WOMEN IN LEADERSHIP

GEORGETOWN UNIVERSITY McDonough
SCHOOL of BUSINESS
ABOUT US

The Center for Women in Business (CWB), a project of the U.S. Chamber of Commerce’s Campaign for Free Enterprise, promotes and empowers women business leaders to achieve their personal and professional goals by increasing opportunities for women to serve on corporate boards and in the C-suite; mentoring women at all stages of their careers; and building a network of women entrepreneurs to encourage peer-to-peer networking, education, and professional growth.

Georgetown University’s McDonough School of Business is a premier business school located at the center of world politics and business in Washington, D.C. Some 1,400 undergraduates, 1,000 M.B.A. students, and 1,200 participants in executive education programs study business with an intensive focus on leadership and a global perspective.

Founded in 1957, the business school today resides in the new Rafik B. Hariri Building, a state-of-the-art facility that blends the tradition of Georgetown University with forward-thinking functionality. For more information about Georgetown’s McDonough School of Business, visit http://msb.georgetown.edu.

The U.S. Chamber of Commerce Foundation (USCCF) is a 501 (c) (3) nonprofit affiliate of the U.S. Chamber of Commerce dedicated to strengthening America’s long-term competitiveness by addressing developments that affect our nation, our economy, and the global business environment.
Women in business are taking on more leadership positions throughout America’s free enterprise system. Their talent and leadership are critical to our economy’s success and the development of a 21st century workforce. In partnership with Georgetown University, the U.S. Chamber of Commerce is proud to feature this insightful report on women who are leading America’s companies. This report makes it clear that women are advancing to the top in a variety of industries and in companies of all sizes.

However, there is still work to be done.

In today’s tough economic climate, challenges remain for America’s businesswomen. Though women represent half of America’s workforce, they make up 6.5% of the executive ranks in small-cap companies, 6.4% in large-cap companies, and only 5.7% in mid-cap companies. For whatever reason, women are still not making it into top leadership roles at the same rates as men.

Fundamentally, the free enterprise system is about enabling all people, regardless of gender, to use their talents and hard work to create opportunities to better themselves, their communities, and society at large. We can and must support women in leveraging the power of free enterprise to achieve these goals.

The breadth of information in this study will prove to be an invaluable resource to businesses of all sizes. It points to industries that are leading the curve in promoting women into executive roles and cultivating the women leaders of tomorrow. It also identifies specific industries and regions of the country where improvements can be made to better use women’s leadership skills and talents. Overall, this report makes it clear that companies have a unique opportunity to enable talented women to advance in the workplace.

The Chamber’s Center for Women in Business will continue its commitment to educate, facilitate, and communicate the critical role of women in the workforce. Helping talented and qualified women advance to the top tiers of business leadership remains an essential goal for the Chamber, and we are excited to see what the future holds for women in the American workforce.

Sincerely,

David C. Chavern

David C. Chavern
Executive Vice President and Chief Operating Officer
U.S. Chamber of Commerce and President, Center for Women in Business
PART ONE

WOMEN IN LEADERSHIP

A Look at Companies in the S&P MidCap 400 Index, 2000–2010
In an ever-competitive global economy, companies that identify and develop leaders who drive innovation and produce results will succeed. Today, nearly 50% of America’s workforce are women, and while women continue to move into leadership roles, there is still more to be done. That’s why the U.S. Chamber of Commerce and its Center for Women in Business partnered with Georgetown University to examine women as business leaders. This report includes research on small, medium, and large enterprises as well as on women entrepreneurs.

This research focuses on women’s participation in the top management ranks of the companies featured in the Standard & Poor’s (S&P) MidCap 400 listing from 2000 to 2010. The findings of this research provide valuable information for businesses as they plan and implement their leadership strategies.

We chose to focus on mid-cap companies—those with $1 billion to $7 billion in market capitalization—in order to complement the extensive research that exists on female executive representation in large Fortune 500 or S&P 500 companies. The data used in this study come from the annual reporting by mid-cap companies to the U.S. Securities and Exchange Commission.

Women who serve as executives in America’s leading mid-cap companies are all too often overlooked. Compared with the number of studies of gender issues at larger companies in the Fortune 500 or the S&P 500, research on the gender demography in smaller companies is relatively scant. Yet it is unclear whether findings about women in larger organizations generalize to those in smaller companies as well.

The analysis presented in this study focuses on the gender makeup of the top five executives of companies that comprise the S&P MidCap 400 Index from the years 2000 to 2010. In addition to examining the percentage of women at this very top level over time, this report looks at their compensation relative to that of their male colleagues. As explained in this report, the increase in available data, coupled with the recession, created a particularly interesting situation in the years 2006 to 2010. This period is where we focus most of our attention.

Over the past decade, the average percentage of women in the top executive ranks of mid-cap firms in the United States was 5.7%. This number did not come about through consistent growth from 2000 to 2010. Rather, the level of female participation increased through the middle part of the decade and then rapidly dropped in 2009 and 2010.

