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## US Economics &amp; Consumer Discretionary

## Rise of the SHEconomy

By 2030, 45% of prime working age women in the US will be single. We take a closer look at how single women spend and the impact this could have over the next decade. Findings reveal large potential tailwinds to apparel & footwear, personal care, food away from home, and luxury & electric vehicles.

Sustainability 

James Egan and Somdutta Basu are fixed income strategists and are not opining on equity securities. Ellen Zentner, Robert Rosener and Sarah Wolfe are economists and are not opining on any securities. Their views are clearly delineated.

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## US Economics &amp; Consumer Discretionary

## Rise of the SHEconomy

By 2030, 45% of prime working age women in the US will be single. We take a closer look at how single women spend and the impact this could have over the next decade. Findings reveal large potential tailwinds to apparel & footwear, personal care, food away from home, and luxury & electric vehicles.

Sustainability 

**Media and social focus on diversity, the male-female wage gap, and women's role in the economy is increasing.** In response, we've attempted to quantify expected changes in women's economic status and assess the potential impact on consumer discretionary spending over the next 10 years. Our forecasts build on Bureau of Labor Statistics (BLS) data. Overall, as the proportion of single women rises, their labor force participation rate should increase, putting upward pressure on wages.

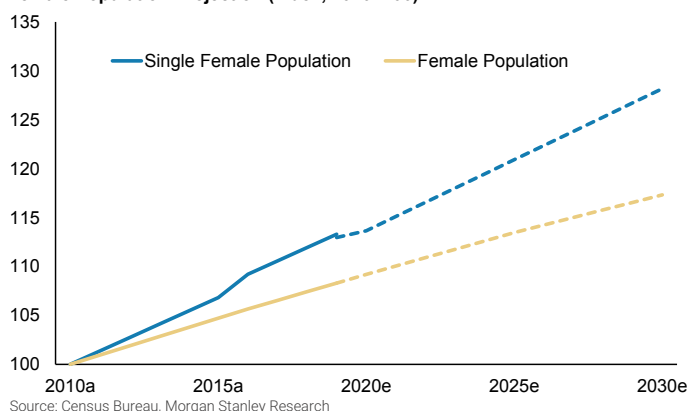
**Based on Census Bureau historical data and Morgan Stanley forecasts, we forecast the number of single women in the US to grow at an annual +1.2% rate in 2018-30, compared with 0.8% for the overall US population.** Multiple factors are driving this growth: 1) The percentage of married people is declining 30-40 bps annually, while women's average marriage age is increasing 1.5 months per year, and divorce rates for people over 55 are rising. 2) Women are having fewer children, with the total US fertility rate dropping from 2 births per woman in 2009 to 1.73 in 2018. 3) Women now obtain more bachelor's degrees than men. These shifting life-style norms are enabling more women with or without children to work full time, which should continue to raise the labor force participation rate among single females and lift total spending. We estimate that 45% of prime working-age women will be single in 2030 vs. 41% in 2018.

**We find that single women outspend the average household, shifting spending profiles toward categories most poised to benefit from growth in single women with rising incomes.** By 2030, we expect:

**Apparel & Footwear:** We forecast a spending tailwind of +25 to +100 bps to apparel & footwear from the growing single population. While this is likely not enough to offset the -150 bp drag from an aging population over the next 10 years (see [The Impact of Gen Z: Be Selective](#)), we see pockets of strength in activewear and off-price.

**Exhibit 1:**

Single women over the age of 15 in the US are expected grow +1.2% annually in 2018-30, from 67.0M to 77.5M, compared with +0.8% for the overall US population

**Female Population Projection (Index, 2010=100)**

**Best-positioned names: Lululemon Athletica (LULU), Nike (NKE), Ross Stores (ROST), TJX Companies (TJX).**

**Personal Care:** We expect a +35-110 bps tailwind for the personal care category, with beauty outperforming. Single people outspend their married counterparts in this segment, with an outsized gap among single women. **Best positioned: Sephora (division of LVMH.PA), Ulta Beauty (ULTA).**

**Food Away From Home:** We project an +80 bps tailwind to spending on food away from home based on shifts in marital status distribution. **Best positioned: Chipotle Mexican Grill (CMG), Starbucks (SBUX).**

**Luxury & Electric Vehicles:** Single women currently spend less than single men and the average US household on vehicle purchases, but we forecast the male-to-female buyer split will equalize as the income gap narrows. **Best positioned: Tesla (TSLA).**

