Final Report

Millennial Women Entrepreneurs: Opportunities and Challenges

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Executive Summary

Millennial women, those born between 1982 and 2000, represent the future of entrepreneurship in America. Prior empirical research raises questions about whether millennials are forming or starting businesses at the same rate as prior generations. While existing data focus primarily on business ownership and self-employment as a barometer for entrepreneurship, there is a dearth of information providing the millennial perspective. This includes understanding the different motivations, challenges, and issues facing millennial women when addressing entrepreneurship.

The purpose of this research is to provide robust qualitative and quantitative data that helps further the discussion of entrepreneurship among millennial women. This includes providing the millennial perspective on the differences between entrepreneurial attitudes, engaging in entrepreneurship, and owning or starting a business. One key differentiator of the millennial generation from prior generations is the amount of student debt held by potential millennial entrepreneurs. As a result, the research focuses on the role that student debt plays in the entrepreneurial decisions of millennial women.

The research design uses quantitative data analysis, coupled with a series of structured focus groups, to explore multiple facets of entrepreneurship among millennial women. The first stage of the research process involves analysis of empirical data to help provide characteristics of millennial women entrepreneurs. Key findings drawn from analysis of Census Bureau data¹ include:

- Millennial women are less likely to be entrepreneurs than millennial men.
- Millennial women exhibit greater diversity along racial and ethnic lines than entrepreneurial women of prior generations.
- Among millennial women, entrepreneurs are significantly more likely to have children, regardless of age.

The data analysis captures summary characteristics drawn from Census Bureau survey data. However, the existing data do not address the “how” and “why” questions related to entrepreneurship among millennial women. To provide additional context, the research design employed structured focus groups to cultivate robust qualitative data that lays the foundation for exploring the entrepreneurial motivations of millennial women.

To maximize the quality of focus group results and the perspectives of millennial women entrepreneurs, the research design focused on millennials participating in technology-based entrepreneurship. This facilitates a focus on not only a predominantly male-dominated industry sector, but also recognizes the potential higher economic impact associated with technology businesses. Furthermore, the focus group research

¹ Data are from the 2010-2014 American Community Survey and 2012 Survey of Business Owners and Self-Employed Persons.
also addresses one of the more pressing and important considerations for millennial entrepreneurs: the role of student debt.

The focus groups captured qualitative data from three distinct groups of millennial entrepreneurs: (1) millennial women with student debt; (2) millennial women without student debt; and (3) millennial men. Conducted in three cities (Boston, Denver and Los Angeles), the focus groups employed the same structured organization to maximize consistency of the research design. This permitted comparison across focus groups while identifying thematic content to help explore millennial perspectives on entrepreneurial motivations and challenges. Key findings from the focus group analysis include:

- Millennial entrepreneurs, regardless of gender, have different perceptions of “entrepreneurial” and “entrepreneur” than what existing empirical data analysis captures. Specifically, focus groups respondents discussed challenges in defining and differentiating entrepreneurship versus entrepreneurial attitudes.
- Financial and economic circumstances influenced millennial perceptions about entrepreneurship, where millennial women discussed, to a greater extent than millennial men, the negative influence of the Great Recession\(^2\) on engaging in entrepreneurship. However, these women also discussed the role of the Great Recession in encouraging independent earning power and self-determination.
- Millennial women and men that viewed debt, including student debt, in a negative light indicated they would not start a business while still paying student debt, as it decreased financial flexibility when balancing debt versus salary.
- Women participants with student debt were more likely than men participants to express concerns related to student debt and a desire to pay off student debt prior to starting their business.
- The “side hustle” was a topic of discussion amongst the focus groups and was particularly prevalent among those with student debt. While not the primary focus of the research, it opens discussion about what activity qualifies as “entrepreneurial” versus “entrepreneurship” for millennials.
- Both women and men noted that gender differences in access to capital (i.e., higher barriers for women) existed and this was particularly true when it came to more informal networks as a means through which funding and opportunities were facilitated.

The research findings act as a springboard to investigate potential policies designed to assist millennial women entrepreneurs, including aspects of the role that student debt plays in entrepreneurial decision-making. In addition, the findings provide an opportunity to explore future areas of research, which will help develop the millennial perspective on entrepreneurship among women in the years to come.

\(^2\) The Great Recession refers to the “contraction in global economic activity that occurred in 2008 and 2009, in the wake of the collapse of several large financial institutions.”
1. Introduction

The U.S. Census Bureau defines millennials as individuals born between 1982 and 2000. 2015 Census Bureau data indicate that there are 83.1 million millennials in the U.S.3 By the year 2025, millennials will comprise 75 percent of the American workforce,4 and many will become entrepreneurs. In 2015, the Ewing Marion Kauffman Foundation released the results of its survey on millennial entrepreneurs, highlighting the potential for millennials to be the “lost” generation of American entrepreneurs, as the rate of new entrepreneurship among those aged 20 to 34 fell from 35 percent in 1996 to 23 percent in 2013.5 Research by the U.S. Small Business Administration (SBA) Office of Advocacy corroborates these results, indicating that the young people of prior generations participated in entrepreneurship at a higher rate than today’s young people, millennials.6 While informative, neither the Kauffman report and survey nor the SBA research findings explore why the observed phenomenon occurs. Instead, past studies focus on what is happening among millennial entrepreneurs, particularly the high incidence of student debt among millennials compared to prior generations, both in the number of millennials with student debt as well as the amount of student debt held. Focusing specifically on technology-based firms,7 this research on millennial women entrepreneurs represents an effort to understand this population’s challenges, motivations, and perceptions of entrepreneurship, with a focus on student debt and how these may contribute to the documented change in the data-based entrepreneurship rate.

This report builds upon the research report released by the NWBC in June 2017 which should be viewed as a companion document.8 The initial research findings utilized the 2010-2014 American Community Survey (ACS) and the 2012 Survey of Business Owners and Self-Employed Persons (SBO) and serve as a foundation for the development of the topics examined in this research.9 There is no publicly available, up

7 The rationale for focusing on technology-based firms is discussed in Chapter 3.
8 Key findings and important background information are included in Chapter 2 of this report.
9 The American Community Survey (ACS) is an annual survey of the American workforce sponsored by the United States Census Bureau. The ACS is nationally representative and offers reliable and generalizable data on labor force dynamics, including the prevalence of business ownership and self-employment activity. The ACS results summarized in this section utilize the Public Use Microdata
to date dataset that captures entrepreneurial motivations and perceptions of student debt and its effect on business formation and operation. However, the knowledge obtained via the ACS and SBO quantitative analysis provides a profile underlying this stage of the research. Where this report contains qualitative findings derived from focus groups of millennial entrepreneurs, the companion report utilizes available empirical data to draw out key trends. Together, the reports provide a mixed-methods,\textsuperscript{10} rigorous account of millennial entrepreneurship from a gendered perspective, profiling the newest generation of entrepreneurs and learning about their experiences first-hand.

This report is organized as follows: Chapter 2 summarizes the companion research report, including an introduction into why research into millennial entrepreneurs is germane. Chapter 3 discusses the importance of technology-based firms to the U.S. economy as well as the rationale for focusing on technology-based millennial entrepreneurs for the focus groups. Chapter 4 details the study design, recruitment, and data analysis procedures undertaken. Chapter 5 presents the focus group data. Finally, Chapter 6 discusses the conclusions of the research and posits next steps and policy implications.

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\textsuperscript{10}This methodology is appropriate given the need for representative data (quantitative survey) as well as causal information (qualitative data). Together, the methods present a more complete picture than either method on a standalone basis.
2. Background and Prior Research

This chapter provides a review of existing literature and background on millennial entrepreneurship presented in two themes. This chapter also includes a summary of the findings from the companion report, which presented a quantitative profile of millennial women entrepreneurs.

