

EXPANDING OPPORTUNITIES FOR WOMEN IN BUSINESS

Over the last five decades, women have made enormous strides in the U.S. labor market. Our economy is [\\$2.0 trillion](#), or 13.5 percent, larger than it would have been without women's increased participation in the labor force and hours worked since 1970. Meanwhile, the additional dollars brought in by women over the same period accounted for the vast majority of the increase in family income since 1970. Women's increased experience and education have contributed to their increased earnings: their college graduation rates have outpaced those of men for several decades now and they have narrowed gaps in work experience. In the next year or two, [women](#) will make up the majority of the college-educated workforce in the United States for the first time, and today make up the majority of college students.

An increased role for women is good news for our economy because research has shown that greater diversity in the workforce [increases productivity](#), [improves decision making](#), and [heightens performance](#). More diverse employees also better enable firms to target a more diverse set of consumers. Businesses with employees who understand the perspectives and goals of a larger range of consumers will better be able to target products and services to consumers and will be more likely to be aware of the needs of minority and female consumers. Research bears out the business case for gender diversity: companies in the top quartile of gender diversity are 15 percent more likely to have [above-typical financial returns](#).

These shifts in our workforce have been driven in part by changes in our family lives, as relationships within households have shifted with many opposite and same-sex couples equally sharing work and family responsibilities. As a result, both men and women are seeking to fulfill roles as both wage earners and caregivers. These changes have implications for who is in the labor force and what these workers need to be successful in both their work and personal lives. Today most [caregivers](#) are workers and have important demands on their time outside of work.

To thrive, businesses across many sectors will need to adapt to recognize the needs of their workers to effectively balance their work and other responsibilities. Meeting the needs of the changing American workforce is an essential ingredient in worker productivity, attraction, and retention. For example, [over half](#) of workers said that they could do their job better if they were given more flexibility, and nearly half of parents say they have turned down a job because it would conflict too much with their families' needs.

[Studies](#) have found that companies with more women on their boards tend to outperform companies with fewer women at the executive level. But although women have become more equal players in the labor market overall and have [increasingly entered](#) previously male-dominated occupations like medicine and law, women have made relatively fewer strides in business careers. In 2014, only 4.8 percent of CEOs at Fortune 500 companies were female, and in 2013 only 16.9 percent of board seats in the Fortune 500 were [held by women](#). This is due in part to the persistence of barriers for women in business that exist at each step of a woman's path to a business career, leading to the loss of women from business careers at each step. These barriers include explicit and implicit bias, inadequate preparation and support from business educators, and a lack of adequate family-friendly workplace policies including, among other things.

This CEA Issue Brief highlights these unique barriers for women entering business careers and considers how businesses and business educators can combat them. Diversity is a key ingredient for success for any business and for the overall economy. Business educators and workplaces must work together to reduce barriers for women and minorities in order to fully reap the benefits of diversity, maximize innovation, and boost productivity.

Setting Aspirations: High School, College, and Early Career

From a young age, girls are less likely than boys to envision themselves as businesspeople. For instance, a

[2007 study](#) of high school students and [a 2013 survey](#) of college-aged students both showed that females were much less likely than males to say they wanted to own a business someday.

Girls are also less confident in their entrepreneurial and business abilities and knowledge. A [survey](#) of youth ages 14-19 found that girls were significantly less likely than boys to give themselves high ratings on their knowledge of starting a business and were less likely to be interested in starting a business. These differences are typically unrelated to actual skill differences. For example, the [OECD](#) found that even high-skilled girls lack confidence in their math and science skills. A [2002 study](#) of teens in grades 7 through 12 found that teenage girls were less confident in their ability to work with numbers than boys and that girls were only 60 percent as likely as teenage boys to list business as their first career choice. Many of the girls surveyed referred to business as constraining, boring, or stressful, and many stated that it was a male-dominated career. Along similar lines, boys were nearly 70 percent more likely than girls to say they wanted to be in charge of other people and 65 percent more likely to say they wanted to be their own boss.

These attitudes become entrenched early in life because of the different expectations society has of girls versus boys. Research has documented environmental factors that affect early childhood differences in [confidence](#) and [career aspirations](#). For instance, girls who show leadership ability or who assert themselves may be more likely to be referred to pejoratively as bossy: a [2008 survey by the Girl Scout Research Institute](#) found that 29 percent of girls, twice as many as boys, did not want to be leaders because they did not want to “seem bossy.”