We examine women’s representation in the top executive ranks of these mid-cap firms from a number of different perspectives, such as age, location, industry, and the status of these executives within their firms. Indeed, looking at different age clusters reveals that younger female executives (between 27 and 39 years old) suffered a decline in their ranks starting earlier than the other executives (2006 rather than 2008). Moreover, the percentage of older female executives (aged 60 and above) seemed to stay the most consistent, albeit at an already low level.
The location of a company also appears to have an impact on female participation at the executive level. The Northeast region of the United States enjoyed the highest percentage of female executives, while the Midwest consistently ranks at the bottom. Preliminary study appears to show that the differences between regions in the percentage of female executives have much to do with the types of industries that dominate in each area of the country.

Throughout the United States, a large difference exists between industries regarding the number of women in their executive ranks. Women make up more than 10% of executives in three industries: media, life sciences, and retailing. The mid-cap automobiles and components industry had no female executives from 2000 to 2010.

Another finding is that the gap in compensation between male and female executives appears to be narrowing. In fact, women in some industries are outperforming men in terms of compensation. Nevertheless, the average percentage of women who became executives and garner this level of compensation remains low. There is still a long way to go.

**WHAT IS THE S&P MIDCAP 400?**

The S&P MidCap 400 Index is a relatively stable set of midsize U.S.-based, publicly traded firms chosen to mirror the characteristics of the larger population of midsize firms. The index covers more than 7% of the U.S. equity market¹ and seeks to remain an accurate measure of midsize companies. To qualify for this index, a company must have a market capitalization in the range of $1 billion to $7 billion, though this range is regularly reviewed to ensure consistency with market conditions. In addition to being located in the United States, companies must meet specific criteria for liquidity, market capitalization, public float, and sector classification, and they must be financially viable with four consecutive quarters of positive reported earnings.² Index constituent turnover is minimized, and additions to the index occur only when deletions are made in response to a merger, acquisition, or substantial violation of index criteria.³ Such changes are made on an as-needed basis.

As of February 20, 2012, the top five S&P MidCap 400 constituents are Green Mountain Coffee Roasters, Inc.; Regeneron Pharmaceuticals, Inc.; Monster Beverage Corp.; AMETEK, Inc.; and Vertex Pharmaceuticals, Inc. Other S&P MidCap companies include Ann Taylor, AOL, DreamWorks Animation, JetBlue, Netflix, and Nordstrom.⁴

According to U.S. law, all publicly traded companies must report their top five executives (in terms of earnings) to the Securities and Exchange Commission. They report not only the gender of these top five executives, but also their earnings in terms of salary, bonus, and other compensation, such as stock and deferred options. Data from these filings were used in this analysis.

Looking at the most recent decade of available data (2000–2010), figure 1 shows that reporting practices began to increase during the middle of the decade, with a near 99% compliance rate toward the decade’s end.
We believe that this increase in reporting is likely due to changes in the regulatory environment and improvements in the online mechanisms by which companies filed their reports. This near-perfect level of reporting by midsize companies offers a robust snapshot of the executive suite.

GENDER DEMOGRAPHICS IN THE EXECUTIVE SUITE

From 2000 to 2010, women represented 5.7% of the leading executives in the S&P 400 index of mid-cap companies. (In this study, “executives” refers to the top five highest-paid members of staff unless otherwise noted.) As figure 2 shows, this number was relatively stable for the first half of the decade, and then appeared to rise from 2006 to 2008 before falling off rather precipitously in 2009 and 2010. Thus, it seems that women were making a slow and steady climb into the top levels of midsize corporations as the decade progressed—that is, until the start of the global economic contraction in 2008, which suggests that this gender trajectory may mirror the broader economic trajectory.

What is most interesting to us about this decline is that some people have argued that the “great recession” had a greater impact on male employment levels than on female employment levels. Women were thought to be more “recession proof.” In approximately 27% of American dual-income households in 2010, the wife was earning
more than husbands. Moreover, single women without children between the ages of 22 and 30 were earning more than their male counterparts of the same age in many of the largest cities in the United States.

These findings are balanced by data that suggest the recession hurt women’s chances of surviving the top ranks of the executive suite—at least for mid-cap firms. There may be more gender equality (in terms of numbers and salary) in the lower levels of the firm, but in the executive suite the percentage of women decreased significantly from 2008 to 2009 and then again from 2009 to 2010.

Figure 3 focuses on the years after 2005, where we see the most significant rise and fall of female executives in mid-cap companies. The first bar of figure 3 shows the average percentage of female executives in the mid-cap firms between 2000 and 2005, and the second through sixth bars show the percentage of women for each subsequent year individually. The information is presented this way because our later analyses focus on the second half of the decade. Because the beginning half of the decade was relatively stable in terms of female executive numbers, we show the average of this first half for reference and comparison and then show 2006 to 2010 in greater detail.

Figure 4 shows the same data, but focuses solely on non-CEO female executives.

