

# **Microbusinesses in the United States: Characteristics and Sector Participation**

by  
James H. Carr and Katrin B. Anacker

*A Special Report Commissioned by*  
**Association for Enterprise Opportunity (AEO)**



September 2013

## Table of Contents

<b>Executive Summary</b> .....	<b>6</b>
<b>Introduction</b> .....	<b>11</b>
<b>Data</b> .....	<b>11</b>
<b>Results</b> .....	<b>14</b>
<b>Differentiation by Business Size</b> .....	<b>14</b>
Number and Proportion of Microbusinesses vs. Non-Microbusinesses	
Sales and Receipts of Microbusinesses vs. Non-Microbusinesses	
Annual Payroll of Microbusinesses vs. Non-Microbusinesses	
<b>Differentiation by Gender and by Sector</b> .....	<b>21</b>
Number and Proportion of Female-Owned Microbusinesses vs. Non-Microbusinesses	
Number and Proportion of Male-Owned Microbusinesses vs. Non-Microbusinesses	
Number and Proportion of Equally Owned Microbusinesses vs. Non-Microbusinesses	
Number and Proportion of Female- vs. Male-Owned Microbusinesses vs. Non-Microbusinesses	
Number and Proportion of Female-Owned, Male-Owned vs. Equally Owned Microbusinesses	
Sales and Receipts of Microbusinesses by Gender	
Annual Payroll of Microbusinesses by Gender	
<b>Differentiation by Race and by Sector</b> .....	<b>45</b>
Number and Proportion of Microbusinesses vs. Non-Microbusinesses by Race and by Sector	
Sales and Receipts of Microbusinesses vs. Non-Microbusinesses by Race and by Sector	
Annual Payroll of Microbusinesses vs. Non-Microbusinesses by Race and by Sector	
<b>Differentiation by Ethnicity and by Sector</b> .....	<b>65</b>
Number and Proportion of Hispanic Microbusinesses vs. Non-Microbusinesses by Sector	
Sales and Receipts of Hispanic Microbusinesses by Sector	
Annual Payroll of Hispanic Microbusinesses by Sector	
<b>Differentiation by Veteran’s Status</b> .....	<b>70</b>
Number and Proportion of Veteran Microbusinesses vs. Non-Microbusinesses by Sector	
Sales and Receipts of Veteran Microbusinesses by Sector	
Annual Payroll of Veteran Microbusinesses by Sector	
<b>Conclusion</b> .....	<b>75</b>
<b>Appendix</b> .....	<b>77</b>

## **Acknowledgements**

AEO sincerely thanks the W. K. Kellogg Foundation for their generous support of this study. We greatly appreciate the talent and skills of our research team and authors, and the valuable insights and analysis provided by our Economic Impact Council of Advisors: Joy Anderson, John Arensmeyer, Keith Ernst, Dr. Robert Fairlie, Mary Houghton, Dr. Susan Jones, Dr. Barbara Robles, Dr. Lisa Servon, Bess Stephens, James Thomas, Gladys Washington, and Gina Wood.

## **Report Authors**

This report was commissioned by Association for Enterprise Opportunity (AEO). It was prepared by James H. Carr and Katrin B. Anacker. Carr is a Banking, Finance, and Economic Development Consultant. He is also a Senior Fellow with the Center for American Progress and Distinguished Scholar with the Opportunity Agenda.

Katrin B. Anacker is Assistant Professor of Public Policy at George Mason University.

## **Report Terms of Use**

The report, “**Microbusinesses in the United States: Characteristics and Sector Participation**” was commissioned by Association for Enterprise Opportunity (AEO), and is to be used solely for the promotion of the public’s general awareness and understanding of the microbusiness industry and microbusinesses. As such, AEO authorizes others to use the report only for educational, charitable or other non-commercial purposes consistent with AEO’s status as a tax-exempt entity under section 501(c)(3) of the Internal Revenue Code.

## **Commercial Use is Prohibited**

Unauthorized publication or exploitation of this report commissioned by Association for Enterprise Opportunity (AEO) is specifically prohibited. Anyone wishing to use any portion of this report, or the report in its entirety for commercial use, publication, or any purpose other than fair use as defined by law, must request and receive prior permission. All requests to reproduce this report should be addressed directly to AEO, Kimberly N. Alleyne, Senior Director, Marketing and Communications at 1111 16th Street, NW, Washington, DC, 20036. Telephone: (202) 650-5580.

## **About AEO**

Association for Enterprise Opportunity (AEO) is the national trade association and network that represents the microbusiness and microfinance industry in support of America’s 25.5 million microbusinesses. Since 1991, AEO has worked to create economic opportunity for underserved entrepreneurs by advancing policies and practices for the nonprofit organizations that provide capital and business support services to them.

With the help of our more than 450-member organizations and partners, we have a reach of more than 1 million microbusinesses across the United States. AEO’s national Board of Directors represents service providers and lenders, nonprofit and for-profit organizations.

## Preface

AEO has long recognized the substantial contributions made by microbusinesses—our country’s largest segment of small businesses—to local economies across the country. The onset of the Great Recession and its lingering consequences of unemployment and wealth stripping sounded a bell of urgency to generate the evidence behind our beliefs. We have now built the evidence base for a well-informed case that documents the economic impact of microbusinesses in the United States. As top policy experts and law makers, economists and business journalists, philanthropists and business leaders posit and debate ideas on what to do about the tens of millions of unemployed people and the growing number of children and families living in poverty, we urge them to learn more about the impact of microbusiness now.

Microbusinesses are responsible for more than 41 million jobs in this country. Just imagine the potential impact microbusiness could have if we made more strategic investments in it as a deliberate strategy and solution to move our economy forward.

This report, *Microbusiness in the United States: Characteristics and Sector Participation*, is one of a series of reports and forthcoming papers. Two other reports were produced from the two-year study funded by the W.K. Kellogg Foundation, (*Bigger than You Think: The Economic Impact of Microbusiness in the United States*; and *Microbusinesses in Georgia: Characteristics and Economic Impact*), and are available on the AEO website ([www.aeoworks.org](http://www.aeoworks.org)). Additional data analysis by the Insight Center for Community Economic Development (ICCED) is contained in the unpublished report, *The Economic Impact of U.S. Microbusinesses*. This report and its 207-page Appendix can be made available to other researchers and analysts upon request.

The evidence gathered through AEO’s efforts goes far in filling the data gap on microbusinesses. The findings paint a compelling portrait of a remarkably vigorous microbusiness community that plays an outsized contribution to the economy, more so than the size of any single business would suggest. Microbusinesses are demonstrating great success in spreading business participation and ownership across underserved communities — they represent a path to economic opportunity for all.



Connie E. Evans,  
President and CEO, Association for Enterprise Opportunity

## Executive Summary

Nearly four years after the end of the Great Recession, the U.S. labor market continues to struggle to create jobs. Although the unemployment rate has fallen from its recession high of 10 percent in October 2009 to 7.4 percent in July 2013, about 11.5 million people are still jobless. The decrease in the unemployment rate can be attributed to the creation of part-time and temporary positions. The decrease can also be attributed to people dropping out of the labor force due to their inability to find employment.

In an environment of limited opportunities for millions of workers in traditional employment, the number of microbusinesses, i.e., firms with four or fewer employees, has been growing.<sup>1</sup> Yet it is unknown how many microbusinesses have been created as a result of limited traditional employment options, unemployment, or other reasons. Millions of microbusinesses have been started by entrepreneurs who have unique skills or training that are in high demand by government, as well as major corporations, by those who desire flexibility in their work schedules or part-time work, or as an alternative to unemployment.

The Insight Center for Community Economic Development estimates that as of 2011, there are about 25.5 million microbusinesses in the U.S., about 22 million (86 percent) of which are non-employers, and about 3.5 million (13 percent) of which are employers of one to four workers. Despite their large number, relatively little is currently known about these important businesses. Research is scarce regarding the reasons microbusinesses are being launched; in which business sectors they are primarily active in and why they cluster; how and why their performance differs by sector; how and in what ways microbusiness performance differs by race, ethnicity, gender, and veteran status; and in what ways, and why, microbusinesses perform differently from non-microbusinesses. This study takes a step forward in investigating microbusinesses in the United States.

The data source for this report is the Survey of Business Owners (SBO). This survey is conducted by the U.S. Bureau of the Census every five years and provides a comprehensive source of information on selected economic and demographic characteristics for businesses by size, gender, race, ethnicity, and veteran status. At the time of this writing, the most recent SBO survey available was the SBO 2007. The SBO 2012 will be conducted in two phases; survey forms were mailed in June 2013 and a second mailing will occur in June 2014. Results are expected to be released in December 2015. As response rates for the different demographic groups are different among survey years, data sets for the different years should not be merged.

The variables utilized in this report were the Number of Businesses, Sales, and Receipts (in \$1,000) and Annual Payroll (\$1,000), by business sector and by firm size. Because the variables Sales and Receipts (\$1,000) and Annual Payroll (\$1,000) are provided as aggregate dollar amounts, this report provides two ratios to make the sales and receipts and annual payroll data more meaningful. First, the Sales and Receipts ratio was developed by dividing aggregate Sales and Receipts (\$1,000) per sector by the Number of Businesses per Sector. Second, the Annual Payroll ratio was created, which divides the Annual Payroll (\$1,000) of each sector by the Number of Employees per sector. These variables and ratios are used to

---

<sup>1</sup> David E. Thigpen and Tim Lohrentz (2013). *The Economic Impact of U.S. Microbusinesses*. Oakland, CA: Insight Center for Community and Economic Development. May.

understand the characteristics and the economic impact of microbusinesses and to compare them with non-microbusinesses, i.e., firms with five or more employees.

Results show that microbusinesses are more heavily concentrated in sectors such as Professional, Scientific, and Technical Services; Construction; and Retail Trade, which have moderately higher median wages relative to non-microbusinesses, and that they are more heavily concentrated in sectors that pay low to moderate wages, such as Health Care and Social Assistance, Retail Trade, and Accommodation and Food Services.

With respect to the concentration among industry sectors, microbusinesses were most heavily represented in sectors that were not classified; Real Estate and Rental and Leasing; and Professional, Scientific, and Technical Services. The sector formally labeled Industries not classified is comprised of a very high proportion (93 percent) of microbusinesses, although there is not much further information available. More than 70 percent of microbusinesses were in Real Estate and Rental and Leasing and Professional, Scientific, and Technical Services. While the former sector pays median wages, the latter pays medium to relatively high median wages.

Non-microbusinesses ranked highest in business sector Management of Companies and Enterprises (87.32 percent), followed by Manufacturing (60.42 percent), and Accommodation and Food Services (58.08 percent). The only difference in sector concentration and wages between microbusinesses and non-microbusinesses, where the latter are disproportionately present, was in sector Management of Companies and Enterprises. This concentration deserves further analysis as this sector is one of the most lucrative in terms of wages, which range from medium to high.

Median wages within many industry sectors vary significantly by occupation. In 2012, for example, median wages within the Professional, Scientific, and Technical Services sector ranged from \$47,930 for architectural and civil drafters, to \$65,100 for accountants and auditors, and \$117,040 for lawyers. Because the SBO does not allow for a more refined analysis of microbusinesses and non-microbusinesses by occupation, the extent to which the two types of businesses cluster by occupation is unknown, even in instances where they have similar clustering at the industry sector level.

In terms of the ratio Sales and Receipts (\$1,000) Divided by the Number of Businesses per Sector, non-microbusinesses had far higher performance ratios than microbusinesses across sectors. Microbusinesses had the highest sales and receipts ratios in Management of Companies and Enterprises, followed by Wholesale Trade, and Utilities. Non-microbusinesses had the highest ratios in Utilities, followed by Finance and Insurance, and Wholesale Trade. The ratio of non-microbusinesses in the sector with the highest sales and receipts ratio (Utilities) was 124 times greater than the ratio of microbusinesses in the sector with the highest sales and receipts ratio (Management of Companies and Enterprises).

However, even when comparing the sales and receipts ratios of the Utilities sector between non-microbusinesses and microbusinesses, the ratio of the former was still 179 times greater than that of the latter. The higher sales and receipts ratios for non-microbusinesses relative to microbusinesses may not necessarily reflect a higher operating performance of non-microbusinesses relative to microbusinesses. As discussed above, the ratio utilized in this report divides aggregated sales and receipts (in \$1,000) by the number of businesses rather than the number of employees. As a result, the extent to which the higher sales and receipts ratio for non-microbusinesses relative to microbusinesses may simply be a reflection of

a greater number of employees generating a similar level of sales and receipts per employee is unknown. This analysis, however, examines microbusinesses as individual business entities, so performance measurement of sales and receipts by number of companies is the appropriate ratio. Further research that drills further to examine sales and receipts by employee and by occupation would be useful. Of immediate concern, based on this analysis, is the extremely small proportion of microbusinesses in the sectors that exhibit the highest sales and receipts ratios. Less than one percent of all microbusinesses are in Management of Companies and Enterprises and Utilities, and just over five percent are in Wholesale Trade sector.

In terms of the ratio Annual Payroll (\$1,000) Divided by the Number of Employees per Sector, non-microbusinesses also outperform microbusinesses. Both microbusinesses and non-microbusinesses scored highest in the Management of Companies and Enterprises sector. Microbusinesses had a higher ratio than non-microbusinesses (99 versus 90, respectively), and this ratio is three times the median ratio for all sectors (99 versus 33). Nevertheless, microbusinesses are underrepresented in that sector and median wages are relatively medium to high. Compared to the highest annual payroll ratio (99), the second highest ratio was in the Information (ratio: 52) and the Arts, Entertainment, and Recreation (ratio: 51) sectors, which are much lower compared to the highest ratio. Non-microbusinesses had the highest annual payroll ratio in the Management of Companies and Enterprises sector (ratio: 90), similar to microbusinesses, followed by the Utilities (ratio: 82), and the Finance and Insurance (ratio: 78) sectors.

Female-owned microbusinesses were most heavily concentrated in the Professional, Scientific, and Technical Services sector; followed by the Retail Trade; and Health Care and Social Assistance sectors. These sectors pay a wide range of wages, ranging from low to high. Female-owned non-microbusinesses were clustered in the Health Care and Social Assistance sector, followed by Accommodation and Food Services, and Retail Trade sectors. Future analytic and policy research should be conducted to investigate these findings further. A similar clustering pattern emerged for male-owned microbusinesses versus male-owned non-microbusinesses, i.e., they exhibit a similar, albeit not identical, business sector clustering.

In terms of sales and receipts by gender of owner of the firm, the Wholesale Trade sector had the highest ratio of sales and receipts for both female- and male-owned firms, followed by the Utilities sector, which had the second highest sales and receipts ratio for both groups, and the Management of Companies and Enterprises sector, which ranked third for both owner categories. Although both female- and male-owned firms tended to perform the best in the same sectors in terms of sales and receipts ratios, female-owned microbusinesses were underrepresented in the highest performing industry sectors while male-owned microbusinesses are somewhat underrepresented.

For the annual payroll ratio, female-owned microbusinesses had relatively high ratios in the Utilities sector; followed by the Information; and Arts, Entertainment, and Recreation sectors. By contrast, male-owned microbusinesses achieved their highest ratios in the sectors Management of Companies and Enterprises; Arts, Entertainment, and Recreation; and Construction. Male-owned microbusinesses outperformed female-owned companies in term of their annual payroll ratios in all sectors.

With regard to race, 82 percent of all microbusinesses were White-owned, two percent of all microbusinesses were Black-owned, and just under 8 percent of all microbusinesses were Asian-owned. White-owned microbusinesses were most heavily clustered in Construction; followed by sectors

Agriculture, Fishing, and Hunting; and Mining, Quarrying, and Oil and Gas Extraction. Furthermore, White-owned microbusinesses dominated these sectors, with about 88 percent of each of these categories.

Black-owned microbusinesses were well represented in the sectors Health Care and Social Assistance; followed by Transportation and Warehousing; and Administrative, Support, Waste Management, and Remediation Services. In contrast to White-owned microbusinesses, Black-owned microbusinesses accounted for just over two percent to just under five percent of any of these categories.

For Asian-owned microbusinesses, Accommodation and Food Services ranked highest, with Asian-owned microbusinesses accounting for nearly 25 percent of all businesses in this sector, followed by Retail Trade with a share of nearly 14 percent, and Wholesale Trade with more than 11 percent. While White- and Asian-owned microbusinesses achieved their highest sales and receipts ratios in Wholesale Trade (ratios 1,329 and 1,181, respectively), Black-owned microbusinesses performed best in the Utilities sector (ratio: 2,426). Interestingly, the sales and receipts ratio for Black-owned microbusinesses was about twice as large as the highest sales and receipt ratio achieved for White- and Asian-owned microbusinesses. In fact, the sales and receipts ratio of Black-owned microbusinesses (2,426) was more than six times the median sales and receipts ratio of microbusinesses for all sectors (ratio: 377). Yet the proportion of Black-owned microbusinesses in this high-performing sales and receipts category is tiny—only 0.02 percent of all Black-owned microbusinesses are in the Utility sector.

For the annual payroll ratio, the Arts, Entertainment, and Recreation sector had the highest ratio for Black-owned microbusinesses (ratio: 89), followed by the Management of Companies and Enterprises sector for White-owned microbusinesses (ratio: 84), and the Information sector for Asian-owned microbusinesses (ratio: 51). Yet the concentration of Black-owned, White-owned, and Asian-owned microbusinesses differed greatly, with 2.35, 6.41, and 2.21 percent, respectively.

Regarding ethnicity, the highest proportion of Hispanic-owned microbusinesses was in Transportation and Warehousing; followed by Accommodation and Food Services; and Administrative, Support, Waste Management, and Remediation Services. While the median pay in the Transportation and Warehousing sector encompasses a wide range, the Accommodation and Food Services and Administrative, Support, Waste Management, and Remediation Services sectors have many occupations that pay relatively low wages. Further examination of microbusiness concentration by occupation within the Transportation and Warehousing sector would be useful to understand whether Hispanic microbusinesses are also concentrated in lower-paid activities in that sector.

Hispanic-owned microbusinesses have the highest sales and receipts ratios in the Wholesale Trade sectors (ratio: 1,058) and Mining, Quarrying, and Oil and Gas Extraction sectors (ratio: 492), yet they are underrepresented with 5.20 and 0.08 percent, respectively. Hispanic-owned microbusinesses ranked third highest in the Retail Trade sector (ratio: 444), in which they are well represented (12.59 percent). These businesses are most represented in the Construction sector (15.53 percent), although this sector only had a sales and receipts ratio of 320. Similarly, the sectors most represented among Hispanic-owned microbusinesses have relatively low annual payroll ratios.

For Veteran-owned microbusinesses the highest proportion was in Mining, Quarrying, and Oil and Gas Extraction; followed by Finance and Insurance; and Professional, Scientific, and Technical Services. The median pay in the Mining, Quarrying, and Oil and Gas Extraction sector was medium to somewhat high;

it encompassed a range in the Finance and Insurance sector; and it was medium to relatively high in the Professional, Scientific, and Technical Services sector.

Veteran-owned microbusinesses have the highest sales and receipts ratios in the Wholesale Trade (1,148); the Management of Companies and Enterprises (676); and the Mining, Quarrying, and Oil and Gas Extraction sectors, yet they are underrepresented with 5.79, 0.11, and 0.45 percent, respectively. These businesses are well represented in the Construction sector (16.59 percent), although this sector had only a sales and receipts ratio of 350.

*Microbusinesses in the United States: Characteristics and Economic Impacts* provides analyses by business size, business sector, gender, race, ethnicity, and veteran status along with detailed insights about microbusinesses. It allows for a close examination of three key observations that, if pursued with further research, could lead to programs and outreach activities that might greatly enhance the competitiveness of microbusinesses. These key observations are as follows. First, microbusinesses are well represented in business sectors that have a below-par performance. Second, microbusinesses are not well represented in business sectors that have a high performance. Third, whenever microbusinesses perform well and are well represented within a business sector they do not perform at par relative to their non-microbusiness counterparts.

This report opens the door to further investigation of the findings within key sectors by occupation and position in the value chain of the industry to better understand how microbusinesses might position themselves to obtain greater business success.

## **Introduction**

Microbusinesses, i.e., businesses that employ four or fewer employees, have played an important role in the U.S. economy, especially in the aftermath of the Great Recession, which lasted from December 2007 until June 2009. Over the past several years, respondents of many national, regional, and local surveys have consistently ranked job creation as the number one domestic issue. There are significant debates within the literature regarding which size firms create the most jobs. Regardless of the answer to this question, microbusinesses are, nevertheless, important job creators.

Interestingly, not much seems to be known about the characteristics and the economic impacts of microbusinesses, the topic of this study. The authors of this report were tasked with analyzing these aspects the United States. Below we will analyze microbusinesses in the United States in terms of their number and proportion, their sales and receipts, and their annual payroll by business sector based on the Survey of Business Owners (SBO) 2007, conducted by the U.S. Bureau of the Census.

We will discuss general differences between microbusinesses and non-microbusinesses regarding their numbers, sales and receipts ratios, and annual payroll ratios, differentiating among business sectors. More specifically, we will discuss differences between female-, male-, and equally owned microbusinesses and non-microbusinesses; differences between White-, Black-, and Asian-owned microbusinesses and non-microbusinesses; differences between Hispanic and non-Hispanic microbusinesses and non-microbusinesses; and differences between Veteran-owned and non-Veteran-owned microbusinesses and non-microbusinesses. We conclude with a summary and suggestions for future research efforts.

## **Data**

The Survey of Business Owners (SBO), conducted by the U.S. Bureau of the Census every five years, provides a comprehensive, regularly collected source of information on selected economic and demographic characteristics for businesses and business owners by gender, race, ethnicity, and veteran status. Title 13 of the United States Code authorizes this survey and provides for mandatory responses. The SBO includes all nonfarm businesses that file Internal Revenue Service tax forms as individual proprietorships, partnership, or any type of corporation and with receipts of \$1,000 or more. The SBO covers firms that do and do not have paid employees, differentiating among firms with

- No employees;
- One to four employees;
- Five to nine employees;
- Ten to 19 employees;
- 20 to 49 employees;
- 50 to 99 employees;
- 100 to 499 employees; and
- Firms with 500 or more employees.

Business ownership is defined as having 51 percent or more of the stock or equity in the business and is categorized by

- Gender (i.e., male, female, or equally male/female);

- Race (i.e., White; Black or African American; American Indian or Alaska Native; Asian; Native Hawaiian or Other Pacific Islander; some other race; minority; equally minority/nonminority; or nonminority);
- Ethnicity (i.e., Hispanic, equally Hispanic/non-Hispanic, or non-Hispanic);
- Veteran status (i.e., veteran, equally veteran/nonveteran, or nonveteran); and
- Publicly held and other firms not classifiable by gender, race, ethnicity, and veteran status.

SBO estimates include the number of nonemployer and employer firms, sales and receipts, annual payroll, and employment. Data aggregates are available by gender, race, ethnicity, and veteran status by the 2007 North American Industry Classification System (NAICS), kind of business, states, metropolitan and micropolitan statistical areas, counties, places, and employment and receipts size.<sup>2</sup>

The SBO covers the following 20 NAICS industries, which are called “business sectors” or “sectors” in this study.

#### Goods-Producing Industries:

- Agriculture, Forestry, Fishing, and Hunting (Sector 11);
- Mining, Quarrying, and Oil and Gas Extraction (Sector 21);
- Utilities (Sector 22);
- Construction (Sector 23);
- Manufacturing (Sectors 31-33);

#### Service-Providing Industries:

- Wholesale Trade (Sector 42);
- Retail Trade (Sectors 44 and 45);
- Transportation and Warehousing (Sectors 48 and 49);
- Information (Sector 51);
- Finance and Insurance (Sector 52);
- Real Estate and Rental and Leasing (Sector 53);
- Professional, Scientific, and Technical Services (Sector 54);
- Management of Companies and Enterprises (Sector 55);
- Administrative, Support, Waste Management, and Remediation Services (Sector 56);
- Educational Services (Sector 61);
- Health Care and Social Assistance (Sector 62);
- Arts, Entertainment, and Recreation (Sector 71);
- Accommodation and Food Services (Sector 72);
- Other Services (except Public Administration) (Sector 81);
- Public Administration (Sector 92); and

---

<sup>2</sup> U.S. Bureau of the Census (n.d.a). Survey of Business Owners (SBO). Washington, DC: U.S. Bureau of the Census. Available at <http://www.census.gov/econ/sbo/about.html>

- Industries not classified.<sup>3</sup>

Examples of professions in these industries will be provided in the Appendix, based on information provided by the U.S. Bureau of Labor Statistics.<sup>4</sup>

At the time of this writing, the most recent survey available was the SBO 2007. The SBO 2012 will be conducted in two phases; forms were mailed out in June 2013 and more will be mailed out in June 2014. Characteristics of businesses and business owners are expected to be released in December 2015. As response rates for the different demographic groups are different among survey years, data sets for the different survey years should not be merged. Thus, only the SBO 2007 was utilized in this study.<sup>5</sup>

The SBO provides several variables that focus on the characteristics and the economic impact of microbusiness entrepreneurs in the United States. In regard to demographic variables, there are variables Gender, Race, Ethnicity, and Veteran status, all broken down by variables Sector and Employment Size of the Business. In regard to economic variables, there are variables Number of Businesses, Sales, and Receipts (in \$1,000) and Annual Payroll (\$1,000), also all broken down by variables Sector and Employment Size of the Business. As the variables Sales and Receipts (\$1,000) and Annual Payroll (\$1,000) are provided in aggregate form, two ratios were created to make them more meaningful for the analysis. First, the ratio Sales and Receipts (\$1,000) Divided by the Number of Businesses per Sector was created. Second, the ratio Annual Payroll (\$1,000) Divided by the Number of Employees per Sector was created.

Below, these variables and ratios will be analyzed and discussed to investigate the characteristics and the economic impact of microbusiness entrepreneurs in the United States, comparing them with non-microbusinesses and utilizing the definition of microbusiness of the U.S. Bureau of the Census, where a microbusiness is defined as a business that has zero to four employees (including a self-employed owner). Thus, a non-microbusiness is defined as a business that has five or more employees.

---

<sup>3</sup> U.S. Bureau of the Census (n.d.b). North American Industry Classification System (NAICS). Washington, DC: U.S. Bureau of the Census. Available at <http://www.census.gov/cgi-bin/sssd/naics/naicsrch?chart=2007>

<sup>4</sup> U.S. Bureau of Labor Statistics (n.d.). Industries at a Glance. Washington, DC: U.S. Bureau of Labor Statistics. Available at [http://www.bls.gov/iag/tgs/iag\\_index\\_naics.htm](http://www.bls.gov/iag/tgs/iag_index_naics.htm)

<sup>5</sup> U.S. Bureau of the Census (n.d.a). Survey of Business Owners (SBO). Washington, DC: U.S. Bureau of the Census. Available at <http://www.census.gov/econ/sbo/about.html>

## **Results**

### **Differentiation by Business Size**

First, microbusinesses will be compared and contrasted with non-microbusinesses based on (a) the proportion of microbusinesses in each business sector as a proportion of all microbusinesses and (b) the proportion of non-microbusinesses in each business sector as a proportion of all non-microbusinesses.

### **Key Findings in This section**

- The sectors Professional, Scientific, and Technical Services; Construction; and Retail Trade were disproportionately represented among microbusinesses. These sectors pay medium to relatively high, medium to somewhat high, and low to moderate median wages, respectively.
- The sectors Management of Companies and Enterprises, Wholesale Trade, and Utilities ranked highest in the sales and receipts ratio among microbusinesses, yet the first and the third enumerated sectors were underrepresented among microbusinesses.
- The sectors Management of Companies and Enterprises; Information; and Arts, Entertainment, and Recreation ranked highest in the annual payroll ratio among microbusinesses, yet all sectors were underrepresented among microbusinesses.

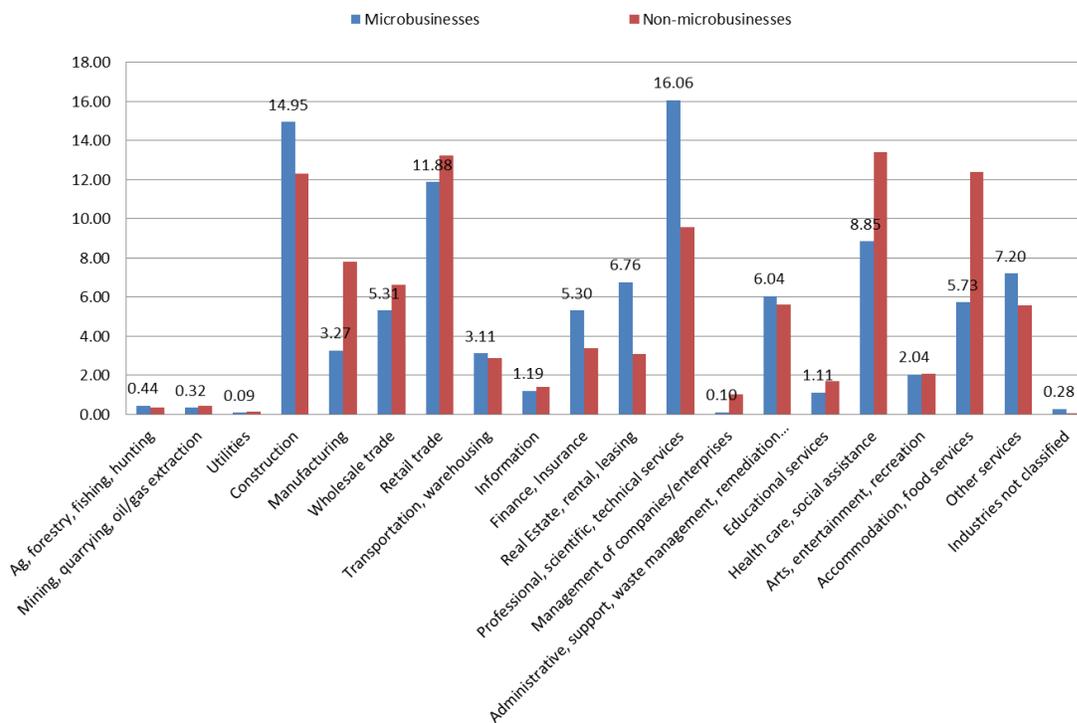
### **Number and Proportion of Microbusinesses vs. Non-Microbusinesses**

The highest proportion of microbusinesses were in Professional, Scientific, and Technical Services (16.06 percent); followed by Construction (14.95 percent); and Retail Trade (11.88 percent). Figure 1 below illustrates findings. Many occupations in the Professional, Scientific, and Technical Services sector pay medium to relatively high median wages. For example, architectural and civil drafters had a median wage of \$47,930, accountants and auditors had a median wage of \$65,100, while lawyers had a median wage of \$117,040 in 2012 (see Table NAICS 54 in the Appendix). Somewhat similarly, many occupations in the Construction sector pay medium to somewhat high median wages. For example, construction laborers had a median wage of \$30,370, carpenters had a median wage of \$40,030, and construction managers had a median wage of \$81,480 in 2012 (see Table NAICS 23 in the Appendix). In turn, many occupations in the Retail Trade sector only pay low to moderate wages. For example, cashiers only made \$18,980 (median), retail salespeople only made \$20,980 (median), and first-line supervisors/managers of retail sales workers made \$36,650 (median) in 2012 (see Table NAICS 44-45 in the Appendix).

The highest proportion of non-microbusinesses was in Health Care and Social Assistance (13.38 percent), followed by Retail Trade (13.24 percent), and Accommodation and Food Services (12.39 percent). The Health Care and Social Assistance sector has occupations that pay relatively low wages, for example, home health aides, who had a median wage of \$20,730 in 2012, but also occupations that pay relatively high wages, for example, medical and health services managers, who had a median wage of \$87,280 in 2012 (see Table NAICS 62 in the Appendix). The Retail Trade sector offers low to moderate wages (see the discussion above), while the Accommodation and Food Services sector has many occupations that pay relatively low wages. For example, combined food preparation and serving workers (including fast food) had a median wage of \$18,110, waiters and waitresses had a median wage of \$18,520, and cooks in restaurants had a median wage of \$21,930 in 2012 (see Table NAICS 72 in the Appendix).

The highest proportion of non-microbusinesses was in Health Care and Social Assistance (13.38 percent), followed by Retail Trade (13.24 percent), and Accommodation and Food Services (12.39 percent). The Health Care and Social Assistance sector has occupations that pay relatively low wages, for example, home health aides, who had a median wage of \$20,730 in 2012, but also occupations that pay relatively high wages, for example, medical and health services managers, who had a median wage of \$87,280 in 2012 (see Table NAICS 62 in the Appendix). The Retail Trade sector offers low to moderate wages (see the discussion above), while the Accommodation and Food Services sector has many occupations that pay relatively low wages (see the discussion above).

