Necessity is the Mother of Isomorphism: Poverty and Market Creativity in Panama

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Does poverty hinder or encourage market creativity? Businesses that offer novel, creative products have greater growth potential than businesses that conform to market norms. Yet the literature offers conflicting views on the relationship between poverty and market creativity. Some research suggests poverty restricts entrepreneurs' capacity to offer novel products, whereas other work suggests poverty facilitates creativity in the marketplace. This paper addresses that tension by examining the shifting relationship between poverty and market creativity across stages of business development. Drawing on survey and interview data from Panama, this paper shows how entrepreneurs are both catalyzed and constrained by conditions of poverty. Poor individuals actively generate novel venture concepts in the early stages of business development. In later stages, however, they struggle to sustain those novel businesses. Ultimately, poverty limits entrepreneurs' capacity to profit from the creativity they bring to the marketplace. This paper elucidates the dual relationship between poverty and creativity, and helps explain why economic mobility via self-employment proves elusive for the poor.

Sociologists have long studied why the poor have limited prospects for economic mobility. Among contemporary sociologists, scholars argue that that the poor tend to stay poor because they face difficulties finding employment (Gangl 2006; Young 2012) and encounter precarious conditions in low-wage labor markets (Bernhardt, Spiller, and Polson 2013; Harris 1993; Edin and Lein 1997). Sociologists also emphasize the importance of structural disadvantages, such as educational inequalities (Bloome and Western 2011; Saporito and Sohoni 2007), limited access to resources (Small, Jacobs, and Massengill 2008), and shifting social welfare programs (Lobao and Hooks 2003; Kenworthy 1999) in hindering economic advancement.

While this literature has defined many forces that limit mobility, it has paid less attention to one of the most important income-generating activities in which the poor engage: self-employment. In both developed and developing economies, the poor often turn to self-employment as a means of earning income (Xavier, Kelley, and Kew 2013). Self-employment offers a useful alternative to wage labor, as many poor individuals face labor market discrimination and have difficulty finding formal employment (Venkatesh 2006; Duneier 2001). While much research has focused on economic mobility among immigrant entrepreneurs (Aldrich and Waldinger 1990), these individuals are not necessarily low income (Sanders and Nee 1996). Given that entrepreneurs account for 17% of low-income individuals in developing countries and 8% in developed countries (Global Entrepreneurship Monitor 2014), it is essential to consider how processes of self-employment hinder or promote economic mobility.

Businesses vary in their potential to generate income for entrepreneurs. Among other factors, small businesses that offer novel, unfamiliar products have greater potential for growth and profitability than businesses that replicate existing products (Storey 1994). I use the term "market creativity" to refer to the process of introducing a novel product or service in the marketplace. Small businesses that introduce novel products can differentiate themselves from competitors, create new demand among consumers, and potentially charge higher prices (Cobbenhagen 2000; Acs and Kallas 2008). Such possibilities extend to poor entrepreneurs, as well. Poor entrepreneurs whose products diverge from market norms can earn more income than entrepreneurs whose businesses offer more of the same (Bradley et al. 2012). Thus, one potential

avenue for enhanced economic mobility for poor entrepreneurs lies in behaving creatively in the marketplace and offering novel products.

While existing research provides many insights, it offers a conflicting vision of how poverty affects entrepreneurs' capacity to bring novel products to market. One stream of research suggests poverty limits market creativity. This body of work demonstrates that entrepreneurs who have wide social networks and extensive start-up capital are most likely to found businesses that introduce novel products (Florida and Kenney 1988; Ruef 2002). Poor individuals generally lack these important resources; they have more constrained social networks (B. H. Rankin and Quane 2000; Wacquant and Wilson 1989) and less capital to invest in new businesses (Yunus and Jolis 1999). Such research suggests that, as a result of limited social and financial capital, poor entrepreneurs found businesses that replicate existing goods rather than offering creative, novel products (Edminston 2008; Sherraden, Sanders, and Sherraden 2004).

Nevertheless, development scholars have suggested that market creativity may emerge under conditions of economic scarcity (Srinivas and Sutz 2008; Arocena and Sutz 2003). Indeed, scholars have found low-income entrepreneurs offering novel products in Thailand (Wherry 2008), Kenya (Bradley et al. 2012), and the Dominican Republic (Bradley, Artz, and Hulett 2012). Such works suggests that if "necessity is the mother of invention," then the poor should be among the most creative actors in the marketplace.

The current literature thus offers conflicting understandings of the relationship between poverty and market creativity. On one hand, research shows the poor lack the wide social networks and extensive financial capital associated with bringing novelty to market. On the other, scholarship suggests that conditions of economic scarcity may encourage poor entrepreneurs to behave creatively in the marketplace. Given these conflicting expectations, it is unclear when conditions of poverty encourage or constrain market creativity. Moreover, since poverty may hasten *and* hinder market creativity, a single entrepreneur may experience both effects at different points in the entrepreneurial process. That is, poverty may be associated with increased market creativity at certain stages of business development, but may also be associated with decreased market creativity at other points. To investigate this possibility, this paper asks: How does the relationship between poverty and market creativity vary across stages of business development?

I investigate this question using interviews with 41 poor entrepreneurs and a nationally-representative survey. Both types of data come from Panama. The dual nature of these data allows for 1) a qualitative analysis of the processes by which poverty encourages and constrains market creativity and 2) a descriptive overview of self-reported business novelty among the poor. The quantitative data show that poverty is associated with different levels of market creativity in the early and established stages of business development. The qualitative data reveal the processes through which poverty facilitates and then constrains market creativity. In the early stages of development, individuals who live in poverty are pushed to develop locally-unfamiliar knowledge that they can use to found novel businesses. Yet once individuals found novel businesses, poverty makes it difficult for entrepreneurs to keep unfamiliar products on the market. Thus, creative business ideas flourish in conditions of poverty, but those same conditions make it challenging for poor entrepreneurs to profit from their creativity. The findings reveal the dual relationship between poverty and market creativity and help explain why self-employment rarely serves as an avenue of economic mobility among the poor.

This paper makes three central contributions to the sociology of development. First, it complements studies that focus on medium- and large-scale businesses as drivers of growth and investment (Schrank 2008; Evans and Timberlake 1980; Haggard 1990). By examining the potential of small-scale entrepreneurs to foment economic advancement, this paper shows the process by which small business owners might—but often do not—contribute to economic growth. In doing so, it emphasizes small-scale businesses as relevant players in developing markets, although they are often overshadowed in the literature by large, multinational firms (Cohn 2012). Second, the paper challenges the notion that entrepreneurs who are motivated by economic necessity found businesses with low growth potential (Acs and Kallas 2008; Wong, Ho, and Autio 2005; Tambunan 2006). By attending to early-stage business development, this paper shows how entrepreneurs facing economic necessity found ventures that contain the initial seeds of growth and creativity. Third and finally, it speaks to feminist scholarship on microenterprise development. This paper shares with the gender literature an essential interest in understanding the micro-level processes that hinder and encourage mobility among socially marginalized entrepreneurs. While the gender literature focuses on women's access to credit (Blumberg 1995; K. N. Rankin 2001) and their control of household resources (Grasmuck and

Espinal 2000), this paper introduces market creativity as a new dimension that must be considered if we seek to understand why poor entrepreneurs tend to stay poor.

Research Context and Definitions

Panama is a particularly illuminating context in which to examine the relationship between poverty and market creativity. Poor entrepreneurs in Panama can found new businesses with relatively little financial investment and limited or no need for government permits (NTR 2011). Whereas individuals in locations with high taxes or regulatory barriers might be discouraged from starting businesses, poor individuals in Panama experience few external constraints. These conditions encourage self-employment. In 2009, 12% of the population owned or was in the process of starting a business, and 40% of those entrepreneurs were low-income (Global Entrepreneurship Monitor 2009). In this paper, individuals are classified as "poor" or "low-income" if their individual income falls below two times the national poverty line. This classification is a common marker of relative, rather than absolute, poverty (Dinan 2009). In Panama, twice the poverty line amounts to approximately \$6 per day, or less than half the minimum daily wage (Ministerio de Economía y Finanzas 2008).

I use the term "market creativity" to capture the process of founding a business that offers novel products. This process consists of 1) generating the knowledge and skills that one uses to found the business and 2) offering novel products to consumers. The individual who conceives of a novel business, but does not act on that idea, has not engaged in market creativity.

I define products as "novel" when they are materially or culturally unfamiliar to consumers. Following the Schumpeterian (1947) distinction, novel products reflect an "adaptive" rather than a "creative" response in the marketplace. Novel products contain minor adjustments to existing product offerings and reflect an "expansion within [an industry's] existing practice," rather than introducing products that fall "outside the range of existing practice" (Schumpeter 1947, 150). For example, the entrepreneur who introduces fruit smoothies in a produce market offers a small variation on that market's existing offerings (whole fruits and vegetables), and thus offers a novel product. Such novel products are not *necessarily* more desirable to consumers than existing products—they are simply different than what is currently available.

Additionally, novel products include those products that were previously unavailable in the local market. Such products may be marginally or drastically different from extant offerings.

For instance, the entrepreneur who opens the first internet café in a rural community offers a novel product since consumers could not access that service in the market previously. The existence of internet cafes in other communities does not negate the product's novelty in the focal community. Indeed, novelty is contextually relative—goods and services that are familiar in one location may be novel in another (Strang and Soule 1998).

