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BEYOND MAKING DO: TOWARD A THEORY OF ENTREPRENEURIAL RESOURCEFULNESS

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ABSTRACT

We developed beginnings of a theory of entrepreneurial resilience that incorporates concepts of resourcefulness, adaptive aspirations and entrepreneurial identity, ideology and values. We developed this work through the discovery of grounded theory based on cross-case analysis of eleven survivors and startups in the US fabric and apparel industry as it experienced the gale of creative destruction. Our theory is built on the foundation of long-standing behavioral theories of the firm and opens frontiers for research about entrepreneurship that incorporates values, identity, ideology and variations in entrepreneurs’ moral ways of being in the world.

INTRODUCTION

The scholarly literature on entrepreneurship tells us a great deal about entrepreneurial success. In a cherished and heroic image, an enterprising individual discovers a lucrative opportunity, assembles a strong team and investments of other peoples’ money and creates value by delivering novel products and services to markets that eagerly accept them. Wealth, innovation and employment growth are often generated through the process. Many elements of this narrative have been well studied and we understand a great deal about this classic story of entrepreneurial success. We know much less, however, about how entrepreneurs may keep going when things don’t work out as well: when their venture struggles to find or construct an opportunity, when investors are not impressed or when customers turn elsewhere.

Most ventures experience a variety of struggles, and though – as is commonly acknowledged – many disband, some ventures persist despite daunting challenges. We are particularly interested in understanding the patterns of behavior and orientations that underlie the persistence of ventures that do not give up despite difficult circumstances. Such entrepreneurial resilience, which we define as “the capacity for positive adaptation under adverse conditions” (Sutcliffe & Vogus, 2003), has received remarkably little attention in the scholarly entrepreneurship literature. In this paper, we report on a grounded theoretical study of entrepreneurial resilience. Grounding our work in classic behavioral theories of the firm (Barnard, 1938; Cyert & March, 1963; March & Simon, 1958), we engaged in a cross-case comparative study (Eisenhardt, 1989; Yin, 2009) of eleven firms in the southeastern US textile industry in order to develop insights and theory about how ventures respond to deeply difficult circumstances. We chose the textile industry – and in particular, fabric and apparel manufacture – because it is represents a striking case of what Schumpeter (1942) called “creative destruction.”

Images of “creative destruction” (Schumpeter, 1942) are a staple in the scholarly study of entrepreneurship. The Schumpeterian “gale” storms through a sector of the economy, destroying and replacing much of what stands. Changes such as the creation and proliferation of new tech-
nologies, or the opening up of new resource and product markets through economic development and regulatory changes sometimes strengthen incumbents (Tushman & Anderson, 1986), but may also provide challenges that result in massive changes to an industry sector. The US apparel industry has experienced such a gale over the last two decades with extraordinarily sharp decreases in domestic employment and production as regulatory changes have encouraged competition from low wage nations. On top of these challenges, the current deep recession has added to the industry’s woes. This combination of challenges makes the contemporary US textile industry an ideal context in which to observe and examine resilience. The recent situation in US fabric and apparel manufacturing is characterized by penurious environments and what we label “negative slack.” We conducted an in-depth study of two groups of firms: six surviving textile firms that were formed prior to trade policies promoting globalization and have persisted through both adverse shocks, and five start-ups founded during the globalization but prior to the overall economic downturn.

Our results suggest that a firm’s resilience is strongly shaped by its ability to manage both its aspiration levels and its resourceful behaviors. In turn, a firm’s ability to manage aspirations and resourcefulness are shaped by variations in the forms of commitment that entrepreneurs demonstrate toward their ventures. In particular, whether the values an entrepreneur expresses through the venture are part of the entrepreneur’s identity or instead represent ideological dreams play a powerful role in determining both aspirations and behaviors.

This study contributes to the entrepreneurship literature by providing the building blocks of a theory of entrepreneurial resilience. By developing the construct of “negative slack” we provide the first theoretically grounded definition of resource constraints, and thereby tie together complementary ideas from existing theories of entrepreneurial resourcefulness and adaptive aspirations while also creating bridges between the entrepreneurship literature and classic theories of the firm. These theories were initially developed to account for the behavior of larger firms endowed with adequate or excess resources in the form of positive slack. By tying together our theory of entrepreneurial resilience and fundamental theories of the firm, our work represents not only a step forward in scholarly understanding of entrepreneurship, but a contribution back to the larger body of organizational and strategic theories.

