




# The Paradox of Breadth: The Tension between Experience and Legitimacy in the Transition to Entrepreneurship\*

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## Abstract

In a study of artists who launched independent record labels in the music industry from 1990 to 2013, we focus on explaining the paradox generated when prospective entrepreneurs accumulate broad functional experience, which signals to resource providers mastery of different skills and access to various information and resources but may also undermine the legitimacy of their entrepreneurial claims because they are not seen as specialists. To resolve this paradox, we theorize that the potential legitimacy discount of categorical membership can be avoided when individuals are classified according to multiple categories simultaneously. We find that the transition to entrepreneurship is most likely to occur when an artist's functional experience is broad but market experience is narrow: he or she has mastered a variety of skills but solicited few audiences. We also find that the paradox of breadth is attenuated—the potential penalty of functional breadth and the corresponding need to develop narrow market experience are reduced—when the entrepreneur has alternate methods of signaling legitimacy, including high status and more-typical prior work experience. Moreover, some audiences are more disposed than others to allow an entrepreneur to pursue greater novelty. Our findings suggest that mastering a variety of skills is not universally beneficial for aspiring entrepreneurs. In some circumstances, such mastery is best coupled with a narrow market focus.

**Keywords:** entrepreneurship, labor markets, legitimacy discount, music industry

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A central question in organizational research is who launches new organizations (Aldrich and Ruef, 2006; Kacperczyk, 2012, 2013). Studies have shown that the success of an entrepreneurial entry, defined as the founding of a new organization by an individual, depends on the founder's skills and capabilities (Lazear, 2004), as well as the legitimacy of his or her efforts in the eyes of external audiences (Aldrich and Fiol, 1994; Navis and Glynn, 2011). Skills and capabilities enable individuals to identify new business opportunities and formulate strategies to exploit them; legitimacy increases the likelihood that these nascent ventures are endorsed by external stakeholders, such as investors, co-founders, customers, bankers, and potential employees, whose support determines a venture's survival (Martens, Jennings, and Jennings, 2007; Navis and Glynn, 2011; Wry, Lounsbury, and Jennings, 2014). Yet the relationship between entrepreneurial skill and legitimacy in 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 advantages for individuals with broad experience and balanced skills: 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 these studies have not considered the potential downsides of functional breadth with respect to the legitimacy of entrepreneurial appeal. The prescription for diverse skills when entering entrepreneurship contradicts sociological research showing consistent legitimacy discounts in the eyes of relevant audiences for the appearance of generalism. Studies have found that key stakeholders discount the quality of candidates who intend to enter the labor market and are perceived to be generalists or whom audiences identify 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, 2015). In contrast, the appearance of specialization in entrepreneurial settings confers legitimacy (Navis and Glynn, 2010, 2011) and increases appeal to consumers (Pontikes, 2012).

Given the contrasting findings of these literatures, it follows that functional breadth might affect the transition into entrepreneurship in opposite ways, generating a paradox. On one hand, experience in a broad set of job functions (e.g., engineer, technician, musician) might facilitate the entrepreneurial process, making the prospective entrepreneur more self-reliant in identifying lucrative opportunities and formulating a strategy for exploiting them (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, Negro, and Swaminathan, 2013), commitment (Leung, 2014), or depth of knowledge in the minds of external stakeholders the founder relies on, including investors, prospective employees, bankers, and consumers (Thornton, 1999; Aldrich and Ruef, 2006). Thus the practices that allow prospective entrepreneurs to access the various resources and information they

require for entry may also diminish their perceived legitimacy, generating an unanticipated constraint on their ability to found new organizations. Resolving this tension between pursuing the breadth of skills required to launch a new venture and establishing the clarity and appropriateness of one's work experiences is a primary determinant of whether someone is able to found a new organization.

In explaining how broad experience and legitimacy can be achieved simultaneously, we begin with the central insight of the psychological theory of cross-categorization: rather than being subject to a single classification system, individuals can be classified based on simultaneous categorization systems (Deschamps and Doise, 1978; Stangor et al., 1992). These multiple categorical memberships can mitigate the potential legitimacy discount by rendering an unfavorable categorization less salient, as individuals can be recategorized using an alternative classification system. Evaluators' ability 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 for the question at hand, cross-categorization suggests that individuals can mitigate the presumptive discounting of broad functional experience by emphasizing their fitness in other experiential domains.

The benefit of an association with different job functions could be amplified if the experience of prospective founders can also be categorized in an alternative way that signals specialized knowledge, commitment, and legitimacy. Studies of individual work experience identify engagement with a given market (e.g., music, healthcare, education) as a second salient attribute of experience (Zuckerman et al., 2003; Leung, 2014). Following the theory of cross-categorization, the broad functional experience favored by the Jack-of-all-trades hypothesis could facilitate the 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. Entrepreneurs can be defined by multiple aspects of their experience, and it is not the pursuit of breadth per se, but this combination of ability and legitimacy that could increase the likelihood that an individual can successfully identify and exploit an opportunity for a new venture.

The hypothesized effect of generalism could also be mitigated when alternate means of reducing legitimacy-based concerns are present: status, the typicality of one's job experience, and the orientation of the audience. 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 giving external audiences and resource providers a frame to understand someone's work experience (Lo and Kennedy, 2015). Hence 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), a prospective entrepreneur soliciting from a crowd receptive to breadth will be less likely to benefit from combining broad functional and narrow market experience.

Assessing the impact of experiential breadth on transition into entrepreneurship hinges on identifying an empirical context in which the two classificatory systems, based on job functions and market domains, can easily be decoupled. Scholars have generally studied those attributes separately, focusing either on experience across market domains (Zuckerman et al., 2003; Navis and Glynn, 2010; Wry, Lounsbury, and Jennings, 2014) or on functional variety (Ferguson and Hasan, 2013; Leung, 2014). The music industry is a particularly appropriate setting to test our theoretical arguments. It has frequently been the site of studies of classification (Sgourev and Althuizen, 2014), and in this setting it is possible to empirically isolate multiple classification 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 independent labels by recording artists during the period 1990–2013.