**Theme 1: The millennial entrepreneur media message differs from the data.**

According to Britt Hysen of *MiLLENNiAL* magazine, “60 percent of Millennials consider themselves entrepreneurs, and 90 percent recognize entrepreneurship as a mentality.”11 While today’s young people lead the country in entrepreneurship as a mentality, they are not leaders in entrepreneurship as an occupation and activity.12 In actuality, while 66 percent of millennials surveyed by Bentley University want to start a business,13 less than 5 percent of American millennials are currently running a business.14 Furthermore, they start fewer businesses than older generations did at the same age.15 Since the 1980s, the percentage of individuals under age 30 who own a business has declined by 65 percent and, according to Bentley University’s analysis of Federal Reserve data, has reached an all-time low.16

In 2015 the Kauffman Foundation released the results of its survey on millennial entrepreneurs, highlighting the potential for millennials to be the “lost” generation of American entrepreneurs.17 According to the report, the median net worth for households aged under 35 declined 43 percent from 1995 to 2013. Coupled with rising levels of student debt and perpetual underemployment, the rate of new entrepreneurship among those aged 20 to 34 fell from 35 percent in 1996 to 23 percent in 2013. Research by the U.S. Small Business Administration (SBA) Office of Advocacy corroborates these results, indicating that the young people of prior generations participated in entrepreneurship as defined by the data at a higher rate than today’s young people, millennials.18

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14 American Community Survey 2010-2014 PUMS, U.S. Census Bureau, PQC, Inc. analysis
15 Bentley University, *op. cit.*
16 Bentley University, *op. cit.*
18 Wilmoth (2016), *op. cit.*
Research by Dr. Daniel Wilmoth of the SBA Office of Advocacy notes that millennial entrepreneurship is expected to “remain relatively low for decades.”\textsuperscript{19} The research utilizes the U.S. Current Population Survey (CPS) to examine entrepreneurship rates for similarly aged individuals across generations. As such, it compares Baby Boomers at age 30 to Millennials at age 30. The author notes that age is positively correlated with entrepreneurship in general, but that growth in entrepreneurship with age among millennials is slower than that of prior generations. When examining the most recent primary employment activity data, less than 4 percent of 30-year-old millennials reported self-employment compared to 5.5 percent of Generation X and 6.7 percent of Baby Boomers at that same age.\textsuperscript{20} The change in entrepreneurship by today’s young adults deserves consideration given the importance of new businesses to job creation and economic growth as new establishments create nearly 20 percent of jobs in the U.S.\textsuperscript{21}

**Theme 2: Student loan debt and the Great Recession\textsuperscript{22} may influence the risk tolerance and business formation rates of millennials.**

Multiple reasons exist for the change in young adult entrepreneurship in the past twenty years. First, today’s young women face a different economic and social climate than prior generations. In 2016, Young Invincibles and Small Business Majority released the results of a statistically representative survey of millennials and found that the largest barriers to entrepreneurship were immense levels of student debt and the lack of employer-sponsored retirement savings programs.\textsuperscript{23} The number of students borrowing for educational purposes rose 89 percent between 2004 and 2014, while average debt balances grew by 77 percent.\textsuperscript{24} Entrepreneurship typically does not offer financial stability at the outset and while some ventures result in high returns to the entrepreneur, approximately 50 percent of businesses fail before reaching five years in business.\textsuperscript{25} High levels of student debt coupled with the reality of the decline in entrepreneurship among young people, begs the question: Are millennial women

\textsuperscript{19} Ibid.  
\textsuperscript{20} Ibid. Generation X includes individuals born between the early 1960s and the mid-1970s. The Baby Boomer generation includes individuals born post World War II to the early 1960s.  
\textsuperscript{22} The Great Recession refers to the “contraction in global economic activity that occurred in 2008 and 2009, in the wake of the collapse of several large financial institutions.” For more information, please see http://kwhs.wharton.upenn.edu/term/great-recession/  
forgoing entrepreneurship because they believe that traditional employment provides a more reliable income source to pay down their debts?

Financial risk is a significant consideration when starting and running a small business. In June 2016, Wells Fargo published the results of its survey of Millennial Small Business Owners. The report focuses on the sources of capital used by millennials to start and grow their businesses and frames financial risk around the use of debt and credit to finance a business, which may or may not succeed. Millennial-owned businesses use a larger portion of personal capital than did prior generations. In addition, the effect of heavy student debt is evident in the responses provided, particularly for millennial women. Over 75 percent of both men and women strongly or somewhat agree with the statement “I am extremely wary of taking on business debt,” consistent with existing personal debts and coming of age during the Great Recession. This result has important ramifications for millennial women and the future of their endeavors and indicates that millennial women may face compounded access to capital challenges.

In July 2015, a research team from the Federal Reserve Bank of Philadelphia released a study detailing the impact of student loan debt on small business formation rates. While not focused directly on women, the report indicates that there is a negative and statistically significant relationship between student debt and new businesses. The authors relate this finding to the difficulty of individuals with student loan debt to access capital, particularly debt, for their businesses. The research focused on businesses with fewer than 4 employees and used County Business Patterns data and data from the Federal Reserve Bank of New York Consumer Credit Panel/Equifax. The authors found that in 2000, student loans comprised only 2.9 percent of total consumer debt. By 2012, that figure reached 10 percent. Given the potential influence of student debt on career decisions, present student debt levels restrict capital access and decrease risk tolerance due to large student loan payments, which require a steady income source.

A nationally representative survey conducted by Gallup and Purdue University indicates that of the 63 percent of millennials who graduated with student loan debt, 19

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26 Millennial Small Business Owner Study. Wells Fargo. June 2016. [https://wellsfargoworks.com/File/Index/-f3XT3jOf0uBSrf5cXUBkA](https://wellsfargoworks.com/File/Index/-f3XT3jOf0uBSrf5cXUBkA)

27 Personal capital includes capital sources such as personal savings, personal credit cards, and personal loans. This contrasts external capital, such as business loans, government guaranteed loans, venture capital, and angel investments.


percent have delayed their entrepreneurial endeavors due to their debt. The delay percentage increases to 25 percent for millennials with more than $25,000 in student loan debt. According to Brandon Busteed of Gallup, given the number of graduates, student debt is estimated to have prevented over 2 million new businesses being formed between 2006 and 2015. Increased programs to assist new graduates with managing their student loan debt are necessary to foster entrepreneurship among the next generation.

Highlighted Results – Companion Report

The research in the companion report developed a profile of millennial women entrepreneurs using the 2010-2014 American Community Survey (ACS) and the 2012 Survey of Business Owners and Self-Employed Persons (SBO). The results present the demographic, social, and financial characteristics of millennial women, identifying those who are already entrepreneurs and providing comparisons to men and women of prior generations. Key findings include:

- **Millennial women are less likely than millennial men to be entrepreneurs.** Only 3.8 percent of millennial women, compared to 5.0 percent of millennial men, indicate entrepreneurship as their primary occupation.

- **Millennial women are more racially and ethnically diverse than entrepreneurial women of prior generations.** Specifically, the percentage of millennial minority entrepreneurs is moving closer to parity with the percentage of millennial minorities in the population, indicating a move towards racial and ethnic parity in business ownership.

- **Among millennial women, entrepreneurs are significantly more likely to have children, regardless of age.** The trend that entrepreneurs are more likely to have children compared to non-entrepreneurs exists across all generations.

- **Across industries, millennial women entrepreneurs earn less than their male counterparts.** While certain industries demonstrate continued concentration of women business owners (such as NAICS 62, Health Care and Social Assistance), women’s entrepreneurial earnings within these industries still trail those of millennial men operating in the same industry.

Developing an understanding of who millennial women entrepreneurs are, what motivates them, and what challenges they face is germane to developing policies and regulatory changes that support business growth. The above research sets a strong foundation for investigation of the influence of student debt on technology-based

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entrepreneurship as well as exploring the potentially evolving definition of entrepreneurship among millennials.
3. Focus on High-Technology Firms

For this current data collection, participants were restricted to only those operating in technology-based industries. The research recognizes that technology-based entrepreneurship is a male-dominated field. However, women entrepreneurs do participate in the industry and millennial women are the most likely generation of women to hold a degree in a science, technology, engineering, or mathematics (STEM) field. Further, technology-based firms operate differently within the economy and provide “outsized” gains in income, employment, and productivity growth vis-à-vis non-technology businesses. Since 2004, high-tech sector employment growth has outpaced non-high-tech private sector growth three to one. Despite overall high unemployment rates in the wake of the recent Great Recession and recovery period, high-tech unemployment has been below the national average. The high-tech sector employment rate was approximately 6 percent in 2011 compared to the total unemployment rate of 9.5 percent that same year. In addition, the jobs that technology-based businesses create result in a multiplier effect in the local economies in which they operate, creating 4.3 additional jobs in the goods/services economy in the long-run. This compares to manufacturing at 1.4, which is still considered a strong value. Finally, the cutting-edge technologies developed and marketed by technology-based firms contribute to sustained economic growth, and employment to the year 2020 in technology-based businesses is projected to significantly outpace the national average, indicating a growing sector.