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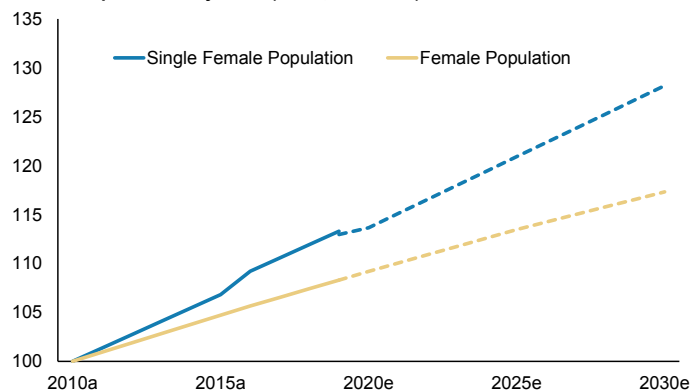
# Executive Summary

**By 2030, we forecast that 45% of prime working age women (aged 25-44) will be single, the largest share in history, up from 41% in 2018.** Based on Census Bureau data, we calculate that single women in the US will grow +1.2% annually, from 67.0M to 77.5M, compared with +0.8% for the overall US population ([Exhibit 2](#)). This should drive a 3 pp increase in the share of single vs. married women, from 49% of the total female population over the age of 15 in 2018 to 52% in 2030, and a 4 pp increase in single women in the prime working ages, 25-44 years ([Exhibit 3](#)). This growth would be consistent with a population-wide shift in marital status distribution toward singles.

## Exhibit 2:

Single women in the US are expected grow +1.2% annually in 2018-30, from 67.0M to 77.5M, compared with +0.8% for the overall US population

**Female Population Projection (Index, 2010=100)**

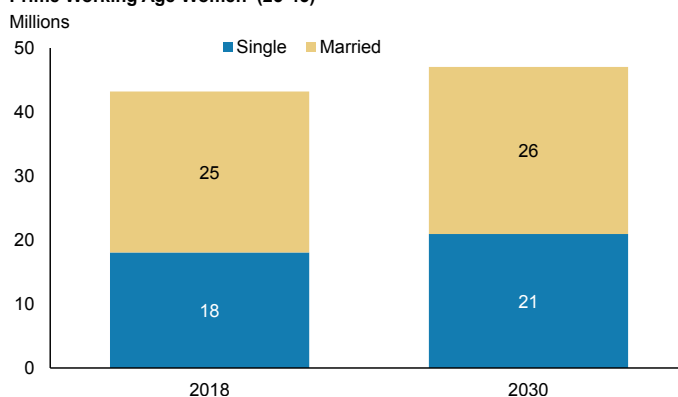


Source: Census Bureau, Morgan Stanley Research

## Exhibit 3:

By 2030, 45% of the prime working age female population will be single, a larger share than ever before

**Prime Working Age Women (25-45)**



Source: Census Bureau, Morgan Stanley Research

Our growth estimate model incorporates **1)** a 30-40 bp annual decline in the percentage of married people, **2)** an annual 1.5-month increase in women's average marriage age, and **3)** increasing divorce rates for those over the age of 55 from 10 per 1,000 marriages in 2010 to 13 per 1,000 marriages in 2030. Additionally, the fastest-growing segment among women is the "never married," which we expect to grow from ~25% in 2000 to nearly 33% in 2030 ([Exhibit 4](#)).

## Exhibit 4:

Women are getting married later in life, in addition to getting divorced at higher rates after the age of 55

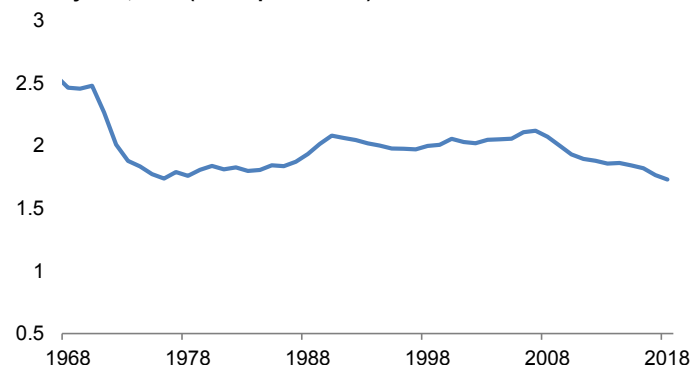
	2000a	2010a	2020e	2030e
<b>Average Age at Marriage (years)</b>	25.1	26.1	28.1	29.5
<b>55+ Divorce Rate (per 1000 marriages)</b>	7.5	10.1	11.4	12.7
<b>Married Women (% of population)</b>	54.70%	52.40%	50.40%	48.30%
<b>Never Married Women (% of population)</b>	25.10%	27.40%	30.00%	32.80%
<b>Number of Women (millions)</b>	114	127	139	149
<b>10 year AR</b>	-	1.10%	0.90%	0.70%
<b>Number of Single Women (millions)</b>	52	60	69	78
<b>10 year AR</b>	-	1.60%	1.30%	1.20%