## 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 in a new or existing market (e.g., Thornton, 1999; Aldrich and Ruef, 2006) to exploit opportunities through the use of ample resources critical for starting a new venture (Shane and Venkataraman, 2000).<sup>1</sup> 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 and Venkataraman, 2000) and the legitimacy of those efforts in the eyes of external audiences, such as investors, customers, and potential employees (Aldrich and Fiol, 1994; Zott and Huy, 2007; Navis and Glynn, 2011; 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.

Past research has equated entrepreneurial skill with a 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, Chen, and Thompson, 2011). Scholars have posited two interrelated mechanisms. First, a breadth of job functions increases the accumulation of human capital: employees with broad work experience accumulate an array of skills that are valuable in transitions to self-employment (Lazear, 2004). Heterogeneous functional experience correlates with the knowledge and skill variety (Jehn and Bezrukova, 2004) especially conducive to starting a new venture. Compounding the effect of these benefits, the accumulation of juxtaposing experiences creates a structure in which novel opportunities are easier to recognize and entrepreneurial

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<sup>1</sup> 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 a new organization.

aspirations are more likely to emerge (Baumol, 2005). Similarly, performing a broad 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).

Second, scholars have theorized that broad functional experience reduces the costs of accessing resources, as entrepreneurs can perform a variety of tasks independently (Davidsson and Honig, 2003; Vissa, 2012). As Lazear (2005: 650) explained, "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 the variety of experience should be positive for entrepreneurs, allowing individuals to recombine the knowledge and skills conducive to forming a new venture (Dokko and Wu, 2013). Balanced skills are particularly conducive to entrepreneurship because founders are usually responsible for a wide variety of functions, including identifying a value-creation opportunity in the market, conceptualizing 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 entrepreneurs' ability to be self-reliant. The overall implication of this literature is that employees with broader functional experience will reveal stronger aspirations and exert greater effort in an attempt to identify and exploit entrepreneurial opportunities.

Thus existing theories of entrepreneurship have emphasized the skill-based benefits derived from functional breadth, but they have not addressed the influence of such breadth on the legitimacy of entrepreneurial claims in the eyes of external audiences. Functional breadth is unlikely to enhance the external perception of entrepreneurial efforts and result in securing the endorsements of relevant stakeholders. Prospective entrepreneurs need to persuade these key audiences, including initial hires, investors, customers, upstream suppliers, and downstream buyers, about the viability of an entrepreneurial opportunity, and a broad history of job functions might pose significant risks for a nascent entrepreneur's legitimacy, 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 a 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, film actors who have taken on a range of roles 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 do not fit the creative prototypes they expect (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) or a lack of commitment (Leung, 2014). These discounts occur even in contexts in which novelty is generally valued, such as entrepreneurship (Pontikes, 2012; Wry, Lounsbury, and Jennings, 2014).

Given that the future success of any nascent business is highly uncertain, entrepreneurs' reliance on 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 hinder 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 the founder, or gaining consumers' confidence. 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 individuals' dilettantism. Prospective co-founders or employees may similarly want evidence that a founder is fully committed, and 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 ideas (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, Negro, and Swaminathan (2013) found that restaurants receive lower ratings from customers if the founding head chef had prior experience as a restaurant owner, because spanning multiple domains (i.e., chef and owner) may contribute to skill decay and a loss of focus, especially when these domains are in conflict. Similarly, Navis and Glynn (2010, 2011) proposed that the evidence of specialization, rather than generalism, helps establish the legitimacy of entrepreneurial claims. These studies suggest that the structural conditions for launching a new venture are unfavorable, even when prospective entrepreneurs have functional breadth, if they fail to appear legitimate in the eyes of relevant audiences, but they have not considered whether the penalty diminishes when an entrepreneur is classified according to more than one category.

### **Cross-categorization: Functional and Market Experience**

Given that a successful entry hinges on establishing legitimacy, a fundamental question is how to restore legitimacy in the face of delegitimizing 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 he or she shares a single salient attribute, such as ethnicity or gender. By contrast, the theory of cross-categorization indicates that multiple factors participate in the initial classification (Hewstone, Islam, and Judd, 1993). Critically, an audience's use of multiple category memberships to reach an assessment reduces potential bias, enhancing the legitimacy of those under evaluation. 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). In the context of directors' appointments to corporate boards, Zhu, Shen, and Hillman (2014) argued 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, such as education, ethnicity, and 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, in which categorization based on one system may contradict categorization based on other systems, thus decreasing the 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, which leads to greater positivity toward individuals who can be classified in more than one way (Vanbeselaere, 1991).

In evaluating entrepreneurs, the critical question is how to determine value in the absence of evidence. The answer hinges on the evaluator's perception; co-founders, investors, initial employees, and prospective consumers must all perceive the person as qualified, capable, and committed if the entrepreneur is to successfully enter. Cross-categorization offers a mechanism by which the legitimacy concerns that accompany a founder's functional breadth may be moderated by evidence of specialization in another area of that person's work history. Evaluators looking for a means to assuage their doubts can use this alternate form of specialization (e.g. in an industry, organization, or market segment) as the evidence needed to reach a positive assessment of an entrepreneur's fit, his or her degree of commitment, or the value of that person's prior experiences. In addition, people who initially conclude that the entrepreneur is too risky to support might recategorize that person in a more positive light if alternative systems to categorize his or her 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 penalty of breadth, 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 more generally enhancing the structural conditions for entrepreneurial entry.