**Figure 3: Female Executives**

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**Figure 4: Non-CEO Female Executives**

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**AGE OF EXECUTIVES**

Based on an analysis of executive representation by women in mid-cap companies, younger female executives appear to be more vulnerable to recessionary pressures than their older counterparts.

Younger women were more strongly represented in the executive pool in 2006 than in later years. Figure 5 shows the percentage of female executives grouped by their ages. There is a significant drop in the percentage of younger female executives, ranging in ages from 27 to 39, starting in 2006. In 2006, younger female executives represented 15% of the overall leadership in mid-size firms. Just a year later, that proportion dropped to 9.3%. By 2009, younger female executives occupied only 3% of these leadership positions.
These same drops in employment shares occurred across nearly every other female age group. The only age group of women that is consistently represented on the executive level is ages 60 or older. Indeed, the percentage of female executives over the age of 70 appears to be increasing, though their overall number remains low compared with their male counterparts.

Although figure 5 appears to represent a fairly significant female representation in the executive suite, particularly in the 40 to 49 and 50 to 59 age ranges, this is still a relatively small percentage compared with male executives. To provide a full appreciation for this differential, figures 6 and 7 present the percentages of female and male executives back to back for each age group. Figure 6 shows these percentages for 2006; figure 7, for 2010.
REGION WHERE THE COMPANY IS BASED

Figure 8 shows the percentage of female executives in the S&P mid-cap companies by region of the country for the second half of the decade. The Northeast region consisted of 87 companies, the Midwest of 126 companies, the South of 84 companies, and the West of 87 companies.

As figure 8 shows, the Northeast has the highest percentage of women in executive roles. The Northeast and Midwest peaked in 2008 with 9% and 5.9%, respectively. Both regions significantly dipped in their percentages of female executives in 2009. In contrast, the South showed a more gradual decline after 2008, whereas the West showed a gradual decline starting in 2005. It is possible that changes in the more macroeconomic environment of these regions explain this fluctuation, but further regional analysis must be done to permit any confident inferences about root causes.

Figure 9 shows the same data but in bar chart. These bar charts are layered on top of a map of the United States to clearly demarcate how states were categorized in the broader regional analysis.
INDUSTRY SECTORS

Sectioning the data by industry offers another picture of where women are advancing in business leadership. The industries with the highest average number of female executives include media (21%), pharmaceutical (14%), and retailing (13%). The industries with the lowest average number of female executives are semiconductors (2%), transportation (2%), energy (2%), and automobiles and components (0%). The telecom, food and staples retailing, and household and personal products industries were excluded, because in these industries the actual number of reported executives is too low to determine any meaningful gender differences or significance in percentage shifts over time.

In many industries, the top leadership consists of fewer than 5% women. These industries include auto and components, capital goods, consumer durables and apparel, diversified financials, energy, insurance, materials, real estate, semiconductors, tech hardware and equipment, and transportation. These industry numbers are graphed in figure 10.

As figure 10 shows, the biggest decline is in the consumer durables and apparel industry, with a 3.9 percentage point drop from 2009 to 2010. Prior to 2010, the consumer durables industry ran counter to the overall national trends, with steady increases in its count of female executives from 4.5% in 2006 to 6.9% in 2009. Transportation is the most stable sector, with women consistently accounting for just under 2% of the overall total of executives.
Figure 11 depicts the percentage of female executives in the seven industries that have between 5% and 10% female executives. These industries are banks; consumer services; food, beverage, and tobacco; health care equipment and services; professional services; software; and utilities. As figure 11 shows, healthcare equipment starts at 9% in 2006 and drops to 4% by 2010. Professional services spikes in 2008 to 10.1%, but quickly returns to the average 5% by 2010. The software, banking, and utilities sectors maintained steady averages of 5%, 5%, and 7.4%, respectively. The notable drop-offs in the representation of female executives in these industries may be directly related to the recessionary conditions felt through the latter years of the decade.

Figure 12 depicts the three industries with more than 10% female executives. Media, retailing, and the larger grouping of pharmaceutical, biotech, and life sciences industries hold this distinction. The media industry started strong in 2006, with 29% of the sector’s executives being women, but dropped to 18% by the end of the decade. The pharmaceutical industry has consistently maintained an average of 13% female executives. Although this industry does not show the highest percentage of female executives, the stability of the percentage over time (with a relatively higher base rate compared with other industries) is worth noting.
EXECUTIVE COMPENSATION

According to the data, the gap between male and female compensation may be closing over time. Figures 13 and 14 show the realized and potential compensation for men and women. The bars are the compensation averages and the lines represent the standard error of the mean for each bar.

As figure 14 shows, from 2000 to 2010 the difference in potential compensation across genders continued to shrink until 2010 when the potential compensation for males was not statistically different from that of females. Figure 13 depicts the realized compensation, showing that it is more disparate across genders than potential compensation (particularly in the earlier part of the decade). Further research is needed to determine the underlying reasons for the difference.