Note: AR = annual rate  
Source: Census Bureau, Morgan Stanley Research

**Women are waiting longer to get married, if they get married at all, and are having fewer children on average and having them later in life.** Data suggest women are having fewer children, as the total fertility rate in the US has dropped from 2 births per woman in 2009 to 1.73 in 2018 ([Exhibit 5](#)). And among women who do have children, the age at which they have their first child has been averaging 2 months later each year, so the negative impact of motherhood on earnings is delayed ([Exhibit 6](#)).

**Exhibit 5:**

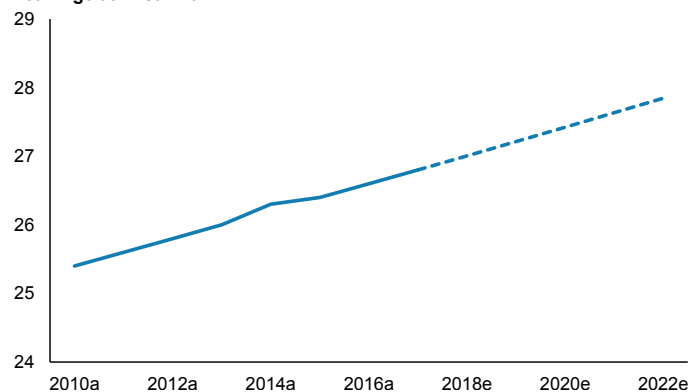
Birth rates have declined...

**Fertility rate, total (births per woman)**

Source: World Bank

**Exhibit 6:**

...and women are waiting longer to have children

**Mean Age at First Birth**

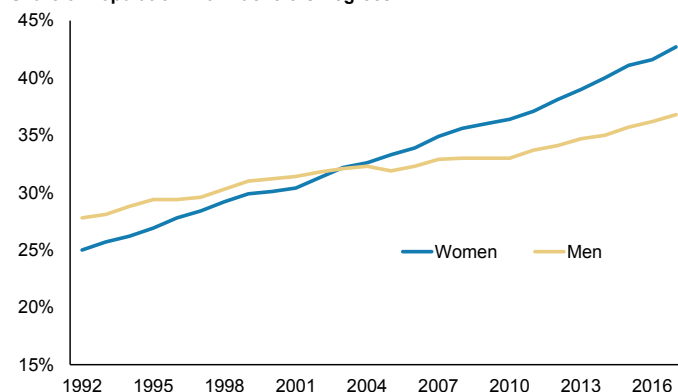
Source: Centers for Disease Control and Prevention, MS Research

**Women are increasingly pursuing a college education. [Exhibit 7](#)**

shows the share of women with a bachelor's degree was 10 pp higher than men by 2017. This phenomenon has no doubt been an important driver behind the delay in marriage, higher age at first birth, and rise in women's labor force participation rate.

**Exhibit 7:**

Women's rate of bachelor's degree attainment surpassed men's in the early 2000s, and the gap has widened since then

**Share of Population with Bachelors Degrees**

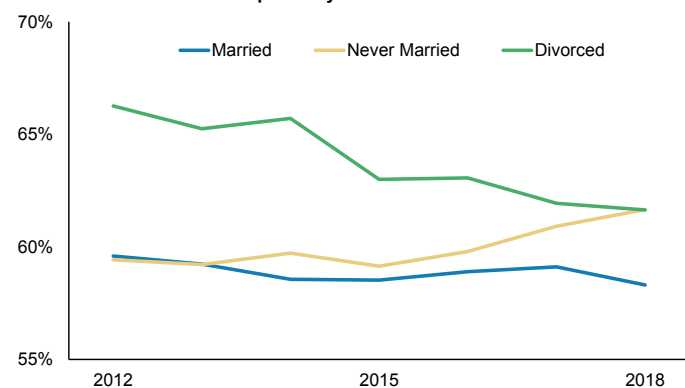
Source: Bureau of Labor Statistics, Morgan Stanley Research

**Women's share of the labor force was 47% in 2018 compared with 30% in 1950, and single women's labor force participation has risen 3 pp since 2012, from 59% to 62% in 2018 (Exhibit 8).** Additionally, the female-to-male ratio of labor force participation accelerated from 75% in 1990 to 82% in 2010 (Exhibit 9). Generally, however, female labor force participation rates have stagnated since the 20th century. Gains in labor force participation rates have topped out as educational enrollment rates among younger workers have risen, increasing life expectancy has allowed older workers to stay in the labor force for longer, and limited childcare social programs in the US have consistently made it hard for mothers to stay at work (see [Labor Force Participation: Fighting Against a Downtrend](#)).