Moreover, [parents](#) also underrate girls’ math abilities, views which may affect perceptions of their suitability for a business career, and that shape their expectations and interactions with children and young adults. Gendered assumptions about typical occupational choices for men and women can be found throughout [children’s books](#). These expectations and representations affect girls’ self-image: reminding girls of their gender when presenting themselves with traditionally male-dominated activities can negatively impact their performance, a phenomenon known as “[stereotype threat](#).” Unfortunately, the [textbooks](#) that prepare teachers to work with students inadequately address resources and strategies to combat gender bias in the classroom.

These differences in expectations and norms for girls and boys creates differences in performance as well. When communities hold more traditional beliefs about gender, students [perform](#) academically in more “gender-typical” ways, with girls outperforming boys in reading and boys outperforming girls in math and science. The most gender-equal regions in the United States have gender gaps in math and science that are roughly 50 percent lower than the average gap for the Nation. This is one reason that efforts to increase female leadership and confidence in the classroom, such as the “[ban bossy](#)” [campaign](#), can be effective in increasing both girls’ interest and their performance.

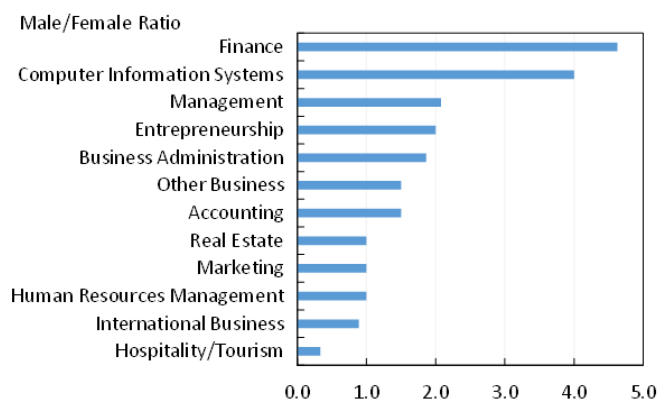
Other social and educational forces can also help combat these attitudes. Girls with [parents](#) in business are more likely to be interested in business, suggesting that early exposure to business as a career can partially prevent these beliefs from forming. Beyond this family relationship, outreach efforts do appear to generate interest in business among girls. For instance, girls who [participate](#) in leadership roles in outside activities are more likely to express interest suggesting that more opportunities to participate in such activities may help foster girls’ business interest. Girls with [higher](#) self-assessed levels of skills in numeracy, speaking, and writing are also more interested in business careers. Research suggests that the socialization that leads to women’s lesser interest in business is apparent as early as middle school and that attempts to combat this phenomenon through tailored education may need to start in grade school.

Despite the gap in career aspirations, women are now [nearly as likely](#) as men to receive an undergraduate degree in a business field (including general business, marketing, and management): [in 2013](#), 48 percent of undergraduate business degrees at U.S. institutions were awarded to women. However, this is down slightly from the mid-2000s, when a majority of undergraduate business degrees were awarded to women. Women’s near-parity in undergraduate business degrees has been the case since the mid-1980s, following a sharp increase over the course of the 1970s and the early 1980s (going from just 9 percent in 1971 to 46 percent in 1986). However, since 1990 women’s enrollment in college has outpaced that of men while their enrollment in business degrees has stagnated and even declined somewhat: in 2013, women received 57 percent of all bachelor’s degrees, but just 48 percent of undergraduate degrees in

business.¹ Undergraduate women are currently about 30 percent less likely than male undergraduates to major in business: undergraduate business degrees made up 16.4 percent of all bachelor's degrees awarded to women in 2012-2013, a decline from 18.4 percent in 2000-2001. For men, this share fell by less, from 24.9 to 23.9, over this period.²

Within undergraduate business majors there are gender differences in the areas of focus within their major. A 2014 UCLA [survey](#) of college freshmen shows large gender gaps in students' intention to major in subjects like finance, which tend to be [higher-paying](#), while women are more likely to focus on tourism and hospitality. This differential focus of area choice leads to wage gaps for men and women from the start of their careers; the expected [early career salary](#) for finance is over 40 percent higher than the expected early career salary for hospitality and tourism.

