry into entrepreneurship because, in combination, the two are most likely to benefit an entrepreneur, ex-post. In auxiliary analyses, we verify this proposition by assessing the correlation between

functional and market breadth and entrepreneurial performance ex-post. To this end, we collected additional data on performance at founding (i.e., within the first year of founding). Using Allmusic.com, we first collected ratings by website users as well as by music experts, following an artist's entry into entrepreneurship. We supplemented these measures with data on record sales obtained from *Nielsen SoundScan*. These data allow us to measure sales of albums released following an artist's entry into entrepreneurship. In table 8, we report the associations between experiential breadth and performance.[14] In column 1, we use the linear regression model to estimate the association between breadth and sales within the subsample of artists who transitioned into entrepreneurship. In column 2, we use the negative binomial model to estimate the association between breadth and user rating. Because the ratings are counts ranging between 1 and 10, negative binomial specification is used to estimate the association between experiential breadth and website ratings (by users or experts). In column 3, we re-estimate the same specification as in column 2 but consider expert ratings as our dependent variable. As can be seen in columns 1-3, the results lend support to our underlying assumption: functional breadth is positively associated with all three measures of performance (although the coefficient on user rating is significant only at the 10% level). Similarly, as can be seen in columns 1-3, the joint effect of functional and market breadth is negative and statistically significant. This suggests that new ventures attain higher record sales and higher ratings (by users and experts), when artists' have combined broad functional with specialist market experience. These results validate our prediction that the positive association between an actor's functional breadth and performance is amplified when the market experience is narrow, following entry into entrepreneurship.

********Insert Table 8 about here********

[14] A caveat of this approach is that we do not have exogenous variation or random assignment. Accordingly, albeit informative, these results are merely suggestive and do not necessarily warrant a causal interpretation.

***Dispute-driven Foundings.*** An important concern might be that the founding events reflect conflicts between artists and commercial labels. This would be the case if artists with a broad functional experience and narrow market experience engaged in a dispute with the parent label, break off the contract, and enter entrepreneurship. We account for this possibility in two ways. First, we determine whether contract disputes play a frequent role in the creation of new labels, in general. To that end, we examined within-industry publications of Billboard Magazine, the leading trade journal, between 1994-2012 for any evidence of contractual disputes between artists and their labels. We collected data on how many of these disputes resulted in the creation of new labels. Over this period, we identified 1,203 articles discussing the founding of a new label. We read and coded each of these to identify the motivation behind founding. In only three cases (0.2%) did the article mention any prior dispute between an artist and their label as contributing to the new label's creation. We then considered articles that described an artist and label involved in a creative or commercial dispute. Of the 2,124 articles describing a commercial or creative dispute only six articles (0.3%) mentioned the founding of a new label as the byproduct of this dispute. Instead of generating entrepreneurs, we found that disputes were used as an excuse to renegotiate contracts with the existing label or to find better terms with a competing label. Even in extremely acrimonious cases (e.g., when Toni Braxton declared personal bankruptcy to end a 3-year legal battle with LaFace Records), she then simply signed a new contract with LaFace.

Finally, we hand-collected data on the founding history of each label in our sample. We found that dispute-driven foundings constituted only 0.8% of all entrepreneurial events in our sample. As expected, excluding those labels does not change any results in the study (results available upon request).

***Alternative Specifications and Measures.*** Our measure of market breath does not account for the weight of any single job function, even though some job functions may be potentially more important than others. To alleviate this concern, we re-estimated the baseline

specifications while also including controls for each job function separately. Our results are robust to these alternative model specifications. We also re-estimated a number of other specifications in which we considered alternative models or alternative measures. For example, our results were robust to estimating Weibull model, Log-Logistic model, and Gamma model. Finally, our results were recovered when the measures for functional and market breadth were normalized; or adjusted for the count of job functions or music genres; or constructed as simple counts of genres or job functions (all results available upon request).[15]

**DISCUSSION**

Classical findings in entrepreneurship have long suggested that the motivation, willingness, and ability to enter entrepreneurship rest on two key factors: entrepreneurial skills and capabilities to identify lucrative, new-business opportunities and the legitimacy of these efforts in the eyes of external stakeholders (e.g., prospective employees, customers, co-founders, or investors). Although entrepreneurship researchers have generally equated entrepreneurial skills to functional breadth (i.e., "Jack-of-All-Trades" hypothesis) (e.g., Lazear, 2004), the prescription for diverse skills when entering entrepreneurship contradicts a long line of ecological research that finds consistent legitimacy discounts to the appearance of generalism (e.g., Zuckerman, 2003; Leung, 2014). Hence, past studies imply a paradox of functional breadth: on the one hand, individuals with mastery of skills should be *more likely* to enter entrepreneurship due to superior capabilities; on the one hand, these individuals should be *less likely* to enter entrepreneurship due to a legitimacy discount.