#### Exhibit 8:

Participation rates among the 'Never Married' group are bucking the declining trend observed in the larger population

**Women's Labor Force Participation by Marital Status**

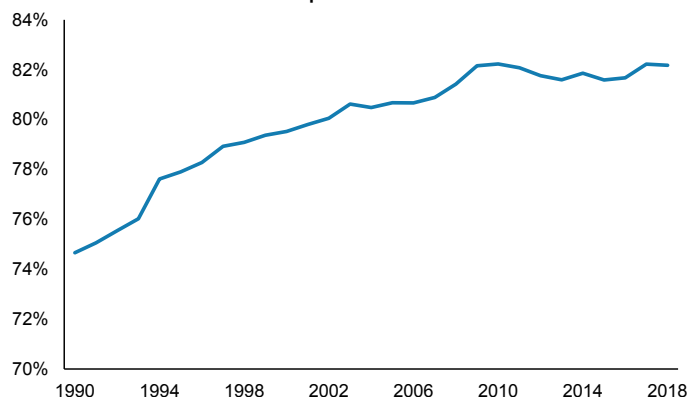


Note: Never Married includes women 24+ years old  
Source: Bureau of Labor Statistics, Morgan Stanley Research

#### Exhibit 9:

The female-to-male ratio of labor force participation has increased dramatically since 1990, though it has stabilized

**Female to Male Labor Force Participation Ratio**



Source: Bureau of Labor Statistics, Morgan Stanley Research

**We find that past drivers of the male-female wage gap have diminished, while drivers of the current wage gap are moving in a favorable direction.** Until the 1980s, the wage gap was largely a function of women's lower labor force participation, lesser educational attainment, and lower-paying occupational choices compared with men. In contrast, motherhood is by far the largest contributor to the wage gap today. When women become mothers, they may stop working or work fewer hours, and their focus on work may diminish as they pick up the responsibilities that come with having a family. Estimates of women's pay relative to men's vary, but data from the Bureau of Labor Statistics (BLS) suggests women make somewhere between 77 to 85 cents for every dollar made by men. This is a significant improvement from 1980, when women made approximately 64 cents per dollar made by men. However, progress in shrinking the wage gap has stagnated in the last 10-15 years, closing only 0.7% between 2004 and 2018 compared with 8.5% between 1990 and 2004 and 9.7% between 1989 and 1990 (Exhibit 10). We expect the wage gap will continue to close as firms reward diversity (see the sidebar below), but spending will be driven by the fact that women are delaying marriage and child-bearing.

## From the SHEconomy to HERS: Diverse companies outperform

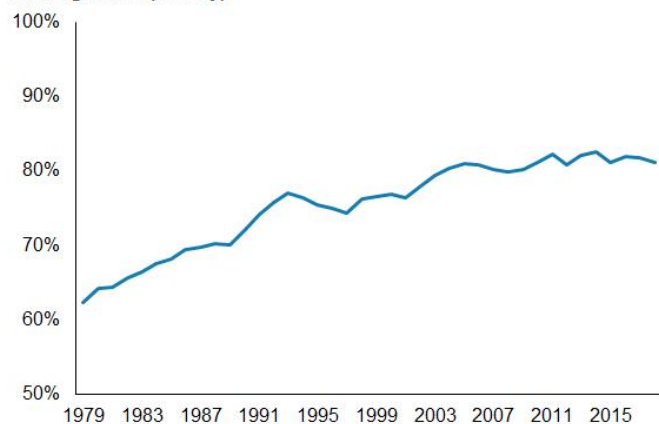
Our Quantitative Research team, in collaboration with Morgan Stanley ESG Research, recently published a [report](#) looking at how gender diverse firms tend to outperform their less diverse peers globally, and have developed a proprietary framework — the Holistic Equal Representation Score (HERS) — to help investors identify the most gender-diverse companies. In all developed MSCI regions, boards are more diverse now than at the end of 2010, though the rate of progress differs across regions.<sup>1</sup> Gender diversity in the executive ranks continues to lag by comparison, although the past decade has seen some improvement.