Drilling down into 2010 more closely (when the potential and realized compensations of males and females were not statistically different), we get a better understanding of why this might be the case.
It turns out that there is a significant relationship between gender and industry group, whereby industries in which women are more represented (with more than 10% female executives) show a different picture than the other industries.

Figures 15 and 16 show the realized and potential compensation for each gender by industry group. Industries with more than 10% female executives had a higher realized and potential compensation for their female executives than their male counterparts. What this may suggest is that as women gain more of a foothold within industries, their compensation becomes more favorable compared with that of men.
Women made up 2.4% of all S&P MidCap 400 CEOs from 2006 to 2010. A look by region (figure 17) shows the percentage of women CEOs during those years to be 3.9% in the West, 3.6% in the Northeast, 2.2% in the South, and 0% in the Midwest.

Those industries with more women executives also tend to have a higher percentage of female CEOs. As figures 18 and 19 illustrate, female CEOs compose 8.4% of CEOs in industries with more than 10% female executives; 2% in industries with 5% to 10% female executives; and 1.3% in industries with fewer than 5% female executives.

The study also analyzed tenure at the companies before an executive became CEO, segmented by industry. This tenure analysis is speculative, since only 47% of companies reported the CEO’s date of hire. Nonetheless, the data trend shows that in industries with more than 10% female executives and in industries that have fewer than 5% female executives, companies tended to hire female CEOs from the outside rather than promote them from within.
Figure 20 details this trend and shows that for both the first block of industries (with female representation in the top ranks below 5%) and the last block (with female representation in the top ranks above 10%), the average tenure for women is negligible. This suggests that CEOs are being hired from the outside. Figure 20 also shows that for industries with 5% to 10% female executives, companies tended to promote women from within. They promoted women after an average of 10 years and men after an average of 7 years.

REFLECTIONS AND THOUGHTS ON THE FUTURE

The overall picture of women at the top level of mid-cap companies seems to be one of optimism in terms of compensation but pessimism over their relative numbers. The brightest finding from this research is that the compensation gap, at least for women at the very top levels of mid-cap organizations appears to be closing. Although the gender gap in compensation was significant throughout most of the decade (with realized compensation differentials even greater), by 2010 the gap had closed. Moreover, in industries where women represent more than 10% of the top executives, females are actually making slightly more in overall pay than their male counterparts.

However, the percentages of women who are actually represented in the top ranks of mid-size companies are disappointing. There are only three industries where women represent more than 10% of the top executive population. Only 5% of the top executives in 2010 were women. Needless to say, while a small group of women may be making amounts comparable to their male counterparts, this remains a very select group.

The sobering conclusion of this study is that from 2000 to 2010, the percentage of women in executive positions did not rise above 6%. Moreover, although the percentage of female executives did climb in most regions from 2005 to 2008, women were particularly vulnerable once the recession struck. For younger executives, this decrease in the percentage of women in the top ranks of mid-cap firms came even sooner, starting in 2007.

Clearly, more research needs to be done. For example, while women account for only 2.4% of S&P MidCap 400 CEOs, there are clearly more female CEOs in industries where there are also more female executives. Are these industries doing something specific to develop female executives? What barriers do women face in these mid-cap companies, and are these the same as those barriers that women face in larger companies? Are women making greater strides in another venue, such as in small-cap firms or in entrepreneurial ventures? This research also points to questions about the future of women in executive leadership.
Will women continue to gain executive positions 1 percentage point at a time, one woman at a time? What can be done to advance the number of women at executive levels more dramatically and consistently? Once gains are achieved, how can they be leveraged and not lost? The Chamber, Georgetown University, and interested stakeholders will continue to explore these and other issues as we advance the goals of women in business.

Dr. Catherine Tinsley speaking to the Center for Women in Business.

2. Ibid.
3. Ibid.
4. Ibid.
PART TWO

THE ADVANCEMENT OF WOMEN IN SMALL AND LARGE-CAP COMPANIES: 2000–2010

Report for the U.S. Chamber of Commerce
Identifying and cultivating leadership is critical for long-term organizational success. Given that roughly half of today’s workforce consists of women, incorporating their talents into leadership positions is critical for any company. As this report shows, there is still much to be done in terms of advancing women to the upper echelons of corporations. Our research focuses on women’s participation in the top management ranks of the Standard & Poor's (S&P) large and small capitalization (cap) companies from the first decade of the 21st century (2000–2010). We view these indices as a complement to our prior report that looked exclusively at how women fared in S&P mid-cap companies.

In this report, we look not only at small- and large-cap companies, but we also compare women’s trajectories across the different indices, noting where and why women may fare better or worse. In the mid-cap analysis, we questioned whether smaller companies created a female-friendlier environment because they are less bureaucratic and can offer more work flexibility. Conversely, we also theorized that, due to potentially higher resource constraints, women’s success in reaching the very top management levels of smaller organizations may more closely mirror what has been found in larger companies.