In this study, we propose that the paradox of breadth can be usefully reconciled by introducing the notion of multiple category systems from the theory of crossed-categorization, implying that job experience can be categorized with respect to more than one dimension: job

[15] We computed z-scores by subtracting the mean of functional breadth and market breadth from the value for each individual in the sample. Then, the difference between the individual's score and the mean was divided by the standard deviation.

functions and market domains. We leverage this distinction to argue that employees are most likely to pursue entrepreneurship when their job experience is broad with regard to job functions but narrow with regard to market domains. The former enables individuals to recognize attractive, new-venture opportunities and to formulate strategies for their exploitation, whereas the latter enhances the legitimacy of these efforts in the eyes of external audiences. Empirically, we find that the chance of entrepreneurial entry is highest when individuals combine broad functional experience with narrow market experience. We interpret these results as indicating that the ability to acquire functional breadth while maintaining narrow market experience allows prospective entrepreneurs to achieve the benefits of breadth without incurring the costs of illegitimacy.

An example may help to illustrate both the dilemma faced by prospective entrepreneurs and the resolution we propose. A young software engineer interested in entrepreneurship could pursue four paths prior to launching their venture: (1) remain in the same position in the same industry, (2) remain in the same position but move across industries (e.g., from video games to healthcare to data security), (3) move into different positions (e.g., HR, business development) across different industries, or (4) move into different positions within a single industry. Pursuing breadth along any of these dimensions invites both opportunity and risk, but it does not do so in equal measure. Remaining in the same position within the same industry signals commitment but denies the actor access to new ideas and broader networks of resource holders. Remaining in the same position but moving between industries introduces the possibility for greater insight and broader networks but constrains the actor's ability and signals a lack of commitment and depth of knowledge. The third path offers new skills and the ability to speak to a broad range of audiences, but so much movement also conveys uncertainty around the actor's intent and ability. We find that the fourth path, combining functional breadth with a narrow market position, maximizes the returns to breadth while minimizing their risks. As is evident here, market breadth does not substitute for functional breadth. Hence, our results do not reflect a simple balance of breadth and

specialization but rather a unique combination of entrepreneurial skill, achieved through functional breadth, and legitimacy, achieved through market specialization. Moreover, we find that this unidirectional combination is consistent with a hierarchical ordering of the categorical systems, whereby clarity in a superordinate category (market experience) mitigates the potential downsides of conflict in a subordinate category (functional experience). Together, these empirical findings help reconcile the paradox in the literature, and provide a recommendation for how to achieve the full value of experiential breadth.

Underlying our findings is the notion that individuals are most likely to enter entrepreneurship when able to acquire resources through functional breadth without sacrificing legitimacy. Our results lend consistent support for this assumption, indicating that the combination of broad job functions with narrow market experience is less likely to facilitate entrepreneurship when actors appear legitimate. Specifically, we find that actors who manage to establish their legitimacy or value through alternate means—prior commercial success—rely less on narrow market experience to achieve the benefits of functional breadth. Similarly, our results indicate that the value of a more-focused position is mitigated by the typicality of an entrepreneur's functional experience. These findings suggest that, given functional breadth, individuals are less likely to benefit from narrow market experience when they have established their legitimacy through other means. This suggests a potential avenue for the reproduction of success in entrepreneurship, as high-status actors can pursue greater novelty in their careers without risking the loss of support. Meanwhile, low-status actors rely on narrow market experience to establish the legitimacy they risk when pursuing experiential breadth.

Finally, to further validate the mechanism we hypothesized, our findings also consider audience heterogeneity as a key moderating factor. Our results are consistent with the well-established notion that audiences are inherently heterogeneous in their receptiveness to experiential breadth. Accordingly, we find that the positive effect of functional breadth combined

with narrow market experience is mitigated for more receptive audiences (i.e., audiences with higher income and higher educational attainment). We interpret these results as indicating that audiences predisposed to favor novelty over purity provide greater latitude to entrepreneurs, while more typical experiential combinations are less likely to elicit confusion and therefore do not require compensatory appeals.

Overall, this study makes a number of contributions. First, we make several extensions to extant research on career histories and entrepreneurial entry. Building on the well-established notion that generalists are most likely to become entrepreneurs (e.g., Lazear, 2004; Elfenbein, Hamilton, and Zenger, 2010; Åstebro et al., 2011), we highlight the potential constraints on these findings—associated with broad experience. A mastery of different skills is not universally beneficial for entrepreneurial entry; rather, breadth is only beneficial in particular domains of work experience and too much experiential breadth harms the prospects of entry. In this way, we propose that the "Jack-of-all-Trades" theory omits an important variable – specialization in other aspects of job experience – that explains why categorical penalties do not appear to attach. Hence, we provide a nuanced view of breadth and its effects in an entrepreneurial context.

Moreover, we contribute novel findings, by distinguishing between two classificatory systems used simultaneously to evaluate a single actor. Despite a long line of categorical research, past studies have devoted little attention to multiple categorical systems and the implications of cross-categorization for experiential breadth. Where some scholars focused on job functions (e.g., Leung, 2014; Ferguson and Hasan, 2013), others focused on market domains (Zuckerman et al., 2003; Pontikes, 2012); yet, the two have rarely been examined in conjunction, limiting our understanding of how multiple experiential categories might work jointly to either mitigate or amplify the well-established penalties associated with broad experience. Our study is the first to expand this line of work by documenting the critical role of taking multiple classificatory systems into consideration, when examining the antecedents and consequences of

experiential breadth. Findings in our study shed new light by suggesting that unless multiple classificatory systems are considered, it is difficult to make inferences about the presence and magnitude of the penalty associated with generalism. Here we demonstrate how additional means of categorization can prevent the loss in legitimacy responsible for generating the generalist discount. Our approach may help explain recent evidence that generalism can be favorable (Merluzzi and Phillips, 2016) as we demonstrate that multiple means of establishing legitimacy mitigate a broader generalist penalty. Future studies may want to build on these findings by more explicitly considering multiple classificatory systems and the consequence of cross categorization, when examining the generalist discount.