Novelty differs from the concept of "innovation" often employed in sociological and managerial research. Innovation refers to breakthroughs in the sciences (Lee and Schrank 2010) or unprecedented recombinations of products or processes in the marketplace (Schumpeter 1939; Von Hippel 1988; Kanter 2000). Innovation is seen as the result of risky research, joint ventures, technological training, and higher education (Kanter 1983). It can be stifled or catalyzed depending on organizational context (Jacobs 1981; Kanter 1983; Hage and Aiken 1970). As compared to innovation, novelty is smaller and more mundane. It does not revolutionize industries, it merely alters the range of products in a local market. Nevertheless, novelty appropriately captures the creative impact of small-scale businesses owned by the poor. "It is the ability of the smaller firm to provide something marginally different, in terms of product or service, which distinguishes it from the more standardized product or service provided by a larger firm" (Storey 1994, 11). Although novelty does not have the disruptive potential of innovation, it does have the potential to boost the incomes of low-income entrepreneurs (Bradley et al. 2012; Bradley, Artz, and Hulett 2012) and promote growth in poor communities (Edminston 2008; Acs and Kallas 2008).

Poverty and Market Creativity

Poverty as a Limiting Factor

Research from sociology and social psychology elucidates why poor entrepreneurs should be unlikely to offer novel products. Scholars have demonstrated that individuals generate creative ideas when they have wide social networks from which they access diverse information (Burt 2004; Perry-Smith 2006; Rodan and Galunic 2004). Scholarship examining the conditions that favor innovation sheds light on when to expect the emergence of novel ventures. In this literature, scholars emphasize the importance of participating in information-rich social networks. Entrepreneurs who participate in mentorship programs, informal industry networks, and professional forums demonstrate increased alertness to new business opportunities (Ozgen

and Baron 2007). Entrepreneurs whose firms have wider network ties to other firms and research institutes are more likely to offer innovative products (Rothwell 1991). Entrepreneurs are also more likely to generate innovative businesses when they base venture ideas on abstract "directed discourse" with experts than when their ideas come from discussions with close ties. Given the importance of wide social networks in facilitating innovative entrepreneurship, it is reasonable to expect that extended social networks also catalyze novel business activity.

However, low-income individuals tend to have smaller social networks and depend heavily on close ties for information. Those who live in impoverished communities have more limited social networks than wealthier individuals in the same regions (B. H. Rankin and Quane 2000; Tigges, Browne, and Green 1998; Wacquant and Wilson 1989). Poor individuals turn to kin and friends for financial assistance (O'Brien 2012), day-to-day survival needs (Domínguez and Watkins 2003), and social support (González de la Rocha 1994; Kana'iaupuni et al. 2005). Such extensive reliance on close "bonding" ties rather than weak "bridging" ties means that low-income individuals have less access to information outside their local communities (Green, Hammer, and Tigges 2000). Moreover, low-income entrepreneurs have been shown to rely on local peers to develop and sustain their businesses, rather than seeking out information or support from beyond their communities (Venkatesh 2006). Such reliance on close ties should hinder entrepreneurs from developing creative business ideas and founding novel ventures.

Additionally, scholars view access to capital as a barrier to market creativity for poor entrepreneurs. External sources of funding encourage creative business activity at both the industry (Kortum and Lerner 2000) and firm (Lynskey 2004) levels. External funding allows entrepreneurs to take risks on creative products and services (Florida and Kenney 1988) rather than adopting more conventional approaches. Low-income entrepreneurs have less access to external funding sources; instead, they rely on family, friends, and personal savings to start new businesses (Sherraden, Sanders, and Sherraden 2004; Yeboah 2008; Zuiker 1998). This literature suggests that, without access to external funding, poor entrepreneurs lack the necessary start-up capital to found businesses that diverge from market norms.¹

Poverty as a Facilitating Factor

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¹ Proponents of microfinance have attempted to fill this external funding gap (Yunus and Jolis 1999). However, most microfinance institutions provide funding to existing businesses rather than start-ups, which are perceived as riskier investments.

While most research depicts poverty as constraining market creativity, some work suggests that conditions of poverty encourage the emergence of novel products. A group of development scholars posits that market creativity does indeed exist where resources are limited, but that such creativity is likely to unfold differently in conditions of scarcity and conditions of abundance (Arocena and Sutz 2003; Srinivas and Sutz 2008). They emphasize that creativity in the marketplace may result from the absence of necessary tools: "rather than starting with available inputs, innovation often starts facing the lack, weakness, or inadequacy of inputs of several different kinds" (Srinivas and Sutz 2008, 131). These scholars argue for a more heterogeneous understanding of creative market processes that accounts for the influence of cognitive, historical and institutional forces under conditions of economic scarcity (Srinivas 2012). Yet while scholars have stressed the theoretical importance of understanding how novelty emerges in conditions of scarcity, they have yet to provide empirical evidence outlining how this process unfolds.

Although existing literature does not yet explain *how* poor entrepreneurs bring novelty to market, it shows that the poor do, indeed, offer novel products. In Thailand, for example, scholars have shown that entrepreneurs blend foreign designs with traditional techniques to create novel versions of standard artisanal crafts (Wherry 2008). Researchers have also identified market creativity among low-income entrepreneurs in the Dominican Republic (Bradley, Artz, and Hulett 2012) and Kenya (Bradley et al. 2012), demonstrating that entrepreneurs who sell novel goods out-earn entrepreneurs who offer more of the same. These examples suggest that, rather than being constrained to product replication, poor entrepreneurs have the capacity to bring a range of creative, unconventional products to market.

Together, these literatures offer seemingly inconsistent understandings of the relationship between poverty and market creativity. If poor entrepreneurs face steep social and financial barriers to market creativity, how do many poor entrepreneurs bring novel products to market? In the remainder of this paper, I attempt to resolve this tension by elucidating the shifting relationship between poverty and market creativity at various stages of business development. I show that, although low-income individuals are pushed to generate novel business concepts, they struggle to sustain businesses that offer novel products when facing economic necessity.

Mixed Methods: Survey And Interview Data

Data for this study come from two sources—a nationally representative survey about entrepreneurship in Panama and 41 interviews with low-income entrepreneurs. The survey was conducted in 2009 by the *Instituto de Estudios Superiores de Administración*, under the auspices of the Global Entrepreneurship Monitor. It provides a contextual backdrop for the qualitative analysis, providing a macro-level snapshot of entrepreneurial activity in Panama. Interviews were conducted in Spanish by the author in 2011 and 2012. They serve as the primary data source for this paper and reveal micro-level processes through which poverty facilitates and then constrains market creativity.

The interview and survey data offer complementary (Small 2011)—though epistemologically distinct—insights into market creativity among low-income individuals. The survey data provide a cross-sectional overview of the relationship between entrepreneurs' income levels and self-reported market creativity. While documenting broad, descriptive trends, the survey data cannot explain *how* conditions of poverty affect market creativity. Thus, I use interview data to elucidate mechanisms linking poverty and market creativity at different stages of business development. Combining these data, the study relies on a sequential, mixed methodology (Creswell 2003). The descriptive statistics first provide a nationally-representative snapshot of entrepreneurial behavior, while interviews shed light on micro-level relationships between poverty and market creativity. In this way, the strengths of each type of data complement the weaknesses of the other (Brewer and Hunter 1989; Sieber 1973). This paper follows in the methodological footsteps of other mixed-method works (e.g. Cherlin et al. 2004; Small 2009b; Schrank 2008) by first using quantitative data to document curious trends, then digging deeply into the related micro mechanisms through qualitative analysis.

The qualitative data consist of interviews with low-income entrepreneurs in the capital, Panama City, as well as the rural province of Veraguas. Seeking to understand the processes driving market creativity, I adopted a "sampling for range" approach (Small 2009a) and sought out poor entrepreneurs who currently or previously owned novel businesses. This approach does not aim to generate a representative sample of interviewees, but rather targets those whose experiences or personal characteristics shed light on the mechanisms of interest. I relied on institutions—such as a microlending bank, the government ministry of small business, and a local chamber of commerce—to facilitate contact with low-income entrepreneurs. To recruit additional interviewees, I relied on snowball sampling. I also approached entrepreneurs

unannounced at their places of work. Appendix B contains a sample of interview questions. The interviews were open-ended, semi-structured and lasted approximately one hour. The 41 interviewees described a total of 84 businesses. Of those businesses, 30 were novel. I classified businesses as novel when interviewees stated that the products they offered were previously unavailable in their local market and that most of their potential consumers were unfamiliar with those products. Table 1 summarizes the demographic and business characteristics of the interviewees and the businesses they described.

[Insert Table 1 here.]

I carefully read and coded the interview data to identify how poverty encouraged and constrained entrepreneurs. In total, the interviews yielded 346 pages of transcripts. I first open coded the transcripts (Corbin and Strauss 2008; Gioia, Corley, and Hamilton 2013), identifying basic components of poor entrepreneurs' experiences. I also coded aspects of entrepreneurs' social and economic environments that might influence the entrepreneurial process (e.g. family status, employment changes). I then axial coded the data (Corbin and Strauss 2008), organizing the open-codes according to more abstract categorical dimensions. This step allowed me to better describe the process by which poor entrepreneurs founded and struggled to sustain novel businesses. In a final step, I moved to a further level of abstraction by drawing connections among the second-order codes to identify overarching themes in the data.

In the process of coding and analyzing the data, I compared my emerging theories with the literature on entrepreneurial founding, innovation, and economic mobility. I cycled between ideas revealed in the data and ideas proposed by other scholars, paying particular attention to areas where my data diverged from previous works (Eisenhardt 1989). As I refined the theories, I continually referred back to the data, checking theoretical abstractions against the experiences described by entrepreneurs in interviews. The theories generated through this approach are not assumed to be exhaustive. The interview data indicate particular processes by which low-income entrepreneurs start and then struggle to sustain novel businesses. Yet alternative pathways may exist as well. The goal of this paper is not to delineate all possible processes by which the poor found and then terminate novel businesses, but rather to generate theory about the tools and conditions that facilitate such outcomes.

The Instituto de Estudios Superiores de Administración (IESA) in Panama City provided the survey data for this study. In collaboration with the Global Entrepreneurship Monitor (GEM), IESA conducted a stratified random sample of 2,000 Panamanian adults in 2009. They employed the GEM standardized sampling methodology and questionnaire. Appendix A describes the survey methodology. The survey provides detailed demographic information about each respondent, as well as information about self-reported entrepreneurial activity. I now turn to the descriptive results of the survey data.