Ratio of Males to Females Reporting Intended Business Major by Focus Area



Source: UCLA Freshman Survey (2014)

Women in Graduate Business Education

Further gaps in business careers emerge after graduation. Immediately after college, young women are less likely than young men to go into business occupations, both at the management and non-management levels. Of all students who graduated in 2008, overall 24 percent of employed men were

employed in business occupations as their primary occupation four years out of college, compared to 19 percent of employed women.³ These gaps affect the desire to pursue business education. Among young men and women employed in business, an equal fraction (about two-thirds) have a desire to pursue a higher degree. Moreover, the gap in work experience in business occupations likely creates gender differences in the pool of students potentially applying to graduate school in business.

Graduate programs in business have expanded rapidly in the United States over the past forty years. [Between 1971 and 2013](#), the number of business degrees (both master's and doctoral) conferred by U.S. institutions grew at an average rate of 4.8 percent per year, nearly twice the rate of non-business postsecondary degrees. Over the same time period, women's participation in graduate business education expanded even more rapidly. In 1971, slightly over 1,000 master's and doctoral degrees in business were conferred on women by U.S. institutions – just 3.9 percent of the total number of such degrees. Between 1971 and 2013, however, this number grew at an average rate of 11.1 percent per year, such that by 2013 women earned nearly 90,000 graduate business degrees in the United States, 46 percent of the U.S. total.

However, these figures include *all* degrees in business, including specialized master's degrees in management and marketing, which tend to have higher shares of women than traditional MBAs. In a [2013-14 study](#), the Association to Advance Collegiate Schools of Business, a global accreditation organization for business schools, found that among specialized master's degree programs offered by business schools, men and women were enrolled at essentially equal rates, contributing to the overall share of 46 percent of all degrees discussed above. Thus, while women have made rapid strides in graduate business education over the past forty years, gaps persist in the number of women and men who receive business degrees, particularly MBA degrees. While comprehensive data on MBA programs is limited,

¹ U.S. Department of Education, National Center for Education Statistics. 2014. *Digest of Education Statistics* Table 325.25; CEA calculations.

² National Center for Education Statistics, Department of Education. 2014. *Digest of Education Statistics* Tables 322.20 and 325.25; CEA calculations.

³ U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12); tabulations from PowerStats.

the data that are available paint a picture of sharp disparities in enrollment between men and women. Enrollment in North American MBA programs is sharply skewed towards men: among the 338 schools reporting data, only 38 percent of students in full-time MBA programs were female.

The disparity in male and female enrollment is even larger among elite business schools. Among the top twenty business schools ranked by [U.S. News and World Report](#) in 2015, only 35 percent of full-time students were women.⁴

Enrollment is likely not the only factor affecting disparities in graduate degrees: women enrolled in MBA programs are less likely than their male peers to finish their degrees. While recent data on this issue are scant, a study using a multistage survey of around 5,000 individuals who registered for the GMAT in 1990 and 1991, [estimated](#) that the women were between 24 and 55 percent less likely than the men to complete a master's degree in business (depending on the type of degree). A [2013 study](#) found that women continue to complete MBAs at lower rates than men.

Factors Affecting Women and Graduate Degrees in Business

Case studies have [identified](#) a number of potential causes for disparities in both enrollment and completion in business schools. For example, the Pew Research Center found that half of respondents in a [2008 survey](#) cited the “old-boy network” as a major reason for the lack of women in top executive positions (and another quarter cited it as a minor reason). One-third of male corporate directors in a [2010 survey](#) cited women's weaker networks, due to the persistence of existing networks among men, as a major factor in women's limited access to and acceptance on corporate boards. Additionally, the relative lack of career advancement options for women in business may serve as a deterrent for young women considering their career options. Among Harvard Business School alumni working full-time, men were more likely to be [satisfied](#) with their opportunities for career growth and development and were more likely to be given high-level responsibilities

such as direct reports, profit-and-loss responsibility, and positions in senior management.

Beliefs Regarding Business School as a Good Match

Women have also been found to have lower confidence regarding math skills—consistent with the lower levels of confidence in numeracy skills among girls. Since business careers are often associated with math skills, that lack of confidence may affect women's willingness to go into business. Similarly, [stereotype threat](#), where individuals fear confirming a negative belief about their group, may also be undermining women's willingness to go into business programs and careers. For instance, [when women are reminded of](#) their gender, they perform worse on tests involving math. There are a number of ways for schools to minimize stereotype threat, including creating an [identity-safe environment](#), in which teachers strive to ensure students that their social identities are assets rather than barriers to success, and getting [more girls](#) into the classroom to create positive peer effects.