Cross-categorization is particularly likely to apply to job experience, which can be categorized along multiple dimensions, raising opportunities to mitigate the potential discount and restore legitimacy. Whereas entrepreneurship theories 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 et al., 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 the music industry, prior to becoming an entrepreneur, Justin Timberlake pursued a diverse set of job functions, including songwriting, performing as a backup singer, and producing music. 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, public relations, and customer acquisition, will find it easier to establish entrepreneurial legitimacy when his or her work experience has been

accumulated in a single industry, creating the conditions favorable to entrepreneurial entry. As one entrepreneur stated:

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)

Thus we expect that the perceptual risk associated with the pursuit of functional breadth will diminish for entrepreneurs who have specialized 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. When individuals are able to combine the versatile entrepreneurial skills associated with broad functional experience and the legitimacy in the eyes of evaluators and resource holders associated with narrow 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 is that individuals are more likely to become entrepreneurs when they develop skills through broad functional experience while also establishing their commitment and legitimacy in another experiential domain. But there are also likely to be heterogeneous effects of this combination on entrepreneurial entry. If this supposition is plausible, alternate means of establishing legitimacy should moderate the acuteness of competing demands, reducing the potential benefit associated with 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. Attributes such as length of experience (Leung, 2014) or evidence of success (Smith, 2011) reduce evaluators' reliance on specialization to identify quality and allow greater latitude to the focal actors. These studies imply that individuals are less likely to suffer breadth discounts when they establish their legitimacy through means other than audience identification.

One frequently cited means of establishing legitimacy is by occupying a high-status position in a community (Merton, 1968; Shane and Khurana, 2003). Status generates a signal of quality and meaning that helps limit the devaluation that may arise through generalization (Phillips and Zuckerman, 2001). The ability to decouple conformity and legitimacy enables high-status actors to pursue novelty by bridging categories (Leahey, Beckman, and Stanko, 2017). Occupying a high-status position can motivate a person to cultivate breadth



(Peterson and Kern, 1996) and can ultimately reduce the discount associated with displaying breadth (Zuckerman et al., 2003). This suggests that all prospective entrepreneurs might not be equally subject to the pressure to specialize: high-status actors may be able to invoke their status to reduce concerns over their ability or commitment that could otherwise result in a charge of illegitimacy. Status thus functions as a moderator, allowing entrepreneurs to generalize and therefore to pursue functional breadth without the need to demonstrate a parallel specialization:

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

Another frequent means of establishing legitimacy is by acquiring a typical combination of skills. 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. But categorical boundaries change 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). The pervasiveness of a new practice functions as a credible proxy for its legitimacy (Freeman and Hannan, 1977; Tolbert and Zucker, 1983). 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, 2015). Similarly, French chefs adopting the techniques of Nouvelle Cuisine were initially penalized, but as the practice became widespread, the penalty disappeared as audiences accepted its legitimacy (Rao, Monin, and Durand, 2003). In each case, combinations become less confusing and less subject to penalty as they occur more frequently. Although these particular studies described combinations that cross scientific or culinary boundaries, studies of career histories provide similar evidence that pursuing more common skill combinations reduces the penalty associated with breadth (Leung, 2014). Functional breadth is more likely to appear legitimate and is less likely to connote dilettantism or ineptitude when the combination of experiences is more typical. Hence, if narrow market experience establishes the legitimacy of functional breadth, we would expect the combination of functional and market breadth to be less salient when the set of job functions an individual has performed is more common. The more typical the combination, the more likely audiences are to understand and accept it, 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. Venture capitalists may treat evidence of breadth as a proxy for novelty (Wry, Lounsbury, and Jennings, 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 equates specialization with ability. Given the evidence that different entrepreneurial (Pontikes, 2012) and music (Peterson and Kern, 1996) audiences exhibit significant preferences for or against specialization, 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.

## METHODS

Drawing plausible inferences hinges on finding a large-scale sample in which job experience can be easily decoupled into job functions and market domains. We take advantage of a novel empirical context: the music industry. Because of the clarity of the dynamic between audiences and producers, 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). They 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 used hand-collected data on music artists' career histories, with a focus on singers: 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 to create an 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 a major label and launch an independent label; an example is Cake, a band that left a major record label, Columbia Records, in 2004 and started an independent label, Upbeat Records. Leaving small record labels may also precede instances of entrepreneurship. As in any other instance of entrepreneurship, a new label's 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 on the scale of the venture (some, like J Records, begin with over \$100 million 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 intellectual property issues (i.e., what art can be on an album cover, how close one song can 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 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

We constructed the database by gathering and combining multiple sources. The first dataset was obtained in 2013 from Nielsen SoundScan, the official source of music industry sales records. The company provides comprehensive coverage of every album released by an artist, including information on the album’s release date, the label 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 U.S. and Canada. Data on album sales are made available to subscribers, including the well-known Billboard music charts. We supplemented these data with hand-collected information extracted primarily from Allmusic.com in 2013. The AllMusic database is a prominent music guide, licensed and used in point-of-sale systems by many 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 collected additional data on artists’ music styles, credits, and awards. We extracted information on the artists’ gender and other demographics 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 focused on 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 albums no earlier than 1990. From this population, Nielsen provided us with a genre-based stratified random sample of artists. To reflect the popularity of different music styles, we followed Oberholzer-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 selected 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 singer or band selected, we obtained that person's or group's entire discography, including the titles of albums released and the release dates.<sup>2</sup> 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 include 804 transitions to entrepreneurship for 3,997 artists (solo artists and bands) from 1990 to 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. We excluded individuals who founded a record label but who lacked a track record in the industry 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, 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.

## 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 artist's credited skills were concentrated in 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 the artist was 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 in the industry, such as performer, composer, instrumentalist, or producer, because the album-production process requires deep expertise in these different areas. Expertise in music performance and composition is particularly valuable because label founders are often in charge of

<sup>2</sup> 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.

scouting and selecting new artists to sign to a label (Schwartz, 2009).<sup>3</sup> 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, and selecting a manufacturer (Schwartz, 2009). Finally, an artist's previous non-music-related jobs might indicate expertise in other areas conducive to entrepreneurship, including financing, sales, marketing, or distribution. 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. Even layout and design. I did everything" (Schwartz, 2009: 46).