By adopting this unique approach, our study extends the emerging stream of research on the flexibility of categories (Navis and Glynn, 2011; Wry and Lounsbury, 2013) and the basis for categorization (Durand and Paolella, 2013; Glynn and Navis, 2013; Kennedy and Fiss, 2013); we show how the penalty for perceived breadth is a product of multiple traits rather than the result of the presence or absence of a single attribute. Finally, the findings contribute to a growing stream of research in organizational theory investigating the limitations of categorical constraints (Rao et al., 2003; Lounsbury and Rao, 2004; Lo and Kennedy, 2015; Merluzzi and Phillips, 2016). In particular, our approach answers Durand and Paolella's (2013) call for research that acknowledges the fluidity and complexity of categories. Here we introduce the theory of crossed-categorization to this stream of research and demonstrate how secondary traits function to moderate categorical penalties. This approach may provide a fruitful means of identifying where entrepreneurs pursue strategies of optimal distinctiveness, by conforming along one dimension and differentiating along another, found to be particularly advantageous in prior research (Navis and Glynn, 2011; Glynn and Navis, 2013). More generally, our approach highlights the need for a better integration of the sociological and psychological understanding of categorization.

The current findings open numerous avenues for future research. Although the study provides insight into how job experience affects transition into entrepreneurship, future research may want to further unpack these mechanisms with greater precision. A potential avenue of future inquiry could, for example, examine whether individuals with a more generalized background might strategically suppress various facets of their prior experience in order to appear more specialized and therefore more attractive to potential resource holders. A possibility that individuals with entrepreneurial inclinations may strategically frame their tangible experience might have important consequences for resource acquisition and ultimately the ability to enter. These and other questions will play an important role in uncovering the mechanisms that underlie entrepreneurial entry.

Moreover, we describe a setting in which prospective entrepreneurs have two salient and easily identifiable aspects of their identity, based on job functions and market domains. It may be that in alternate settings there are additional criteria or that the salient criteria we offer here are less pronounced. In both cases we would anticipate that the results will hold, although the complications may introduce delays or reductions in the degree of support. For example, Zhu et al. (2014) describe a setting in which salient—but less accessible—features like education and work experience become the basis for recategorization as they are recognized. The ambiguity introduces a delay but does not alter the direction of the process. More generally, although the specific variables (genre and credited experiences) may not translate to other settings, we expect that the broader implication that a prospective entrepreneur is judged based on (a) what they have done and (b) where they have done it is applicable to a wide range of industries.

Our findings also involve situations in which an entrepreneur must acquire additional resources and the providers are conscious of consumer preferences. While we view this as a typical set of circumstances, there may be alternate settings in which prospective entrepreneurs do not require external resources or in which the resource providers are indifferent to the predilection

of the eventual consumer (e.g., private investors funding a hobby or interest). In situations like these, where resource holders are irrelevant or indifferent, we would not expect a need to moderate functional breadth.

We assume, based on evidence that functional breadth results in negative individual assessments, that investors or prospective hires prefer a founder with specialized skills to one with generalized experiences. However, to our knowledge the specific question of how investors appraise entrepreneurial breadth has not been investigated previously. While our findings indicate that the benefits of broad functional experience are mitigated by specialist market experience, future research might want to investigate whether entrepreneurial breadth is indeed associated with any penalty. An alternative mechanism may be that the benefits of functional breadth are amplified when market breadth is narrow. In addition, the process we describe could be strategic, but the design of the present study does not allow us to determine the basis on which individuals make their market decision. Additional research that identified why and when entrepreneurs adjust their market breadth would complement the findings here and help further our understanding of what determines successful entry.

Relatedly, our findings suggest a means by which traditionally underrepresented groups may increase the likelihood of attracting early support. In cases where a gender or racial bias might lead to categorization as a "poor fit" for entrepreneurship, the prospective entrepreneur might benefit from emphasizing their secondary attributes that do align with the definition of an entrepreneur to try and induce cross-categorization. One interesting and counterintuitive finding in our study is that females are more likely to launch their own ventures. Building on our work, future studies might want to assess whether a combination of broad functional experience with narrow market experience might enable minority groups to more successfully enter entrepreneurship. While the present study does not analyze these other dimensions of an

individual's identity, a further investigation of how crossed-categorization applies to entrepreneurship could deepen the understanding of both fields.