**Figure 1: Comparison of Proportions of Microbusinesses vs. Non-Microbusinesses by Sector, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

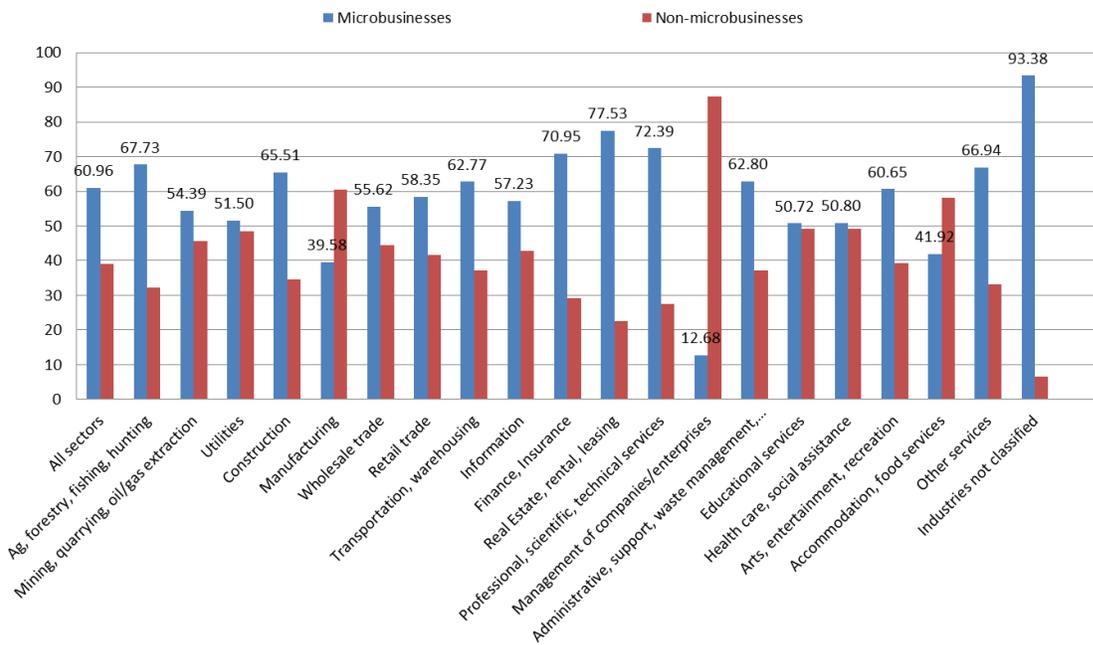
Note: calculation example: number of microbusinesses in Agriculture, Forestry, Fishing, and Hunting (15,293) of all microbusinesses (3,496,161) = 0.44%

Next, for each business sector microbusinesses and non-microbusinesses were differentiated. In other words, for each business sector the proportion of microbusinesses and the proportion of non-microbusinesses sums up to 100 percent. Figure 2 below illustrates findings. For all business sectors, 60.96 percent of businesses were microbusinesses, whereas 39.04 percent were non-microbusinesses. For single business sectors, microbusinesses ranked highest in business sector Industries not classified (93.38 percent); followed by Real Estate and Rental and Leasing (77.53 percent); and Professional, Scientific,

and Technical Services (72.39 percent). Occupations in the Real Estate and Rental and Leasing sector pay medium wages. For example, counter and rental clerks had a median wage of \$23,870; property, real estate, and community association managers had a median wage of \$50,040; and real estate brokers had a median wage of \$57,840 in 2012 (see Table NAICS 53 in the Appendix).

Non-microbusinesses ranked highest in business sector Management of Companies and Enterprises (87.32 percent), followed by Manufacturing (60.42 percent), and Accommodation and Food Services (58.08 percent). The Management of Companies and Enterprises sector has relatively medium to high wages. For example, bookkeeping, accounting, and auditing clerks had median wages of \$36,160; accountants and auditors had median wages of \$64,670; and financial managers had median wages of \$124,840 in 2012 (see Table NAICS 55 in the Appendix). The Manufacturing sector has relatively low wages, as evidenced in the median pay for helpers and production workers (\$24,280), team assemblers (\$29,600), and purchasing agents (except wholesale, retail, and farm products; \$56,940) in 2012 (see Table NAICS 31-33 in the Appendix). The Accommodation and Food Services sector is also characterized by relatively low median wages, as discussed above.

**Figure 2: Comparison of Proportions of Microbusinesses vs. Non-Microbusinesses by Sector, 2007**



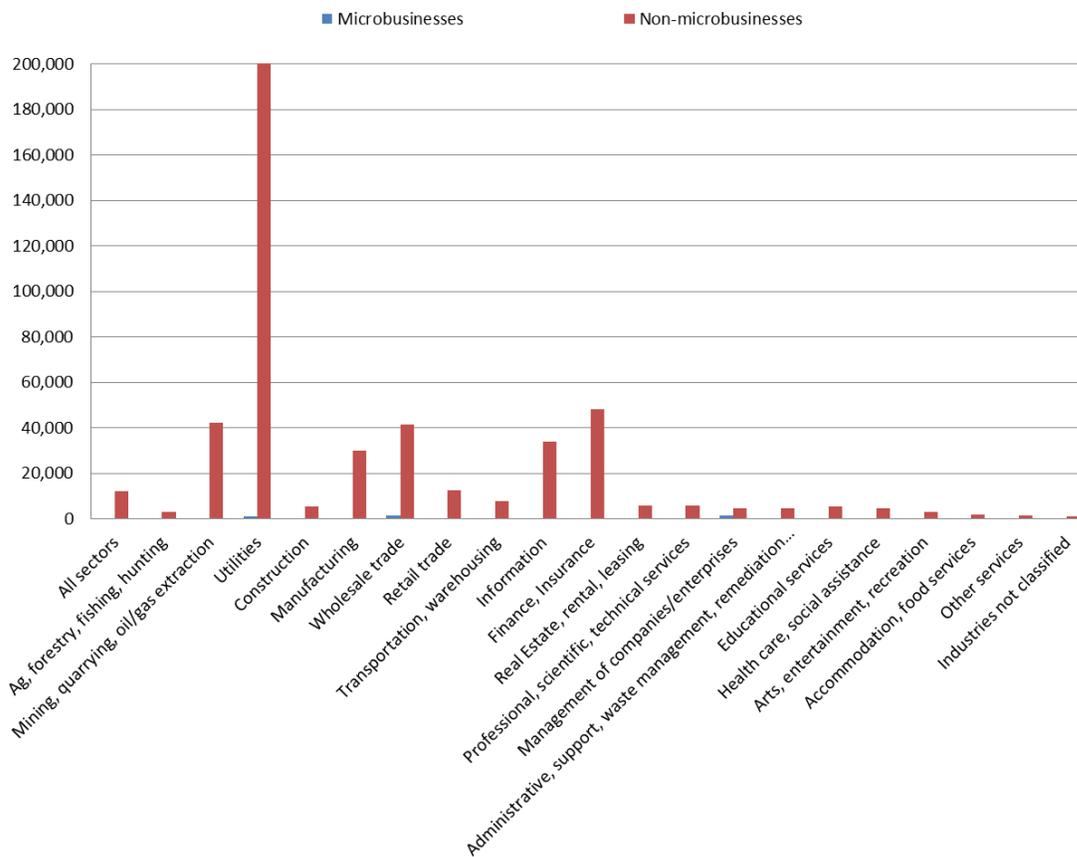
Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

Note: calculation example: number of all microbusinesses (3,496,161) divided by all businesses (5,735,561) = 60.96%

### Sales and Receipts of Microbusinesses vs. Non-Microbusinesses

For the ratio Sales and Receipts (in \$1,000) Divided by the Number of Businesses by sector, non-microbusinesses not surprisingly had a much higher ratio than microbusinesses. Figure 3 below shows that for microbusinesses, the highest ratio was obtained in the business sector Management of Companies and Enterprises (ratio: 1,617), followed by Wholesale Trade (ratio: 1,435), and Utilities (ratio: 1,119). For non-microbusinesses, the highest ratio was in the business sector Utilities (ratio: 200,710), followed by Finance and Insurance (ratio: 48,213), and Wholesale Trade (ratio: 41,355).

**Figure 3: Sales and Receipts (in \$1,000) Divided by the Number of Businesses: Comparison of Microbusinesses vs. Non-Microbusinesses by Sector, 2007**

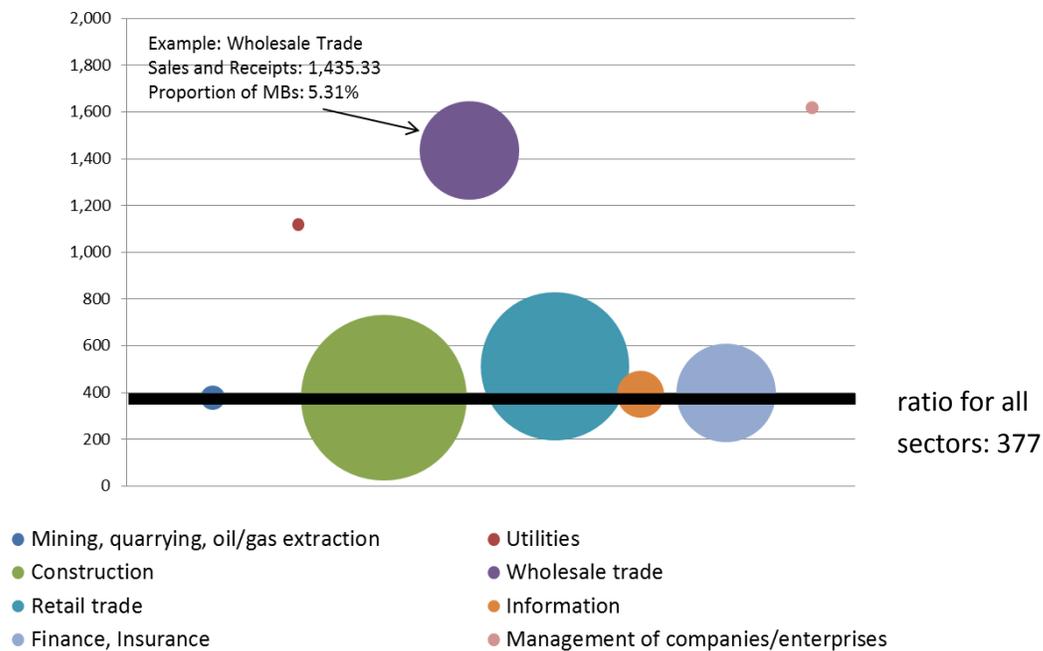


Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

There are large differences in the ratio Sales and Receipts (in \$1,000) Divided by the Number of Businesses among business sectors. These differences should be acknowledged and discussed, as analyses with averages and even medians mask them. Figure 4 shows the eight top-ranked microbusinesses by the ratio Sales and Receipts (\$1,000) Divided by the Number of Businesses by sector and by proportion of all microbusinesses for 2007. These eight sectors ranked above 377, the ratio for all microbusinesses in all sectors. The vertical or y-axis ranges from 0 to 2,000. Figure 4 below shows the differences among the

ratios for select sectors. The horizontal or *x*-axis displays the sectors in the order in which the SBO enumerates them, starting with sector Mining, Quarrying, and Oil and Gas Extraction and ending with sector Management of Companies and Enterprises. The bubble size indicates the proportion of microbusinesses in a particular sector as a proportion of microbusinesses in all sectors. For example, the proportion of microbusinesses in sector Mining, Quarrying, and Oil and Gas Extraction of all microbusinesses was rather small, with 0.32 percent. In contrast, the proportion of microbusinesses in sector Construction was the largest, with 14.95 percent. Based on Figure 4 below, the highest sales and receipts (1,618) were generated in the Management of Companies and Enterprises sector, although the proportion of this particular sector of all sectors is only 0.10 percent. The second highest sales and receipts (1,435) were generated in the Wholesale Trade sector, where the proportion was 5.31 percent. Finally, the third highest sales and receipts (1,119) were in the Utilities sector, where the proportion was only 0.09 percent. In other words, microbusinesses were underrepresented in the sectors with the highest sales and receipts, whereas the vast majority of microbusinesses had a limited range of the ratio.

**Figure 4: Top-Ranked Microbusinesses by Ratio of Sales and Receipts (\$1,000/Number of Microbusinesses) by Sector and by Proportion of All Microbusinesses, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

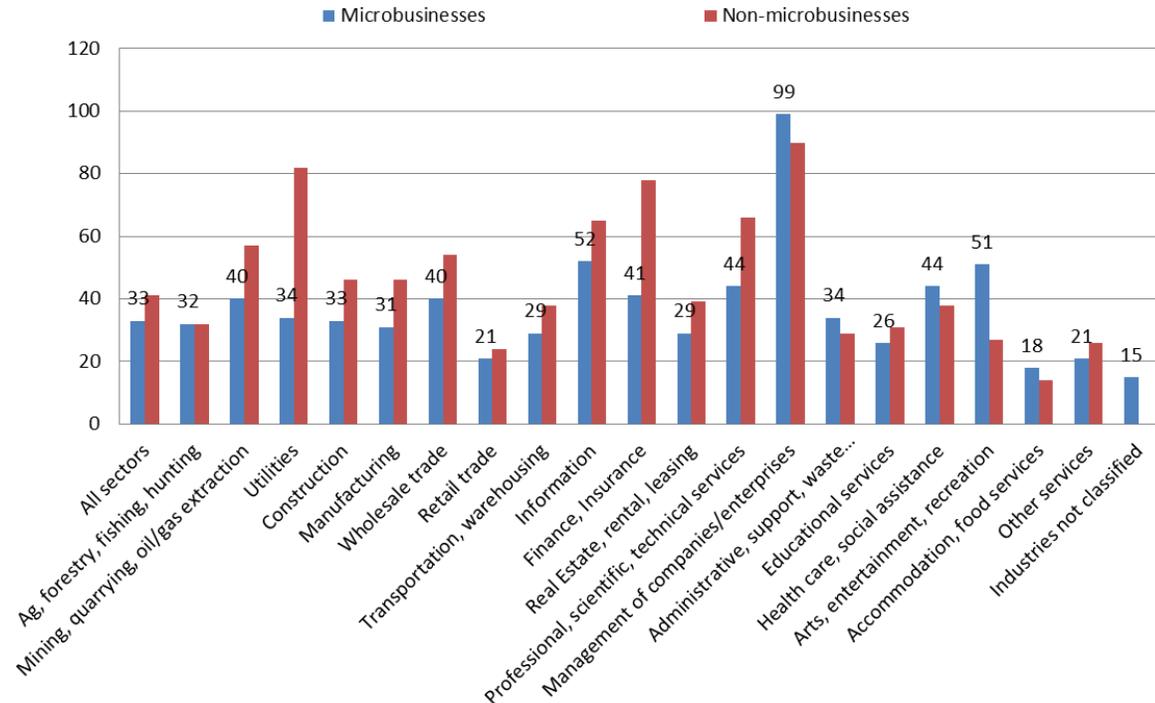
**Annual Payroll of Microbusinesses vs. Non-Microbusinesses**

For Annual Payroll (in \$1,000) Divided by the Number of Employees by sector, microbusinesses and non-microbusinesses had a similar ratio in some sectors but a dissimilar ratio in others (see Figure 5 below). For microbusinesses, the highest ratio was obtained in the business sector Management of Companies and Enterprises (ratio: 99); followed by Information (ratio: 52); and Arts, Entertainment, and

Recreation (ratio: 51). As discussed above, the Management of Companies and Enterprises sector has relatively medium to high wages. The information sector has medium wages. For example, customer service representatives had a median wage of \$33,320, whereas telecommunications equipment installers and repairs (for example, line installers) had a median wage of \$56,960 in 2012 (see Table NAICS 51 in the Appendix). The Arts, Entertainment, and Recreation sector has low to medium wages. For example, amusement and recreation attendants had a median wage of \$18,610, fitness trainers and aerobics instructor had a median wage of \$32,830, and gaming supervisors had a median wage of \$46,260 in 2012 (see Table NAICS 71 in the Appendix).

For non-microbusinesses, the highest annual payroll ratio was obtained in the business sector Management of Companies and Enterprises (ratio: 90), followed by Utilities (ratio: 82), and Finance and Insurance (ratio: 78). The Utilities sector is characterized by medium to relatively high median wages, as illustrated in the median wages earned by meter readers (\$41,340), electrical power-line installers and repairers (\$66,370), and electrical engineers (\$85,970) in 2012 (see Table NAICS 22 in the Appendix). The Finance and Insurance sector encompasses a range of median wages, ranging from low to somewhat high. For example, tellers had a median wage of \$24,920; insurance sales agents had a median wage of \$48,230; and securities, commodities, and financial services sales agents had a median wage of \$71,180 in 2012 (see Table NAICS 52 in the Appendix).

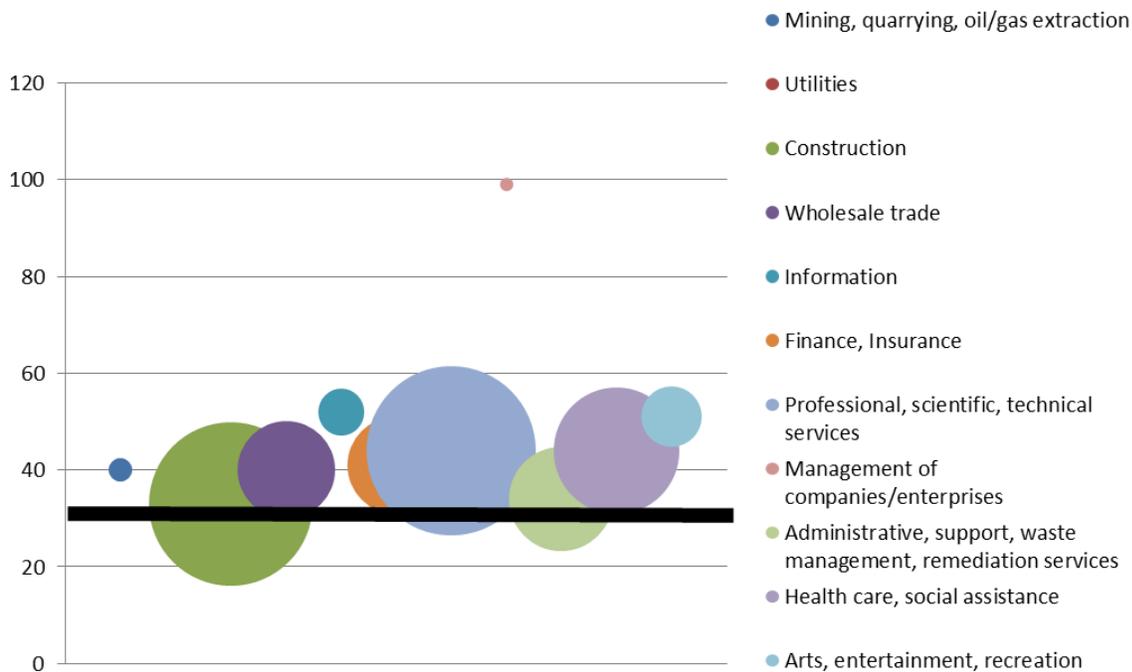
**Figure 5: Annual Payroll (\$1,000) Divided by the Number of Employees: Comparison of Microbusinesses vs. Non-Microbusinesses by Sector, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

There are large differences in the ratio Annual Payroll (in \$1,000) Divided by the Number of Employees among business sectors. These differences should be acknowledged and discussed, as analyses with averages and even medians mask them. Figure 6 shows eleven top-ranked microbusinesses by the ratio Sales and Receipts (\$1,000) Divided by the Number of Businesses by sector and by proportion of all microbusinesses for 2007. These eleven sectors ranked above 33, the ratio for all microbusinesses in all sectors. The vertical or y-axis ranges from 0 to 100. Figure 6 below shows the differences among the ratios for select sectors. The horizontal or x-axis displays the sectors in the order in which the SBO enumerates them, starting with sector Mining, Quarrying, and Oil and Gas extraction and ending with sector Arts, Entertainment, and Recreation. The bubble size indicates the proportion of microbusinesses in a particular sector as a proportion of microbusinesses in all sectors. For example, the proportion of microbusinesses in sector Mining, Quarrying, and Oil and Gas Extraction of all microbusinesses was rather small with 0.32 percent. This sector, though, is characterized by a range in median wages, ranging from helpers/extraction workers (\$32,430), to first-line supervisors/managers of construction trades and extraction workers (\$69,610), to mining and geological engineers, including mining safety engineers (\$83,440) (see Table NAICS 21 in the Appendix). In contrast, the proportion of microbusinesses in sector Professional, Scientific, and Technical Services was the largest with 16.06 percent. This sector is characterized by medium to high median wages, as discussed above. Some microbusinesses that fall into an underrepresented sector have a rather high ratio, whereas the vast majority of microbusinesses has a limited range of the ratio.

**Figure 6: Top-Ranked Microbusinesses by Ratio of Annual Payroll (\$1,000/Number of Employees) by Sector and by Proportion of All Microbusinesses, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

## **Differentiation by Gender and by Sector**

The following section differentiates by gender, i.e., among female-owned, male-owned, and equally male-and-female-owned microbusinesses versus non-microbusinesses. First, female-owned businesses, then male-owned businesses, and finally equally owned businesses are discussed. Below, these businesses are compared and contrasted with each other, and then they are discussed separately.

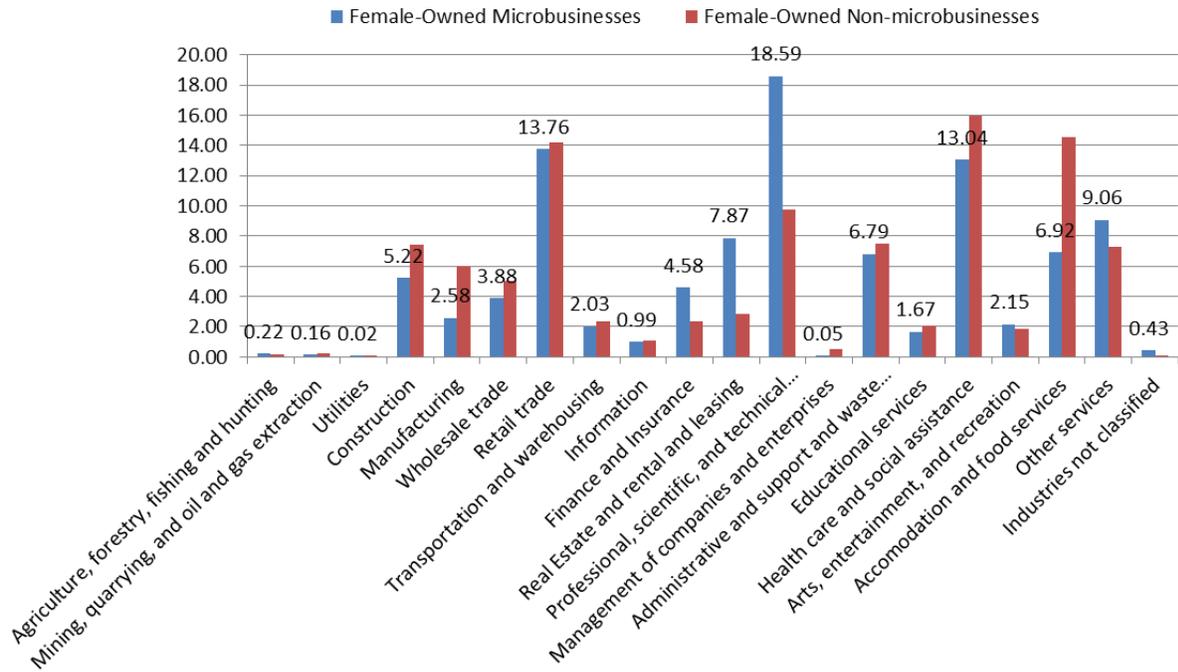
### **Key Findings in This Section**

- The sectors Professional, Scientific, and Technical Services; Retail Trade; and Health Care and Social Assistance had a relatively high representation among female-owned microbusinesses. These sectors pay medium to relatively high, relatively low, and relatively low to relatively high median wages, respectively.
- The sectors Construction; Professional, Scientific, and Technical Services; and Retail Trade had a relatively high representation among male-owned microbusinesses. These sectors pay medium, relatively low, and relatively low to relatively high median wages, respectively.
- The Wholesale Trade sector had the highest ratio of sales and receipts for female-, male-, and equally owned microbusinesses by sector. The Utilities sector had the second highest sales and receipts ratio for female- and male-owned microbusinesses, although rather low ratios for equally owned microbusinesses.

### **Number and Proportion of Female-Owned Microbusinesses vs. Non-Microbusinesses**

First, female-owned microbusinesses are compared and contrasted against female-owned non-microbusinesses based on calculations of (a) the proportion of female-owned microbusinesses in each business sector as a proportion of all female-owned microbusinesses and (b) the proportion of female-owned non-microbusinesses in each business sector as a proportion of all female-owned non-microbusinesses. Figure 7 below illustrates findings. For female-owned microbusinesses, the highest proportion of microbusinesses was in Professional, Scientific, and Technical Services (18.59 percent); followed by Retail Trade (13.76 percent); and Health Care and Social Assistance (13.04 percent). While the median pay in the Professional, Scientific, and Technical Services sector ranges from medium to relatively high; the median pay in the Retail sector is relatively low; and the median pay in the Health Care and Social Assistance sector ranges from relatively low to relatively high. For female-owned non-microbusinesses, the highest proportion of non-microbusinesses was in Health Care and Social Assistance (15.93 percent), followed by Accommodation and Food Services (14.54 percent), and Retail Trade (14.19 percent).

**Figure 7: Comparison of Proportions of Female-Owned Microbusinesses vs. Non-Microbusinesses by Sector, 2007**

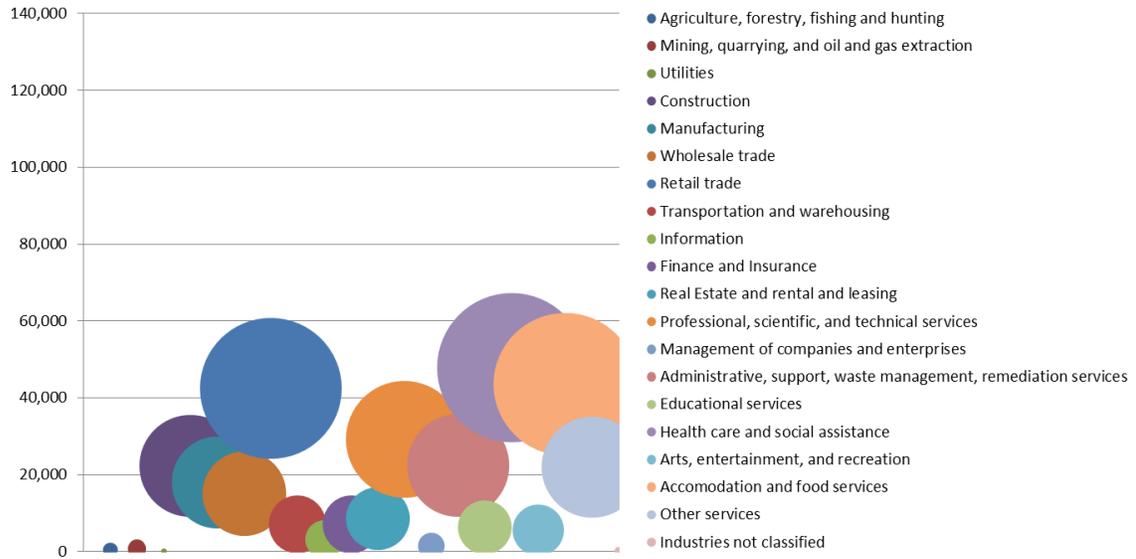


Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

Below, the number of female-owned non-microbusinesses by the proportion of all female-owned non-microbusinesses and the number of female-owned microbusinesses by the proportion of all female-owned microbusinesses, respectively, are discussed. As can be seen in Figure 8, sector Health Care and Social Assistance was the largest with 15.75 percent, followed by Accommodation and Food Services (14.37 percent), and Retail Trade (14.03 percent). While the first sector is characterized by quite a range in median wages, the latter two sectors are characterized by rather low median wages.

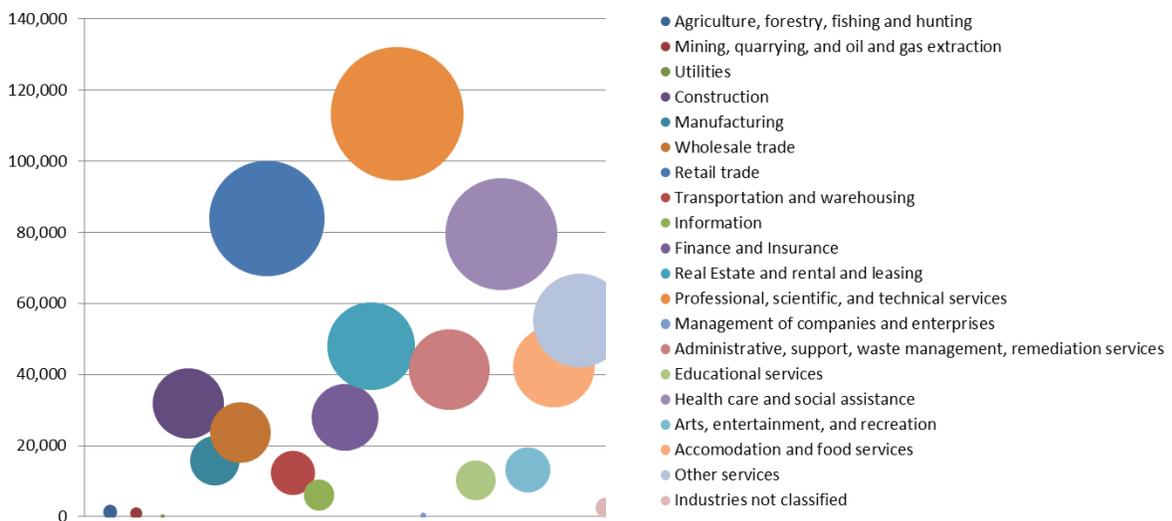
Figure 9 below shows the proportion of female-owned microbusinesses by sector as a proportion of all female-owned microbusinesses. Sector Professional, Scientific, and Technical Services was the largest with 18.59 percent; followed by Retail Trade (13.76 percent); and Health Care and Social Assistance (13.04 percent). Here, the first sector has medium to high pay, the second sector has relatively low pay, and the third sector also has quite a range in pay.

**Figure 8: Number of Female-Owned Non-Microbusinesses by Proportion of All Female-Owned Non-Microbusinesses by Sector, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

**Figure 9: Number of Female-Owned Microbusinesses by Proportion of All Female-Owned Microbusinesses by Sector, 2007**

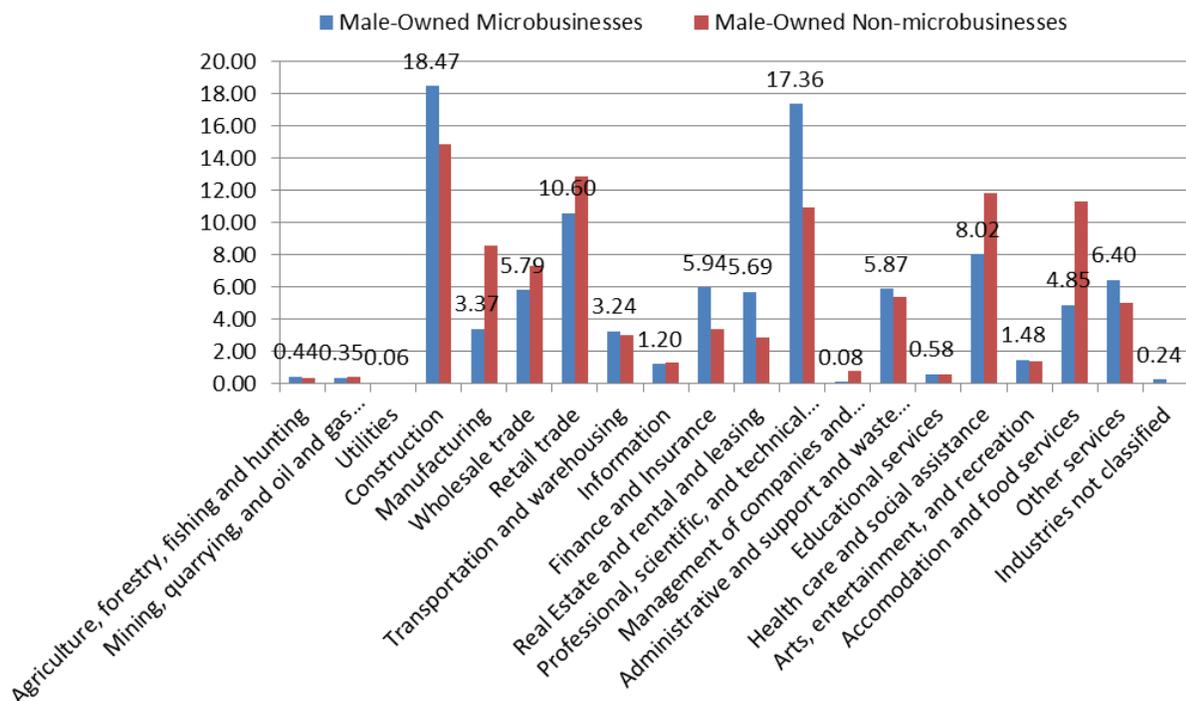


Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

## Number and Proportion of Male-Owned Microbusinesses vs. Non-Microbusinesses

Next, male-owned microbusinesses are compared and contrasted against male-owned non-microbusinesses, based on (a) the proportion of male-owned microbusinesses in each business sector as a proportion of all male-owned microbusinesses and (b) the proportion of male-owned non-microbusinesses in each business sector as a proportion of all male-owned non-microbusinesses. Figure 10 below illustrates findings. For male-owned microbusinesses, the highest proportion was in Construction (18.47 percent); followed by Professional, Scientific, and Technical Services (17.36 percent); and then Retail Trade (10.60 percent). The median pay in Construction is medium; while it is medium to relatively high in the Professional, Scientific and Technical Services sector; yet relatively low in the Retail Trade sector. For male-owned non-microbusinesses, the highest proportion of non-microbusinesses was in Construction (14.85 percent), followed by Retail Trade (12.84 percent), and Health Care and Social Assistance (11.79 percent). While the median pay in the Construction sector is about medium, the median pay in the Retail Trade sector is relatively low, and the pay in the Health Care and Social Assistance sector encompasses quite a range.

**Figure 10: Comparison of Proportions of Male-Owned Microbusinesses vs. Non-Microbusinesses by Sector, 2007**



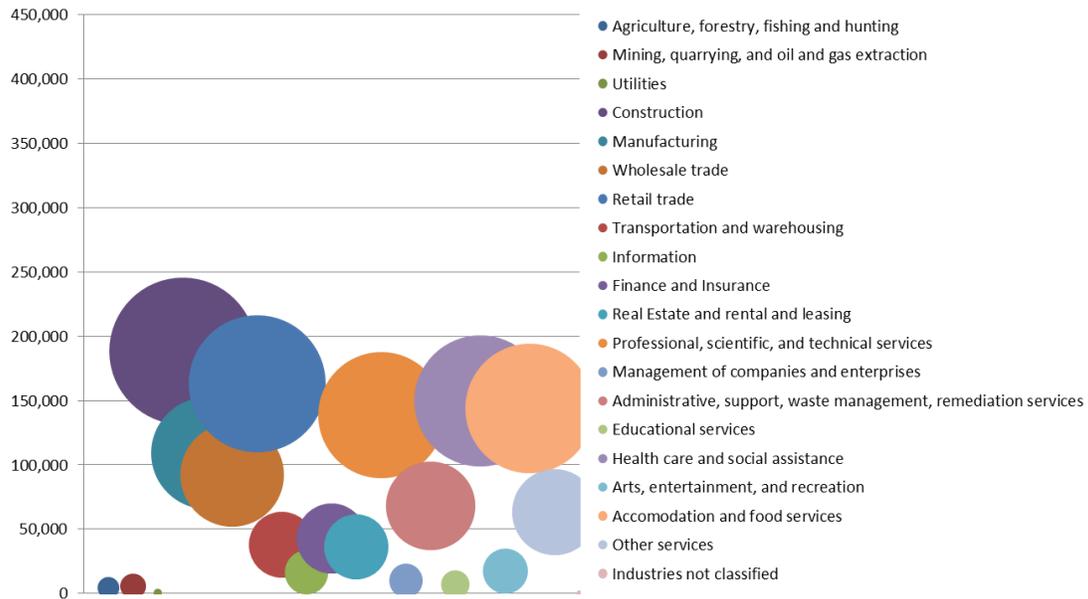
Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

Below, the number of male-owned non-microbusinesses by the proportion of all male-owned non-microbusinesses and the number of male-owned microbusinesses by the proportion of all male-owned microbusinesses, respectively, are discussed. As can be seen in Figure 11, the Construction sector was the

largest with 14.85 percent; followed by the Retail Trade sector (12.84 percent); and the Professional, Scientific, and Technical Services sector (10.93 percent).

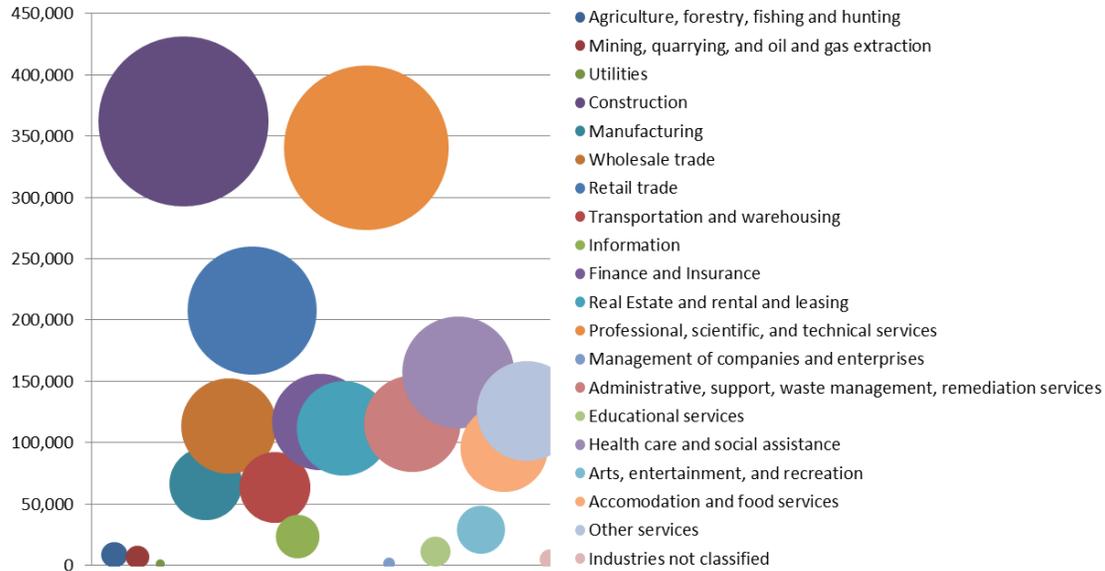
Figure 12 below shows the proportion of male-owned microbusinesses by sector as a proportion of all male-owned microbusinesses. The Construction sector was the largest with 18.47 percent; followed by Professional, Scientific, and Technical Services (17.36 percent); and Retail Trade (10.60 percent).

**Figure 11: Number of Male-Owned Non-Microbusinesses by Proportion of All Male-Owned Non-Microbusinesses by Sector, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

**Figure 12: Number of Male-Owned Microbusinesses by Proportion of All Male-Owned Microbusinesses by Sector, 2007**



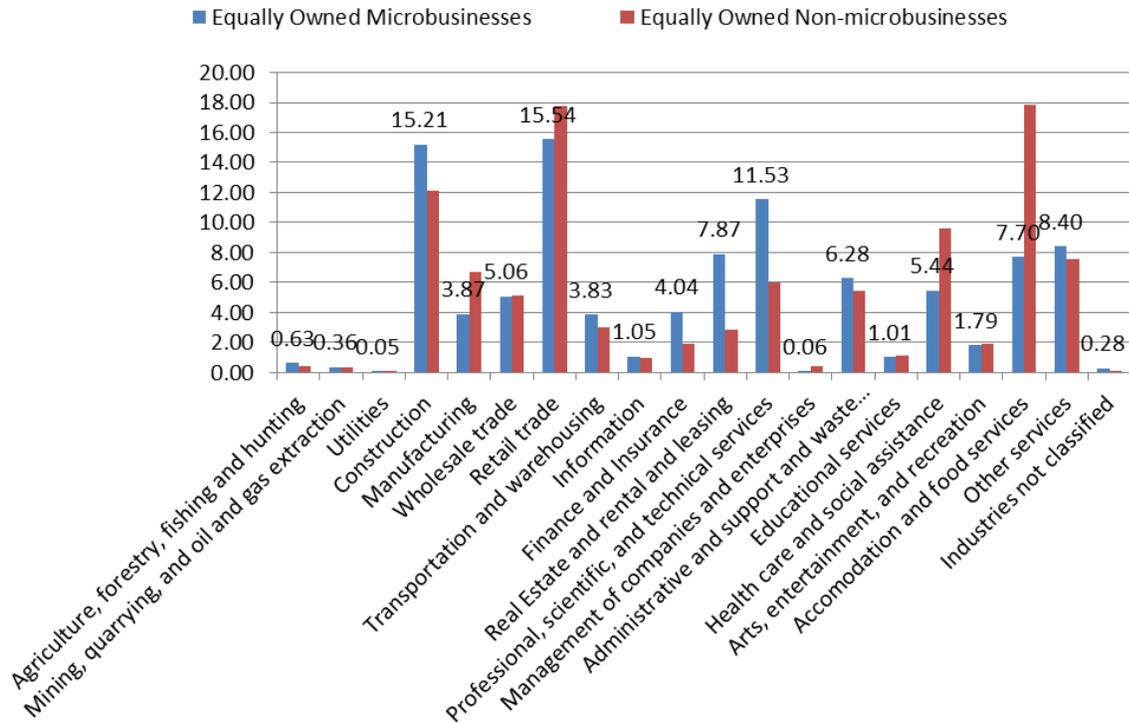
Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

### Number and Proportion of Equally Owned Microbusinesses vs. Non-Microbusinesses

Next, equally owned microbusinesses are compared and contrasted against equally owned non-microbusinesses, based on calculations of (a) the proportion of equally owned microbusinesses in each business sector as a proportion of all equally owned microbusinesses and (b) the proportion of equally owned non-microbusinesses in each business sector as a proportion of all equally owned non-microbusinesses. Figure 13 below illustrates findings. For equally owned microbusinesses, the highest proportion of microbusinesses was in Retail Trade (15.54 percent); followed by Construction (15.21 percent); and then Professional, Scientific, and Technical Services (11.53 percent). The median pay in the Retail Trade sector is rather low; it is medium in the Construction sector; and medium to high in the Professional, Scientific, and Technical Services sector.

For equally owned non-microbusinesses, the highest proportion of non-microbusinesses was in Accommodation and Food Services (17.85 percent), followed by Retail Trade (17.73 percent), and Construction (12.08 percent). While the median pay in the first two sectors is relatively low, it is medium in the latter sector.

**Figure 13: Comparison of Proportions of Equally Owned Microbusinesses vs. Non-Microbusinesses by Sector, 2007**

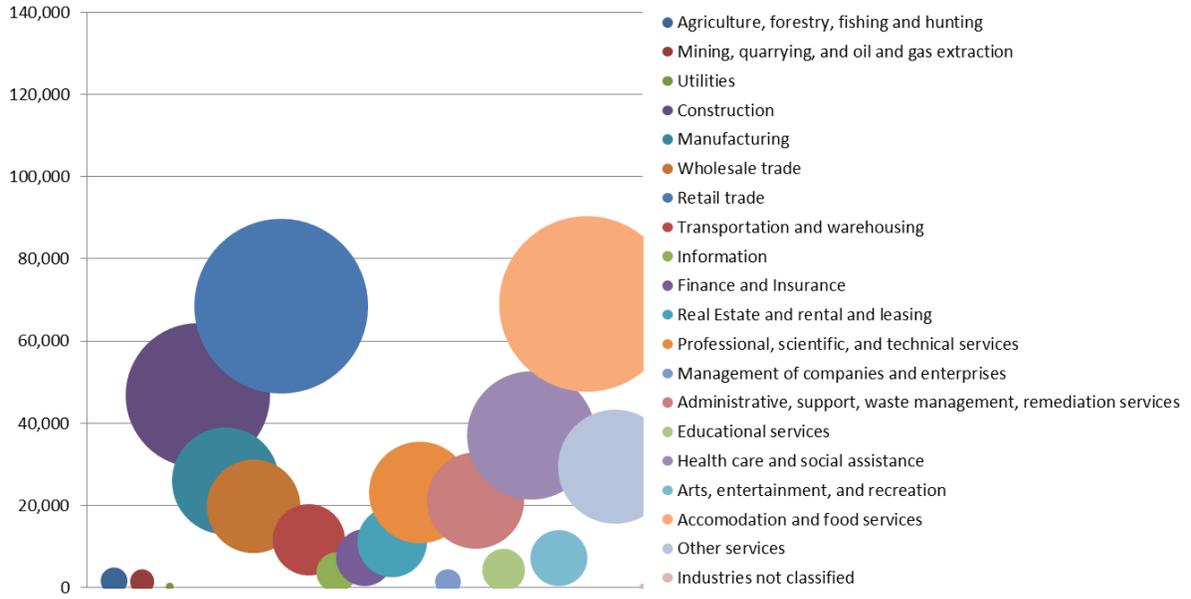


Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

Below, the number of equally owned non-microbusinesses by the proportion of all equally owned non-microbusinesses and the number of equally owned microbusinesses by the proportion of all equally owned microbusinesses, respectively, are discussed. As can be seen in Figure 14, the Accommodation and Food Services sector was the largest with 17.85 percent, followed by the Retail Trade sector (17.73 percent), and the Construction sector (12.08 percent). While the former two sectors are characterized by relatively low pay, the latter is characterized by medium pay.

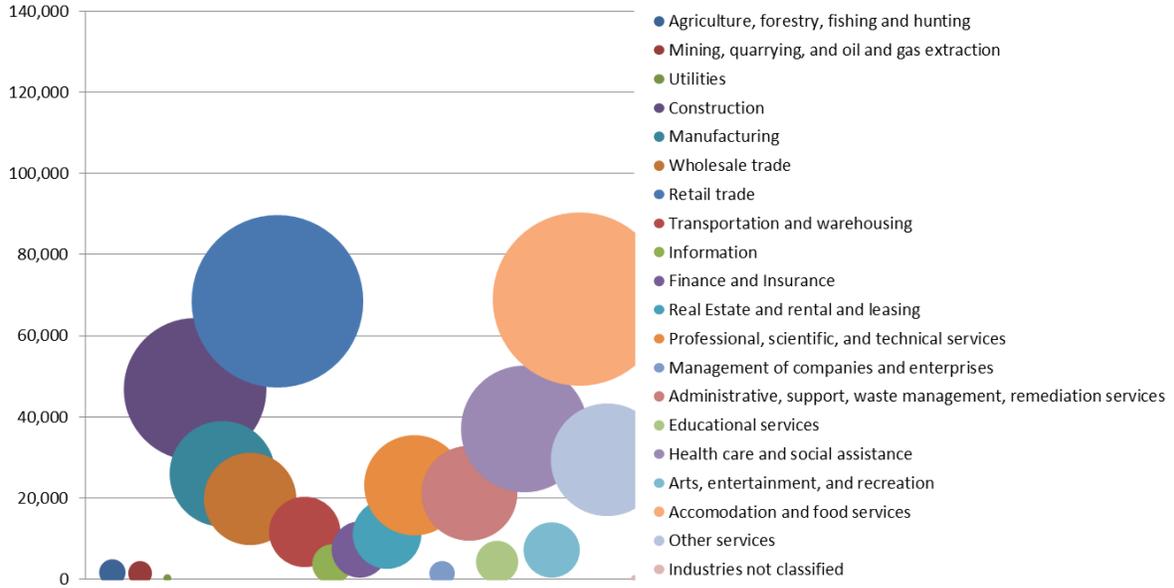
Figure 15 below shows the proportion of equally owned microbusinesses by sector as a proportion of all equally owned microbusinesses. The Retail Trade sector was the largest with 15.54 percent; followed by the Construction sector (15.21 percent); and the Professional Scientific, and Technical Services sector (10.60 percent). While the former sector is characterized by relatively low pay, the second has medium pay, and the third has medium to high pay.

**Figure 14: Number of Equally Male-/Female-Owned Non-Microbusinesses by Proportion of All Equally Male-/Female-Owned Non-Microbusinesses by Sector, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

**Figure 15: Number of Equally Male-/Female-Owned Microbusinesses by Proportion of All Equally Male-/Female-Owned Microbusinesses by Sector, 2007**

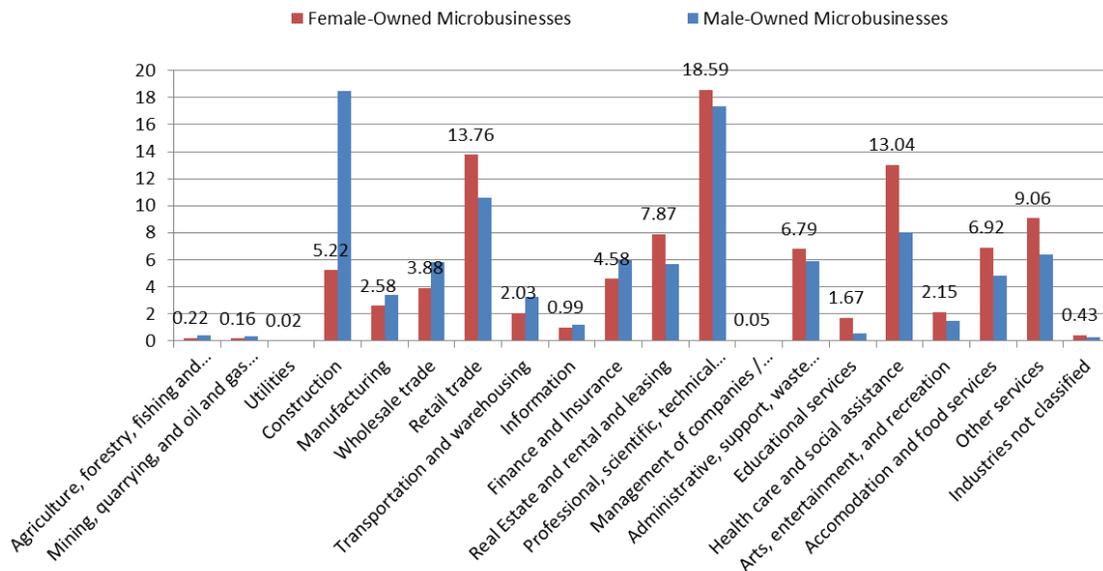


Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

### Number and Proportion of Female- vs. Male-Owned Microbusinesses vs. Non-Microbusinesses

Figure 16 below compares the proportions of female- vs. male-owned microbusinesses by sector. It shows that the top three female-owned microbusinesses were in the Professional, Scientific, and Technical sector (18.59 percent); the Retail Trade sector (13.76 percent); and the Health Care and Social Assistance sector (13.04 percent). The top three male-owned microbusinesses were in the Construction sector (18.47 percent); the Professional, Scientific, and Technical sector (17.36 percent); and the Retail Trade sector (10.6 percent). Interestingly, the Professional, Scientific, and Technical and the Retail Trade sectors were among the top three for both genders. While the Health Care and Social Assistance sector, characterized by a range in pay, ranked third for female-owned microbusinesses, the Construction sector, characterized by medium pay, ranked first for male-owned microbusinesses.

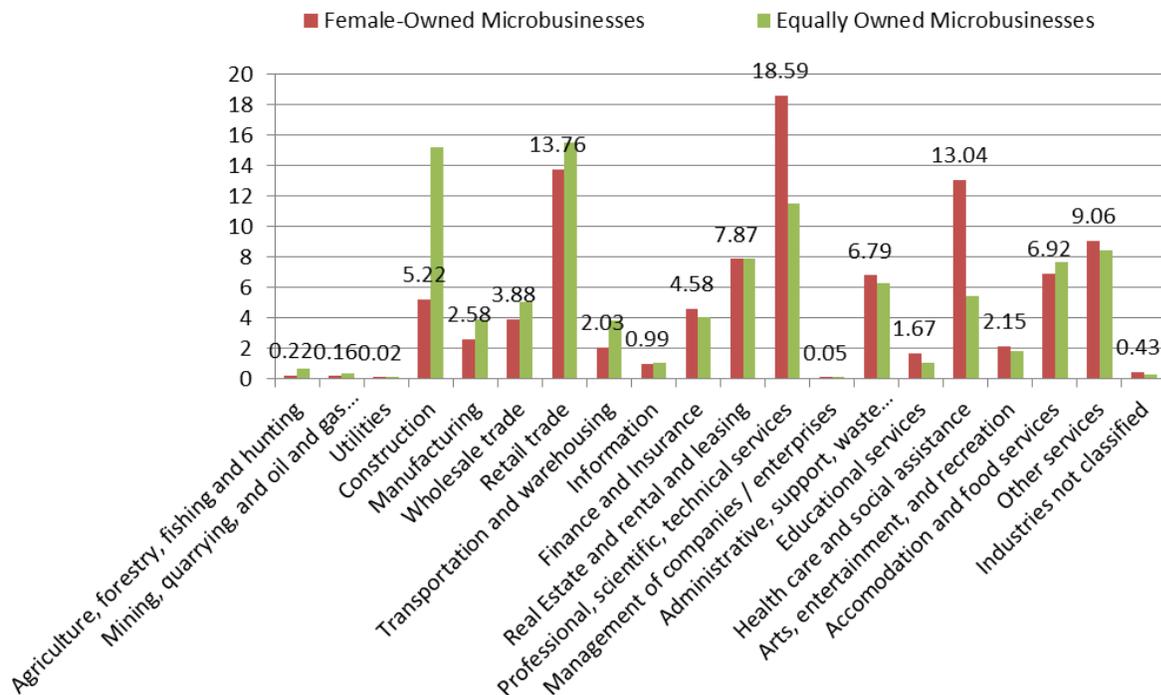
**Figure 16: Comparison of Proportions of Female- vs. Male-Owned Microbusinesses by Sector, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

Figure 17 below compares the proportions of female- vs. equally owned microbusinesses by sector. It shows that the top three female-owned microbusinesses were in the Professional, Scientific, and Technical sector (18.59 percent); the Retail Trade sector (13.76 percent); and the Health Care and Social Assistance sector (13.04 percent). The top three equally owned microbusinesses were in the Retail Trade sector (15.54 percent); the Construction sector (15.21 percent); and the Professional, Scientific, and Technical Services sector (11.53 percent). Interestingly, similar to the comparison between female- and male-owned microbusinesses, the Professional, Scientific, and Technical and the Retail Trade sectors were among the top three for both groups. While the Health Care and Social Assistance sector, characterized by a range in pay, ranked third for female-owned microbusinesses, the Construction sector, characterized by medium pay, ranked second for equally owned microbusinesses.

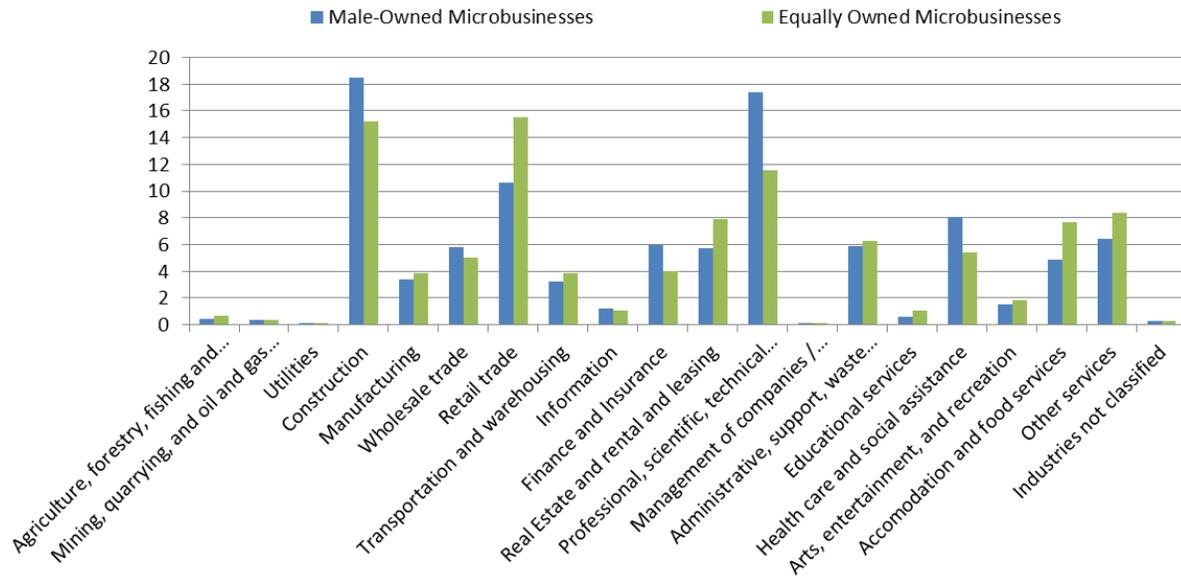
**Figure 17: Comparison of Proportions Female- vs. Equally Owned Microbusinesses by Sector, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

Figure 18 below compares the proportions of male- vs. equally owned microbusinesses by sector. It shows that the top three male-owned microbusinesses were in the Construction sector (18.59 percent); the Professional, Scientific, and Technical sector (17.36 percent); and the Retail Trade sector (10.6 percent). The top three equally owned microbusinesses were in the Retail Trade sector (15.54 percent); the Construction sector (15.21 percent); and the Professional, Scientific, and Technical Services sector (11.53 percent). Interestingly, all three sector were among the top three between the two groups.

**Figure 18: Comparison of Proportions Male- vs. Equally Owned Microbusinesses by Sector, 2007**

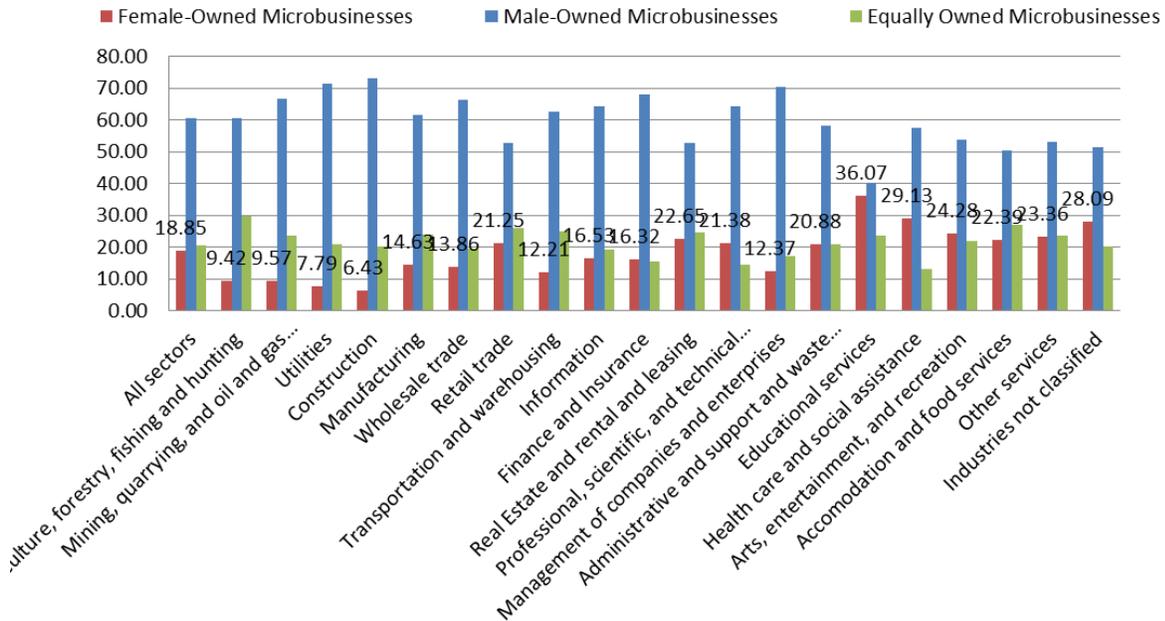


Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

**Number and Proportion of Female-Owned, Male-Owned vs. Equally Owned Microbusinesses**

Next, each business sector was taken and differentiated among female-owned, male-owned, and equally male-and-female-owned microbusinesses. In other words, for each business sector the proportion of female-owned, the proportion of male-owned, and the proportion of equally owned microbusinesses sums up to 100 percent. Figure 19 below illustrates findings. For all business sectors, 18.85 percent of all microbusinesses were female-owned, 60.63 percent of all microbusinesses were male-owned, and 20.52 percent of all microbusinesses were equally owned. For single business sectors and for female-owned microbusinesses, sector Educational Services (36.07 percent) ranked highest, followed by Health Care and Social Assistance (29.13 percent), and Industries not classified (28.09 percent). For male-owned microbusinesses, sector Construction (73.18 percent) ranked highest, followed by Utilities (71.30 percent), and Management of Companies and Enterprises (70.52 percent). For equally owned microbusinesses, sector Agriculture, Forestry, Fishing, and Hunting (29.86 percent) ranked highest; followed by Accommodation and Food Services (27.12 percent); and Retail Trade (26.12 percent).

**Figure 19: Comparison of Proportion of Female-, Male- vs. Equally Owned Microbusinesses by Sector, 2007**

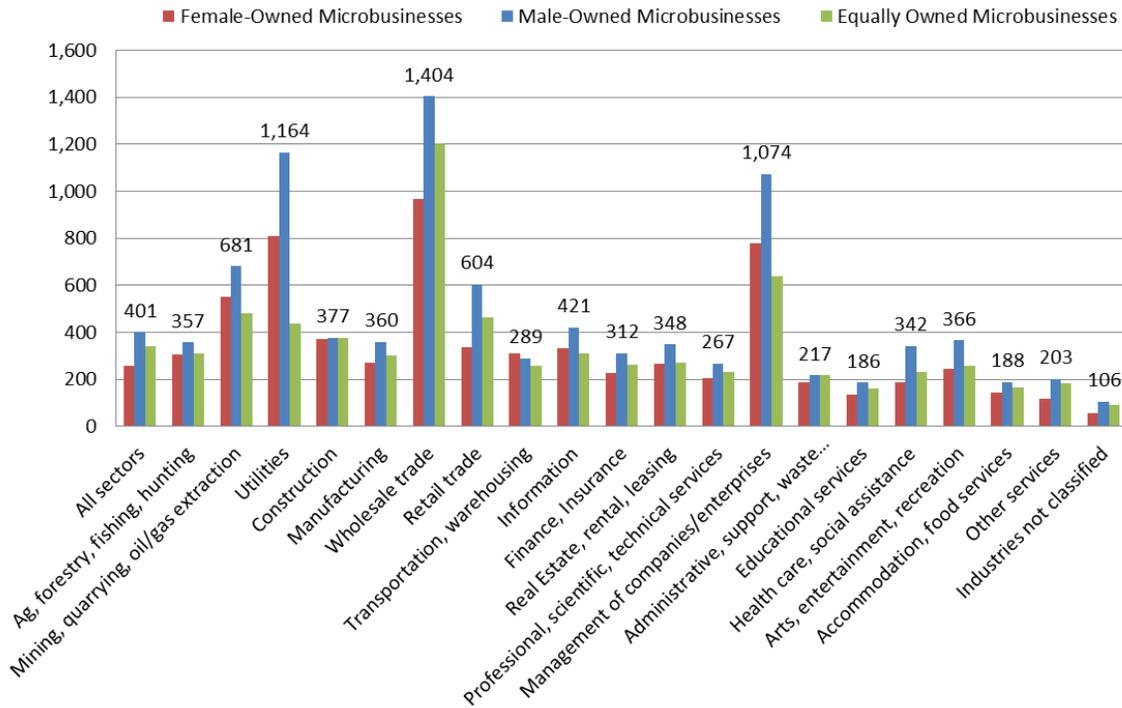


Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

### Sales and Receipts of Microbusinesses by Gender

In this section Sales and Receipts (in \$1,000) Divided by the Number of Businesses are compared and contrasted for female-, male-, and equally owned microbusinesses by sector (see Figure 20 below). Then, these groups will be discussed separately below. The Wholesale Trade sector had the highest ratio of sales and receipts for each of the three groups. The Utilities sector had the second highest amount of sales and receipts for female- and male-owned microbusinesses, although rather low sales and receipts for equally owned microbusinesses. The Management of Companies and Enterprises sector had relatively high sales and receipts, the third highest for female- and male-owned microbusinesses, but the second highest for equally owned microbusinesses.