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 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 used a Herfindahl index that sums the squared proportional membership in each of the principal music genres.<sup>4</sup> 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 so far concentrated entirely in a single genre. We define market breadth ( $M$ ) for artist  $i$  in year  $y$  as 1 minus the sum of the artist's squared proportion of claims  $C$  (out of all the claims the artist had made  $T$  across the genres considered) for each genre  $g$ :

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

We collected album genre identification from the label and from data provided by 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 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—focus on a single market segment—when founding

<sup>3</sup> A founder of Roc-A-Fella Records noted, "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).

<sup>4</sup> 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).

a new label. For example, Schwartz (2009: 83) argued, "When you begin your label, choose your brand and stick with it. Don't put out a country record one week and a hip-hop record next week. . . . people are attracted to buying those records since they have an idea what to expect from them."

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 genre members. Each tag was treated as a single vote for a particular subgenre; then, in keeping with recent studies (Hsu, Hannan, and Koçak, 2009), we aggregated subgenres into one of the principal genres recognized by the National Endowment for the Arts (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. We used the NEA genre classifications 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, such as iTunes. 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 measured breadth along these dimensions. Justin Timberlake began his career as a member of the band 'N Sync and slowly diversified into writing for others, performing as a primary and backup singer, and producing. 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 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 not functional breadth (all of his credits are concentrated in a small number of categories) and never launched his own label. Timberlake and White initially 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 considered commercial success and critical acclaim to measure an artist's status in the music industry. Music artists who achieve greater commercial success are likely to be perceived as occupying higher status and having greater prestige. Past research has recognized that record sales are the principal measure of commercial success (Cox, Felton, and Chung, 1995; Anand and Peterson, 2000). 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*



from 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, made up of tracks by various artists (such as soundtracks, label samplers, and theme albums) or by a single artist (such as greatest hits or a 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 significant commercial success or are considered major contributions to music are more likely to be featured in compilation albums. Our measure, *artist's count of compilation albums*, computes a time-varying cumulative count of compilation albums between time  $t_0$  and time  $t_y$  for any given artist in the sample. We took 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 followed 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 proxied 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 U.S. income):

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

where  $I_i$  is the percentage of fans of genre  $i$  earning more than the U.S. median,  $S_i$  is the size of the audience for that genre (the percentage of all fans who list this genre as the "best"), and  $C_{ij}$  is an indicator for whether or not album  $j$  was listed in genre  $i$ . Peterson and Kern (1996) found that contemporary elites define themselves by evidence of their omnivorousness, whereas earlier elites tried to establish their difference by the exclusivity of their taste. As Bryson (1996)

explained, 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 who are presumably more closed-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 of 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.<sup>5</sup> For artists who span multiple genres, we calculated the average income and education for any given audience.

**Other controls.** We included a number of individual-level controls. First, we controlled 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 female, and 0 otherwise.<sup>6</sup> We also included a control for a band, to account for the possibility that a team structure might influence the propensity to launch a new venture. Artists' names were used to identify a band because first and last names 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 and in the job. Prior research has shown a negative influence of job tenure on interorganizational mobility, including entrepreneurship (e.g., Haveman and Cohen, 1994). We constructed two variables, measured in years: (a) tenure in the current firm, dating from the first year an artist was recorded as having been associated with a given record label, and (b) tenure in the job, dating from the first year an artist was recorded as having worked in the music industry (i.e., first appearance in the dataset). 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 from 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 record label*, based on the label's name. Major labels include EMI Records, Vivendi Universal Records, Warner Brothers Records, and Sony BMG, as well as their subsidiaries. To verify our classification, we also obtained

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<sup>5</sup> Although the data on audience receptivity are cross-sectional, past research shows that though individual preferences may change, the audience-level characteristics associated with any specific music genre tend to be stable over time (for a review, see Garcia-Alvarez, Katz-Gerro, and Lopez-Sintas, 2007).

<sup>6</sup> For bands for which identifying a principal vocalist is challenging, *female* is equal to 1 if all vocalists are females.

the list of independent (non-major) labels from Nielsen SoundScan for the period between 1990 and 2004 and matched it 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. Diversified firms may be open to implementing new ventures and enhancing an employee's initiative to pursue a new venture internally but may be less likely to assimilate new ventures because of a higher probability of cannibalizing existing ventures by any new venture.

Finally, we included the dummy variable *Post 99*, coded 1 if the year is equal to or greater than 1999. 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 the rate of entry into entrepreneurship.

### 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:

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

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; and  $\alpha'$  is the vector of coefficients corresponding to covariates.<sup>7</sup> 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 the instantaneous rate of transition to entrepreneurship, defined as:

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

where  $r_m(t)$  is the hazard rate of movement from one state to another, and  $\text{prob}(\cdot)$  is the probability of movement between times  $t$  and  $t + dt$ , given that an

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<sup>7</sup> An important advantage of the Cox model is that it 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 for the effect of time on the hazard rate.