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**Table 1. Descriptive Statistics**

| Variable | Mean | S.D. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** Entrepreneurship | **0.065** | **0.247** | 1.000 | | | | | | | | | | | |
| **2** Functional Breadth | **0.350** | **0.309** | -0.033 | 1.000 | | | | | | | | | | |
| **3** Market breadth | **0.375** | **0.281** | 0.063 | 0.102 | 1.000 | | | | | | | | | |
| **4** Artist's Count of Compilation Albums | **1.443** | **0.895** | -0.234 | 0.125 | 0.051 | 1.000 | | | | | | | | |
| **5** Industry Tenure | **0.815** | **0.782** | -0.129 | 0.252 | 0.140 | 0.335 | 1.000 | | | | | | | |
| **6** Firm Tenure | **0.297** | **0.545** | -0.059 | 0.213 | 0.143 | 0.232 | 0.917 | 1.000 | | | | | | |
| **7** Female | **0.322** | **0.467** | 0.002 | 0.197 | 0.069 | 0.140 | 0.602 | 0.574 | 1.000 | | | | | |
| **8** Artist's Count of Albums | **0.679** | **0.793** | -0.063 | 0.170 | 0.062 | 0.104 | 0.555 | 0.589 | 0.921 | 1.000 | | | | |
| **9** Band | **0.178** | **0.383** | -0.019 | -0.095 | 0.012 | -0.017 | -0.048 | -0.026 | -0.037 | -0.024 | 1.000 | | | |
| **10** Artist's Record Sales | **2.129** | **2.549** | -0.047 | 0.148 | 0.130 | 0.191 | 0.619 | 0.626 | 0.671 | 0.619 | 0.025 | 1.000 | | |
| **11** Firm Diversification | **2.802** | **2.136** | 0.058 | 0.086 | -0.031 | 0.012 | 0.022 | 0.026 | 0.015 | 0.017 | 0.213 | 0.012 | 1.000 | |
| **12** Major Record Label | **0.162** | **0.369** | -0.111 | 0.111 | 0.108 | 0.089 | 0.100 | 0.105 | 0.014 | 0.019 | -0.005 | 0.036 | -0.002 | 1.000 |
| **13** Post 99 | **0.587** | **0.492** | -0.041 | 0.207 | -0.138 | -0.041 | 0.092 | 0.029 | 0.152 | 0.102 | -0.140 | -0.067 | 0.009 | -0.198 |

**Figure 1. The Effect of Functional and Market Breadth on Entrepreneurial Entry**

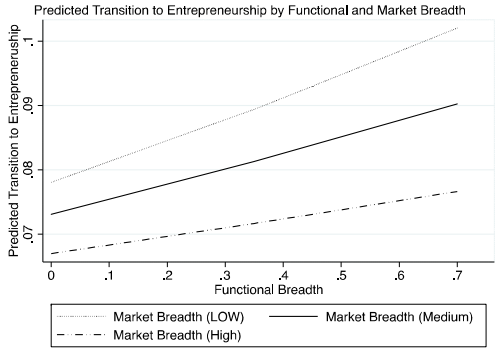

**Table 2. Cox Models of Transition to Entrepreneurship: Main Regressions**

| Variables | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| **Functional Breadth (H1)** | **0.3175*** ** | **0.3506*** ** | **1.1211*** ** | **0.9229*** ** |
| | **(0.054)** | **(0.072)** | **(0.240)** | **(0.264)** |
| Artist's Count of Compilation Albums | – | -0.0478 | – | -0.0329 |
| | – | (0.059) | – | (0.058) |
| Industry Tenure | – | -0.8698*** | – | -0.8680*** |
| | – | (0.171) | – | (0.171) |
| Industry Tenure Squared | – | 0.2434*** | – | 0.2587*** |
| | – | (0.068) | – | (0.068) |
| Firm Tenure | – | 0.0293 | – | 0.0423 |
| | – | (0.587) | – | (0.587) |
| Firm Tenure Squared | – | -0.8512 | – | -0.8639 |
| | – | (0.541) | – | (0.542) |
| Female | – | 0.1613* | – | 0.1603* |
| | – | (0.078) | – | (0.078) |
| Artist's Count of Albums | – | 0.1451 | – | 0.1428 |
| | – | (0.091) | – | (0.091) |
| Band | – | -0.3336* | – | -0.3405** |
| | – | (0.133) | – | (0.132) |
| Artist's Record Sales | – | -0.0254 | – | -0.0191 |
| | – | (0.017) | – | (0.017) |
| Firm Diversification | – | -0.0022 | – | -0.0118 |
| | – | (0.020) | – | (0.019) |
| Major Record Label | – | -3.0182*** | – | -2.9776*** |
| | – | (0.410) | – | (0.410) |
| Post 99 | – | 1.3901*** | – | 1.3998*** |
| | – | (0.091) | – | (0.090) |
| Market Breadth | – | – | -0.5933** | -0.4454* |
| | – | – | (0.183) | (0.204) |
| **Functional Breadth × Market Breadth (H2)** | – | – | **-0.6161**** | **-0.5739**** |
| | – | – | **(0.190)** | **(0.190)** |
| Observations | 13,856 | 13,856 | 13,856 | 13,856 |
| Genre dummies | Yes | Yes | Yes | Yes |
| Log Likelihood | -5873.1516 | -5891.7145 | -6109.5384 | -5873.1516 |

Robust standard errors in parentheses.
*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; + $p < 0.1$.