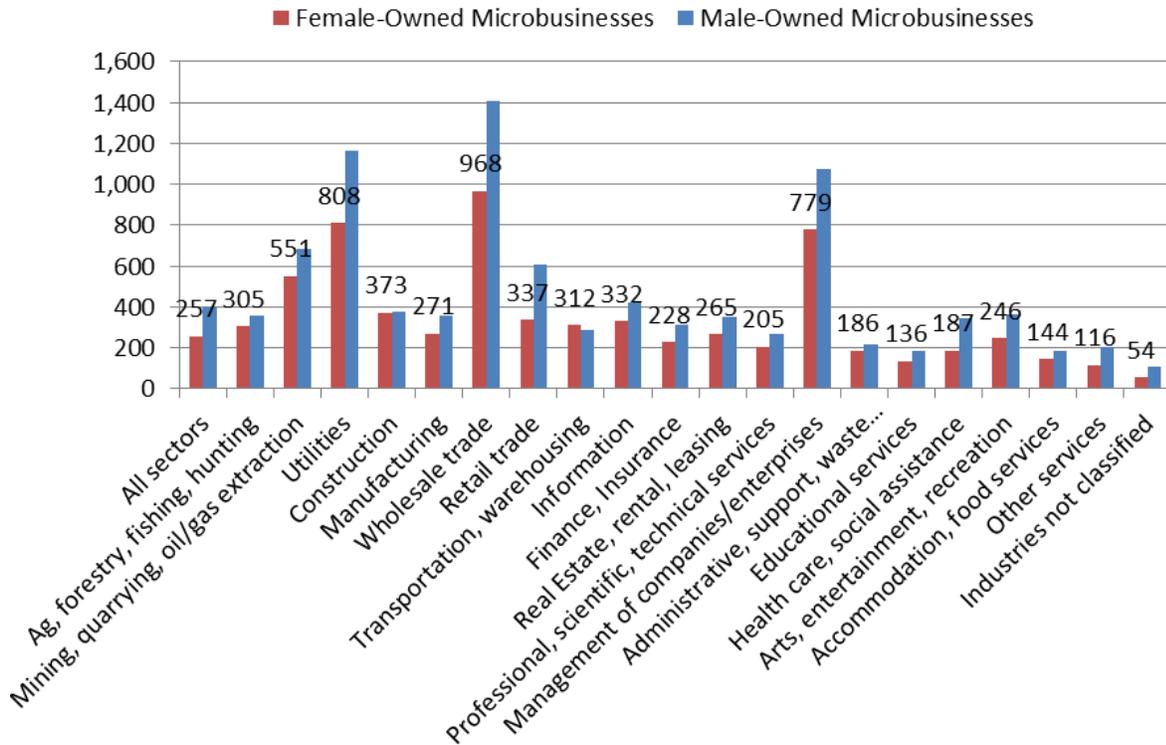
**Figure 20: Sales and Receipts (in \$1,000) Divided by the Number of Businesses: Comparison of Female- vs. Male- vs. Equally Male-/Female-Owned Microbusinesses by Sector, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

Figure 21 below compares and contrasts female- and male-owned microbusinesses by sector. Interestingly, these two groups had similar rankings, as they both score rather high in the Wholesale Trade, Utilities, and Management of Companies and Enterprises sectors.

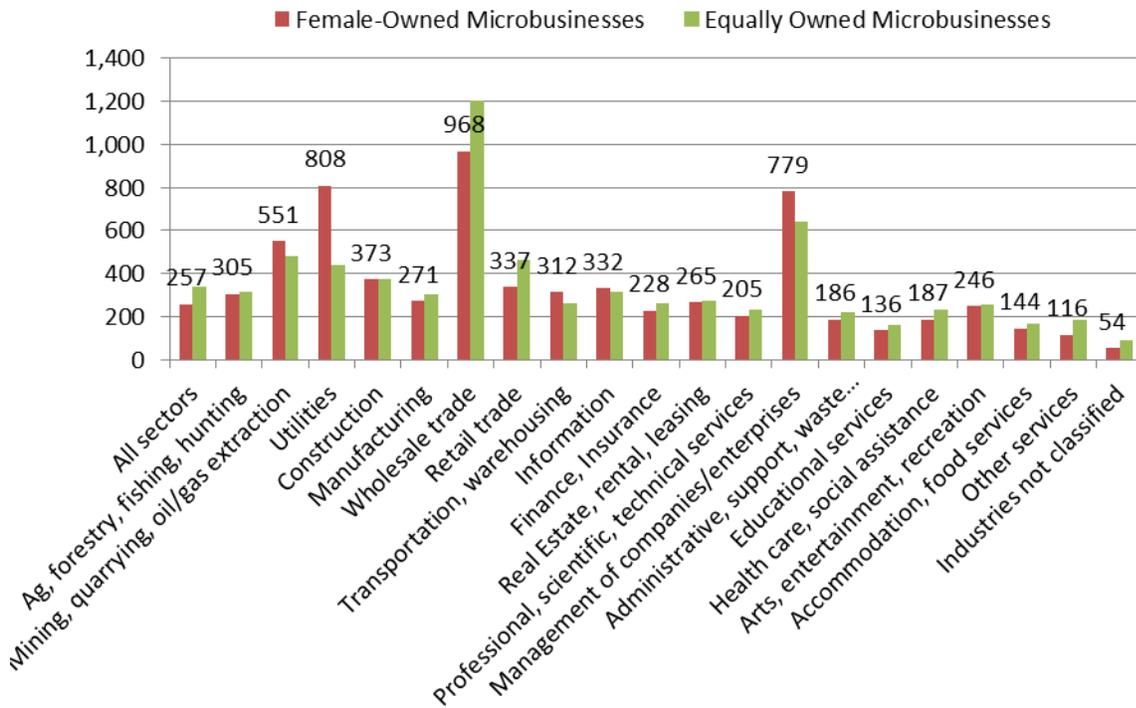
**Figure 21: Sales and Receipts (in \$1,000) Divided by the Number of Businesses: Comparison of Female- vs. Male-Owned Microbusinesses by Sector, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

Figure 22 compares and contrasts female- and equally owned microbusinesses that ranked high in the Wholesale Trade and Management of Companies and Enterprises sectors, although female-owned microbusinesses ranked higher in the Mining, Quarrying, and Oil and Gas Extraction and Utilities sectors.

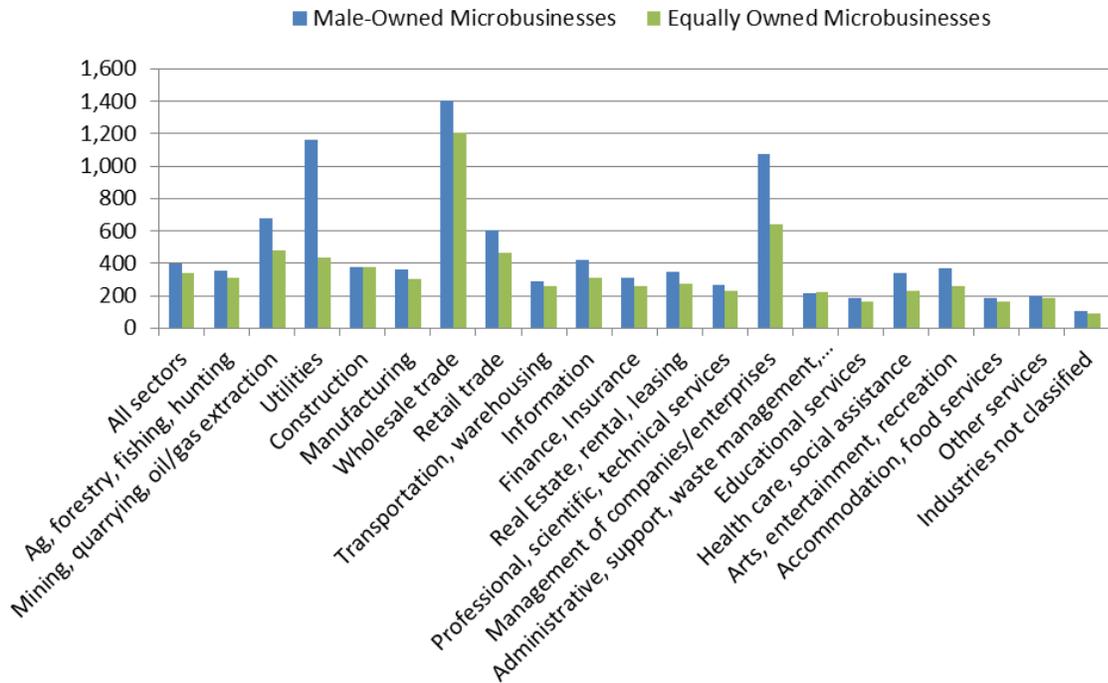
**Figure 22: Sales and Receipts (in \$1,000) Divided by the Number of Businesses: Comparison of Female- vs. Equally Owned Microbusinesses by Sector, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

Similar to the observations above, Figure 23 shows that both male- and equally owned microbusinesses ranked highly in the Wholesale Trade and Management of Companies and Enterprises sectors, whereas male-owned microbusinesses ranked quite high in the Utilities sector and equally owned microbusinesses did not.

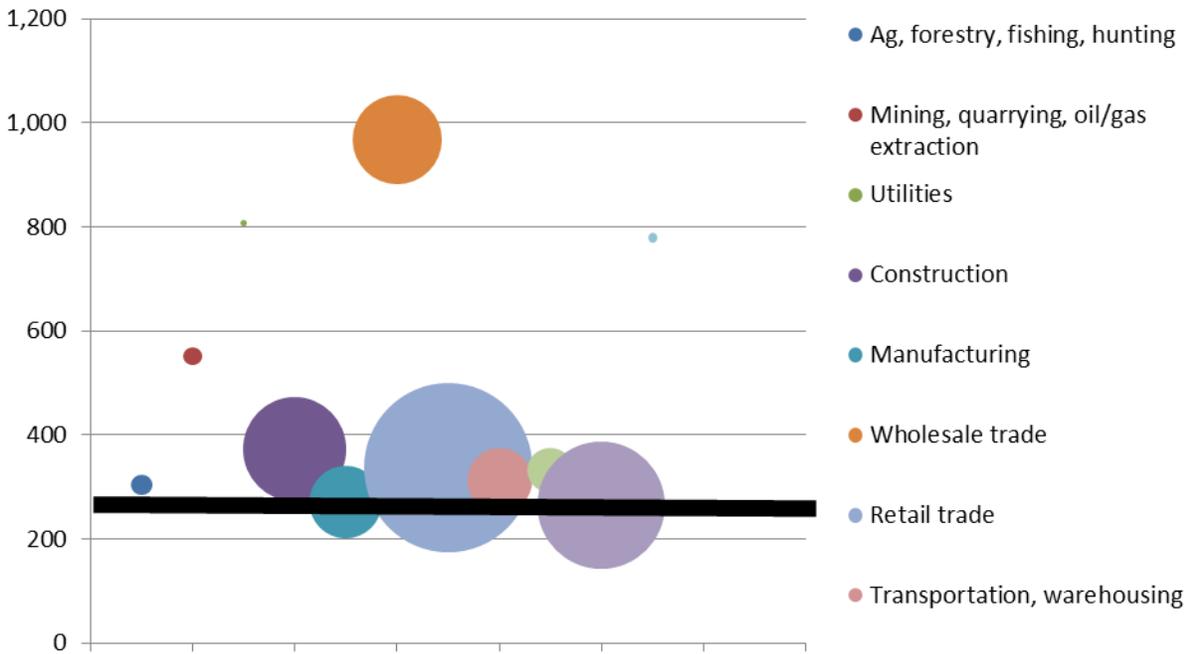
**Figure 23: Sales and Receipts (in \$1,000) Divided by the Number of Businesses: Comparison of Male- vs. Equally Owned Microbusinesses by Sector, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

Figure 24 shows eleven top-ranked female-owned microbusinesses by the ratio Sales and Receipts (\$1,000) Divided by the Number of Businesses by sector and by proportion of all female-owned microbusinesses for 2007. These eleven sectors ranked above 256, the ratio for all female-owned microbusinesses in all sectors. The bubble size indicates the proportion of female-owned microbusinesses in a particular sector as a proportion of female-owned microbusinesses in all sectors. The highest sales and receipts (968) were generated in the Wholesale Trade sector, although the proportion was only 3.88 percent, followed by the Utilities sector (808) with a proportion of 0.02 percent, and the Management of Companies and Enterprises sector (779) with a proportion of 0.05 percent. In other words, female-owned microbusinesses were underrepresented in the sectors with the highest sales and receipts.

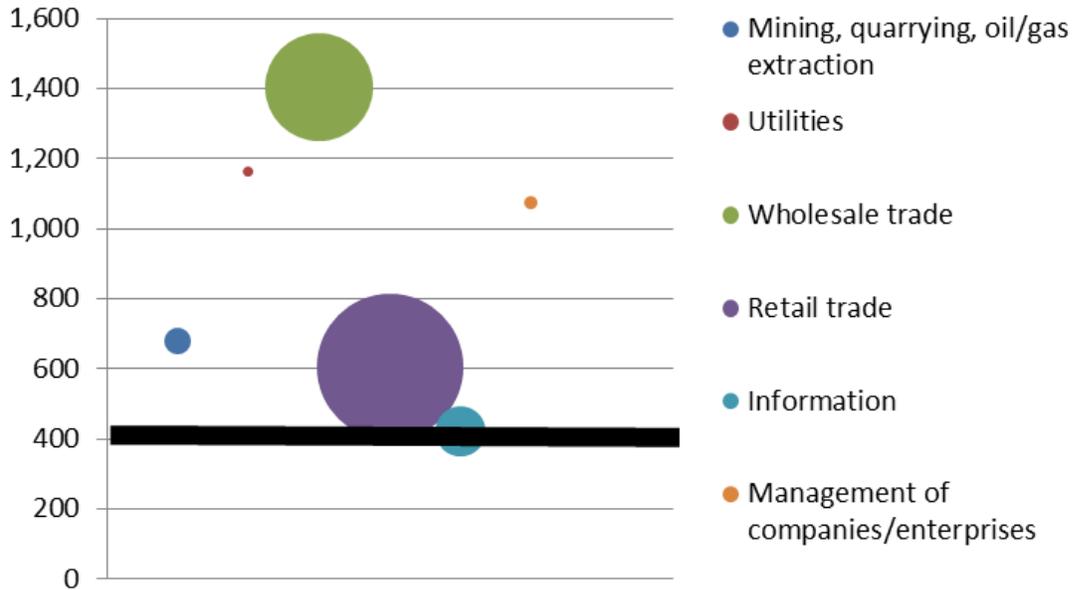
**Figure 24: Top-Ranked Female-Owned Microbusinesses by Ratio of Sales and Receipts (\$1,000/Number of Female-Owned Microbusinesses) by Sector and by Proportion of All Female-Owned Microbusinesses, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

Figure 25 shows six top-ranked male-owned microbusinesses by the ratio Sales and Receipts (\$1,000) Divided by the Number of Businesses by sector and by proportion of all male-owned microbusinesses for 2007. These six sectors ranked above 401, the ratio for all male-owned microbusinesses in all sectors. The bubble size indicates the proportion of male-owned microbusinesses in a particular sector as a proportion of male-owned microbusinesses in all sectors. The highest sales and receipts (1,404) were generated in the Wholesale Trade sector, although the proportion was only 5.79 percent, followed by the Utilities sector (1,164) with a proportion of 0.06 percent, and the Management of Companies and Enterprises sector (1,074) with a proportion of 0.08 percent. Although the proportion of male-owned microbusinesses in the Wholesale Trade sector was higher (5.79 percent) than the proportion of female-owned microbusinesses (3.88 percent), it was still relatively low. Similar to the conclusion above, male-owned microbusinesses are somewhat underrepresented in the sectors with the highest sales and receipts.

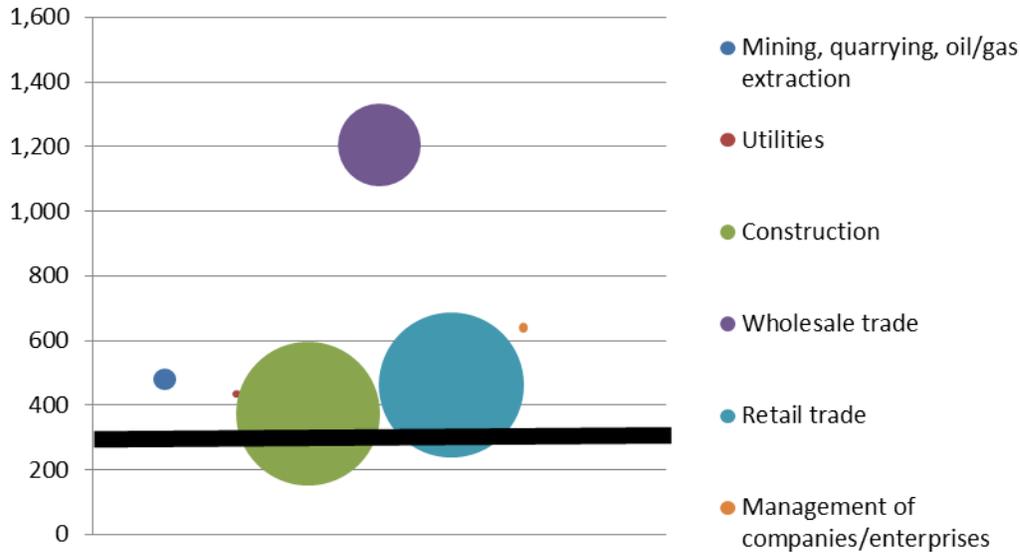
**Figure 25: Top-Ranked Male-Owned Microbusinesses by Ratio of Sales and Receipts (\$1,000/Number of Female-Owned Microbusinesses) by Sector and by Proportion of All Male-Owned Microbusinesses, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

Figure 26 presents six top-ranked equally owned microbusinesses by the ratio Sales and Receipts (\$1,000) Divided by the Number of Businesses by sector and by proportion of all equally owned microbusinesses for 2007. These six sectors ranked above 339, the ratio for all equally owned microbusinesses in all sectors. The bubble size indicates the proportion of equally owned microbusinesses in a particular sector as a proportion of equally owned microbusinesses in all sectors. The highest sales and receipts (1,206) were, again, generated in the Wholesale Trade sector, although the proportion is only 5.06 percent; followed by the Management of Companies and Enterprises sector (641) with a proportion of 0.06 percent; and the Mining, Quarrying, and Oil and Gas Extraction sector (480) with a proportion of 0.36 percent. Although the proportion of equally owned microbusinesses of the Wholesale Trade sector was higher (5.06 percent) than the proportion of female-owned microbusinesses (3.88 percent), it was still relatively low. Similar to the conclusion above, equally owned microbusinesses were somewhat underrepresented in the sectors with the highest sales and receipts.

**Figure 26: Top-Ranked Equally Owned Microbusinesses by Ratio of Sales and Receipts (\$1,000/Number of Equally Owned Microbusinesses) by Sector and by Proportion of All Equally Owned Microbusinesses, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

### Annual Payroll of Microbusinesses by Gender

In this section Annual Payroll (in \$1,000) Divided by the Number of Employees for female-, male-, and equally owned microbusinesses by sector will be discussed (see Figure 27 below). Then, these groups will be discussed separately below. The Management of Companies and Enterprises sector had the highest ratio of annual payroll for male-owned and equally owned microbusinesses (female-owned microbusinesses had missing information in this sector), with a payroll ratio of 86 and 93, respectively. This finding is similar to the finding presented in Table NAICS 55 in the Appendix, which lists occupations that are typical in this sector and that have a median pay that is medium to high, for example, bookkeeping, accounting, and auditing clerks (median pay in 2012: \$36,160); first-line supervisors/managers of office and administrative support workers (\$56,410); accountants and auditors (\$64,670); general and operations managers (\$123,200); and financial managers (\$124,480).

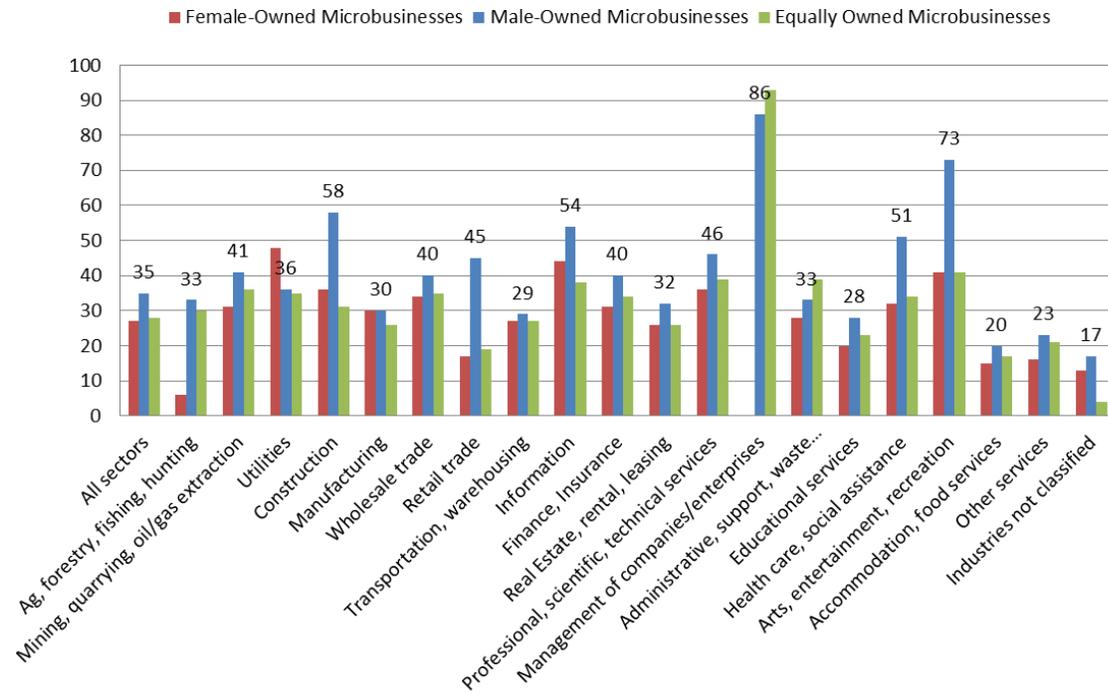
Female-owned microbusinesses had relatively high ratios in Utilities (48); followed by Information (44); and Arts, Entertainment, and Recreation (41). This finding is similar to the findings presented in Tables NAICS 22, NAICS 51, and NAICS 71 in the Appendix. Table NAICS 22 pertains to the Utilities sector, where the pay is medium to high and where typical occupations are meter readers (median pay in 2012: \$41,340); control and valve installers and repairers (\$60,940); electrical power-line installers and repairers (\$66,370); first-line supervisors/managers of mechanics, installers, and repairers (\$80,600); and electrical engineers (\$85,970). Table NAICS 51 presents information on the Information sector, where the

pay is medium. Two occupations typical of this sector are customer service representatives (median pay in 2012: \$33,320) and telecommunications equipment installers and repairers (\$56,960). Finally, Table NAICS 71 contains information on the Arts, Entertainment, and Recreation sector, characterized by low to medium pay. Typical occupations in this sector are amusement and recreation attendants (median pay in 2012: \$18,610); fitness trainers and aerobics instructors (\$32,830); and gaming supervisors (\$46,260).

Nevertheless, these ratios were much lower than the ratios obtained by male-owned microbusinesses, which have relatively high ratios in Management of Companies and Enterprises (86); Arts, Entertainment, and Recreation (73); Construction (58); and Information (54), although these levels were not reached by female- or equally owned microbusinesses. Interestingly, while female-owned microbusinesses had an annual payroll ratio of 41 in Arts, Entertainment, and Recreation, male-owned microbusinesses had a much higher annual payroll ratio of 73 in this field. Similarly, while female-owned microbusinesses had an annual payroll ratio of 44 in the Information sector, male-owned microbusinesses had an annual payroll of 54 in this sector.

Future research should investigate the reasons for this difference. Table NAICS 55 shows information for the Management of Companies and Enterprises sector, which has medium to high pay. Typical occupations in this sector are bookkeeping, accounting, and auditing clerks (median pay in 2012: \$36,160); first-line supervisors/managers of office and administrative support workers (\$56,410); accountants and auditors (\$64,670); general and operations managers (\$123,200); and financial managers (\$124,840). Table NAICS 23 displays information for the Construction sector, which has medium pay. Typical occupations in this sector are construction laborers (median pay in 2012: \$30,370); carpenters (\$40,030); operating engineers and other construction equipment operators (\$43,560); electricians (\$48,230); and construction managers (\$81,480).

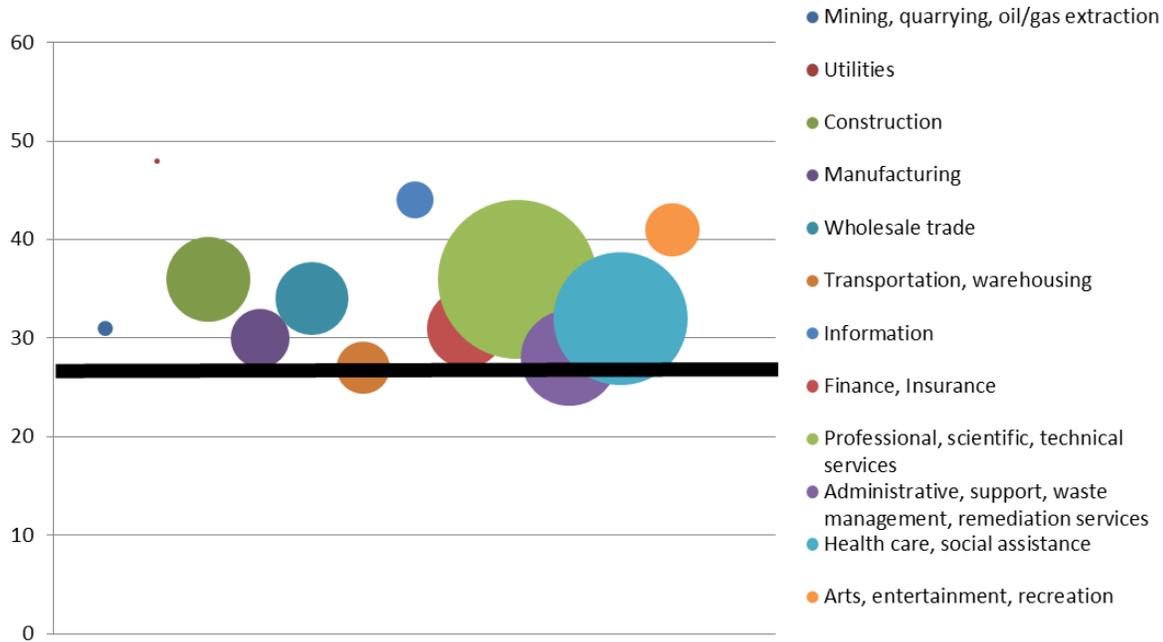
**Figure 27: Annual Payroll (\$1,000) Divided by the Number of Employees: Comparison of Female- vs. Male- vs. Equally Owned Microbusinesses by Sector, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

Female-owned microbusinesses were different from male- and equally owned microbusinesses. For female-owned microbusinesses, the highest ratio was obtained in the business sector Utilities (ratio: 48); followed by Information (44); and Arts, Entertainment, and Recreation (41). However, the proportion of female-owned microbusinesses in these sectors was rather small, with 0.02, 0.99, and 2.15 percent, respectively. The largest proportion of female-owned microbusinesses, 18.59 percent, was in the Professional, Scientific, and Technical Services sector, which has a ratio of 36. Figure 28 below displays those sectors that rank above 27, the ratio for all sectors.

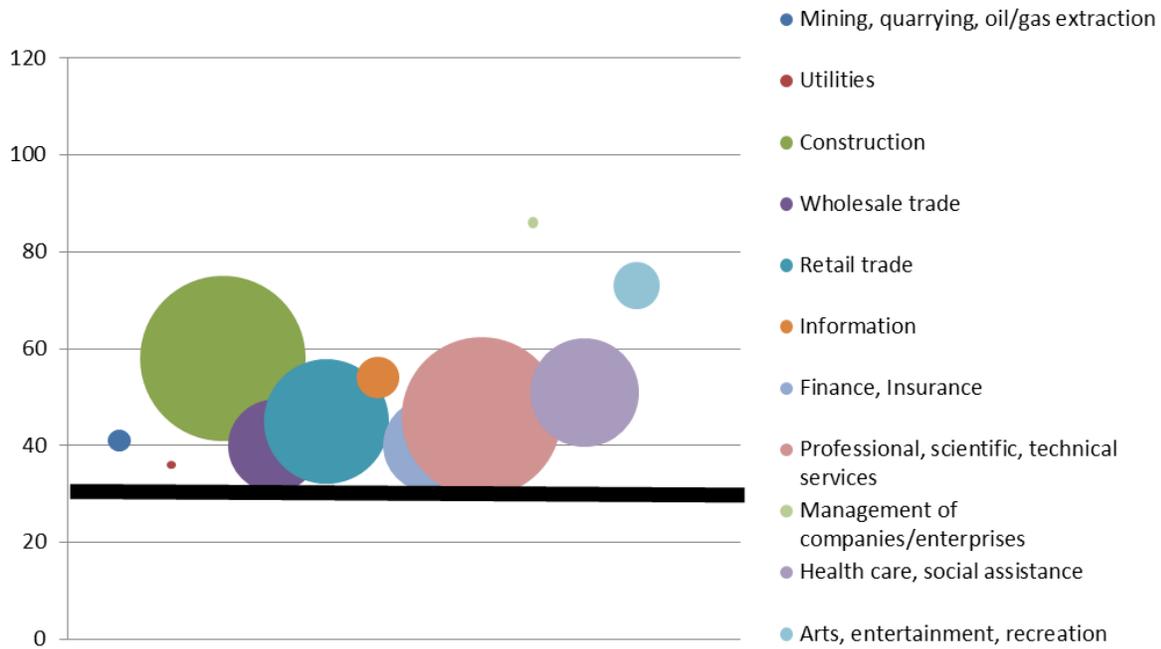
**Figure 28: Top-Ranked Female-Owned Microbusinesses by Ratio of Annual Payroll (\$1,000/Number of Employees in Female-Owned Microbusinesses) by Sector and by Proportion of All Microbusinesses, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

For male-owned microbusinesses, the highest ratio was obtained in the business sector Management of Companies and Enterprises (ratio: 86); followed by Arts, Entertainment, and Recreation (73); and Construction (58). Whereas the proportion of male-owned businesses in the first two sectors were rather small, 0.08 percent and 1.48 percent, respectively, the proportion was rather high in the Construction sector, 18.47 percent. Figure 29 below displays those sectors that rank above 27, the ratio for all sectors.

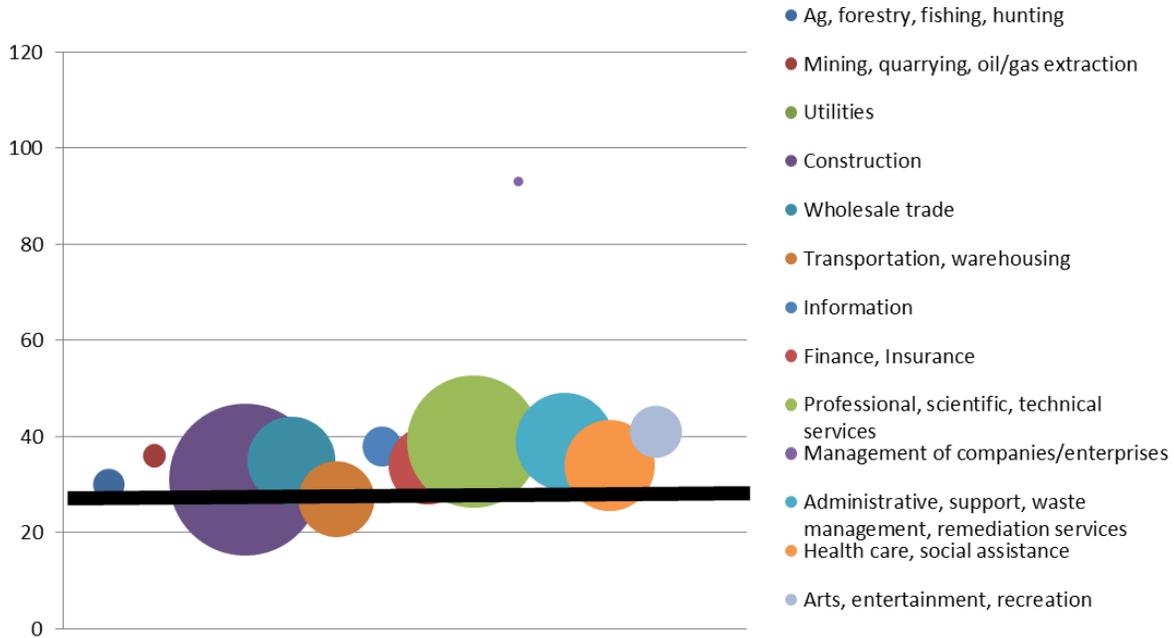
**Figure 29: Top-Ranked Male-Owned Microbusinesses by Ratio of Annual Payroll (\$1,000/Number of Employees in Male-Owned Microbusinesses) by Sector and by Proportion of All Microbusinesses, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

For equally owned microbusinesses, the highest ratio was obtained in the business sector Management of Companies and Enterprises (ratio: 93); followed by Arts, Entertainment, and Recreation (41); and Professional, Scientific, and Technical Services (39). Interestingly, male-owned businesses had a ratio of 86 for business sector Management of Companies and Enterprises and a ratio of 73 for business sector Arts, Entertainment, and Recreation. Figure 30 below displays those sectors that rank above 28, the ratio for all sectors.