Another contribution to differing enrollment in business schools and pursuit of business careers may be women's beliefs about the match between their own ethics and their perceptions of the ethics required to be successful in business careers. [One study](#) found that women were more likely to associate business with immorality than men, and that they were also more likely to react negatively to jobs that required a trade-off between ethics and careers. Gender differences in ethical standards also [affect](#) negotiations, which in turn may impact women's opportunities and experiences at work. Research [has shown that](#) the ethical issues in business education may be playing a role in turning women away from MBA programs. Women's [disproportionate exposure](#) to deception in negotiations may also contribute to this aversion to the ethics of business.

Experiences at Business School

Other challenges are apparent when one digs into the business school experience itself. For instance, women are substantially less likely to be featured in the case studies that form the basis of classroom discussion. A [review](#) of case studies in one leading business journal found that women were absent in close to half and were

⁴ CEA calculations based on data presented in *U.S. News and World Report*, “Best Business Schools 2015.”

the protagonist in just 13 percent. When women are protagonists they are mostly involved in “pink” topics, including food, family, fashion, and gender-specific issues such as women’s health. Of the seven cases among the 53 that are best-sellers and award-winners and also feature women, six of them deal with traditionally female areas.

Women may also be reluctant to take classes that are less traditional for women: [research](#) on graduates of one top MBA program found that women are less likely to take finance and accounting classes but are more likely to take classes in marketing, a finding that matches other research discussed earlier on both undergraduate and graduate interests within business education. They also find that women have slightly lower GPAs across all courses of study, with finance classes having the largest gender gap in grades. A recent [case study](#) of one top business school suggests that lower grades among women may be due in part to subjective measures such as classroom participation.

[Multiple studies over several decades](#) have found that women are less likely to engage fully in competitive case discussions that make up a large portion of business school classroom practices. At the same time, implicit bias among teachers may [favor](#) men in subjects like math, which are traditionally associated with male success. As with differences seen in studies related to gender differences in math and science and the potential impact of stereotype threat on performance, some of these differences in performance may be caused by gendered beliefs about women’s ability to succeed in finance and the overall gender attitudes that shape campus culture.

Meanwhile, a lack of female mentors and role models within business schools may both discourage enrollment and hamper completion for women students. [Data from the AACSB](#) show that women are underrepresented in nearly every faculty rank and discipline in U.S. business schools. Women are also much more likely to be concentrated in lower-ranking faculty positions in business schools. For example, among general business faculty, only 14 percent of full professors are women,

while 42 percent of instructors are female. These gaps are even larger in the leadership of top business schools: of the top sixty business schools ranked by *U.S. News and World Report* in 2015, just 11 (18 percent) have a female dean. Among the top twenty schools, only three (15 percent) have a female dean.⁵

Gender balance within professions can create important opportunities for women to mentor women. According to a [multi-occupation survey study](#), female mentees find mentor relationships more productive when mentors are female. Mentoring and role model effects are also relevant in the [college classroom](#), where female professors can improve the performance and persistence of women in STEM fields. Similarly, mentoring by female professors has also increased the success and productivity of [female assistant professors](#) in Economics.

Business School Timing

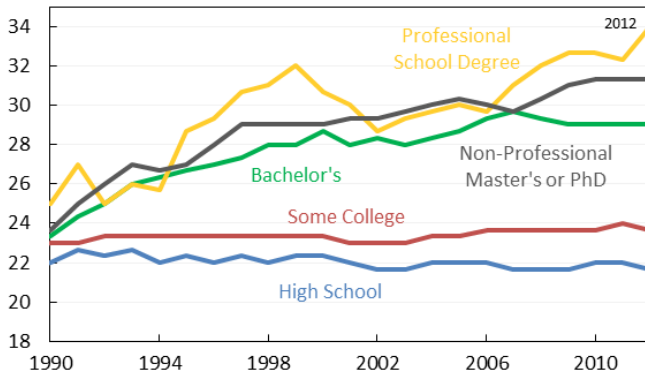
The usual timing of enrollment in traditional MBA programs may be another barrier, as the median MBA student age of 30 lines up closely with the [typical age](#) of first birth for college-educated women in the United States.⁶ This means that women who want to have children may face a trade-off between pursuing graduate education in business and having children on their preferred timeline. Indeed, women pursuing professional degrees have had the sharpest increase in age of first birth in recent years: from 25 in 1992 to 34 in 2012.⁷ The increasing age of first birth among women with graduate degrees highlights the very real trade-offs women are facing. For many women who choose to have children, this may result in women choosing not to pursue graduate education in business given the trade-offs that come with postponing childbirth into one’s mid-to-late 30s and 40s.