**Theoretical Grounding**

There is small prior literature on entrepreneurial resilience. For example, Gimeno, Folta, Cooper and Woo (1997) found that variation in an entrepreneur’s threshold of performance was a determining factor in firm survival. Personal financial capacity also shapes survival (Holtz-Eakin, Joulfaiian, & Rosen, 1994). Additionally, emotional, cognitive, social and financial resilience rather than just self-confidence were found to assist entrepreneurs with rebounding to start another venture after venture failure (Fredrickson, 2001; Hayward, Forster, Sarasvathy, & Fredrickson, 2010). Overall, resilience remains an underdeveloped and understudied idea and “given the dearth of empirical work exploring resilience in organization theory, many (if not all) avenues are open for future research in resilience” (Vogus & Sutcliffe, 2007: 3418).

We grounded our study on foundational work from the so-called “behavioral theory of the firm” (Cyert & March, 1963; Mahoney, 2004). This seminal theory traces its origins back to Barnard (1938) and continues to be influential today, shaping for example contemporary work on evolutionary economics and organizational learning (Argote & Greve, 2007). We oriented our fieldwork and theory development around two core ideas from this work. The first, “adaptive
aspirations” refers to linkages between the performance of the firm and its reference group and adjustments to the firm’s aspirations for the future (Cyert & March, 1963). Our use of the second construct around which we oriented our work – “slack” – requires a little more explanation. Slack resources, defined as resources in excess of those required to simply maintain the firm, have been shown to serve as a buffer against environmental instability (Cyert & March, 1963) to protect the firm from environmental downturns (Pfeffer & Salancik, 1978; Smart & Vertinsky, 1977) and to slow the responsiveness of aspirations to changes in firm performance (Cyert & March, 1963).

Questions about the role of resources and constraints in shaping entrepreneurial behavior and outcomes permeate the last three decades of scholarly research. Unfortunately the development of any theory of how entrepreneurs deal with constraints has been limited by the absence of a useful conception of what constitutes a resource constraint. While prior research has explored slack considered as some form of excess resource we differentiate between such slack and introduce the idea of “negative” slack, construed as a resource inadequacy or constraint.

The second body of work on which we grounded our inductive study relates to entrepreneurial resourcefulness. Over the last two decades, research in entrepreneurship has occasionally highlighted the importance of resourcefulness, which we define as patterned variations in making use of limited resources. For example, work on bootstrapping (Bhide, 1992) highlights the key role of careful financial management and the conservation of cash. Some work in strategy and improvisation has identified niche and other generic market strategies sometimes appropriate to small, young resource-constrained firms and identified both advantages and problems related to seat-of-the-pants opportunism by resource-constrained ventures (Baker, Miner, & Eesley, 2003; Lee, Lim, & Tan, 1999). Research on bricolage shows – reinforcing classic insights from Penrose – that variations in what entrepreneurs define as resources and what they do with them may sometimes matter more to survival and success than do initial variations in resource endowments (Garud & Karnoe, 2003). Taken together, this work leads to the expectation of “substantial differences among firms in their ability to survive or prosper given ostensibly similar resource constraints” (Baker & Nelson, 2005: 332).

In summary, we oriented our attempt to develop grounded theory about entrepreneurial resilience around these three core constructs: adaptive aspirations, negative slack and entrepreneurial resourcefulness.