A report by the Kauffman Foundation emphasizes the importance of personal financing for technology-based ventures in the U.S. Because many technology-based businesses are considered riskier than traditional businesses, it can be more difficult for entrepreneurs to obtain the external debt or equity capital required to launch and grow their businesses. While access to external capital for technology-based firms, including debt, is a challenge for all entrepreneurs, the challenge is magnified for women, and may be magnified for individuals with substantial student debt. In a 2008 study, Mayer analyzed women-owned technology-based businesses in Silicon Valley, Boston, Washington, D.C., and Portland, Oregon. She noted that the women-owned firms were smaller in terms of revenues and employees and that structural barriers prevented women from entering capital intensive high-technology sectors.

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31 For more information, please see https://www.usnews.com/news/articles/2015/01/27/more-students-earning-degrees-in-stem-fields-report-shows
32 Haltiwanger et al. (2014), op. cit.
34 Ibid.
35 Haltiwanger et al. (2014), op. cit.
Within technology-based industries, there are differences in how men and women obtain capital for startup and ongoing operations, including the use and importance of externally sourced debt.\textsuperscript{38} The Kauffman Firm Survey (KFS) is a reliable and representative dataset used to study entrepreneurial dynamics and funding. The KFS data show that debt is a significant source of capital for startup and ongoing capital for technology-based firms.\textsuperscript{39} For women, outsider debt accounted for 41.1 percent of total startup capital and 35.5 percent of new capital injections. Given the debt situation discussed above for millennials, it begs the question: \textit{how does student debt influence the ability of millennials to start their businesses and obtain necessary capital? To what extent is this issue magnified for women, who traditionally obtain less capital than their male counterparts and face a higher average student loan burden relative to their male peers?}

The focus on high-tech and high-growth entrepreneurs personifies the belief that these entrepreneurs drive productivity and living standards in the U.S.\textsuperscript{40} Technology-based startups disseminate new innovations and increase competition in the economy.\textsuperscript{41} Different from low-growth businesses, high-growth and technology firms typically place a high priority on revenues, profits, and increasing market shares, and require “dramatically different” financing strategies than their non-technology counterparts.\textsuperscript{42} Technology-based firms can require more capital than non-technology firms and energy, biological, or chemical ventures may be even more capital intensive.\textsuperscript{43} Debt can be an important component to starting and growing a technology-based business and often requires personal credit or guarantees at the outset. Millennials, burdened by student debt, may lack the capacity to effectively finance their firms. This research provides additional information related to understanding the challenges related to student debt and their influence on the founding and growth of technology-based firms.

\textsuperscript{38} External debt includes bank loans, for example. This directly contrasts personal debt, such as a second mortgage or family loans.
\textsuperscript{39} Ewing Manion Kauffman Foundation (2009), \textit{op. cit.}
\textsuperscript{41} Shabangu, Sanile. \textit{The Importance of Startup Companies for Economic Development}. LinkedIn. November 22, 2014. \url{https://www.linkedin.com/pulse/20141122084428-77551011-the-importance-of-startup-companies-for-economic-development}.
\textsuperscript{43} For information on how technology and traditional startups finance their founding, please see \url{https://www.forbes.com/sites/jeffkauflin/2016/08/01/two-paths-to-financing-a-startup-how-a-tech-entrepreneur-and-a-franchisee-funded-their-businesses/#7d5512ed3278} . Technology-based firms may require substantial initial and ongoing investment, please see \url{http://www.tandemlaunch.com/raising-capital-for-technology-ventures/}.
4. Data Collection and Analysis

Research Questions

The focus group questionnaires and discussions were designed to explore the following overarching research questions to augment the quantitative components\(^{44}\) of the research study with a specific interest on potential gender differences:\(^{45}\)

- How does student debt influence the decision-making process of millennial entrepreneurs in technology-based industries?
- Do technology-based millennial entrepreneurs with student debt alter their business plans and growth strategies to accommodate student debt repayment?
- Is student debt a deterrent or a motivator for technology-based millennial entrepreneurs?
- Do millennials believe that the financial risk of starting a business outweighs the steady income from a traditional job?
- Do student loan payments prevent millennials from starting businesses?

Selection of Focus Groups

There is a lack of robust and contemporaneous quantitative data on millennial women entrepreneurs, particularly their motivations and the role of student debt in entrepreneurial decision making. As a result, a qualitative research design is an effective methodology to address the research questions outlined above.\(^{46}\) Focus groups answer questions as to why people behave as they do. To collect data relevant to the research questions, focus groups were conducted directly with millennial entrepreneurs to understand the challenges they face during the startup phase, what motivated their decision to pursue entrepreneurship, future plans related to business operations and/or growth, and their ongoing challenges related to their business, surrounding a central theme of student debt.\(^{47}\)

Women are the focus of this study. However, in order to answer the research questions and ascertain any women-specific findings, the data collection also included


\(^{45}\) These research questions refer specifically to technology-based millennials and do not refer to the overall millennial population.

\(^{46}\) For more information on the applicability of focus groups, please see Yin (2009) and Creswell (2017).

\(^{47}\) The focus groups were approved by the Office of Management and Budget. For more information, please see Appendix C.
millennial men entrepreneurs. This permitted the exploration of gender differences in responses or results from the focus group interviews.

**Recruitment Strategies**

The study participants were current entrepreneurs located in the cities listed below and identified through public articles, local or national media outlets, LinkedIn and Crunchbase, nomination, and affinity groups. To produce meaningful results, more than one focus group on a particular topic was required. This allowed the research team to reach the critical “saturation point” in a series of focus groups, the point at which patterns were discernable in the coding of data and notes. Three focus groups for each participant category outlined below were conducted, consistent with professional and research standards for focus groups. Participants were recruited via email.

There are some inherent limitations with the use of focus groups as a research and data collection methodology. Specifically, focus groups such as these do not capture broad or wholly representative data. Rather, as indicated above, the use of focus groups here builds upon the demographic and quantitative data already compiled in this research study. The results contained herein are not representative of all millennial entrepreneurs and instead reflect the views and experiences of the participants. In particular, scholars such as Madriz note that focus groups can provide new avenues for exploration, helping to hone and craft further hypotheses, and suggest additional areas of inquiry as part of an overall project.

**Qualitative Data Analysis Process**

Focus groups have entered the repertoire of techniques for qualitative researchers and evaluators involved in participatory studies with co-researchers. Several steps comprise careful and accurate qualitative focus group analysis. Developing a manageable classification or coding scheme is the first step in data analysis. Content analysis involves identifying, coding, categorizing, classifying, and labeling the primary patterns in the data. Following coding, the PQC team developed a codebook of significant codes and broad themes, standardizing the analysis process.

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48 For more information, please see [https://www.crunchbase.com/](https://www.crunchbase.com/)
49 For example, when speaking to millennial women entrepreneurs with student debt in a focus group setting, three separate focus groups should be performed to align with professional best practices and to extract the best results.
50 Performing the focus groups in different cities across the United States does not influence the number of groups that should be performed. Instead, it provides the ability to ascertain geographic influence on the subject matter.
and increasing inter-coder reliability. The team then developed summary statements and analyses to establish clear links between the research objectives and the summary findings and to ensure that these links were both transparent (able to be demonstrated to others) and defensible (justifiable given the objectives of the research). Classifying and coding qualitative data produces a framework for organizing and describing what has been collected during qualitative data collection. This descriptive phase of analysis is essential. It builds a foundation for the interpretive phase when meanings are extracted from the data, comparisons are made, creative frameworks for interpretation are constructed, conclusions are drawn, significance is determined. These processes permit analysis of the core content of focus group interviews to determine what is most significant in an objective and verifiable manner.

Participants

A purposive sample of 42 millennial entrepreneurs, women and men, participated in the study. Focus groups were conducted in three cities selected using the process outlined in Appendix A. Three focus groups were conducted per city, in Boston, Massachusetts, Denver, Colorado, and Los Angeles, California. Participants were all millennial entrepreneurs operating businesses in technology-based industries. The groups included entrepreneurs with student debt and entrepreneurs with no student debt. As shown in Figure 4-1 below, in each city, there were two groups of women entrepreneurs separated by student debt status and one group of men entrepreneurs with mixed debt status. The groups selected permitted gender comparisons as well as comparisons among women with and without student debt at the time of starting their ventures. All participants considered themselves millennials.