⁵ CEA calculations based on data presented in *U.S. News and World Report*, “Best Business Schools 2015.”

⁶ National Postsecondary Student Aid Study 2012; tabulations from PowerStats.

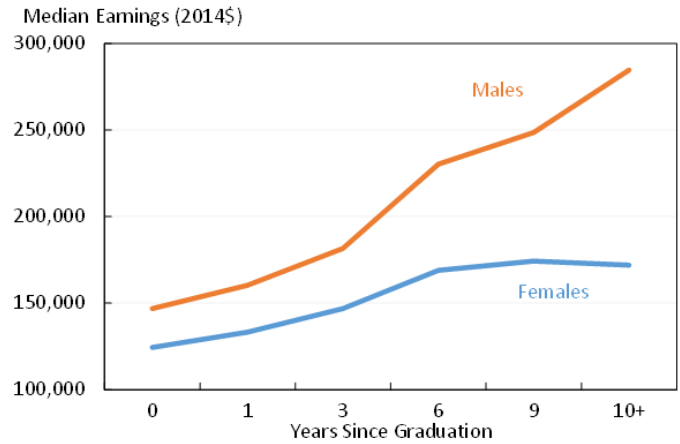
⁷ Bureau of Labor Statistics, Current Population Survey (Fertility and Marital History Supplement, 2012); CEA calculations. Data are three-year moving averages.

Median Age at First Birth by Birth Year of First Child and Educational Attainment



Note: Data are three-year moving averages.
 Source: Bureau of Labor Statistics, Current Population Survey (Fertility and Marital History Supplement, 2012); CEA calculations.

The Earnings Gap Among MBAs



Source: Bertrand, Goldin, and Katz (2010).

Enhancing the Careers and Opportunities of Women in Business

Women are underrepresented in the highest ranks of business, and compensation and leadership disparities that emerge several years after graduation grow sharply over time. For instance, women see gaps in leadership: as of 2014, only 4.8 percent of CEOs at Fortune 500 companies were female and only 16.9 percent of board seats at Fortune 500 companies were [held by women](#). Studies have shown that MBA women may be subject to implicit or explicit gender discrimination, [especially from male colleagues](#), that may hold them back from promotion; this may also keep the number of female sponsors and mentors at the highest levels of business low, reducing the likelihood of [career-boosting mentorship](#) for women on lower rungs. [Survey estimates](#) also find that women identify with female role models who frequently hold lower level positions, often tempering their ultimate career expectations.

Similarly, research [examined](#) the salaries of MBA graduates from a top business school and found that although men and women had fairly similar earnings at graduation, after 5 years, men earned approximately 30 percent more than women, and, after 10 or more years, this gap stretched to 60 percent.

Career Interruptions, Parenthood, and Work-Family Conflict

The research documenting the experience of one MBA program [finds that](#) the primary differences between men and women came from the likelihood and length of career interruptions as well as differences in weekly hours worked, with much less explained by differences in preparation (e.g. finance courses). Deviations from the corporate norm of non-interruption and long hours are harshly punished in terms of earnings. This is especially true if a woman chooses to have children; the presence of children is the largest contributor to these gender differences. The authors [found](#) that much of the growth in the earnings gap in the first decade was due to women being more likely to take time away from work – closely associated with childbirth and child care needs (10 or more years out, there is a 22 percentage point gender gap in having taken time out of work including parental leave) – and the gender gap in hours with women more likely to work shorter hours including part-time employment – also typically related to family and caregiving responsibilities.