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 entered the sample or the time since the last transition. Because 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, because certain music genres may be associated with norms that encourage risk taking and entrepreneurship, we augmented our specification with a music-genre-fixed estimator to alleviate the possibility that our results might be contaminated by unobserved attributes of music genres.<sup>8</sup>

## 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. Model 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. In model 2, we estimate the hazard of transitioning into entrepreneurship with additional controls included. Individual-level covariates influence entrepreneurship in several ways. 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

**Table 1. Descriptive Statistics**

Variable	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12
1. Entrepreneurship	.065	.247												
2. Functional breadth	.350	.309	-.033											
3. Market breadth	.375	.281	.063	.102										
4. Artist's count of compilation albums	1.443	.895	-.234	.125	.051									
5. Industry tenure	.815	.782	-.129	.252	.140	.335								
6. Firm tenure	.297	.545	-.059	.213	.143	.232	.917							
7. Female	.322	.467	.002	.197	.069	.140	.602	.574						
8. Artist's count of albums	.679	.793	-.063	.170	.062	.104	.555	.589	.921					
9. Band	.178	.383	-.019	-.095	.012	-.017	-.048	-.026	-.037	-.024				
10. Artist's record sales	2.129	2.549	-.047	.148	.130	.191	.619	.626	.671	.619	.025			
11. Firm diversification	2.802	2.136	.058	.086	-.031	.012	.022	.026	.015	.017	.213	.012		
12. Major record label	.162	.369	-.111	.111	.108	.089	.100	.105	.014	.019	-.005	.036	-.002	
13. Post 99	.587	.492	-.041	.207	-.138	-.041	.092	.029	.152	.102	-.140	-.067	.009	-.198

<sup>8</sup> 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, and Other.

**Table 2. Cox Models of Transition to Entrepreneurship: Main Regressions (N = 13,856)\***

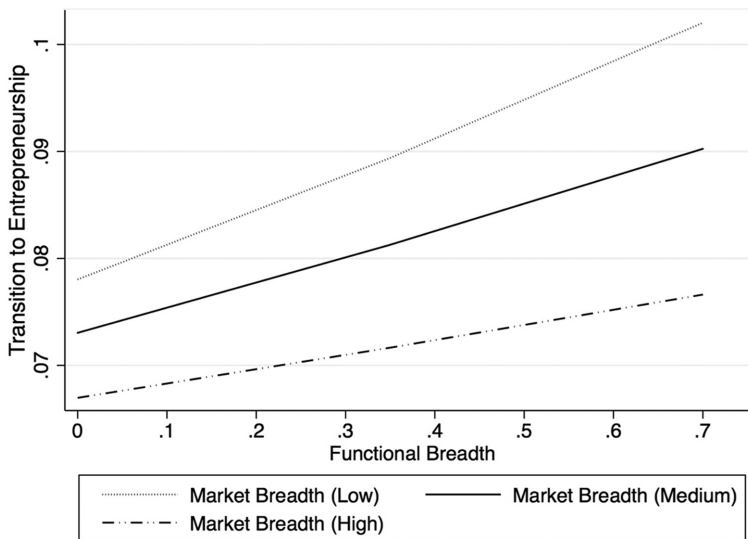
Variable	(1)	(2)	(3)	(4)
Functional breadth (H1)	.3175*** (.054)	.3506*** (.072)	1.1211*** (.240)	.9229*** (.264)
Artist's count of compilation albums	–	–.0478 (.059)	–	–.0329 (.058)
Industry tenure	–	–.8698*** (.171)	–	–.8680*** (.171)
Industry tenure squared	–	.2434*** (.068)	–	.2587*** (.068)
Firm tenure	–	.0293 (.587)	–	.0423 (.587)
Firm tenure squared	–	–.8512 (.541)	–	–.8639 (.542)
Female	–	.1613* (.078)	–	.1603* (.078)
Artist's count of albums	–	.1451 (.091)	–	.1428 (.091)
Band	–	–.3336* (.133)	–	–.3405** (.132)
Artist's record sales	–	–.0254 (.017)	–	–.0191 (.017)
Firm diversification	–	–.0022 (.020)	–	–.0118 (.019)
Major record label	–	–3.0182*** (.410)	–	–2.9776*** (.410)
Post 99	–	1.3901*** (.091)	–	1.3998*** (.090)
Market breadth	–	–	–.5933** (.183)	–.4454* (.204)
Functional breadth × Market breadth (H2)	–	–	–.6161** (.190)	–.5739** (.190)
Log likelihood	–5873.1516	–5891.7145	–6109.5384	–5873.1516

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

\* Robust standard errors are in parentheses. Genre dummies are included in all models.

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; Kacperczyk, 2012), the coefficient on the major record label is negative and statistically significant, 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.

Model 3 of table 2 shows that 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. This effect continues to be negative and significant even when we include other covariates in the model. A one-standard-deviation increase in the level of functional breadth increases the hazard that an employee will transition to entrepreneurship by 31 percent [ $\exp(0.9229 * 0.30) - 1$ ]. More simply, prior to entry, a

**Figure 1. The effect of functional and market breadth on entrepreneurial entry.**

typical entrepreneur in our sample has spanned 2.6 music genres, whereas a typical non-entrepreneur has spanned 3 music genres. Similarly, a typical entrepreneur has spanned 1.4 job functions, whereas a typical non-entrepreneur has spanned 1.1 job functions.<sup>9</sup>

Finally, we explored 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 that individuals with broad functional experience are more likely to enter entrepreneurship when they also have a specialist market experience.

### 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. Table 3 focuses on cross-sectional heterogeneity and assesses 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.

<sup>9</sup> 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  $\chi^2 = 48.99$  ( $p < .000$ ) with 3 degrees of freedom. This result suggests that adding these predictor variables together (not just individually) results in a statistically significant improvement in model fit.



**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)			.2921** (.098)			.5895* (.259)
Status × Functional breadth			-.3727** (.130)			-.9446** (.349)
Status × Market breadth			-.2797* (.113)			-.1840 (.240)
Functional × Market breadth (H3)	-.0090 (.260)	-1.2353*** (.320)	-.9313*** (.244)	.0313 (.580)	-.4550* (.220)	-.8676*** (.239)
Functional breadth	.4215 (.340)	1.7661*** (.403)	1.5289*** (.316)	.3296 (.808)	.9817*** (.281)	1.5794*** (.302)
Market breadth	-.9191*** (.270)	-.0879 (.275)	-.1934 (.229)	-1.2693* (.564)	-.4879* (.202)	-.4850* (.225)
Artist's count of compilation albums	.1073 (.077)	-.1887* (.088)	-.0344 (.058)			.3518 (.319)
Industry tenure	-.7780*** (.203)	-.9403** (.307)	-.8666*** (.171)	-.4471 (.374)	-1.0208*** (.196)	-.8691*** (.171)
Industry tenure squared	.2584*** (.077)	.1593 (.148)	.2569*** (.068)	.1412 (.158)	.2573*** (.077)	.2627*** (.068)
Firm tenure	-.6966 (.836)	.7869 (.575)	.0181 (.588)	1.0361 (.781)	-.2643 (.633)	.0703 (.582)
Firm tenure squared	-.4280 (.734)	-1.0842* (.459)	-.8537 (.541)	-1.8681** (.663)	-.4294 (.548)	-.8453 (.538)
Female	.1839 (.108)	.1155 (.115)	.1624* (.078)	.0137 (.236)	.1811* (.083)	.1594* (.078)
Artist's count of albums	.1230 (.122)	.1165 (.147)	.1530 (.090)	.5891*** (.168)	.0700 (.114)	.1101 (.093)
Band	-.4063* (.178)	-.2241 (.190)	-.3387** (.131)	-.7118 (.399)	-.3147* (.141)	-.3403** (.132)
Artist's record sales			.3360* (.146)	.0187 (.039)	-.0355 (.020)	-.0181 (.017)
Firm diversification	-.0199 (.025)	.0147 (.030)	-.0118 (.019)	.0067 (.054)	-.0004 (.022)	-.0154 (.019)
Major	-2.8465*** (.502)	-3.1946*** (.708)	-2.9895*** (.409)	-3.0531** (1.006)	-2.9714*** (.450)	-2.9888*** (.410)
Post 99	1.2517*** (.120)	1.6149*** (.129)	1.4111*** (.090)	-1.4763** (.523)	1.4976*** (.099)	1.3890*** (.091)
Observations	7,537	6,328	13,856	9,030	4,835	13,856
Log likelihood	-2843.9514	-2450.0926	-5870.0943	-541.95347	-4982.362	-5867.9148

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

\* Robust standard errors are in parentheses. Genre dummies are included in all models.

We began by considering cumulative record sales. In models 1–2, we estimated the baseline specification within the subsamples of high-status artists (i.e., record sales at or above the median) and low-status artists (i.e., record sales below the median), respectively.<sup>10</sup> As expected, the interaction between

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

functional and market breadth is not statistically significant for high-status actors (model 1) but is negative and statistically significant for low-status actors (model 2). Model 3 reestimates this specification on the full sample to directly compare the results in models 1 and 2. When interacted with status, the joint impact of functional and market breadth is positive and statistically significant, indicating that the joint negative impact of functional and market breadth on entrepreneurship is mitigated for artists with higher status, as indicated by higher record sales.

In models 4–6, we reestimated these baseline specifications using an artist's cumulative count of compilation albums to measure status. Models 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. By contrast, the interaction between functional and market breadth is negative and statistically significant for lower-status artists. Finally, these results hold when we reestimate the models on the full sample. Model 6 shows that the coefficient on the interaction term is positive and statistically significant, 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.

In table 4, we assessed whether the joint influence of broad functional and narrow market experience is moderated by the typicality of the functional combination. Models 1 and 2 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 model 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 the functional combination is more typical. In model 2, which reestimates this baseline for the subsample of artists with lower typicality, however, the joint impact of functional and market breadth continues being negative but is statistically significant. Finally, to compare the two samples directly, model 3 reestimates 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. 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.

Table 5 reports the findings on the moderating impact of audience receptivity. We considered 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 began by reestimating the baseline specifications for the subsamples of high-receptivity (at or above 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). But column 2 shows that, for the subsample

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

Variable	Typicality		
	Above median (1)	Below median (2)	All (3)
Typicality × Functional × Market breadth (H4)	–	–	1.6651 (.922)
Typicality × Functional breadth	–	–	-2.8755 (1.485)
Typicality × Market breadth	–	–	-6748 (1.082)
Typicality	–	–	.4624 (1.341)
Functional breadth × Market breadth (H4)	–.3738 (.238)	–.8117** (.271)	–1.9017* (.800)
Functional breadth	.7681** (.279)	1.4584*** (.422)	3.5516** (1.364)
Market breadth	–.5834 (.306)	–.4044* (.182)	.0403 (.801)
Artist's count of compilation albums	.1263 (.090)	–.1638 (.112)	–.0619 (.094)
Industry tenure	–.6883** (.221)	–1.2099*** (.365)	–.9306*** (.263)
Industry tenure squared	.2016* (.102)	.4142*** (.094)	.2746*** (.074)
Firm tenure	.6239 (.559)	–.1408 (.969)	.0886 (.734)
Firm tenure squared	–1.4470** (.473)	–.6922 (.752)	–.8787 (.583)
Female	–.0893 (.186)	.2650* (.105)	.1343 (.095)
Artist's count of albums	–.0043 (.141)	.2913 (.168)	.1855* (.077)
Band	–.0612 (.231)	–.5562*** (.110)	–.2886* (.127)
Artist's record sales	.0367 (.025)	–.0632** (.022)	–.0142 (.012)
Firm diversification	–.0389 (.032)	.0025 (.032)	–.0247 (.029)
Major record label	–4.0324*** (.964)	–2.5518*** (.470)	–2.9728*** (.387)
Post 99	1.3053*** (.188)	1.5260*** (.216)	1.4043*** (.175)
Observations	6,622	7,243	13,856
Log likelihood	–2029.7802	–3282.2619	–5880.2591

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

\* Robust standard errors are in parentheses. Genre dummies are included in all models.

of the less-breadth-receptive audience, the joint impact of functional and market breadth on entrepreneurship is negative and statistically significant. 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 breadth 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