Market Creativity In Panama: Demographic Trends

As a first step in considering the relationship between poverty and market creativity, I present data from a nationally representative survey on entrepreneurship in Panama. I use these data to establish broad trends in self-reported market creativity among low-, middle-, and highincome individuals. These data highlight an important and surprising tendency. Compared to wealthier entrepreneurs, low-income entrepreneurs report that they are similarly likely to offer novel products in the early stages of business development, but are far less likely to offer novel products in later stages. While suggesting macro-level trends, these cross-sectional data do not allow for causal claims, nor do they facilitate longitudinal analyses across development stages (Lieberson 1985; Lieberson 1980). Nevertheless, they provide a unique snapshot of the relationship between poverty and market creativity at the national level. These descriptive statistics set the stage for and are consistent with the qualitative data, which elucidate how poverty encourages creativity at early business stages, but stifles it at later stages of development.

The survey data measure self-reported market creativity across income groups and stages of business development. In accordance with the theoretical construct, I identify entrepreneurs as engaging in market creativity when they report offering a product that is materially or culturally unfamiliar to prospective clientele (Strang and Soule 1998). Following previous scholars (Johannessen, Olsen, and Lumpkin 2001; Global Entrepreneurship Monitor 2009; Hargadon and Douglas 2001; Schoonhoven, Eisenhardt, and Lyman 1990), I measure novelty via three dimensions—entrepreneurs' perceptions of consumers' familiarity with their products, the

² I am grateful to Professor Federico Fernández at IESA for generously sharing the survey data before it was available to the public.

presence of competitors, and the newness of technologies employed. Specifically, I code entrepreneurs as engaging in market creativity when they report at least one of the following: 1) all or some potential customers will find the products or services new and unfamiliar; 2) no other businesses offer the same product or service to potential customers; or 3) the technologies or procedures required for the products or services have been available for less than one year. When creating income groups, I rely on classifications from the World Bank and Panama's statistics bureau. I classify respondents as low income when their income falls at or below two times the poverty line (Ministerio de Economía y Finanzas 2008). I classify individuals as moderate income when they fall between twice the poverty line and the top income quartile as established by the 2010 census (Contraloría General de la República 2010). I classify individuals as high income when their income falls within the top income quartile (Contraloría General de la República 2010). I follow the Global Entrepreneurship Monitor's predetermined classification scheme to identify stages of business development (Xavier, Kelley, and Kew 2013). Entrepreneurs in the nascent stage report being engaged in startup efforts (e.g. organizing a business team, looking for a location, soliciting credit). Entrepreneurs in the young stage report having managed and owned a business for 3.5 years or less, while those in the established stage report having managed and owned a business for more than 3.5 years. Table 2 provides details on the survey measures and their corresponding theoretical constructs.

[Insert Table 2 about here.]

I use the survey data to provide descriptive evidence of poor entrepreneurs' tendency to offer novel products relative to that of their wealthier peers. Figures 1 and 2 offer descriptive evidence about the relationship between income and market creativity. Figure 1 displays the proportion of individuals within each income group who report novel business activity. Figure 2 displays the same information for traditional (non-novel) businesses. As these figures demonstrate, engaging in market creativity is uncommon at any business stage. Only 4% of the population surveyed reported founding or attempting to found novel businesses, and 9% reported founding or attempting to found traditional businesses.

[Insert Figures 1 and 2 about here.]

Figure 1 shows that, at the nascent stage, low-income individuals report comparable rates of starting up novel businesses (1.81%) relative to moderate-income individuals (2.11%). However, the proportion of low-income entrepreneurs who offer novel products declines in later

stages of business activity. At the established stage, only 0.41% of low-income entrepreneurs report novel business activity. By comparison, 1.87% of moderate-income and 2.56% of high-income entrepreneurs report novel activity in the established stage. Overall, the descriptive data suggest that low-income individuals are relatively active in the early stage of novel business development, but are underrepresented in more advanced business stages.

Figure 2 demonstrates that the trends above are unique to novel businesses, rather than businesses in general. As this figure shows, low-income entrepreneurs who report running traditional (non-novel) businesses do not display the same decline in representation across business stages. Rather than disappearing in the established stage, low-income entrepreneurs who offer traditional products make up 2.14% of their income group, a figure paralleling that of moderate-income entrepreneurs (2.34%). In the following sections I discuss qualitative data that reveal why low-income entrepreneurs have greater difficulty sustaining novel businesses, as compared to traditional businesses.

Overall, data from Figure 1 suggest a shifting association between poverty and market creativity across stages of business development. Low-income individuals report early attempts to offer novel products at rates similar to wealthier entrepreneurs; however, very few report owning longstanding novel businesses. These cross-sectional data offer a snapshot of intriguing trends in entrepreneurial activity. Yet they do not allow for differentiation among the variety of factors may contribute to these tendencies.

I now turn to the qualitative data to describe micro-level social mechanisms linking poverty and market creativity, the outcomes of which are consistent with the descriptive trends above. Drawing on interviews with entrepreneurs, I first outline how poverty encourages market creativity in the early stages, pushing low-income individuals to develop repertoires of unique knowledge when they migrate in search of educational and employment opportunities. I then describe how conditions of poverty stifle entrepreneurs' capacity to sustain the novel businesses they found. Since low-income entrepreneurs often start businesses in response to economic crises, and because they target low-income consumers, these entrepreneurs face steep challenges in keeping novel products on the market. The qualitative data thus reveal a set of mechanisms underlying the shifting relationship between poverty and market creativity, as poor individuals first gain the tools to found novel businesses, but later find those businesses difficult to sustain.

Migration and Market Creativity

In this section, I discuss how conditions of poverty encourage low-income individuals to migrate in search of employment and educational opportunities, as well as how such migration facilitates novel business founding. Most low-income entrepreneurs in this study described lives characterized by instability. For many, their neighborhoods or towns offer limited opportunities, and some felt those environments were unsafe. As a result, many interviewees chose to migrate. Still others stayed behind, but communicated regularly with migrant family and friends. Of the 41 low-income entrepreneurs interviewed, 22 described having migrated domestically or internationally before founding their businesses. Nearly all interviewees had family members who migrated within Panama. Interviewees who engaged in domestic migration either moved permanently to a new location—generally a rural-to-urban move—or engaged in return migration. Seven interviewees migrated to Panama from other Latin American countries.

Such high levels of migration are common in Panama. Many low-income Panamanians migrate from less-developed rural areas to Panama City and the provincial capitals in search of work and educational opportunities (Ministerio de Economía y Finanzas 2012). Many then return-migrate to their home communities following a period of work or study in an urban area. Additionally, Panama has high rates of immigration. As the fastest-growing economy in Latin America at the time of this study (CIA 2013), Panama has been a popular destination for immigrants from other Latin American countries (O'Neil, Hamilton, and Papademetriou 2005).

Although migration is often driven by necessity and takes place under inauspicious conditions, the movement of peoples from one location to another also facilitates the creation and assimilation of new knowledge. Through migration, low-income individuals develop skills, ideas, and access to materials, and they use that knowledge to found businesses that are novel in their local markets. Of the 30 novel businesses that entrepreneurs described in this study, 22 emerged from entrepreneurs' migratory experiences or discussions with other migrants. Table 3 summarizes the novel businesses and the type of migratory knowledge mobilized when bringing novel products to market.

[Insert Table 3 about here.]

³ I use the term "migration" to refer to domestic migration within Panama, as well as immigration to Panama from other countries.

For example, Oscar, ⁴ a 56-year old agriculturalist, applied the skills he developed in Panama City to found a novel business in his rural hometown. Oscar learned about coffee production from his parents, who were also agriculturalists. As an adult, he moved to Panama City to work with a government agricultural cooperative. There, he learned about organic agriculture techniques. He supplemented this experience with adult education courses on organic agriculture. When Oscar abruptly lost his government job following a national election, he described the transition in this way:

"Whenever there's a change of government, there are always people who go after your job. And someone fell in love with my job and they went after it. I said, 'Ok, no problem. I'm going home.' And that's when I started working here."

After losing his job, Oscar returned to his rural community, where he estimates that 90% of residents work in coffee production. He drew from his knowledge about organic agriculture from Panama City to launch a business that offered organic consulting to local coffee farmers. In Oscar's community, organic agriculture was virtually unknown. Local farmers took out loans for pesticides and chemical fertilizers to enhance crop production. Oscar believed local farmers would be interested in learning techniques that were less expensive and more environmentally friendly than current practices.

"I know a lot about the kind of production system that we should implement here in the region to maintain the health of the environment and the people here. [I started the business] so that people would copy what I was doing. I've done this with the few resources that I have to be an example for others, so they can see they don't need to go and get a loan [to buy fertilizer and pesticides]."

Oscar's experiences in Panama City encouraged him to see organic practices as an important aspect of agricultural production. Few agriculturalists in his rural community shared this knowledge. He combined his unique knowledge (organic agriculture techniques) with the specific conditions of his local community (coffee cultivation) to found the organic coffee

⁴ All names are pseudonyms. Interviews were conducted in Spanish and translated by the author.

consulting business. Oscar transformed the knowledge he gained in Panama City into a service he believed matched consumer needs in his local market. In doing so, he introduced a novel business in his rural hometown.

Another entrepreneur, 28-year-old Amaya, described how the knowledge she gained in the capital helped her conceive of the idea to start an internet café in her rural community. Amaya initially left her hometown because, as she explains, "It's a mess trying to find work here." After becoming pregnant with her first child, Amaya moved back home. She found a few temporary jobs after giving birth, but eventually was left without work. It was then that she and a friend came up with the idea to start an internet café in their community. While in Panama City, Amaya learned to use the internet. In her rural community, she saw that young people needed internet access, but had to travel long distances to find a connection.