Earnings gaps between men and women with MBAs are exacerbated because men [continue](#) to experience pay increases when they have children. Economists have suggested that these different experiences reflect household decisions about specialization. Women with children work fewer hours and are more likely to take parental leave than men with children. The penalty for time out of the labor force, in the form of lost wages, is [larger](#) for women in business than in almost any other profession; they do not simply lose the wages they would

have received had they been at work, but in addition their entire earnings trajectory for the rest of their career is negatively affected. Because women disproportionately take time out of the labor force, this penalty disproportionately affects women. [Other studies](#) have also documented this parenthood penalty and its disparate impact on mothers.

Notably, career interruptions are non-linearly related to earnings in a number of occupations, particularly business, so workers who take time off lose more than just the foregone earnings during the period away from work—they continue to lose earnings for the rest of their careers. Research [found](#) that a 10 percent hiatus in employment for MBAs 15 years post-college (18 months off) was associated with a decrease in earnings of 41 percent—much higher than the equivalent penalties in law (29 percent) and medicine (15 percent). The author also found that MBAs tended to take the longest non-work spells after a birth compared to other highly educated women, such as physicians, PhDs, and lawyers.

This suggests that those with the greatest penalties to time off were more likely to take extra time off, since their jobs do not facilitate regular forms of flexibility that allow parents to balance work and child care, such as shorter hours or more flexible scheduling. When there is very little workplace flexibility, an expectation for a workweek well above 40 hours, and high career penalties for taking even brief time off for maternity leave, some women, especially married women or those with another high earner in the household, [may prefer](#) to leave the workforce or engage in self-employment in response.

However, men in married couples are increasingly becoming [more engaged](#) in family life and parenting, and these parenthood penalties may begin to affect them as well. While women have become important contributors to family income, men have increasingly taken on child care responsibilities and other duties in the home. Today men are doing a larger share of household duties than in the past, though mothers still spend almost twice as much time on household work as fathers. Men are now increasingly looking for jobs with paternity leave: [a 2014 survey](#) of high-skilled working fathers conducted by researchers at Boston College found that 89 percent said that the availability of paid paternity leave was an important consideration in seeking a new job if they planned to have another child. Likewise, 95 percent

reported that workplace flexibility policies allowing them to actively engage with their children were an important job characteristic. Because many couples are [increasingly](#) splitting home and workplace responsibilities more evenly, a majority of children are now in households where all parents work, and a majority of unpaid caregivers are also employed; it is more important than ever that workers are not penalized for balancing work with their family responsibilities. Moreover, women who are single parents may also face unique challenges in balancing work and family that create constraints in making career decisions.

Family-friendly workplace policies can better enable workers to choose jobs in which they will be most productive. For example, research shows that women are particularly likely to select careers that offer flexibility, like pharmacy or obstetrics, and less likely to enter careers known for inflexibility, such as business. Despite increasing workplace flexibility initiatives across sectors of the economy, women in management and business still view [prioritizing family over work](#) as an obstacle to success.

Individual businesses and the economy as a whole [benefit](#) when workers are in jobs that are well-suited to their skills and qualifications. From a business's perspective, these policies can also increase worker productivity and worker retention. For example, in a [study](#) of over 700 firms, well-managed firms were found to have both higher productivity and better work-life balance policies, and a [survey](#) of California employers found that 90 percent reported that paid leave did not harm productivity, profitability, turnover, or morale. Fair compensation for hours worked, access to workplace flexibility to shift either time or place of work, and advanced notice of work schedules can go a long way to making it easier for workers to balance their work and family responsibilities. These policies can not only help reduce the pay, promotion, and leadership gaps between men and women in business, but can also allow businesses to attract and retain the strongest talent, which benefits the economy as a whole.

Research also shows that family benefits like workplace flexibility and paid maternity leave have an important impact on women's labor force participation. When women have access to paid maternity leave, a year later they [work more](#) and may have commensurately higher earnings. Research examining both maternity leave

programs in [other countries](#) and in [California](#) concludes that paid leave can help new mothers maintain a connection to the labor force and increase the likelihood they return to their employer. Companies examining their own data have reported that expanding the length of maternity leave increased the retention of valuable employees. For example, Google [has found](#) that adding maternity leave decreased the rate by which new mothers left by 50 percent and Vodafone announced their new maternity leave policy along with the [release](#) of analysis showing that paid maternity leave could save businesses money.