Figure 4-1
Focus Group Summary

<table>
<thead>
<tr>
<th>Boston, MA</th>
<th>Denver, CO</th>
<th>Los Angeles, CA</th>
</tr>
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<tbody>
<tr>
<td>Women Entrepreneurs</td>
<td>Women Entrepreneurs</td>
<td>Women Entrepreneurs</td>
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<tr>
<td>– No Student Debt</td>
<td>– No Student Debt</td>
<td>– No Student Debt</td>
</tr>
<tr>
<td>Women Entrepreneurs</td>
<td>Women Entrepreneurs</td>
<td>Women Entrepreneurs</td>
</tr>
<tr>
<td>– With Student Debt</td>
<td>– With Student Debt</td>
<td>– With Student Debt</td>
</tr>
<tr>
<td>Men Entrepreneurs</td>
<td>Men Entrepreneurs</td>
<td>Men Entrepreneurs</td>
</tr>
</tbody>
</table>
5. Presentation of Findings

This section presents findings from a series of nine focus groups with millennial technology-based entrepreneurs, both women and men. Presented by theme, the results describe the challenges, experiences, and perceptions of millennial entrepreneurs. The analyses contained herein compare millennial women entrepreneurs with millennial men entrepreneurs, refer only to the participant entrepreneurs, and are not nationally representative of all entrepreneurs. Nonetheless, they provide a solid basis upon which to investigate causal factors and qualitative insights related to entrepreneurship, gender, age, and the role of student debt. The results of the focus groups both corroborate and challenge the current narrative and prior work about millennial entrepreneurship. In addition, they provide a unique, gender-specific lens, identifying differences and commonalities among women and men millennial entrepreneurs.

**Entrepreneurial vs. Entrepreneur**

To ascertain differences in the perception that millennials are highly entrepreneurial and the finding from representative data that millennials are less likely to be entrepreneurs than young people of prior generations or participating in differently defined entrepreneurial activity, we asked participants to discuss why the difference in perception and data-based findings exists as well as what makes millennials unique. Nearly all respondents expressed surprise at the question. Some participants appeared affronted, feeling that entrepreneurship is a part of the millennial identity, while others were perplexed. One male participant noted “I’m actually surprised by that statistic. Really surprised. I always thought it was the opposite.” No respondents in any focus group agreed with the statement immediately and instead engaged in discussions about why the numbers do not match their experience and perception.

This line of questioning probed the phenomenon in the literature that shows that data and anecdotal accounts in the media and current data-based research present a dichotomy between the desire to start a business and taking the steps necessary to make that desire a reality. That is, despite the media message that millennials are entrepreneurial, why is entrepreneurial dynamism, as defined by currently available data, decreasing among young people, compared to prior generations? To that end, the focus group responses provided increased clarity on the sentiments of millennial entrepreneurs about the subject and strengthened the analysis undertaken in the companion report. There were no differences in response across gender nor differences in debt status. The following quotations typify the responses gathered:

*I would’ve thought that millennials have higher rates of entrepreneurship than previous generations. (Man)*

53 Wilmoth (2016), *op. cit.*
I feel so many people now [think] starting a high-growth tech setup is the coolest thing you can do. (Woman)

The focus groups support the theory that the media narrative surrounding millennial entrepreneurship differs from the data-based results using current data definitions of entrepreneurship. Prior surveys indicate that 60 percent of millennials consider themselves entrepreneurs and that 90 percent recognize entrepreneurship as a mentality.\textsuperscript{54} Hypothesizing reasons for the observed phenomenon, focus group respondents discussed challenges in defining and differentiating entrepreneurship versus entrepreneurial attitudes. This was a key distinction discussed throughout the groups of both women and men. Many participants debated defining 1099 contractors\textsuperscript{55} of companies such as Lyft or Uber as entrepreneurs, instead noting that they are entrepreneurial.\textsuperscript{56} Given the increasingly large role that the share economy plays in America, as well as the potential of 1099 contracting positions as alternative employment, this begs the question: Should these individuals be considered entrepreneurs?

I think the difference here is not necessarily what people are doing of the same ages and those generations, it’s how they’re defining what they’re doing, how they’re labeling what they’re doing. If you’re sitting at home and you’re coding on your computer, and you’re like maybe building a little app or something, are you an entrepreneur? Are you a small business founder? Probably not. (Man)

Despite this discussion, participants felt that as a generation, millennials were extremely entrepreneurial and that interest in entrepreneurship was high among peers. Participants described their experience with peers and network members eager to associate with entrepreneurship but unwilling or unable to take the steps necessary to launch a business. This sentiment was more common among men, specifically those with student debt:

There’s a popular culture today, there’s a lot of glamour around startups, startup life, and everything. I think that there are a lot of people who want to get some exposure, be involved, but are not going to ultimately commit because they’re aware of how much risk you’re taking on by actually starting a company. (Man)

\textsuperscript{54} Hysen (2014), op. cit.
\textsuperscript{55} 1099 Contractors are individuals that are not employees of the companies that pay them. Instead, they provide work on a contract basis. For more information, please see \url{https://www.irs.gov/businesses/small-businesses-self-employed/independent-contractor-defined}
\textsuperscript{56} This opinion of focus group participants differs from the U.S. Government’s position on business ownership. According to the IRS, 1099 Independent Contractors are self-employed individuals operating their own businesses.
What I had to do is I had to work four jobs in order to pull this off and I think some people my age are a little lazier and aren’t willing to put in that work and all my friends thought I was crazy for not just taking the job out of college and doing that for 40 years. (Woman)

I certainly know a lot of people that always tell me they have ideas for businesses but aren’t really willing to take that first step... A lot of what my friends say is, we were going into high school during the beginning of the recession, and I think a lot of my friends have told me that when they got out of college they were really looking for something that was stable and they’re comfortable in. (Man)

The discussion of entrepreneurship and entrepreneurial attitude permeated nearly all the other themes discussed below. Focus group participants felt that interest in entrepreneurship was high among their peers, indicating high entrepreneurial potential for their generation. The discussions highlighted the evolving definition of entrepreneurship, including the importance of the 1099 contractor paradigm among millennials. The discussions also raised questions regarding what types of activity constitute entrepreneurship. Hypothesized reasons for the difference in the data and the millennial perception regarding entrepreneurial participation included student debt, the Great Recession, and access to capital.

Differential Recessionary Effects

Participants were asked questions related to the Great Recession to develop an understanding of its potential effects on their attitudes towards financial risk. Coming of age during the Great Recession, participants described multiple viewpoints on how the financial crisis influenced their entrepreneurial paths and feelings on career risks. The majority of both women and men noted a negative effect on their appetite for risk. However, they also discussed the role of the Great Depression in encouraging independent earning power and self-determination for their careers. Those with debt, particularly women, expressed this sentiment. Women with and without student debt discussed the negative influence of the Great Recession more than men, conveying that they saw their parents “lose everything.” The focus group participants noted overall that the Great Recession negatively influenced their risk tolerance. The inherent risk associated with launching a business and the lingering recessionary risk awareness among young people may contribute to the noted decline in traditionally defined entrepreneurship among young people.

While millennials felt and continue to feel the effects of the Great Recession on their entrepreneurial endeavors, the mitigating experience of job loss related to financial

57 Wilmoth (2016), op. cit.
downfall was prevalent. This sentiment corroborates past research by the Kauffman Foundation that found rising levels of student debt and underemployment resulted from recessionary factors.\textsuperscript{58} Woven through the focus group discussions was the theme that despite playing by the rules and working a conventional job, their parents still experienced job loss. For participants, this acted as a motivator to control their own employment situation via entrepreneurship and hedge the risk associated with the venture since traditional employment is not the safety net it was once considered. There are multiple potential effects associated with this finding including both increases and decreases in startup activity. In the decrease case, millennials may feel unprepared to assume the additional financial risk associated with starting a business. In the increase case, millennials may feel that starting a business reduces career risk by providing more control over earnings and career path. While this research does not factually establish either, it raises important questions about the lingering effects of the financial crisis on young people and its potential contribution to the change in entrepreneurial activity among young people. Women with debt most often expressed this, although men did as well:

\begin{quote}
I look to my parents and their parents and they still don't understand why I'm doing this. Even though I'm successful, it is still just way too risky for them because they have been put in a position financially where they were the most vulnerable. (Woman)
\end{quote}

\begin{quote}
My dad worked at the same company for 25 years and then gets laid off and you're like, "well it doesn't even matter if you stay at a job." Because of this, I can start a company and have the same risk. (Woman)
\end{quote}