**Table 3. Cox Models of Transition to Entrepreneurship: The Moderating Role of Status**

| Variable | Status: Artist's Record Sales | | | Status: Artist's Count of Compilation Albums | | |
|---|---|---|---|---|---|---|
| | Above Median (1) | Below Median (2) | All (3) | Above Median (4) | Below Median (5) | All (6) |
| **Status × Functional × Market Breadth (H3)** | | | **0.2921**** | | | **0.5895*** |
| | | | **(0.098)** | | | **(0.259)** |
| Status × Functional Breadth | | | -0.3727** | | | -0.9446** |
| | | | (0.130) | | | (0.349) |
| Status × Market Breadth | | | -0.2797* | | | -0.1840 |
| | | | (0.113) | | | (0.240) |
| **Functional × Market Breadth (H3)** | **-0.0090** | **-1.2353***** | -0.9313*** | **0.0313** | **-0.4550*** | -0.8676*** |
| | **(0.260)** | **(0.320)** | (0.244) | **(0.580)** | **(0.220)** | (0.239) |
| Functional Breadth | 0.4215 | 1.7661*** | 1.5289*** | 0.3296 | 0.9817*** | 1.5794*** |
| | (0.340) | (0.403) | (0.316) | (0.808) | (0.281) | (0.302) |
| Market Breadth | -0.9191*** | -0.0879 | -0.1934 | -1.2693* | -0.4879* | -0.4850* |
| | (0.270) | (0.275) | (0.229) | (0.564) | (0.202) | (0.225) |
| Artist's Count of Compilation Albums | 0.1073 | -0.1887* | -0.0344 | | | 0.3518 |
| | (0.077) | (0.088) | (0.058) | | | (0.319) |
| Industry Tenure | -0.7780*** | -0.9403** | -0.8666*** | -0.4471 | -1.0208*** | -0.8691*** |
| | (0.203) | (0.307) | (0.171) | (0.374) | (0.196) | (0.171) |
| Industry Tenure Squared | 0.2584*** | 0.1593 | 0.2569*** | 0.1412 | 0.2573*** | 0.2627*** |
| | (0.077) | (0.148) | (0.068) | (0.158) | (0.077) | (0.068) |
| Firm Tenure | -0.6966 | 0.7869 | 0.0181 | 1.0361 | -0.2643 | 0.0703 |
| | (0.836) | (0.575) | (0.588) | (0.781) | (0.633) | (0.582) |
| Firm Tenure Squared | -0.4280 | -1.0842* | -0.8537 | -1.8681** | -0.4294 | -0.8453 |
| | (0.734) | (0.459) | (0.541) | (0.663) | (0.548) | (0.538) |
| Female | 0.1839+ | 0.1155 | 0.1624* | 0.0137 | 0.1811* | 0.1594* |
| | (0.108) | (0.115) | (0.078) | (0.236) | (0.083) | (0.078) |
| Artist's Count of Albums | 0.1230 | 0.1165 | 0.1530+ | 0.5891*** | 0.0700 | 0.1101 |
| | (0.122) | (0.147) | (0.090) | (0.168) | (0.114) | (0.093) |
| Band | -0.4063* | -0.2241 | -0.3387** | -0.7118+ | -0.3147* | -0.3403** |
| | (0.178) | (0.190) | (0.131) | (0.399) | (0.141) | (0.132) |
| Artist's Record Sales | | | 0.3360* | 0.0187 | -0.0355+ | -0.0181 |
| | | | (0.146) | (0.039) | (0.020) | (0.017) |
| Firm Diversification | -0.0199 | 0.0147 | -0.0118 | 0.0067 | -0.0004 | -0.0154 |
| | (0.025) | (0.030) | (0.019) | (0.054) | (0.022) | (0.019) |
| Major | -2.8465*** | -3.1946*** | -2.9895*** | -3.0531** | -2.9714*** | -2.9888*** |
| | (0.502) | (0.708) | (0.409) | (1.006) | (0.450) | (0.410) |
| Post 99 | 1.2517*** | 1.6149*** | 1.4111*** | -1.4763** | 1.4976*** | 1.3890*** |
| | (0.120) | (0.129) | (0.090) | (0.523) | (0.099) | (0.091) |
| Observations | 7,537 | 6,328 | 13,856 | 9,030 | 4,835 | 13,856 |
| Genre Dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Log Likelihood | -2843.9514 | -2450.0926 | -5870.0943 | -541.95347 | -4982.362 | -5867.9148 |

Robust standard errors in parentheses. *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; + $p < 0.1$.