Methods

The US textile industry is a particularly appropriate context for studying constraints and resilience because it has experienced at least two distinct and continuing shocks in recent years. First, during the last two decades the opening up of free trade has been associated with devastation of the traditional US industry as firms operating in countries with much cheaper labor and fewer environmental safeguards have drastically undercut prices. Fabric and apparel manufacturing has been particularly affected by low wage competition because the handling of pliable fabric has proved remarkably resistant to labor-saving technological innovation (BLS, 2009). During this time, the industry has suffered losses of over one million jobs and over half of the traditional textile manufacturing plants have closed (AMTAC, 2007). Media reports on the decline have described employment losses using terms such as “cut,” “lay-off,” “slash,” “axe” and “eliminate” and headlines such as “When the textile mill goes, so does a way of life” (Wiseman, 2010). Among the Bureau of Labor Statistics employment predictions for the 2008-2018 period, the top three industry sectors
expected to decline most significantly are in traditional apparel manufacturing jobs (Occupational Outlook Handbook, 2010). The industry has become an environment characterized by disinvestment, declining revenues and high levels of fatalism and just giving up. Little noticed by the mass media, however, some US apparel manufacturing firms have managed to survive, and in the southeastern US, textile entrepreneurs are quite active. The efforts towards adaptation by surviving firms and the pursuit of opportunity by entrepreneurs in the traditional textile industry allows us to observe and measure the behaviors key to development of a theory of entrepreneurial resilience. In addition to the industry level changes, the global economic crisis has added insult to injury – especially at the firm level. The current global economic crisis is the second shock that has impacted the firms in our sample and firms continue to experience increasing resource constraints of many kinds. Commercial financial backing for entrepreneurial ventures – new and old alike – is very limited and therefore constraining growth and startup through traditional methods.

As we iterated between our theory and our data, our theoretical sensitivities (Glaser, 1978) changed substantially. As we reported at BCERC 2010, this project began as a focused exploration of human capital bricolage as a response to resource constraints and then evolved into a more general study of resourcefulness as it became apparent that the firms we were studying were engaged in a much more complex pastiche of resourcefulness than we could explain by focusing only on bricolage or especially one form of bricolage. Last year we presented variations of behaviors under resource constraints. Since then, and in addition to expanding toward a theory of resourcefulness, we observed variations in the reasons entrepreneurs were committed to maintain their firms under adversity. Taking seriously the basic tenets of the discovery of grounded theory (Glaser & Strauss, 1967), we therefore again reframed our study in terms of understanding how older firms were able to survive and new firms were established under penurious environmental conditions and severe firm-level resource constraints. We broadened our study on two occasions and with that, further developed the theoretical sample. Therefore, our final sample on which we build our theory consists of six “survivors” and five “startups.” Age was an important factor for sampling for two reasons: to facilitate our access to the founding entrepreneur of each firm and then to ensure that the “survivors” were old enough to have withstood both shocks and that the “start-ups” withstood just the economic crisis. All organizations were small enough to be able to observe activities across all facets of the operations. The sample was partially derived from a database of textile firms established from prior research (Cassill, Little, Godfrey, & Frederick, 2006) and newer firms were located by word of mouth and website research. The sampling matrix is shown in Table 1.

In our field work, we conducted primary interviews with the founding entrepreneurs, employees of the firms and in some cases, other stakeholders of the firms such as mentors and customers and also conducted direct observations of activities within the manufacturing facilities. Data were collected from mid-February 2010 through mid-March 2011. Over this time, we progressed from open, exploratory conversations to semi-structured interviews. Question specificity was based on the emerging theory as we built individual case studies and engaged in cross-case analysis that enabled replication across cases (Eisenhardt, 1989; Yin, 2009). We reduced our data from field notes and approximately 1,500 single-spaced pages of transcriptions from audio recorded interviews by formulating speculative hypotheses and tables to find patterns in our data (Miles & Huberman, 1994), resulting in the elements of our theory of entrepreneurial resilience.
RESULTS

We report here on several distinct variations of elements of our theory developed by studying entrepreneurs and firms operating in a context plagued with unfavorable conditions created by two specific shocks. First, the textile industry in the United States has changed dramatically over the past two decades with firms’ increased pursuit of globalization strategies. Second, the current global economic crisis has significantly decreased the availability of many kinds of resources, and especially financial resources. This combination of events has drastically reduced environmental munificence and caused a reduction in slack for many firms. These circumstances provided an opportunity for us to assess variations in firm resilience by observing how entrepreneurs responded to either or both of these shocks. The older firms we studied, survivors, experienced both of these shocks. Newer firms that began between these shocks, startups, experienced the financial crisis directly and were indirectly affected by the remnants of textile globalization, especially the gaps in the domestic supply chain. We focus on three firms (GenTech, ArborWork and SandStone) in this paper to demonstrate examples of each element of the theory; however, our theory was induced based on replications in the data and explains differences in resilience across both sets of firms (survivors and startups) as combinations of variation across forms of commitment, complexity of aspirations and resourceful behaviors.