<sup>1</sup> Developed MSCI countries include Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Israel, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom, Australia, Hong Kong, Japan, New Zealand, Singapore, and the United States.



**Exhibit 10:**

Progress in closing the wage gap has slowed in the last decade

**Earnings Ratio (Weekly)**

Source: US Department of Labor (Women's Bureau), Morgan Stanley Research

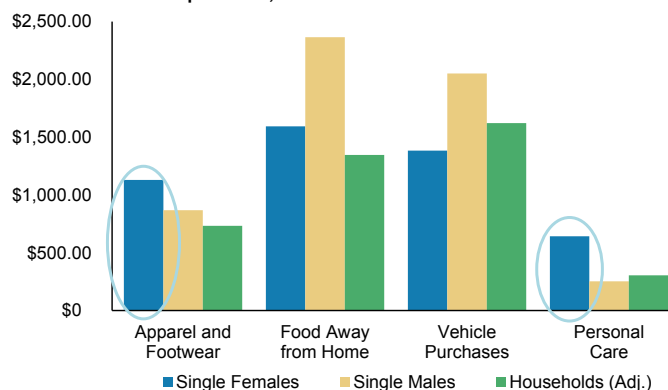
**These demographic and economic trends prompted us to take a closer look at how women spend and the impact it could have on discretionary spending over the next 10 years.** In order to assess the impact of growth in the number of single women on US consumer discretionary spending, we first looked at single's spending distribution compared with the average US household using the BLS Consumer Expenditure Surveys (CES).

**We found that in the apparel & footwear and personal care segments, single women outspent the average household** (2.58 people) in terms of expenditure share of income per person. By weighting these different expenditure distributions according to the proportion of singles in the population, we assessed the shares in spending in the Apparel & Footwear, Restaurants, Autos, and Personal Care and Beauty industries in 2017 and present these in [Exhibit 11](#).

Based solely on our estimate that growth in the singles population will outpace the population as a whole, annual expenditures driven by single women should grow disproportionately to other spending cohorts. Additionally, the rise in labor force participation and closing wage gap should further influence this divergence.

**Exhibit 11:**

Singles outspent average US households on a per person adjusted basis in every category we discuss

**Per Person Annual Expenditure, 2016-2017**

Source: Bureau of Labor Statistics, Consumer Expenditure Survey, Morgan Stanley Research, 2017

**Apparel & Footwear**

**Growth of single women may partially offset generational headwinds.** While we estimate a spending tailwind of +25 to +100 bps to apparel & footwear from the growing single population, this is not enough to offset the -150 bp drag from an aging population over the next 10 years (see [The Impact of Gen Z: Be Selective](#)). We advocate staying selective and see activewear and off-price as best positioned to capitalize on these trends. An increase in the number and proportion of singles is likely to boost athletic apparel & footwear names like Nike (NKE) and Lululemon (LULU), as research has shown that both single women and single men spend significantly more time exercising than their married counterparts (single women exercise 1.5 hours more per week than their married counterparts). Additionally, not only are Ross Stores (ROST) and TJX Companies (TJX) highly exposed to women, both above 60% according to MRI, but their value proposition should resonate with single women whose incomes are lower than their married counterparts but are more willing to spend on clothing and shoes. Women also enjoy the "treasure-hunt" experience more than men. Off-price should also benefit from greater home furnishing spending as women spend more on home décor than men, and will likely be living alone longer than previous generations. *More detail in [Apparel & Footwear](#).*



## Food Away from Home

**We estimate an +80 bp tailwind to spending on food away from home by 2030 based on marital status distribution shifts,** assuming expenditure shares are constant. On a per person basis, both single men and single women outspend households on food away from home. As marriage rates drop, the number of single men increases along with the number of single women. Single men outspend single women and households in this category in terms of expenditure share. However, the gap between single men's and women's expenditure share is considerably smaller in higher income brackets, so we believe as women's incomes rise they will spend more on food away from home. Therefore, we see advantages for the restaurant industry from a closing wage gap. While there are a number of chain restaurants that over index to female consumers, we view Chipotle Mexican Grill (CMG) and Starbucks (SBUX) as well positioned to capture additional dollars from a shift toward singles and higher women's incomes. Please see [Restaurants](#).