Another motivating factor related to parental career experience was the notion of pursuing something worthwhile and enjoyable. A universal sentiment among the women and men participants with and without student debt was strong feelings about freeing themselves from work they witnessed their peers and the prior generation hating and traditional careers.

\begin{quote}
So, both my parents, I saw them work very hard but in jobs that they hated, hated. It affected me a lot, you watch your parents. (Woman)
\end{quote}

\begin{quote}
I think of a big challenge as when you first start something, I always ask myself the question, "Even if this does nothing and goes nowhere, is it worth doing?" Just convincing yourself that it's worth doing if nothing comes of it for a year. Hard work is that learning throughout that two years of building a business is worth it if it just completely fails. The stats show that most businesses fail. If you have to go into it, if you're a rational
\end{quote}

human being in it, knowing the stats is the experience worth doing, regardless. I think if you can answer that, you could do a business. (Man)

Coming of age during the Great Recession influenced the risk attitudes of the focus group participants. Women expressed more influence on their risk tolerance and perception than men. Two experiences emerged related to the role of the Great Recession in starting a business. In the first, participants championed entrepreneurship as an empowerment mechanism, providing them with agency over their own careers. In the second, participants felt that entrepreneurship was riskier than having a traditional job but noted that jobs are not guaranteed income either. Despite the risks associated with entrepreneurship, participants felt that entrepreneurship was worthwhile and allowed them to control their careers and pursue meaningful work at the same time.

Sentiments Towards Debt – Opposing Views

To test the hypothesis that student debt influences entrepreneurial activity among millennials, we asked participants to share their debt philosophies and attitudes, as well as how debt shaped their career paths. The majority of participants with student debt owed between $25,000 and $50,000 at the time they started their business. Approximately one quarter of participants with debt owed more than $75,000. Participants expressed mixed beliefs related to student debt and its influence on their lives. The sentiments fell into two diverging groups with gendered trends. In the first group, participants expressed negative feelings about debt and felt that entrepreneurship and student debt were incompatible ideas. In the second group, participants demonstrated a laissez faire attitude towards debt, noting that it is just part of life. Sentiments expressed ranged from “I'll pay it off when I pay it off” to “always on my mind.” Women participants were more likely to belong to the first group, expressing negative sentiments towards debt.

Women and men participants with negative feelings towards debt noted that they would not start a business while still paying down student debt because of the weight and “crushing responsibility” associated with it. They described inflexibility financially and felt that given the uncertain nature of entrepreneurship and founder pay, the burden of a student loan payment that comes regardless of income was too much to bear. In early stage startups, founders may not receive a salary or receive very limited income. This is particularly true during times when technology-based startups are fundraising and not yet generating a profit. Society perceives technology-based entrepreneurs as well-paid, commensurate with the success of their ventures. However, the reality may be quite different, with founder money tied up in the business, leaving the entrepreneur “cash poor.” To circumvent this challenge, several participants, both women and men, paid off their student debt prior to starting their businesses. These individuals expressed that had their student debt burden been higher, that would not have been an option and would have deferred their entrepreneurial journey substantially. Defining
“higher” is challenging, but consensus developed around the notion of a high burden being more than their annual income. In this regard, student debt influenced their career decisions, corroborating work by Rothstein and Rouse (2011), suggesting that debt forces millennials into sub-optimal careers. Women participants with student debt were more likely than men participants to express concerns related to student debt as well as more likely to pay off their debt prior to founding the business:

[If] I had to pay $1,000 back a month or whatever it was because I mean that's quite a high amount and interest rates increasing, I don't know what I will be able to do. I actually wouldn't have started this business. (Woman)

I know that debt affects every single other decision you make. It affects getting married later in life, buying a house later in life. 67% of millennials don’t have a credit card which is mind-blowing to me and it’s because they already have debt and they don't want to go into more debt. (Woman)

I’m totally terrified of debt, don't like debt. Want nothing to do with debt. I don't have any student loans and I haven't had any. Maybe it’s just that I have never dealt with big debt, I mean, my mortgage, it’s basically it. (Woman)

While no participants expressed positive feelings towards debt, men were much more likely than women with student debt to take a “head in the sand” approach to handling their student loan debt. The attitude of moving on with life despite a high student debt burden facilitated business formation. Woven through the discussion was the notion that student debt payments are part of life like any other expense. Respondents in this group, both women and men, agreed that they would not have started their businesses without detaching themselves from the idea of student debt:

My attitude towards debt is like, “I’ll pay it off when I pay it off.” It’s not deterring me from following my dreams. (Woman)

Personally, I came out of school with debt and had never been out of debt and I’m still not out of debt and consider myself completely desensitized to the idea of being in debt. (Man)

Others yet expressed that there is a “threshold” where student debt becomes so burdensome, the only reasonable choice is to push forward in their career. While no concrete threshold was established where debt becomes unmanageable and therefore, less relevant to the entrepreneurial decision, its relationship to earnings was important:

59 For example, an individual earning $50,000 per year would consider student debt of $75,000 a high burden as the debt is greater than their annual income.
60 Rothstein et al. (2011), op. cit.
The behavior I see is that once you’re past $100,000, once you’re past $60,000, you almost have this mindset that it’s such a large number anyway, I may as well do what I want to do. (Woman)

This directly relates to the student debt burden gender differences discussed in Chapter 2. Women face a higher student debt burden than men resulting from lower income levels and consistent student debt balances. This may indicate that women may have a lower “threshold” as discussed above when deciding when to pursue entrepreneurship despite debt.

The propensity of the millennial women and men entrepreneurs with high student debt burdens to pursue entrepreneurship does not imply that student debt is not a burden or deterrent to entrepreneurship. Instead, it establishes a challenging career decision for millennials that prior generations did not face. The gendered divide between the prevalence of entrepreneurial attitudes and the pursuit of entrepreneurship among millennials created a valuable discussion with multiple potential reasons for the decline in entrepreneurship among young people in America.

**The Impact of Debt**

While multiple attitudes exist with respect to debt tolerance, women and men expressed that student debt negatively influences business trajectory. This finding corroborates research by Young Invincibles and Small Business Majority highlighting immense student debt as a potential deterrent to entrepreneurship for millennials. Additionally, participant responses related to the negative impact of student debt on their business founding and operations lends theoretical purchase to the correlation analysis from the Federal Reserve Bank of Philadelphia. In that study, the authors found a negative correlation between student debt and new business formation. In this study, participant entrepreneurs reported that their businesses would be further along if they did not have student debt. Those without debt or who had already paid their debt expressed gratitude for the freedom to pursue their entrepreneurial visions untethered. However, starting a business after paying off student debt is a timeline deferral as well. Ultimately, the groups agreed that debt delays the timeline, which delays fundraising, which compounds challenges with access to capital in a vicious cycle, ultimately increasing the odds of failure.

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62 Young Invincibles & Small Business Majority (2016), op. cit.

63 Ambrose (2015), op. cit.
It’s interesting because my co-founder had no student debt. It’s totally different, our paths and how we approach the business. The stress on her is so much less. (Woman)

It was crippling for me, graduating with 40k in debt… It made me not want to start a business originally… As soon as I paid off my debt, I felt like, “wow, now is the time I can start thinking about other things.” (Man)

You’re saddled with debt, which is going to delay you being able to start your business. (Man)

The “side hustle” was a topic of discussion amongst the focus groups and was particularly prevalent among those with student debt. The side hustle is a commonly used phrase among millennials denoting secondary employment or entrepreneurial activity, such as tutoring or working as an Uber driver. While limited academic research exists yet examining this phenomenon, discussions exist in the media highlighting the negative implications of pursuing secondary employment while pursuing entrepreneurship. A higher incidence of women with student debt discussed the challenges and drawbacks of the side hustle on their business. Those with student debt discussed how this assisted in bridging the gap during a time when their companies didn’t make enough money for them to make their student loan payments. However, a side hustle can be time consuming and given the time-intensive nature of launching a technology-based business, may delay activity on the main business, potentially to the long-term detriment of the venture. During the course of the focus groups, more women than men mentioned the importance of the side hustle to launching their businesses. Other participants reported that while the side hustle enabled them to start their business, there was a cost associated with it:

If I didn’t have the debt in the beginning, the company would be further along because I would have been able to dedicate more time towards it… When investors ask, “why is it taking you so long to do something?” Because of my side hustle. I guess I had to do it to get to this point. (Woman)

The side hustle takes so much energy away from what I would be doing [in my business]. (Woman)

I definitely think it would have propelled me -- my time wouldn’t be as taken up by all my side hustles and everything. I'd definitely be further along in my process and probably have my product out faster. (Woman)