Model Description

As outlined in Figure 1, our theory suggests that differences in forms of commitment to keep organizations together have important effects on both the entrepreneur’s aspirations and the resourceful behaviors in which they engage. Together, differences among entrepreneurs in their forms of commitment, aspirations and behaviors allow us to provide an explanation for the variations in resilience that we were able to observe as the entrepreneurs operated under conditions that we describe as “negative slack.”

Forms of Commitment

The entrepreneurs we studied exhibited three distinctive forms of commitment to their organizations. While all were committed to economic or financial goals of growing the organizations and generating profits, we also discovered two forms of commitment in which these instrumental commitments displayed consonance with – indeed, were intertwined with – the entrepreneurs’ personal values. We labeled these values-driven commitments “identity-based” and “ideology-based” and labeled the less value-laden form of commitment, “instrumental”, as described in Table 2.

Although it is possible to imagine dynamism in forms of commitment, we found no evidence of any changes in our sample. For example, it is conceivable that an entrepreneur who begins with a purely instrumental commitment might embed this later in ideological values, or that an entrepreneur’s ideological commitments become firmly embedded in his/her identity. Because we observed no such changes and found no strong evidence of any such changes in the prior history of the firms we studies, possible changes in forms of commitment are beyond the scope of the theory we develop here. We explain examples of forms of commitment with their objects – aspirations.

Aspirations

In every case, the entrepreneurs’ commitments were to both the survival of their firms and to one or more additional aspiration. Here, we identify aspirations as the objects of the forms of commitment. As suggested above, each entrepreneur expressed an instrumental aspiration reflecting one fundamental purpose for operating their business – to make a profit. However, entrepreneurs
with a values-driven form of commitment – grounded in either identity or ideology – demonstrated multi-faceted objectives, including both instrumental and values-laden aspirations.

The complexity of multi-faceted aspirations serves one significant role in our observations: multi-faceted aspirations allow entrepreneurs to maintain or even increase the level of their aspirations by switching to a new aspiration. The number of aspirations can indicate the degree to which an entrepreneur is able to supplant or at least suspend one aspiration that may be under duress to focus on another. For example, in the case of a single-faceted aspiration, an entrepreneur may have nowhere to turn and see no option but to abandon the one aspiration if it seems infeasible. However, if the entrepreneur also harbors a second aspiration then the entrepreneur can turn his or her focus to that aspiration. Multi-faceted aspirations allow entrepreneurs to satisfy one aspiration while deemphasizing another. This represents a change of focus – illustrated below as a horizontal change in aspirations – as shown in Figure 2. Furthermore, a second type of change may occur within each aspiration. The level of an individual aspiration may increase or decrease and is depicted in Figure 2 as a vertical change.

In the cases of the ventures of the identity-based form of commitment, the firms became personal representation of an entrepreneur’s inner-being and their aspirations are based on their core values. The first example, GenTech, was established because the founding entrepreneur witnessed the manner by which his colleagues of the executive management level at his previous employer treated the employees. Their behavior was personally disturbing to him and not something he could support; he grew up “as a worker” in the plants and was well aware of the “hardships” of the people. Additionally, he vehemently disapproved of careless and wasteful approaches to resources. He reached a point in his career where he decided that the time was “now or never” to strike out on his own and start an organization to manufacture products similar to his previous employer – because this was his expertise – but to make things right by treating his employees with respect. As part of his identity, he currently takes the livelihood of his employees just as seriously as he does the livelihood of his own family. Therefore, he is ultimately committed to – and aspires to provide for -- their well-being and long-term employment, which includes keeping his firm alive to be able to support the employees that count on him.

Ideological aspirations are expressions of how the entrepreneur envisions the firm positioned in the future, which is something different than its current state and is also based on values that the entrepreneur is also still pursuing for personal fulfillment. In the case of another survivor, ArborWork, the entrepreneur began to more aggressively shift his business philosophy to an economically and environmentally stable model when the support of large apparel firms – his customers – began to wane during globalization. The entrepreneur started joining community grassroots efforts to be more environmentally conscious prior to globalization. He has since been on a personal crusade to integrate the business philosophy throughout all aspects of the venture. His instrumental aspiration is to “run a business”, but he does not have high growth aspirations – at least not disproportional or out of sync with the ideological aspirations: “the South is good enough for us” (meaning they needn’t expand beyond this region) because otherwise they fear compromising the environmental component of the business philosophy with transportation emissions.