**Figure 30: Top-Ranked Equally Owned Microbusinesses by Ratio of Annual Payroll (\$1,000/Number of Employees in Equally-Owned Microbusinesses) by Sector and by Proportion of All Microbusinesses, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA09

### Differentiation by Race and by Sector

The following section differentiates by race, i.e., among White-owned, Black-owned, and Asian-owned microbusinesses versus non-microbusinesses. First, White-owned microbusinesses, then Black-owned microbusinesses, and finally Asian-owned microbusinesses are discussed. Below, these businesses will be compared and contrasted with each other and then discussed separately.

### Key Findings in This Section

- For single business sectors and for White-owned microbusinesses, sector Construction ranked highest; followed by Agriculture, Fishing, and Hunting; and Mining, Quarrying, and Oil and Gas Extraction. The median pay in the Construction sector is medium to somewhat high; it is relatively low in the Agriculture, Fishing, and Hunting sector; and medium to somewhat high in the Mining, Quarrying, and Oil and Gas Extraction sector.
- For Black-owned microbusinesses, sector Health Care and Social Assistance ranked highest; followed by Transportation and Warehousing; and Administrative, Support, Waste Management, and Remediation Services. The median pay in the Health Care and Social Assistance and

Transportation and Warehousing sectors encompass a wide range, while it is relatively low in Administrative, Support, Waste Management, and Remediation Services.

- For Asian-owned microbusinesses, sector Accommodation and Food Services ranked highest, followed by Retail Trade, and Wholesale Trade. The Accommodation and Food Services sector has many occupations that pay relatively low wages, the Retail Trade sector only pays low to moderate wages, and the Wholesale Trade sector pays a range of wages.
- The Wholesale Trade sector had the highest sales and receipts ratio among White- and Asian-owned microbusinesses, while the Utilities sector had the highest ratio among Black-owned microbusinesses. In other words, White- and Black-owned microbusinesses were underrepresented in the sectors with the highest sales and receipts. Asian-owned microbusinesses were well represented in two sectors with the highest sales and receipts.
- The Arts, Entertainment, and Recreation sector had the highest ratio of annual payroll for Black-owned microbusinesses; followed by the Management of Companies and Enterprises sector for White-owned microbusinesses; and the Information sector for Asian-owned microbusinesses.

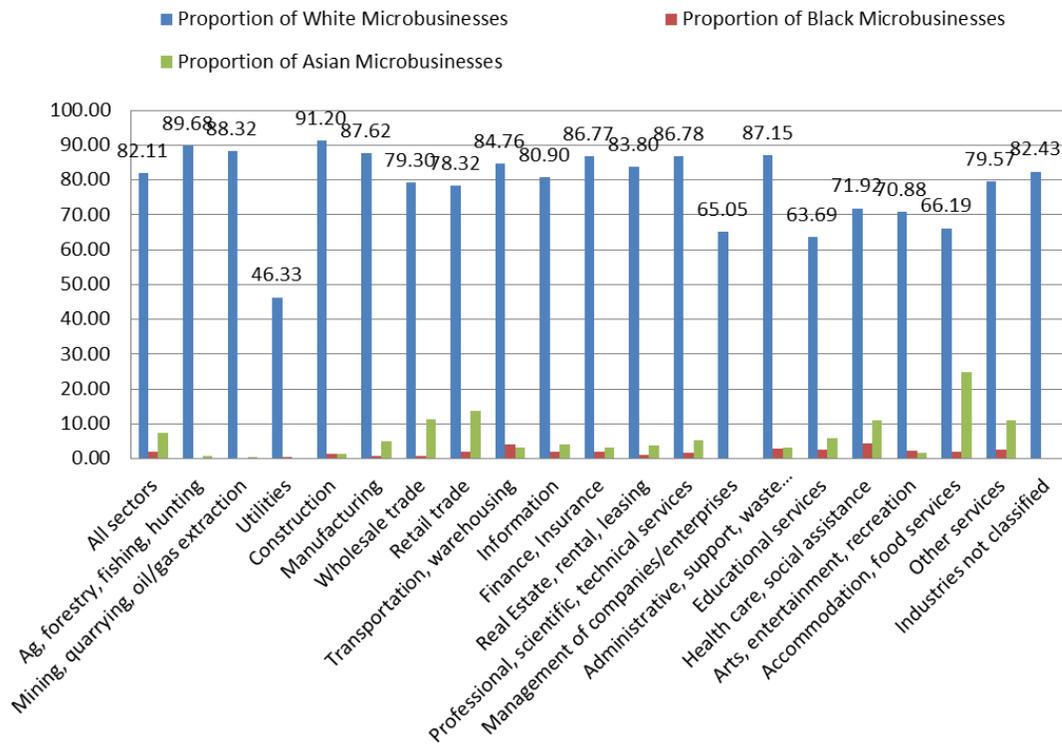
### **Number and Proportion of Microbusinesses vs. Non-Microbusinesses by Race and by Sector**

First, White-owned microbusinesses are compared and contrasted against White-owned non-microbusinesses based on calculations of (a) the proportion of White-owned microbusinesses in each business sector as a proportion of all White-owned microbusinesses and (b) the proportion of White-owned non-microbusinesses in each business sector as a proportion of all White-owned non-microbusinesses. Figure 31 below illustrates that for all business sectors, 82.11 percent of all microbusinesses were White-owned, 2.09 percent of all microbusinesses were Black-owned, and 7.52 percent of all microbusinesses were Asian-owned. For single business sectors and for White-owned microbusinesses, sector Construction (91.20 percent) ranked highest; followed by Agriculture, Fishing, and Hunting (89.68 percent); and Mining, Quarrying, and Oil and Gas Extraction (88.32 percent). The median pay in the Construction sector is medium to somewhat high; it is relatively low in the Agriculture, Fishing, and Hunting sector; and medium to somewhat high in the Mining, Quarrying, and Oil and Gas Extraction sector. For example, helpers in extraction work had a median wage of \$32,430 and mining and geological engineers had a median wage of \$83,440 in 2012 (see Table NAICS 21 in the Appendix).

For Black-owned microbusinesses, sector Health Care and Social Assistance (4.41 percent) ranked highest; followed by Transportation and Warehousing (4.10 percent); and Administrative, Support, Waste Management, and Remediation Services (2.86 percent). The median pay in the Health Care and Social Assistance and Transportation and Warehousing sectors encompass a wide range, while it is relatively low in Administrative, Support, Waste Management, and Remediation Services.

For Asian-owned microbusinesses, sector Accommodation and Food Services (24.74 percent) ranked highest, followed by Retail Trade (13.85 percent), and Wholesale Trade (11.16 percent). The Accommodation and Food Services sector has many occupations that pay relatively low wages, the Retail Trade sector only pays low to moderate wages, and the Wholesale Trade sector pays a range of wages.

**Figure 31: Comparison of Proportion of White, Black vs. Asian Microbusinesses by Sector, 2007 (Denominator: All Microbusinesses)**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA011

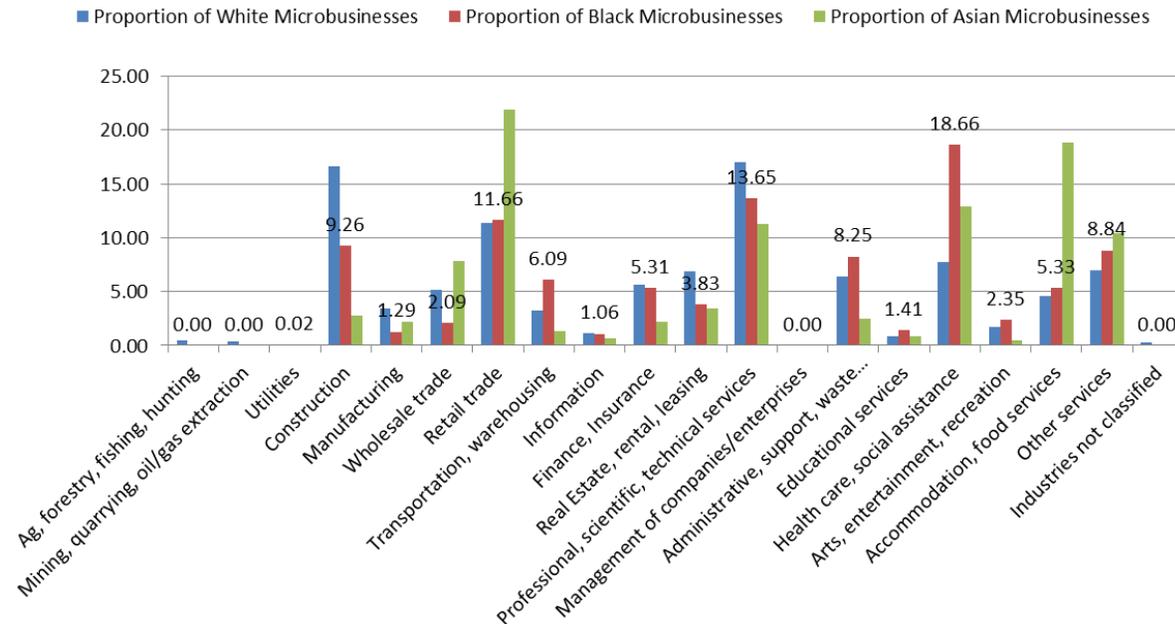
While Figure 31 above is based on calculations with all microbusinesses in the denominator, Figure 32 below is based on calculations with denominators for each subgroup. Figure 32 below illustrates that for White-owned microbusinesses, sector Professional, Scientific, and Technical Services (16.97 percent) ranked highest; followed by Construction (16.61 percent); and Retail Trade (11.33 percent). The Professional, Scientific, and Technical Services sector pays relatively high median wages; the Construction sector pays medium to somewhat high wages; while the Retail Trade sector pays low to moderate median wages.

For Black-owned microbusinesses, sector Health Care and Social Assistance (18.66 percent) ranked highest; followed by Professional, Scientific, and Technical Services (13.65 percent); and Retail Trade (11.66 percent). The median pay in the Health Care and Social Assistance and Transportation and Warehousing sectors encompass a wide range, while it is relatively high in Professional, Scientific, and Technical Services and low to moderate in Retail Trade.

For Asian-owned microbusinesses, sector Retail Trade (21.87 percent) ranked highest, followed by Accommodation and Food Services (18.84 percent), and Health Care and Social Assistance (12.95 percent). The Retail Trade sector only pays low to moderate wages, the Accommodation and Food

Services sector has many occupations that pay relatively low wages, and the Health Care and Social Assistance sector pays a range of wages.

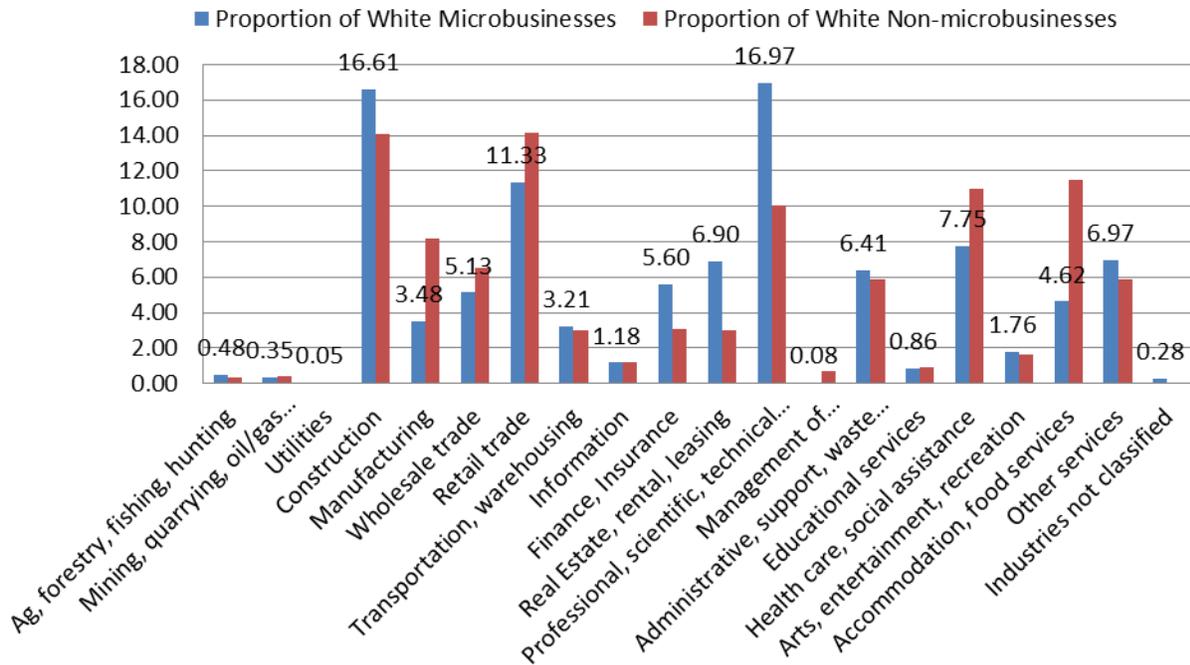
**Figure 32: Comparison of Proportion of White, Black vs. Asian Microbusinesses by Sector, 2007 (Denominator: Microbusinesses by Sector)**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA011

Figure 33 differentiates between White-owned microbusinesses and non-microbusinesses. For White-owned microbusinesses, the highest proportion was in Professional, Scientific, and Technical Services (16.97 percent); followed by Construction (16.61 percent); and Retail Trade (11.33 percent). As mentioned above, many occupations in the Professional, Scientific, and Technical Services sector pay medium to relatively high median wages. Somewhat similarly, many occupations in the Construction sector pay medium to somewhat high median wages. In turn, many occupations in the Retail Trade sector only pay low to moderate wages. For White-owned non-microbusinesses, the highest proportion of non-microbusinesses was in Retail Trade (14.12 percent), followed by Construction (14.10 percent), and Accommodation and Food Services (11.51 percent).

**Figure 33: Comparison of Proportions of White-Owned Microbusinesses vs. Non-Microbusinesses by Sector, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA011

Below, the number of White-owned non-microbusinesses by the proportion of all White-owned non-microbusinesses and the number of White-owned microbusinesses by the proportion of White-owned microbusinesses, respectively, are discussed. As can be seen in Figure 34, sector Retail Trade was the largest with 14.12 percent, followed by Construction (14.10 percent), and Accommodation and Food Services (11.51 percent). Many occupations in the Retail Trade sector only pay low to moderate wages, many occupations in the Construction sector pay medium to somewhat high median wages, while the Accommodation and Food Services sector has many occupations that pay relatively low wages.

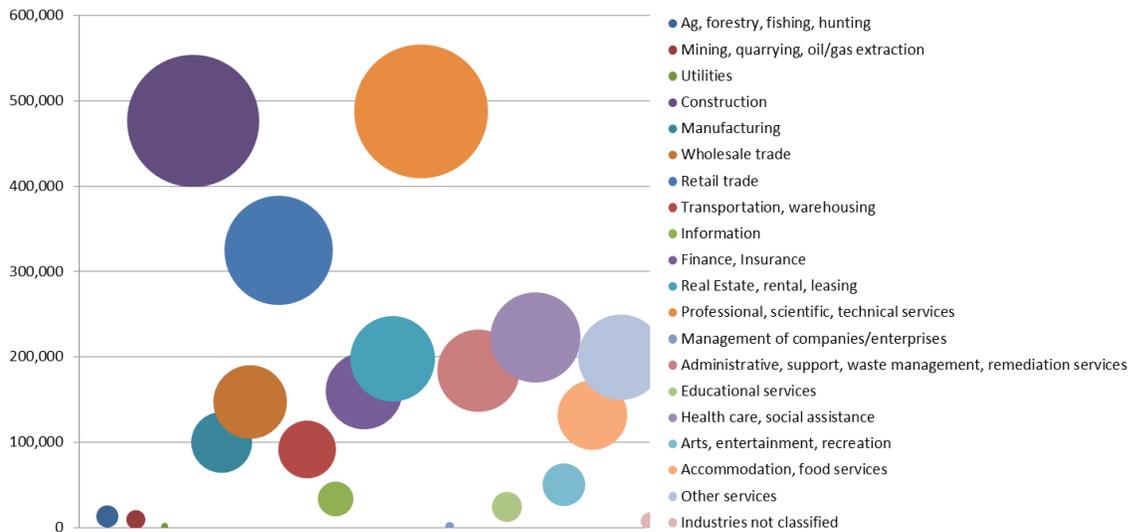
Figure 35 below shows the proportion of White-owned microbusinesses by sector as a proportion of White-owned microbusinesses. Sector Professional, Scientific, and Technical Services was the largest with 16.97 percent; followed by Construction (16.61 percent); and Retail Trade (11.33 percent). Many occupations in the Professional, Scientific, and Technical Services sector pay medium to relatively high median wages; many occupations in the Construction sector pay medium to somewhat high median wages; while the Retail Trade sectors only pay low to moderate median wages.

**Figure 34: Number of White-Owned Non-Microbusinesses by Proportion of All White-Owned Non-Microbusinesses by Sector, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA011

**Figure 35: Number of White-Owned Microbusinesses by Proportion of All White-Owned Microbusinesses by Sector, 2007**

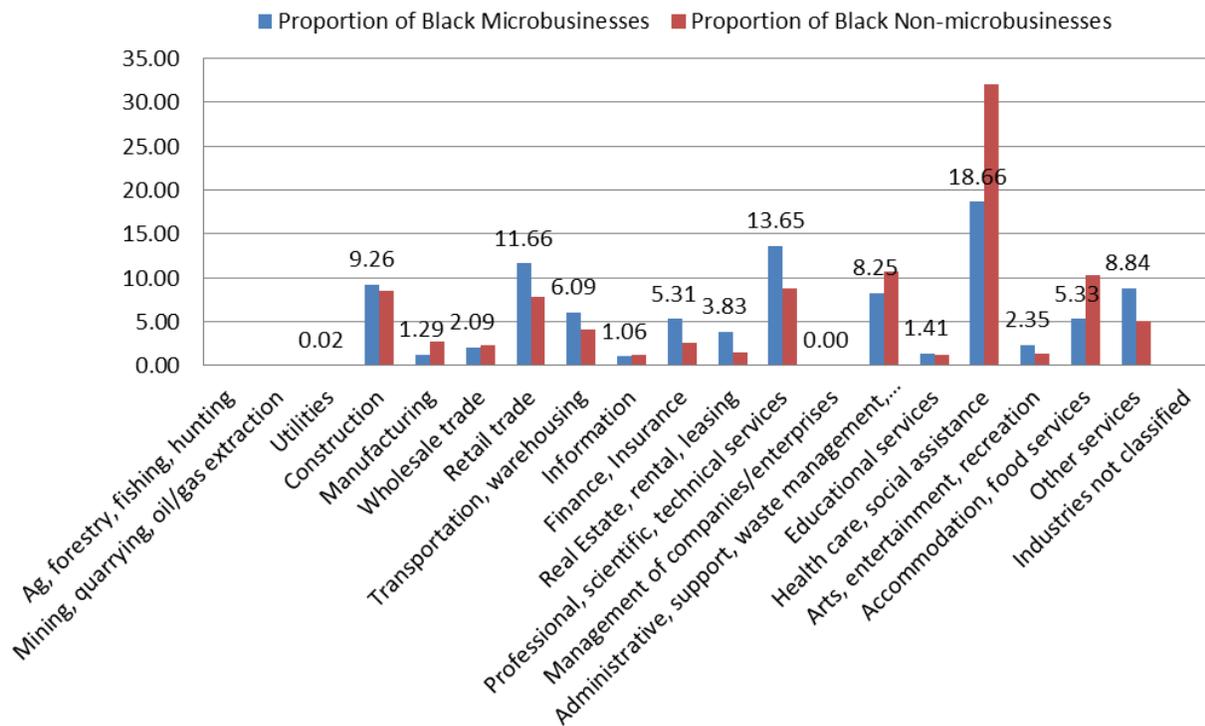


Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA011

Next, Black-owned microbusinesses are compared and contrasted against male-owned non-microbusinesses based on (a) the proportion of Black-owned microbusinesses in each business sector as a proportion of all Black-owned microbusinesses and (b) the proportion of Black-owned non-microbusinesses in each business sector as a proportion of all Black-owned non-microbusinesses. Figure

36 below illustrates findings. For Black-owned microbusinesses, the highest proportion was in Health Care and Social Assistance (32.10 percent); followed by Administrative, Support, Waste Management, and Remediation Services (10.75 percent); and Accommodation and Food Services (10.32 percent). The median pay in Health Care and Social Assistance is characterized by a range in pay; the median pay in Administrative, Support, Waste Management, and Remediation Services is relatively low; and it is somewhat low in Accommodation and Food Services.

**Figure 36: Comparison of Proportions of Black-Owned Microbusinesses vs. Non-Microbusinesses by Sector, 2007**

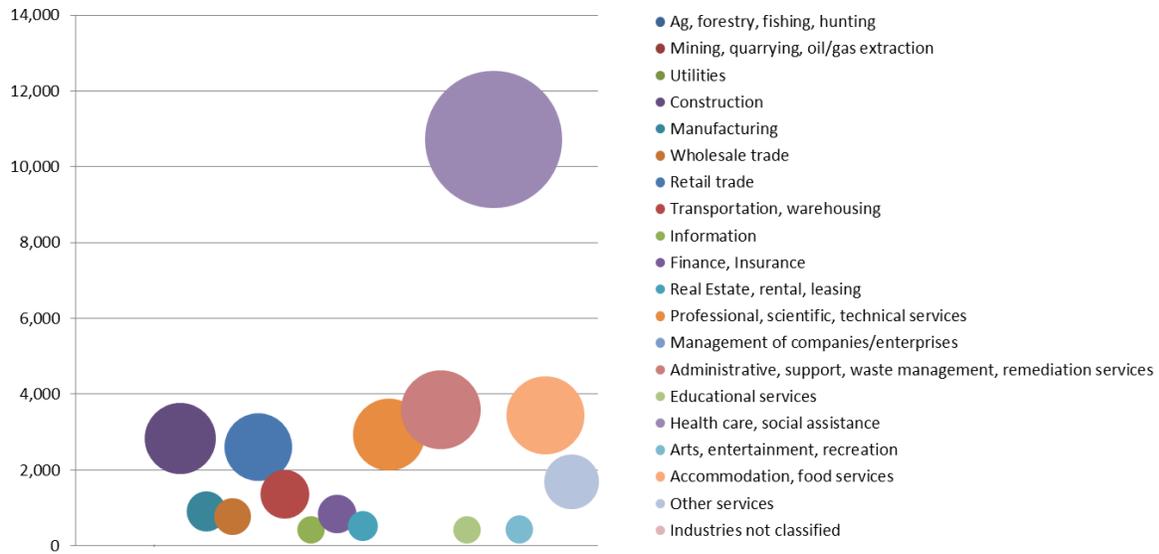


Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA011

Below, the number of Black-owned non-microbusinesses by the proportion of all Black-owned non-microbusinesses and the number of Black-owned microbusinesses by the proportion of all Black-owned microbusinesses, respectively, are discussed. As can be seen in Figure 37, the Health Care and Social Assistance sector was the largest with 32.10 percent; followed by the Administrative, Support, Waste, and Remediation Services sector (10.75 percent); and the Accommodation and Food Services sector (10.32 percent).

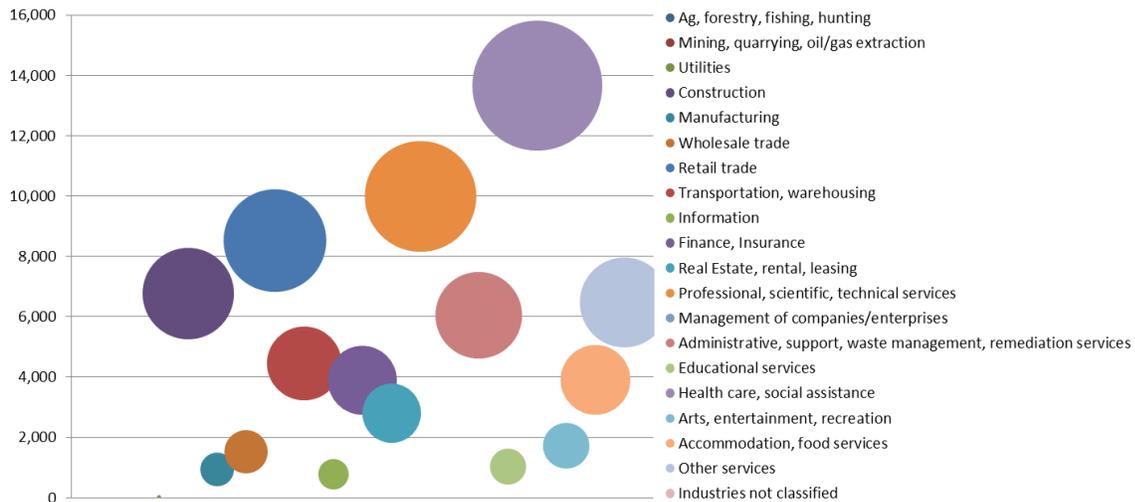
Figure 38 below shows the proportion of Black-owned microbusinesses by sector as a proportion of all Black-owned microbusinesses. The Health Care and Social Assistance sector was the largest with 18.66 percent; followed by Professional, Scientific, and Technical Services (13.65 percent); and Retail Trade (11.66 percent).

**Figure 37: Number of Black-Owned Non-Microbusinesses by Proportion of All Black-Owned Non-Microbusinesses by Sector, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA011

**Figure 38: Number of Black-Owned Microbusinesses by Proportion of All Black-Owned Microbusinesses by Sector, 2007**

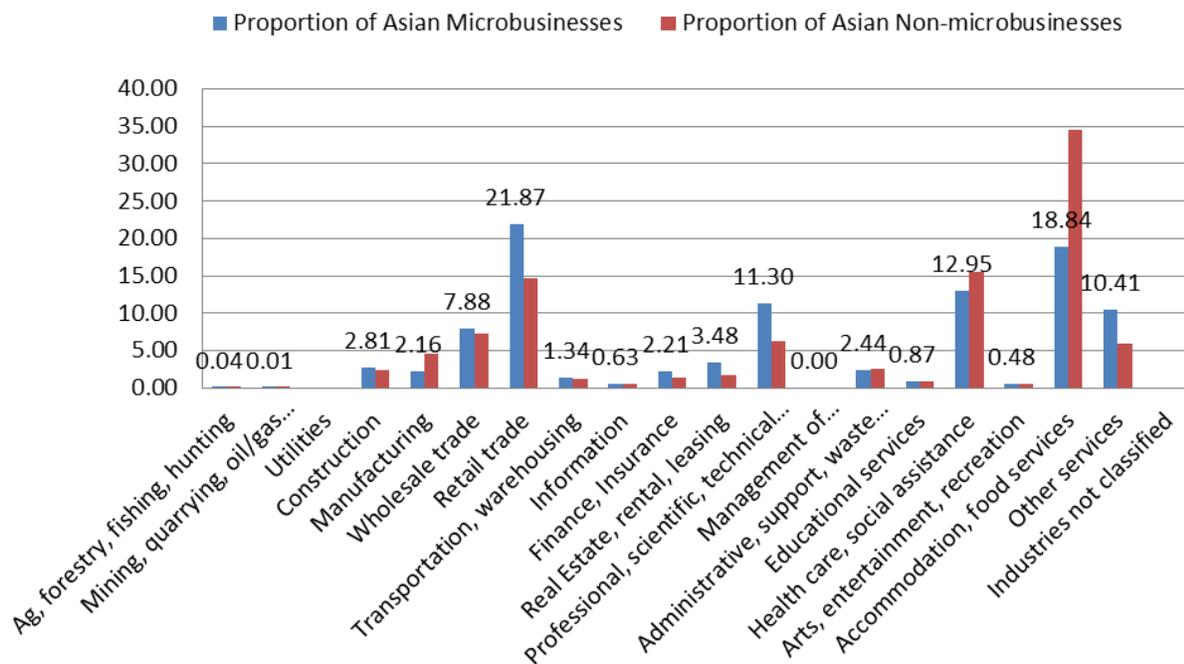


Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA011

Next, Asian-owned microbusinesses are compared and contrasted against Asian-owned non-microbusinesses based on (a) the proportion of Asian-owned microbusinesses in each business sector as a proportion of all Asian-owned microbusinesses and (b) the proportion of Asian-owned non-

microbusinesses in each business sector as a proportion of all Asian-owned non-microbusinesses. Figure 39 below illustrates findings. For Asian-owned microbusinesses, the highest proportion was in Retail Trade (21.87 percent); followed by Health Care and Social Assistance (12.95 percent); and Professional, Scientific, and Technical Services (11.30 percent). The median pay in Retail Trade is low to moderate; it encompasses a range in Health Care and Social Assistance; and it is relatively high in Professional, Scientific, and Technical Services. For Asian-owned non-microbusinesses, the highest proportion of non-microbusinesses was in Accommodation and Food Services (34.56 percent), followed by Health Care and Social Assistance (15.46 percent), and Retail Trade (14.76 percent). The median pay in Accommodation and Food Services is relatively low, it encompasses a range in Health Care and Social Assistance, and it is low to moderate in Retail Trade.

**Figure 39: Comparison of Proportions of Asian-Owned Microbusinesses vs. Non-Microbusinesses by Sector, 2007**

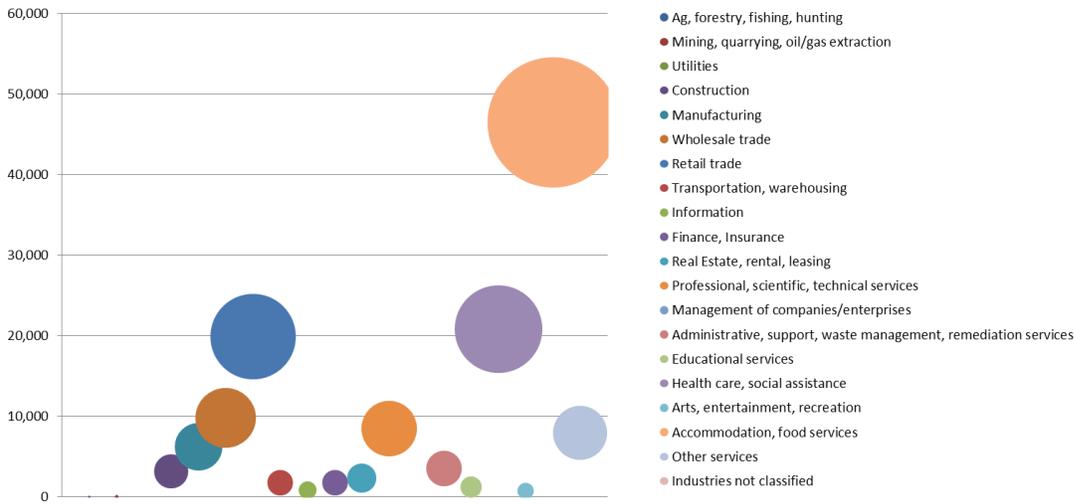


Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA011

Below, the number of Asian-owned non-microbusinesses by the proportion of all Asian-owned non-microbusinesses and the number of Asian-owned microbusinesses by the proportion of all Asian-owned microbusinesses, respectively, are discussed. As can be seen in Figure 40, the Accommodation and Food Services sector was largest with 34.56 percent, followed by the Health Care and Social Assistance sector (15.46 percent), and the Retail Trade sector (14.76 percent).