"I really liked the internet café idea because there isn't anything like it here. Nowadays, for the majority of school assignments, it's like, 'Look it up on the internet! Go to the internet!' [...] But there isn't any [internet] here. You have to go all the way to [the regional capital] just to be able to get on the internet."

For Amaya, the technical knowledge she developed outside her home community helped her conceive of starting an internet café, a novel business in her local market. While this business would not have been novel *outside* her local community, it nevertheless would have been novel in her home market.

While some entrepreneurs have direct migratory experiences, others draw from the knowledge of migrant friends and kin. These entrepreneurs learn about the products available outside their hometowns by talking with or visiting those who have relocated. When pressed to start small businesses, these individuals use information and goods provided by migrants to found novel ventures.

For example, 25-year-old Yurielis sought information and materials from her sister in Panama City in order to bring a unique product to her rural community. With only \$100 to invest in her business, Yurielis wanted to sell "American clothing"—used clothing that is considered inexpensive and high quality. She knew from talking with her sister that American clothing was available in bulk packages in the capital:

"My sister was working in Panama City. I told her, get me a quote for a package of American clothes there in the city. This was to see how much it would cost me. She got the quote in Panama City and she brought [the package] here to me."

Yurielis's relationship with her sister served as a bridge between two markets. Through this family tie, Yurielis channeled locally unfamiliar goods and information to introduce a new product in her community. Entrepreneurs like Yurielis turn to migrant family and friends to share information, learn new skills, and source new products. In this way, even non-migrants have access to market knowledge that transcends the boundaries of their localities.

Low-income individuals with direct or indirect migratory experiences gain knowledge—skills, information or goods—that can be used as fodder for novel products. However, poor entrepreneurs have difficulty keeping novel products on the market. In the following section, I describe why low-income entrepreneurs struggle to sustain novel businesses.

Sustaining Novelty in the Marketplace

Although sustaining a novel business is challenging for any entrepreneur, doing so is particularly difficult for poor entrepreneurs. I outline two central factors that hinder market creativity among the poor. First, many poor individuals reported founding businesses in response to economic crises. As a result, they had little time to vet and develop their business ideas, and many sold products that did not match demand. Second, poor entrepreneurs marketed their goods to poor consumers, who are loath to experiment with unfamiliar products. These factors made it difficult for low-income entrepreneurs to sustainably profit from their market creativity. As an overview, Table 4 summarizes the relationship between poverty and the founding and sustaining of novel businesses.

[Insert Table 4 about here.]

Founding Embryonic Novel Businesses

Many poor entrepreneurs started a business in response to unexpected financial hardship. Following the shock of job loss, reduced wages, or a death in the family, they turned to self-employment as a means of generating income. This tendency occurred among entrepreneurs who founded novel businesses, as well as those who founded businesses that replicated familiar products and services. Entrepreneurs interviewed for this study described founding 61 businesses (of 84 total businesses) in response to financial necessity or crisis. Table 5 characterizes the five

main necessity-driven motivations entrepreneurs cited in founding new businesses, along with the frequency at which they cited those factors.

[Insert Table 5 about here.]

Individuals motivated by financial necessity are pushed to act on embryonic business ideas. Consider Lorenzo, a 23-year-old immigrant from Colombia who worked at a call center in Panama City before starting a business. He previously studied sound engineering at a Colombian university, but postponed his studies upon immigrating to Panama. Lorenzo had a natural talent for languages; he taught himself English and Italian by watching foreign television shows on YouTube and chatting with native English and Italian speakers online. He put these skills to work at the call center, where the pay was low but nevertheless supported his mother and teenage sister. Importantly, it was also one of the few jobs that did not require a work permit.

When Lorenzo lost his job unexpectedly, he saw few employment options for someone without a work permit. As an alternative to wage labor, he decided to start a novel language tutoring business. Lorenzo drew from his own language skills, as well as those of his polyglot immigrant friends, to found a business that offered tutoring in English, Italian, Portuguese, and Creole, among other languages. Within one week of losing his job, Lorenzo recruited his friends as tutors, posted advertisements online, and found his first client. A few days after starting the new business, Lorenzo described conceiving of the idea: ⁵

Interviewer: So had you had this idea for a long time? Of starting this language academy?

Lorenzo: You know what? I just came up with that. "Hey I can teach English" or "I can teach Italian." And then...

Interviewer: When did that idea come up?

Lorenzo: A few days ago! If I have the ideas and if that looks good...I just start it.

Interviewer: Just go for it?

Lorenzo: Yeah. So I just came up with the idea, like, "Hey, I can teach them languages." Right? And then, the idea of the academy. I mean the academy idea was like, "I have a lot of friends that speak languages." Right? Like French, Italian, English, Portuguese. And

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⁵ These excerpts come from an English language interview.

they are in the same situation as me. They're trying to find a job [and it's not] that easy. So why don't I create something where they can work, they can make some good money just doing what they already know how to do. [...] So that's why I came up with that idea. Just like one week ago. I mean, I already started.

After running the business for one month, Lorenzo had only a handful of clients although he continued to advertise online. Though disappointed with the slow start, he described the need for patience:

"I mean, you know, it's like the beginning of everything. Everything goes slow. I don't have too many students right now, but, you know, I just have to be patient. [...] I haven't lost my motivation or something like that. It's like that at the beginning."

One month later, however, Lorenzo terminated the business. Since he could not generate sufficient income to support his family, he searched for and found work at a call center.

Lorenzo launched his business quickly—and creatively—using the skills he and his friends brought to Panama from foreign countries. Yet in his haste to found a new business, Lorenzo invested little time in developing and refining his idea. Entrepreneurs facing different conditions might investigate questions such as: Is there demand for exotic language tutoring in Panama City? How do other language tutors recruit clients? Yet Lorenzo's situation encouraged him to act rather than reflect. He founded a business that effectively utilized the tools he and his friends possessed, but did not match existing demand right away.

Poor Consumers Resist Experimenting with Novel Products

The second challenge low-income entrepreneurs face relates to their consumers. Poor entrepreneurs in this study often started businesses in their homes or close to their homes; this meant their potential clients also tended to be low-income. Consumers who struggle to afford basic necessities are reluctant to purchase goods or services of uncertain value. Individuals with low levels of income and educational attainment adopt novel practices more slowly than individuals who have higher socioeconomic standing (Cancian 1967; Gartrell 1977). Poor entrepreneurs found that their low-income clientele were unwilling to purchase unfamiliar products at the outset.

Recall Oscar, the entrepreneur who started an agricultural consulting business in his rural community. He quickly discovered that coffee farmers in his area could not afford his services.

"I tried [agricultural consulting]. But I really regretted it afterwards because in this region people are poor. They don't have a lot of resources. They're not going to pay what it costs to make running the business worthwhile."

Upon realizing that the poor farmers in his area could not afford organic consulting services, Oscar terminated his novel business. He began farming his own small plot of land and founded a non-profit organization to teach local farmers about organic practices. Through his non-profit, Oscar discovered local farmers were eager to learn organic techniques, but only when the instruction was free of charge. As this example suggests, low-income consumers may view novel products as useful, but may not have the means to purchase non-essential goods. This reluctance towards unfamiliar products makes it difficult for low-income entrepreneurs to sustain novel businesses, particularly if they need those businesses to generate income quickly in response to a crisis.

Another entrepreneur succinctly summed up the situation in describing a nascent business he struggled to launch. Ronald, a 46-year-old Veraguas resident, attempted to start a business selling a board game about Panamanian history. He knew local consumers would require time to become familiar with the game and that he would not earn profits right away. To overcome this limitation, he applied for a loan from a microfinance institution, but decided he could not afford the \$90 monthly payments. Ronald felt frustrated because he anticipated the business would not earn profits for at least a year: "And what am I going to do during that time? My other businesses aren't very strong. They can't support me. There's no way that I can start a business that won't earn money for year."

By comparison, entrepreneurs who founded traditional businesses often earned modest profits right away, even when serving low-income customers. These entrepreneurs offered products that local individuals consumed regularly and understood as valuable. For instance, 26-year-old Angela started a business selling chicken after her son's father died suddenly. Angela previously depended on her son's father to provide child support, and she struggled to support her family without those funds. Angela learned about handling livestock from her father, who lived in the same rural community. She reported that three other individuals in her community

also sold chicken. As she explains, "Here in [this community] you can make decent money working in agriculture, working with chicken and pork." Indeed, chicken is a staple of the Panamanian diet and is often eaten at both lunch and dinner. Angela quickly earned profits by selling chicken:

"[At first] I had to go from store to store, from house to house saying, "Look, I'm selling chicken!" Things like that. And that's how I sold them. [...] Now I start here [on this street] and say, 'Hey, I'm selling chicken! Tomorrow I'm butchering chicken!' Like that. Then I go to the market and I ask [the vendor who resells the chicken], "How many [chicken] do you want?" That's how I do it. [...] If I have to carry the chicken around town in a tank, I'll do it. Because that's how I did it at the beginning."

Upon starting her business, Angela sold a product for which consumers already had a well-developed demand. Her neighbors knew they needed chicken and knew approximately how much it should cost. Unlike novel products, traditional products require no experimentation or period of familiarization. As soon as Angela brought her product to market, she—like her competitors—was able to earn a modest profit. Although she may have had greater long-term earning potential with a novel product, she generated cash quickly by being the fourth chicken vendor in her community. In this way, founding a traditional business allowed her to overcome the immediate financial crisis of losing her son's father.

Counterexample: Novel Business Success

I have argued that, although poor entrepreneurs may have the tools to bring novel products to market, few can sustain novel businesses. Despite the challenges they face, certain poor entrepreneurs succeed in sustaining novel businesses. In this section, I describe the process by which one poor entrepreneur founded and successfully sustained a novel business. Her experiences differ in important ways from the founding experiences of many poor entrepreneurs. In its uniqueness, this individual's case highlights the challenges poor individuals face when engaging in market creativity, as well as the ways in which these challenges might be overcome.