Finally, both entrepreneurs with only instrumental commitments experienced vertical shifts in their aspirations. Our example here, SandStone, is content to maintain his current operations until the commercial real estate market becomes more forgiving. In response to the global eco-
economic crisis, he has decided that he would like to exit manufacturing and “just sell stuff” at this stage of his life, and thus, his instrumental – and only – aspiration has decreased.

Our primary findings regarding aspirations relate to two methods of adaptation: changes in the focal aspiration and changes in the level of the aspirations. The nature of the forms of commitment shapes the complexity of the aspirations: values-consonant commitments complement purely instrumental commitments and thus enable the multi-faceted aspirations. Single-faceted aspirations only allow vertical changes in an aspiration where as multi-faceted aspirations may shift vertically as well as horizontally. The horizontal change in focus allows an entrepreneur to deemphasize one aspiration that may suffer the most from an environmental shock or negative slack circumstance; as a situation improves, the focus may or may not switch again between the aspirations. In either case, having more than one aspiration presents an opportunity to explore an alternate aspiration in a horizontal change as another decreases due to changes in the business environment.

Behaviors of Resourcefulness

As shown Figure 1, an entrepreneur’s form of commitment shapes the selection of behaviors. Entrepreneurs in this study created ways to do more with less by being resourceful. We define “resourcefulness” as patterned behaviors of making use of limited resources. Thus, the behaviors of resourcefulness are the mechanisms through which the commitments and aspirations are pursued. We grouped the behaviors of resourcefulness observed in this study into three categories: bricolage, thrift and community, shown with descriptions in Table 3. Bricolage, making do with the resources at hand to address new challenges and opportunities (Baker & Nelson, 2005), is used here as a category that captures behaviors related to making use of both material and human capital resources at hand. Recent work around human capital bricolage, “making do with the human capital resources at hand” (Baker, Pollock, & Sapienza, 2010) expands the notion beyond just using physical resources at hand. The bricolage category in this study, therefore, includes cross-training, notions of a bias for action, experimentation and hustle. Bias for action, refusal to enact limitations and experimentation are key components of bricolage (Baker & Nelson, 2005). In also implies hustle, which is willingness to do more with less by working harder.

“Thrift” captures behaviors related to conservative financial philosophies and resource-seeking behaviors. We include bootstrapping, starting and operating ventures with modest personal financing (Bhide, 1992), frugal resource management, seeking good deals and seeking subsidies from various agencies or organizations in this category. Thrift is exemplified through careful, frugal spending and seeking and negotiating favorable deals. Finally, subsidies may be sought from agencies, banks or funding organizations. Behaviors that minimize expenses and increase – or at least conserve – cash-on-hand are considered in this category.

The third category of behaviors of resourcefulness is community. Communities of practice (Brown & Duguid, 1991) have been found to assist particularly with learning and innovation. However, in many cases, the entrepreneurs in our study used a community, a forum of a shared interest, in a different way: to promote their own ventures and gain market share independent of other firms or individuals in the community that shared some type of similar topic. Such communities involve environmental sustainability, “Made in the USA” and a community related to a specific task, such as handicrafts.
Entrepreneurs whose commitments were tied up with their identities were tightly constrained not only in their ability to make major adjustments in either the levels or the objects of their aspirations, but also in the manner in which they could behave resourcefully. A strong sense of connection between the entrepreneur’s personal identity and their aspirations and behaviors meant that many possible changes would be seen not just as an organizational change but as a violation of their personal identity. In contrast, entrepreneurs with an ideological commitment were able to take greater liberties in a variety of resourceful behaviors and were able to more freely explore the boundaries of each behavior. Finally, entrepreneurs with the greatest flexibility for choosing behaviors were those with purely instrumental commitment. These entrepreneurs could even test the boundaries of behaviors against legal risks because their commitment was very little shaped by their values.