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64 For more information on the phenomenon, please see https://www.levo.com/posts/how-millennials-have-conquered-the-art-of-the-side-hustle
65 For example, please see https://www.entrepreneur.com/article/285439
Both women and men focus group participants described the overwhelming burden of student debt facing today’s young people as a potential deterrent to entrepreneurship. This was more common among the women participants with debt, who felt more conscious of their debt than similarly indebted men participants. One woman noted that, despite having debt herself, “any reasonable person would go get a job if they had debt.” They discussed their feeling that young people of today have more financial obligations than prior generations because of debt and that because they have student loan payments, something prior generations did not face to the same extent, they incur additional financial risk when starting a business. Participants noted:

*If they have debt or if they don’t, that hugely changes what decisions they make and what they’re going to do in the next six months and six years.*

(Woman)

*I think that if I had any student [debt] I just wouldn’t have done it. I can’t think of a scenario in which I would have unless I knew I could pay it off within a very short amount of time… I don’t think I’d be able to do that.*

(Woman)

The concept of risk appeared multiple times throughout the focus group series. Men and women were equally aware of the risks associated with entrepreneurship, and women with debt discussed a higher level of risk than women with no debt. While the media narrative paints women as more risk averse than their male counterparts, the women participants described their approach to risk taking as calculated and well researched compared to their male counterparts. The discussion related to risk continues throughout this result section, consistent with risk as a fundamental quality of technology-based entrepreneurship in the U.S.

Despite multiple attitudes towards student debt and starting a business, as discussed above, the focus group participants overall perceived student debt as a negative influence on business success and growth. This sentiment was stronger for women participants and began a discussion of the “side hustle.” Those who had debt and used side hustles to supplement their incomes to make student loan payments felt that the side hustle, and thus their student debt, took time from their business and ultimately negatively influenced timeline, growth, and operations.

**Age, Autonomy, and the Entrepreneurial Runway**

While participants described entrepreneurship as risky, the notion of age as a mitigating risk factor was prevalent in the focus group discussions. Participants expressed feeling that being young lessens the pressure for the business to succeed because they had more time left in their careers (a longer runway) to recoup. This finding held across gender and for participants with and without student debt:
I was coming from a standpoint where I didn't really see that much of a risk behind not paying myself for a year trying to get funding. If it didn't work out, "Okay. I'd be one year older. I'll be 23. I could go get a job." (Man)

Participants also described less freedom than their traditionally employed peers, noting the long hours and years of work without certain payoff. Overall, participants noted that entrepreneurship is not freedom in and of itself but is a vehicle to financial freedom via a potential exit. The entrepreneurial exit typically refers to the successful sale or acquisition of the business, garnering the entrepreneur a significant payday. The exclusion of family life was more prominent among men than women participants. Deferral of traditional life milestones, such as marriage and children, were also discussed within the context of entrepreneurial freedom and the time commitment required to run a technology-based startup:

I understand why people get real jobs -- entrepreneurship is really hard until one day it isn't any more [an exit]. (Man)

When you think about being a CEO, I get up at 3:00 AM. I have to get up at 3:00 AM and go to bed 11:00 PM. What is the autonomy? (Man)

We got into this because of that "freedom dream," and that's what everybody always cites, "Oh, freedom." Then you realize when you run a company, you're actually the least free person ever. (Woman)

The demands of starting a company and building it from nothing are so intense that it comes at the exclusion of personal life and family. (Man)

The finding that participants felt that technology-based entrepreneurship came at the exclusion of personal and family life raises important questions related to the distribution of marital status by gender for entrepreneurs and non-entrepreneurs developed in the companion research. The prior work finds that women entrepreneurs are more likely than women non-entrepreneurs to be married and that entrepreneurs are more likely to have children than non-entrepreneurs. These points hint at relationships between marriage and home-life and the entrepreneurial decision. An important distinction is the focus of the focus groups exclusively on technology-based ventures. The statistics presented in the companion report are for all industries. Nonetheless, the results of the focus groups combined with the statistics in the companion report support the notion that technology-based entrepreneurship is different from a motivational and lifestyle perspective than traditional entrepreneurship. Additionally, the research supports the hypothesis that technology-based

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66 This phenomenon is particularly common among technology-based businesses. For more information on the entrepreneurial exit, please see [http://www.nber.org.ezproxy.net.ucf.edu/papers/w24350.pdf](http://www.nber.org.ezproxy.net.ucf.edu/papers/w24350.pdf)
entrepreneurship is likely not used to resolve work-life conflict for women,\textsuperscript{67} as entrepreneurship in other industries can be.\textsuperscript{68}

Despite the challenges associated with starting and running a business, women and men participants recognized the potential for their entrepreneurial efforts to pay off big via an exit and recognized this as the upside to the venture. No differences existed across debt status in this regard. This answers a critical question raised in the companion research report. Student debt burden is a component of the relative reward and risk analysis undertaken by millennial entrepreneurs when starting and operating their businesses. From the reward perspective, an exit would permit complete student loan payment but was recognized as a realistic alternative among men more than women. This finding within the focus groups also puts in context the finding that among women, non-entrepreneurs out-earn entrepreneurs. This may result from technology-based entrepreneurs resisting personal earnings and reinvesting in their businesses with the goal of achieving an exit.

\textit{If I come out of this, I’m going to be so much better for taking this few years and going after that than if I got and just work for someone else, so I’m willing to take that risk. (Woman)}

\textit{That’s the plan. I want to pay off the loans in one day. I want to get acquired and just pay them and be done. (Woman)}

Despite the recognized risk of starting a technology-based business, both women and men focus group participants recognized the advantage of their young age in starting a business because of the increased career runway. Respondents felt that they had time to regroup if they failed and noted that the financial upside of a potential exit or acquisition outweighed the risk associated with failure. While the notion of entrepreneurial freedom existed, participants felt constrained by their businesses. They reported less free time than peers in traditional jobs with some reporting the exclusion of personal and family life. However, the overriding notion was that their young age was a risk mitigating factor as an entrepreneur.


Access to Capital – Gender and Age

Throughout the focus groups, participants discussed access to capital extensively, elaborating on challenges, strategies, and their experiences. While major differences existed for women and men, both groups faced challenges related to age and experience. The results indicate both generational and gendered challenges, consistent with past research.69

When comparing the descriptions of the experiences of men and women, it was clear that tremendous differences exist between genders in terms of access to capital for technology-based businesses. Both women and men noted that this was particularly true when it came to more informal networks as a means through which funding and opportunities were facilitated. These responses echo what has been traditionally seen in the literature, where venture capital and angel investor networks are largely male-driven and access to external equity financing for women remains limited.70 In 2017, women founders received just 2.2 percent of total venture capital.71 Multiple studies and articles exist in the literature hypothesizing the reasons for the dearth of external equity funding for women, but the lack of female venture capitalists (approximately 8 percent) may be a contributing factor.

In all of the focus groups, women raised the challenge of “playing the game”, the importance of social networks in navigating and securing capital and the gendered barriers they encountered in doing so. While male participants expressed no reservations about this process and all noted the importance, however unfair, of engaging in informal social networking, they did note the ubiquity of gender bias and several expressed the need for a cultural shift in how external funding is secured:

*Nothing is a meritocracy, everything is a game. (Man)*

*This is what I see the existing behavior being. It’s very easy for two guys to go to a bar together and deals get done and the bar and on the golf course and it’s just conversational. It’s much more awkward for me to go to a bar at eight o’clock with a VC because it’s just weird. (Woman)*

*It took us a long time to get funded. I think there’s definitely ageism there… What we did was, we brought on a gentleman who is in his late 40s to help us. It’s the whole grey hair type thing and it helped. (Man)*

70 For more information, please see https://www.nwbc.gov/2014/08/01/high-growth-women-owned-businesses-access-to-capital/
71 For more information, please see http://fortune.com/2018/01/31/female-founders-venture-capital-2017/
It’s very network-driven… I have a white male co-founder and people love him because he looks just like them. (Woman)