## Autos

**In Autos, we believe growth in the number of single women will drive growth in the luxury and electric vehicle segments:** Single women currently spend significantly less than single men and households on vehicle purchases. The difference between men and women is especially pronounced in the luxury and electric vehicle segments. Our analysis suggests income is a larger driver of the gap than preference, so we forecast the male-to-female buyer split will equalize as women's incomes approach men's. Tesla (TSLA) is a potential beneficiary of this trend. Please see [Autos](#).

*We acknowledge the contributions of Hannah Pittock to this report.*

## Personal Care

**We estimate a tailwind of +35 to +110 bps to the personal care category, with beauty outperforming:** Both single men and women outspend their married counterparts in this segment, with the gap especially large amongst women. The beauty segment will benefit from Millennial and Gen Z generational tailwinds in the coming decade, and growth in women's incomes will both encourage and supplement these trends. Among single women specifically, spending on personal care and beauty appears elastic, so as delayed marriage and child-bearing translates into higher incomes, spending in this category could accelerate further. Sephora, a division of LVMH (LVMH, covered by Ed Aubin), Ulta Beauty (ULTA), and Estee Lauder (EL, covered by Dara Mohsenian) are over 75% exposed to women and are likely to see healthy growth from demographic shifts toward delayed marriage and Gen Z aging into peak incomes. Please find more detail in [Personal Care and Beauty](#).

**Owning up to caveats.** We are making some predictions based on general assumptions of income elasticity of demand. We do not make adjustments for income elasticity across income groups, which may narrow or widen gaps in expenditure allocation between men and women. Any quantified estimates are based exclusively on distribution shifts across marital status categories. When specificity is lacking, we assume in several cases that household spending is a rough proxy for married couple spending. We did not include generational shifts within genders in our sector calculations, although spending patterns may differ between age groups. Finally, we did not examine racial spending differences within genders, but the shifts we see will likely occur at different paces for different minority groups as the current gender gaps we observe are often wider among minority women.

# Women as Economic Agents

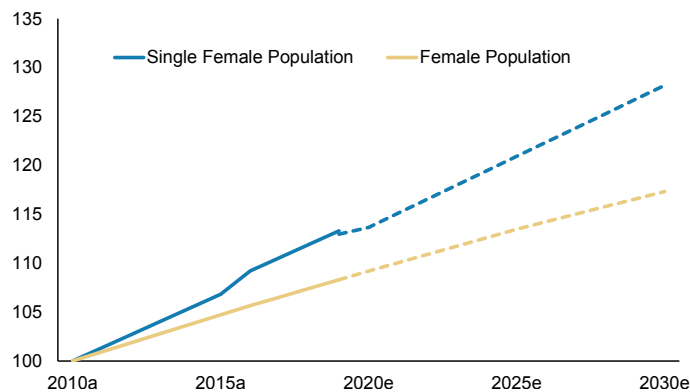
— Ellen Zentner, Robert Rosener, Sarah Wolfe, James Egan, Somdutta Basu

**According to calculations by the Center for American Progress, working women contribute over \$7 trillion to US GDP each year.<sup>2</sup>** Based on Census Bureau historical data and Morgan Stanley forecasts, between 2018 and 2030, the number of single women in the United States over the age of 15 is expected to grow 1.2% annually, from 67.0 million to 77.5 million (**Exhibit 12**). This reflects a 3 pp increase in the share of single versus married women, from 49% of the total female population in 2018 to 52% in 2030. Our estimates are driven by **1)** lower marriage rates, **2)** delayed age of marriage, and **3)** increasing divorce rates for those over the age of 55. An aging population, combined with women's 5-year greater life expectancy vs. men, has also created a growing widow population.

## Exhibit 12:

Single women over the age of 15 in the US are expected grow +1.2% annually in 2018-30, from 67.0M to 77.5M, compared with +0.8% for the overall US population

### Female Population Projection (Index, 2010=100)

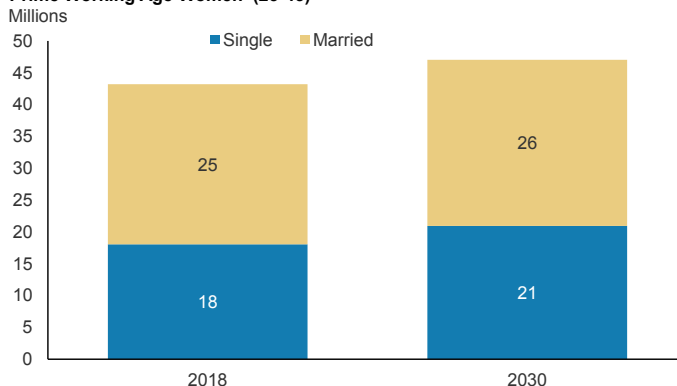


**Focusing in on prime working age women (25-45), by 2030 an estimated 45% will be single, the largest share in history, up from 41% in 2018 (**Exhibit 13**).** Over that time, single women between the ages of 25 and 45 are expected to increase from 18.1M to 20.9M.

