

The Metamorphosis of Women Business Owners: A Focus on Age

by

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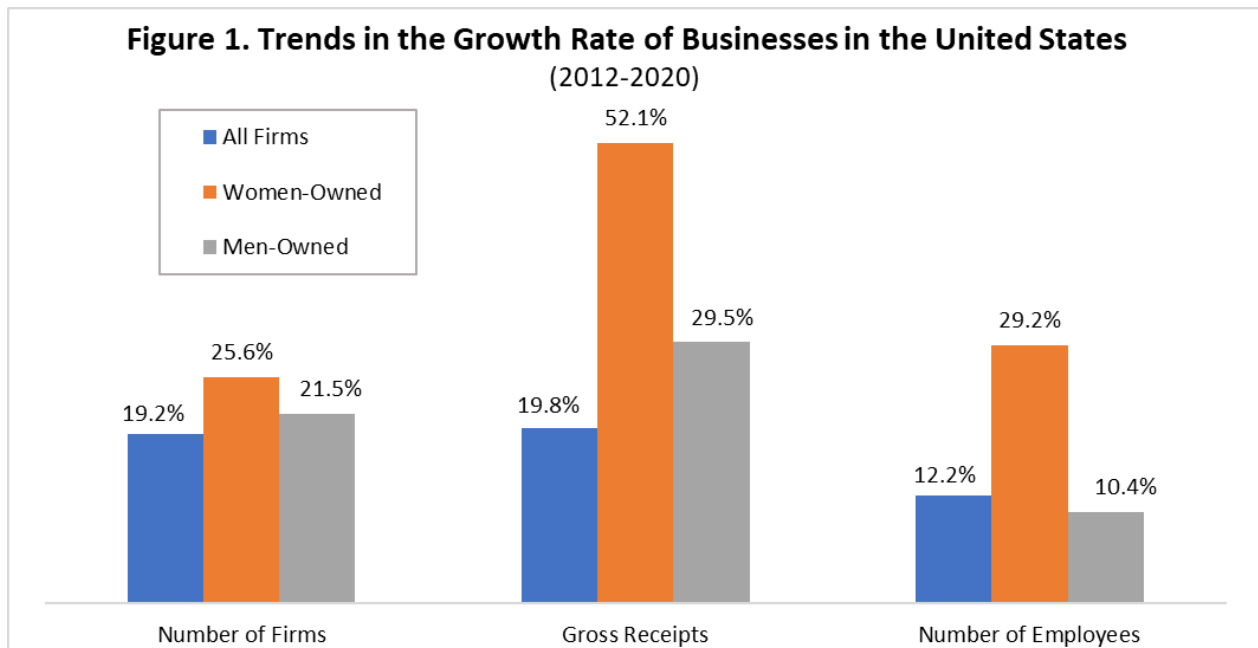
Abstract

Due to their growth, increasing performance, and significant contributions to the United States economy, women-owned businesses have spurred the interest of policymakers, researchers, and advocacy groups. Using various data products from the Census Bureau's Business Demographics Program, this study examines how women business ownership changes over time by age. We find that young owners experienced growth in ownership between 2012 and 2020 and that younger employer businesses were mostly owned by women under the age of 35 in 2021. We show that among women aged 45 to 54 and those aged 55 to 64 ownership rates declined 5.5% and 4.8% between 2012 and 2020, implying an acceleration in the drop out of entrepreneurship for mid to late career age groups. We also show that older owners operate most businesses in capital-intensive industries, had more prior businesses, and higher rates of selling their most recently started businesses. Finally, we find that age groups often characterized as childbearing ages found balancing work and family as key drivers of their decision to start a business.

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Introduction

Women entrepreneurs' contribution to the United States economy remains significant as marked by the exponential growth of the number of businesses owned¹, revenues earned, and workforce hired in recent decades (Blank, 2010). Latest available data show that women-owned businesses climbed 25.6%, their growth rate of receipts more than doubled that of all firms at 52.1%, and their employment rose 29.2% between 2012 and 2020. These rates compare with a 21.5% increase in the number of businesses, 29.5% growth in total revenues, and 10.4% employment growth for businesses owned by their male counterparts. Overall, U.S. businesses went up 19.2%, total receipts grew by 19.8%, and there was a 12.2% increase in the number of workers hired over this time period.



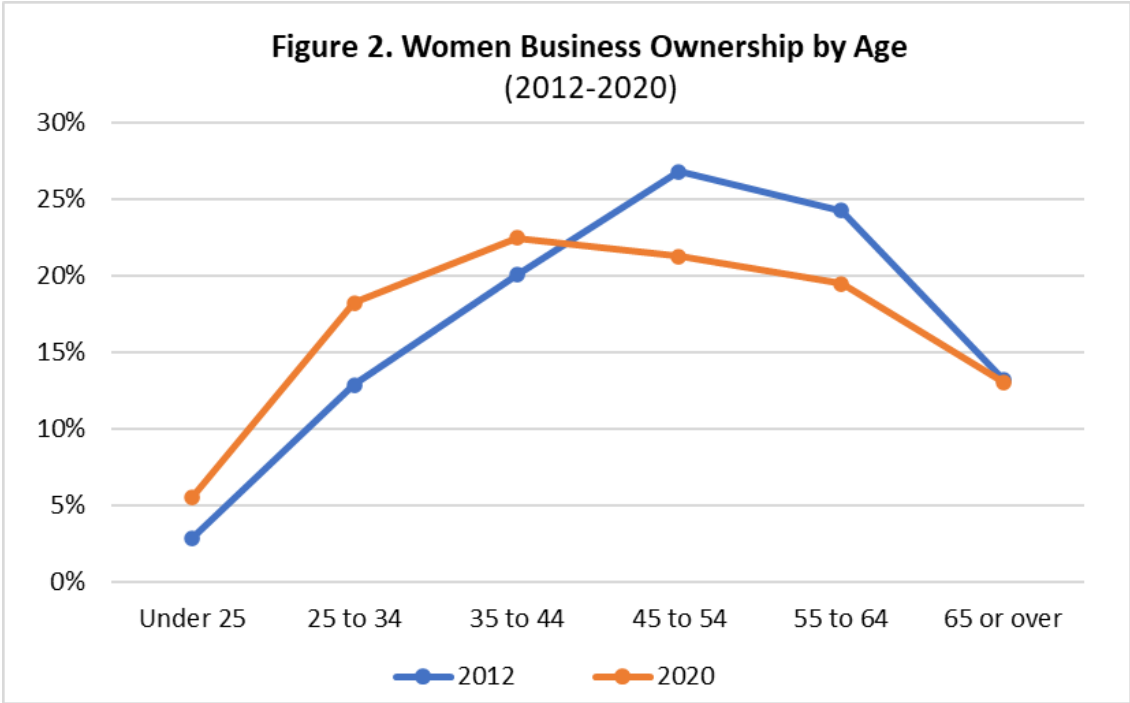
Note: The "All Firms" category include firms unclassifiable by sex, ethnicity, race, and veteran status. Receipts are in nominal dollars.

Sources: U.S. Census Bureau, 2012 Survey of Business Owners, 2021 Annual Business Survey, data year 2020, and 2020 Nonemployer Statistics by Demographics (NES-D).

Considering women entrepreneurs' increasing performance and growth, policymakers, researchers, and advocacy groups continue to express interest in learning more about them. In this study, we dig deeper into their key characteristics, particularly through a demographic lens. Previous work (American Express, 2023) has looked into the distribution of businesses by race and ethnicity across time, but very little is known about how women's relationship with

¹ Note: The Census Bureau defines majority women-owned businesses as having more than 50% of the stock or equity in the business.

entrepreneurship changes over time by age². Women business owners are generally older with 77.7% aged 35 and over in 2020 (U. S. Census Bureau, 2021, Annual Business Survey Program). A recent study has also found that the highest success rates in entrepreneurship in the U.S. come from founders in their middle age and beyond (Azoulay et al. 2020). These findings are consistent with theories that align entrepreneurial resources such as human capital, financial capital, and social capital with age. However, the distribution of ownership by age group has slightly changed in the past 8 years. For example, the share of women business owners under the age of 45 rose 10.5 percentage points between 2012 and 2020, while ownership for those over 45 declined by fairly the same rate (10.4 percentage points). Particularly, women ages 25 to 34 posted the largest increase (+5.4 percentage points) in business ownership, while those in the 45 to 54 age group had the largest decline (-5.5 percentage points).



Sources: U.S. Census Bureau, 2012 Survey of Business Owners, 2021 Annual Business Survey, data year 2020, and 2020 Nonemployer Statistics by Demographics (NES-D).