In our first example, GenTech, the founder’s identity-based form of commitment restricts his behaviors to little to no bricolage behaviors; he witnessed great amounts of wastefulness with his prior employer and he manages his business to avoid those behaviors. In this respect, he is focused on frugal, values-based thrift, however he uses very little creativity in using what is at hand (and keeps very little excess materials). He has a strong sense of the local community and reflected about the start-up of the firm that “our previous relationships paid immense dividends that I didn’t realize at the time” because his friends provided financial support at a critical turning point in the venture. The entrepreneur’s personal relationships were also the basis for two complementary ventures and he was able to create mutually beneficial deals with others. In any business transaction, he always made sure both sides of the deal were being treated fairly and with a “good deal” for him – and his employees.

On multiple occasions during the peak of globalization efforts, GenTech was able to “rescue” employees, which was facilitated by his identity-based commitment, as he heard through community connections that facilities were closing. He expanded his operations and “changed the name on the building” directly before a lapse in employment for the people. The entrepreneur described one such occasion where he visited the facility to introduce himself to his new employees and recounted his apprehension, “We went to them [their facility] because we didn’t want them to see how small we were… We were broke. But we had the potential to save all those jobs. We borrowed money from the government – a low interest loan – to save the jobs.” He managed to build his demand to support the expansion. He believes in working hard and that those around him should work just as hard. While he is happy to create new products and explore business opportunities with some contacts – as was a primary source of his own business expansions – he has little tolerance for helping people that approach him for help without a proper business plan and he feels like they do not work up to his standards. Vacation time, prior to recent changes in his business structure, was out of the question; he considered it his responsibility to be at the plant every day. He and a business partner decided to sell one business (after he stabilized all of his ventures during the economic crisis); in the interviews with potential buyers he made certain that his people would be retained and he negotiated a phase out contract for himself to be able to oversee this stipulation. His secondary aspiration is to pass along viable business and this one was step towards that goal and in keeping with his identity.

ArborWork’s ideology-based aspiration is to fully implement a sustainable business model promoting environmental stewardship, social justice and economic prosperity. However, this firm demonstrates how this form of commitment shapes acceptable behaviors through greater liberties that can be taken with selecting the behaviors – in addition to testing boundaries, which the
entrepreneur is testing in two ways. First, he promotes domestic – and local – manufacturing with a minimized carbon footprint; until very recently, that is, when the firm added garments manufactured in another country. ArborWork has asked for understanding from his customers for taking this step since it compromised part of the domestic manufacturing criteria. Second, he has taken to “green-shaming” by tapping into a community that already endorses environmental stewardship, but by pointing out that members of this common community are advertising using “non-sustainable” products – that ArborWork will be pleased to replace with sustainable products. The entrepreneur is focused on educating the business owners in the community about the products that create the risk that a green reputation will be sullied through stakeholders’ “discovery” of violations. This is also a newer tactic for ArborWork, and its effects are unclear.

The entrepreneur of ArborWork displays other behaviors of resourcefulness as well. He is the epitome of a bricoleur: he builds and modifies all equipment and gadgets around the plant – including all infrastructure for the plant. He is the self-proclaimed “tinkerer” of the group. Other bricolage behaviors include human capital bricolage in the form of cross-training around the facility. Unfortunately, the entrepreneur is also going without a salary – as he has done in the past for survival – and is making sure his employees, the ones that remain, are compensated for their work.

With purely instrumental aspirations, SandStone is willing to test the boundaries of being resourceful – to the extent that there could be legal repercussions (probably fines) if his behaviors are discovered. In efforts toward frugality, the founder does use cross training with employees, uses inexpensive and temporary student labor and prices raw materials daily to get the best prices rather than holding inventory. He chooses to hire one of his friends to cover spikes in his demand rather than changing internal operations to cover these peaks. In general, though, he says, “it’s a fun place to work” but he is just interested in maintaining a profit and has little other personal connection to the business or its activities.

Our primary findings regarding behaviors of resourcefulness are also twofold. The forms of commitment shape the choice of behaviors as well as the boundary conditions by which the behaviors are implemented. Purely instrumental commitments and aspirations are the least restrictive and allow the entrepreneur freedom to experiment with any behavior and as well as the liberty to push the boundaries of each behavior. On the contrary, the identity-based form of commitment dictates that behaviors and boundaries must coalesce with the identity of the venture and the entrepreneur. The ideology-based form of commitment fall between the other two on how it affects the choices of behavior open to the entrepreneur: it places the choices and boundaries of behavior under moderate restrictions.