Negotiation: A Lose-Lose Situation

Even workers who do not have children face barriers in their careers, which contribute to a growing pay gap over time. There are many reasons for these gaps to grow over time, particularly because gaps tend to be accumulate over time with small differences growing as future promotions and raises exacerbate the differences. One issue related to both pay and promotion may be due to [gender differences](#) in the likelihood of initiating a negotiation.

Even highly-educated women tend to be [less likely](#) to negotiate their first job offer than men. But even when women do negotiate, if the norms of negotiation and salary expectations are not transparent, they are likely to receive less than men. While gaps in negotiated salaries are small in “low-structural ambiguity industries,” in “high structural ambiguity industries,” women received about \$10,000, or 10 percent, less than similarly-qualified men.

Even though negotiation can lead to greater career prospects and higher wages, it can also be detrimental, particularly for women. Researchers [found](#) that women were more often penalized for initiating negotiations, since they are perceived differently from their male colleagues. Another study [showed](#) that female negotiators are perceived as more easily misled than male negotiators due to a perception of relatively low competence. As a result, negotiators deceived women more than men, leading women into more deals under false pretenses. [Research](#) finds that women are expected to be more altruistic than men, or support their coworkers more, to receive the same performance rating. This baseline expectation of altruism in women

likely affects how women are perceived as negotiators relative to men.

Differences in compensation that arise due to differences in negotiation behavior may not be visible to women. Many workers are unaware of wage differences between themselves and coworkers. For example, a 2010 [survey](#) found that 19 percent of employees reported their employer formally prohibits discussing salaries and another 31 percent are discouraged from discussing pay. A pay gap between men and women is particularly likely to exist under conditions of pay secrecy, where workers do not know whether they are receiving differential compensation from coworkers who have similar skills and experience levels. To remedy this situation, businesses can ensure that their workers are able to discuss compensation without fear of retaliation.

Bias: Implicit and Explicit

Underlying all of the possible explanations for the gender pay gap is the potential for discrimination. A large and well-established [literature](#) has demonstrated the persistent negative effects of discrimination against women in [hiring](#), promotion, and earnings. In addition, discrimination may not be overt: some [work](#) has suggested that implicit, or subconscious, biases are more common than overt biases; in this case, a pay gap stemming from discrimination will be more difficult to overcome.

Despite [evidence](#) that explicit discrimination is declining, in particular, that perceptions of women in managerial roles is improving, implicit bias against women, particularly those in leadership roles, may continue to hold back women’s career trajectories. Recent [research](#) has found that men were more likely to associate traits linked to successful management (“competent,” “knowledgeable,” “leader”) with men, and to associate traits linked to unsuccessful management (“incompetent,” “ignorant,” “follower”) with women, even when scoring low on measures of explicit bias against women.

New research shows that these implicit biases can have concrete effects on women’s success in the job market. In one [study](#), male job interviewers who scored high on measures of implicit bias were more likely to give female interviewees negative performance evaluations. Moreover, interviewers who simultaneously scored high

on implicit bias but low on explicit bias were the most likely to score female interviewees negatively, demonstrating the critical need to address both forms of bias in the workplace.

Women in Entrepreneurship

Finally, entrepreneurship and business ownership are also an important career avenue for business school graduates, and there are persistent gender gaps. In 2012, just 36 percent of business owners in the United States [were women](#), and in 2007 only 29 percent of businesses were majority-owned by women. Moreover, businesses owned by women are substantially smaller on average than male-owned businesses. [In 2007](#)—the most recent year for which comprehensive data is available—88 percent of businesses that were majority-owned by women were sole proprietorships. Less than 1 percent of all women-owned businesses had 100 or more employees, and 1.8 percent of women-owned businesses generated receipts of more than \$1 million annually (compared to 1.6 percent and 6.3 percent respectively for men). Despite these gaps in entrepreneurship, gender diversity has been shown to increase the success of new companies: research by [First Round Capital](#), a notable investor, found that startups with at least one female founder performed 63 percent better than all-male teams.

The small size of women-owned businesses may be due to credit constraints, as research has indicated that female entrepreneurs have less access to financial capital on average than do male entrepreneurs. A [survey of firms](#) by the National Women’s Business Council found that male entrepreneurs start out with nearly twice as much capital as women (\$135,000 versus \$75,000). [Research](#) by the Small Business Administration also finds that female entrepreneurs are more likely to use a different mix of debt capital and equity and depend more on owner equity investments than do male entrepreneurs.