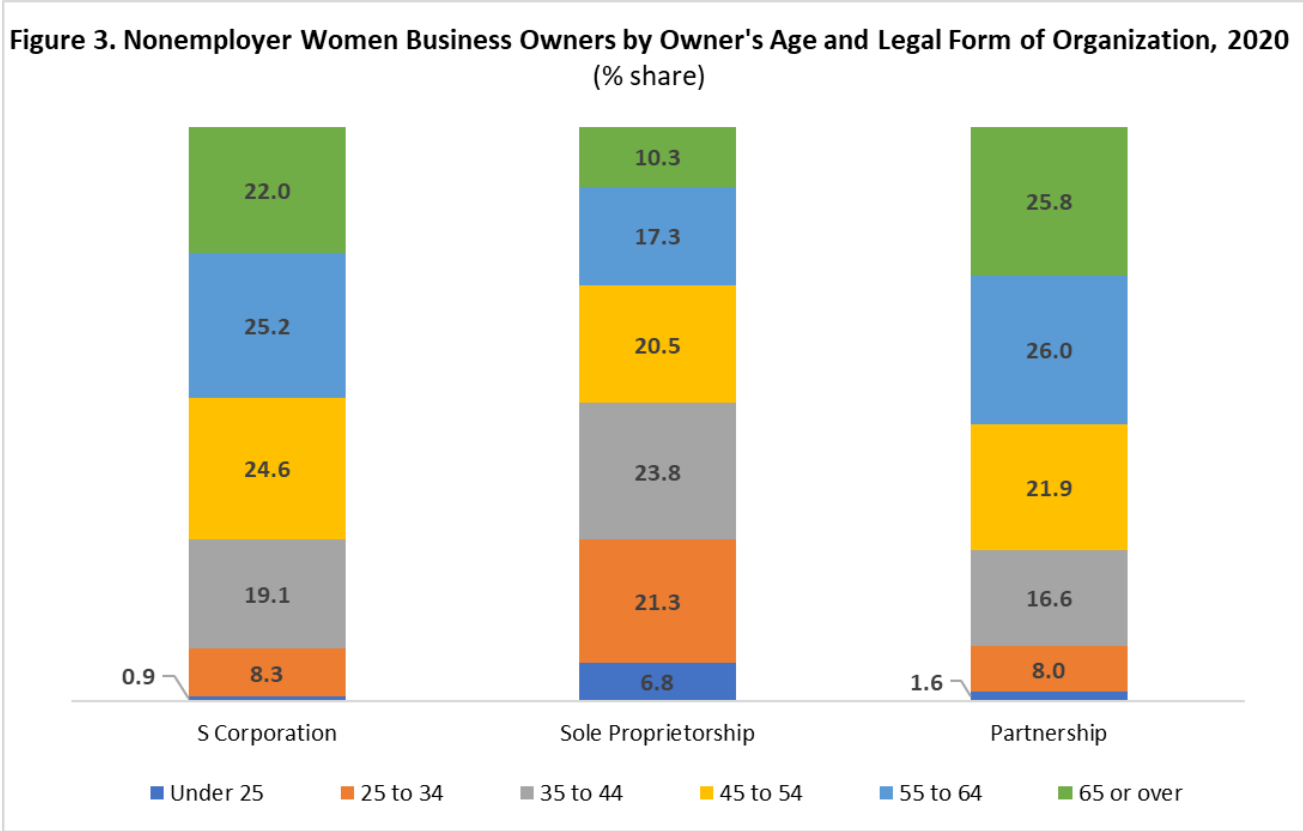
Business Type and Industry

Age also appears to play a role in the type of businesses³ that women own and the industry sectors in which they operate. For example, women-owned nonemployer S corporations were generally owned by women aged 55 and older in 2020, with an ownership share of 47.2%. This

² While the ABS imputes race, ethnicity, sex, and veteran status, it does not impute missing other owner and business characteristics such as age, therefore percentages are representative of weighted responses but not representative of all US employer businesses or owners.

³ Legal Form of Organization is not currently available for employer businesses in the Annual Business Survey.

age group also represented 51.8% of nonemployer partnership owners. On the other hand, they only accounted for 27.6% of nonemployer sole proprietorships. Owners under the age of 35 made up 28.1% of nonemployer sole proprietorships, the highest share for this group among all types of organization, implying ease of entry. Women aged 35 to 54 made up a large share of nonemployer sole proprietorship at 44.3%.



Source: U.S. Census Bureau, 2020 Nonemployer Statistics by Demographics (NES-D).

In terms of industry concentration, we observe striking differences in business owners' age. Table 1 provides the top 5 industries with highest shares of women owners aged 55 and over and those under 35 years old among women owners in a particular industry. For instance, women over 55 were heavily represented among women owners of employer businesses in more capital-intensive industries in 2020. These industries include, Mining, Quarrying and Oil and Gas extraction where they accounted for 72.6% of women-owners in that industry, Management of Companies and Enterprises (67.2%), Manufacturing (62.4%), and Wholesale Trade (62.3%). Women under 35 were most represented among women owners of employer businesses in labor-intensive industries such as those in the Arts, Entertainment, and Recreation

sector with a share of 11.9%, Information (9.3%), Accommodation and Food Services (8.1%) and Other Services (except public administration)⁴ with 7.6%.

Table 1. Top 5 Industries: Employer Businesses

Oldest owners (55 and over)	Industry share	Youngest owners (under 35)	Industry share
Mining, quarrying, and oil and gas extraction	72.6%	Arts, entertainment, and recreation	11.90%
Management of companies and enterprises	67.2%	Information	9.30%
Manufacturing	62.4%	Accommodation and food services	8.10%
Wholesale trade	62.3%	Other services (except public administration)	7.60%
Industries not classified	60.7%	Agriculture, forestry, fishing and hunting	7.30%

Note: The industries not classified sector comprises of establishments where no NAICS coding information is available.

Source: U.S. Census Bureau, 2021 Annual Business Survey, data year 2020.

We observe similar statistics for nonemployer business owners where industries that require more capital to operate are owned by older women. The top sector, commonly shared with employer businesses is Mining, Quarrying and Oil and Gas Extraction with 71.2% of women owners in that industry over the age of 55. The remaining businesses are Real Estate and Rental and Leasing (52.3%), Utilities (44.3%), Finance and Insurance (44.0%), and Wholesale Trade (36.4%). Findings for younger (less than 35 years old) women employer owners also align with those for nonemployer businesses. Younger women owners are more represented in nonemployer businesses that require less capital to start, except for the Transportation and Warehousing industry where they account for 41.1% of owners.

Table 2. Top 5 Industries: Nonemployer Businesses

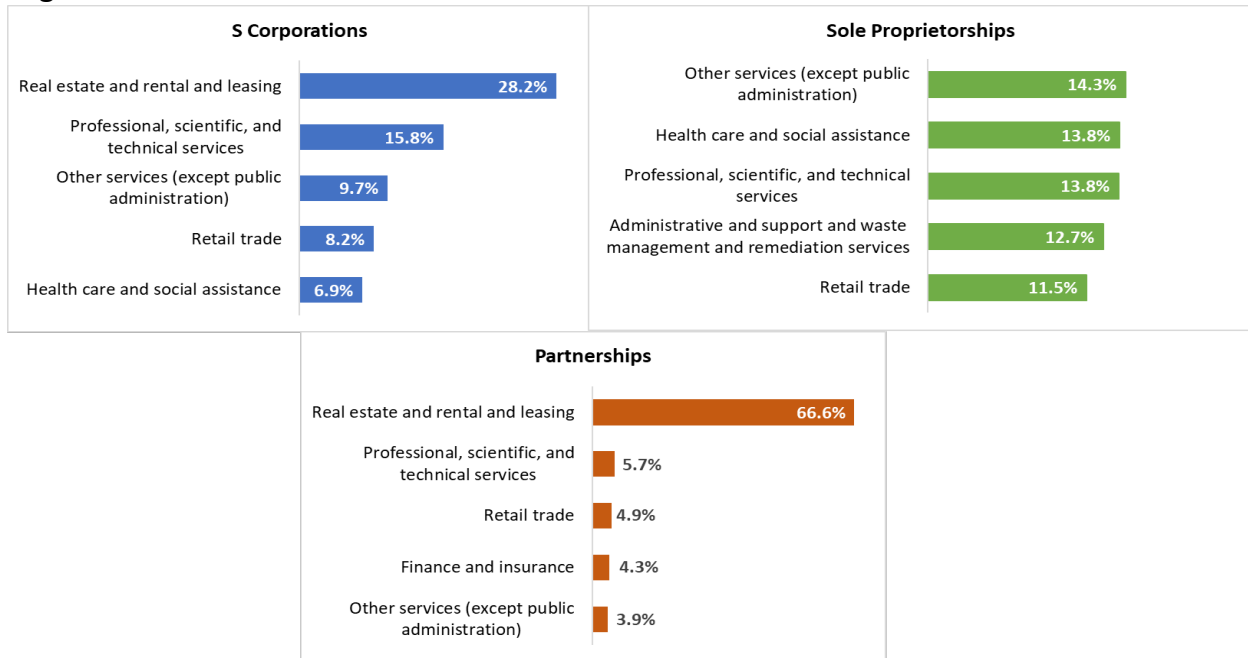
Oldest owners (55 and over)	Industry share	Youngest owners (under 35)	Industry share
Mining, quarrying, and oil and gas extraction	71.2%	Transportation and warehousing	41.1%
Real estate and rental and leasing	52.3%	Arts, entertainment, and recreation	36.4%
Utilities	44.3%	Other services (except public administration)	31.9%
Finance and insurance	44.0%	Information	31.4%
Wholesale trade	36.4%	Agriculture, forestry, fishing and hunting	30.5%

Source: U.S. Census Bureau, 2020 Nonemployer Statistics by Demographics (NES-D).