At 26 years old, Rubi lived with her husband and two small children in a simple concrete home in rural Panama. Rubi's husband had low-paid but stable work repairing cell phone antennae. Rubi devoted most of her time to raising her children and occasionally sold homemade popsicles to a local grocery store to earn extra money. Hoping to expand her employment

possibilities, she enrolled in low-cost, adult education courses at a university in the regional capital. While taking these courses, Rubi learned to use computers and navigate the internet. She found that she enjoyed using computers and needed them to complete her school assignments. Rubi and her husband saved funds to buy a used computer and established an internet connection at home. They installed the computer in their living room. Soon after, local children started knocking on their door.

"[The kids] had seen that I had a computer, but [they knew] the internet was just for me. They would come [and say], '[Rubi], will you look this up for me? Will you do who-knows-what for me?' So I thought, 'Well, why don't I start an internet café?'"

Rubi did not act on the idea immediately, but further developed the concept in one of her adult education courses by crafting a mock business plan.

"For our second assignment, the professor had us make a plan for the future. You know, like an imaginary project. So I thought, 'Why don't I do something that we don't already have in the neighborhood?' And the professor really started to encourage me."

Based on the interest she received from neighborhood children, Rubi already knew that local consumers might be interested in an internet café. She outlined a number of additional advantages in the business plan.

"I knew I would make more money doing this than anything else. There are beauty salons and things like that, but they're not going to give you the kind of profits you can earn with an internet café. [...] Here in the community there are two little grocery stores. Why would I start another one? Starting an internet café was the best option. Plus, there are only ten houses around here that have computers and mine is the only one with internet. That was another advantage for me."

With their small but stable income, Rubi and her husband knew their family could survive without initial profits from the business. They saved their money to purchase an additional used computer—of which Rubi says, "I can't even say it was secondhand, it was more like thirdhand," and posted a handmade sign reading "INTERNET CAFÉ" in their front yard.

The new venture struggled at first. Rubi recalled a two-month period during which the business was so slow that she contemplated shutting it down. On a few occasions, she closed the café during normal business hours because few customers visited. But she and her husband

persisted, and eventually business picked up. At the time of the interview, the internet café had been operational for over a year.

Rubi and her husband planned to use the profits from the business to build an additional room on their home to expand the café. As a testament to this plan, a pile of approximately 40 cinderblocks sat in their front yard at the time of the interview. Rubi explained that they purchased construction materials in small batches when they could afford it, slowly accumulating enough materials to construct a space dedicated to the business.

As compared to other entrepreneurs discussed in this paper, Rubi's case is unique in two important ways. First, she did not found her business in response to a financial crisis. If Rubi needed to earn money quickly, she would have been forced to close the venture in the first two months when business proved slow. But since the couple could rely on a small, stable income, she was able to keep the business open during a low-profit period while local consumers became familiar with her novel service. Second, Rubi invested time in evaluating the feasibility of the concept. She considered evidence of existing demand, examined alternatives, and discussed the viability of her plan with others. Rubi did not rush the business to market, but considered the decision carefully before acting. Given her family's modest financial security, Rubi had the luxury of developing her venture idea and then sustaining the business when profits were not immediately forthcoming.

Discussion: Poverty and Market Creativity

In clarifying the relationship between poverty and market creativity, this paper attends to "a process of real importance that is being sidelined [in the literature]" (Srinivas and Sutz 2008, 131). It first uses descriptive survey data to show that low-income individuals report moderate levels of novel business activity in early stages of development, but very little novel business activity in the established stage. Then, interviews with poor entrepreneurs reveal social processes that parallel these descriptive trends. These data show how poor individuals are pushed to migrate in search of educational and work opportunities. Through their migration experiences, as well as those of kin and friends, poor individuals gain knowledge that differs from familiar, local knowledge. Poor individuals use this unique knowledge to bring novel products to market. Yet the conditions under which the poor found new businesses make them difficult to sustain.

Responding to financial emergencies, poor individuals invest little time in vetting business ideas.

Moreover, they found businesses in areas where consumers are also poor and cannot afford to experiment with unfamiliar products. Poor entrepreneurs do not have the funds to keep unprofitable businesses on the market while consumers become familiar with unconventional products. As a result, they pull novel products from the market, eliminating the possibility that they will profit from their creativity.

This paper has two limitations that create new opportunities for future work on poverty, creativity, and self-employment. First, this study focuses on how individuals develop knowledge through migration. While this focus is appropriate to conditions in Panama, it may not capture the diffusion of knowledge in other settings. For instance, internet penetration may be a key mechanism facilitating supralocal knowledge in more developed economies. Future research should consider whether other forms of knowledge diffusion in low-income areas increase market creativity.

Second, individuals in Panama cannot easily share funds with family in distant locations. In other developing countries, mobile technologies allow the poor to transfer and receive funds easily (Maurer 2012) and serve to buffer households against economic shocks (Jack and Suri 2014). Research shows that such mobile financial tools are associated with increased investment in entrepreneurial assets (Yenkey, Doering, and Aceves 2014). Future work should examine how poor entrepreneurs use financial technologies to access the funds necessary for sustaining novel businesses in early stages of development.

Implications for Entrepreneurship, Creativity, and Economic Mobility

The present paper expands our understanding of the relationships among entrepreneurship, migration and economic development. Previously, scholars have productively demonstrated how migration patterns affect and are affected by economic growth in developing countries (Kentor and Sanderson 2009; Sanderson 2013). Yet in elucidating these macro-level trends, scholars have paid less attention to the micro-sociological processes that accompany migration and self-employment, particularly among poor entrepreneurs. A full account of self-employment requires an examination of the nexus of poverty, small business founding, and economic mobility.

The present paper contributes to this literature by elucidating how migration and selfemployment are uniquely intertwined for the poor. Focusing on the early stages of business development, this work highlights the elusive, often fleeting, nature of creative economic action in conditions of poverty. It demonstrates how the poor generate novel ideas as a result of domestic and international migration, much in the same way that highly-educated, elite entrepreneurs have been shown to develop product innovations through transnational migration (Agrawal et al. 2011; Saxenian 2006). Highlighting the role of migration in early-stage creativity, the findings from the present study encourage scholars to reconsider the view that low-income markets are spaces of replication and repetition (Sherraden, Sanders, and Sherraden 2004). Instead, it offers a view of poor communities as hotbeds of intensive, but short-lived, creativity.

More broadly, this paper aids in reconciling two divergent views about the relationship between necessity and creativity beyond the bounds of self-employment. On one hand, scholars do not expect individuals motivated by necessity to engage in creative economic action (Shah, Mullainathan, and Shafir 2012). When the stakes are high, individuals who face financial pressures tend to rely on familiar ways of doing things, rather than experimenting with untested approaches (March and Shapira 1988; Mueller, Melwani, and Goncalo 2012). Yet another school of thought promotes the perspective that creativity flourishes under pressure. This approach is summarized in the familiar phrase, "Necessity is the mother of invention." Indeed, the innovation literature is rich with examples of challenging circumstances that encourage the generation of novel ideas. Creative ideas emerge, for instance, when individuals are stretched to think beyond their areas of expertise (Kanter 2000) or when new employees challenge existing organizational practices (March 1991).

To resolve the apparent inconsistencies in these approaches, it is essential to differentiate between *generating* creative ideas and *profiting* from creative ideas. At the knowledge development stage, individuals facing necessity are encouraged to think creatively. These actors must look beyond traditional frameworks of economic action and generate creative alternatives to the normative set of products and practices in the marketplace. And yet, actors facing economic necessity may struggle to profit from their novel additions to the market. Consumers require time to adapt to market changes. If individuals face immediate necessity, they cannot sustainably invest in unusual products or practices that do not generate quick returns. Necessity facilitates creative ideation, but ultimately promotes market isomorphism by hindering the sustainable sale of creative goods.

Finally, this paper demonstrates how self-employment has the potential to serve as an avenue of "palliative development." Palliative development policies "immediately [reduce] poverty by raising the employment and income of the lower classes" (Cohn 2012, 2) and focus on "stimulating small labor intensive enterprises that provide services and employment to the local population" (Cohn 2012, 165). Based on the present study, national governments might take two steps to encourage greater success among low-income entrepreneurs who bring novel products to market. First, governments could provide incubation centers to help poor entrepreneurs develop and vet novel business ideas. Such incubation centers would go beyond basic business training and would focus instead on refining businesses that bring unfamiliar products to market. Second, governments could provide cash grants to entrepreneurs who have particularly promising novel business ideas. By providing such grants, governments could help poor entrepreneurs with promising ventures overcome initial periods without profit. Indeed, recent programs providing entrepreneurial training and small cash grants to poor women found significant income increases within one year (Blattman et al. 2013). Programs like these might produce even more powerful outcomes if they targeted poor entrepreneurs with novel businesses. Ultimately, policies that promote novel businesses could achieve "double dividends" (Edminston 2008), with poor entrepreneurs earning higher incomes and local economies becoming more productive and efficient.

Conclusion

This paper takes a mixed-methodological approach to studying the relationship between poverty and creative action in self-employment. It demonstrates the shifting association between poverty and market creativity across the business development process. In early stages, poor individuals are pushed to generate novel business concepts, but in later stages, those individuals find that conditions of poverty make novel businesses difficult to sustain. Although selling novel products offers greater potential profits to poor entrepreneurs and opens a possible avenue for economic mobility, the poor are generally stymied in their nascent attempts to profit from the sale of novel goods and services. With many poor individuals in developing and developed countries turning to self-employment as a means of generating income, this paper elucidates an important means by which low-income individuals attempt—but often fail—to climb out of poverty.