## Exhibit 13:

By 2030, 45% of the prime working age female population will be single, a larger share than ever before

### Prime Working Age Women (25-45)



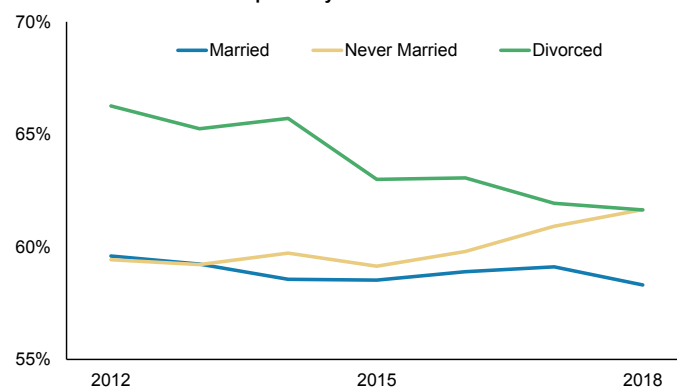
Note: Prime working age is 25-45 years old  
Source: Census Bureau, Morgan Stanley Research

**This projection factors into our estimates of women's labor force participation rates going forward.** Never married women have participated in the labor force at higher rates than married women since 2014. Their rate of participation is increasing unlike married women, whose participation rate has dropped by 2% since 2012 (**Exhibit 14**).

## Exhibit 14:

Participation rates among the 'Never Married' group are bucking the decline trend observed in the larger population

### Women's Labor Force Participation by Marital Status



Note: Never-Married includes women 24+ years old.  
Source: Bureau of Labor Statistics

2 This number excludes adjustments for women's saturation of low-paying jobs, disproportionate influence on household expenditures, and unpaid domestic labor not included in GDP.

**MRI data show that women are the principal shoppers in 72% of households (Exhibit 15) and tend to have a larger multiplier effect on expenditures.** When women shop, they are often purchasing for other household members in addition to themselves. The position of principal shopper also likely gives women more control over how household money is spent. Even holding sector shares of household budgets constant, the household's principal shopper is largely responsible for choosing which products and brands to buy, where to prioritize cost versus quality, and more.

**Today, women are the primary breadwinner for nearly 30% of households headed by a married couple, and nearly 40% of total US households (Exhibit 16).** Within households where men are still the primary breadwinner, the proportion of women contributing between 25% and 49% of the household's income, called co-breadwinners (Co-BW), has risen substantially, from 46.8% in 2007 to 52.7% in 2017 (Exhibit 17). Women are generally thought to control large portions of household spending regardless of their income, so an estimate based solely on income contribution could be conservative.

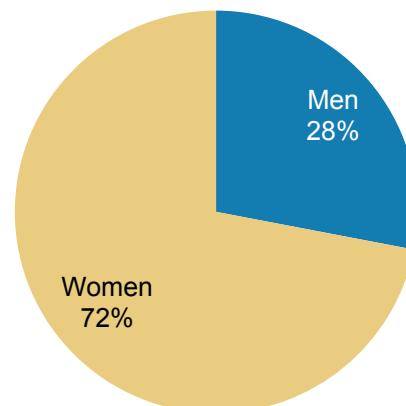
**Because women now contribute significantly more to household income than previous generations and remain the primary shopper for most households,** their influence has grown in nature and degree. We can simplify women's spending into two broad buckets: **1)** "household," which includes female principal shoppers of family households (usually a mother); and **2)** "single," which describes women who are unmarried and shopping primarily for themselves. In both buckets, women are determining what to spend money on, although the outcomes of those decisions are different due to the presence of additional family or household members for the former group.

**Single mother's share of families with children has been in decline after peaking in 2012 at 25.4%.** Additionally, the proportion of family households with children is gradually decreasing and currently sits at 41%, down from a peak of 57% in the early 1960s (Exhibit 18). The growth in the number of single women is driven by the "never married" segment, and if current trends continue single mothers will make up an increasing proportion of this group.