When we break down the composition of industry by type of organization, we see that the Real Estate and Rental and Leasing industry (the industry with the second oldest owners) made up the bulk of owners in both partnerships (66.6%) and S corporations (28.2%) as shown in Figure 4. However, that's the only industry in the top five industries among nonemployer businesses as shown in Table 2. Other Services (except public administration) which account for 14.3% of women owners of sole proprietorships, 9.7% of S corporations, and 3.9% of owners of partnerships is the only industry that appears in all of the three types as shown in Figure 4. Table 2 shows this industry has the third youngest owners.

⁴ Businesses in this sector include, automotive repair and maintenance, personal and laundry services, religious, grantmaking, civic, professional, and similar organizations, and private households. Please see the North American Industry Classification System for more details on sector 81: North American Industry Classification System (NAICS) U.S. Census Bureau.

Figure 4. Top 5 Industries of Nonemployer Women Business Owners by Legal Form of Organization



Source: U.S. Census Bureau, 2020 Nonemployer Statistics by Demographics (NES-D).

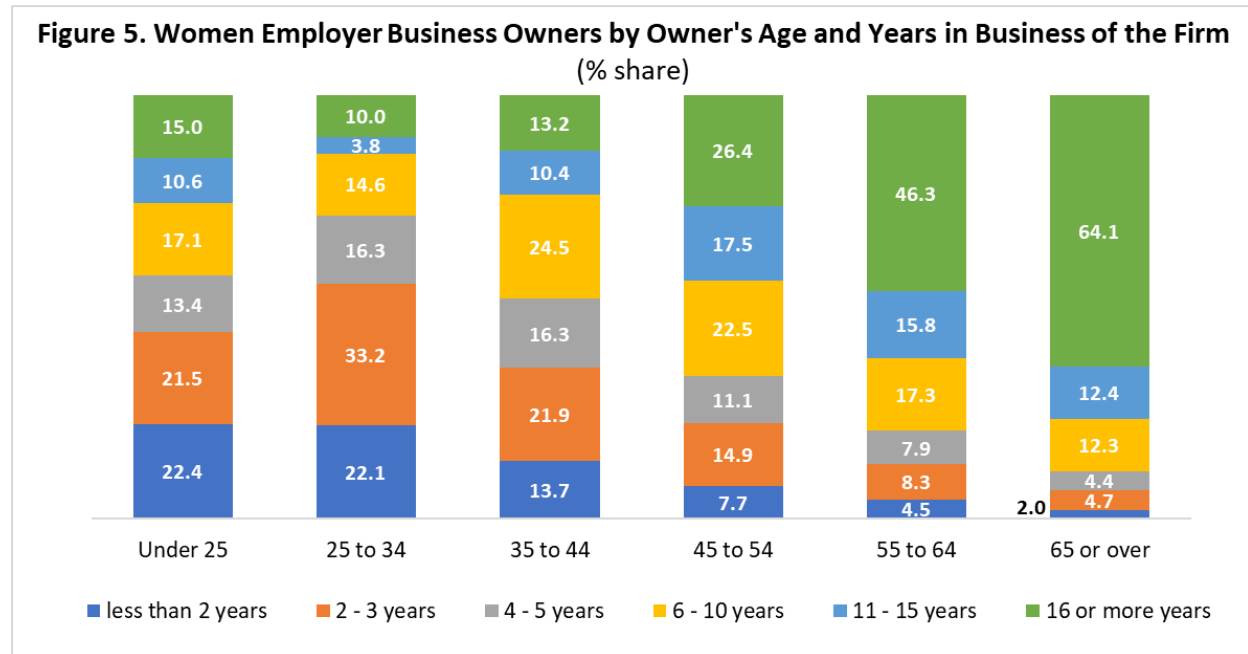
Entrepreneurship and Owner Age

How does serial entrepreneurship track across age? While we do not have specific data on serial entrepreneurship which is defined as starting and running more than one business, one way we could proxy for this measure is to plot the distribution of firm years in business⁵ by owner's age as shown in Figure 5. As expected, business age is related to owner's age with younger employer businesses mainly owned by younger women. For example, 33.2% of women business owners aged 25 to 34 owned businesses that were between 2 and 3 years old, while 22.4% of owners under 25 had businesses that were less than 2 years old in 2021. These rates show that despite existing entrepreneurship theories showing that resources accumulate with age⁶, young women are still engaging in the start of new businesses. A recent study finds that founders in their mid-20s to early 30s learn and invest over time and can ultimately run new firms that are even more productive than those founded by older entrepreneurs (Shawn and Sørensen, 2022). Furthermore, we observe that older women generally owned older businesses with 64.1% of women owners aged 65 or older operating firms that were in existence for 16 or more years. Additionally, 46.3% of women owners aged 55 to 64 owned businesses that were 16 or more years old. These shares align with findings that businesses owned and operated by older individuals are more likely to survive (Mueller, 2006, Backman and Karlsson, 2020, and Robb

⁵ Years in Business on the Annual Business Survey is derived from the firm birth date available through administrative records. The variable is not currently available for Nonemployer businesses.

⁶ Please see Azoulay et. al, 2020 for a thorough review of the literature of these theories.

and Diagne, forthcoming). It is important to note that Figure 5 provides only a partial picture of serial entrepreneurship because it does not provide a way to measure how many years an entrepreneur has been in practice since owner’s age is aggregated to all responding owners of the business. Another limitation is that it does not provide insight into how long business owners pursued entrepreneurial endeavors before their current business.



Source: U.S. Census Bureau, 2022 Annual Business Survey, data year 2021.

An additional way we could proxy for serial entrepreneurship is to use the question on prior business ownership in the 2018 Annual Business Survey (ABS). The specific question asked is shown in Figure 13 and as expected most of those that reported had no prior businesses in 2017. However, those with prior businesses had slight differences by age. For example, 6.2% of owners under 25, 16.0% of owners aged 24 to 35, and 21.6% of those aged 35 to 44 had at least one prior business as shown in Table 3. Furthermore, older owners—27.2% of those aged 55 to 64 and 27.6% of those aged 65 and over had at least one prior business.

Figure 13. Number of Prior Businesses

PRIOR BUSINESS OWNERSHIP

Prior to establishing, purchasing, or acquiring this business, how many previous businesses has *Owner 1* owned? (Include self-employed businesses.)

- 0 – Skip to EDUCATION PRIOR TO OWNING THE BUSINESS
- 1
- 2
- 3
- 4
- 5 or more

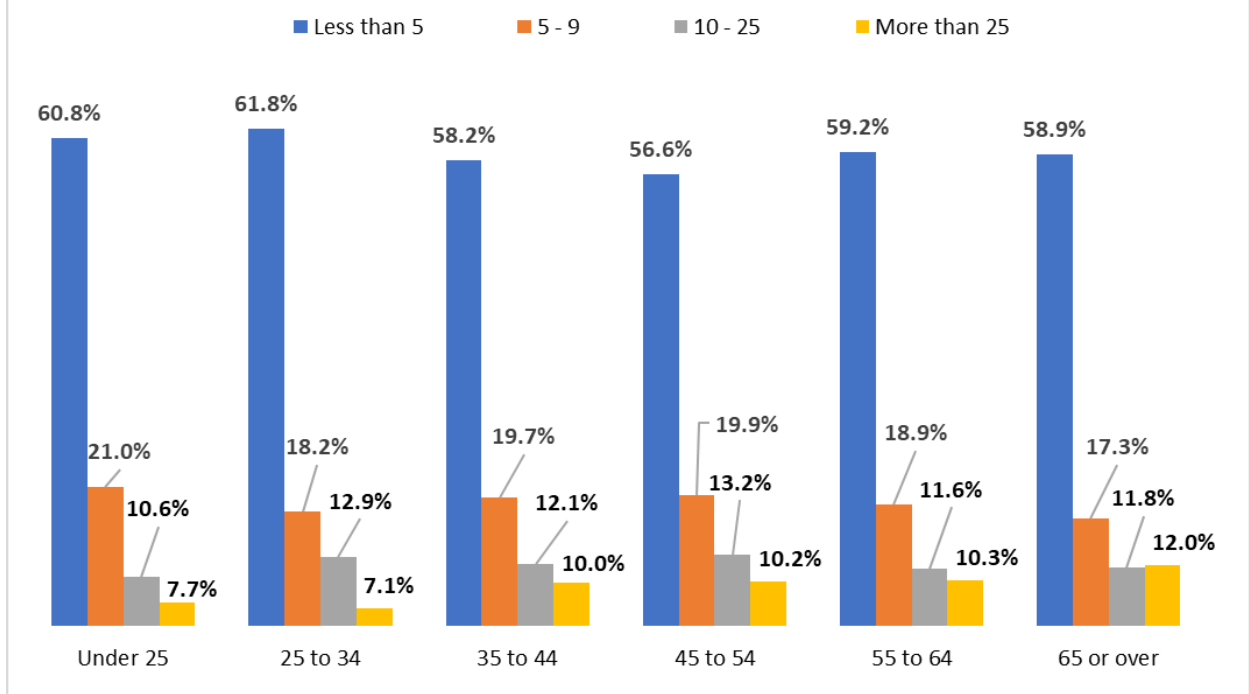
Age	None	One	Two	Three	Four	Five or more
Under 25	93.8%	3.4%	1.0%	(D)	(D)	1.4%
25 to 34	84.0%	11.9%	2.5%	0.7%	0.2%	0.6%
35 to 44	78.4%	15.5%	3.8%	1.1%	0.3%	0.9%
45 to 54	74.2%	17.5%	5.0%	1.5%	0.5%	1.4%
55 to 64	72.7%	17.9%	5.3%	1.8%	0.6%	1.6%
65 or over	72.4%	17.1%	5.4%	2.0%	0.6%	2.5%

Note: “D” means suppressed to ensure that no confidential information is disclosed.
 Source: U.S. Census Bureau, 2018 Annual Business Survey, data year 2017.