Meanwhile, venture capital flows disproportionately to firms headed by men. Between 2011 and 2013, just 14 percent of venture capital-funded companies had at least one woman on the executive team. Only 3 percent had a [female CEO](#), and only 6 percent of [partners in venture capital firms](#) are women. However, venture capital-backed firms with women on the management team [received somewhat greater investment](#) on average

than male-headed firms (\$12 million versus \$8 million). This difference in investment may be due to the fact that companies with women [tend to be](#) older and larger, as start-ups tend to hire more female as they age and expand. At venture capital firms themselves, female partners are less likely to invest in companies that go public, a performance gap that may be attributed to a [lack of support from male colleagues](#).

Conclusion: A Path Forward

Despite continued progress, the current landscape in business career aspirations, business school enrollment and graduate experience, and ultimately career success can be marked by striking obstacles for women. The good news is that there are ways to address these challenges.

Working to improve gender dynamics in business will involve targeting gender disparity over a woman’s education and career, beginning with primary education and continuing to the workplace. To support a future where more young women pursue an interest in business careers, the task will be to change attitudes, build awareness about business opportunities, increase leadership opportunities, and build confidence in girls from an early age.

To help with these goals, the Administration is working to make sure that women succeed in the workplace. As the President has said, “When women succeed, America succeeds.” In April of 2014, the President issued an executive order stating that Federal contractors could not retaliate against employees inquiring about, disclosing, or discussing their compensation with fellow workers. He has also called on Congress to pass the Paycheck Fairness Act, which would extend these protections to the broader workforce. These policies help combat the gender differences in negotiation by giving women the opportunity to arm themselves with more and better information about what their colleagues earn. In addition, the first piece of legislation he signed into law, the Lilly Ledbetter Fair Pay Act, helps workers recover wages lost to discrimination.

The Small Business Administration is also expanding the InnovateHER Women’s Business Challenge, a series of local competitions hosted by universities, accelerators, clusters, scale-up communities, SBA’s resource partnership, and other local organizations. The

competitions are designed to identify products and services that have measurable impacts on the lives of women and families, have potential for commercialization, and fill a need in the marketplace. Microsoft is partnering with SBA and is expanding the prizes awarded to the winners of the Challenge.

Finally, the President has called on Congress to pass the Healthy Families Act, which would give millions of workers the chance to earn up to seven days per year of paid sick time, and is expanding his support of state efforts for paid parental leave through a \$2.2 billion dollar budget proposal.

Business educators have a critical role to play in shaping the leaders of tomorrow and facilitating diverse leadership. Given the demographic changes both underway and on the horizon, business schools must adapt in order to ensure that their students are trained looking forward to the business environment in which they will lead. To be competitive, future leaders will increasingly need to be involved in recruiting and retaining talent and therefore will need to be aware of the work/family issues they, their colleagues, and their employees may face. By taking further steps to encourage more female students to pursue business careers, to ensure greater inclusivity in the classroom and on campus, and to better consider the lifetime career paths of their students, business schools can help our nation's workplace policies catch up with the needs of our modern-day workers and employers.

In particular, business schools can help ensure access to business school and business careers for women by taking concrete steps to pursue outreach and engagement to build the pipeline of women interested in business careers, to partner with companies to help women get back on the fast track, and to ensure that business school is a viable investment for a range of students, especially those with a lower earnings profile. In addition, business schools have the opportunity to combat gender disparities by altering the business school experience to better address obstacles faced by women, including life-cycle challenges, facilitating mentorship and sponsorship opportunities, making curricula and faculty more representative, and ensuring that a diverse group of perspectives are brought into the classroom.

Finally, the task ahead requires considering the experience beyond business school and the role models

that business schools are providing. To improve the outcomes and success of women in the workplace, it will be critical to improve career support and services, build tools for entrepreneurs, and expand workplace flexibility. By being model employers, business schools can lead by example, creating opportunities for all workers to succeed, including recognizing the need for balance between work and family responsibilities, ensuring diversity in leadership positions, and recognizing the importance of value, tone, and a culture of inclusiveness. Working together, businesses and business educators can expand opportunities and ensure the future of U.S. competitiveness.

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