We found, for the most part, women fare better in large-cap companies and worse in small-cap companies. This finding is consistent with the proposition that the more resources a company has at its disposal, the more opportunities there are for women to thrive. Yet when resources are constrained, women suffer disproportionately. Our finding that women fare better in large-cap companies is also consistent with an argument that the larger companies may be subject to more oversight and public scrutiny and therefore are more sensitive to gender issues.

The data used in this study come from the annual reporting done by all publicly traded companies to the U.S. Securities and Exchange Commission (SEC). According to U.S. law, each year all publicly traded companies must disclose the compensation of and other information about their top five earners. We examine the percentage of women at this very top level, their compensation relative to that of their male colleagues, and trends in these indicators over time. As with our mid-cap analysis (which tracks executives from 400 firms), we find that the compliance rate of small-cap (executives from 600 firms) and large-cap companies (executives from 500 firms) in reporting their executive numbers and compensation rates during the latter part of the decade was quite high. This plethora of data, coupled with the recession starting in 2008, created a particular interest in the years 2006–2010. This is where we focus most of our attention. Our results and comparisons should prove valuable for both organizations implementing leadership strategies and executives navigating their careers.

WHAT IS THE S&P LARGECAP 500?

The S&P 500® provides investors with a benchmark for large-cap equities. The index covers more than 75% of the U.S. equity market and seeks to remain an accurate measure of large-cap companies, reflecting the risk and return characteristics of the broader large-cap universe on an ongoing basis.¹

To qualify, a company must have a market capitalization of more than $4 billion, though this range is regularly reviewed to ensure consistency with market conditions. All the
companies in the index are classified as a U.S. company according to their location of assets and revenues, their corporate structure, and their SEC filing type. To be included in an index, companies must meet criteria for liquidity, market capitalization, public float and sector classification, and be financially viable with four consecutive quarters of positive reported earnings.\(^2\) Index constituent turnover is minimized, and additions to the index only occur when deletions are made due to a merger, acquisition, or substantial violation of index criteria.\(^3\) Such changes are made on an as-needed basis. Therefore, this index is a relatively stable set of high equity U.S.-based publicly traded firms chosen to mirror the characteristics of the larger population of large, U.S.-based publicly traded firms.

As of September 14, 2012, the top five S&P 500 constituents are Apple, ExxonMobil, Microsoft, IBM, and GE.\(^4\)

**WHAT IS THE S&P SMALLCAP 600?**

The S&P 600\(^5\) provides investors with a benchmark for small-cap companies. The index covers about 3% of the U.S. equity market and seeks to remain an accurate measure of small-cap companies, reflecting the risk and return characteristics of the broader small-cap universe on an ongoing basis\(^5\).

To qualify, a company must have a market capitalization between $300 million and $1.4 billion, though this range is regularly reviewed to ensure consistency with market conditions. The same inclusion criteria apply to the small-cap index as was applied to the large-cap index. Therefore, this index is a relatively stable set of small-cap U.S.-based publicly traded firms chosen to mirror the characteristics of the larger population of small-cap U.S.-based publicly traded firms.

As of September 14, 2012, the top five S&P SmallCap constituents are Kilroy Realty, Questcor Pharmaceuticals, Extra Space Storage, Salix Pharmaceuticals, and Tanger Factory Outlet Centers. Notable S&P SmallCap Companies include Vitamin Shoppe, CROCS, Men’s Warehouse, Jack in the Box, Boston Beer, Monroe Muffler and Brake, Peets Coffee and Tea, WD-40, La-Z Boy, American Public Education Inc, Movado, OfficeMax, and Haverty Furniture.\(^6\)

Looking at the most recent decade of available data (2000–2010), figures 1a and 1b show that reporting practices began to increase during the middle of the decade, with a near 99% compliance rate toward the decade’s end.
We believe that this increase in reporting is likely due to changes in the regulatory environment as well as to improvement in the online mechanisms by which companies file their reports. Although the Sarbanes-Oxley (SOX) Act was passed in 2002, the SEC issued guidance on SOX Section 404, which called for increased internal control of financial reporting (ICFR) in 2006, making it easier for them to enforce Section 404 reporting. In 2013, the SEC also upgraded its EDGAR online reporting website. Regardless of the exact cause of this near perfect reporting by the decade’s end, the benefit for us is a robust snapshot of what the executive suite looks like at these companies.

GENDER DEMOGRAPHICS IN THE EXECUTIVE SUITE

From 2000 to 2010, large-cap companies reported an average of 6.4% female executives, while 6.5% of executives in small-cap companies were female. As figure 2a shows, this large-cap number was relatively stable for the first half of the decade, then appears to rise from 2005 to 2008, before falling off rather precipitously between 2009 and 2010.

As figure 2b shows, the small-cap number appears to rise in the early part of the decade, leveling out close to 7% in the middle of the decade, then begins to fall in 2007, ending the decade close to where it started. Thus, it seems that women in large and small-cap companies mirrored the trend of previously researched mid-cap companies. Over the first half of the decade, women made slow progress in terms of increased representation in all three indices (small, mid, and largecap), peaking mid-decade, with something happening in 2008 causing their decline.

**Figure 2a**
Large-cap female percentage at the executive level.

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**Figure 2b**
Small-cap female percentage at executive level.

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This trajectory of female representation reflects the broader trajectory of the U.S. economy, which began a period of expansion in late 2001, lasting 73 months and peaking in December 2007. According to a report by the National Bureau of Economic Research, the economic downturn began in January 2008. As the economy contracted, so did the proportion of women in the top executive ranks.

What is most interesting to us about this decline in female top executives is that it runs contrary to other findings that show, on average, the latest recession had a greater impact on male employment levels than on female employment levels. Women, overall, were more “recession proof” during this latest contraction, particularly in the early months, as it tended to play out primarily in male-dominated industries such as construction.

Moreover, women outside the corporate suite continued to make steady progress throughout the entire decade both in terms of representation of number and in terms of salaries. By 2010, for example, wives were earning more than husbands in approximately 27% of American dual-income households. Women between the ages of 22 and 30, without husbands or children, were earning more than their male counterparts of the same age in many of the largest cities in the United States.

Despite this positive outlook for the average woman in corporate America, women in the executive suite were disproportionately hurt by the economic contraction relative to their male colleagues. Although there may be more gender equality (in terms of numbers and salary) in the lower levels of firms, the percentage of women in the executive suite decreased significantly from 2008 to 2009 for large-and mid-cap companies. For small-cap companies, a similar decrease occurred from 2006 to 2007 and again from 2008 to 2009.
Across the three indices (small, mid, and large cap), the average proportion of top women executives between 2000 and 2010 was virtually identical at around 6.5%. Over the first half of the decade, women made slow progress in terms of proportional representation in the three indices, but these gains were wiped out by the end of the decade.

**AGE OF EXECUTIVES**

In both small- and large-cap companies, relative to their male counterparts, 40- to 60-year-old women did modestly better than women of other ages in terms of the percentage of executives who were female. This was true for mid-cap companies as well. Across all three indices, the vast majority of the top executives were men for both the younger (below 40) and older (over 60) age ranges.

One note about the large-cap firms (figure 5a) is that there were very few executives of any gender (male or female) who were younger than 40 in these firms. Thus, the volatility of the percentage of women for this age range should not be interpreted as anything other than noise in the data due to very small overall numbers.

Taking away this volatility, the visible trend is that women of all ages appear equally affected by the recession. For each block of ages, the representation of women in the executive suite dropped between 2008 and 2009. There are some exceptions—in the large-cap companies, the representation of women over 60 dropped a year earlier, and in the small-cap companies the representation of women between 40 and 49 dropped from 2006 to 2007 and then again from 2008 to 2009. The overall pattern, though, shows a decline for women starting around 2008, again mirroring the larger economic contraction.

![Figure 5a](image)

**Figure 5a**

Large-cap percentage of female executives by age group.

![Figure 5b](image)

**Figure 5b**

Small-cap percentage of female executives by age group.
Although the graphs in figures 5a and 5b appear to reflect a fairly significant female representation in the executive suite, particularly in the 40–49 and 50–59 age ranges, this is still a relatively small percentage compared with the percentage of male executives. To fully appreciate this differential, figures 6a, 6b, 7a, and 7b graph the percentages of female and male executives, side by side, for each age group. Figures 6a and 6b show percentages for 2006. Figures 7a and 7b show percentages for 2010.
Although women’s representation relative to men’s is still rather paltry, some industries are more female friendly than others. To examine industry differences between 2006 and 2010, we divided them into three clusters—those that had percentages of female executives that were, on average, above 10%, between 5% and 10%, and below 5%.

This first cluster, shown in figures 8 and 9, consists of industries with the largest percentages of female top executives. For the large-cap index (figure 8), the leading industries are retailing (with on average 12.5% female executives) and household & personal products (11.9%). For the small-cap index (figure 9), these industries are utilities (16.9%), consumer services (15.3%), retailing (13.1%), and professional services (10.1%). Although retailing does not have the largest percentage of women, it is the most consistently represented industry in our top cluster, having been in the top cluster for the small-, large-, and mid-cap indices. We speculate that this may be a more female-friendly industry because there may be more women overall who work in retail compared with other industries.
Those industries with the lowest average percentage of female executives between 2006 and 2010 are seen in figures 10 and 11 for the large-cap index and small-cap index, respectively. For the large-cap index (figure 10), the industries with the lowest average number of female executives are materials (4.6%), capital goods (4.5%), energy (3.6%), and semiconductors (1.8%).

For the small-cap index (figure 11), several industries fall in this range, including capital goods (4.9%); software (4.6%); diversified financials (4.5%); materials (3.5%); semiconductors (3.5%); insurance (3.2%); pharmaceuticals, biotech, life sciences (3.2%); telecom (3.1%); food & staple retailing (1.8%); energy (1.3%); and food, beverage, tobacco (0.6%).