Appendix A: IESA National Entrepreneurship Survey

Under the auspices of the Global Entrepreneurship Monitor, the *Instituto de Estudios* Superiores de Administración (IESA) conducted a stratified random sample of the Panamanian adult population during May and June of 2009. The population universe includes all adults ages 18 to 64, excluding those who live in the indigenous provinces and the province of Darién. IESA researchers used Panamanian census data to stratify the sample by province, district, and subdivision (*corregimiento*). The resulting sample reflects the population density of each geographic unit.

IESA researchers then randomly selected 1) neighborhoods within each subdivision, 2) households within each neighborhood, and 3) adults within each household. If the selected respondent could not be located, the researchers returned up to three times to locate the randomly selected individual. They surveyed no more than one respondent per household, no more than three respondents per block, and no more than 12 respondents per neighborhood. The survey generated 2,000 respondents.

Appendix B: Interview Guide, Selected Questions

- 1. How long have you had this business?
- 2. Is this your first business or have you had others in the past?
 - a. *For multiple ventures*: I would like to make a timeline to better understand your business history. For each business that you launched or began working on and then stopped, please tell me: when you started; how long you owned the business/worked on the business idea; and the products/services offered.

For each business mentioned:

- 1. Did you work prior to starting this business? If so, what did you do?
- 2. Do you have a business partner?
 - a. Does your family help you with the business? If so, how?
- 3. How did you decide to sell this product/offer this service?
 - a. Did you have previous experience in this field?
 - b. Did you have any friends or family who work in this field?
 - c. There are many kinds of businesses that you *could* have opened. Why did you want to open this type of business?
- 4. Who are your competitors?
 - a. Where else can your customers find this product/service?
 - b. Were most people in this area familiar with your product/service before you started the business?
- 5. What did you do/do you do to promote the business and reach out to new clients?
 - a. *For novel businesses:* What did you do to teach clients about the new product/service you offered?
- 6. Who do you talk with when you have to make a decision about your business?
 - a. Who have been the five most important people in helping you maintain this business?
 - b. Do you participate in any business discussion/networking groups?
- 7. For established ventures: Can you tell me about a time when you thought the business would not survive? What made this time so difficult?
 - a. How were you able to sustain the business in the face of this difficulty? Did anyone support you?
- 8. For established ventures: Maintaining a venture is often difficult. In your experience, what has been the most important factor in keeping your business going?
 - a. How important have the following factors been in maintaining your business: capital, business location, support from others, and clientele? Which of these factors do you think is most important/least important relative to the others?
- 9. For terminated ventures: Maintaining a venture is often difficult and many businesses fail. In your experience, what was the most important factor in your decision to close your business?
 - a. How important were each of the following factors in the decision to close your business: capital, business location, support from others, and clientele?
- 10. How much money did you need to get the business running? How much money did you invest as start-up capital?
 - a. Entrepreneurs gather start-up capital from a variety of sources. Did you use savings, family support, bank loans or another means to start your business? How much of your start-up capital came from each source?

References

- Acs, Zoltan J., and Kadri Kallas. 2008. "State of Literature on Small- to Medium-Sized Enterprises and Entrepreneurship in Low-Income Communities." In *Entrepreneurship in Emerging Domestic Markets: Barriers and Innovation*, edited by Glenn Yago, James R. Barth, and Betsy Zeidman, 21–45. New York: Springer.
- Agrawal, Ajay, Devesh Kapur, John McHale, and Alexander Oettl. 2011. "Brain Drain or Brain Bank? The Impact of Skilled Emigration on Poor-Country Innovation." *Journal of Urban Economics* 69 (1): 43–55.
- Aldrich, Howard, and Roger Waldinger. 1990. "Ethnicity and Entrepreneurship." *Annual Review of Sociology* 16: 111–35.
- Arocena, R., and J. Sutz. 2003. "Inequality and Innovation as Seen from the South." *Technology in Society*, Studies in Science, Technology, and Society (STS) North and South, 25 (2): 171–82.
- Bernhardt, Annette, Michael W. Spiller, and Diana Polson. 2013. "All Work and No Pay: Violations of Employment and Labor Laws in Chicago, Los Angeles and New York City." *Social Forces* 91 (3): 725–46.
- Blattman, Christopher, Eric Green, Jeannie Annan, and Julian Jamison. 2013. "Building Women's Economic and Social Empowerment Through Enterprise: An Experimental Assessment of the Women's Income Generating Support (WINGS) Program in Uganda." New Haven Conn.: Innovations for Poverty Action.
- Bloome, Deirdre, and Bruce Western. 2011. "Cohort Change and Racial Differences in Educational and Income Mobility." *Social Forces* 90 (2): 375–95.
- Blumberg, Rae Lesser. 1995. "Gender, Microenterprise, Performance and Power: Case Studies from the Dominican Republic, Guatemala, and Swaziland." In *Women in the Latin American Development Process*. Philadelphia: Temple University Press.
- Bradley, Steven W., Kendall Artz, and Jimmy Hulett. 2012. "The Innovation Necessity: Evidence from Microcredit in the Dominican Republic." *Journal of International Development* 24 (January): S112–21.
- Bradley, Steven W., Jeffery S. McMullen, Kendall Artz, and Edward M. Simiyu. 2012. "Capital Is Not Enough: Innovation in Developing Economies." *Journal of Management Studies* 49 (4): 684–717.
- Brewer, John, and Albert Hunter. 1989. *Multimethod Research: A Synthesis of Styles*. Sage Library of Social Research. Newbury Park, Calif.: Sage Publications.
- Burt, Ronald S. 2004. "Structural Holes and Good Ideas." *American Journal of Sociology* 110 (2): 349–99.
- Cancian, Frank. 1967. "Stratification and Risk-Taking: A Theory Tested on Agricultural Innovation." *American Sociological Review* 32 (6): 912–27.
- Cherlin, Andrew J., Linda M. Burton, Tera R. Hurt, and Diane M. Purvin. 2004. "The Influence of Physical and Sexual Abuse on Marriage and Cohabitation." *American Sociological Review*, no. 6: 768.
- CIA. 2013. "Central America and Caribbean: Panama." The World Factbook. Washington, D.C.: Central Intelligence Agency.
- Cobbenhagen, Jan. 2000. Successful Innovation: Towards a New Theory for the Management of Small and Medium-Sized Enterprises. Northampton, Mass.: Edward Elgar.
- Cohn, Samuel. 2012. Employment and Development under Globalization: State and Economy in Brazil. New York, NY: Palgrave Macmillan.

- Contraloría General de la República. 2010. "Censos Nacionales de Población Y Vivienda." *Instituto Nacional de Estadística Y Censo*. http://www.contraloria.gob.pa/inec/Redatam/index_censospma.htm.
- Corbin, Juliet M., and Anselm L. Strauss. 2008. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. 3rd ed. Los Angeles, Calif.: Sage Publications, Inc.
- Creswell, John W. 2003. *Research Design: Qualitative, Quantitative, and Mixed Method Approaches*. 2nd ed. Thousand Oaks, Calif: Sage Publications.
- Dinan, Kinsley Alden. 2009. "Budgeting for Basic Needs: A Struggle for Working Families." New York: National Center for Children in Poverty.
- Domínguez, Silvia, and Celeste Watkins. 2003. "Creating Networks for Survival and Mobility: Social Capital Among African-American and Latin-American Low-Income Mothers." *Social Problems* 50 (1): 111–35.
- Duneier, Mitchell. 2001. Sidewalk. New York: Farrar.
- Edin, Kathryn, and Laura Lein. 1997. Making Ends Meet: How Single Mothers Survive Welfare and Low-Wage Work. New York: Russell Sage Foundation.
- Edminston, Kelly D. 2008. "Entrepreneurship in Low and Moderate Income Communities." In *Entrepreneurship in Emerging Domestic Markets: Barriers and Innovation*, edited by Glenn Yago, James R. Barth, and Betsy Zeidman, 1–8. New York: Springer.
- Eisenhardt, Kathleen M. 1989. "Building Theories from Case Study Research." *Academy of Management Review* 14 (4): 532–50.
- Evans, Peter B., and Michael Timberlake. 1980. "Dependence, Inequality, and the Growth of the Tertiary: A Comparative Analysis of Less Developed Countries." *American Sociological Review* 45 (4): 531–52.
- Florida, Richard L., and Martin Kenney. 1988. "Venture Capital-Financed Innovation and Technological Change in the USA." *Research Policy* 17: 119–37.
- Gangl, Markus. 2006. "Scar Effects of Unemployment: An Assessment of Institutional Complementarities." *American Sociological Review* 71 (6): 986–1013.
- Gartrell, John W. 1977. "Status, Inequality, and Innovation: The Green Revolution in Andra Pradesh, India." *American Sociological Review* 42 (2): 318–37.
- Gioia, Dennis A., Kevin G. Corley, and Aimee L. Hamilton. 2013. "Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology." *Organizational Research Methods* 16 (1): 15–31.
- Global Entrepreneurship Monitor. 2009. "Informe Ejecutivo GEM Panamá." Babson Park, MA. ——. 2014. "GEM 2010 APS Global Individual Level Data." Babson Park, MA. http://www.gemconsortium.org/docs/3132/gem-2010-aps-global-individual-level-data.
- González de la Rocha, Mercedes. 1994. *The Resources of Poverty : Women and Survival in a Mexican City*. Cambridge, Mass.: Blackwell.
- Grasmuck, Sherri, and Rosario Espinal. 2000. "Market Success or Female Autonomy? Income, Ideology, and Empowerment among Microentrepreneurs in the Dominican Republic." *Gender and Society* 14 (2): 231–55.
- Green, Gary Paul, Roger B. Hammer, and Leann M. Tigges. 2000. "'Someone to Count on': Informal Support." In *The Atlanta Paradox*, 244–63. New York: Russell Sage Foundation.
- Hage, Jerald, and Michael Aiken. 1970. *Social Change in Complex Organizations*. New York: Random Houselc[1970].

- Haggard, Stephan. 1990. Pathways from the Periphery: The Politics of Growth in the Newly Industrializing Countries. Cornell Studies in Political Economy. Ithaca, NY: Cornell University Press.
- Hargadon, Andrew B., and Yellowlees Douglas. 2001. "When Innovations Meet Institutions: Edison and the Design of the Electric Light." *Administrative Science Quarterly* 46 (3): 476–501.
- Harris, Kathleen Mullan. 1993. "Work and Welfare Among Single Mothers in Poverty." *American Journal of Sociology* 99 (2): 317–52.
- Jack, William, and Tavneet Suri. 2014. "Risk Sharing and Transactions Costs: Evidence from Kenya's Mobile Money Revolution." *American Economic Review* 104 (1): 183–223.
- Jacobs, David. 1981. "Toward a Theory of Mobility and Behavior in Organizations: An Inquiry Into the Consequences of Some Relationships Between Individual Performance and Organizational Success." *American Journal of Sociology* 87 (3): 684–707.
- Johannessen, Jon-Arild, Bjorn Olsen, and G. T. Lumpkin. 2001. "Innovation as Newness: What Is New, How New, and New to Whom?" *European Journal of Innovation Management* 4 (1): 20–31.
- Kana'iaupuni, Shawn Malia, Katharine M. Donato, Theresa Thompson-Colón, and Melissa Stainback. 2005. "Counting on Kin: Social Networks, Social Support, and Child Health Status." *Social Forces* 83 (3): 1137–64.
- Kanter, Rosabeth Moss. 1983. *The Change Masters: Innovations for Productivity in the American Corporation*. New York: Simon and Schuster.
- Kanter, Rosabeth Moss. 2000. "When a Thousand Flowers Bloom: Structural, Collective, and Social Conditions for Innovation in Organization." In *Entrepreneurship: The Social Science View*, edited by Richard Swedberg, 167–210. Oxford; New York: Oxford University Press.
- Kentor, Jeffrey D., and Matthew R. Sanderson. 2009. "Globalization, Development and International Migration: A Cross-National Analysis of Less-Developed Countries, 1970-2000." *Social Forces* 88 (1): 301+.
- Kenworthy, Lane. 1999. "Do Social-Welfare Policies Reduce Poverty? A Cross-National Assessment." *Social Forces* 77 (3): 1119–39.
- Kortum, Samuel, and Josh Lerner. 2000. "Assessing the Contribution of Venture Capital to Innovation." *The RAND Journal of Economics* 31 (4): 674–92.
- Lee, Cheol-Sung, and Andrew Schrank. 2010. "Incubating Innovation or Cultivating Corruption? The Developmental State and the Life Sciences in Asia." *Social Forces* 88 (3): 1231–55.
- Lieberson, Stanley. 1980. "Procedures for Improving Sociolinguistic Surveys of Language Maintenance and Language Shift." *International Journal of the Sociology of Language* 1980 (25): 11–27.
- ——. 1985. *Making It Count: The Improvement of Social Research and Theory*. Berkeley: University of California Press.
- Lobao, Linda, and Gregory Hooks. 2003. "Public Employment, Welfare Transfers, and Economic Well-Being across Local Populations: Does a Lean and Mean Government Benefit the Masses?" *Social Forces* 82 (2): 519–56.
- Lynskey, Michael J. 2004. "Determinants of Innovative Activity in Japanese Technology-Based Start-up Firms." *International Small Business Journal* 22 (2): 159–96.
- March, James G. 1991. "Exploration and Exploitation in Organizational Learning." *Organization Science*, no. 1: 71.

- March, James G., and Zur Shapira. 1988. "Managerial Perspectives on Risk and Risk-Taking." In *Decisions and Organizations*, edited by James G. March, 76–97. New York and Oxford: Blackwell.
- Maurer, Bill. 2012. "Mobile Money: Communication, Consumption and Change in the Payments Space." *Journal of Development Studies* 48 (5): 589–604. doi:10.1080/00220388.2011.621944.
- Ministerio de Economía y Finanzas. 2008. "Principales Resultados: Encuesta de Niveles de Vida." Gobierno Nacional de la Republica de Panamá.
- ———. 2012. "Migración Interna Reciente En Panamá." Panama City, Panama.
- Mueller, Jennifer S., Shimul Melwani, and Jack A. Goncalo. 2012. "The Bias Against Creativity: Why People Desire but Reject Creative Ideas." *Psychological Science* 23 (1): 13–17.
- NTR. 2011. "Mayoría de Microempresas de Panamá Son Informales Y de Subsistencia," August 25. http://ntrzacatecas.com/2011/08/25/mayoria-de-microempresas-de-panama-son-informales-y-de-subsistencia/.
- O'Brien, Rourke L. 2012. "Depleting Capital? Race, Wealth and Informal Financial Assistance." *Social Forces* 91 (2): 375–95.
- O'Neil, Kevin, Kimberly Hamilton, and Demetrios Papademetriou. 2005. "Migration in the Americas." Washington, D.C.: Global Commission on International Migration.
- Ozgen, Eren, and Robert Baron. 2007. "Social Sources of Information in Opportunity Recognition: Effects of Mentors, Industry Networks, and Professional Forums." *Journal of Business Venturing* 22: 174–92.
- Perry-Smith, Jill E. 2006. "Social yet Creative: The Role of Social Relationships in Facilitating Individual Creativity." *Academy of Management Journal* 49 (1): 85–101.
- Rankin, Bruch H., and James M. Quane. 2000. "Neighborhood Poverty and the Social Isolation of Inner-City African American Families." *Social Forces* 79 (1): 139–70.
- Rankin, Katharine N. 2001. "Governing Development: Neoliberalism, Microcredit, and Rational Economic Woman." *Economy and Society* 30 (1): 18–37.
- Rodan, Simon, and Charles Galunic. 2004. "More Than Network Structure: How Knowledge Heterogeneity Influences Managerial Performance and Innovativeness." *Strategic Management Journal* 25 (6): 541–62.
- Rothwell, Roy. 1991. "External Networking and Innovation in Small and Medium-Sized Manufacturing Firms in Europe." *Technovation* 11 (2): 93–112.
- Ruef, Martin. 2002. "Strong Ties, Weak Ties and Islands: Structural and Cultural Predictors of Organizational Innovation." *Industrial and Corporate Change* 11 (3): 427–49.
- Sanders, Jimy M., and Victor Nee. 1996. "Immigrant Self-Employment: The Family as Social Capital and the Value of Human Capital." *American Sociological Review* 61 (2): 231–49.
- Sanderson, Matthew R. 2013. "Does Immigration Promote Long-Term Economic Development? A Global and Regional Cross-National Analysis, 1965–2005" 39 (1): 1–30.
- Saporito, Salvatore, and Deenesh Sohoni. 2007. "Mapping Educational Inequality:
 Concentrations of Poverty among Poor and Minority Students in Public Schools." *Social Forces* 85 (3): 1227–53.
- Saxenian, AnnaLee. 2006. *The New Argonauts: Regional Advantage in a Global Economy*. Cambridge, Mass.: Harvard University Press.
- Schoonhoven, Claudia Bird, Kathleen M. Eisenhardt, and Katherine Lyman. 1990. "Speeding Products to Market: Waiting Time to First Product Introduction in New Firms." *Administrative Science Quarterly* 35 (1): 177–207.

- Schrank, Andrew. 2008. "Homeward Bound? Interest, Identity, and Investor Behavior in a Third World Export Platform." *American Journal of Sociology* 114 (1): 1–34.
- Schumpeter, Joseph. 1939. Business Cycles: A Theoretical, Historical and Statistical Analysis of the Capitalist Process. New York: McGraw-Hill.
- ———. 1947. "The Creative Response in Economic History." *The Journal of Economic History* 7 (2): 149–59.
- Shah, Anuj K, Sendhil Mullainathan, and Eldar Shafir. 2012. "Some Consequences of Having Too Little." *Science* 338 (6107): 682–85.
- Sherraden, Margaret S., Cynthia K. Sanders, and Michael W. Sherraden. 2004. *Kitchen Capitalism: Microenterprise in Low-Income Households*. SUNY Series in Urban Public Policy. Albany: State University of New York Press.
- Sieber, Sam D. 1973. "The Integration of Fieldwork and Survey Methods." *American Journal of Sociology* 78 (6): 1335–59.
- Small, Mario Luis. 2009a. "How Many Cases Do I Need?" Ethnography 10 (1): 5–38.
- ——. 2009b. *Unanticipated Gains: Origins of Network Inequality in Everyday Life*. Oxford; New York: Oxford University Press.
- ——. 2011. "How to Conduct a Mixed Methods Study: Recent Trends in a Rapidly Growing Literature." *Annual Review of Sociology* 37: 57–86.
- Small, Mario Luis, Erin M. Jacobs, and Rebekah Peeples Massengill. 2008. "Why Organizational Ties Matter for Neighborhood Effects: Resource Access through Childcare Centers." *Social Forces* 87 (1): 387–414.
- Srinivas, Smita. 2012. *Market Menagerie : Health and Development in Late Industrial States*. Stanford, Calif.: Stanford Economics and Finance.
- Srinivas, Smita, and Judith Sutz. 2008. "Developing Countries and Innovation: Searching for a New Analytical Approach." *Technology in Society* 30 (2): 129–40.
- Storey, David J. 1994. *Understanding the Small Business Sector*. London: International Thomson Business Press.
- Strang, David, and Sarah A. Soule. 1998. "Diffusion in Organizations and Social Movements: From Hybrid Corn to Poison Pills." *Annual Review of Sociology* 24: 265–90.
- Tambunan, Tulus. 2006. "Survival Strategy and the Importance of the Informal Sector for Urban Poor Families: A Case Study of Jakarta." In *Informal Labour Markets and Development*, edited by Basudeb Guha-Khasnobis and S. M. Ravi Kanbur. Studies in Development Economics and Policy. New York: Palgrave Macmillan.
- Tigges, Leann M., Irene Browne, and Gary P. Green. 1998. "Social Isolation of the Urban Poor: Race, Class, and Neighborhood Effects on Social Resources." *Sociological Quarterly* 39 (1): 53–77.
- Venkatesh, Sudhir Alladi. 2006. *Off the Books: The Underground Economy of the Urban Poor*. Cambridge, Mass.: Harvard University Press.
- Von Hippel, Eric. 1988. The Sources of Innovation. New York: Oxford University Press.
- Wacquant, Loïc J. D., and William Julius Wilson. 1989. "The Cost of Racial and Class Exclusion in the Inner City." *Annals of the American Academy of Political and Social Science*, 8.
- Wherry, Frederick F. 2008. *Global Markets and Local Crafts: Thailand and Costa Rica Compared*. Baltimore: Johns Hopkins University Press.