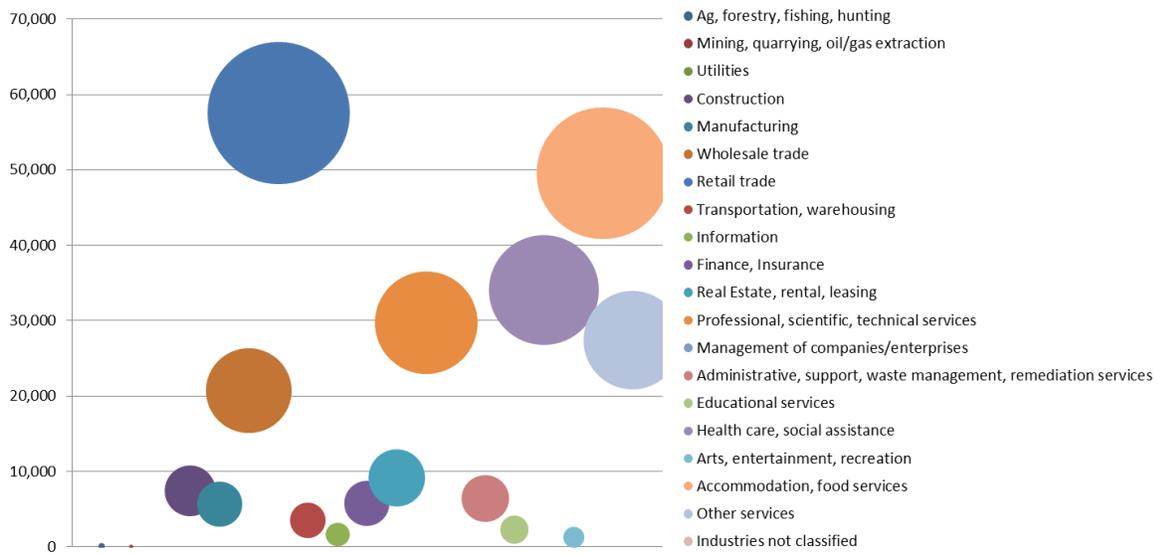
Figure 41 below shows the proportion of Asian-owned microbusinesses by sector as a proportion of all Asian-owned microbusinesses. The Retail Trade sector was largest with 21.87 percent, followed by the Accommodation and Food Services sector (18.84 percent), and the Health Care and Social Assistance sector (12.95 percent).

**Figure 40: Number of Asian-Owned Non-Microbusinesses by Proportion of All Asian-Owned Non-Microbusinesses by Sector, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA011

**Figure 41: Number of Asian-Owned Microbusinesses by Proportion of All Asian-Owned Microbusinesses by Sector, 2007**

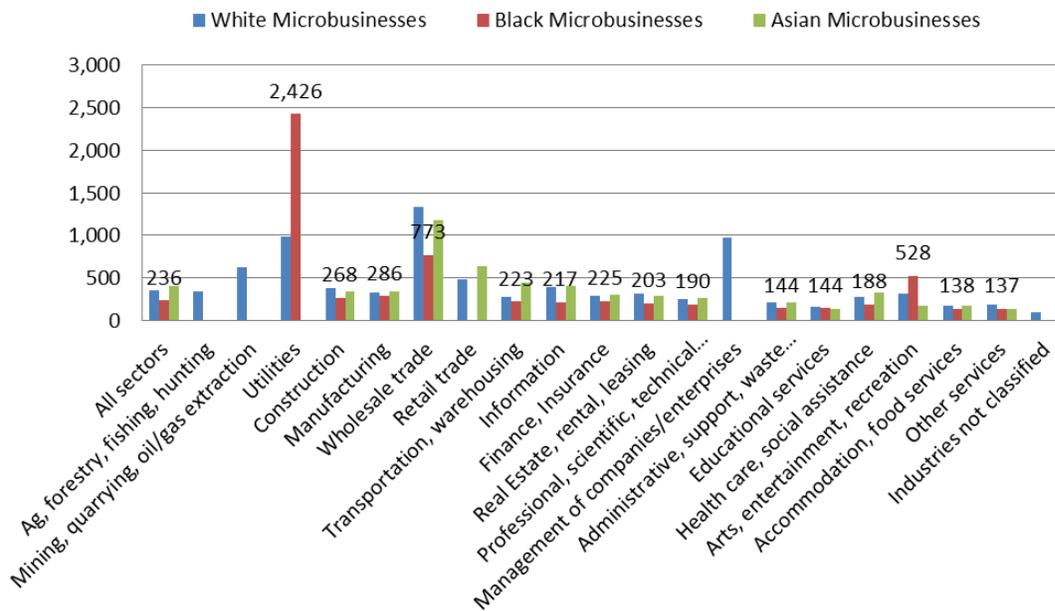


Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA011

## Sales and Receipts of Microbusinesses vs. Non-Microbusinesses by Race and by Sector

In this section Sales and Receipts (in \$1,000) Divided by the Number of Businesses are compared and contrasted for White-, Black-, and Asian-owned microbusinesses by sector (see Figure 42 below). Then, these groups will be discussed separately below. While the Wholesale Trade sector had the highest sales and receipts ratio (1,329 and 1,181, respectively) among White- and Asian-owned microbusinesses, the Utilities sector had the highest ratio (2,426) among Black-owned microbusinesses. The sectors with the second highest ratios were Utilities among White-owned microbusinesses (ratio: 992), Wholesale Trade among Black-owned microbusinesses (ratio: 773), and Retail Trade (ratio: 645) among Asian-owned microbusinesses. The sectors with the third highest ratios were Management of Companies and Enterprises (ratio: 970) among White-owned microbusinesses; Arts, Entertainment, and Recreation (ratio: 528) among Black-owned microbusinesses; and Transportation and Warehousing (ratio: 443) among Asian-owned microbusinesses.

**Figure 42: Sales and Receipts (in \$1,000) Divided by the Number of Businesses: Comparison of White- vs. Black- vs. Asian-Owned Microbusinesses by Sector, 2007**

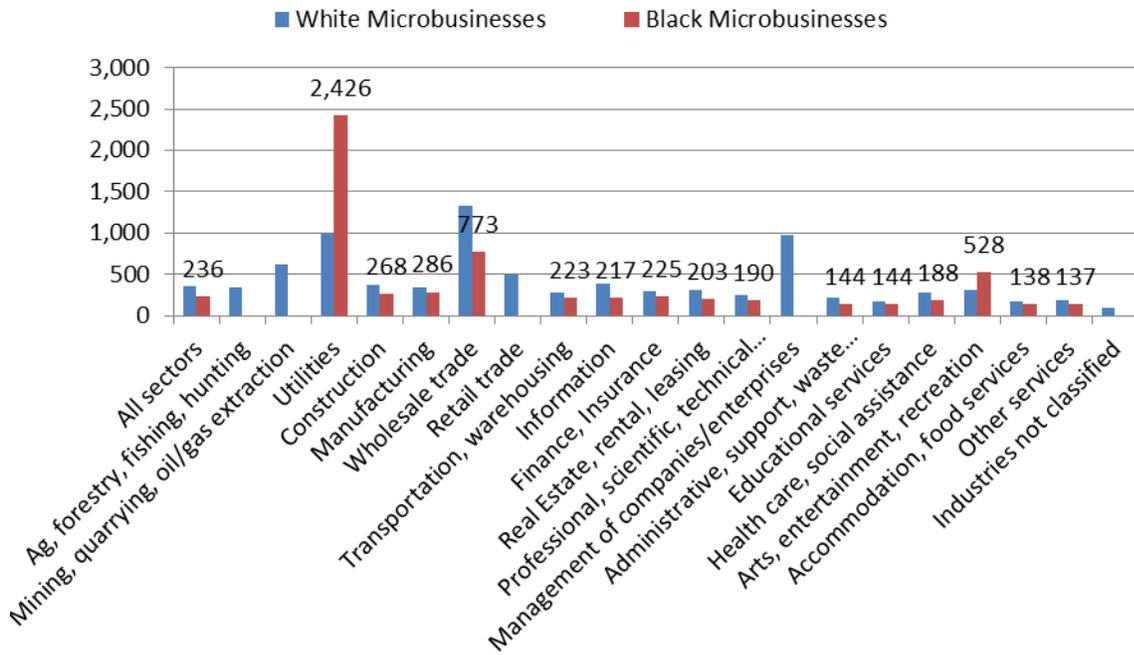


Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA011

Figure 43 below compares and contrasts White- and Black-owned microbusinesses by sector. As the figure shows, the ratios between the two groups were quite different. For White-owned microbusinesses the ratios were highest in Wholesale Trade (ratio: 1,329); followed by Utilities (992); Management of Companies and Enterprises (969); Mining, Quarrying, and Oil and Gas Extraction (623); and Retail Trade

(489). For Black-owned microbusinesses the ratios were highest for Utilities (ratio: 2,426); Wholesale Trade (773); Arts, Entertainment, and Recreation (527); Manufacturing (285); and Construction (268).

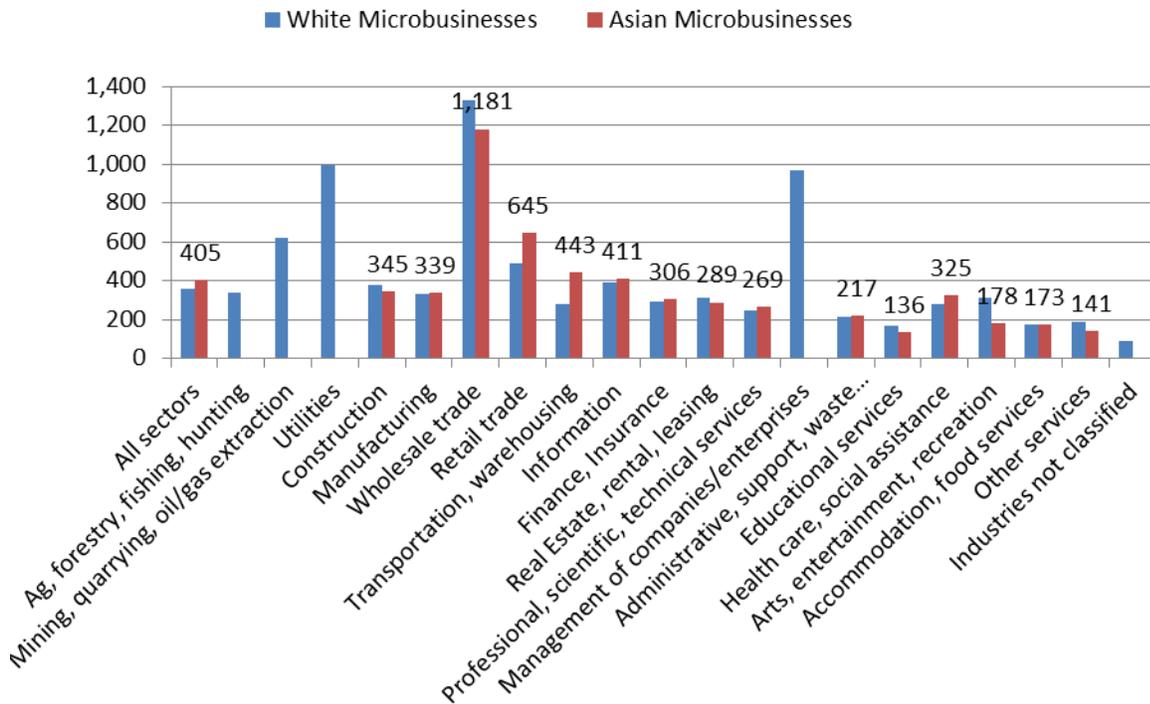
**Figure 43: Sales and Receipts (in \$1,000) Divided by the Number of Businesses: Comparison of White- vs. Black-Owned Microbusinesses by Sector, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA011

Figure 44 below compares and contrasts White- and Asian-owned microbusinesses by sector. For Asian-owned microbusinesses the ratios were highest in Wholesale Trade (ratio: 1,180); Retail Trade (644.75); and Transportation and Warehousing (442), followed by Information (411) and Construction (344). For White-owned microbusinesses the ratios were highest in Wholesale Trade (ratio: 1,329); Utilities (992); and Management of Companies and Enterprises (969).

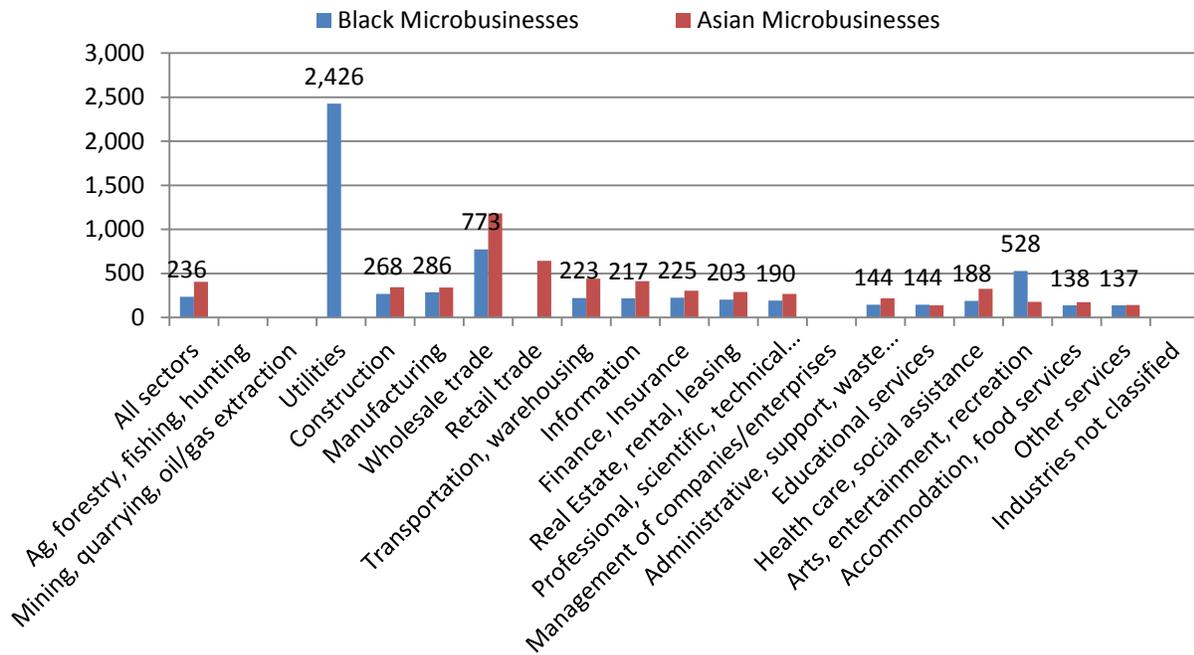
**Figure 44: Sales and Receipts (in \$1,000) Divided by the Number of Businesses: Comparison of White- vs. Asian-Owned Microbusinesses by Sector, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA011

Figure 45 below compares and contrasts Black- and Asian-owned microbusinesses by sector. For Black-owned microbusinesses the ratios were highest for Utilities (ratio: 2,426); Wholesale Trade (773); Arts, Entertainment, and Recreation (527); Manufacturing (285); and Construction (268). For Asian-owned microbusinesses the ratios were highest in Wholesale Trade (ratio: 1,180); Retail Trade (644.75); and Transportation and Warehousing (442), followed by Information (411) and Construction (344).

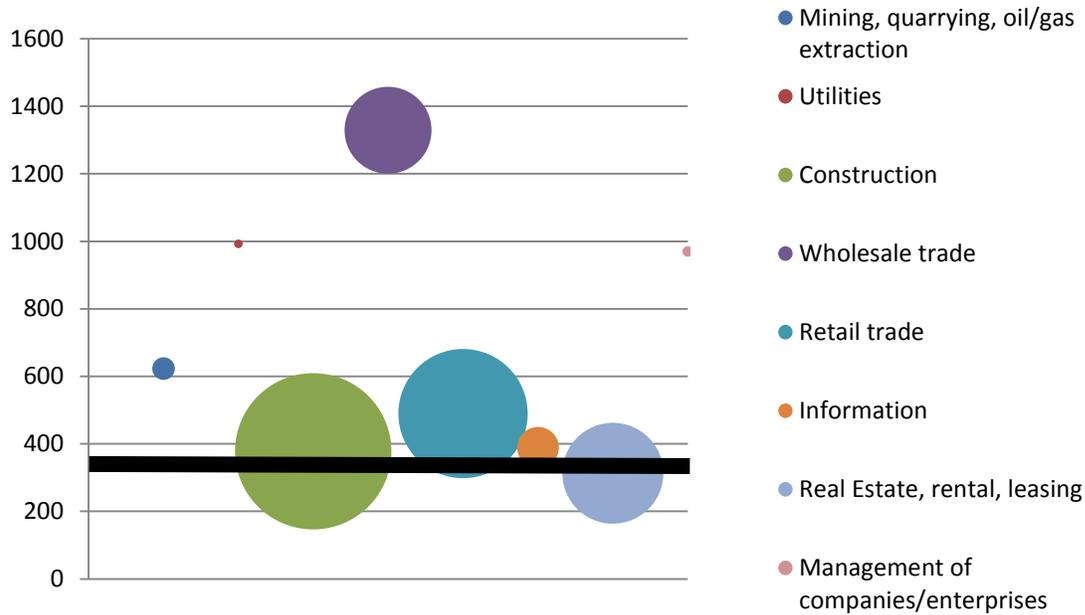
**Figure 45: Sales and Receipts (in \$1,000) Divided by the Number of Businesses: Comparison of Black- vs. Asian-Owned Microbusinesses by Sector, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA011

Figure 46 below shows eight top-ranked White-owned microbusinesses by the ratio Sales and Receipts (\$1,000) Divided by the Number of Businesses by sector and by proportion of all White-owned microbusinesses in 2007. These eight sectors ranked above 360, the ratio for all White-owned microbusinesses in all sectors. The highest sales and receipts (1,329) were generated in the Wholesale Trade sector, although the proportion was only 5.12 percent, followed by the Utilities sector (992) with a proportion of only 0.05 percent, and the Management of Companies and Enterprises sector (970) with a proportion of only 0.07 percent of all White-owned microbusinesses. In other words, White-owned microbusinesses were underrepresented in the sectors with the highest sales and receipts.

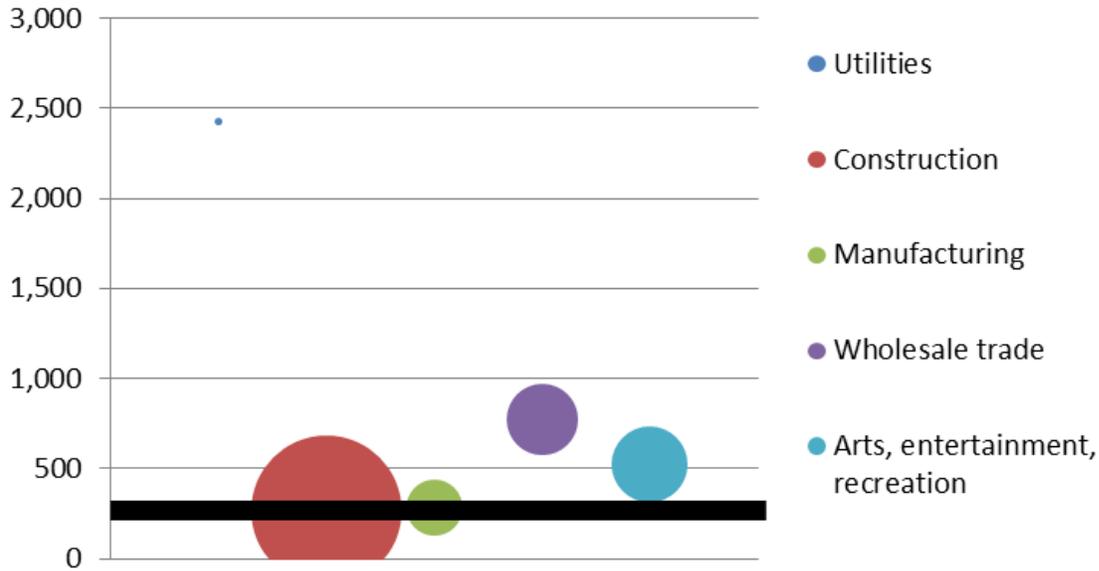
**Figure 46: Top-Ranked White-Owned Microbusinesses by Ratio of Sales and Receipts (\$1,000/Number of White-Owned Microbusinesses) by Sector and by Proportion of All White-Owned Microbusinesses, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA011

Figure 47 below shows five top-ranked Black-owned microbusinesses by the ratio Sales and Receipts (\$1,000) Divided by the Number of Businesses by sector and by proportion of all Black-owned microbusinesses in 2007. These five sectors ranked above 236, the ratio for all Black-owned microbusinesses in all sectors. The highest sales and receipts (2,426) were generated in the Utilities sector, although the proportion was only 0.02 percent; followed by the Wholesale Trade sector (773) with a proportion of only 2.09 percent; and the Arts, Entertainment, and Recreation sector (528) with a proportion of only 2.35 percent of all Black-owned microbusinesses. In other words, Black-owned microbusinesses were very underrepresented in the sectors with the highest sales and receipts.

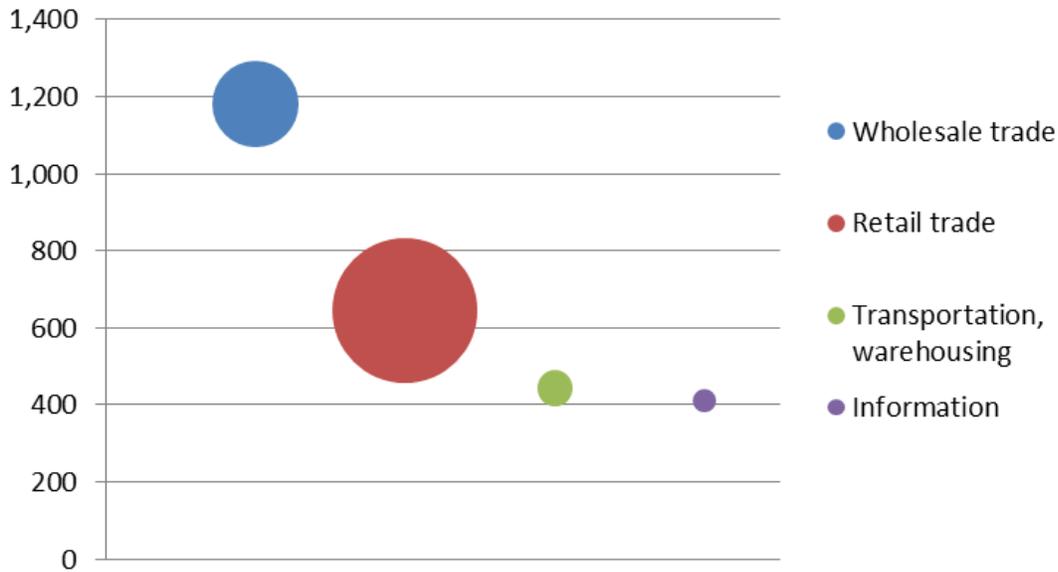
**Figure 47: Top-Ranked Black-Owned Microbusinesses by Ratio of Sales and Receipts (\$1,000/Number of Black-Owned Microbusinesses) by Sector and by Proportion of All Black-Owned Microbusinesses, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA011

Figure 48 below shows four top-ranked Asian-owned microbusinesses by the ratio Sales and Receipts (\$1,000) Divided by the Number of Businesses by sector and by proportion of all Asian-owned microbusinesses in 2007. These four sectors ranked above 405, the ratio for all Asian-owned microbusinesses in all sectors. The highest sales and receipts (1,181) were generated in the Wholesale Trade sector, although the proportion was only 7.87 percent, followed by the Retail Trade sector (645) with a proportion of only 21.87 percent, and the Transportation and Warehousing sector (443) with a proportion of only 1.34 percent of all Asian-owned microbusinesses. In other words, Asian-owned microbusinesses were well represented in two sectors with the highest sales and receipts.

**Figure 48: Top-Ranked Asian-Owned Microbusinesses by Ratio of Sales and Receipts (\$1,000/Number of Asian-Owned Microbusinesses) by Sector and by Proportion of All Asian-Owned Microbusinesses, 2007**

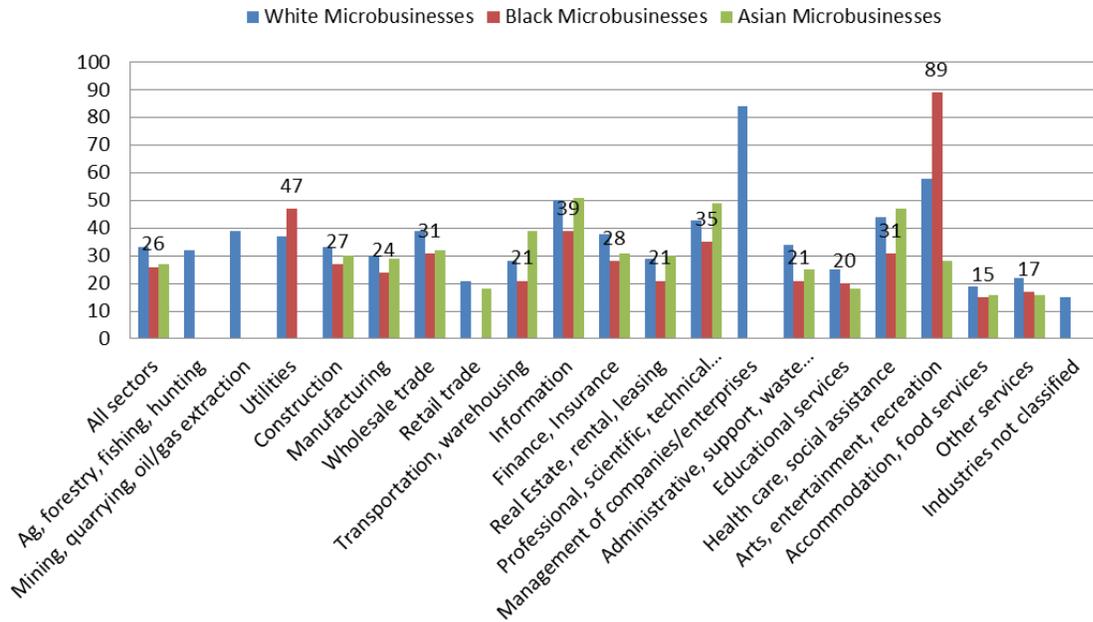


Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA011

### **Annual Payroll of Microbusinesses vs. Non-Microbusinesses by Race and by Sector**

In this section Annual Payroll (in \$1,000) Divided by the Number of Employees for White-, Black-, and Asian-owned microbusinesses by sector will be discussed (see Figure 49 below). Then, these groups will be discussed separately below. The Arts, Entertainment, and Recreation sector had the highest ratio of annual payroll for Black-owned microbusinesses (ratio: 89); followed by the Management of Companies and Enterprises sector for White-owned microbusinesses (ratio: 84); and the Information sector for Asian-owned microbusinesses (ratio: 51). Based on NAICS information, the Arts, Entertainment, and Recreation sector has low to medium wages, as discussed above, which somewhat contradicts the relatively high ratio of 89. The Management of Companies and Enterprises sector has relatively medium to high wages, based on NAICS information, which is consistent with the annual payroll ratio of 84. The Information sector has medium wages, based on NAICS information, which is also somewhat consistent with the annual payroll ratio of 51.

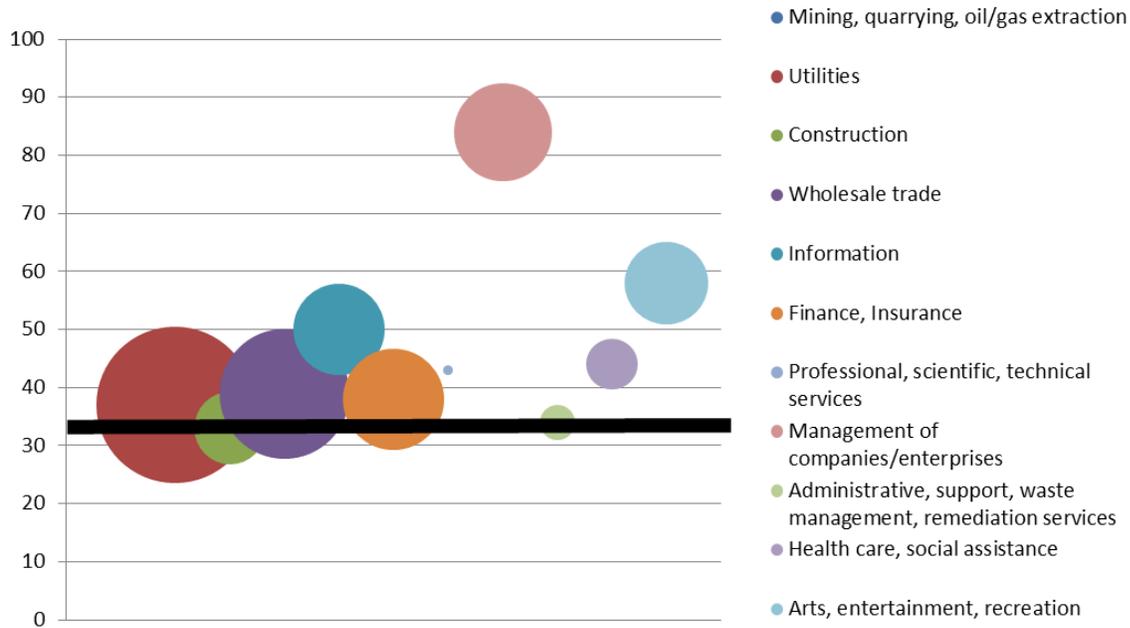
**Figure 49: Annual Payroll (\$1,000) Divided by the Number of Employees: Comparison of White- vs. Black- vs. Asian-Owned Microbusinesses by Sector, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA011

Figure 50 below shows that White-owned microbusinesses had relatively high ratios in Management of Companies and Enterprises (ratio: 84); followed by Arts, Entertainment, and Recreation (ratio: 58); and Information (ratio: 50). The Management of Companies and Enterprises sector has relatively medium to high wages; the Arts, Entertainment, and Recreation sector has low to medium wages; and the information sector has medium wages. Nevertheless, these sectors are not represented very well. For example, sector Management of Companies and Enterprises had only 6.41 percent; Arts, Entertainment, and Recreation had only 4.62 percent; and Information had 5.60 percent of White-owned microbusinesses. In comparison, sector Utilities comprised 16.61 percent of White-owned microbusinesses yet had a ratio of 37 and sector Wholesale Trade comprised 11.33 percent of White-owned microbusinesses and had a ratio of 39.

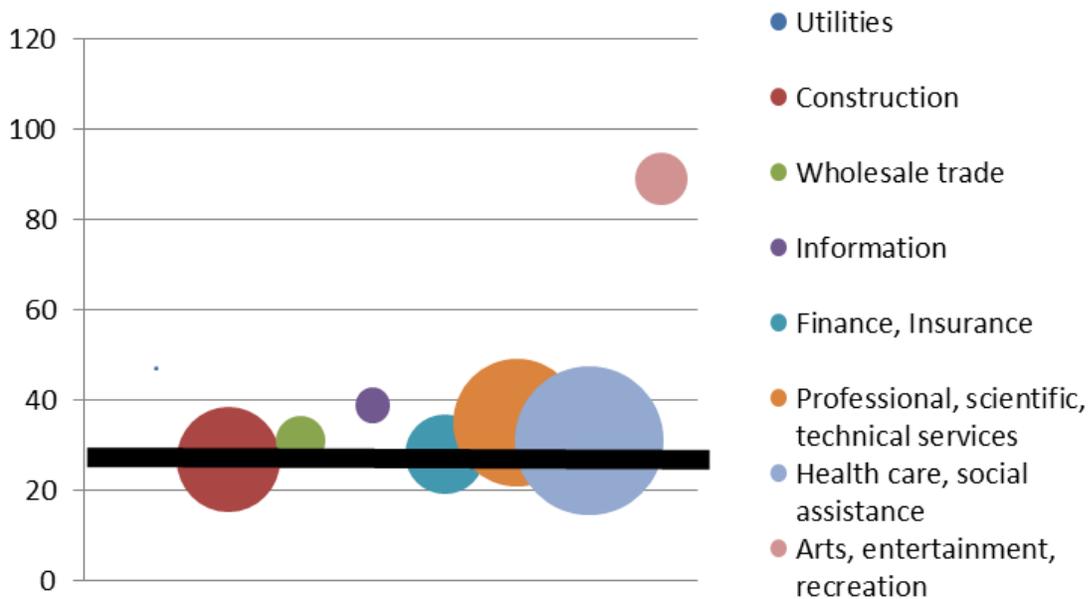
**Figure 50: Top-Ranked White-Owned Microbusinesses by Ratio of Annual Payroll (\$1,000/Number of Employees in White-Owned Microbusinesses) by Sector and by Proportion of All Microbusinesses, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA011

Figure 51 below shows that Black-owned microbusinesses had relatively high ratios in Arts, Entertainment, and Recreation (ratio: 89); followed by Utilities (ratio: 47); and Information (ratio: 39). The Arts, Entertainment, and Recreation sector has low to median wages; the Utilities sector is characterized by medium to relatively high median wages; and the Information sector has medium wages. However, these sectors are underrepresented. For example, sector Arts, Entertainment, and Recreation was only represented among 2.35 percent; Utilities was only represented among 0.02 percent; and Information was represented among 1.06 percent of Black-owned microbusinesses. In comparison, sector Health Care and Social Assistance comprised 18.66 percent of Black-owned microbusinesses yet had a ratio of 31 and Professional, Scientific, and Technical Services comprised 13.65 percent of Black-owned microbusinesses and had a ratio of 35.

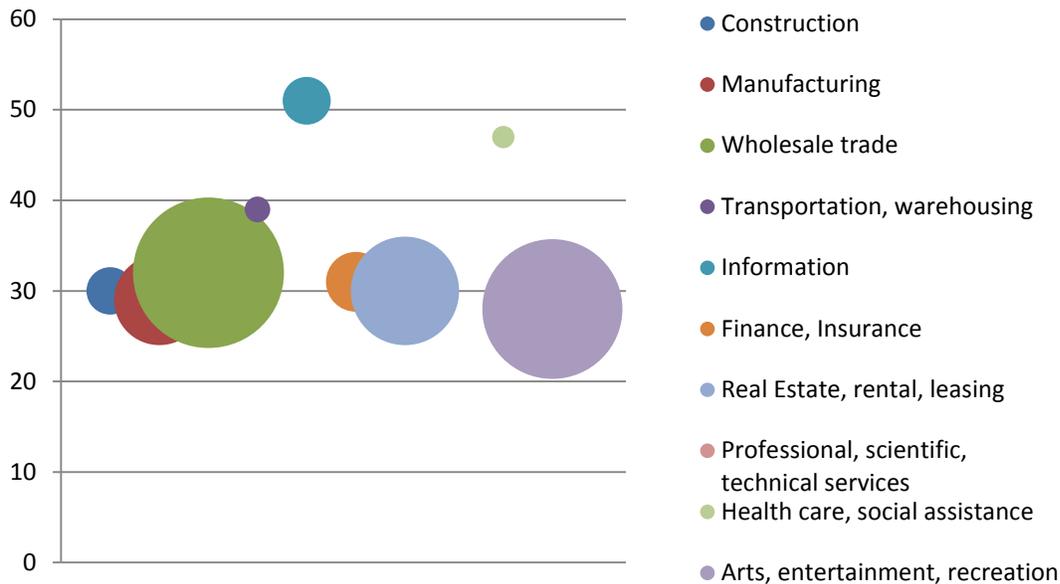
**Figure 51: Top-Ranked Black-Owned Microbusinesses by Ratio of Annual Payroll (\$1,000/Number of Employees in Black-Owned Microbusinesses) by Sector and by Proportion of All Microbusinesses, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA011

Figure 52 below shows that Asian-owned microbusinesses had somewhat high ratios in Information (ratio: 51); followed by Professional, Scientific, and Technical Services (ratio: 49); and Health Care and Social Assistance (ratio: 47). The Information sector has medium wages; the Professional, Scientific, and Technical Services sector has medium to relatively high median wages; and the Health Care and Social Assistance sector has a median pay that ranges from relatively low to relatively high. These sectors are very underrepresented among Asian-owned microbusinesses. While the Information sector was represented among 2.21 percent; the Professional, Scientific, and Technical Services sector was near zero percent; and the Health Care and Social Assistance sector was only 0.48 percent of Asian-owned microbusinesses. In comparison, sector Wholesale Trade comprised 21.87 percent; Arts, Entertainment, and Recreation comprised 18.84 percent; and Real Estate, Rental, and Leasing comprised 11.30 percent of Asian-owned microbusinesses. Their ratios were 28, 32, and 30, respectively.

**Figure 52: Top-Ranked Asian-Owned Microbusinesses by Ratio of Annual Payroll (\$1,000/Number of Employees in Asian-Owned Microbusinesses) by Sector and by Proportion of All Microbusinesses, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA011

### Differentiation by Ethnicity and by Sector

The following section differentiates by ethnicity, i.e., between Hispanic and non-Hispanic microbusinesses versus non-microbusinesses.

### Key Findings in This Section

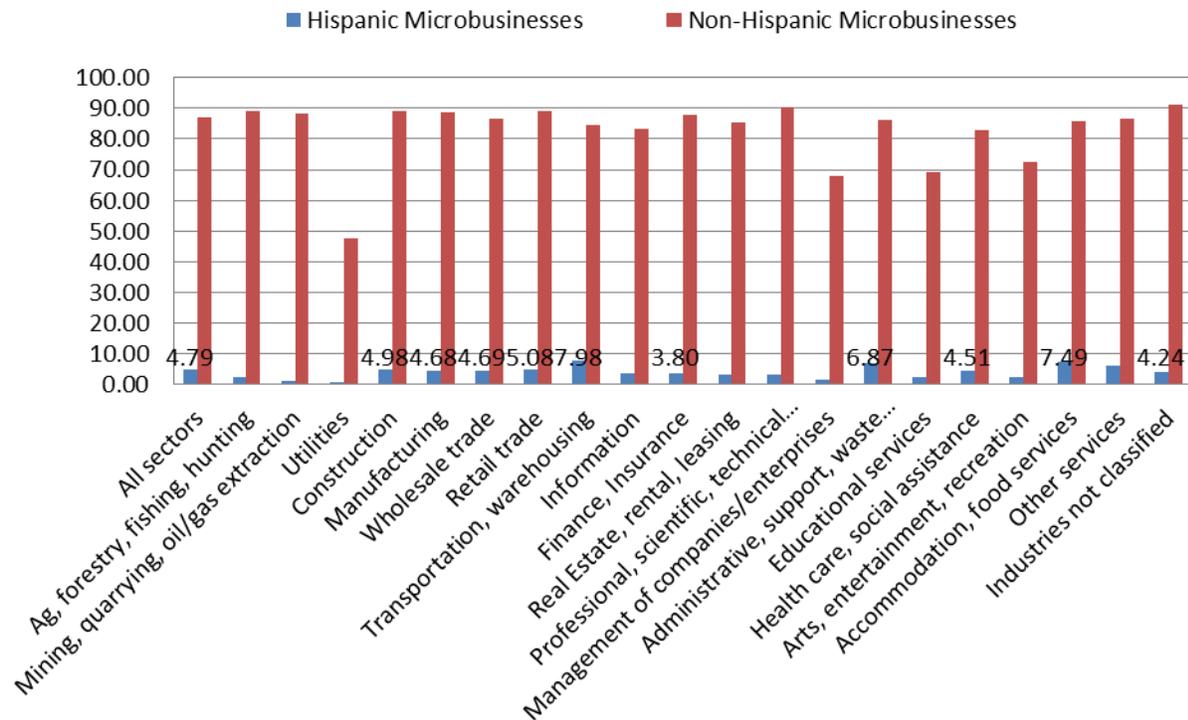
- For Hispanic-owned microbusinesses, the highest proportion of microbusinesses was in Transportation and Warehousing; followed by Accommodation and Food Services; and Administrative, Support, Waste Management, and Remediation Services. While the median pay in the Transportation and Warehousing sector encompasses a wide range, the Accommodation and Food Services and Administrative, Support, Waste Management, and Remediation Services sectors have many occupations that pay relatively low wages.
- Hispanic-owned microbusinesses are underrepresented among the two sectors with the highest sales and receipts ratios, although they are well represented in the Retail Trade sector and the Construction sector, neither of which have high sales and receipts ratios.
- Hispanic-owned microbusinesses are underrepresented among the highest and the third highest sector in terms of the annual payroll ratio (Arts, Entertainment, and Recreation and Utilities,

respectively) yet well represented in the second highest sector (Health Care and Social Assistance).

**Number and Proportion of Hispanic Microbusinesses vs. Non-Microbusinesses by Sector**

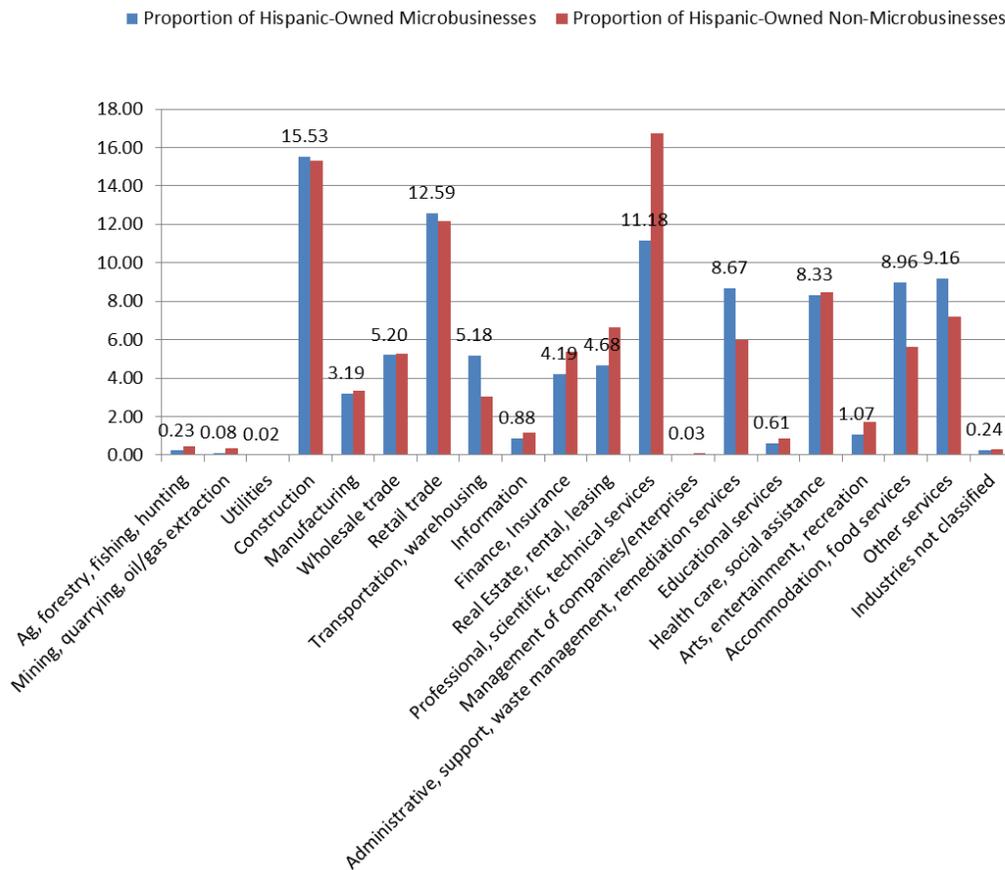
Hispanic-owned microbusinesses are compared and contrasted against Hispanic non-microbusinesses based on calculations of (a) the proportion of Hispanic-owned microbusinesses in each business sector as a proportion of all Hispanic-owned microbusinesses and (b) the proportion of Hispanic-owned non-microbusinesses in each business sector as a proportion of all Hispanic-owned non-microbusinesses. Figure 53 below illustrates findings. For Hispanic-owned microbusinesses, the highest proportion of microbusinesses was in Transportation and Warehousing (7.98 percent); followed by Accommodation and Food Services (7.49 percent); and Administrative, Support, Waste Management, and Remediation Services (6.87 percent). While the median pay in the Transportation and Warehousing sector encompasses a wide range, as discussed above, the Accommodation and Food Services and Administrative, Support, Waste Management, and Remediation Services sectors have many occupations that pay relatively low wages. While Figure 53 below is based on calculations with all microbusinesses in the denominator, Figure 54 below is based on calculations with denominators for each subgroup.

**Figure 53: Comparison of Proportions of Hispanic-Owned Microbusinesses vs. Non-Microbusinesses by Sector, 2007 (Denominator: All Microbusinesses)**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA010

**Figure 54: Comparison of Proportions of Hispanic-Owned Microbusinesses vs. Non-Microbusinesses by Sector, 2007 (Denominator: Microbusinesses by Sector)**

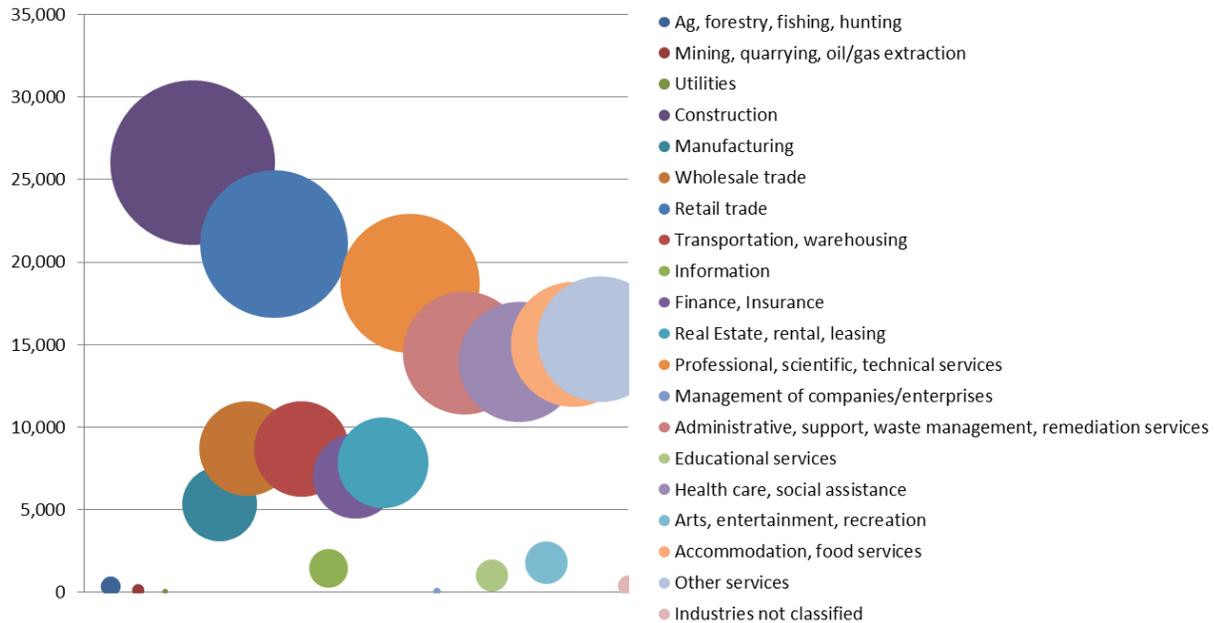


Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA010

Figure 54 above illustrates that for Hispanic-owned microbusinesses, sector Construction (15.53 percent) ranked highest; followed by Retail Trade (12.59 percent); and Professional, Scientific, and Technical Services (11.18 percent). The Construction sector pays medium to somewhat high wages; the Retail Trade sector pays low to moderate median wages; and the Professional, Scientific, and Technical Services sector pays relatively high median wages.

Figure 55 below shows the proportion of Hispanic-owned microbusinesses by sector as a proportion of all Hispanic-owned microbusinesses. Sector Construction was the largest with 15.53 percent; followed by Retail Trade (12.59 percent); and Professional, Scientific, and Technical Services (11.18 percent). The Construction sector pays medium to somewhat high median wages; the Retail Trade sector only pays low to moderate wages; whereas the Professional, Scientific, and Technical Services sector pays medium to relatively high median wages.

**Figure 55: Number of Hispanic-Owned Microbusinesses by Proportion of All Hispanic-Owned Microbusinesses by Sector, 2007**

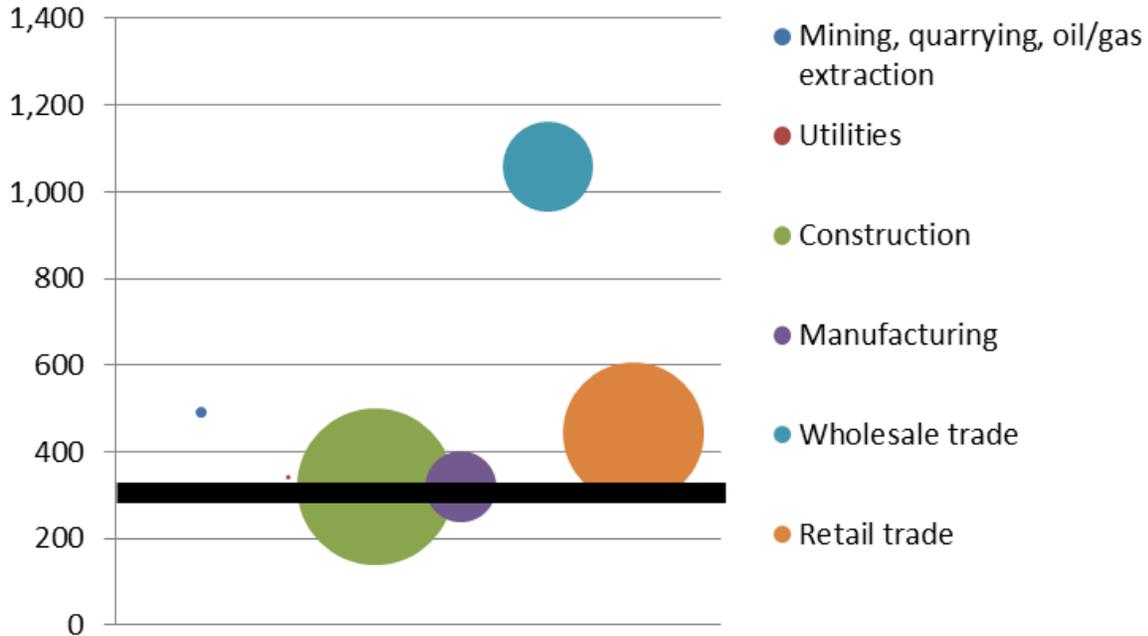


Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA010

### Sales and Receipts of Hispanic Microbusinesses by Sector

Figure 56 shows the six top-ranked Hispanic-owned microbusinesses by the ratio Sales and Receipts (\$1,000) Divided by the Number of Businesses by sector and by proportion of all Hispanic-owned microbusinesses for 2007. These six sectors ranked above 306, the ratio for all Hispanic-owned microbusinesses in all sectors. The highest sales and receipts (1,058) were generated in the Wholesale Trade sector, although the proportion was only 5.20 percent; followed by the Mining, Quarrying, Oil, and Gas Extraction sector (492) with a proportion of 0.08 percent; and the Retail Trade sector with a proportion of 12.59 percent. Hispanic-owned microbusinesses are underrepresented among the two sectors with the highest sales and receipts ratios, although they are well represented in the Retail Trade sector (ratio: 444; proportion: 12.59 percent) and the Construction sector (ratio: 320; proportion: 15.53 percent), neither of which have high sales and receipts ratios.

**Figure 56: Top-Ranked Hispanic-Owned Microbusinesses by Ratio of Sales and Receipts (\$1,000/Number of Hispanic-Owned Microbusinesses) by Sector and by Proportion of All Hispanic-Owned Microbusinesses, 2007**

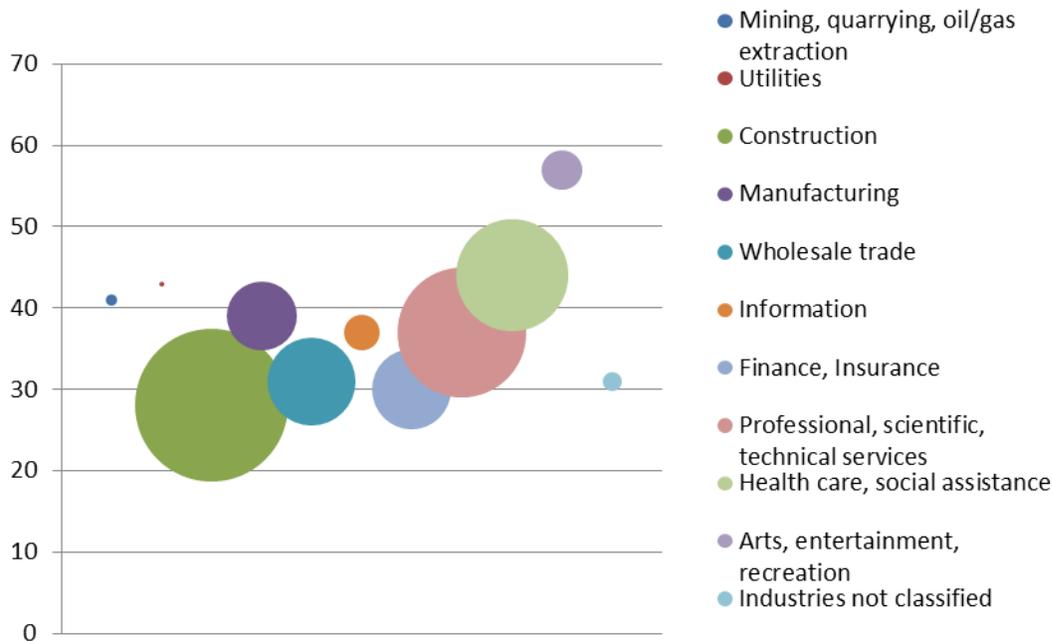


Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA010

### Annual Payroll of Hispanic Microbusinesses by Sector

In this section Annual Payroll (in \$1,000) Divided by the Number of Employees for Hispanic-owned microbusinesses by sector will be discussed. The Arts, Entertainment, and Recreation sector had the highest ratio of annual payroll for Hispanic-owned microbusinesses, with a payroll ratio of 57. This finding is somewhat consistent with the finding based on the NAICS table, which leads to the conclusion that the Arts, Entertainment, and Recreation sector has low to medium wages. The Health Care and Social Assistance sector had the second highest ratio (44). As pointed out above, the Health Care and Social Assistance sector has occupations that pay relatively low wages but also occupations that pay relatively high wages. More refined analyses should be undertaken to investigate this finding. The Utilities sector had the third highest ratio (43), which somewhat contradicts the finding, based on NAICS, that the Utilities sector is characterized by medium to relatively high median wages. While the Arts, Entertainment, and Recreation sector is underrepresented (1.07 percent); the Health Care and Social Assistance sector is somewhat well represented with 8.33 percent; and the Utilities sector is very underrepresented among Hispanic-owned microbusinesses (0.02 percent).

**Figure 57: Top-Ranked Hispanic-Owned Microbusinesses by Ratio of Annual Payroll (\$1,000/Number of Employees in Hispanic-Owned Microbusinesses) by Sector and by Proportion of All Microbusinesses, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA010

### Differentiation by Veteran's Status

The following section differentiates by Veteran's status, i.e., between Veteran and non-Veteran microbusinesses versus non-microbusinesses.

### Key Findings in This Section

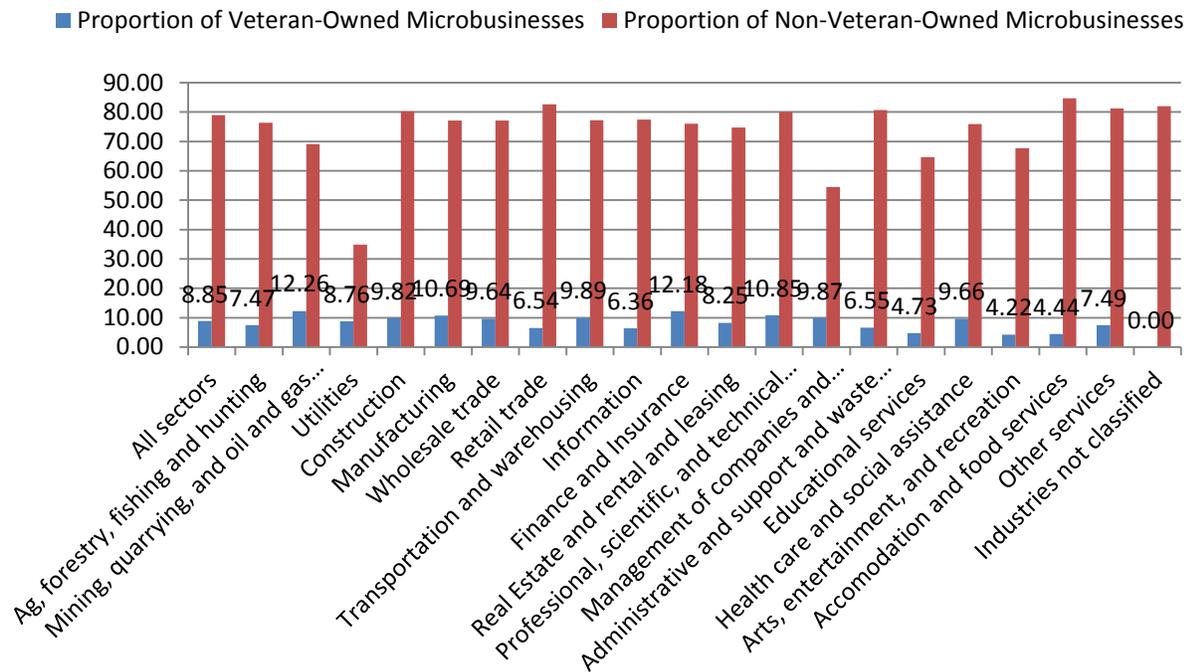
- For Veteran-owned microbusinesses, the highest proportion of microbusinesses was in Mining, Quarrying, and Oil and Gas Extraction; followed by Finance and Insurance; and Professional, Scientific, and Technical Services. The median pay in the Mining, Quarrying, and Oil and Gas Extraction sector was medium to somewhat high; it encompassed a range in the Finance and Insurance sector; and it was medium to relatively high in the Professional, Scientific, and Technical Services sector.
- Veteran-owned microbusinesses are somewhat underrepresented both in the sector with the highest sales and receipts and in the sectors with the second and third highest sales and receipts ratios, although they are well represented in the Construction sector and the Retail Trade sector, neither of which have high sales and receipts ratios.

- Veteran-owned microbusinesses are underrepresented among the first and the third highest sector in terms of the annual payroll ratio (Management of Companies and Enterprises and Information) yet well represented in the second highest sector (Health Care and Social Assistance).

### Number and Proportion of Veteran Microbusinesses vs. Non-Microbusinesses by Sector

Veteran-owned microbusinesses are compared and contrasted against Veteran non-microbusinesses based on calculations of (a) the proportion of Veteran-owned microbusinesses in each business sector as a proportion of all Veteran-owned microbusinesses and (b) the proportion of Veteran-owned non-microbusinesses in each business sector as a proportion of all Veteran-owned non-microbusinesses. While Figure 58 (below) is based on calculations with all microbusinesses in the denominator, Figure 59 (below) is based on calculations with denominators for each subgroup.

**Figure 58: Comparison of Proportions of Veteran-Owned Microbusinesses vs. Non-Microbusinesses by Sector, 2007 (Denominator: All Microbusinesses)**

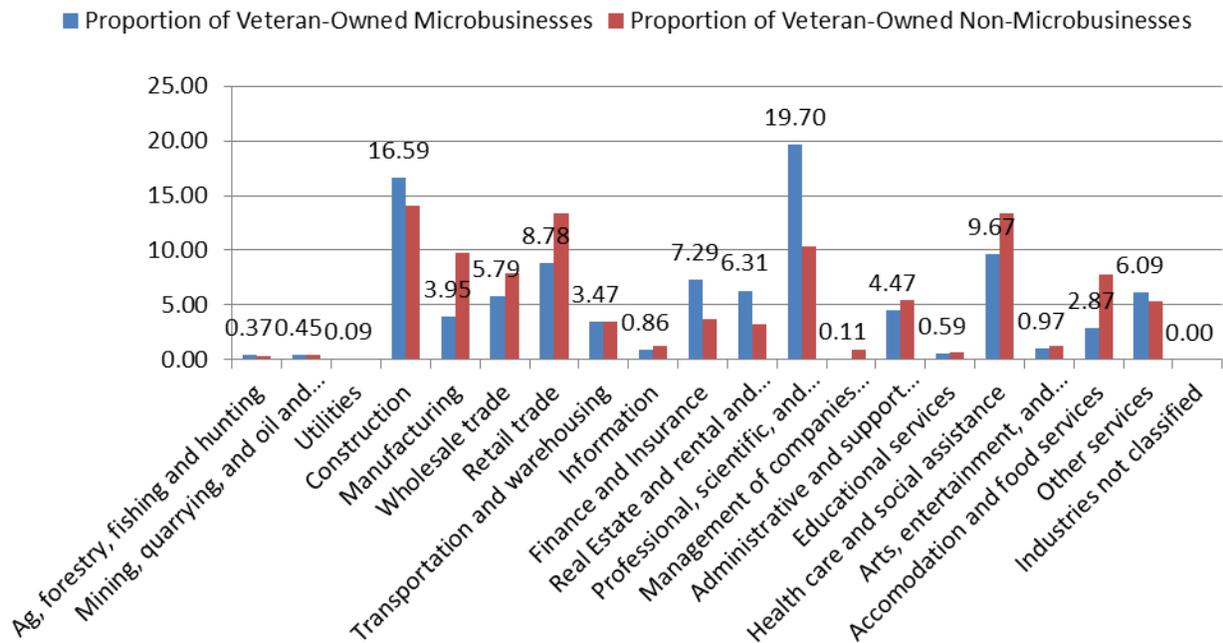


Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA012

Figure 58 above shows that for Veteran-owned microbusinesses, the highest proportion was in Mining, Quarrying, and Oil and Gas Extraction (12.26 percent); followed by Finance and Insurance (12.18 percent); and Professional, Scientific, and Technical Services (10.85 percent). The median pay in the Mining, Quarrying, and Oil and Gas Extraction sector was medium to somewhat high; it encompassed a range in the Finance and Insurance sector; and it was medium to relatively high in the Professional, Scientific, and Technical Services sector.

Figure 59 below shows that for Veteran-owned microbusinesses, the highest proportion of microbusinesses was in Professional, Scientific, and Technical Services (19.70 percent); followed by Construction (16.59 percent); and Health Care and Social Assistance (9.67 percent). While the median pay in the Professional, Scientific, and Technical Services sector was medium to relatively high, as discussed above, the median pay in the Construction sector was medium to somewhat high and the median pay in the Health Care and Social Assistance sector encompassed a wide range of wages.

**Figure 59: Comparison of Proportions of Veteran-Owned Microbusinesses vs. Non-Microbusinesses by Sector, 2007 (Denominator: Microbusinesses by Sector)**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA012

Figure 60 below shows the proportion of Veteran-owned microbusinesses by sector as a proportion of all Veteran-owned microbusinesses. Sector Construction was the largest with 15.53 percent; followed by Retail Trade (12.59 percent); and Professional, Scientific, and Technical Services (11.18 percent). The Construction sector pays medium to somewhat high median wages; while the Retail Trade sector only pays low to moderate wages; and the Professional, Scientific, and Technical Services sector pays medium to relatively high median wages.

**Figure 60: Number of Veteran-Owned Microbusinesses by Proportion of All Veteran-Owned Microbusinesses by Sector, 2007**

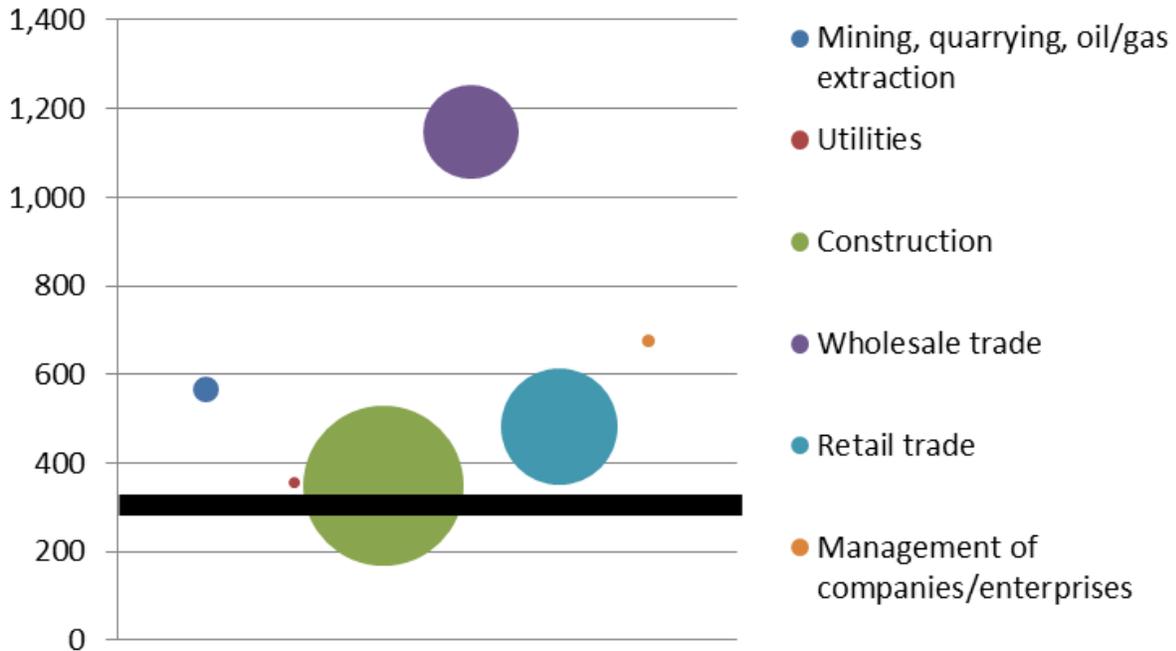


Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA012

**Sales and Receipts of Veteran Microbusinesses by Sector**

Figure 61 shows the six top-ranked Veteran-owned microbusinesses by the ratio Sales and Receipts (\$1,000) Divided by the Number of Businesses by sector and by proportion of all Veteran-owned microbusinesses for 2007. These six sectors ranked above 336, the ratio for all Veteran-owned microbusinesses in all sectors. The highest sales and receipts (1,148) were generated in the Wholesale Trade sector, although the proportion was only 5.79 percent; followed by the Management of Companies and Enterprises sector (676), with a proportion of 0.11 percent; and the Mining, Quarrying, and Oil and Gas Extraction sector (566), with a proportion of 0.45 percent. Veteran-owned microbusinesses are somewhat underrepresented both in the sector with the highest sales and receipts and in the sectors with the second and third highest sales and receipts ratios, although they are well represented in the Construction sector (ratio: 350; proportion: 16.59 percent) and the Retail Trade sector (ratio: 483; proportion: 8.78 percent), neither of which have high sales and receipts ratios.

**Figure 61: Top-Ranked Veteran-Owned Microbusinesses by Ratio of Sales and Receipts (\$1,000/Number of Veteran-Owned Microbusinesses) by Sector and by Proportion of All Veteran-Owned Microbusinesses, 2007**

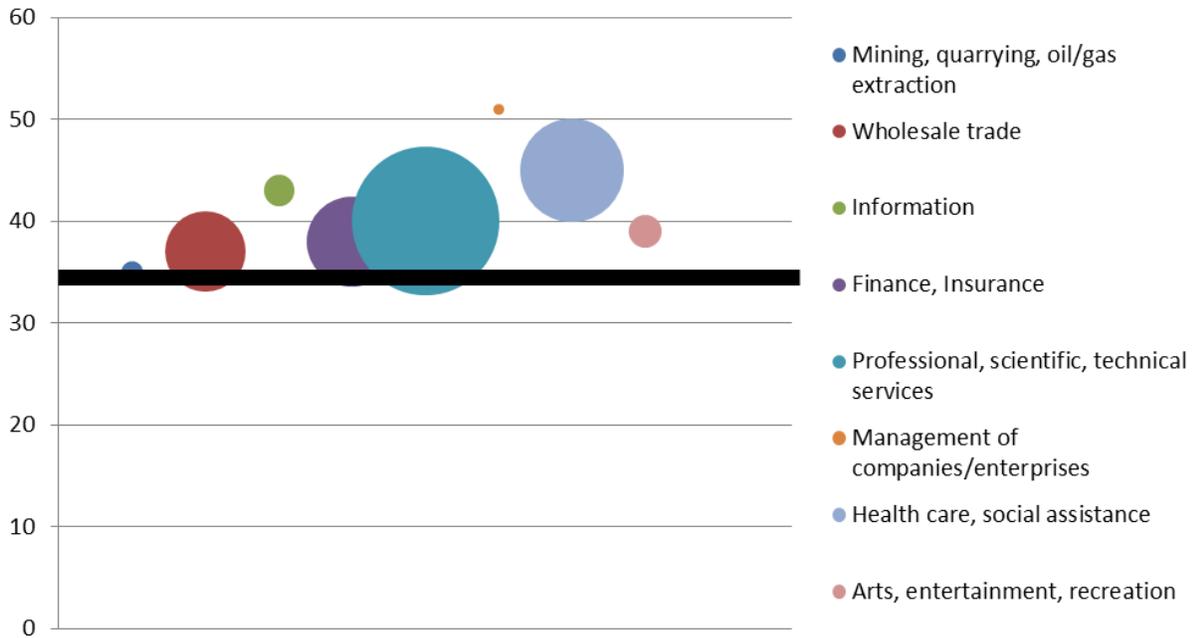


Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA012

### Annual Payroll of Veteran Microbusinesses by Sector

In this section Annual Payroll (in \$1,000) Divided by the Number of Employees for Veteran-owned Microbusinesses by sector will be discussed. The Management of Companies and Enterprises sector had the highest ratio of annual payroll for Veteran-owned microbusinesses, with a payroll ratio of 51. This finding is consistent with the finding based on the NAICS table, which leads to the conclusion that this sector has medium to high wages. The Health Care and Social Assistance sector had the second highest ratio (45). As pointed out above, the Health Care and Social Assistance sector has occupations that pay relatively low wages but also occupations that pay relatively high wages. More refined analyses should be undertaken to investigate this finding. The Information sector had the third highest ratio (43), which somewhat contradicts the finding, based on NAICS, that this sector has medium wages. While the Management of Companies and Enterprises sector is underrepresented (0.11 percent); the Health Care and Social Assistance sector is somewhat well represented with 9.67 percent; yet the Information sector is very underrepresented among Veteran-owned microbusinesses (0.86 percent).

**Figure 62: Top-Ranked Veteran-Owned Microbusinesses by Ratio of Annual Payroll (\$1,000/Number of Employees in Veteran-Owned Microbusinesses) by Sector and by Proportion of All Microbusinesses, 2007**



Source: U.S. Bureau of the Census, Survey of Business Owners (2007), Subset CSA012

## Conclusion

*Microbusinesses in the United States: Characteristics and Economic Impacts* provides substantial insights into the concentration and performance of U.S. microbusinesses across business sectors, relative to nonmicrobusinesses, by gender, race, and ethnicity. It offers a rich set of observations that can serve as the foundation for more detailed analyses into ways to better position microbusinesses to increase their representation among sectors characterized by high wages, high sales and receipts, and high annual payroll.

Results show that female- and male-owned microbusinesses rank similarly in terms of the sales and receipts ratio but differently in terms of the annual payroll ratio for the top three sectors. Both have the highest sales and receipts ratios in the Wholesale Trade, Utilities, and Management of Companies and Enterprises sectors. For the annual payroll ratio, female-owned microbusinesses have the highest annual payroll ratios in the Utilities; Information; and Arts, Entertainment, and Recreation sectors, while male-owned microbusinesses have the highest ratios in the Management of Companies and Enterprises; Arts, Entertainment, and Recreation; and Construction.

Further, Black-owned microbusinesses are significantly clustered in the Health Care and Social Assistance sector, which is characterized by a wide range of wages. A sector analysis as well as a value chain study would help to determine the extent to which Black microbusinesses might better position

themselves to achieve higher sales and receipts and annual payrolls. Asian-owned microbusinesses are primarily in Accommodation and Food Services, which are characterized by relatively low wages. The highest proportion of Hispanic-owned microbusinesses was in Transportation and Warehousing, a sector that is underperforming in terms of median wages, sales and receipts, and annual payroll.

As noted previously, the following observations are useful for a more comprehensive understanding of the opportunities for microbusinesses. First, microbusinesses are well represented in business sectors that have a below-par performance. Second, microbusinesses are not well represented in business sectors that have a high performance. Third, whenever microbusinesses perform well and are well represented within a business sector they do not perform at par relative to their non-microbusiness counterparts.

While this white paper answers some questions about microbusiness performance by sector and by gender, race, and ethnicity, it raises many more questions that must be answered before policy makers and microbusiness advocacy organizations can better position microbusinesses for success. Some additional questions raised by the study include the following: Why are the majority of female-, male-, Black-, Asian-, and Hispanic-owned microbusinesses underrepresented in business sectors with the highest sales and receipts ratios? What are the barriers to entry to those business sectors with the highest sales and receipts ratios? In which high-performing sectors and, more importantly, in which occupations within these sectors are microbusinesses most concentrated? What role does selection bias play? Where in the value chain are microbusinesses in high-performing sectors where microbusinesses nevertheless do not perform well? What factors influence the retention of microbusinesses in those sectors with the highest sales and receipts ratios? What can public policy do to assist microbusinesses in terms of job creation? Different data sets should be utilized to further analyze and confirm these findings. Also, a survey could be designed that answers these questions, which are important to the U.S. economy.

## Appendix

### Overview: Industries at a Glance: Industries by Supersector and NAICS Code<sup>6</sup>

#### Goods-Producing Industries

- Natural Resources and Mining
  - Agriculture, Forestry, Fishing, and Hunting (NAICS 11)
    - Crop Production (NAICS 111);
    - Animal Production (NAICS 112);
    - Forestry and Logging (NAICS 113);
    - Fishing, Hunting, and Trapping (NAICS 114);
    - Support Activities for Agriculture and Forestry (NAICS 115).
  - Mining, Quarrying, and Oil and Gas Extraction (NAICS 21)
    - Oil and Gas Extraction (NAICS 211);
    - Mining (except Oil and Gas) (NAICS 212);
    - Support Activities for Mining (NAICS 213).
- Construction
  - Construction (NAICS 23)
    - Construction of Buildings (NAICS 236);
    - Heavy and Civil Engineering Construction (NAICS 237);
    - Specialty Trade Contractors (NAICS 238).
- Manufacturing
  - Manufacturing (NAICS 31-33)
    - Food Manufacturing (NAICS 311);
    - Beverage and Tobacco Product Manufacturing (NAICS 312);
    - Textile Mills (NAICS 313);
    - Textile Product Mills (NAICS 314);
    - Apparel Manufacturing (NAICS 315);
    - Leather and Allied Product Manufacturing (NAICS 316);
    - Wood Product Manufacturing (NAICS 321);
    - Paper Manufacturing (NAICS 322);
    - Printing and Related Support Activities (NAICS 323);
    - Petroleum and Coal Products Manufacturing (NAICS 324);
    - Chemical Manufacturing (NAICS 325);
    - Plastics and Rubber Products Manufacturing (NAICS 326);
    - Nonmetallic Mineral Product Manufacturing (NAICS 327);
    - Primary Metal Manufacturing (NAICS 331);
    - Fabricated Metal Product Manufacturing (NAICS 332);
    - Machinery Manufacturing (NAICS 333);
    - Computer and Electronic Product Manufacturing (NAICS 334);

---

<sup>6</sup> U.S. Bureau of Labor Statistics (n.d.). Industries at a Glance. Washington, DC: U.S. Bureau of Labor Statistics. Available at [http://www.bls.gov/iag/tgs/iag\\_index\\_naics.htm](http://www.bls.gov/iag/tgs/iag_index_naics.htm)

- Electrical Equipment, Appliance, and Component Manufacturing (NAICS 335);
- Transportation Equipment Manufacturing (NAICS 336);
- Furniture and Related Product Manufacturing (NAICS 337);
- Miscellaneous Manufacturing (NAICS 339).

## Service-Providing Industries

- Trade, Transportation, and Utilities
  - Wholesale Trade (NAICS 42)
    - Merchant Wholesalers, Durable Goods (NAICS 423);
    - Merchant Wholesalers, Nondurable Goods (NAICS 424);
    - Wholesale Electronic Markets and Agents and Brokers (NAICS 425).
  - Retail Trade (NAICS 44-45)
    - Motor Vehicle and Parts Dealers (NAICS 441);
    - Furniture and Home Furnishings Stores (NAICS 442);
    - Electronics and Appliance Stores (NAICS 443);
    - Building Material and Garden Equipment and Supplies Dealers (NAICS 444);
    - Food and Beverage Stores (NAICS 445);
    - Health and Personal Care Stores (NAICS 446);
    - Gasoline Stations (NAICS 447);
    - Clothing and Clothing Accessories Stores (NAICS 448);
    - Sporting Goods, Hobby, Book, and Music Stores (NAICS 451);
    - General Merchandise Stores (NAICS 452);
    - Miscellaneous Store Retailers (NAICS 453);
    - Nonstore Retailers (NAICS 454).
  - Transportation and Warehousing (NAICS 48-49)
    - Air Transportation (NAICS 481);
    - Rail Transportation (NAICS 482);
    - Water Transportation (NAICS 483);
    - Truck Transportation (NAICS 484);
    - Transit and Ground Passenger Transportation (NAICS 485);
    - Pipeline Transportation (NAICS 486);
    - Scenic and Sightseeing Transportation (NAICS 487);
    - Support Activities for Transportation (NAICS 488);
    - Postal Service (NAICS 491);
    - Couriers and Messengers (NAICS 492);
    - Warehousing and Storage (NAICS 493).
  - Utilities (NAICS 22)
- Information
  - Information (NAICS 51)
    - Publishing Industries (except Internet) (NAICS 511);
    - Motion Picture and Sound Recording Industries (NAICS 512);
    - Broadcasting (except Internet) (NAICS 515);
    - Internet Publishing and Broadcasting (NAICS 516);
    - Telecommunications (NAICS 517);

- Data Processing, Hosting, and Related Services (NAICS 518);
  - Other Information Services (NAICS 519).
- Financial Activities
  - Finance and Insurance (NAICS 52)
    - Monetary Authorities – Central Bank (NAICS 521);
    - Credit Intermediation and Related Activities (NAICS 522);
    - Securities, Commodity Contracts, and Other Financial Investments and Related Activities (NAICS 523);
    - Insurance Carriers and Related Activities (NAICS 524);
    - Funds, Trusts, and Other Financial Vehicles (NAICS 525).
  - Real Estate and Rental and Leasing (NAICS 53)
    - Real Estate (NAICS 531);
    - Rental and Leasing Services (NAICS 532);
    - Lessors of Nonfinancial Intangible Assets (except Copyrighted Works) (NAICS 533).
- Professional and Business Services
  - Professional, Scientific, and Technical Services (NAICS 54);
  - Management of Companies and Enterprises (NAICS 55);
  - Administrative, Support, Waste Management, and Remediation Services (NAICS 56);
    - Administrative and Support Services (NAICS 561);
    - Waste Management and Remediation Services (NAICS 562).
- Education and Health Services
  - Educational Services (NAICS 61);
  - Health Care and Social Assistance (NAICS 62);
    - Ambulatory Health Care Services (NAICS 621);
    - Hospitals (NAICS 622);
    - Nursing and Residential Care Facilities (NAICS 623);
    - Social Assistance (NAICS 624).
- Leisure and Hospitality
  - Arts, Entertainment, and Recreation (NAICS 71);
    - Performing Arts, Spectator Sports, and Related Industries (NAICS 711);
    - Museums, Historical Sites, and Similar Institutions (NAICS 712);
    - Amusement, Gambling, and Recreation Industries (NAICS 713).
  - Accommodation and Food Services (NAICS 72)
    - Accommodation (NAICS 721);
    - Food Services and Drinking Places (NAICS 722).
- Other Services (except Public Administration)
  - Other Services (except Public Administration) (NAICS 81);
    - Repair and Maintenance (NAICS 811);
    - Personal and Laundry Services (NAICS 812);
    - Religious, Grantmaking, Civic, Professional, and Similar Organizations (NAICS 813);
    - Private Households (NAICS 814).

**Table NAICS 11: Earnings and Employment by Occupation Commonly Found in Agriculture, Fishing, and Hunting Sector**

<b>Occupation</b>	<b>Hourly Wages 2012: Median</b>	<b>Hourly Wages 2012: Mean</b>	<b>Annual Wages 2012: Median</b>	<b>Annual Wages 2012: Mean</b>	<b>Employment 2012</b>
Agricultural equipment operators	\$11.18	\$12.22	\$23,250	\$25,420	12,840
Farmworkers and laborers, crop, nursery, and greenhouse	\$8.90	\$9.24	\$18,510	\$19,230	202,650
First-line supervisors/managers of farming, fishing, and forestry workers	\$19.63	\$21.19	\$40,830	\$44,080	10,230
Logging equipment operators	\$16.41	\$16.74	\$34,140	\$34,810	19,210
Truck drivers, heavy and tractor-trailer	\$15.63	\$16.13	\$32,510	\$33,550	12,330

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics (2012)

**Table NAICS 21: Earnings and Employment by Occupation Commonly Found in Sector Mining, Quarrying, and Oil and Gas Extraction**

<b>Occupation</b>	<b>Hourly Wages 2012: Median</b>	<b>Hourly Wages 2012: Mean</b>	<b>Annual Wages 2012: Median</b>	<b>Annual Wages 2012: Mean</b>	<b>Employment 2012</b>
First-line supervisors/managers of construction trades and extraction workers	\$33.47	\$35.43	\$69,610	\$73,690	32,720
Helpers – extraction workers	\$15.59	\$16.56	\$32,430	\$34,450	22,530
Mining and geological engineers, including mining safety engineers	\$40.12	\$42.82	\$83,440	\$89,060	3,340
Operating engineers and other construction equipment operators	\$20.18	\$21.15	\$41,980	\$43,990	31,450
Roustabouts, oil and gas	\$16.61	\$17.35	\$34,550	\$36,080	53,550

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics (2012)

**Table NAICS 22: Earnings and Employment by Occupation Commonly Found in Utilities Sector**

<b>Occupation</b>	<b>Hourly Wages 2012: Median</b>	<b>Hourly Wages 2012: Mean</b>	<b>Annual Wages 2012: Median</b>	<b>Annual Wages 2012: Mean</b>	<b>Employment 2012</b>
Control and valve installers and repairers, except mechanical door	\$29.30	\$28.45	\$60,940	\$59,180	17,370
Electrical engineers	\$41.33	\$41.91	\$85,970	\$87,180	15,900
Electrical power-line installers and repairers	\$31.91	\$31.49	\$66,370	\$65,500	61,000
First-line supervisors/managers of mechanics, installers, and repairers	\$38.75	\$37.65	\$80,600	\$78,310	17,220
Meter readers, utilities	\$19.87	\$20.69	\$41,340	\$43,040	16,860

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics (2012)

**Table NAICS 23: Earnings and Employment by Occupation Commonly Found in Construction Sector**

<b>Occupation</b>	<b>Hourly Wages 2012: Median</b>	<b>Hourly Wages 2012: Mean</b>	<b>Annual Wages 2012: Median</b>	<b>Annual Wages 2012: Mean</b>	<b>Employment 2012</b>
Carpenters	\$19.25	\$21.51	\$40,030	\$44,730	471,350
Construction laborers	\$14.60	\$16.84	\$30,370	\$35,020	641,860
Construction managers	\$39.17	\$43.31	\$81,480	\$90,090	165,950
Electricians	\$23.19	\$25.25	\$48,230	\$52,520	382,970
Operating engineers and other construction equipment operators	\$20.94	\$23.36	\$43,560	\$48,590	204,090

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics (2012)

**Table NAICS 31-33: Earnings and Employment by Occupation Commonly Found in Manufacturing Sector**

<b>Occupation</b>	<b>Hourly Wages 2012: Median</b>	<b>Hourly Wages 2012: Mean</b>	<b>Annual Wages 2012: Median</b>	<b>Annual Wages 2012: Mean</b>	<b>Employment 2012</b>
Helpers – production workers	\$11.67	\$12.46	\$24,280	\$25,910	254,660
Inspectors, testers, sorters, samplers, and weighers	\$16.82	\$17.97	\$34,990	\$37,390	304,750
Machinists	\$19.00	\$19.65	\$39,520	\$40,860	312,410
Purchasing agents, except wholesale, retail, and farm products	\$27.38	\$28.86	\$56,940	\$60,040	96,130
Team assemblers	\$14.23	\$15.25	\$29,600	\$31,710	742,040

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics (2012)

**Table NAICS 42: Earnings and Employment by Occupation Commonly Found in Wholesale Sector**

<b>Occupation</b>	<b>Hourly Wages 2012: Median</b>	<b>Hourly Wages 2012: Mean</b>	<b>Annual Wages 2012: Median</b>	<b>Annual Wages 2012: Mean</b>	<b>Employment 2012</b>
Laborers and freight, stock, and material movers, hand	\$12.24	\$13.01	\$25,470	\$27,050	372,220
Sales representatives, wholesale and manufacturing, except technical and scientific products	\$25.79	\$30.97	\$53,640	\$64,410	948,100
Sales representatives, wholesale and manufacturing, technical and scientific products	\$35.45	\$41.33	\$73,740	\$85,970	213,680
Truck drivers, heavy and tractor-trailer	\$18.27	\$19.39	\$38,010	\$40,330	195,250
Wholesale and retail buyers, except farm products	\$24.87	\$27.38	\$51,740	\$56,940	43,660

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics (2012)

**Table NAICS 44-45: Earnings and Employment by Occupation Commonly Found in Retail Trade Sector**

<b>Occupation</b>	<b>Hourly Wages 2012: Median</b>	<b>Hourly Wages 2012: Mean</b>	<b>Annual Wages 2012: Median</b>	<b>Annual Wages 2012: Mean</b>	<b>Employment 2012</b>
Cashiers	\$9.13	\$9.78	\$18,980	\$20,340	2,734,130
Customer service representatives	\$11.58	\$12.74	\$24,090	\$26,500	281,490
First-line supervisors/managers of retail sales workers	\$17.62	\$19.55	\$36,650	\$40,660	1,104,310
Retail salespersons	\$10.09	\$12.09	\$20,980	\$25,140	4,056,250
Stock clerks and order fillers	\$9.80	\$10.75	\$20,390	\$22,370	1,262,740

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics (2012)

**Table NAICS 48-49: Earnings and Employment by Occupation Commonly Found in Transportation and Warehousing Sector**

<b>Occupation</b>	<b>Hourly Wages 2012: Median</b>	<b>Hourly Wages 2012: Mean</b>	<b>Annual Wages 2012: Median</b>	<b>Annual Wages 2012: Mean</b>	<b>Employment 2012</b>
Airline pilots, copilots, and flight engineers	N/A	N/A	\$116,320	\$130,870	61,800
Bus drivers, school	\$14.14	\$14.65	\$29,410	\$30,480	187,190
Railroad conductors and yardmasters	\$26.27	\$27.36	\$54,630	\$56,900	39,450
Sailors and marine oilers	\$17.78	\$19.00	\$36,990	\$39,520	23,720
Truck drivers, heavy and tractor-trailer	\$19.09	\$19.92	\$39,710	\$41,430	909,670

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics (2012)

**Table NAICS 51: Earnings and Employment by Occupation Commonly Found in Information Sector**

<b>Occupation</b>	<b>Hourly Wages 2012: Median</b>	<b>Hourly Wages 2012: Mean</b>	<b>Annual Wages 2012: Median</b>	<b>Annual Wages 2012: Mean</b>	<b>Employment 2012</b>
Computer software engineers, applications	N/A	N/A	N/A	N/A	N/A
Computer support specialists	N/A	N/A	N/A	N/A	N/A
Customer service representatives	\$16.02	\$17.69	\$33,320	\$36,790	165,730
Network and computer systems administrators	N/A	N/A	N/A	N/A	N/A
Telecommunications equipment installers and repairers, except line installers	\$27.38	\$26.53	\$56,960	\$55,180	153,520

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics (2012)

**Table NAICS 52: Earnings and Employment by Occupation Commonly Found in Finance and Insurance Sector**

<b>Occupation</b>	<b>Hourly Wages 2012: Median</b>	<b>Hourly Wages 2012: Mean</b>	<b>Annual Wages 2012: Median</b>	<b>Annual Wages 2012: Mean</b>	<b>Employment 2012</b>
Accountants and auditors	\$31.99	\$35.75	\$66,530	\$74,360	95,660
Insurance sales agents	\$23.19	\$30.56	\$48,230	\$68,560	328,030
Loan officers	\$28.35	\$33.51	\$58,960	\$69,700	255,270
Securities, commodities, and financial services sales agents	\$34.22	\$48.53	\$71,180	\$100,950	316,410
Tellers	\$11.98	\$12.39	\$24,920	\$25,780	534,100

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics (2012)

**Table NAICS 53: Earnings and Employment by Occupation Commonly Found in Real Estate and Rental and Leasing Sector**

<b>Occupation</b>	<b>Hourly Wages 2012: Median</b>	<b>Hourly Wages 2012: Mean</b>	<b>Annual Wages 2012: Median</b>	<b>Annual Wages 2012: Mean</b>	<b>Employment 2012</b>
Counter and rental clerks	\$11.48	\$12.69	\$23,870	\$26,400	198,350
Maintenance and repair workers, general	N/A	N/A	N/A	N/A	N/A
Property, real estate, and community association managers	\$24.06	\$29.07	\$50,040	\$60,460	118,160
Real estate brokers	\$27.81	\$38.50	\$57,840	\$80,070	32,850
Real estate sales agents	\$18.02	\$24.25	\$37,470	\$50,440	136,400

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics (2012)

**Table NAICS 54: Earnings and Employment by Occupation Commonly Found in Professional, Scientific, and Technical Services Sector**

<b>Occupation</b>	<b>Hourly Wages 2012: Median</b>	<b>Hourly Wages 2012: Mean</b>	<b>Annual Wages 2012: Median</b>	<b>Annual Wages 2012: Mean</b>	<b>Employment 2012</b>
Accountants and auditors	\$31.30	\$36.50	\$65,100	\$75,910	394,010
Architectural and civil drafters	\$23.04	\$24.26	\$47,930	\$50,470	65,680
Lawyers	\$56.27	\$66.09	\$117,040	\$137,460	384,000
Management analysts	\$41.29	\$48.05	\$85,880	\$99,940	202,240
Market research analysts	N/A	N/A	N/A	N/A	N/A

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics (2012)

**Table NAICS 55: Earnings and Employment by Occupation Commonly Found in Management of Companies and Enterprises Sector**

<b>Occupation</b>	<b>Hourly Wages 2012: Median</b>	<b>Hourly Wages 2012: Mean</b>	<b>Annual Wages 2012: Median</b>	<b>Annual Wages 2012: Mean</b>	<b>Employment 2012</b>
Accountants and auditors	\$31.09	\$33.88	\$64,670	\$70,480	82,790
Bookkeeping, accounting, and auditing clerks	\$17.39	\$18.02	\$36,160	\$37,470	72,910
Financial managers	\$60.02	\$67.16	\$124,840	\$139,690	54,450
First-line supervisors/managers of office and administrative support workers	\$27.12	\$28.67	\$56,410	\$59,640	45,570
General and operations managers	\$59.23	\$67.87	\$123,200	\$141,170	79,070

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics (2012)

**Table NAICS 56: Earnings and Employment by Occupation Commonly Found in Administrative, Support, Waste Management and Remediation Services Sector**

<b>Occupation</b>	<b>Hourly Wages 2012: Median</b>	<b>Hourly Wages 2012: Mean</b>	<b>Annual Wages 2012: Median</b>	<b>Annual Wages 2012: Mean</b>	<b>Employment 2012</b>
Janitors and cleaners, except maids and housekeeping cleaners	\$9.52	\$10.78	\$19,800	\$22,430	852,130
Laborers and freight, stock, and material movers, hand	\$9.51	\$10.75	\$19,780	\$22,360	450,990
Landscaping and groundskeeping workers	\$11.22	\$12.04	\$23,350	\$25,050	472,660
Office clerks, general	\$12.25	\$13.14	\$25,480	\$27,330	281,590
Security guards	\$10.91	\$12.21	\$22,700	\$25,390	643,560

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics (2012)

**Table NAICS 61: Earnings and Employment by Occupation Commonly Found in Educational Services Sector**

<b>Occupation</b>	<b>Hourly Wages 2012: Median</b>	<b>Hourly Wages 2012: Mean</b>	<b>Annual Wages 2012: Median</b>	<b>Annual Wages 2012: Mean</b>	<b>Employment 2012</b>
Education administrators, elementary and secondary school	N/A	N/A	\$87,810	\$90,890	222,410
Elementary school teachers, except special education	N/A	N/A	\$53,430	\$56,150	1,350,480
Middle school teachers, except special and vocational education	N/A	N/A	\$53,440	\$56,280	617,300
Secondary school teachers, except special and vocational education	N/A	N/A	\$55,080	\$57,790	952,280
Teacher assistants	N/A	N/A	\$24,120	\$25,740	1,015,700

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics (2012)

**Table NAICS 62: Earnings and Employment by Occupation Commonly Found in Health Care and Social Assistance Sector**

<b>Occupation</b>	<b>Hourly Wages 2012: Median</b>	<b>Hourly Wages 2012: Mean</b>	<b>Annual Wages 2012: Median</b>	<b>Annual Wages 2012: Mean</b>	<b>Employment 2012</b>
Home health aides	\$9.97	\$10.43	\$20,730	\$21,680	794,300
Licensed practical and licensed vocational nurses	\$19.90	\$20.37	\$41,380	\$42,370	611,710
Medical and health services managers	\$41.96	\$46.65	\$87,280	\$97,030	240,580
Nursing aides, orderlies, and attendants	N/A	N/A	N/A	N/A	N/A
Registered nurses	N/A	N/A	N/A	N/A	N/A

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics (2012)

**Table NAICS 71: Earnings and Employment by Occupation Commonly Found in Arts, Entertainment, and Recreation Sector**

<b>Occupation</b>	<b>Hourly Wages 2012: Median</b>	<b>Hourly Wages 2012: Mean</b>	<b>Annual Wages 2012: Median</b>	<b>Annual Wages 2012: Mean</b>	<b>Employment 2012</b>
Actors	\$15.88	\$26.31	N/A	N/A	16,640
Amusement and recreation attendants	\$8.95	\$9.39	\$18,610	\$32,830	172,340
Fitness trainers and aerobics instructors	\$15.78	\$18.31	\$32,830	\$38,080	154,170
Gaming supervisors	\$22.24	\$22.80	\$46,260	\$47,420	6,280
Musicians and singers	\$26.37	\$35.09	N/A	N/A	27,090

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics (2012)

**Table NAICS 72: Earnings and Employment by Occupation Commonly Found in Accommodation and Food Services Sector**

<b>Occupation</b>	<b>Hourly Wages 2012: Median</b>	<b>Hourly Wages 2012: Mean</b>	<b>Annual Wages 2012: Median</b>	<b>Annual Wages 2012: Mean</b>	<b>Employment 2012</b>
Combined food preparation and serving workers, including fast food	\$8.71	\$8.74	\$18,110	\$18,180	2,492,280
Cooks, fast food	\$8.85	\$9.02	\$18,400	\$18,760	483,670
Cooks, restaurant	\$10.54	\$11.15	\$21,930	\$23,190	947,590
Hotel, motel, and resort desk clerks	\$9.74	\$10.53	\$20,250	\$21,890	220,360
Waiters and waitresses	\$8.90	\$9.93	\$18,520	\$20,660	2,167,840

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics (2012)

**Table NAICS 81: Earnings and Employment by Occupation Commonly Found in Other Services (except Public Administration) Sector**

<b>Occupation</b>	<b>Hourly Wages 2012: Median</b>	<b>Hourly Wages 2012: Mean</b>	<b>Annual Wages 2012: Median</b>	<b>Annual Wages 2012: Mean</b>	<b>Employment 2012</b>
Automotive service technicians and mechanics	\$15.99	\$17.01	\$33,250	\$35,370	225,640
First-line supervisors/managers of mechanics, installers, and repairers	\$25.78	\$27.25	\$53,630	\$56,680	51,940
Hairdressers, hairstylists, and cosmetologists	\$10.94	\$12.88	\$22,750	\$26,790	321,260
Laundry and dry-cleaning workers	\$9.38	\$10.00	\$19,510	\$20,800	105,800
Maintenance and repair workers, general	N/A	N/A	N/A	N/A	N/A

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics (2012)