Although some of these industries started above the 5% threshold in 2006, each industry drops between 2.5 and 3 percentage points in 2007 and remained below 5% for the rest of the decade. Notably, materials, energy, capital goods, and semiconductors are the most consistently represented industries in our bottom cluster, having fewer than 5% female executives for the small-, large-, and mid-cap companies. Again, this may well be function of a small number of women who enter these industries compared with other industries. Follow-up research may consider looking at the pipeline argument more closely, detailing the numbers of women who enter each year and how they move up the corporate ladder in one industry versus another.
Figures 12 and 13 show our middle cluster of industries, where women, on average, represent between 5% and 10% of the top executives. For the large-cap index (figure 12), most industries in the index fall in this cluster.

These industries are diverse and include software (9.7%); telecom (9.4%); food, beverage & tobacco (8.5%); insurance (8.3%); diversified financials (7.9%); transportation (7.8%); healthcare equipment & services (7.6%); banks (7.2%); consumer durables & apparel (6.9%); professional services (6.8%); media (6.8%); tech hardware & equip (6.4%); pharma, biotech & life sciences (6.3%); utilities (5.7%); food & staples retailing (5.6%); consumer services (5.1%); and real estate (5.1%).

The small-cap index companies with 5% to 10% female executives (figure 13) are health care equipment & services (8.0%), real estate (7.0%), banks, (6.4%), transportation (5.2%), consumer durables & apparel (5.1%), and tech hardware & equipment (5.1%). All the small-cap index firms that fall in this cluster are also in the cluster for the large-cap index.

One rather remarkable feature of these industry-based graphs is how consistent a picture they paint across time and across indices. For any particular index, industries do not shift between clusters over time. Moreover, all industries that are in the below 5% cluster of large-cap firms are also in this cluster for the mid-cap and small-cap firms. Similarly, all industries that are in the 5%–10% cluster in the small-cap firms are also in this cluster for the large-cap firms.

**Figure 12**
Large-cap industries with, on average, 5%–10% female executives.
One final thing to point out is that women are faring relatively better in large-cap companies relative to small-cap companies. The majority of industries for the large-cap firms are in the 5%–10% female cluster, whereas the majority of industries for the small-cap firms are in lowest cluster with fewer than 5% representation. This is a trend that we see again in the executive compensation section.

EXECUTIVE COMPENSATION

Although the percentage of women represented at the top levels of large- and small-cap firms is fairly constant, female compensation shows significant improvement, with the gap between male and female compensation closing over time. Starting in 2008, the highest paid women were bringing home as much money as their male counterparts; the gender wage gap has closed.

As figures 14a and 14b show, from 2000 to 2010, women’s compensation caught up to that of their male colleagues. “Potential compensation” refers to what is promised to an executive in any given year, and “realized compensation” refers to the actual amount an executive takes home in any given year. For potential compensation, the averages between male and female executives are not significantly different in either 2009 or 2010. For realized compensation, the averages between male and female executives are not significantly different starting as early as 2008.
For the small-cap companies, the story is not quite as progressive. As figures 15a and 15b show, men still continued to make significantly more than women throughout the decade in terms of both potential (figure 15a) and realized (figure 15b) compensation. Our analysis on mid-cap firms showed that compensation for women caught up in 2010. Thus, in terms of compensation, women fared best in large-cap firms (closing the gap in actual pay by 2008), second best in mid-cap firms (closing the gap in actual pay by 2010), and worst in small-cap firms (where the compensation gap remained throughout the decade).
Since women’s compensation in large-cap firms had caught up to that of men’s in the last part of the decade, we wondered whether this might be due to some industries being more female friendly than others. Drilling down into the years 2008–2010 gives us a greater understanding of why female compensation may have caught up. There is a significant interaction between gender and industry group, whereby those industries where females are more represented (more than 10% female executives) show a different picture than the other industries.

Figures 16a and 16b show that in 2008 for industries where fewer than 5% of the top executives are female, women continue to make significantly less than men. In contrast, women earn as much as their male counterparts in industries where more than 10% of the top executives are female. Figures 17a and 17b show data for 2009 and depict the same trend—in industries where fewer than 5% of the top executives are female, women earn less than men, while women executives earn the same as men in industries where women make up more than 5% of the executives. Figures 18a and 18b show that this trend continues into 2010.

For the large-cap companies, as women gain more of a foothold industries, their compensation becomes more favorable when compared with males. This same trend in compensation was found for mid-cap companies for the year 2010, which was the year for the mid-cap index that women’s compensation was not significantly different from that of men’s. The closing of the compensation gap happens in industries where there are more women executives in the first place—further confirming that these are female-friendly industries.
Among small-cap firms, we examined the compensation data for 2010 alone (see figures 19a and 19b). We found the same pattern described for the large-cap firms, where women’s pay had caught up to that of their male colleagues in industries where more than 10% of executives were women. As seen in figures 19a and 19b, there is no significant difference in pay between the genders for the “above 10% female” bars. This was the same pattern also displayed in the mid-cap firm analysis.