**Table 4. Cox Models of Transition to Entrepreneurship: Typicality**

| | Typicality | | |
|---|---|---|---|
| **Variables** | **Above Median (1)** | **Below Median (2)** | **All (3)** |
| **Typicality × Functional × Market Breadth (H4)** | – | – | **1.6651+** |
| | – | – | **(0.922)** |
| Typicality × Functional Breadth | – | – | -2.8755+ |
| | – | – | (1.485) |
| Typicality × Market Breadth | – | – | -0.6748 |
| | – | – | (1.082) |
| Typicality | – | – | 0.4624 |
| | – | – | (1.341) |
| **Functional Breadth × Market Breadth (H4)** | **-0.3738** | **-0.8117**** | -1.9017* |
| | **(0.238)** | **(0.271)** | (0.800) |
| Functional Breadth | 0.7681** | 1.4584*** | 3.5516** |
| | (0.279) | (0.422) | (1.364) |
| Market Breadth | -0.5834+ | -0.4044* | 0.0403 |
| | (0.306) | (0.182) | (0.801) |
| Artist's Count of Compilation Albums | 0.1263 | -0.1638 | -0.0619 |
| | (0.090) | (0.112) | (0.094) |
| Industry Tenure | -0.6883** | -1.2099*** | -0.9306*** |
| | (0.221) | (0.365) | (0.263) |
| Industry Tenure Squared | 0.2016* | 0.4142*** | 0.2746*** |
| | (0.102) | (0.094) | (0.074) |
| Firm Tenure | 0.6239 | -0.1408 | 0.0886 |
| | (0.559) | (0.969) | (0.734) |
| Firm Tenure Squared | -1.4470** | -0.6922 | -0.8787 |
| | (0.473) | (0.752) | (0.583) |
| Female | -0.0893 | 0.2650* | 0.1343 |
| | (0.186) | (0.105) | (0.095) |
| Artist's Count of Albums | -0.0043 | 0.2913+ | 0.1855* |
| | (0.141) | (0.168) | (0.077) |
| Band | -0.0612 | -0.5562*** | -0.2886* |
| | (0.231) | (0.110) | (0.127) |
| Artist's Record Sales | 0.0367 | -0.0632** | -0.0142 |
| | (0.025) | (0.022) | (0.012) |
| Firm Diversification | -0.0389 | 0.0025 | -0.0247 |
| | (0.032) | (0.032) | (0.029) |
| Major Record Label | -4.0324*** | -2.5518*** | -2.9728*** |
| | (0.964) | (0.470) | (0.387) |
| Post 99 | 1.3053*** | 1.5260*** | 1.4043*** |
| | (0.188) | (0.216) | (0.175) |
| Observations | 6,622 | 7,243 | 13,856 |
| Genres Dummies | Yes | Yes | Yes |
| Log Likelihood | -2029.7802 | -3282.2619 | -5880.2591 |

Robust standard errors in parentheses.
*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; + $p < 0.1$.

**Table 5. Cox Models of Transition to Entrepreneurship: Audience Receptivity**

| Variables | Advanced Degree | | | High Income | | |
|---|---|---|---|---|---|---|
| | Above Median | Below Median | All | Above Median | Below Median | All |
| **Receptivity × Functional × Market Breadth (H5)** | – | – | **174.4944+** | – | – | **123.9893*** |
| | – | – | **(98.407)** | – | – | **(63.075)** |
| Receptivity × Functional Breadth | – | – | -191.6750 | – | – | -146.4776+ |
| | – | – | (136.577) | – | – | (87.783) |
| Receptivity × Market Breadth | – | – | -404.1209*** | – | – | -271.2871*** |
| | – | – | (99.128) | – | – | (66.585) |
| **Functional × Market Breadth (H5)** | **0.0195** | **-1.2817***** | 608.3370*** | **0.1518** | **-1.1434***** | 401.2283*** |
| | **(0.361)** | **(0.362)** | (136.612) | **(0.368)** | **(0.347)** | (92.165) |
| Receptivity | 0.4050 | 1.0248* | -0.8055** | 0.2318 | 1.1111** | -0.8217** |
| | (0.470) | (0.430) | (0.268) | (0.482) | (0.424) | (0.265) |
| Functional Breadth | -1.6138*** | -0.4740 | 1.1287*** | -1.7624*** | -0.4884 | 1.1672*** |
| | (0.423) | (0.330) | (0.330) | (0.447) | (0.320) | (0.327) |
| Market Breadth | -0.0220 | 0.1377 | -0.3746 | -0.0518 | 0.2355* | -0.3290 |
| | (0.072) | (0.110) | (0.242) | (0.076) | (0.096) | (0.241) |
| Artist's Count of Compilation Albums | -1.1076*** | -0.2763 | 0.1144+ | -0.9923*** | -0.5333+ | 0.0993+ |
| | (0.211) | (0.346) | (0.060) | (0.215) | (0.315) | (0.060) |
| Industry Tenure | 0.2934*** | 0.1908 | -0.8068*** | 0.2817** | 0.2062 | -0.8048*** |
| | (0.088) | (0.158) | (0.174) | (0.088) | (0.136) | (0.173) |
| Industry Tenure Squared | 0.7135 | -2.1101* | 0.2680*** | 0.5576 | -0.8796 | 0.2694*** |
| | (0.715) | (0.970) | (0.070) | (0.774) | (0.724) | (0.070) |
| Firm Tenure | -1.2329+ | 0.2576 | 0.0732 | -1.1962 | -0.2798 | 0.0555 |
| | (0.681) | (0.525) | (0.606) | (0.739) | (0.444) | (0.607) |
| Firm Tenure Squared | 0.2199* | -0.1148 | -0.9673+ | 0.2495** | -0.1645 | -0.9380+ |
| | (0.087) | (0.171) | (0.565) | (0.089) | (0.160) | (0.566) |
| Female | 0.1623 | 0.1032 | 0.1709* | 0.1355 | 0.1940 | 0.1707* |
| | (0.110) | (0.173) | (0.077) | (0.116) | (0.161) | (0.077) |
| Artist's Count of Albums | -0.3846** | -0.0390 | 0.1738+ | -0.3921** | -0.0881 | 0.1732+ |
| | (0.145) | (0.287) | (0.093) | (0.149) | (0.274) | (0.093) |
| Band | -0.0340+ | 0.0382 | -0.3265* | -0.0388+ | 0.0372 | -0.3220* |
| | (0.020) | (0.038) | (0.132) | (0.020) | (0.034) | (0.132) |
| Artist's Record Sales | -0.0081 | -0.2368*** | -0.0158 | -0.0040 | -0.2095*** | -0.0137 |
| | (0.023) | (0.045) | (0.017) | (0.024) | (0.039) | (0.017) |
| Firm Diversification | -2.7050*** | -47.8321 | -0.0470* | -2.6712*** | -47.0623 | -0.0454* |
| | (0.411) | (0.000) | (0.019) | (0.411) | (0.000) | (0.019) |
| Major | 1.2184*** | 2.0725*** | -2.9556*** | 1.2351*** | 1.8810*** | -2.9572*** |
| | (0.096) | (0.279) | (0.410) | (0.099) | (0.228) | (0.410) |
| Post 99 | 0.0195 | -1.2817*** | 1.3887*** | 0.1518 | -1.1434*** | 1.3962*** |
| | (0.361) | (0.362) | (0.089) | (0.368) | (0.347) | (0.089) |
| Observations | 7,554 | 6,311 | 13,865 | 6,909 | 6,956 | 13,865 |
| Genre Dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Log Likelihood | -4378.6416 | -986.92727 | -5822.693 | -4169.6297 | -1167.2646 | -5819.9037 |

