

Disadvantaged? Informal Female Entrepreneurs Operating “Tienditas” in Nicaragua

¿Desaventajadas? Mujeres empresarias informales operando tienditas en Nicaragua

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Fecha de recepción: 23 II 2016

Fecha de aceptación: 22 IX 2016

Abstract

I explore the business and (household) income outcomes of base of the pyramid (BoP) in-home convenience store entrepreneurs through a census-like business survey in Nicaragua. Throughout Latin America and in Nicaragua, *tienditas* are typically operated by female entrepreneurs in an informal regulatory environment out of the home and at the periphery of developing economies. Some authors have characterized this sector as disadvantaged because of its inherent reliance on female ownership, on a home-based location, and on operating within an informal context (Nichter and Goldmark, 2009). Others have argued that such enterprises may serve as a link toward poverty reduction at the BoP (Pisani and Yoskowitz, 2012). Utilizing a 2012 cross-sectional and nationally representative business focused survey, 400 Nicaraguan *tenderas* are examined. Findings indicate heterogeneity exists across the *tiendita* retail sector; where failing, ailing, stable and healthy *tienditas* are segmented, analyzed, and discussed.

JEL Classification: L26, O17, D22, O54.

Keywords: Informality. Female Entrepreneurship. *Tienditas*. Nicaragua.

Resumen

En este trabajo, se estudia el negocio y los ingresos (del hogar) en la base de la pirámide (BoP, por sus siglas en inglés) de tiendas de conveniencia ubicadas dentro del hogar en Nicaragua, a través de una encuesta empresarial tipo censo. En toda América Latina y en Nicaragua, las *tienditas* son

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típicamente operadas por mujeres microempresarias en un entorno informal y en la periferia de las economías en desarrollo. Algunos autores han caracterizado a este sector como en desventaja debido a su dependencia inherente a la propiedad femenina, su ubicación dentro del hogar, y a su operación informal (Nichter y Goldmark, 2009). Otros han argumentado que tales empresas pueden servir para reducir la pobreza en la BoP (Pisani y Yoskowitz, 2012). Utilizando una encuesta del 2012 de corte transversal y representativa en el nivel nacional, se examinan 400 tenderas nicaragüenses. Los resultados indican que existe heterogeneidad en el sector minorista de las tienditas; las cuales se clasifican como saludables, estables, enfermas y fracasadas, para su análisis y discusión.

Clasificación JEL: L26, O17, D22, O54.

Palabras Clave: Informalidad. Microempresarias. Tienditas. Nicaragua.

Introduction

Nichter and Goldmark (2009) recently conducted a thorough and comprehensive literature review linking MSE (micro and small enterprise) characteristics and other associated factors to firm growth. From this review, they developed a model that may help distinguish between MSEs mired in survival mode (“survivalists”) versus those MSEs poised for rapid growth (“latent gazelles”). They found that the *most* disadvantaged survivalist firms happen to be those MSEs that are female-owned, informal, and home-based within developing country economic contexts. Acknowledging these structural barriers to MSE growth, I seek to disaggregate this market segment through the analysis of a single retail sub-sector: the *tiendita* in Nicaragua. The *tiendita* uniquely exhibits the structural disadvantages argued by Nichter and Goldmark (2009), but at the microenterprise scale.

In Latin America and Nicaragua, the *tiendita*, while seemingly everywhere, is often overlooked as a subject of study because the *tiendita* is so familiar and ordinary to most consumers. The ordinary nature of the *tiendita* does not dismiss its importance as an object of study; rather because the *tiendita* is so commonplace, increasing our understanding about this microenterprise, if only incrementally, may help sharpen our focus concerning primarily female micro-entrepreneurship. The *tiendita*, or barrio-based convenience store, more closely resembles a microenterprise than a small business because very few *tienditas* employ more than a single employee, though most utilize one to two unpaid family members (Pisani and Yoskowitz, 2012).

Academic researchers have classified microenterprises as business entities with typically five or fewer employees, engaged in non-primary activities,

and selling at least 50% of their output (Mead and Liedholm, 1998)¹. Mead and Liedholm (1998) found that working proprietors, or one-person shops, accounted for over half of all microenterprise employment in the developing world. Extending the workplace to unpaid family members within working proprietorships accounts for over 75% of all workers engaged in microenterprise establishments (Mead and Liedholm, 1998).

In this paper, I accept Nichter and Goldmark’s (2009) call to segment a sub-sector they label as “survivalist” in a developing world context with firms facing many of the same key characteristics. If these most disadvantaged microenterprises exhibit heterogeneity (i.e., performance differences), then policy prescriptions may be further refined to distinguish between healthy, stable, ailing, and failing firms in the most distressed compartments of the business community. In turn, policy innovations which heal distressed *tienditas*, and which facilitate the creation, maintenance, and expansion of healthy *tienditas*, may play an important role in a comprehensive policy approach toward poverty mitigation at the base of the pyramid. It is precisely because of the ubiquitous nature of *tienditas* and the primary role female entrepreneurs play in their operation that it is essential to better understand this phenomenon in developing market contexts and determine if they are truly disadvantaged. More formally, I ask the following research question: *What distinguishes healthy, stable, ailing, and failing “survivalist” microenterprises?* (Given the same sub-sector [*tienditas*] and business pre-conditions of female-owned, in the home, and informal.)

The remainder of the paper is organized as follows: section one presents an overview of *tienditas*, including a review of the associated literature of female entrepreneurship, informality, and Nicaraguan national context. Section two reviews the data source and describes the research methodology. Section three presents the results concerning the heterogeneity and segmentation of *tienditas*. Section four provides a discussion and policy implications of these results. The last section concludes the paper.

1. *Tienditas* in Context

1.1 Overview of Tienditas

Tienditas are pervasive throughout Latin America. The in-house convenience or tiny grocery store is typically found in the relatively poorer or underdeveloped sections of the country—such as shantytowns, rural hamlets,

¹ This is in contrast to SMEs which usually allow for firm size to include up to 50 employees.

and urban barrios. The *tiendita* caters to a nearby clientele that is bound to the neighborhood by location, primarily the result of mobility constraints resulting from a lack of financial resources, inadequate transportation alternatives, and poor job prospects. In Nicaragua, more than half of urbanites and roughly three-quarters of rural residents chose *tienditas* as their primary shopping outlet (D'Haese, Van de Berg, and Speelman, 2008).

The in-house convenience store typically devotes and converts the front section of the home to a selling space or retail outlet. The basic stock of a *tiendita* includes staple food supplies, hygienic products, junk food, school supplies, and other specialty items depending upon the *tiendita*. Start-up costs for *tienditas* in Nicaragua may be relatively small, oftentimes less than \$100 (Pisani and Yoskowitz, 2012)². The typical *tiendita* is open from six in the morning until eight in the evening, seven days per week. For the best and most regular customers, *tienditas* may extend credit. The workforce principally comes from the family unit, typically under the direction of the wife, who is almost always at home because of the home-based location of the business, and is generally supported by other family members in the household (Haase, 2007). While there are many similarities among *tienditas*, differences in economic structure and performance exist within the *tiendita* market segment. Some of the major differences uncovered include start-up costs, inventory size, financing, profits, and firm growth, illustrating heterogeneity among *tienditas* (Pisani and Yoskowitz, 2012).

Berner et al. (2012) more generally assert and add that small neighborhood stores in developing markets are “part of a strategy of increasing [household] security through diversification, and profits are only one part of the household income, whereas other sources such as formal or informal wage labor are more often irregular and insecure.” They suggest that while “the shop brings in inadequate but steady earnings that help to bridge more difficult periods,” the business may also be a “form of saving that can be consumed [or liquidated] in case of emergency.”

1.2 *Tienditas and Female Entrepreneurship in Developing Contexts*

Tenderas are female microentrepreneurs and owners of *tienditas*, and as such self-employed, where entrepreneurship refers to own-account employment (Blanchflower and Oswald, 1998). While not all *tienditas* are owned and operated by women in Nicaragua, nearly nine out of ten *tienditas* are female-owned and operated (Pisani, 2017). As women play a dominant consumptive role in the household as buyers of food and basic household goods in local

² All monetary amounts in this paper have been converted to US dollars.

stores and markets, these skills are transferable in many ways to the operation of a *tiendita*.

Tiendita ownership offers *tenderas* the ability in a traditional cultural environment to be home-based where oftentimes familial duties for women (e.g., caring for children, maintaining the household) are prioritized ahead of activities outside the home (Pisani and Yoskowitz, 2012). Yet, women in Nicaragua have also engaged in important and public ways outside the home, especially during the revolutionary years of the 1980s (Kampwirth, 2012). Hence female entrepreneurship in Nicaragua is readily on display (Pisani, 2006), but it is more accepted if it is in the confines of the home or safe spaces.

More broadly, Adom (2015) in his qualitative study of 60 informal female entrepreneurs in Accra, Ghana, argues that “there remains untapped potential for female entrepreneurs becoming key players for achieving economic development” in emerging markets. This is especially true for “the few opportunity-driven [entrepreneurs who] have the potential for sustainable economic development” (Adom, 2015).

Entrepreneurs at the Base of the Pyramid (BoP) have been described as lying on a continuum between necessity-driven entrepreneurs (own-account business owners without other employment options) and opportunity-driven entrepreneurs (own-account business owners by choice, exploiting a market niche [Kirzner, 1973]). Margolis (2014) argues “countries with weaker social protection systems” are “more likely to have a higher share of necessity-driven, as opposed to choice-driven, self-employed.” This continuum may also be gendered as argued by Williams and Youssef (2013) who find that informal female entrepreneurs in Brazil are more likely operating necessity driven enterprises while earning less than their male peers. For example, Williams (2008, 2007) observed that both necessity and opportunity drive many into informal entrepreneurship. Gurtoo and Williams (2009) find that in India self-employed informals may be necessity and/or opportunity driven over time, illustrating microenterprise life cycle dynamism as the motivation to participate in the informal economy.

Calderon et al. (2016) in their large sample of urban-based female entrepreneurs in Mexico note that opportunity-driven entrepreneurs earn higher profits, engage in better management practices, attain higher education levels, and possess personality traits associated with positive business outcomes than necessity-driven entrepreneurs. The authors also find that opportunity-driven entrepreneurs only constitute 21% of female entrepreneurs in their study. Stam and van Stel (2011) suggest higher levels of entrepreneurship and necessity-driven entrepreneurship exists in low-

income countries due to a lack of alternative earning activities. Stam and van Stel also attempt to connect necessity entrepreneurship with economic growth in middle-income countries, but their results are mixed and inconclusive. They do suggest that if it were possible to distinguish between entrepreneurial enterprises, the result might help direct or redirect scarce public resources to encourage entrepreneurship that also fosters national economic growth. Berner et al. (2012) suggest further that survivalist microbusiness concerns, such as small neighborhood informal stores are mostly “run by mothers of young children, elderly persons or anyone else who has no chance to earn money in another way – people with so-called zero opportunity costs.” Yet the authors suggest these microbusinesses may be “a different target group, requiring different [policy] interventions based on a different logic” (Berner et al., 2012). Stam and van Stel (2011) caution governments, however, that they “should avoid” making resources “available through government stimulation programs” that “are absorbed by necessity entrepreneurs with low human capital” because of the low probability that such programs will induce wider economic growth.

1.3 Tienditas and Informality

Tienditas are mostly informal business concerns as are the majority of the microenterprises in developing countries and Central America (Funkhouser, 1996; Jain and Pisani, 2008; Pisani and Pagán, 2004; Pisani and Yoskowitz, 2012). The retail function of *tienditas* may be performed under the auspices of government regulators and tax collectors, but more often than not, the government is absent from *tiendita* oversight. This hidden from government purview employment has been referred to as informal employment (Hart, 1973, 1970). In essence work “activities that avoid state regulation” and supervision best describes informality (Itzigsohn, 2000). The informal condition is especially true for micro-entrepreneurs unaware of registration requirements and for those microbusiness establishments located away from government office and authorities (Pisani and Yoskowitz, 2012).

Kahn and Khan (2009) suggest that in Pakistan, women work informally to help poor families improve their survival chances. They also report that “there are strong rigid cultural constraints, which restrict mobility and handicap them [women] for having employment outside the home for remuneration. However, their struggle for family survival is accepted,” this is particularly the case under circumstances of extreme poverty. Occasionally, researchers have noted a progression for some informal firms to move up, either in stature, as Achua and Lussier (2014) uncovered in Cameroon where some itinerant street vendors become brick and mortar store owners, or as Pisani et al. (2008) discovered along the Texas-Mexico border of informal businesses formalizing their operations. The approach to studying informality

is no longer the realm of dualistic labor market (Peattie, 1987), but a dynamic continuum of market-based outcomes (Richardson and Pisani, 2012).

1.4 Nicaraguan National Context

Contemporary Nicaragua has faced many challenges including natural disasters (e.g., earthquakes and hurricanes), social, economic, and political upheaval (e.g., revolution, counter-revolution, and revolution restored), external pressures and shifting alliances (e.g., the oscillating roles of the US, socialism, the Nicaraguan diaspora, and Venezuela), and widespread poverty (e.g., about three-fourths of the current population lives on \$2 or less per day [World Food Programme, 2014]) (Walker and Wade, 2011). More recently, the political landscape has been dominated by Sandinista Daniel Ortega who has held the presidency since 2007. Under Ortega’s leadership, the nation’s foreign policy has tilted to the left and aligned the state with the Bolivarian alliance centered in Venezuela. Economically, the nation is tied to the capitalist global market, in particular the United States and the CAFTA region plus Venezuela.

Nicaragua, with approximately six million inhabitants, is the second poorest country in the Western Hemisphere with a 2014 per capita GDP of \$1,870 with about one-third of households living below the national poverty line (World Bank, 2016). Presently the economy is growing between four and six percent per year with moderate inflation under ten percent (Banco Central de Nicaragua, 2015). Informal employment remains persistently high at about 75% of all employed Nicaraguans. There is a direct relationship between informality and self-employment which are both inversely related to per capita income (Xavier et al., 2012). Hence, self-employment remains an important economic employment outlet and driver of the economy with self-employment comprising roughly one-third of the economically active population (Banco Central de Nicaragua, 2013, Pisani and Pagán, 2004). The composition of the \$10 billion economy is about 35% services, 35% manufacturing, and 30% agriculture. The economy is very open to global trade with imports and exports comprising 105% of GDP and overseas remittances accounting for 10% of GDP (Banco Central de Nicaragua, 2013). Lastly, the capital city, Managua, is a classic Latin American primate city containing about half of the nation’s population and is the hub of the nation’s economic activity.

2. Research Methodology

In order to explore the degree of heterogeneity among female owned *tienditas*, a recent business survey conducted in Nicaragua was utilized. The cross-sectional data set, *bases de datos de la encuesta continua de hogares*

[ECH] (II trimestre del 2012)³, employed in this paper was accessed through the Nicaraguan *Instituto Nacional de Información de Desarrollo* (INIDE). Partial external support for the survey came from the Economic Commission for Latin America and the Caribbean and the International Labour Office. The ECH survey was deployed by INIDE and completed in Nicaragua from April to June 2012 with a primary focus on economic activity. The household questionnaire contains categorical and ratio data concerning the household roster and demographics and employment. The random national household survey included 6,811 households spread representatively across the country and included 31,281 persons⁴.

Tienditas were identified utilizing two ECH survey questions in combination: occupation as shop keeper (*vendedores y demostradores de tiendas y almacenes*) and location of business (*en su propia vivienda*). Hence only stores located in one's home were included. As the weighting mechanism was not adequately described in the ECH survey documentation or provided in the accompanying data set, no weighting was used in the empirical analysis reported in the results section of the paper. However, preliminary extrapolation may suggest a national total of 213,500 Nicaraguans employed in 91,313 *tienditas* across the country⁵. Of these projections, perhaps as many as 77,707 *tienditas* are female owned and operated employing 140,483 women. The final results utilized in this article display survey information collected for 400 *tenderas*.

The 2012 Nicaraguan national poverty line is used as a benchmark to segment healthy, stable, ailing, and failing firms. This is in line with other researchers who have used similar benchmarks to delineate success among microenterprises. For example, Gindling and Newhouse (2012) classify success with "per capita consumption above the \$2/day poverty line." Those *tienditas* earning returns clearly above the poverty line are considered healthy, around the poverty line are considered stable, just below the poverty line are considered ailing, and far below the poverty line are failing firms due to their extreme impoverishment.

³ The data set and accompanying material are available at: <http://www.inide.gob.ni/>.

⁴ The representative national sample of households, or sampling frame, was selected randomly from approximately the same number of households from each department of Nicaragua except the capital city of Managua, where that number was tripled. Care was taken to include both urban and rural households in the same proportion as the population in the region. The universe of households (7,460) was derived from previous censuses, voter registration rolls, and validated with field observation. The non-response rate was 8.7%. De Mel, McKenzie, and Woodruff (2009) note that surveys involving microenterprises reveal comparable data as that derived from detailed firm diaries suggesting that business surveys are robust. Overall, the quality of the data and sample utilized here are considered good.

⁵ No specialized government census of *tienditas* exists for Nicaragua.

The Fundación Internacional para el Desafío Económico Global⁶, or FIDEG, a Nicaraguan non-governmental organization funded in part by the Swiss Agency for Development and Cooperation in Central America, the Finish Embassy, and the Canadian International Development Agency, conducted 1,730 household surveys throughout the country in 2012 to measure poverty in the country (FIDEG, 2013). The 2012 surveys were random and national in scope and scale and measured the poverty line at \$2 per person per day. The same report noted that extreme poverty was present measured by earnings of \$1 per person per day or less.

Support for segmenting enterprises within the informal sector comes from Grimm, Knorringa, and Lay (2012), who find three such groups (top-performers, constrained gazelles, and survivalists) in their expansive study of French West Africa. Berner, Erhard, and Knorringa (2012) present a typology of survivalist and growth-oriented enterprises in the informal sector. As such, I utilize the following daily earnings benchmarks for segmenting healthy, stable, ailing, and failing firms (*tienditas*) in this study: \$4 or more, healthy; \$2 to \$4, stable; \$1 to \$2, ailing; and below \$1, failing.

A set of *a priori* variables are utilized in line with previous research conducted with *tienditas* in the region (Pisani and Yoskowitz, 2012, 2010; Pisani, 2017, 2013, 2010). Demographic variables include region of residence, urban or rural nature of residence, the number of people living in the household, age, education and literacy, civil (marital) status, and income. Variables utilized for enterprise characteristics include length of work year, income, hours worked, record keeping, number of employees, desire, rationale, and action to change jobs, and second employment and second employment hours worked. Additional variables used in the statistical analyses (i.e., multiple regression, cross-tabulations) include years of potential work experience, remittances, and transfer income.

3. Results

In this section, results are presented to provide insight into the four identified groups of *tiendita* enterprises: healthy, stable, ailing, and failing firms. To begin this section, I contextualize *tenderas* and then segment *tienditas* by earnings per day. Then, I cluster *tienditas* earning profits of \$1 or less a day, \$1 to \$2 a day, \$2 to \$4 a day, and more than \$4 a day together; these groups represent 30.4%, 18.6%, 25.4%, and 25.6%, respectively, of all *tienditas* in

⁶ In English the name translates as the International Foundation for Global Economic Challenge.

the sample. As \$2 a day is a watershed measure for poverty in the country, these earning segments may be considered failing (dying), ailing (marginally subsistence), stable (survival), and healthy (opportunity oriented). Subsequently, multivariate analyses as to the determinants of business profits are presented. Lastly, household income in relation to potential poverty outcomes is offered.

3.1 *Tenderas (Female Tiendita Entrepreneurs)*

A demographic profile of female *tiendita* entrepreneurs and workers appears in Table 1. The survey is national in scope with all of the regions represented noting the principal importance of Managua. Urban areas house about two-thirds of *tiendita* owners and workers in households holding around five people, each reflective of the periphery location of *tienditas* and in-country population dynamics. *Tenderas* are on average middle-aged, a reflection of the accumulated capital necessary to launch, own, and operate a *tiendita* (Pisani and Yoskowitz, 2012). Most of the owners proclaim literacy, yet relative education levels are low (even when compared to *tiendita* employees) perhaps a result of impoverished life circumstances and constrained occupational choice for *tenderas*. The *tiendita* owner typically resides in married households generating earnings from the *tiendita*.

3.2 *Failing, Ailing, Stable, and Healthy Tienditas*

Firm characteristics for each *tendera* segment are offered in Table 2. Most *tenderas* work year around with the highest earning *tienditas* more likely to be open longer hours, employ more workers, and be open the whole year as compared to the lowest earning *tienditas*. Further, *tenderas* who earn more money keep more business records. Yet, just 35.3% of the most profitable *tendera* segment maintains separate bookkeeping accounts for their *tiendita*. No *tendera* was enrolled in social security reinforcing the informal nature of the sector. *Tenderas* most interested in changing jobs seek higher incomes and are, unsurprisingly, those in the lowest income segments. About one-fifth of *tenderas* were actively in the search for alternate work at the time of the survey with the highest *tendera* earners the most active in the alternate work search. All segments reported relatively large minorities of *tenderas* working a second job averaging more 11.0 hours a week with the highest *tenderas* earners also working the longest hours at a second job.

Table 1
***Tiendita* Demographics: Female Entrepreneurs**

Variable	Entrepreneurs/<i>Tenderas</i>
Region* (%)	
Segovias	11.0
Western	18.2
Managua	28.8
Southern	10.0
Central	7.0
Northern	11.0
Atlantic	14.0
Residence Urban/Rural	
Urban	66.0
Rural	34.0
Mean Household Size (std. dev.)	4.9 (2.6)
Mean Age (std. dev.)	46.2 (15.2)
Literate (%)	
Yes	84.0
No	16.0
Education – Last School Attended (%)	
None	18.0
Primary	45.0
Secondary	25.7
Technical	3.3
University	8.0
Mean Education – Years (std. dev.)	5.9 (4.4)
Civil Status (%)	
Single	3.5
Married (includes unions)	63.0
Separated/Divorced	24.0
Widowed	9.5
Earned Income/Paid in the <i>Tiendita</i> (%)	
Yes	99.0
No	1.0
N=	400

Source: Author’s calculations derived from: *bases de datos de la encuesta continua de hogares [ECH] (II trimestre del 2012)*, Nicaraguan *Instituto Nacional de Información de Desarrollo*. *Region is grouped as Segovias: Estelí, Madriz, Nueva Segovia; Western: León, Chinandega; Managua; Southern: Granada, Masaya, Carazo, Rivas; Central: Boaco, Chontales; Northern: Jinotega, Matagalpa; and Atlantic: Río San Juan, RAAN, RAAS.

Table 2
Female Owned *Tiendita* Firm Characteristics (as primary occupation)

Variable	\$1/day < Failing	\$1-\$2/ day Ailing	\$2-\$4/ day Stable	> \$4/day Healthy	All
<i>Work as a <i>Tendera</i> Year Round?*</i> (%)					
Yes	79.3	82.4	85.1	89.2	83.8
No (seasonal/other)	21.7	17.6	14.9	10.8	16.3
<i>Earned <i>Tiendita</i> Income Over the Past Month?</i> (%)					
Yes	96.7	100	100	100	99.5
No	3.3	0	0	0	0.5
<i>Amount Earned in <i>Tiendita</i> – Monthly Profits (\$US)</i>					
<i>Mean</i>	16.45	43.18	84.49	200.8	85.17
<i>Standard Deviation</i>	7.7	6.63	12.45	89.06	85.38
<i>Hours Worked per Week</i>					
<i>Mean</i>	25.8	37.3	48.3	53.2	40.57
<i>Standard Deviation</i>	19.5	20.3	23.6	18.5	23.27
<i>Keep Bookkeeping Records?</i> (%)					
Yes	21.5	29.7	29.7	35.3	29
No	78.5	70.3	70.3	64.7	71
<i>Number of Employees (%)</i>					
0	39.7	35.1	21.8	14.7	27.8
1-4	60.3	64.9	77.2	84.3	71.8
5-8	0	0	1	1	0.5
<i>Enrolled in Social Security?</i> (%)					
Yes	0	0	0	0	0
No	100	100	100	100	100
<i>Do you wish to change jobs?</i> (%)					
Yes	35.5	35.1	30.7	24.5	31.5
No	64.5	64.9	69.3	75.5	68.5

Rationale for those indicating they wish to change jobs: (%)

Increase income	93	96.2	96.8	96	94.4
Better use my skills	0	3.8	0	0	0.8
Other	7	0	3.2	4	4.8

Have you looked for other work over the past 3 months? (%)

Yes	18.6	11.5	25.8	32	21.6
No	81.4	88.5	74.2	68	78.4

Do you have a second job? (%)

Yes	28.9	33.8	31.7	28.4	30.2
No	71.1	66.2	68.3	71.6	69.8

Hours Worked per Week in Second Job

<i>Mean</i>	8.3	<i>11.1</i>	<i>10.7</i>	<i>14.6</i>	11
<i>Standard Deviation</i>	5.4	8.8	6.4	8.3	7.43
N=	121	74	101	102	398

Source: Author’s calculations derived from: *bases de datos de la encuesta continua de hogares [ECH] (II trimestre del 2012)*, Nicaraguan *Instituto Nacional de Información de Desarrollo*. *Italics = significant difference at the .10 level.

3.3 Multivariate Analysis for Principal Tendencia Ownership Profits

To better understand the determinants of business profits, I estimated multiple regression analyses utilizing 14 preselected (a priori) variables. These variables include region (Managua [=1] or rest of the country), residence (urban [=1] or rural), household size (number of persons living in the household), potential experience⁷ (this estimates the amount of potential work experience, calculated as age minus years of education minus 6), potential experience squared divided by 100 (to uncover any nonlinear returns to experience), literacy (literacy = 1), years of education, civil status (married [=1] or not married), foreign remittances (=1 if household receives foreign remittances), keep business records (=1 if *tiendita* keeps separate business records), have employees (=1 if *tiendita* has employees), wish to change jobs (=1 if *tendera* indicated a desire to change jobs), have a second

⁷ Because of multicollinearity issues, age was removed from the multiple regression analysis. Age is however embedded in the potential experience variables.

job (=1 if *tendera* possess a second job), and number of hours worked per week. The dependent variable is business profits per hour (constructed from monthly business profits and hours worked per week variables). The significant multiple regression results for each *tiendita* segment is reported below as is a composite and summary. I begin with the composite and end with a summary.

For all *tienditas* together, five independent variables significantly impact and are associated with *tendera* profits: region, potential experience squared/100, business record keeping, wish to change jobs, and hours worked (see Table 3A). *Tenderas* located in Managua earned a \$0.26 per hour premium over those *tenderas* located throughout the rest of the country. The returns to potential work experience were nonlinear and negative for women indicating diminishing profits the longer one stayed in business (at a rate of \$0.02 per hour). Business record keeping boosted hourly profits \$0.16 for *tenderas*. *Tenderas* wishing to change jobs saw diminished hourly profits of \$0.23. Finally, the longer *tenderas* worked in the *tiendita* the less she profited per hour by \$0.02 per hour⁸.

Regional location and the number of hours worked by the *tendera* are the significant variables associated in determining profits for failing *tienditas* (see Table 3B). *Tenderas* operating in Managua improved their earnings by \$0.22 per hour over *tienditas* operating outside the capital. Additionally, the longer the *tendera* worked in the *tiendita* the lower were her returns at the rate of \$.01 per hour. Five variables are significant for determining profits in ailing firms: regional location, potential experience and its square/100, record keeping, and hours worked (see Table 3C). Enhancing hourly earnings are regional location in Managua (\$0.72), potential work experience (\$.05) and the maintenance of business records (\$0.48). Two variables diminish earnings; these are the non-linear returns to experience (\$0.06) and the number of hours worked by the *tendera* in the *tiendita* (\$0.04). Hourly computed profits for stable *tienditas* benefit from remittance flows (\$0.63) and are stunted by additional time spent in the *tiendita* by the *tendera* (\$0.03) (see Table 3D). Lastly, hourly profits for healthy *tienditas* are augmented by regional location in Managua (\$0.29) and reduced by the *tendera* working longer hours in her *tiendita* (\$0.03) (see Table 3E).

⁸ Additionally, the multiple regression model for monthly profits for second business ownership proved insignificant. Nevertheless, one variable impacted second business profits: receipt of foreign remittances. Indeed, foreign remittances augmented hourly profits by \$1.48. Hence, assistance from abroad may help create and sustain a notable secondary income. Nevertheless, this result is only to be understood as illustrative of the potential remittances may have on second business income.

In summary, two variables were significant in more than one segment: region and number of hours worked. Regional location within the economic hub of the nation —Managua— improved earnings for all *tienditas* generally and for three of the four segments individually. Based upon the average number of hours worked by *tenderas* in each significant *tiendita* segment, regional location in Managua improved earnings on average for failing firms by \$22.68 per month, for ailing firms by \$107.44 per month, and for healthy firms by \$40.96 per month. Also the more time *tenderas* spent working within their own *tiendita* reduced average monthly income across all segments by \$1.03, \$5.96, \$5.80, and \$6.38, respectively, among failing, ailing, stable, and healthy *tienditas*.

Table 3A

Multiple Regression *Tiendita* Hourly Profits –Female Owners (*Tenderas*)

Variable	All <i>Tienditas</i>			Significance
	β	Standard Error	t statistic	
Constant	1.005	.253	3.970	.000***
Region (Managua=1)	.262	.097	2.694	.007***
Residence (Urban=1)	.107	.095	1.122	.263
Household Size	-0.09	.016	-.600	.549
Years of Potential Experience (PE)	.011	.009	1.197	.232
PE Squared/100	-0.020	.012	-1.723	.086*
Literacy (Yes=1)	.071	.134	.531	.596
Years of Education	.004	.013	.289	.773
Civil Status (Married=1)	-0.11	.088	-.125	.900
Foreign Remittances (Yes=1)	.139	.176	.790	.430
Keep Business Records (Yes=1)	.160	.092	1.740	.083*
Have Employees (Yes=1)	.142	.094	1.508	.132
Wish to Change Jobs (Yes=1)	-0.227	.089	-2.566	.011**
Have Second Job (Yes=1)	-0.049	.088	-.556	.579
Hours Worked in <i>Tiendita</i> (Week)	-0.016	.002	-8.359	.000***

Adjusted R² = .144

Model ANOVA: F= 5.726, df=14, p=.000***

Source: Author’s calculations derived from: *bases de datos de la encuesta continua de hogares [ECH] (II trimestre del 2012)*, Nicaraguan Insituto Nacional de Información de Desarrollo. ***, **, * represent statistical significance at the 0.01, 0.05, and 0.10 levels, respectively.

Table 3B
Multiple Regression *Tiendita* Hourly Profits –Female Owners (*Tenderas*)

Variable	Failing <i>Tienditas</i> β	Standard Error	t statistic	Significance
Constant	.872	.213	4.090	.000***
Region (Managua=1)	.217	.091	2.388	.019**
Residence (Urban=1)	-.051	.090	-.561	.576
Household Size	-.019	.013	-1.480	.142
Years of Potential Experience (PE)	.002	.007	.256	.798
PE Squared/100	-.005	.009	-.541	.590
Literacy (Yes=1)	-.155	.116	-1.335	.185
Years of Education	.003	.013	.240	.811
Civil Status (Married=1)	.063	.077	.815	.417
Foreign Remittances (Yes=1)	.089	.142	.623	.535
Keep Business Records (Yes=1)	-.039	.090	-.438	.662
Have Employees (Yes=1)	-.061	.080	-.766	.446
Wish to Change Jobs (Yes=1)	-.089	.082	-1.087	.280
Have Second Job (Yes=1)	-.081	.079	-1.023	.309
Hours Worked in <i>Tiendita</i> (Week)	-.012	.002	-5.781	.000***
Adjusted R ² = .276				
Model ANOVA: F= 4.213, df=14, p=.000***				

Source: Author's calculations derived from: *bases de datos de la encuesta continua de hogares [ECH] (II trimestre del 2012)*, Nicaraguan Insituno Nacional de Información de Desarrollo. ***, **, * represent statistical significance at the .01, .05, and .10 levels, respectively.

Table 3C
Multiple Regression *Tiendita* Hourly Profits –Female Owners (*Tenderas*)

Variable	Ailing <i>Tienditas</i> β	Standard Error	t statistic	Significance
Constant	1.088	.644	1.689	.097*
Region (Managua=1)	.716	.230	3.117	.003***
Residence (Urban=1)	.088	.215	.410	.683
Household Size	-.032	.047	-.678	.500
Years of Potential Experience (PE)	.047	.025	1.843	.070*
PE Squared/100	-.061	.032	-1.918	.060*
Literacy (Yes=1)	-.049	.287	-.170	.866
Years of Education	-.002	.029	-.059	.953
Civil Status (Married=1)	.200	.230	.868	.389
Foreign Remittances (Yes=1)	-.590	.554	-1.065	.291
Keep Business Records (Yes=1)	.484	.198	2.450	.017**
Have Employees (Yes=1)	-.146	.197	-.741	.462
Wish to Change Jobs (Yes=1)	.094	.182	.517	.607
Have Second Job (Yes=1)	-.349	.221	-1.576	.121
Hours Worked in <i>Tiendita</i> (Week)	-.035	.005	-7.143	.000***

Adjusted R² = .420

Model ANOVA: F= 4.725, df=14, p=.000***

Source: Author’s calculations derived from: *bases de datos de la encuesta continua de hogares [ECH] (II trimestre del 2012)*, Nicaraguan *Instituto Nacional de Información de Desarrollo*. ***, **, * represent statistical significance at the .01, .05, and .10 levels, respectively.

Table 3D
Multiple Regression *Tiendita* Hourly Profits –Female Owners (*Tenderas*)

Variable	Stable <i>Tienditas</i>		t statistic	Significance
	β	Standard Error		
Constant	2.022	.406	4.978	.000***
Region (Managua=1)	.175	.164	1.069	.288
Residence (Urban=1)	.259	.167	1.556	.123
Household Size	-.013	.026	-.512	.610
Years of Potential Experience (PE)	.012	.017	.719	.474
PE Squared/100	-.025	.023	-1.086	.280
Literacy (Yes=1)	.046	.267	.172	.864
Years of Education	-.010	.024	-.435	.665
Civil Status (Married=1)	-.119	.150	-.793	.430
Foreign Remittances (Yes=1)	.628	.274	2.293	.024**
Keep Business Records (Yes=1)	.202	.150	1.348	.181
Have Employees (Yes=1)	.030	.167	.181	.857
Wish to Change Jobs (Yes=1)	-.142	.148	-.955	.342
Have Second Job (Yes=1)	-.163	.156	-1.042	.300
Hours Worked in <i>Tiendita</i> (Week)	-.030	.003	-9.696	.000***
Adjusted R ² = .514				
Model ANOVA: F= 8.541, df=14, p=.000***				

Source: Author's calculations derived from: *bases de datos de la encuesta continua de hogares [ECH] (II trimestre del 2012)*, Nicaraguan *Instituto Nacional de Información de Desarrollo*. ***, **, * represent statistical significance at the .01, .05, and .10 levels, respectively.

Table 3E
Multiple Regression *Tiendita* Hourly Profits –Female Owners (*Tenderas*)

Variable	Healthy <i>Tienditas</i>		t statistic	Significance
	β	Standard Error		
Constant	3.168	.570	5.555	.000***
Region (Managua=1)	.289	.172	1.680	.097*
Residence (Urban=1)	.027	.168	.163	.871
Household Size	-.021	.031	-.686	.495
Years of Potential Experience (PE)	-.015	.018	-.862	.391
PE Squared/100	.015	.025	.580	.564
Literacy (Yes=1)	.327	.260	1.258	.212
Years of Education	-.020	.022	-.920	.360
Civil Status (Married=1)	.033	.158	.209	.835
Foreign Remittances (Yes=1)	-.188	.340	-.552	.582
Keep Business Records (Yes=1)	.021	.160	.130	.897
Have Employees (Yes=1)	-.097	.205	-.474	.637
Wish to Change Jobs (Yes=1)	-.235	.169	-1.391	.168
Have Second Job (Yes=1)	.019	.159	.119	.906
Hours Worked in <i>Tiendita</i> (Week)	-.033	.004	-7.947	.000***
Adjusted R ² = .386				
Model ANOVA: F= 5.482, df=14, p=.000***				

Source: Author’s calculations derived from: *bases de datos de la encuesta continua de hogares [ECH] (II trimestre del 2012)*, Nicaraguan *Instituto Nacional de Información de Desarrollo*. ***, **, * represent statistical significance at the .01, .05, and .10 levels, respectively.

3.4 Total Household Income in *Tendera* Homes

Incomes of *tendera* households in this ECH sample reveal three main sources of income: principal occupation, secondary occupation, and monetary transfers. Total household income for *tendera* households is displayed in Table 4. Secondary occupational income averages about \$10 per month for all *tenderas* as well as for *tenderas* working in ailing and stable *tienditas*. *Tenderas* in failing *tienditas* earn on average an additional \$5.14 per month in their secondary employment whereas *tenderas* operating healthy *tienditas*

earn an extra \$17.01 per month in their secondary occupation. Nearly all secondary employment is self-employment (85.1%) or additional work for another family business (11.6%). The most common secondary jobs included raising and selling chickens and other animals (24.8%), cooking and baking (24.8%), selling ice cream and ices (14.0%), sewing and washing clothes (11.6%), and work in another *tiendita* (8.3%). However, less than one-third of all *tenderas* engage in secondary employment with no discernible pattern across the four groups. Perhaps the time constraints associated with caring for the family, managing the household, and operating the *tiendita* are roadblocks for many to secondary employment.

Table 4
Tendera Household Income Across Tiendita Segments (\$US)

	Income Source				
Principal Occupation	Failing	Ailing	Stable	Healthy	All
Monthly Mean	16.45	43.18	84.49	200.80	85.17
Amount (std. dev.)	(7.70)	(6.63)	(12.45)	(89.06)	(85.38)
F=328.298, p=.000					
Hourly Mean	0.32	0.58	0.72	1.11	0.67
Amount (std. dev.)	(0.43)	(0.93)	(0.89)	(0.86)	(0.83)
F=19.256, p=.000					
Secondary Occupation	Failing	Ailing	Stable	Healthy	All
Monthly Mean	5.14	10.23	9.90	17.01	10.33
Amount (std. dev.)	(22.91)	(25.46)	(30.49)	(62.07)	(38.88)
F=1.736, p=.159					
Hourly Mean	0.21	0.22	0.25	0.34	0.25
Amount (std. dev.)	(1.10)	(0.54)	(0.72)	(1.23)	(0.97)
F=.382, p=.766					
Transfer Income [^]	Failing	Ailing	Stable	Healthy	All
Monthly Mean	59.44	80.40	78.84	176.03	96.21
Amount (std. dev.)	(49.00)	(54.43)	(48.42)	(149.16)	(97.18)
F=6.665, p=.001					
Total Income	Failing	Ailing	Stable	Healthy	All
Monthly Mean	34.36	64.27	102.32	247.15	111.70
Amount (std. dev.)	(41.41)	(40.60)	(45.64)	(137.37)	(137.37)
F=149.093, p=.000					
Per Capita Household Income	Failing	Ailing	Stable	Healthy	All
Monthly Mean	10.50	21.52	29.43	67.73	32.02
Amount (std. dev.)	(18.23)	(28.33)	(28.20)	(47.39)	(47.39)
F=36.746, p=.000					

Source: Author's calculations derived from: *bases de datos de la encuesta continua de hogares [ECH] (II trimestre del 2012)*, Nicaraguan Instituto Nacional de Información de

Desarrollo *Italics = significant difference (ANOVA, comparison of means) across segments at the .001 level. ^Note: Only 67 households received transfer income, 26 for failing *tienditas*, 10 for ailing *tienditas*, 14 for stable *tienditas*, 17 for healthy *tienditas*. Transfer income is comprised of domestic and foreign remittances, social security, pensions, alimony, and local and foreign assistance.

Monthly transfer income, for those households that receive it, is substantial (\$96.21 on average). Few households receive transfer income; the rate of receipt of such transfer income is 21.5%, 13.5%, 13.9%, and 16.7%, respectively for failing, ailing, stable and healthy *tienditas*. In fact, transfer income to the *tendera* household is more than the monthly business profits for *tenderas* operating failing and ailing *tenderas* and nearly as much as income derived in stable and healthy *tienditas*. In all, total average monthly household income rises above \$100 for *tendera* households operating stable and healthy *tienditas*. On a per capita household basis, while incomes average \$32.02 for *tendera* households collectively, there is a stark contrast across the segments with per capita household incomes of \$10.50, \$21.52, \$29.43, and \$67.73, respectively, across failing, ailing, stable and healthy *tiendita* households.

4. Discussion and Policy Implications

This study set out to distinguish among healthy, stable, ailing, and failing “survivalist” female owned microenterprises within the home-based informal *tiendita* market segment. Because of the size and importance of *tienditas* within Nicaragua as a source of BoP employment and goods distribution, it makes sense from a public policy perspective not only to engage the sector, but also to enhance economic and social outcomes where possible. While it is improbable that even the healthiest *tienditas* may be latent or constrained gazelles, 14 or 3.5% of the *tienditas* in the sample earned more than \$300 a month with the monthly profits for the highest performing *tiendita* equaling \$522. This finding is in concert with the typology of survivalist firms offered by Berner et al. (2012, p. 388) who suggest that fewer than 10% of informal microenterprises may be growth oriented as “most survival enterprises would start up and remain within the informal economy, a feature that goes together with the low barriers of entry typical of these enterprises.” The low percentage of healthy *tienditas* are also consistent with Gindling and Newhouse (2012) who suggest that informal microenterprise success rates (measured by employment of others) are about 7% in the developing world. Grimm et al. (2012) argue in their study of the informal economy in West Africa that constrained gazelles are more likely to come from dynamic economies; dynamism as a whole is lacking within the Nicaraguan context.

Nonetheless, this healthy group of extraordinary performing informal *tienditas* representing both rural and urban areas and all but one of the regions of Nicaragua may be positioned for rapid growth provided the correct institutional interventions, such as access to capital through financial institutions and overseas remittances, relaxed legal requirements for formal sector entry, and bookkeeping training (where only seven in this group kept business records). Calderon et al. (2016) advocate similar policy interventions such as management training for those informal female Mexican entrepreneurs identified with the greatest success potential.

On the other end of the performance continuum, perhaps there is little direct public assistance that may help failing *tienditas* become stable or healthy business concerns. In many respects, failing *tienditas* fit the narrative of informal female entrepreneurship espoused by Nichter and Goldmark (2009) and uncovered by Grimm et al (2012) in West Africa. Yet, on the one hand, failing *tienditas* may provide some income to avoid complete familial disaster; however, on the other hand, the risk of utilizing scarce public resources to assist failing *tienditas* does not seem to match the business outlook of such microenterprises that are operating at the edge of extreme poverty. Perhaps this is an area where private or not-for-profit organizations may step in with microcredit assistance (Pisani, 2010). As a whole, failing *tienditas* comprise 30.4% of all *tienditas* while nationally 7.6% of households live in extreme poverty (FIDEG, 2013). The challenges of extreme poverty are embedded within structural deficiencies of institutions. Hence, structural changes, such as paid access to education for longer periods in high achieving schools (like Mexico's *oportunidades* program), may be a much better use of scarce public resources for children in households involved in failing *tienditas*.

Perhaps it is with ailing and stable *tienditas* that public policy may have the greatest impacts on these primarily necessity-driven microenterprises. For about one in three ailing firms, the practice of keeping business records enhances earnings significantly—that is, ailing firms with bookkeeping in place outperform their ailing firm counterparts by more than thirty percent on a per hour earnings basis. Basic business bookkeeping and accounting is an acquired skill that may be transferred to *tendera* entrepreneurs through skill development workshops in local schools at night with a modest investment. Yet not all *tenderas* in this segment may be ready to receive such training as 18.9% report they are not literate and 32.4% report having three years of formal education or less. In such cases family members, especially children with higher levels of education, may assist with the training and maintenance of record keeping in the *tiendita*. More concerted public investments in adult education for those whom the educational system has passed by may reap positive spillovers across the micro-entrepreneurship class. Moving ailing

tienditas that are marginally subsistence in outcome toward stability may radically improve life chances, particularly for the children of *tenderas*.

Stable *tienditas* provide a sufficient household income base for survival. Importantly, *tenderas* operating stable *tienditas* have a solid foundation to move forward. Nearly all are literate and 74.3% possess four years or more of formal education. As such, public policy interventions involving education and training, like bookkeeping, are very likely to take hold with this segment of *tiendita* owners. Further, remittances for owners of stable *tienditas* significantly boost earnings. There are no restrictions or taxes to remittance flows into Nicaragua (Deloitte, 2016), though there are very low rates of penetration of the formal financial sector particularly for those at the economic margins of society⁹. Policies that expand the banked population in Nicaragua may facilitate the over \$1billion in inbound remittance flows (IMF, 2013) and ease access to native capital and financial institutions. Additionally, relaxed regulatory policies may move stable, but informal, *tienditas* toward formal incorporation as long as the benefits of formality outweigh the costs of formality (Prahalad, 2004).

For three of four *tiendita* segments and *tienditas* collectively, regional location in Managua augmented earnings. This expected finding primarily results from Managua’s status as the economic hub of the country. Business location, especially as it is home-based and typically at the economic periphery, is not easily transferred in this context. Hence there is little public policy may achieve connecting regional business location in Managua and *tiendita* earnings. Indeed, as a classic primate city, Managua may be better off if the rural to urban migration to the capital is reduced where the present infrastructure is overburdened. More salient is the finding that the more *tenderas* worked in their *tienditas* the lower their economic returns per hour. In part, longer hours may result in more income, but at a lower hourly return. This findings signals the lower opportunity costs associated with *tiendita* ownership where next best occupational choices are found in second job employment such as raising animals, small scale vending, cooking, baking, sewing, and washing clothes for others. Nevertheless, *tiendita* ownership may provide an important path toward poverty reduction for some where economic opportunities are limited at the BoP particularly for adult women whom the educational system has passed by.

⁹ Of the poorest 40% of households in Nicaragua, only 8% have a bank account. For the nation as a whole, 19% of adults possess a bank account (Demirguc-Kunt et al., 2015). The World Bank considers the overall volume of remittances to be large as remittances amount to 10% of GDP and 23% of the value of goods and services exports (Demirguc-Kunt et al., 2015).

5. Conclusion

Tienditas, in-home convenience stores, are ubiquitous in Nicaragua where the total number of *tienditas* may exceed 100,000 firms employing 200,000 Nicaraguans. This is not an inconsequential business sector. Indeed more than half of Nicaraguans shop frequently at *tienditas*, more so in rural areas and in the urban periphery reaching base of the pyramid consumers. In meeting this consumer market niche, *tienditas* fulfill a Kirznerian or incremental market approach (and market need) toward micro-entrepreneurship.

Recently, Nichter and Goldmark (2009) advanced our understanding of the structural challenges and opportunities facing micro and small enterprises (MSEs) in the developing world. They lumped together the most challenged businesses as firms (and households) on the margins of life, literally interpreted. Nichter and Goldmark (2009) found that the *most* disadvantaged firms happen to be those MSEs that are female-owned, informal, and home-based within developing country economic contexts. This description matches *tendera* operated *tienditas* in Nicaragua. No *tiendita* in the survey reported enrollment in social security, a signal of informality. And by definition, only storefronts embedded within households were selected for analysis; hence in a classic sense, Nicaraguan female *tenderas* match Nichter and Goldmark's description of a disadvantaged and survivalist firm— where average business income falls under \$3 per day. Yet, business income from *tiendita* ownership is relatively stable and resilient to seasonality in the region, another benefit of *tiendita* ownership (Pisani and Yoskowitz, 2012). *Tienditas*, however, are not homogenous and not all are disadvantaged; four earnings categories emerge: failing *tienditas* (under \$1 a day), ailing *tienditas* (\$1 to \$2 a day), stable *tienditas* (\$2 to \$4 a day) and healthy *tienditas* (more than \$4 dollars a day). While it may be beyond the state's ability to effectively assist failing *tienditas*, public policy innovations, such as easing access to credit and overseas remittances, providing bookkeeping skills, and legitimizing informal concerns, may help heal ailing *tienditas* and facilitate stable and healthy *tienditas* to perform even better. In all, national public policy may play an important role in a comprehensive approach toward poverty mitigation at the base of the pyramid.

Additionally, *tenderas* are limited in educational achievement where nearly one-fifth has never attended school and collectively 63% possess an elementary school education or less. As the average *tendera* is middle-aged and married, the possibility of acquiring additional formal education is highly improbable in a developing market context. Within this disadvantaged environment, the good news surrounds the economic returns to entrepreneurship even where the educational system and accompanying

opportunities have passed *tenderas* by. In a country where 75% earn \$2 a day or less, more than half of *tenderas* earn above this perilous benchmark. Additionally, the workers in *tienditas*, who are mostly family members, have a much higher rate of educational achievement than *tenderas* suggesting that the children and extended family members of *tendera* households have the ability to pursue greater levels of education— where greater levels of education translate into higher paying work and life chances. Even so, about one-third of *tenderas* desire a change of occupational scenery hoping that another job would be higher paying. Second occupations for those *tenderas* who have them suggest few viable alternatives for higher paying work; in essence, many *tenderas* are doing relatively well considering their occupational alternatives.

Self-employed *tenderas* play an important role at the BoP, not only serving BoP consumers, but also achieving for many some modicum of relative good fortune for themselves and households given the available alternatives. Disadvantages aside, work as a *tendera* may be as good a self-employment option as possible for adult women to reduce poverty and move beyond survival at the BoP in a challenging emerging market like Nicaragua.

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