Thus, across all three indices, women have made progress in closing the gender gap in pay. Moreover, in industries where there are larger proportions of female top executives, the pay gap has closed faster.
**FEMALE CEOS**

In industries where women make up at least 10% of the top executive ranks, there are correspondingly more women CEOs. For example, figure 20a shows that for large-cap companies in industries where at least 10% of the top executives were female between 2006 and 2010, 5% of these companies also have a female CEO. In contrast, in industries where there are fewer than 5% female top executives, only 0.7% of these companies have a female CEO. We showed a similar chart in our report on the mid-cap companies.

**Figure 20a**
Large-cap female CEOs by industry, 2006–2010.

**Figure 20b**

**OVERALL REFLECTIONS**

This report gives cause for both celebration and concern. Although women made small advancements to the executive suite in the first half of the decade, those gains were gone by the end of the decade. This decline coincided directly with the overall economic contraction in the United States.

Additionally, in some industries women consistently represent a small or nonexistent percentage of the top executives. The materials, energy, capital goods, and semiconductors industries all have fewer than 5% female executives across all three indices (small-, mid-, and large-cap companies).

A more celebratory finding concerns the compensation of females in our sample. At least at this very top executive level, women have made real progress in closing the gender gap in potential (promised) and realized (actual) compensation. For the large-cap companies, starting in 2008, women’s realized compensation was not different from that of their male colleagues. This shift occurred two years earlier than it did for mid-cap companies. Although the gap did not close completely for women in the small-cap companies, their compensation did make progress toward that of their male colleagues.
Looking more closely at compensation across industries, we found that in all three indices (small-, mid-, and large-cap companies) there was a clear positive correlation between the percentage of women in the executive suite and their compensation. In industries where more than 10% of the top executives were women, these women made no less than the men. Yet in industries where fewer than 5% of the top executives were women, these women continued to make significantly less than their male colleagues.

The findings suggest that some environments are more female friendly than others. Across all three indices, there was remarkable industry stability in terms of the percentage of women in the top executive ranks. The most female-friendly industry is retail, where women consistently represent more than 10% of the top executives across all three indices. For small-cap companies, consumer and professional services were also female friendly. Again, this may be a function of the large number of women who enter these industries relative to other industries. Utilities was another small-cap industry where women composed more than 10% of the top executives, which may seem odd given that women are not generally associated with energy companies. Yet a detailed look at the companies that represented this small-cap industry revealed that they were mostly retail distributors rather than wholesale generators, again suggesting that retail may be a female-friendly environment.

Finally, we found that women tended to have better outcomes in large-cap companies than in smaller ones. The large-cap index was the only one where the majority of industries had between 5% and 10% women in their top ranks. For the other indices, most of the industries had fewer than 5% of women in their top ranks. Also, in the large-cap index, women's compensation caught up to males' earlier in the decade.

Women are gaining ground, but they seem to be doing so in female-friendly pockets—in some industries over others and in larger rather than smaller firms. Future research should look more closely at the convergent factors that create such female-friendly niches. This report confirms that these niches exist.

**ADDENDUM**

Included are regional graphs for the large- and small-cap companies. They are presented here to provide a complete accounting of female executives in the large- and small-cap companies. These graphs can be used in conjunction with those in the earlier mid-cap report to serve as a baseline for comparisons of future years or decades.
2. Ibid.
3. Ibid.
4. Ibid.
6. Ibid.
7. U.S. Securities and Exchange Commission. “SEC Votes to Adopt Changes to Disclosure Requirements 
13. Industries excluded for analysis because their raw numbers of executives were too low to produce any 
   reliable insights were: Automobiles and Components (for large and small-cap), Media (small-cap) and 
   Household and Personal Products (small-cap).
Dr. Catherine H. Tinsley

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Tinsley served on two committees for the National Academy of Sciences—the Committee to Improve Intelligence Analysis for National Security and the Committee on Unifying Social and Cultural Frameworks—and is on the Context of Military Environments: Social and Organizational Factors committee.

She has won various academic rewards for her research. Tinsley studies how factors such as culture, reputation, and gender influence negotiation and conflict resolution. She also studies how people’s implicit beliefs about the power of gender shape their attitudes and behaviors. Finally, she studies how people make decisions under risk, applying analytic frameworks to understanding organizational disasters as well as individual and expert responses to natural and man-made disasters.

Previously, Tinsley collaborated with the White House and the U.S. State Department to execute a woman-to-woman mentorship summit. She also partnered with the U.S. State Department and the Council of Women World Leaders to convene the first-ever worldwide meeting of ministers of women’s affairs.

Tinsley has conducted a number of negotiation, conflict resolution, and leadership training seminars for a variety of organizations, including select staff of the U.S. Senate, Rolls Royce N.A., Gucci, Sprint-Nextel, Verizon, World Bank, and the Korean International Trade Association. She has also run numerous negotiation training seminars for managers of diverse companies in different cultures, including Germany, Japan, Korea, Slovenia, Hong Kong, India, and Mexico. Tinsley also runs semiannual seminars for senior-level executives in the energy industry.

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