Resilience

We observed two primary elements of resilience. First, we observed a range of orientations toward continuation of the venture from “ready to give up” to “endeavor to persevere.” Second, some ventures seemed stuck in “survival” mode while other continued hustling to make progress toward either their original or new goals and aspirations. Taken together, this translated to low, medium and high rating of resilience.

SandStone was low in overall resilience because he was both ready to give up and not trying any behaviors beyond survival. He said, “In an ideal world…at this point in my life I would like to be able to sell something and not have to make anything. I’d rather be the guy that the Budweiser comes in the back and you sell it out the front. The Budweiser distributorship model is the one I want. Basically, I
distribute a product and I don’t have to do anything to it…I’ve always told everybody if I had to do it all over again, I’d just sell something.” Additionally, his behaviors combine to show that he is not making any strides beyond the bare minimum to stay in business. Although his form of commitment allows free reign for behaviors, he chooses to sit back and be reactive rather than proactive for change. When we asked him why he was not eager to abide by changes in legislation and take advantage of a regulation change, he said, “That’s probably why I haven’t done it yet because once I get it, I know that it’s just gonna turn into a mess back there [more work]…So actually when you think about it that way, it’s not that much [cost]. It’s just all the time that it takes.”

ArborWork was medium in overall resilience; they “endeavor to persevere” but have yet to find traction with new products or ideas despite their efforts, and yet they are also hopeful for the future. The entrepreneur explained his reasoning for persisting beyond the first shock (globalization) and the second (current economic crisis) by saying, “We still had the overhead. We had the building, we had the equipment. We did then what’s similar to what we’re doing now…we went 18 months without pay. We maxed out our credit lines, the banks cut us off…We lost sales because our customers went out of business, they ordered less or they didn’t order at all; we did not lose customers because they went to a cheaper product. If 2009 wasn’t price pressure, then I’ll never know what price pressure was. So it held up during that. So that gives me hope for the future.” Regarding behaviors of resourcefulness, the founder of ArborWork is trying multiple angles to positively adapt, however he has not had great success with achieving that adaptation. He accepts that he is on a journey towards sustainability, and yet his tactics for gaining customers may be a bit abrupt and linked to the “green shaming.” The entrepreneur gave an example of how he recently pitched the product to a potential customer in the “green” community: “What I told him…you’re fooling yourself. You pull this [brand] name away from this stuff and you’re in the gutter with everybody else. But what’s getting you there is your name. Eventually somebody’s gonna make this connection (pointing with his two index fingers together). That’s what I always say. I’ve had conversations with [celebrities promoting sustainability]. Those guys get it, man I’m all about this stuff. When I get down to their purchasing guy, he says, I gotta buy [products] as cheap as I can. So I said, eventually, it’s gonna catch up with you…Up till now I’ve been testing out the idea; now I need to really lay it out there so I can then go to the next people and then make a proposal.” This is an option they are exploring.

Finally, GenTech was high in overall resilience. His commitment to survival is summarized here: “We peaked [several] years ago and we’ve been flat since, flat and down a little bit…For better or worse I’m really committed to these people…We’ve hired people that we’ve needed and we’ve told them when we’ve hired them that we’re going to work terribly hard together and my wife and I live in this town and we work every day and I work more hours than anybody and I, our employees feel like they know the ownership…We are still a viable domestic manufacturing company.” His behaviors enable progress toward this aspiration and he explained, “We’re fighting the good fight trying to, trying to take what advantages we do have, closest to our customers, quick turns, sensitivity to the markets, new styling, having really good communications with our customers, having our customers come and visit us. All the advantages that we have, but the other folks have lots of advantages that we don’t have. Less expenses, better finance, all sorts of things they have, so we have to minimize our disadvantages and maximize our advantages and we’re trying to make do, a company.”