Business Start, Scaling, and Selling

How does the way women start, scale, and sell their businesses change with age? We attempt to answer this question using several techniques. Business scaling refers to growing a business in a way that allows it to expand its reach and increase its profits. We can conceptualize scaling by examining various indicators including workforce size, sales and revenues, and profitability (Bercovitz and Mitchell, 2007). Our first approach is to look into employment. Women-owned businesses are usually small in size with 58.4% of owners who responded to the age question hiring less than 5 workers in 2021. We observe similar statistics regardless of owner’s age as shown in Figure 6 where 61.8% and 60.8% of women business owners aged 25 to 34 and those under the age of 25 employed less than 5 people, respectively. Meanwhile, 56.6% of owners aged 45 to 54 had less than 5 employees. Only 10 to 12 percent of owners over the age of 35 had more than 25 employees.

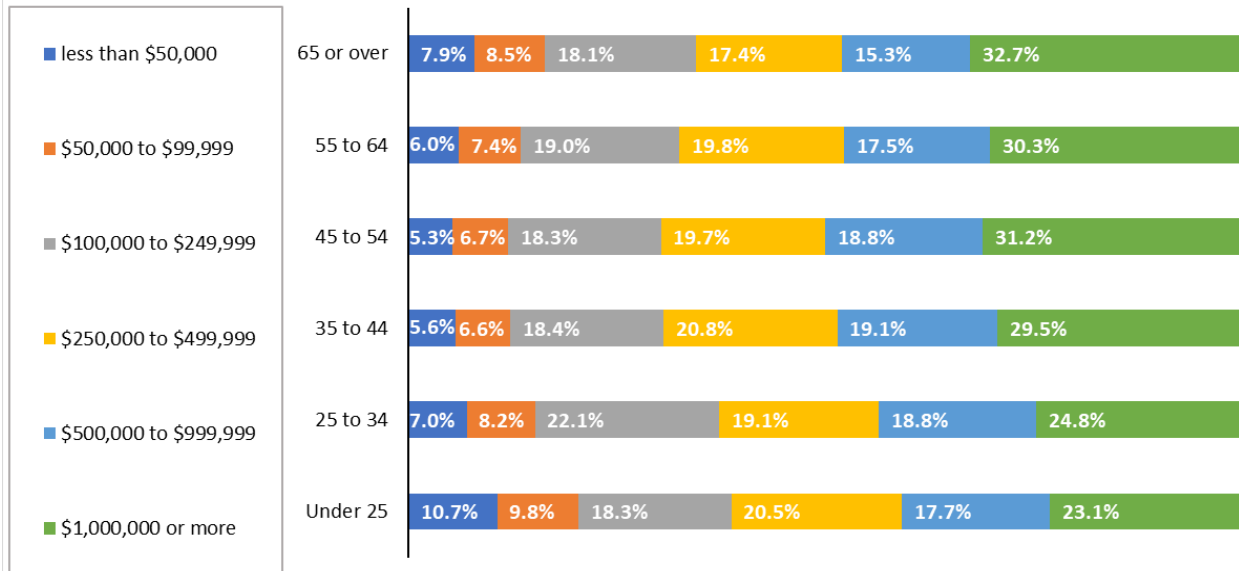
Figure 6. Women Business Owners by Age and Employment Size



Source: U.S. Census Bureau, 2022 Annual Business Survey, data year 2021.

In terms of revenues, women-owned employer businesses generally have receipts higher than \$100,000—86.5% of firms who responded to the age question in 2021. This share is also reflected in owner totals since not only do women-owned employer businesses earn large receipts, but they also most commonly appear in the largest receipt size category. However, we see key differences by age as shown in Figure 7. For instance, 10.7% of women owners under the age of 25 had less than \$50,000 in total revenues, the largest share among age groups. Meanwhile, owners 65 years and over had the highest share (32.7%) of sales or receipts of \$1 million or more.

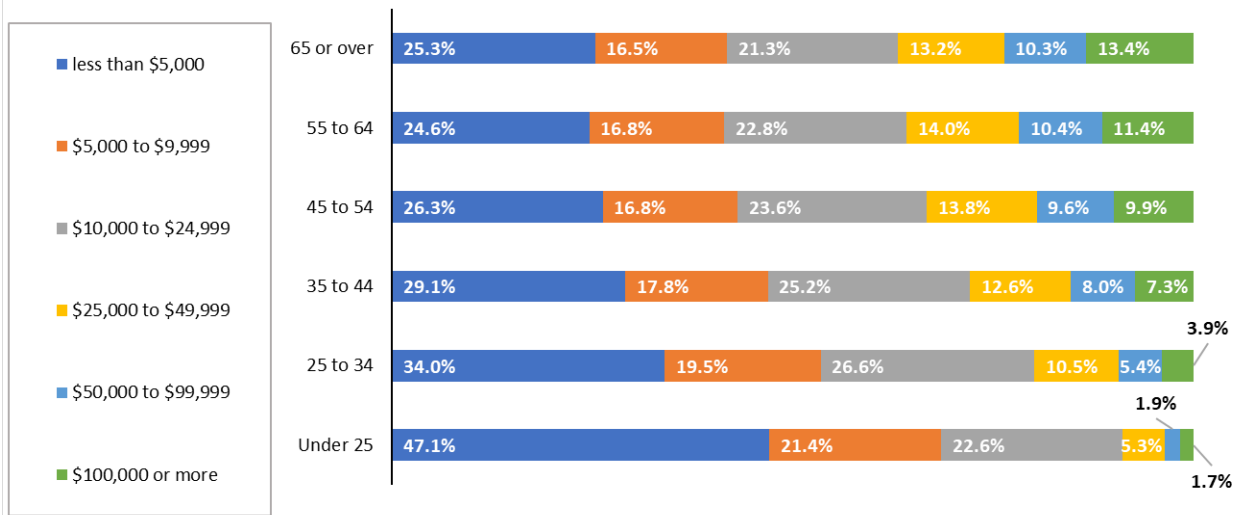
Figure 7. Women Employer Business Owners by Age and Receipt Size



Source: U.S. Census Bureau, 2022 Annual Business Survey, data year 2021.

We notice an inverse picture when we look at nonemployer women-owners by receipt size. For example, 83.5% of nonemployer business owners classifiable by age had sales or receipts of less than \$50,000 in 2020. However, there is a stark difference in revenue size when looking at specific owner age groups. Figure 8 shows that 47.1% of owners under the age of 25 had total receipts of less than \$5,000 and only 1.7% recorded revenues of \$100,000 or higher. On the other hand, 25.3% of those over 65 years old had sales less than \$5,000 and 13.4% had \$100,000 or more in receipts.

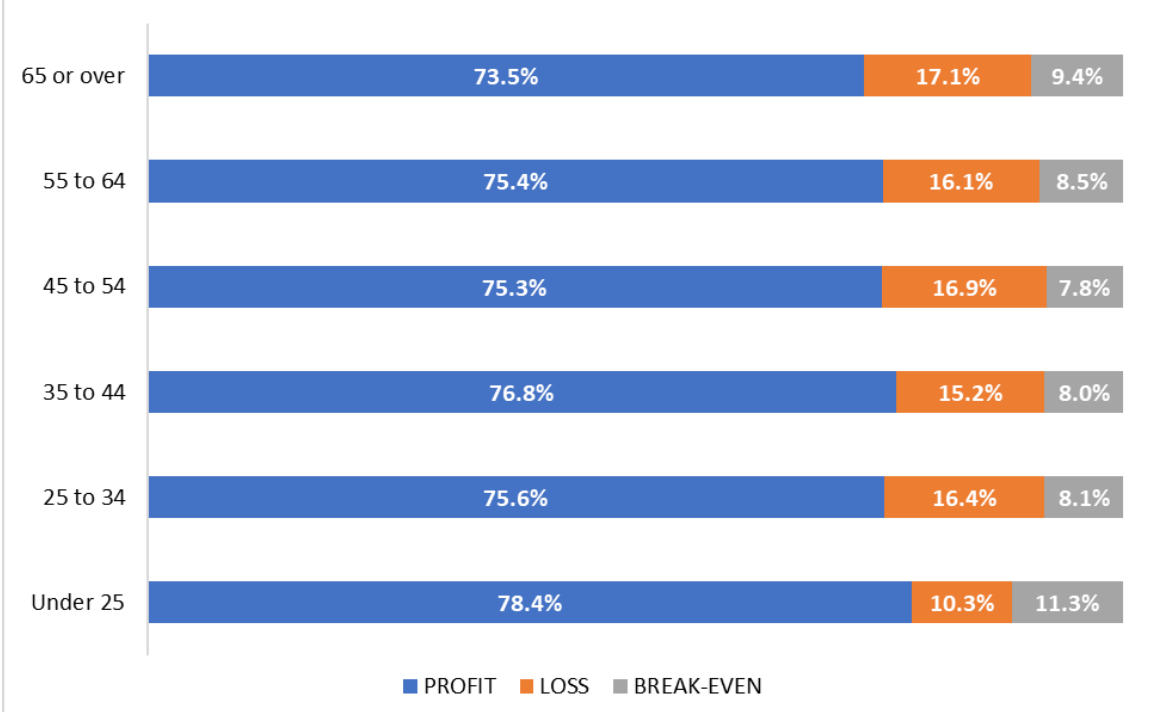
Figure 8. Women Nonemployer Business Owners by Age and Receipt Size



Source: U.S. Census Bureau, 2020 Nonemployer Statistics by Demographics (NES-D).