**Table 6. Cox Models of Transition to Entrepreneurship: Selection**

| Variable | Functional Breadth | Entrepreneurship | Entrepreneurship |
|---|---|---|---|
| | (1) | (2) | (3) |
| **Mergers × Treatment** | **-0.2763*** ** | **-1.6510*** | – |
| | **(0.044)** | **(0.836)** | – |
| Mergers | 0.0408 | -0.1857 | – |
| | (0.041) | (0.421) | – |
| **Functional Breadth × Market Breadth** | - | - | **-0.4667+** |
| | - | - | **(0.270)** |
| Functional Breadth | 0.2131*** | -0.8581*** | 0.7420* |
| | (0.045) | (0.206) | (0.372) |
| Market Breadth | 0.0460** | 0.0886 | 0.3155 |
| | (0.015) | (0.098) | (0.230) |
| Artist's Count of Compilation Albums | 0.0856* | -0.2833 | 0.0240 |
| | (0.039) | (0.303) | (0.059) |
| Industry Tenure | -0.0009 | 0.0843 | -0.5619** |
| | (0.016) | (0.135) | (0.185) |
| Industry Tenure Squared | 0.0676 | -0.9470 | -0.0164 |
| | (0.047) | (0.590) | (0.086) |
| Firm Tenure | -0.0065 | -0.4506 | 0.1170 |
| | (0.022) | (0.396) | (0.395) |
| Firm Tenure Squared | -0.0845*** | 0.0800 | -0.1161 |
| | (0.025) | (0.146) | (0.260) |
| Female | 0.0210 | 0.2623+ | – |
| | (0.020) | (0.147) | – |
| Artist's Count of Albums | 0.2105*** | -0.3986 | 0.5706*** |
| | (0.040) | (0.254) | (0.109) |
| Band | 0.0212*** | 0.0071 | – |
| | (0.003) | (0.030) | – |
| Artist's Record Sales | 0.0546*** | -0.1396*** | 0.0309+ |
| | (0.005) | (0.033) | (0.018) |
| Firm Diversification | 0.0486 | -3.5756*** | -0.1284*** |
| | (0.034) | (1.016) | (0.036) |
| Major | 0.1630*** | 1.5874*** | -2.6417* |
| | (0.013) | (0.175) | (1.027) |
| Post 99 | 0.2131*** | -0.8581*** | 1.2734*** |
| | (0.045) | (0.206) | (0.329) |
| Constant | -0.0681 | – | – |
| | (0.067) | – | – |
| Log Likelihood | – | -1504.33 | -1882.6454 |
| Observations | 11,534 | 10,459 | 1,305 |
| R-Squared | 0.170 | – | – |
| Genre Dummies | Yes | Yes | Yes |
| Individual Dummies | No | No | Yes |

Robust standard errors in parentheses.
*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; + $p < 0.1$.