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

Variable	Advanced Degree			High Income		
	Above median (1)	Below median (2)	All (3)	Above median (4)	Below median (5)	All (6)
Receptivity × Functional × Market breadth (H5)	–	–	174.4944 (98.407)	–	–	123.9893* (63.075)
Receptivity × Functional breadth	–	–	–191.6750 (136.577)	–	–	–146.4776 (87.783)
Receptivity × Market breadth	–	–	–404.1209*** (99.128)	–	–	–271.2871*** (66.585)
Functional × Market breadth (H5)	.0195 (.361)	–1.2817*** (.362)	608.3370*** (136.612)	.1518 (.368)	–1.1434*** (.347)	401.2283*** (92.165)
Receptivity	.4050 (.470)	1.0248* (.430)	–.8055** (.268)	.2318 (.482)	1.1111** (.424)	–.8217** (.265)
Functional breadth	–1.6138*** (.423)	–.4740 (.330)	1.1287*** (.330)	–1.7624*** (.447)	–.4884 (.320)	1.1672*** (.327)
Market breadth	–.0220 (.072)	.1377 (.110)	–.3746 (.242)	–.0518 (.076)	–.2355* (.096)	–.3290 (.241)
Artist's count of compilation albums	–1.1076*** (.211)	–.2763 (.346)	.1144 (.060)	–.9923*** (.215)	–.5333 (.315)	.0993 (.060)
Industry tenure	.2934*** (.088)	.1908 (.158)	–.8068*** (.174)	.2817** (.088)	.2062 (.136)	–.8048*** (.173)
Industry tenure squared	.7135 (.715)	–2.1101* (.970)	.2680*** (.070)	.5576 (.774)	–.8796 (.724)	.2694*** (.070)
Firm tenure	–1.2329 (.681)	.2576 (.525)	.0732 (.606)	–1.1962 (.739)	–.2798 (.444)	.0555 (.607)
Firm tenure squared	.2199* (.087)	–.1148 (.171)	–.9673 (.565)	.2495** (.089)	–.1645 (.160)	–.9380 (.566)
Female	.1623 (.110)	.1032 (.173)	.1709* (.077)	.1355 (.116)	.1940 (.161)	.1707* (.077)
Artist's count of albums	–.3846** (.145)	–.0390 (.287)	.1738 (.093)	–.3921** (.149)	–.0881 (.274)	.1732 (.093)
Band	–.0340 (.020)	.0382 (.038)	–.3265* (.132)	–.0388 (.020)	.0372 (.034)	–.3220* (.132)
Artist's record sales	–.0081 (.023)	–.2368*** (.045)	–.0158 (.017)	–.0040 (.024)	–.2095*** (.039)	–.0137 (.017)
Firm diversification	–2.7050*** (.411)	–47.8321 (.000)	–.0470* (.019)	–2.6712*** (.411)	–47.0623 (.000)	–.0454* (.019)
Major	1.2184*** (.096)	2.0725*** (.279)	–2.9556*** (.410)	1.2351*** (.099)	1.8810*** (.228)	–2.9572*** (.410)
Post 99	.0195 (.361)	–1.2817*** (.362)	1.3887*** (.089)	.1518 (.368)	–1.1434*** (.347)	1.3962*** (.089)
Observations	7,554	6,311	13,865	6,909	6,956	13,865
Log likelihood	–4378.6416	–986.92727	–5822.693	–4169.6297	–1167.2646	–5819.9037

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

\* Robust standard errors are in parentheses. Genre dummies are included in all models.

breadth and audience receptivity. In columns 4–6, we further investigated the heterogeneous effects of audience receptivity but focused 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. 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.<sup>11</sup> Overall, the results support our prediction, indicating that the negative joint impact of functional and market breadth is amplified for more-discerning consumers.

### Supplemental Analyses and Robustness Checks

We performed a number of supplemental analyses, as described in the Online Appendix (<http://journals.sagepub.com/doi/suppl/10.1177/0001839217700352>), including eliminating the possibility that individual-level traits lead artists to self-select into different job functions—creating functional breadth—using an analysis of mergers in the music industry. Acquisitions of independent labels by the majors can cause internal job shifts that would increase functional breadth but that would be exogenous to individual artists. Results presented in table A1 in the Online Appendix indicate that artists affiliated with independent labels that were acquired by majors became more specialized than artists of independent labels that were not acquired, decreasing their functional breadth and propensity to enter entrepreneurship. The analysis indicates that our main results are not due to unobserved individual effects.

Further, we examined the possibility that functional breadth and market experience might be equivalent and substitutable rather than being superordinate and subordinate categories, respectively, by examining combinations of different levels of experience and market specialization. Results in Online Appendix table A2 indicate that the categories are unlikely to be equivalent. We also conducted a survey to assess audiences' perceptions of the importance of functional and market experience for artists, which confirmed that subjects perceive the two forms of experience as non-equivalent.

Finally, we performed a number of robustness checks, described in the Online Appendix. First, although bands make up only 18 percent of our sample, we reran the analysis of model 1 from table 2 excluding bands to see if they are perceived as having greater functional breadth than solo artists because they are composed of multiple individuals. The results were essentially unchanged. Second, we collected additional data on the rated performance of artists after their entry into entrepreneurship to verify that the combination of broad functional experience and narrow market experience that we theorized would facilitate entry would also translate into enhanced performance. The results shown in table A3 of the Online Appendix suggest that new ventures attain higher record sales and higher ratings by users and experts when they have combined broad functional experience and specialist market experience. Third, to verify that founding events in our sample aren't the result of disputes between artists and commercial labels, we collected data from published

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<sup>11</sup> In additional (unreported) analyses, we reestimated the baseline specifications using median disposable income and college degree as alternate measures of audience receptivity to breadth. The estimates were quantitatively and qualitatively comparable.

industry articles on contractual, creative, and commercial disputes. We found that dispute-driven foundings constituted only .8 percent of the events in our database and that disputes were usually used to negotiate better terms with existing labels rather than as opportunities to found new labels. Last, we tested several alternative model specifications and measures, described in the Online Appendix, and results were unchanged (results available upon request).