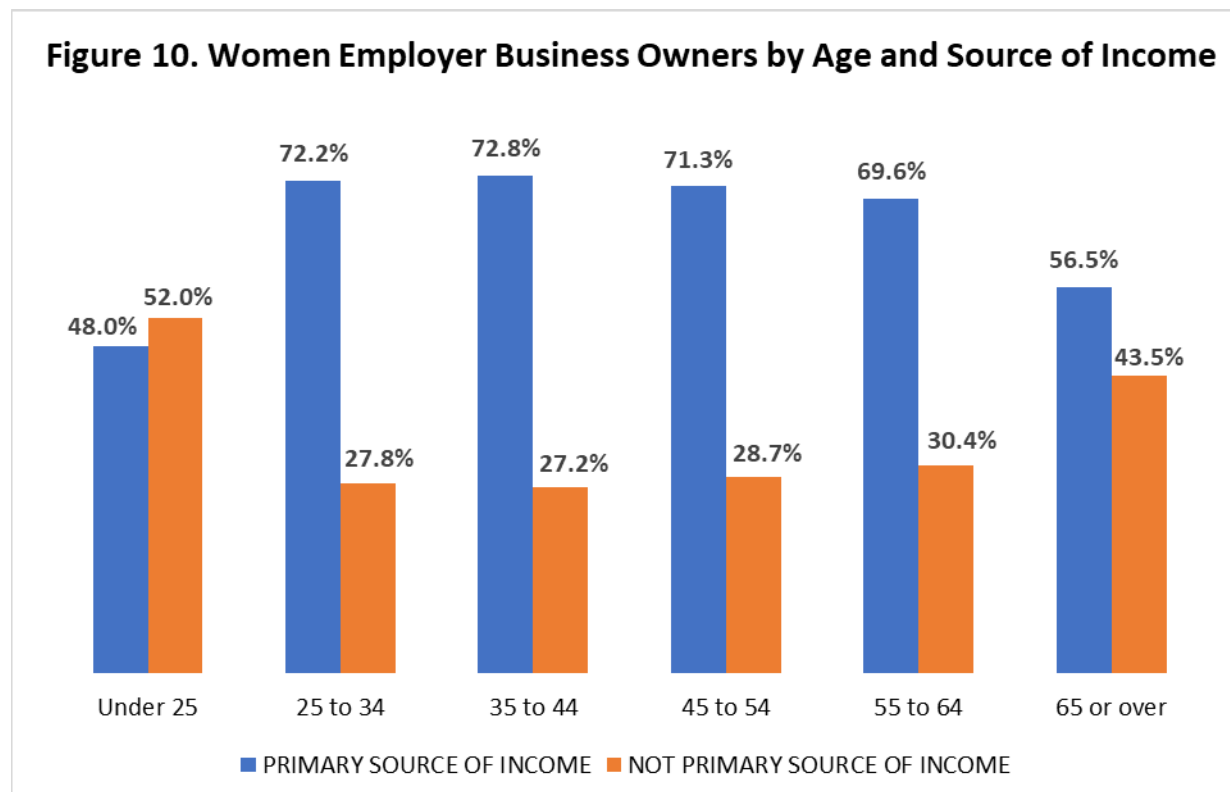
Another way we explore business scaling is profitability. As of 2021, 75.2% of women business owners generated profits in 2021. It is essential to point out that 78.4% of owners under the age of 25 had profits, highest among all age groups. Consequently, a smaller share of owners in this age group (10.3%) reported a loss, while 11.3% broke-even.

Figure 9. Women Employer Business Owners by Age and Financial Health



Source: U.S. Census Bureau, 2022 Annual Business Survey, data year 2021.

Our final take to examine scaling uses the primary income source question on the ABS. Women owners mainly rely on their businesses for their primary source of personal income. More than one-third (68.0%) reported that their business in question was their primary source of income in 2021. However, this share is relatively different by owner age. For instance, 48.0% of women owners under 25 said their business was their primary source of income while 52.0% said it was not that same year. On the contrary, 56.5% of those aged 65 and over said the business was their primary source of income compared to 43.5% who reported it was not.



Source: U.S. Census Bureau, 2022 Annual Business Survey, data year 2021.

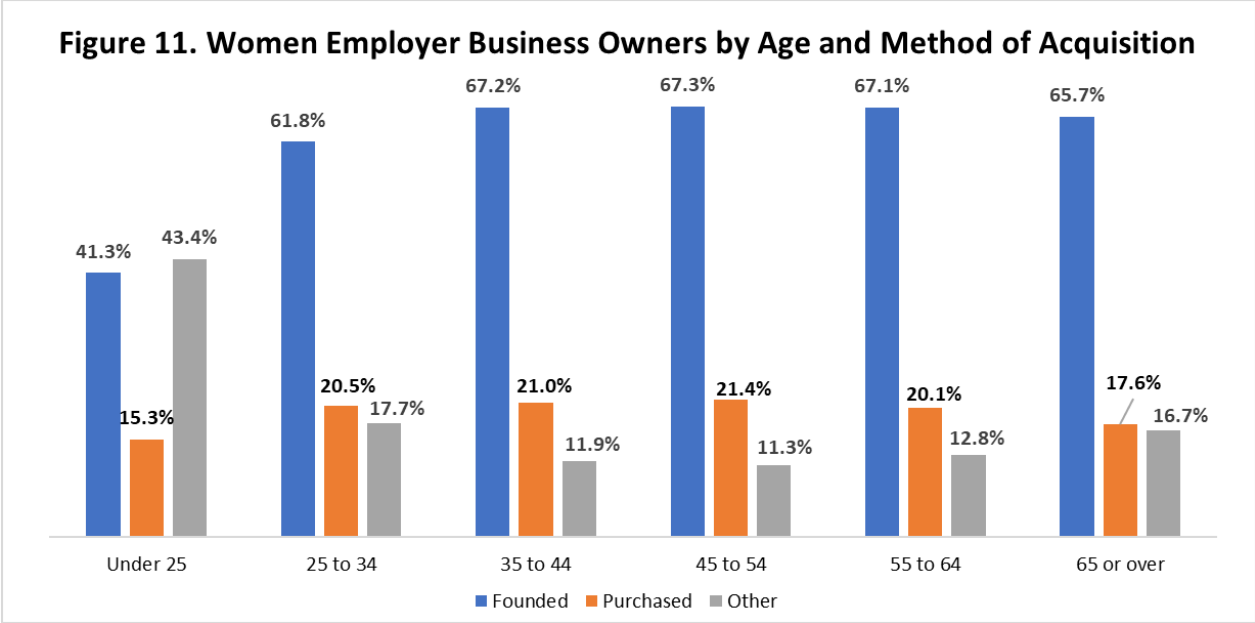
As with statistics on business scaling, women business owners also have key differences with the way they start their businesses. In particular, we explore the reasons for owning the business question by owner’s age. Table 4 provides these reasons by category including, not important, somewhat important, and very important. To highlight a few, 26.6% of owners under 25 years old and 23.5% of those 65 and older reported that balancing work and family is not important while 70.5% of owners aged 35 to 44 and 67.1% of those 25 to 34 responded very important in 2021. These results can be characterized by these age groups’ potential family building. Younger owners also said that their reason to start the business was inability to find a job, with 11.2% of those under 25 stating this reason to be very important versus 4.9% of owners 65 and over. Minor shares of respondents in all age groups reported that inability to find a job was an important reason for starting the business, potentially implying a strong labor market for women. Another interesting reason demonstrating the desire to become an entrepreneur among young and early middle age groups is that of wanting to be her own boss

with 61.1% of owners aged 25 to 34 and 60.9% of those 35 to 44 reporting that this reason was very important. These results compare with 39.9% for owners under 25 and 44.0% of owners 65 and over. The reason to have flexible hours was also very important for the age groups 25 to 34 and 35 to 44 with 64.6% and 65.6% of owners, respectively. Only 25.1% of responding owners under the age of 25 and 26.9% of those 65 and older reported this reason to be very important.