**Table 7. Cox Models of Transition to Entrepreneurship: Robustness Checks**

| Variable | Market Breadth Below Median (1) | Functional Breadth Below Median (2) | Bands Excluded (3) | Bands Excluded (4) |
|---|---|---|---|---|
| **Functional Breadth** | **0.4001*** ** | – | **0.3411*** ** | **0.8310** ** |
| | **(0.103)** | – | **(0.078)** | **(0.296)** |
| **Market Breadth** | – | **-0.7735*** ** | -0.8660*** | -0.5921** |
| | – | **(0.153)** | (0.144) | (0.212) |
| Artist's Count of Compilation Albums | -0.1782* | -0.1191+ | -0.0047 | -0.0057 |
| | (0.081) | (0.071) | (0.065) | (0.065) |
| Industry Tenure | -0.9521*** | -0.7435*** | -0.9116*** | -0.9119*** |
| | (0.282) | (0.212) | (0.188) | (0.188) |
| Industry Tenure Squared | 0.2330+ | 0.1843* | 0.2744*** | 0.2787*** |
| | (0.128) | (0.089) | (0.073) | (0.073) |
| Firm Tenure | 0.5115 | 0.5295 | 0.0392 | 0.0428 |
| | (0.541) | (0.684) | (0.630) | (0.629) |
| Firm Tenure Squared | -1.1523** | -1.5316* | -0.8116 | -0.8115 |
| | (0.416) | (0.707) | (0.564) | (0.563) |
| Female | 0.0967 | 0.2024* | 0.2022* | 0.2051* |
| | (0.112) | (0.088) | (0.089) | (0.089) |
| Artist's Count of Albums | 0.4563*** | 0.3060** | 0.1487 | 0.1459 |
| | (0.126) | (0.108) | (0.096) | (0.096) |
| Band | -0.2312 | -0.4382** | -0.9156*** | -0.9090*** |
| | (0.174) | (0.147) | (0.179) | (0.179) |
| Artist's Record Sales | -0.0274 | -0.0394+ | -0.0236 | -0.0233 |
| | (0.027) | (0.022) | (0.019) | (0.019) |
| Firm Diversification | 0.0082 | 0.0119 | -0.0144 | -0.0143 |
| | (0.027) | (0.023) | (0.021) | (0.021) |
| Major | -2.1101*** | -3.0335*** | -3.0253*** | -3.0150*** |
| | (0.448) | (0.502) | (0.449) | (0.449) |
| Post 99 | 1.3333*** | 1.6512*** | 1.3886*** | 1.3889*** |
| | (0.123) | (0.102) | (0.099) | (0.099) |
| **Functional Breadth × Market Breadth** | – | – | – | **-0.3892+** |
| | – | – | – | **(0.226)** |
| Observations | 5,701 | 8,884 | 11,405 | 11,405 |
| Genre Dummies | Yes | Yes | Yes | Yes |
| Log Likelihood | -2437.3042 | -4270.8136 | -4687.0971 | -4685.8698 |

Robust standard errors in parentheses.
*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; + $p < 0.1$.

**Table 8. The Impact of Functional and Positional Breadth on Performance**

| Variables | Record Sales OLS (1) | Rating (Users) Negative Binomial (2) | Rating (Experts) Negative Binomial (3) |
|---|---|---|---|
| **Functional Breadth × Market Breadth** | **-1.1179**** | **-0.1166*** | **-1.3408*** |
| | **(0.344)** | **(0.052)** | **(0.550)** |
| Functional Breadth | 1.1990* | 0.1245+ | 2.4044** |
| | (0.477) | (0.072) | (0.791) |
| Market Breadth | -0.7077* | 0.0181 | 4.3880*** |
| | (0.349) | (0.052) | (0.668) |
| Artist's Count of Compilation Albums | 0.1185 | 0.0564** | -0.2570 |
| | (0.133) | (0.019) | (0.254) |
| Industry Tenure | 0.0400 | -0.0123 | 0.9914** |
| | (0.193) | (0.029) | (0.339) |
| Industry Tenure Squared | 0.0255 | 0.0040 | -0.1167 |
| | (0.079) | (0.012) | (0.147) |
| Firm Tenure | 0.2910 | -0.0130 | -0.8674 |
| | (0.298) | (0.044) | (0.570) |
| Firm Tenure Squared | -0.2035 | 0.0151 | 0.2886 |
| | (0.179) | (0.027) | (0.351) |
| Female | 0.0206 | 0.0085 | -0.3552+ |
| | (0.112) | (0.016) | (0.211) |
| Artist's Count of Albums | 0.1746 | -0.0167 | 0.2609 |
| | (0.107) | (0.016) | (0.202) |
| Band | -0.2066 | 0.0052 | -0.7056* |
| | (0.156) | (0.023) | (0.283) |
| Firm Diversification | -0.0306 | 0.0070+ | -0.4449*** |
| | (0.027) | (0.004) | (0.049) |
| Post 99 | 0.0376 | 0.0136 | 0.0094 |
| | (0.108) | (0.016) | (0.199) |
| Constant | 0.6426 | 2.1796*** | -5.8103*** |
| | (0.485) | (0.072) | (0.935) |
| Observations | 2,050 | 2,050 | 2,050 |
| R-Squared | 0.066 | – | – |
| Genre Dummies | Yes | Yes | Yes |
| Log Likelihood | – | -4383.9185 | -1458.8454 |

Robust standard errors in parentheses.
*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; + $p < 0.1$.