## DISCUSSION

Entrepreneurship research has long suggested that the motivation, willingness, and ability to enter entrepreneurship rest on two key factors: (1) entrepreneurial skills and capabilities to identify lucrative new business opportunities and (2) the legitimacy of these efforts in the eyes of external stakeholders. Although researchers have generally equated entrepreneurial skills with functional breadth, the prescription for diverse skills contradicts a long line of ecological research showing consistent legitimacy discounts to generalism (e.g., Zuckerman et al., 2003; Leung, 2014). Hence past studies imply a paradox of functional breadth: individuals with superior skills should be more likely to enter entrepreneurship, but they may be less likely to do so because of a legitimacy discount.

We theorized and found in our study in the music industry that this paradox can be reconciled by taking into account cross-categorization, such that job experience can be categorized with respect to both job functions and market domains. We found that artists are most likely to pursue entrepreneurship when their job experience is broad with regard to job functions but narrow with regard to market domains. Our results indicate that acquiring 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 a 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., human resources, 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 not in equal measure. Remaining in the same position in 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 found that the fourth path, combining functional breadth with a narrow market position, maximizes the returns to breadth while minimizing their risks. This 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).



Individuals are most likely to enter entrepreneurship when they are able to acquire resources through functional breadth without sacrificing legitimacy, but our results indicate that the combination of broad job functions with narrow market experience is less likely to facilitate entrepreneurship when actors appear legitimate through alternate means. Specifically, artists with prior commercial success rely less on narrow market experience to achieve the benefits of functional breadth. Our results also indicate that the value of a more-focused position is mitigated by the typicality of an entrepreneur's functional experience. Thus high-status actors and those with more-typical functional experience may be able to pursue greater novelty in their careers without risking the loss of support. Low-status actors and those with less-typical functional experience may rely on narrow market experience to establish the legitimacy they risk when pursuing experiential breadth.

We also found audience heterogeneity to be a key moderating factor. Audiences are inherently heterogeneous in their receptiveness to experiential breadth, and we found that the positive effect of functional breadth combined with narrow market experience is mitigated for more-receptive audiences—those with higher income and higher educational attainment—which favor novelty over purity and thus provide greater latitude to entrepreneurs.

This study makes a number of contributions, first by extending research on career histories and entrepreneurial entry based on the well-established notion that generalists are most likely to become entrepreneurs (e.g., Lazear, 2004; Elfenbein, Hamilton, and Zenger, 2010; Åstebro, Chen, and Thompson, 2011). We highlight the potential constraints on these findings by showing that mastering different skills is not universally beneficial for entrepreneurial entry; rather, breadth is beneficial only in particular domains of work experience, and too much experiential breadth harms the prospects of entry. In this way, we suggest 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 apply.

We also contribute novel findings by distinguishing between two classificatory systems used simultaneously to evaluate a single actor. Past studies have devoted little attention to multiple categorical systems and the implications of cross-categorization for experiential breadth. Some scholars have focused on job functions (e.g., Ferguson and Hasan, 2013; Leung, 2014) and others on market domains (Zuckerman et al., 2003; Pontikes, 2012), but the two have rarely been examined in conjunction. Our study suggests that unless multiple classificatory systems are considered, it is difficult to make inferences about the presence and magnitude of the penalty associated with generalism. 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 can more explicitly consider multiple classificatory systems and the consequence of cross-categorization when examining the generalist discount.

We extend 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 Paoletta, 2013; Glynn and Navis, 2013; Kennedy and Fiss, 2013) by showing 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 research in organizational theory investigating the limitations of categorical constraints (Rao, Monin, and Durand, 2003; Lounsbury and Rao, 2004; Lo and Kennedy, 2015; Merluzzi and Phillips, 2016). We introduce the theory of cross-categorization to this stream of research and demonstrate how secondary traits function to moderate categorical penalties. This approach may help identify how 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).

### Limitations and Future Research

Although our study provides insight into how job experience affects the transition into entrepreneurship, future research could unpack these mechanisms with greater precision. A potential avenue of inquiry could examine whether individuals with a more-generalized background might strategically suppress various facets of their prior experience to appear more specialized and therefore more attractive to potential resource holders. If individuals with entrepreneurial inclinations strategically frame their tangible experience, this could have important consequences for acquiring resources and for the ability to enter.

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. In other settings there may be additional criteria, or the salient criteria we offer here may be 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, Shen, and Hillman (2014) described a setting in which salient but less accessible features like education and work experience can become the basis for recategorization. The ambiguity introduces a delay but does not alter the direction of the process. More generally, although our specific variables (genre and credited experiences) may not translate to other settings, we expect that the broader implication that prospective entrepreneurs are judged based on what they have done and 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 consumers' preferences. Though we view this as a typical set of circumstances, in other settings prospective entrepreneurs may not require external resources or resource providers may be indifferent to the predilection of the eventual consumers (e.g., a private investor funding a hobby or interest). In situations like these, in which 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. To our knowledge, however, the specific question of how investors appraise entrepreneurial breadth has not been investigated. Our findings indicate that the benefits of broad functional experience are mitigated by specialist market experience, but 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 decisions. Research that identifies why and when entrepreneurs adjust their market breadth by choosing to enter fewer or more market segments 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 in which a gender or racial bias might lead to categorization as a “poor fit” for entrepreneurship, the prospective entrepreneur might benefit from emphasizing his or her secondary attributes that do align with the definition of an entrepreneur to try to induce cross-categorization. One interesting and counterintuitive finding in our study is that women 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. Although our study does not analyze these other dimensions of an individual’s identity, a further investigation of how cross-categorization applies to entrepreneurship could deepen the understanding of both fields.

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