Reasons for Owning the Business	Under 25	25 to 34	35 to 44	45 to 54	55 to 64	65 or over
Balance work and family: Not important	26.6%	10.1%	8.8%	11.3%	15.8%	23.5%
Balance work and family: Somewhat important	28.2%	22.9%	20.7%	24.6%	28.2%	29.7%
Balance work and family: Very important	45.2%	67.1%	70.5%	64.1%	56.0%	46.8%
Best avenue for ideas: Not important	27.2%	12.5%	14.6%	18.3%	22.5%	29.0%
Best avenue for ideas: Somewhat important	34.1%	29.8%	30.6%	31.0%	30.7%	30.0%
Best avenue for ideas: Very important	38.7%	57.6%	54.9%	50.7%	46.9%	41.0%
Carry on family business: Not important	44.6%	61.8%	67.1%	69.2%	69.4%	64.8%
Carry on family business: Somewhat important	26.2%	17.2%	14.9%	14.9%	13.9%	14.4%
Carry on family business: Very important	29.2%	21.0%	18.1%	15.9%	16.7%	20.8%
Couldn't find a job: Not important	70.7%	75.8%	76.9%	79.4%	81.4%	83.5%
Couldn't find a job: Somewhat important	18.1%	16.8%	14.9%	14.1%	12.7%	11.6%
Couldn't find a job: Very important	11.2%	7.4%	8.1%	6.5%	5.9%	4.9%
Flexible hours: Not important	25.1%	10.9%	10.6%	13.7%	18.1%	26.9%
Flexible hours: Somewhat important	27.9%	24.5%	23.8%	26.4%	28.6%	29.3%
Flexible hours: Very important	47.1%	64.6%	65.6%	59.9%	53.3%	43.8%
Friend or family role model: Not important	35.7%	34.2%	41.7%	46.3%	50.9%	55.6%
Friend or family role model: Somewhat important	28.9%	30.1%	28.2%	27.5%	24.9%	23.0%
Friend or family role model: Very important	35.4%	35.7%	30.2%	26.3%	24.3%	21.5%
Greater income: Not important	24.5%	9.3%	9.0%	11.4%	15.5%	23.6%
Greater income: Somewhat important	34.5%	26.8%	26.7%	29.5%	31.5%	31.8%
Greater income: Very important	41.0%	63.9%	64.2%	59.1%	53.0%	44.6%
Help my community: Not important	41.9%	28.0%	31.0%	36.8%	43.2%	47.7%
Help my community: Somewhat important	26.6%	36.2%	35.8%	34.4%	33.0%	30.8%
Help my community: Very important	31.4%	35.8%	33.2%	28.7%	23.7%	21.5%
Start my own business: Not important	34.8%	21.4%	25.7%	29.0%	33.8%	41.8%
Start my own business: Somewhat important	32.6%	32.5%	32.1%	32.1%	31.3%	28.9%
Start my own business: Very important	32.5%	46.0%	42.3%	39.0%	34.9%	29.3%
Wanted to be my own boss: Not important	26.6%	11.8%	11.9%	14.8%	19.0%	27.2%
Wanted to be my own boss: Somewhat important	33.5%	27.2%	27.2%	28.4%	29.0%	28.8%
Wanted to be my own boss: Very important	39.9%	61.1%	60.9%	56.8%	52.0%	44.0%
Work for self: Not important	44.5%	28.1%	31.1%	35.6%	40.1%	45.5%
Work for self: Somewhat important	30.7%	38.9%	38.6%	36.7%	34.3%	30.9%
Work for self: Very important	24.8%	33.0%	30.2%	27.7%	25.6%	23.6%

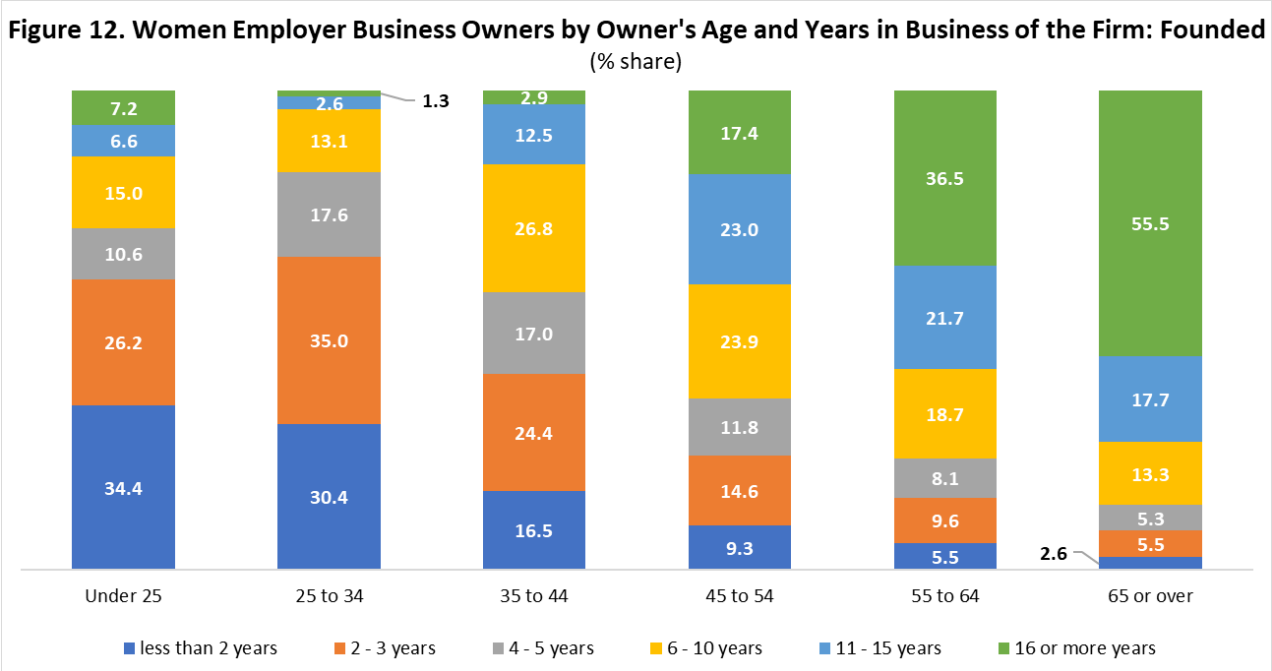
Source: U.S. Census Bureau, 2022 Annual Business Survey, data year 2021.

To further investigate differences in how women start their businesses, we map method of business acquisition by owner's age. Using the 2018, Annual Business Survey (ABS), Figure 11 shows that most women owners founded their businesses in 2017, except for those under the age of 25 where 43.4% acquired their business using other ways. 41.3% of owners in this age group founded their businesses while 15.3% purchased them. It is also important to highlight that 67.3% and 21.4% of owners aged 45 to 54 founded and purchased their business, respectively.



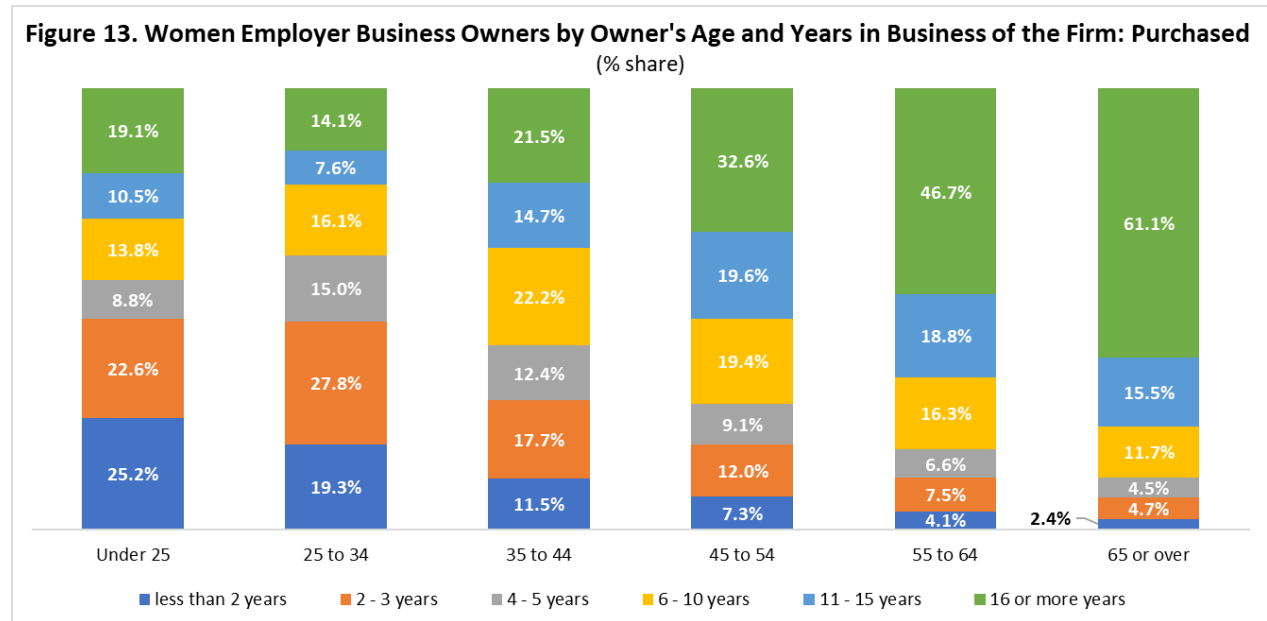
Source: U.S. Census Bureau, 2018 Annual Business Survey, data year 2017.