Overall, we identified two distinctly different routes to resilience: one is more rigid and focused on “staying the course” and the second is more flexible and open to trying out new values,
new aspirations and a wide range of behaviors. The first is driven by commitments based on a founder’s sense of identity, and the defense of that identity in the firm is managed. The second is shaped largely by whether or not the founder is driven by ideological commitments beyond sustaining a profit.

**DISCUSSION**

In this paper, we inductively developed elements of a theory of entrepreneurial resilience from case studies of eleven firms in the low munificent environment of the textile industry. This paper provides the basis for a number of theoretical contributions. First, we provide a useful basis for exploring variations in entrepreneurial resilience and did so in a way that will help to bring together prior work on elements of resourcefulness, which we view as a component and precursor of resilience. Second, we discovered and described the important role played by founder commitments, values, identity and ideology in shaping aspirations, behaviors and resilience. This complements and resonates with the growing recognition that supra-rational elements of entrepreneurial behavior such as passion (Cardon, Wincent, Singh, & Drnovsek, 2009) are important to entrepreneurship. Third, by conceptualizing constraints as negative slack we create a useful connection between entrepreneurship and powerful behavioral theories of the firm. This will allow us to begin exploring the possibilities and limitations of theoretical symmetry between the properties and effects of positive and negative slack and provides a common construct around which to build the increasingly important conversation regarding entrepreneurship under resource constraints. We will continue this work by beginning to test our theory and by establishing a longitudinal dataset to investigate resilience over additional shocks and across textile firms in the US.

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**REFERENCES**


APPENDIX

Table 1: Theoretical Sampling Matrix

<table>
<thead>
<tr>
<th>Forms of Commitment</th>
<th>Survivors (founded pre-1994)</th>
<th>Startups (founded post-1994)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Growth (&gt;100 employees at some point)</td>
<td>GenTech, HotRod, Golden, ArborWork, LeanOps</td>
<td>TeamSports, HighRock, DogWood, LintHead, SnowBall</td>
</tr>
<tr>
<td>Some Growth (&gt;founders at some point)</td>
<td>SandStone</td>
<td></td>
</tr>
</tbody>
</table>

Figure 1: Theory of Entrepreneurial Resilience

![Diagram of Theory of Entrepreneurial Resilience]

Table 2: Entrepreneurial Resilience, Element 1

<table>
<thead>
<tr>
<th>Forms of Commitment</th>
<th>Values-Consonance</th>
<th>Purely Instrumental</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identity-based commitment</td>
<td>The identity-based form of commitment embodies the values of “this is who I am” (in philosophical terms: “being”). The entrepreneur is committed to maintaining the business and making progress toward its goals because the goals are inextricably tied to the entrepreneur’s values and sense of personal identity.</td>
<td>The ideology-based commitment represents the values of “this is who I want to be” (in philosophical terms: “becoming”). The entrepreneur describes and expresses commitment to a set of personal values, but these values are themselves ideological targets the entrepreneur is trying to meet and the venture is an important way of enacting these values.</td>
</tr>
<tr>
<td>Ideology-based commitment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instrumental commitment</td>
<td>An instrumental commitment is driven by more purely financial goals. Commitment to the firm is for the most part purely a commitment to a means to a financial end.</td>
<td></td>
</tr>
</tbody>
</table>

Figure 2: Entrepreneurial Resilience, Element 2

![Diagram of Entrepreneurial Resilience, Element 2]

Table 3: Entrepreneurial Resilience, Element 3

<table>
<thead>
<tr>
<th>Behaviors of Resourcefulness</th>
<th>Bricolage</th>
<th>Thrift</th>
<th>Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>Making do with resources at hand — material or human capital — to address new challenges and opportunities (Baker &amp; Nelson, 2005; Baker, Pollock, &amp; Sapienza, 2010); behaviors in this category were demonstrated through a bias for action and refusal to enact limitations.</td>
<td>A variety of behaviors related to management of financial resources such as: “learned-thrift” based on suffering consequences from wasteful spending; seeking good deals; seeking subsidies from various agencies or organization; bootstrapping and values-based inclinations to frugally manage finances.</td>
<td>Behaviors that involved interacting with other people based on shared interests. These behaviors varied by the authenticity of the entrepreneurs in participating in these communities and the level of embeddedness in the community.</td>
<td></td>
</tr>
</tbody>
</table>