- Wong, Poh Kam, Yuen Ping Ho, and Erkko Autio. 2005. "Entrepreneurship, Innovation and Economic Growth: Evidence from GEM Data." *Small Business Economics* 24 (3): 335–50.
- Xavier, Siri Roland, Donna Kelley, and Jacqui Kew. 2013. "GEM 2012 Global Report." Global Reports. Babson Park, MA: Global Entrepreneurship Monitor.
- Yeboah, Ian E. A. 2008. Black African Neo-Diaspora: Ghanian Immigrant Experiences in Greater Cincinnati, Ohio Area. Lanham: Lexington Books.
- Yenkey, Christopher, Laura Doering, and Pete Aceves. 2014. "The Financialization Of Everyday Life: Mobile Money And (In)Formal Activity In A Developing Context." *Working Paper, University of Chicago*.
- Young, Cristobal. 2012. "Losing a Job: The Nonpecuniary Cost of Unemployment in the United States." *Social Forces* 91 (2): 609–33.
- Yunus, Muhammad, and Alan Jolis. 1999. *Banker to the Poor: Micro-Lending and the Battle against World Poverty*. New York: PublicAffairs.
- Zuiker, Virginia Solis. 1998. *Hispanic Self-Employment in the Southwest: Rising above the Threshold of Poverty*. New York: Garland Publishing.

Figure 1. Novel Business Activity by Founding Stage and Income Group

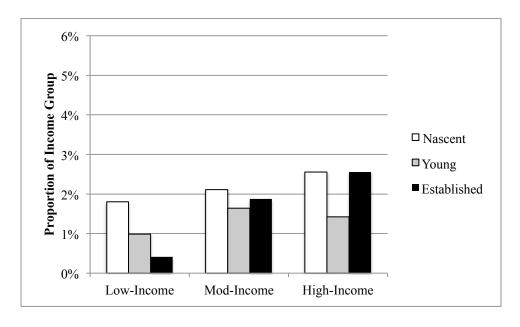


Figure 2. Traditional Business Activity by Founding Stage and Income Group

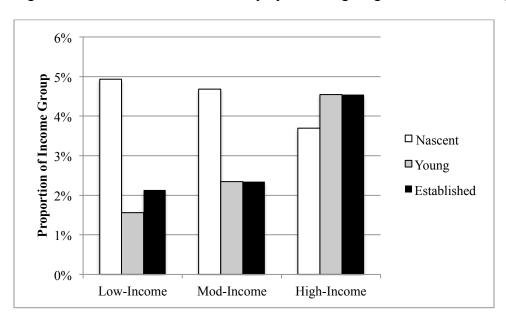


Table 1: Interviewee and Business Characteristics

Nationality	%	Count
Panamanian	83%	34
Other Latin American	17%	7
Gender		
Female	54%	22
Male	46%	19
Age		
20-30	29%	12
31-40	15%	6
41-50	34%	14
51-64	22%	9
Location		
Panama City	27%	11
Veraguas	73%	30
Business Type (of 84 businesses)		
Novel	36%	30
Traditional	64%	54

Table 2: Theoretical and Survey Constructs

	Theoretical Construct	Survey Construct
Nascent	Interviewee reports new startup effort (current or previous)	Respondent reports new startup effort
Young	Interviewee manages and owns a business that is up to 3.5 years old (current or previous)	Respondent manages and owns a business that is up to 3.5 years old
Established	Interviewee manages and owns a business that is older than 3.5 years (current or previous)	Respondent manages and owns a business that is older than 3.5 years
Low	Income level falls at or below 2X the poverty line as established by the World Bank, or ≤\$188/month (Ministerio de Economía y Finanzas 2008)	1. Which of these ranges best describes the total annual income of all the members of your household, including your income, as one combined figure?
Moderate	Income falls between 2X the poverty line and the top income quartile as established by the 2010 census, or >\$188 and ≤400/month (Contraloría General de la República 2010)	2. How many members make up your permanent household, including you? Individual income = Total household income /
High	Income falls in top quartile of income- earners as established by the 2010 census, or >\$400/month (Contraloría General de la República 2010)	number of household members
Novel	Products or services are culturally or materially unfamiliar to potential clientele	Novel businesses fulfill at least one of the following three criteria:
Traditional	Products or services are familiar to potential clientele	1. Will all, some, or none of your potential customers consider this product or service new and unfamiliar? (Novel= All or some) 2. Right now, are there many, few, or no other businesses offering the same products or services to your potential customers? (Novel= No business competitors) 3. How long have the technologies or procedures required for this product or service been
	Young Established Low Moderate High	Young Interviewee manages and owns a business that is up to 3.5 years old (current or previous) Established Interviewee manages and owns a business that is older than 3.5 years (current or previous) Low Income level falls at or below 2X the poverty line as established by the World Bank, or ≤\$188/month (Ministerio de Economía y Finanzas 2008) Moderate Income falls between 2X the poverty line and the top income quartile as established by the 2010 census, or >\$188 and ≤400/month (Contraloría General de la República 2010) High Income falls in top quartile of incomeearners as established by the 2010 census, or >\$400/month (Contraloría General de la República 2010) Novel Products or services are culturally or materially unfamiliar to potential clientele Traditional Products or services are familiar to

Table 3: Novel Businesses and the Influence of Migration

	Stage	Migratory Knowledge Utilized	Industry*	Novel Product	Interviewee
	Nascent	None	OCSP	Panamanian history board game	2
	Nascent	Domestic migration	Hotels/Restaurants	Tourism "ranch"	4
3	Nascent	Domestic return migration	TSC	Internet cafe	7
4	Nascent	Domestic migration	Construction	Handmade cinderblocks	10
5	Nascent	None	Education	Sewing school	17
6	Nascent	None	OCSP	Video arcade	19
7	Young	Domestic migration	OCSP	Hazardous material clean-up	2
8	Young	Domestic return migration	Agriculture	Organic goat milk production	5
9	Young	Domestic return migration	Agriculture	Organic honey production	5
10	Young	International migration	OCSP	Alternative medicine clinic	11,12
11	Young	Communication with migrants (domestic	TSC	Internet cafe	16
	_	return)			
12	Young	Communication with migrants	OCSP	Visa document review	13
		(international)			
13	Young	None	TSC	Internet cafe	19
14	Established	Domestic migration	Retail	Indigenous crafts from remote area	3
15	Established	Domestic return migration	Agriculture	Organic coffee production	5
16	Established	Domestic return migration	Manufacturing	Mechanized corn processing	6
17	Established	Communication with migrants	OCSP	Mechanized laundry	14
		(domestic)		_	
18	Established	None	Hotels/Restaurants	Aphrodisiac juices	18
19	Established	None	TSC	Internet cafe	20
20	Established	None	Retail	Kid-friendly dental supplies	22
21	Established	None	Manufacturing	Glass engraving	23
22	Terminated	International migration	Education	Exotic language tutoring	1
23	Terminated	Domestic migration	OCSP	Training courses in Photoshop and	2
				Microsoft Office	
24	Terminated	Domestic return migration	Agriculture	Organic coffee consulting	5
25	Terminated	Domestic migration	Education	Fine arts classes	8
26	Terminated	Domestic migration	Manufacturing	Medicinal honey	9
27	Terminated	Domestic migration	OCSP	Birthday party animator	9
28	Terminated	Domestic return migration	Manufacturing	Aloe vera wine production	9
29	Terminated	Communication with migrants	Retail	"American" clothing	15
		(domestic)			
30	Terminated	None	TSC	Internet cafe	21

^{*} Industry classifications come from the Panamanian census. OCSP=Other community, social, and personal services: Agriculture=Agriculture, Ranching, Hunting, Forestry, Fishing; TSC=Transportation, storage, and communication

Table 4: Stages of Market Creativity

	Knowledge Development	Business Implementation
Poverty Facilitates:	Migration in search of work and educational opportunities	Financial crises in response to job loss, health emergencies, etc.
Relationship to Entrepreneurship:	Individuals who migrate or have ties to migrants gain access to locally unfamiliar goods and information. They can use this knowledge to found novel businesses.	Responding to crises, individuals hastily found small businesses in their local communities. These businesses may be under developed and the local clientele may lack the funds to experiment with unfamiliar products. These conditions make novel ventures particularly unlikely to survive.

Table 5: Motivations for Business Founding

Motivation	Frequency	Example	
Job Loss	34	Entrepreneur started lawn care business following the conclusion of a construction project. The 45-year-old male felt that he was not earning enough money as a manual laborer and was frustrated by the spells of unemployment that followed each construction project.	
Family Emergency	12	Entrepreneur started a restaurant after her husband fell ill, lost his job as a bus driver, and was no longer able to work. The 50-year-old female needed to replace her husband's income.	
Insufficient Wages	5	Entrepreneur started a small manufacturing business after relocating to a rural community. The 43-year-old female previously worked in retail. However, she found that the daily wages offered by retail shops would barely cover the cost of commuting from her community to the regional capital.	
Other Labor Options Restricted	10	Entrepreneur started a recycling business to supplement the meager income his mother earned. The 20-year-old male, who started the business when he was 12, was not old enough to work legally.	