Among women who founded their businesses, 34.4% of those younger than 25 had businesses that were less than 2 years old and 26.2% has businesses that were between the ages of 2 and 3 as shown in Figure 12. Moreover, 35.0% of founding owners aged 25 to 34 had businesses that were between 2 and 3 years old. Older owners also appear to have founded older businesses. For example, 55.5% of owners aged 65 and over and 36.5% of owners aged 55 to 64 founded businesses that were operating for 16 years or more.



Source: U.S. Census Bureau, 2018 Annual Business Survey, data year 2017.

Shares for women founders were also fairly similar to those of purchasers as shown in Figure 13 where younger (older) businesses were owned by younger (older) owners with slight differences in magnitude. For instance, 27.8% of purchasers aged 25 to 34 owned businesses that were between 2 and 3 years old while 25.2% of owners under the age of 25 had businesses that were less than 2 years old. On the other hand, 61.1% of owners aged 65 and over and 46.7% of those aged 55 to 64 owned businesses that were in operation for 16 or more years. Results for founders and purchasers are relatively in line with those found earlier for all women employer owners.



Source: U.S. Census Bureau, 2018 Annual Business Survey, data year 2017.

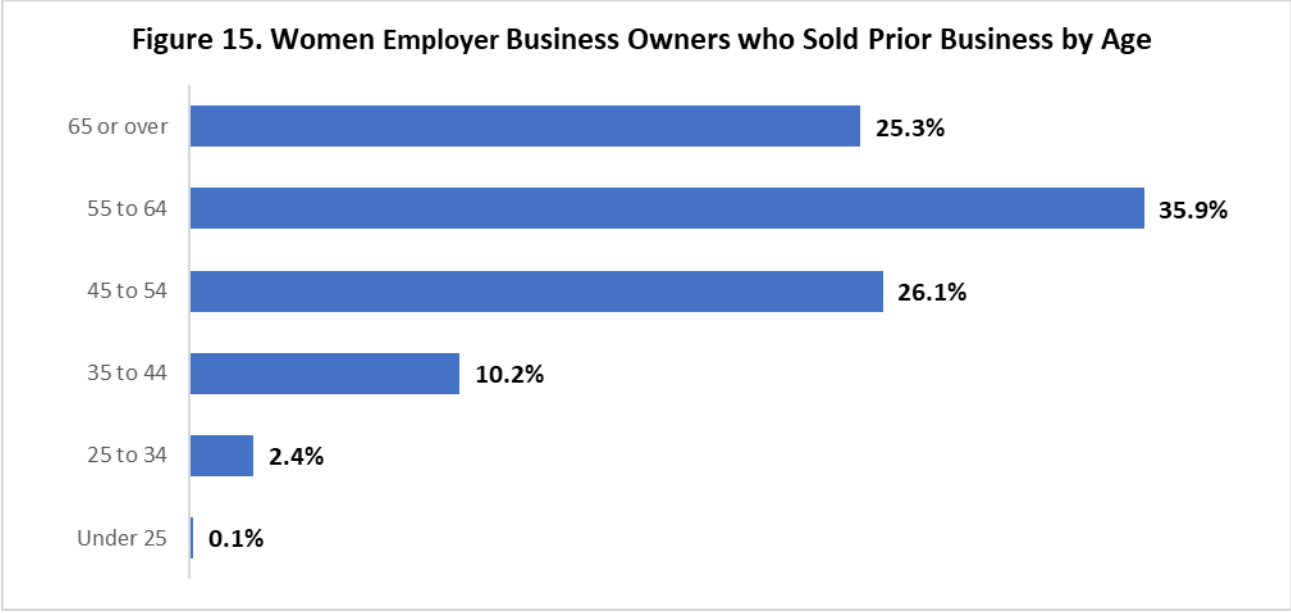
As done with the serial entrepreneurship question, we also examined those that responded to the question related to prior business ownership to see how the way women sell their business change with age. A screenshot of the specific question is shown in Figure 14. The shares of owners that have sold their most recently started business are shown in Figure 15. Of the more than 30,000 women owner respondents who had sold a previous business, 35.9% were aged 55 to 64, followed by 26.1% of those aged 45 to 54, and 25.3% of those 65 and older.

Figure 14. Status of Prior Business Owned

PRIOR BUSINESS OWNERSHIP - CONTINUED

Not including this business, what is the status of the previous business *Owner 1* started most recently?

- Business is still operating and Owner 1 still owns it
- Business is no longer in operation
- Business was purchased by another company
- Business was purchased by another individual
- Other (specify): ↘



Source: U.S. Census Bureau, 2018 Annual Business Survey, data year 2017.

Selected Statistics by Race and Ethnicity

As documented earlier, women owners are generally older, but how does age differ by race and ethnicity? We see similar shares when we look at the historical distribution of owners’ age by race and ethnicity with younger women’s ownership rates trending upward as shown in Figure 16. The growth was spearheaded by Hispanic and Black or African American women under 35 years old. Specifically, the ownership rate of Hispanic women under the age of 35 went from 23.2% to 32.5%, an increase of 9.4 percentage points between 2012 and 2020. In addition, Black or African American women in the same age group grew (+9.2 percentage points) their rate from 25.7% to 34.9%. Meanwhile, owners 55 and over experienced slight declines in ownership, including a drop of 7.5 percentage points for Black or African American, a decrease of 6.1 percentage points for American Indian and Alaska Native, and a 3.8 percentage point reduction for Whites during this time period. Asian women in this age group reverse this deceleration with a gain of 0.3 percentage points in ownership. The reversal was pioneered by those 65 and older with an increase of 2.1 percentage points in ownership between 2012 and 2020.

Figure 16. Women Business Ownership by Age and Race and Ethnicity



Sources: U.S. Census Bureau, 2012 Survey of Business Owners, 2021 Annual Business Survey, data year 2020, and 2020 Nonemployer Establishment Statistics-Demographics (NES-D).

Striking differences are also observed when we look at industry by race and ethnicity of age groups, although findings that older owners are more involved in capital-intensive sectors than younger ones still hold. For instance, employer business owners 55 years or older are more involved in industries such as Manufacturing, Wholesale Trade, Finance and insurance, Real Estate and Rental Leasing, and Administrative and Support and Waste Management and Remediation Services. Conversely, Younger employer owners are concentrated in industries that require less capital to start such as Arts, Entertainment, and Recreation; Retail Trade; Information; and Other Services (except public administration). A few exceptions worth noting are Asian owners younger than 35 who made up a good chunk (40.0%) of all Asian owners in the Mining, Quarrying, and Oil and Gas Extraction, a capital-intensive industry in 2020. Similarly, 40.0% and 16.1% of Hispanic women operating in the Utilities and Construction industries were

under 35, both requiring a high amount of capital to run. Finally, Native Hawaiian & Other Pacific Islander (NHOPI) owners in the same age group also represented high shares, 36.8% and 22.2% among all NHOPI women that own businesses in the Construction and Manufacturing industries.

American Indian & Alaska Native			
Oldest owners (55 and over)	Industry share	Youngest owners (under 35)	Industry share
Agriculture, forestry, fishing and hunting	95.9%	Wholesale trade	16.9%
Finance and insurance	58.7%	Retail trade	13.0%
Retail trade	50.3%	Professional, scientific, and technical services	11.3%
Real estate and rental and leasing	47.5%	Manufacturing	11.2%
Transportation and warehousing	46.1%	Health care and social assistance	10.7%
Asian			
Oldest owners (55 and over)	Industry share	Youngest owners (under 35)	Industry share
Manufacturing	51.6%	Mining, quarrying, and oil and gas extraction	40.0%
Wholesale trade	49.0%	Arts, entertainment, and recreation	25.5%
Administrative and support and waste management and remediation services	47.4%	Information	15.3%
Real estate and rental and leasing	44.4%	Transportation and warehousing	10.7%
Finance and insurance	40.9%	Accommodation and food services	10.6%
Black or African American			
Oldest owners (55 and over)	Industry share	Youngest owners (under 35)	Industry share
Industries not classified	63.6%	Information	46.2%
Manufacturing	63.1%	Other services (except public administration)	12.2%
Wholesale trade	55.9%	Retail trade	11.8%
Real estate and rental and leasing	53.9%	Arts, entertainment, and recreation	11.8%
Administrative and support and waste management and remediation services	49.3%	Accommodation and food services	11.8%
Hispanic			
Oldest owners (55 and over)	Industry share	Youngest owners (under 35)	Industry share
Finance and insurance	48.4%	Utilities	40.0%
Manufacturing	44.4%	Other services (except public administration)	36.0%
Wholesale trade	42.8%	Agriculture, forestry, fishing and hunting	25.0%
Real estate and rental and leasing	41.6%	Arts, entertainment, and recreation	18.2%
Administrative and support and waste management and remediation services	40.6%	Construction	16.1%
Native Hawaiian & Other Pacific Islander			
Oldest owners (55 and over)	Industry share	Youngest owners (under 35)	Industry share
Wholesale trade	95.5%	Agriculture, forestry, fishing and hunting	100.0%
Real estate and rental and leasing	68.1%	Educational services	41.5%
Administrative and support and waste management and remediation services	67.7%	Manufacturing	36.8%
Health care and social assistance	55.0%	Construction	22.2%
Finance and insurance	50.0%	Retail trade	20.8%
White			
Oldest owners (55 and over)	Industry share	Youngest owners (under 35)	Industry share
Mining, quarrying, and oil and gas extraction	73.5%	Arts, entertainment, and recreation	11.5%
Wholesale trade	64.7%	Information	8.7%
Management of companies and enterprises	64.3%	Other services (except public administration)	7.6%
Manufacturing	62.9%	Educational services	7.5%
Industries not classified	62.1%	Agriculture, forestry, fishing and hunting	7.4%

Source: U.S. Census Bureau, 2021 Annual Business Survey, data year 2020.

Just like employer business owners, nonemployer business ownership by industry sector and race and ethnicity drew similar conclusions, more (less) capital—older (younger) owner, except for a few cases. Older nonemployer owners (aged 55 and over) are mainly concentrated in the Mining, Quarrying, and Oil and Gas Extraction; Real Estate and Rental and Leasing; Utilities; Finance and Insurance; and the Health Care and Social Assistance industries. As we observed with employer owners younger than 35, nonemployer owners are mostly distributed in non-capital-intensive industries such as Arts, Entertainment, and Recreation; Agriculture, Forestry, Fishing, and Hunting; Information; and Other Services (except public administration). The few

exceptions among women owners of this age group, include Native Hawaiian & Other Pacific Islander and Hispanics who accounted for 45.4% and 44.5% of the Transportation and Warehousing industry within race and ethnicity group, respectively in 2020. Moreover, Hispanic, American Indian & Alaska Native, and Asian women owners made up 40.9%, 36.2%, and 29.5% of Construction industry owners within race and ethnicity group, respectively.

Table 6. Top 5 Industries by Race and Ethnicity: Nonemployer Businesses			
American Indian & Alaska Native			
Oldest owners (55 and over)	Industry share	Youngest owners (under 35)	Industry share
Mining, quarrying, and oil and gas extraction	57.8%	Transportation and warehousing	44.5%
Real estate and rental and leasing	42.4%	Arts, entertainment, and recreation	40.5%
Utilities	39.4%	Agriculture, forestry, fishing and hunting	39.1%
Finance and insurance	34.6%	Other services (except public administration)	37.0%
Manufacturing	30.6%	Construction	36.2%
Asian			
Oldest owners (55 and over)	Industry share	Youngest owners (under 35)	Industry share
Mining, quarrying, and oil and gas extraction	45.1%	Transportation and warehousing	43.2%
Real estate and rental and leasing	38.6%	Arts, entertainment, and recreation	42.6%
Agriculture, forestry, fishing and hunting	33.3%	Information	39.3%
Health care and social assistance	32.8%	Educational services	31.8%
Finance and insurance	31.0%	Construction	29.5%
Black or African American			
Oldest owners (55 and over)	Industry share	Youngest owners (under 35)	Industry share
Mining, quarrying, and oil and gas extraction	42.2%	Other services (except public administration)	47.8%
Real estate and rental and leasing	33.8%	Arts, entertainment, and recreation	45.7%
Finance and insurance	29.1%	Transportation and warehousing	43.0%
Utilities	26.6%	Information	38.7%
Health care and social assistance	23.0%	Agriculture, forestry, fishing and hunting	35.7%
Hispanic			
Oldest owners (55 and over)	Industry share	Youngest owners (under 35)	Industry share
Real estate and rental and leasing	33.3%	Arts, entertainment, and recreation	50.4%
Mining, quarrying, and oil and gas extraction	30.8%	Information	44.9%
Health care and social assistance	25.7%	Transportation and warehousing	44.2%
Finance and insurance	22.3%	Construction	40.9%
Wholesale trade	21.8%	Agriculture, forestry, fishing and hunting	40.6%
Native Hawaiian & Other Pacific Islander			
Oldest owners (55 and over)	Industry share	Youngest owners (under 35)	Industry share
Mining, quarrying, and oil and gas extraction	64.7%	Arts, entertainment, and recreation	48.4%
Real estate and rental and leasing	37.9%	Transportation and warehousing	45.4%
Utilities	29.4%	Information	43.5%
Wholesale trade	27.6%	Agriculture, forestry, fishing and hunting	42.8%
Health care and social assistance	26.8%	Other services (except public administration)	37.5%
White			
Oldest owners (55 and over)	Industry share	Youngest owners (under 35)	Industry share
Mining, quarrying, and oil and gas extraction	72.0%	Transportation and warehousing	40.4%
Real estate and rental and leasing	54.5%	Arts, entertainment, and recreation	35.1%
Utilities	47.7%	Agriculture, forestry, fishing and hunting	30.5%
Finance and insurance	47.6%	Information	30.1%
Manufacturing	39.4%	Construction	29.9%

Source: U.S. Census Bureau, 2020 Nonemployer Establishment Statistics-Demographics (NES-D).

Conclusion

Due to their growth, increasing performance, and significant contributions to the United States economy, women-owned businesses have spurred the interest of policymakers, researchers, and advocacy groups. Using various data products from the Census Bureau's Business Demographics Program, this study examines how women business ownership changes over time by age. Results show that women owners differ across business and owner characteristics

when we zero in on age. We find that young owners experienced growth in ownership between 2012 and 2020 and that younger businesses were mostly owned by women under the age of 35 in 2021. Furthermore, we noticed that among women aged 45 to 54 and those aged 55 to 64 ownership rates declined 5.5% and 4.8% between 2012 and 2020, implying an acceleration in the drop out of entrepreneurship for mid to late career age groups. These findings emphasize that although existing entrepreneurial theories have shown that older owners tend to have more resources that correlate with age such as human capital, financial capital, social capital, young owners are still making the decision to start businesses.

We also find that older owners (55 and over) operate most businesses in capital-intensive industries, however there are few exceptions where younger women own a notable share of these businesses. For example, findings include Asians under 35 years old who accounted for 40.0% of employer Mining, Quarrying, and Oil and Gas Extraction industry Asian owners in 2020. In addition, Hispanics in the same age group made up 40.0% of Hispanic employer business owners that operated in the Utilities industry in the same year. Similar results were also obtained for nonemployer businesses where Native Hawaiian & Other Pacific Islander (NHOPI) and Hispanics younger than 35 accounted for 45.4% and 44.5% of the Transportation and Warehousing industry NHOPI and Hispanic owners, respectively. We also find that owners under the age of 35 made up a high share (28.1%) of nonemployer sole proprietorships in 2020, implying ease of entry into this type of business.

Additionally, we looked into reasons for owning a business and discovered that age groups often. Specifically, 70.5% of early middle age (35-44) owners and 67.1% of those aged 25 to 34 revealed that balancing work and family was very important. Younger owners also reported that one of the reasons they started their businesses was inability to find a job with 11.2% of those under the age of 25 years indicating this reason to be very important vs. 4.9% of owners 65 and over. Percentage shares of women reporting inability to find a job as a very important reason for starting their business were small in magnitude, potentially implying strength in female labor force participation.

Furthermore, we find that older owners had more prior businesses and had higher rates of selling their most recently started businesses. Specifically, 27.2% of owners aged 55 to 64 and 27.6% of those aged 65 and over had at least one prior business in 2017. Rates were 6.2% for owners under 25 and 16.0% for those aged 25 to 34. Among those who have sold their most recently started business, 35.9% were aged 55 to 64, 26.1% were aged 45 to 54, while 0.1% were under 25 and 10.2% were aged 25 to 34.

References

- American Express (2023). The 2019 State of Women Businesses. <https://ventureneer.com/wp-content/uploads/2019/10/Final-2019-state-of-women-owned-businesses-report.pdf>.
- Azoulay, P., Jones, B. F., Kim, J. D., & Miranda, J. (2020). Age and high-growth entrepreneurship. *American Economic Review: Insights*, 2(1), 65-82.
- Backman, M., & Karlsson, C. (2020). Age of managers and employees—Firm survival. *The Journal of the Economics of Ageing*, 15, 100215.
- Blank, R. M. (2010). Women-owned businesses in the 21st century. US Department of Commerce Economics and Statistics Administration. White House Council on Women and Girls. <https://www.commerce.gov/sites/default/files/migrated/reports/women-owned-businesses.pdf>.
- Bercovitz, J., & Mitchell, W. (2007). When is more better? The impact of business scale and scope on long-term business survival, while controlling for profitability. *Strategic management journal*, 28(1), 61-79.
- Mueller, P. (2006). Entrepreneurship in the region: Breeding ground for nascent entrepreneurs?. *Small Business Economics*, 27, 41-58.
- Robb, A. & Diagne, A. F. (Forthcoming). Startup Dynamics: Transitioning from Nonemployer Firms to Employer Firms, Survival, and Job Creation.
- Shaw, K., & Sørensen, A. (2022). Coming of age: Watching young entrepreneurs become successful. *Labour Economics*, 77, 102033.
- U. S. Census Bureau, 2021 Annual Business Survey, data year 2020 and 2020 Nonemployer Statistics by Demographics (NES-D). <https://www.census.gov/programs-surveys/abs/data.html>.