To address access to capital challenges, both women and men millennial entrepreneurs sought external assistance, often in the form of hiring an older, presumably more experienced and well-connected, team member to help bolster their efforts. In all the focus groups, women and men discussed the careful process and strategies employed to facilitate investment in their businesses. Participants who engaged an outside team member or advisor engaged white men given the historical male dominance and lack of diversity of these networks. As several of the participants pointed out, it was a source of considerable frustration that despite their own knowledge, or the experience of a wide range of entrepreneurial individuals (including their peers, women, and people of color, for example) that success remained coupled with a limited idea and symbol of business success. The experience was not unique to women nor was it unique to individuals with student debt, and instead speaks to the role of age and experience as barriers to entrepreneurship among young people, particularly the types of businesses that many young people want to start today, many of which require external financing. In each focus group, participants agreed that while age was a tremendous barrier to success in securing capital, it was simultaneously important to have a more ‘traditional’ symbol of experience - in this case, an older white male presence - of financial success and secure investment as part of the ‘team’. For many in this study, frustration over perceived age discrimination was problematic and created real burdens for new businesses. As one respondent suggested in describing the decision to hire an older team member,

We have an advisor who we bring into meetings who has almost no operational value. (Man)

In this case the advisor, an older, white male, had been a final strategy to secure funding that up until that point, had been elusive. While the older hire had no ‘operational value’, it was clear in the discussion that this kind of decision was understood by many to be a necessary strategy to convey the investment worthiness of their venture. Others in this study went on to discuss further how gender, age, and identity intersect in efforts to secure capital. Specifically, responses focused on challenges of discrimination and lack of respect for younger cohorts of entrepreneurs as well as the need for often costly networks, in order to achieve success. As one woman suggested,

It’s just about treating people with respect and I feel like that’s why the old white man thing is annoying because I feel disrespected by a lot of them. (Woman)

Another, male respondent, noted that
It definitely helps if you’re younger to have outsider representation - it’s just the networking thing. You have to pay for a network. We had to give up x percentage of the amount we raised to somebody [the older male hire] to help make intros to investors because they wouldn’t answer our phone calls or emails. (Man)

This is not to suggest that women respondents do not face gendered challenges when fundraising. On mixed gender teams, none of the women reported being the fundraising person. Nearly all of the male participants reported taking part in fundraising efforts. Both genders reported that male involvement made it easier to secure funding. As one male participant put it, “men do the fundraising and women run the business.” This has potentially damaging effects for the economy, particularly as it relates to access to capital. Not all ventures are led by mixed-gender teams. Depressed access to capital for women restricts the growth of women-owned and women-led enterprises.72

Once in front of funders, women and men reported drastically different experiences undifferentiated by their debt status. Their experiences are supported by a study in the Harvard Business Review.73 In the focus groups, both men and women in mixed-gender founder teams reported that in meetings with funders, women received questions about the business that put them on the defense whereas men received questions that promoted the business idea. While men in the current study noticed this in mixed-gender meetings, women felt particularly strong about this and described inappropriate social questions such as their marital status and their plans for children. Men reported no such questions and minority women noted amplified challenges vis-à-vis white women and men.

Women’s experience raising capital from VC turns into favors for fundraising that we do not have to get into around here. I think there’s definitely a gender problem. (Man)

I feel like I’ve been so much more confident having an engagement ring on my finger and having, now, been married for the last year and a half, I feel like it just dissolves any of the questions, and I hate that that’s true, but I really felt it. (Woman)

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72 Access to capital among women entrepreneurs is a highly studied topic. For more information, please see https://www.nwbc.gov/2018/03/01/understanding-the-landscape-access-to-capital-for-women-entrepreneurs/

Consistent with past research, the focus group participants identified gendered challenges associated with obtaining financing for their businesses. Both men and women acknowledged that fundraising for technology-based businesses occurs in informal networking atmospheres dominated by men. To circumvent fundraising challenges, many participants recruited experienced older individuals, most often men with prior fundraising experience, to assist in their efforts. Respondents noted little operational value from these hires beyond securing capital. While used by both men and women, women participants reported requiring assistance entering male-dominated fundraising networks more than men participants, as well as different and negative experiences related to gender once in front of potential funders.

Concluding Remarks

While not a statistically representative sample of all millennial entrepreneurs, the 9 focus groups conducted provide complementary insights into how student debt influences technology-based entrepreneurship among young people as well as what additional challenges and barriers exist. Organized by theme, the above results present a first of its kind look at the millennial entrepreneurial experience through a gendered lens.
Conclusions

Together with the companion report, this research presents a first of its kind examination of millennial women entrepreneurs’ profile and experiences. The research contributes to the understanding of entrepreneurial dynamics for millennials in general and women specifically, providing a foundation for both future research and policy change designed to spur economic growth. Incorporating a mixed-methods approach, including survey analysis and qualitative data collection via focus groups, this research highlights areas for growth, future inquiry, and action. As increasing business dynamism among millennials is advantageous for the entire economy, policymakers and key stakeholders should consider their roles in the entrepreneurial ecosystem and how they can best support the growth of young women entrepreneurs.
Appendix A – Focus Group Location Selection Process

The selection of geographic location is a linear process that incorporates a series of screens to remove cities that do not meet the desired attributes while creating a geographically diverse pool. We began our selection with a list that compiled several online lists of “top cities for millennials” and “top cities for millennial entrepreneurs,” and includes 52 cities across the U.S. The cities were drawn from the following lists:

- The Voactiv list\textsuperscript{74} started with the 50 largest cities and ranked them on the following: youngest population, lowest employment rate, lowest average rent, cheapest gallon of gas, cheapest electricity, lowest average cost of food and beverage, public transportation ridership, green commuter index, cheapest broadband, highest average salary, most laundromats per capita, most coffee shops per capita, most vintage clothing stores per capita, most cheap takeout restaurants per capita, lowest priced manicures and pedicures, highest percentage of young single people, most music venues per capita, cheapest pack of cigarettes, cheapest pint of beer, cheapest ounce of high-quality marijuana.

- The Niche list\textsuperscript{75} ranked the metropolitan areas in the U.S. with at least 1 million residents using a combination of the following: a proprietary survey of nearly 500,000 college students and recent graduates over four years, data from the U.S. Census Bureau, FBI crime rates. Factors included percentage of population between 25 and 34 years old, median rent, median income, education level, racial diversity, unemployment rate, crime rates, best professional sports, best shopping, most accessible, best nightlife, best cultural attractions.

- The Nerdwallet list\textsuperscript{76} was developed by analyzing 181 metropolitan areas in the U.S. The list was developed using the following data sources: U.S. Small Business Administration, U.S. Census Bureau, U.S. Bureau of Labor Statistics, Council for Community and Economic Research.
  - Small business financing accounted for 20 percent of the overall score and considered SBA loans per 100,000 people
  - Local business environment accounted for 25 percent of the overall score and incorporated the unemployment rate (10 percent) and the number of small businesses per 100 residents (15 percent)
  - Local economy accounted for 55 percent of the overall score and considered the percentage of the population ages 25 to 34 (15 percent), the percentage of the population age 25 and older with a bachelor’s

\textsuperscript{74} Please see http://www.vocativ.com/culture/media/livability/

\textsuperscript{75} Please see https://ink.niche.com/methodology-25-best-places-millennials/

\textsuperscript{76} Please see https://www.nerdwallet.com/blog/finance/best-cities-for-young-entrepreneurs-2015/
degree (15 percent), the median earnings of the population (15 percent),
the cost of living index (10 percent).

Before beginning the screening process, we gathered the following information
for each location:

- Primary County
- Total Population (2015 Census Estimate)
- Unemployment Rate (MSA-level, Bureau of Labor Statistics)
- Innovation Accelerator Presence (Seed-DB)
- 2011 and 2015 County-Level Census Data (for each year)
  - Total Population
  - Population of Millennial Men
  - Population of Millennial Women
- Change in Total Population and Millennial Population
- Average Student Loan Debt
  - Student Loan Burden Ranking
- Median Income for Individuals Aged 25-44

The 52 cities screened include:

<table>
<thead>
<tr>
<th>Scottsdale, Arizona</th>
<th>Tempe, Arizona</th>
<th>Berkeley, California</th>
</tr>
</thead>
<tbody>
<tr>
<td>Los Angeles, California</td>
<td>San Diego, California</td>
<td>San Francisco, California</td>
</tr>
<tr>
<td>San Jose, California</td>
<td>Santa Clara, California</td>
<td>Sunnyvale, California</td>
</tr>
<tr>
<td>Denver, Colorado</td>
<td>Washington, D.C.</td>
<td>Atlanta, Georgia</td>
</tr>
<tr>
<td>Boise, Idaho</td>
<td>Chicago, Illinois</td>
<td>Fort Wayne, Indiana</td>
</tr>
<tr>
<td>Baton Rouge, Louisiana</td>
<td>Boston, Massachusetts</td>
<td>Cambridge, Massachusetts</td>
</tr>
<tr>
<td>Ann Arbor, Michigan</td>
<td>Minneapolis, Minnesota</td>
<td>St. Paul, Minnesota</td>
</tr>
<tr>
<td>Lincoln, Nebraska</td>
<td>Henderson, Nevada</td>
<td>Reno, Nevada</td>
</tr>
<tr>
<td>Jersey City, New Jersey</td>
<td>New York, New York</td>
<td>Charlotte, North Carolina</td>
</tr>
<tr>
<td>Durham, North Carolina</td>
<td>Raleigh, North Carolina</td>
<td>Winston-Salem, North Carolina</td>
</tr>
<tr>
<td>Fargo, North Dakota</td>
<td>Oklahoma City, Oklahoma</td>
<td>Portland, Oregon</td>
</tr>
<tr>
<td>Pittsburgh, Pennsylvania</td>
<td>Charleston, South Carolina</td>
<td>Arlington, Texas</td>
</tr>
<tr>
<td>Austin, Texas</td>
<td>Dallas, Texas</td>
<td>Fort Worth, Texas</td>
</tr>
<tr>
<td>Garland, Texas</td>
<td>Houston, Texas</td>
<td>Irving, Texas</td>
</tr>
<tr>
<td>Lubbock, Texas</td>
<td>Midland, Texas</td>
<td>Plano, Texas</td>
</tr>
<tr>
<td>Round Rock, Texas</td>
<td>Salt Lake City, Utah</td>
<td>Alexandria, Virginia</td>
</tr>
<tr>
<td>Madison, Wisconsin</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Screen 1: Declining Millennial Population**

Using the collected population information, we calculated the percentage of millennials in 2011 and 2015 and found the difference. Any locations where the percentage of millennials declined (i.e., a shrinking millennial population) were rejected. We included this screen to ensure that the cities we target are attractive to millennials.

This step removed 5 cities:

<table>
<thead>
<tr>
<th>City</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicago, Illinois</td>
<td>Jersey City, New Jersey</td>
</tr>
<tr>
<td>New York, New York</td>
<td>Fargo, North Dakota</td>
</tr>
<tr>
<td>Midland, Texas</td>
<td></td>
</tr>
</tbody>
</table>

**Screen 2: No Primary Accelerator in Seed-DB**

Innovation accelerators are startup assistance programs that provide seed funding to participants in exchange for equity in the company. Accelerators rose in popularity in the late 2000s as a method for company founders to gain necessary experience, training, mentorship, and funding. The majority of accelerators have a selective application process for companies and founding teams. Accelerator programs operate with a cohort model that concludes with a demo day where participating entrepreneurs pitch their ideas to a group of investors. Given their newness, accelerators are a component of the entrepreneurial ecosystem we anticipate that millennial women entrepreneurs are interested in. Accelerator programs are also connected with experienced entrepreneurs, mentors, venture capitalists, and angel investors. As such, accelerator programs address issues that all entrepreneurs face in terms of education, networking, and access to capital. However, research indicates that these issues are particularly pronounced for women and minority entrepreneurs.\(^{77}\) For these reasons, we feel that it is important that the cities selected have established innovation accelerators.

To identify which cities in the sample have established accelerator programs, we utilized Seed-DB. Seed-DB\(^{78}\) is a data aggregator for entrepreneurs, accelerators, and investors tracking companies and organizations that provide seed-level funding. A hallmark of Seed-DB is a comprehensive list of accelerators. We searched for all cities in our sample and rejected those without established accelerators listed in Seed-DB.

This step removed 25 cities:

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\(^{78}\) For more information, please see [http://seed-db.com/accelerators](http://seed-db.com/accelerators)
Screen 3: Popularity

Screen 3 incorporates the ability to determine which cities are generating buzz for their suitability for millennials and millennial entrepreneurs. Screen 3 removes cities that were not included on two lists of best cities for millennials or millennial entrepreneurs. This screen is in place to select the most popular and “buzzed” about cities from the remaining 22 locations.

This step removed 11 cities:

<table>
<thead>
<tr>
<th>Scottsdale, Arizona</th>
<th>Santa Clara, California</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Jose, California</td>
<td>Sunnyvale, California</td>
</tr>
<tr>
<td>Atlanta, Georgia</td>
<td>Ann Arbor, Michigan</td>
</tr>
<tr>
<td>Lincoln, Nebraska</td>
<td>Durham, North Carolina</td>
</tr>
<tr>
<td>Portland, Oregon</td>
<td>Dallas, Texas</td>
</tr>
<tr>
<td>Houston, Texas</td>
<td></td>
</tr>
</tbody>
</table>

Screen 4: Student Debt Burden

Given the importance of evaluating student debt to our research hypotheses, we incorporated the student debt burden into the screening process. We compared the average student loan debt to the median income for individuals aged 25 to 44 in each city. To elucidate causal information about the impacts of high student loan debt, we want to travel to cities with the highest student loan debt burden relative to income. Therefore, we screened for cities with a student loan debt to average salary ratio greater than 0.5.

This step removed 3 cities:

| San Francisco, California | Cambridge, Massachusetts |

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Final City Selection

The multi-faceted screening process employed selects cities for inquiry in a replicable, transparent manner. The eight finalist cities include:

<table>
<thead>
<tr>
<th>Los Angeles, California</th>
<th>Denver, Colorado</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington, D.C.</td>
<td>Boston, Massachusetts</td>
</tr>
<tr>
<td>Minneapolis, Minnesota</td>
<td>Pittsburgh, Pennsylvania</td>
</tr>
<tr>
<td>Austin, Texas</td>
<td>Madison, Wisconsin</td>
</tr>
</tbody>
</table>

We selected Boston, Denver, and Los Angeles as our focus group locations based on the factors and process outlined above and in consultation with the NWBC. As part of this selection, we performed various analyses probing lifestyle factors, race, industry, total population, and funding source distributions in each city to develop geographic cohort that will provide rich data for comparison and contrast among the focus groups. We selected each city for multiple reasons, including, but not limited to:

- Los Angeles was selected due to its large Hispanic/Latino population, its ranking as America’s second largest city, its West coast location, and reputation as a traditional ‘hot-bed’ of entrepreneurial activity.
- Denver has one of the first and largest innovation accelerators, TechStars, as well as a non-coastal location, and is a young city, with an average age of 31.7 years and 2.5 percent annual growth in the millennial population.
- Boston is a leading innovation hub in the U.S., the city is racially diverse, with approximately a 45 percent non-White population, high student loan debt burden at a 73.1 percent loan-to-income ratio.
Appendix B – Focus Group Questions

1. Recent research found that millennials engage in entrepreneurship at lower rates than prior generations at the same age. Why do you think this is? What distinguishes millennials?

2. What were your primary goals and desired outcomes when starting a business?
   a. How have those changed?

3. What was the biggest barrier to launching your entrepreneurial endeavor?
   a. What is the biggest barrier in ongoing operations?
   b. How did/do you handle these challenges?

4. How does age influence the ability to obtain capital and other necessary resources? How does age relate to experience?
   a. What about gender?

5. How would you characterize your attitude towards debt, in general?
   a. Has it been difficult to access capital?
      i. What other factors have made access to capital difficult?
   b. Student debt can be both a motivator and a deterrent to entrepreneurship. Was student debt a deterrent, a motivator, or both for you? Please explain.
   c. How does student debt affect your ability to secure necessary capital?
      i. What effect do student loans have on your capital security and ability to secure capital? How has this changed since you started the business?
   d. How does student debt influence your decisions related to ongoing entrepreneurial operations?
   e. How does debt relate to business growth?

6. Describe the role that economic security plays in the establishment of a business. What is the connection between entrepreneurship, student debt, and business financing?
7. How does student debt influence the ongoing operations of your business?
   
a. What effect does it have on the ability to grow, access to capital, and risk?
   
b. How about on student loan payments?

8. How would your actions and decisions regarding entrepreneurship differ if you had no student debt? What different opportunities or challenges would you face?

9. Were there any other factors, in addition to your student debt, that were significant barriers to starting and growing your business?
Appendix C – Office of Management and Budget Approval

In accordance with the Paperwork Reduction Act, PQC and the NWBC submitted a request to the Office of Management and Budget (OMB) to perform the focus group data collection. The request was reviewed and approved by OMB on January 17, 2018. The OMB control number is 3245-0397. As part of the OMB process, documentation was made available for comment on the Federal Register: