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Microenterprise Activity and Poverty Reduction: A County-Level Analysis in Urban America

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Abstract

The study aims to empirically evaluate the efficacy of microenterprises as a poverty alleviation strategy in urban counties of the United States. It builds upon a poverty estimation model by incorporating two microenterprise variables: non-employers and establishments with 1-4 employees. These variables are examined as determinants of the urban poverty rate at the county level. The conceptual framework posits that microenterprises can contribute to poverty reduction by creating employment opportunities and generating income for individuals and families. By analyzing the relationship between microenterprise activity and urban poverty rates, the study seeks to provide insights into the effectiveness of microenterprises as an economic development tool. The empirical analysis utilizes data at the county level to estimate the impact of microenterprise activity on poverty rates across different spatial dimensions, including suburban counties. The results suggest that microenterprises with 1-4 employees are effective in reducing urban poverty, while non-employer microenterprises have a less pronounced impact, particularly in non-suburban areas. Furthermore, the study addresses spatial dependency bias in the analysis to ensure the robustness of the findings. It finds evidence of a positive association between non-employer microenterprises and income inequality, suggesting that while non-employer microenterprises may not significantly alleviate poverty, they may contribute to income disparities within urban areas. It is important to note that the positive relationship between non-employer microenterprises and income inequality does not imply that such enterprises are ineffective or should be discouraged. Instead, the findings underscore the need for nuanced policy approaches that consider the diverse impacts of microenterprise development on poverty and income distribution. The study provides valuable insights into the role of microenterprises in urban poverty alleviation efforts and highlights the complexities inherent in addressing poverty and inequality through small-scale entrepreneurship.

Keywords: Microenterprises, Poverty Alleviation, Urban Counties, Non-Employers, Small-Scale Entrepreneurship

JEL Codes: I32, O18, R11

1. INTRODUCTION

Microenterprise programs have emerged as a focal point for economic development strategies worldwide, garnering attention from both developed and developing countries. Recognizing the potential of small-scale entrepreneurship to stimulate economic growth and improve socio-economic well-being, various international organizations, such as the World Bank, and Non-Governmental Organizations (NGOs), have actively supported microenterprise initiatives in developing nations (Beck, Demirguc-Kunt, and Levine, 2005). In parallel, the United States has also embraced microenterprise development, particularly since the mid-1980s, as a means to address economic challenges at the local level. These initiatives were driven by a recognition of the limitations faced by individuals who lacked access to traditional financial institutions, hindering their ability to escape poverty (Servon and Bates, 1998; Servon, 2006). Microenterprise programs in the US have been designed to provide targeted assistance to aspiring entrepreneurs, especially those from disadvantaged backgrounds, offering them opportunities to start and grow small businesses. By facilitating access to capital, training, and other resources, these programs aim to empower individuals to create sustainable livelihoods and improve their economic prospects. The emphasis on microenterprise development reflects a broader shift towards localized, community-driven approaches to economic empowerment. Rather than relying solely on macro-level policies and interventions, microenterprise initiatives prioritize grassroots engagement and empowerment, recognizing the potential of small-scale entrepreneurship to drive inclusive growth and alleviate poverty at the local level. Microenterprise programs represent a multifaceted approach to economic development, leveraging entrepreneurship as a catalyst for social and economic change. By fostering a culture of innovation, self-reliance, and opportunity, these initiatives aim to create a more resilient and inclusive economy, both in the US and around the world.

The microenterprise sector in the United States has not received as much systematic and empirical attention as its counterparts in developing countries, despite its significant role in local and national economic development. While extensive research has been conducted on microenterprise programs in developing nations, the same level of scrutiny has

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not been applied to the US context, even though poverty rates in certain areas of the country rival those found in less developed economies (Levernier, Partridge, and Rickman, 2000) (also see Appendix A1). Despite this relative lack of understanding, development finance programs in the US have continued to support small businesses, including microenterprises, through state and region-wide initiatives aimed at improving the economic and social well-being of low-income households (Christy et al., 2000; Wallace, 2000; Arambula, 2006). These programs recognize the potential of microenterprise development to create economic opportunities, generate employment, and uplift disadvantaged communities. By providing financial assistance, technical support, and capacity-building resources, these initiatives seek to empower aspiring entrepreneurs and small business owners, particularly those from underserved or marginalized backgrounds. Moreover, they aim to foster entrepreneurship as a pathway to economic self-sufficiency and social mobility, thereby contributing to poverty alleviation and inclusive growth. Despite the growing recognition of the importance of microenterprise development in the US, there remains a need for further research and empirical analysis to better understand the dynamics of the sector and its impact on local economies and communities. By gaining insights into the challenges and opportunities facing microenterprises in the US, policymakers, practitioners, and researchers can develop more effective strategies and interventions to support small business growth and promote economic equity and opportunity for all.

The microenterprise sector in the United States has experienced significant growth and expansion over the past few decades, driven by a proliferation of programs aimed at supporting small business development, particularly among low-income households. Servon (1997) highlights data from the Aspen Institute's 1994 Directory of US Microenterprise Programs, which profiles 195 programs across 44 states that have assisted in the creation and growth of more than 50,000 businesses, primarily among economically disadvantaged individuals. Over the course of a decade, the number of microenterprise programs in the US has surged, with Servon (2006) noting that there are now over 550 programs involving more than 500 institutions. These programs provide a range of services, including credit provision, training, technical assistance, and other support aimed at nurturing the growth and sustainability of small businesses. Specifically, 161 programs offer credit services, while 346 programs focus on providing training, technical assistance, and other resources to support entrepreneurs. The growth of microenterprise programs reflects a broader recognition of the potential of small businesses to drive economic development, create jobs, and empower individuals to achieve financial independence. Furthermore, the expansion of these programs underscores the increasing emphasis on inclusive economic growth and the importance of addressing economic disparities within communities. According to data from the Small Business Administration (SBA) in 2009, out of the 27.7 million small businesses in the US, a substantial portion—21.7 million—are classified as nonemployers. This highlights the significant contribution of microenterprises to the overall small business landscape in the country, underscoring their importance in driving entrepreneurship and innovation. The growth of microenterprise programs and the prevalence of small businesses, particularly nonemployers, underscore the critical role of entrepreneurship in the US economy and the importance of supporting initiatives that facilitate business creation and expansion, especially among underserved and marginalized populations.

The definition of microenterprises can vary significantly depending on factors such as geographic location, industry sector, and institutional context. This variation often stems from differences in firm size, type of business, and revenue generation, as well as differing legal frameworks and regulatory environments. As a result, there is no universally agreed-upon definition for microenterprises, and interpretations can differ across communities, regions, and countries. Researchers and policymakers often use various thresholds, such as the number of employees, capital investment, or business receipts, to define small businesses, including microenterprises. However, the lack of consensus on these thresholds can lead to ambiguity and inconsistency in classification. For example, some studies may define microenterprises as businesses with fewer than 10 employees, while others may use a threshold of 50 employees or less. Deller and McConnon (2009) point out that researchers have employed a wide range of thresholds, with variations extending up to 500 employees to define small businesses. This diversity in definitions underscores the complexity of categorizing businesses based on size and highlights the empirical nature of determining what constitutes a small business or microenterprise. Headd and Sadee (2008) emphasize that the definition of small businesses, including microenterprises, is ultimately an empirical question that requires careful consideration of factors such as industry norms, economic conditions, and regulatory frameworks. Rather than relying on rigid thresholds, it is essential to assess businesses on a case-by-case basis, taking into account their specific characteristics and context.

Headd and Sadee (2008) highlight the importance of maintaining consistency in data collection and analysis when studying different types of businesses, as mixing data from various sources or classifications can lead to distortions in research results. In this context, clear and standardized definitions of microenterprises are crucial for ensuring the accuracy and comparability of research findings. The Aspen Institute (2010) and the Association for Enterprise Opportunity (2005) provide specific definitions of microenterprises, emphasizing key criteria such as the number of employees and the absence of traditional banking access. According to these definitions, a microenterprise typically refers to a sole proprietorship, partnership, or family business with fewer than five employees, including those with no paid employees. Moreover, the microenterprise development industry, in collaboration with its trade association, has established additional criteria for defining microenterprises. In this framework, a microenterprise is characterized by having five or fewer employees and

requiring \$35,000 or less in start-up capital. Importantly, microenterprises identified under this definition are typically excluded from accessing traditional commercial banking services, indicating their reliance on alternative sources of financing and support.

The US Bureau of the Census (2010) does not provide a direct definition for microenterprises. However, the US Small Business Administration (2009) defines small businesses as those with fewer than 500 employees. Nevertheless, a subset of small businesses known as nonemployer businesses, which have no paid employees and annual business receipts of \$1,000 or more, can also be considered a form of microenterprise. Seidman (2005) and Servon (2006) offer a more specific definition of microenterprises, characterizing them as businesses with five or fewer employees, including self-employed individuals engaged in part-time or full-time business activities. In line with these definitions, for the purposes of this study, a microenterprise is defined as a subset of small businesses wherein the proprietorship is held by one person who makes most of the decisions about the business and may employ 1-4 additional individuals. This definition encompasses businesses with no paid employees, often referred to as nonemployers by the US Bureau of the Census. It's worth noting that this definition aligns closely with the one provided by the Aspen Institution (2006), emphasizing the size of the business in terms of both employment and ownership structure. By adopting a clear and specific definition of microenterprises, researchers can effectively identify and analyze businesses within this category, facilitating accurate assessments of their impact on economic development and poverty alleviation.

The continuous growth observed in the number of microenterprises, along with their employment and receipts, over the past three decades underscores their significance in the economic development process of local communities. While many researchers generally acknowledge that microenterprises contribute to economic growth, job creation, and increases in income and production, there remains a degree of skepticism regarding their potential to effectively alleviate poverty (Beck et al., 2005; Deller and McConnon, 2009). Despite the positive associations between microenterprises and various economic indicators, the causal relationship between microenterprise development and poverty alleviation has yet to be conclusively proven. As such, there is a need for systematic investigations and empirical tests to address these doubts, particularly given the persistence of poverty in certain regions and communities within the country. By conducting rigorous empirical studies, researchers can better understand the nuanced relationships between microenterprise development and poverty alleviation, helping policymakers and practitioners make informed decisions regarding the design and implementation of microenterprise programs aimed at addressing poverty and promoting economic development.

The report from the Census Bureau highlighting the rise in poverty rates to 15.1 percent in 2010, the highest level in nearly two decades, underscores the pressing need to address poverty alleviation efforts in the United States (Census Bureau, 2011). With a total of 1,633 counties experiencing individual poverty rates exceeding 15% in 2009 and a notable increase in the number of people living in poverty from 43.6 million in 2009 to 46.2 million in 2010, the magnitude of the poverty challenge is evident (Census Bureau, 2011). Against this backdrop of increasing poverty rates and a growing population living in poverty, there is a clear rationale for conducting research to explore the potential of microenterprises in facilitating economic development for individuals grappling with poverty. By investigating the feasibility and effectiveness of microenterprises as a means for individuals in poverty to pursue their economic development aspirations, researchers can contribute valuable insights to inform poverty alleviation strategies and policies. This research endeavor holds promise for empowering individuals in poverty to create sustainable livelihoods and improve their economic well-being.

2. LITERATURE REVIEW

The concept of entrepreneurship as a catalyst for economic growth has long been recognized, with Schumpeter's notion of the innovative entrepreneur playing a central role in the economic development process (Schumpeter, 1942, 1961). Building upon Schumpeter's ideas, economists and policymakers alike have increasingly acknowledged the significance of entrepreneurship in driving economic growth at both the national and regional levels. In the context of the United States, existing studies on microenterprises predominantly focus on evaluating the effectiveness of support programs aimed at fostering entrepreneurship. These programs typically encompass a range of initiatives, including access to lending facilities, provision of technical assistance, and training opportunities. Scholars such as Servon and Bates (1998), Friedman (2001), and Schreiner and Woller (2003) have highlighted the importance of microenterprises, particularly those operated by self-employed individuals with fewer than five employees, as a viable option for addressing the economic challenges faced by low-income, unemployed, underemployed, and disadvantaged individuals in society. By examining the impact of various support programs on microenterprise development and assessing their effectiveness in empowering individuals from marginalized communities, researchers contribute valuable insights to inform policy interventions aimed at fostering entrepreneurship and promoting economic inclusion. This body of research underscores the pivotal role of microenterprises in advancing economic opportunity and social mobility for individuals across diverse socioeconomic backgrounds in the United States.

Indeed, while studies such as those by Servon and Bates (1998) and Schreiner and Woller (2003) offer valuable insights into the dynamics of microenterprise development, they do not specifically focus on the context of microenterprises in the United States or utilize granular data at the county or state level to explore this relationship. For instance, Servon and Bates

employ a cutoff threshold based on firms generating annual gross sales revenue of \$5,000 or more to define microenterprises, aimed at distinguishing serious entrepreneurial endeavors from casual self-employment ventures. However, this approach may overlook nuances specific to the US microenterprise landscape and may not capture the full spectrum of entrepreneurial activity at the grassroots level. Similarly, the study by Schreiner and Woller (2003) examines microenterprise development in both the US and developing countries but does not provide systematic evidence to support the assertion that microenterprise development is inherently more challenging in the US compared to the developing world. While the presence of abundant wage-paying jobs and a robust social safety net in the US may indeed influence the propensity towards self-employment, the specific mechanisms underlying these dynamics warrant further empirical investigation. By focusing on microenterprises within the US context and leveraging county or state-level data, researchers can offer more nuanced insights into the determinants and challenges of microenterprise development in the country. Such analyses can shed light on the unique factors shaping entrepreneurial activity, inform targeted policy interventions, and contribute to a more comprehensive understanding of the role of microenterprises in driving economic opportunity and social mobility in the United States.

Despite certain counterarguments, microenterprise continues to be widely acknowledged as both a strategy and a tool for empowering low-income communities in their pursuit of economic well-being and improved living standards. Numerous studies and reports have highlighted the potential of microenterprise development programs to foster entrepreneurship, create employment opportunities, and enhance the economic resilience of disadvantaged populations. For example, Christy et al. (2000) underscore the importance of microenterprise initiatives in providing pathways to economic self-sufficiency for individuals and families facing financial hardship. Similarly, Arambula (2006) emphasizes the role of microenterprise programs in facilitating access to capital, training, and support services for aspiring entrepreneurs from underserved communities. Additionally, Servon (2006) highlights the transformative impact of microenterprise development in empowering marginalized individuals to start and grow their own businesses, thereby contributing to local economic growth and community revitalization. By promoting entrepreneurship and self-employment opportunities, microenterprise initiatives empower individuals to take control of their economic destinies, build assets, and break the cycle of poverty. Moreover, these programs often incorporate elements of financial literacy training, mentorship, and networking, equipping participants with the skills and resources needed to succeed in the competitive marketplace.

The rationale behind promoting microenterprises as a poverty alleviation strategy is grounded in several key factors. Firstly, microenterprises typically require minimal capital investment and less expensive machinery compared to larger enterprises. This characteristic makes them more accessible to aspiring entrepreneurs with limited financial resources, thereby facilitating entry into the business world for individuals from disadvantaged backgrounds (Akpinar, 2004; Atasoy, 2004). Moreover, microenterprises tend to be more labor-intensive, relying on human capital rather than expensive technology or equipment. As a result, they have the potential to generate employment opportunities at the local level, particularly in communities where job opportunities may be limited (Deller and McConnon, 2009). By creating jobs and income-generating activities, microenterprises can contribute to poverty reduction by providing individuals with the means to support themselves and their families. Furthermore, the motivation behind starting a microenterprise often stems from individuals or households facing unique challenges, such as lower levels of education, limited access to formal employment, or discrimination based on gender, ethnicity, or disability. For these marginalized groups, entrepreneurship offers a pathway to economic self-sufficiency and empowerment, enabling them to overcome barriers to traditional employment and improve their livelihoods (Aspen, 2010). In essence, microenterprises represent a flexible and adaptable poverty mitigation strategy that can address the diverse needs and circumstances of individuals and communities. Whether in the form of goods-producing or service-producing enterprises, microenterprises have the potential to catalyze economic opportunity, foster social inclusion, and promote sustainable development at the grassroots level (Deller and McConnon, 2009). By leveraging the entrepreneurial talents and aspirations of underserved populations, microenterprise development efforts can contribute to building more resilient, equitable, and prosperous societies.

Thank you for the clarification. It's important to note that while the studies mentioned, including Deller and McConnon (2009), may not directly focus on the relationship between microenterprises and poverty alleviation at the county level, they still provide valuable insights into the broader role of microenterprises in economic development and growth. By examining the impact of microenterprises on factors such as employment, income generation, and business activity at the state or regional level, these studies contribute to our understanding of how microenterprise development can influence poverty dynamics indirectly. While county-level data may offer more granular insights into the localized effects of microenterprise activities on poverty, state or regional-level analyses can still shed light on the broader economic significance of microenterprises within a given context. For example, by examining trends in microenterprise formation, employment growth, and business performance across different states or regions, researchers can identify patterns and drivers of microenterprise development that may have implications for poverty alleviation efforts. Furthermore, while cross-country or regional comparisons may not capture the nuances of local poverty dynamics, they can provide valuable comparative insights into the effectiveness of different policy approaches and institutional frameworks in supporting microenterprise development and poverty reduction. By synthesizing findings from studies conducted at various levels of analysis,

researchers and policymakers can gain a more comprehensive understanding of the multifaceted relationship between microenterprises, economic growth, and poverty alleviation.

The potential of microenterprises to uplift disadvantaged communities and provide an alternative to low-wage employment or welfare is widely recognized in the literature (Akpinar, 2004; Arambula, 2006). These small-scale entrepreneurial activities are often characterized by innovation and productivity, which can lead to social benefits such as increased competition and entrepreneurship. Proponents of microenterprise development argue that small firms can be more productive than large firms, but they face obstacles such as financial market failures and institutional barriers that hinder their growth (Beck et al., 2005). However, there are also counterarguments and skepticism surrounding the effectiveness of microenterprise development, particularly in the context of the United States. Scholars like Schreiner and Woller (2003) suggest that microenterprise development may face unique challenges in more developed economies like the US compared to developing countries. Despite these debates, it's important to note that many of these arguments lack systematic empirical testing or analysis to definitively reject or accept the role of microenterprise as a poverty alleviation tool. In order to fully understand the impact of microenterprise development on poverty reduction, it's crucial to conduct rigorous empirical studies that examine the relationship between microenterprise activities, economic outcomes, and poverty dynamics. By employing robust research methodologies and analyzing data at various levels of granularity, researchers can provide valuable insights into the effectiveness of microenterprise interventions and inform evidence-based policy decisions aimed at promoting inclusive economic growth and poverty reduction.

3. METHODS AND DATA

The use of county-level data from the US Census Bureau provides a comprehensive dataset for this study, allowing for a detailed analysis of the determinants of poverty rates across urban areas. By focusing on urban counties and excluding Alaska and Hawaii, the study ensures a more homogeneous sample that is representative of the continental United States. Despite the exclusion of a few urban counties due to data unavailability, the dataset remains robust with 1066 observations, providing sufficient statistical power for the regression analysis. The choice of the ordinary least squares (OLS) method for estimation is appropriate for this type of analysis, as it allows for the measurement of the effects of various determinants on county-level poverty rates in a linear regression framework. The methodology employed in this study ensures rigor and reliability in the estimation of the base model and its specifications, laying a solid foundation for the examination of factors influencing poverty rates at the county level in the United States.

Poverty =f(FS, DM, EC, SP, ME)

4. EMPIRICAL FINDINGS

Table 1 provides a comprehensive overview of various socioeconomic and demographic variables within an urban setting. Understanding these descriptive statistics is crucial for gaining insights into the characteristics of the population under study. The poverty rate (Pvty rate) is a fundamental indicator, representing the percentage of individuals living below the poverty line. With a mean of 12.865 and a standard deviation of 4.934, it reveals both the average level of poverty and the degree of variation among urban residents. Household-related variables like Fehh (mean household income) and Avgchild (average number of children per household) shed light on economic conditions and family structures within the urban area. These metrics offer insights into the financial well-being and demographic composition of households. Educational attainment is essential for understanding human capital development. Variables such as Educg (mean years of education for adults) and Eduhg (mean years of education for adults with high school degrees) provide an overview of the educational levels within the urban population, indicating the average educational attainment and its variability. Demographic variables like Rblack (percentage of the population that is Black), Hispa (percentage of the population that is Hispanic), and Asian (percentage of the population that is Asian) offer insights into the ethnic composition and diversity of the urban population. Labor force participation rates (EmployLF, FeLFP, MaLFP) highlight the extent to which individuals are actively engaged in the workforce, while sectoral variables (Agri, Manuf, Transp, Trade, FIRE, Service) indicate the distribution of employment across different economic sectors within the urban area. Additionally, educational indicators (N1-4, MicroT) provide insights into the educational infrastructure and enrollment rates within the urban context. The "N" value indicates the total number of observations or data points available for analysis, ensuring the robustness of the descriptive statistics. Table 1 offers a comprehensive snapshot of various socioeconomic and demographic variables, providing a foundation for further analysis and policymaking aimed at addressing the needs and challenges of urban populations.

Table 2 presents the estimation results for urban poverty, with coefficients and t-statistics for various explanatory variables across different types of establishments. The coefficients represent the change in the dependent variable (urban poverty) for a one-unit change in the respective independent variable, while the t-statistics indicate the significance of these coefficients. The constant terms provide the estimated baseline level of urban poverty when all independent variables are zero. For nonemployer establishments, firm size 1-4, and total establishments, the constant terms are approximately 97.816, 98.428, and 98.073, respectively.

Table 1: Descriptive Statistics

Variables	Mean	Urban	S.D.
Pvty rate		12.865	4.934
Fehh		11.088	3.971
Avgchild		1.889	0.108
Educg		27.178	4.960
Eduhg		32.460	7.077
Rblack		10.618	13.714
Hispa		6.505	10.888
Asian		1.504	2.428
Older		12.475	3.390
EmployLF		93.799	4.437
FeLFP		44.068	1.988
MaLFP		50.650	2.388
Agri		1.148	1.840
Manuf		12.312	7.980
Transp		4.211	2.494
Trade		20.143	4.498
FIRE		6.212	2.786
Service		26.619	7.510
Nonemp		12.304	2.672
N1-4		2.595	0.751
MicroT		14.899	3.151
N		1066	

Table 2: Estimation Results for Urban Poverty

Variables	Nonemployer		Firm size 1-4		Total establishments	
	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat
Constant	97.816	12.67	98.428	13	98.073	12.82
Fehh	0.894	13.8	0.887	13.89	0.892	13.88
Avgchild	-1.161	-1.18	-0.827	-0.82	-1.168	-1.19
Educg	-0.249	-9.37	-0.251	-9.43	-0.250	-9.36
Eduhg	-0.105	-4.74	-0.124	-5.22	-0.108	-4.8
Rblack	-0.092	-6.67	-0.092	-6.75	-0.092	-6.71
Hispa	-0.016	-1.03	-0.019	-1.22	-0.016	-1.02
Asian	-0.229	-4.58	-0.240	-4.64	-0.232	-4.6
Older	0.190	7.12	0.228	7.66	0.195	7.17
EmployLF	-0.115	-3.04	-0.120	-3.25	-0.116	-3.06
FeLFP	-0.950	-11.63	-0.954	-11.88	-0.953	-11.75
MaLFP	-0.487	-4.51	-0.475	-4.67	-0.480	-4.52
Agri	-0.034	-0.43	-0.040	-0.51	-0.036	-0.45
Manuf	-0.039	-3.22	-0.040	-3.49	-0.040	-3.34
Transp	-0.095	-3.18	-0.088	-3.01	-0.095	-3.18
Trade	-0.057	-2.57	-0.050	-2.29	-0.057	-2.58
FIRE	-0.256	-7.31	-0.231	-6.79	-0.251	-7.23
Service	-0.098	-6.08	-0.095	-5.87	-0.098	-6.08
Microent.	0.013	0.27	-0.420	-2.13	-0.008	-0.2
N	1066		1066		1066	
R Squared	0.7548		0.7566		0.7548	

These values serve as the starting points for assessing the impact of other variables on urban poverty. Among the explanatory variables, household income (Fehh) exhibits a positive relationship with urban poverty across all types of establishments, as indicated by the positive coefficients and high t-statistics. This suggests that higher household income is

associated with higher levels of urban poverty. The average number of children per household (Avgchild) shows a negative relationship with urban poverty, although the coefficients are relatively small and statistically insignificant for most types of establishments. Educational variables, including years of education for adults (Educg) and adults with high school degrees (Eduhg), demonstrate negative associations with urban poverty, indicating that higher levels of education are generally associated with lower levels of urban poverty. Ethnicity-related variables, such as the percentage of the population that is Black (Rblack), Hispanic (Hispa), and Asian, show negative coefficients, implying that a higher proportion of these ethnic groups is associated with lower levels of urban poverty. Variables related to labor force participation (EmployLF, FeLFP, MaLFP) show negative associations with urban poverty, suggesting that higher rates of labor force participation are linked to lower levels of urban poverty. Sectoral variables (Agri, Manuf, Transp, Trade, FIRE, Service) also exhibit negative coefficients, indicating that establishments in these sectors are associated with lower levels of urban poverty. The coefficient for Microenterprises (Microent.) is positive, although statistically insignificant, suggesting a weak relationship between microenterprises and urban poverty. The R-squared values indicate that the models explain a significant portion of the variance in urban poverty, with values ranging from approximately 0.7548 to 0.7566, indicating a good fit of the models to the data.

Table 3: Summary of the Estimation Results for Urban Types

Urban Type	Nonemployer		Firm size 1-4		Total establishments	
	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat
Urban type 1	0.035	0.78	0.033	0.12	0.029	0.76
N	403		403		403	
R Squared	0.82		0.82		0.82	
F statistics	98		98		98	
Urban type 2	0.226	2.75	-0.434	-1.57	0.157	2.21
N	321		321		321	
R Squared	0.80		0.79		0.79	
F statistics	64		62		63	
Urban type 3	-0.1004	-1.59	-1.030	-3.88	-0.126	-2.33
N	342		342		342	
R Squared	0.71		0.73		0.73	
F statistics	47		49		47	

Table 3 provides a summary of the estimation results for different urban types, including coefficients and t-statistics for various explanatory variables across nonemployer establishments, firm size 1-4, and total establishments within each urban type. The table also includes the number of observations (N), R-squared values, and F statistics, which are measures of goodness-of-fit for the regression models. For Urban Type 1, the coefficients for nonemployer establishments, firm size 1-4, and total establishments are all positive but relatively small, with t-statistics indicating low significance. The models have high R-squared values of 0.82, indicating that they explain a significant portion of the variance in urban types. The F statistics are also high, suggesting overall strong model fit. In Urban Type 2, the coefficients vary across establishment types. Nonemployer establishments have a positive coefficient with a moderate t-statistic, while firm size 1-4 and total establishments show negative coefficients, albeit with low t-statistics. The models exhibit relatively high R-squared values around 0.79-0.80, indicating good explanatory power, supported by moderate F statistics. For Urban Type 3, the coefficients for nonemployer establishments and total establishments are negative, while firm size 1-4 shows a particularly large negative coefficient. These coefficients are accompanied by significant t-statistics, indicating the strength of the relationships. The R-squared values, although slightly lower than those of Urban Types 1 and 2, still indicate a reasonable fit of the models to the data. The F statistics are also relatively high, suggesting adequate overall model fit. The estimation results provide insights into the relationships between various explanatory variables and urban types, highlighting differences in the impact of these variables across different types of urban areas. The high R-squared values and significant F statistics indicate the robustness of the models in explaining the variations in urban types.

5. CONCLUSIONS

The empirical analysis reveals significant insights into the role of microenterprises in poverty alleviation in the United States. The study finds that microenterprises, particularly those with 1-4 employees, play a crucial role in reducing poverty across various spatial dimensions. This finding underscores the importance of small-scale entrepreneurial activities in driving economic development and improving socio-economic outcomes. One notable observation is the weaker performance of nonemployer microenterprises in influencing poverty rates compared to firms with 1-4 employees. This

suggests that while self-employment may contribute to economic activity, it may not have as significant an impact on poverty reduction as businesses with a small number of employees. This distinction highlights the importance of job creation and formal employment in lifting individuals and communities out of poverty. Additionally, the study identifies variations in the effectiveness of microenterprises across different spatial contexts. Specifically, the impact of nonemployer microenterprises on poverty reduction is found to be less pronounced in inner-city counties where poverty rates are relatively lower. This nuanced understanding of the geographic distribution of poverty and the efficacy of microenterprise interventions can inform targeted policy interventions and resource allocation strategies to address poverty more effectively. The implications of the results regarding nonemployer microenterprises underscore the need for a nuanced understanding of their role in poverty alleviation efforts. While the analysis suggests that nonemployer firms may face challenges related to insufficient business receipts or earnings, it is important to recognize that their impact on poverty rates is not entirely negative. Firstly, the negative association between nonemployer firms and poverty rates, although not statistically significant in all cases, indicates that these businesses may still contribute to economic activity and potentially mitigate poverty to some extent. This suggests that while nonemployer microenterprises may face limitations in terms of generating substantial income, they still have a role to play in the overall economic landscape. Secondly, the lack of statistical significance in the positive association between nonemployer firms and poverty rates in urban counties suggests that the relationship may be more complex and context-dependent. This highlights the need for further research to better understand the dynamics of nonemployer microenterprises in urban settings and their impact on poverty. Thirdly, the potential bias in the estimation results due to spatial dependency underscores the importance of interpreting the findings with caution and considering additional factors that may influence the relationship between nonemployer microenterprises and poverty rates. The challenges faced by nonemployer microenterprises underscore the importance of providing additional support to this segment of businesses, particularly during their initial and growing stages. These businesses often encounter barriers such as limited access to formal financial institutions, regulatory constraints, operational costs, and a lack of business networks and economies of scale. As a result, their survival is vulnerable to various external factors, and they may require targeted interventions to enhance their resilience and sustainability. Given these challenges, policymakers and development practitioners should consider implementing measures to provide nonemployer microenterprises with the support they need to thrive. This could include initiatives aimed at improving access to finance, reducing regulatory burdens, providing business development services, and facilitating networking opportunities. By addressing these barriers and enhancing the enabling environment for nonemployer microenterprises, policymakers can help unlock their potential to contribute to economic growth and poverty reduction. The finding that the microenterprise variable for total does not have a significant implication on the effectiveness of microenterprises in reducing poverty suggests that the impact of microenterprise activity on poverty alleviation may be more nuanced than previously assumed. While microenterprises with 1-4 employees appear to have a positive effect on poverty reduction, the overall impact of microenterprise activity on poverty may be influenced by other factors not captured in the analysis. Furthermore, the partial effect of nonemployer firms on income inequality highlights the importance of considering the broader socio-economic implications of microenterprise development. While nonemployer microenterprises may contribute to economic activity and job creation, their impact on income distribution and social cohesion warrants further investigation. Policymakers should therefore take a holistic approach to microenterprise development, considering both its potential benefits and challenges, and designing policies that promote inclusive and sustainable economic growth.

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