**Exhibit 15:**

Women are the principal shoppers in 72% of households

**Household's Principal Shopper**

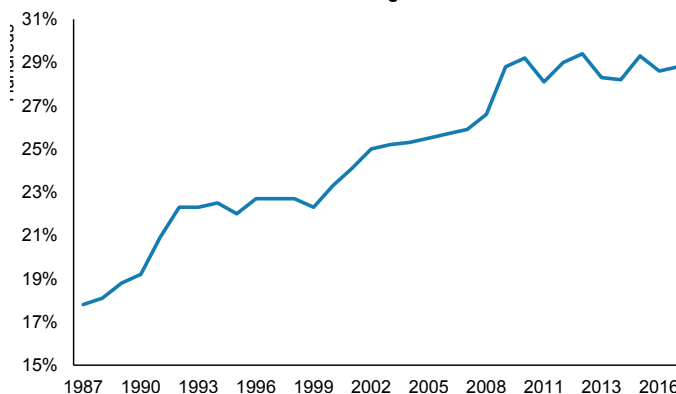


Source: MRI

**Exhibit 16:**

Wives now earn more than their husbands in nearly 30% of households headed by a married couple

**Share of Households with Wives Out-Earning Husbands**

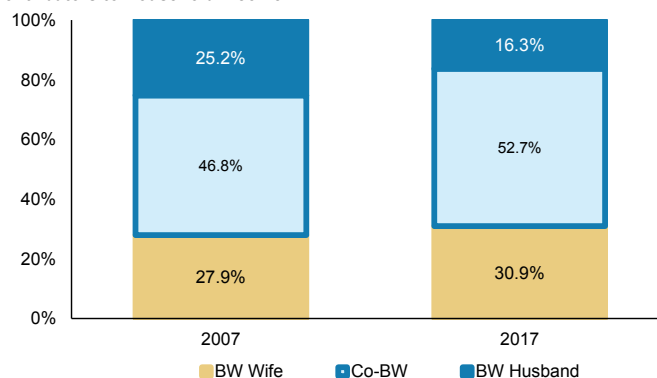


Source: Census Bureau, Bureau of Labor Statistics

**Exhibit 17:**

The share of household income contributed by women is growing, even within households where men remain the primary breadwinners

**Contributors to Household Income**



Source: Census Bureau (Current Population Survey, Annual Social and Economic Supplement), Morgan Stanley Research

**The incidence of single motherhood is declining alongside the drop in birth rates and as the "never married" segment grows.**

Single mothers make up the highest proportion of single women within the "separated" category, peaking at over 85% in the 35-39 age group, followed by the "divorced" category, reflecting higher birth rates among married couples ([Exhibit 33](#)). These findings are consistent with our bottom-up projection of the total number of single women by marital status. The proportionate growth of the "never married" segment will contribute to a continued decline in single motherhood, supplementing drivers like lower teen birth rates and easier access to birth control (see [Appendix: Women's Changing Economic Status](#) for a more complete discussion of the role contraceptives have played in shaping family planning and life-style changes over the past several decades).

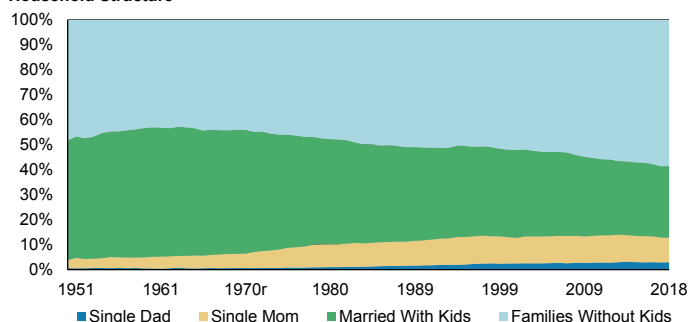
**In line with the growing rate of single women, data from the Census Bureau shows that the share of non-family female households as a percent of total households has increased in the last decade, from 18% in 2008 to over 20% in 2018 ([Exhibit 20](#)).**

Most strikingly, female headship rates have been trending up while overall headship rates have been trending down. These contrasting trends are rather prominent among the critical younger age cohorts, as they are the key drivers of housing demand. The most pronounced rise in female headship rates in the last decade is among single, prime working age women who are 30-34 years old ([Exhibit 22](#)), followed by 25-29 year olds ([Exhibit 21](#)).

**Exhibit 18:**

The share of family households without children is rising, consistent with lower birth rates and later maternal age at first birth

**Household Structure**

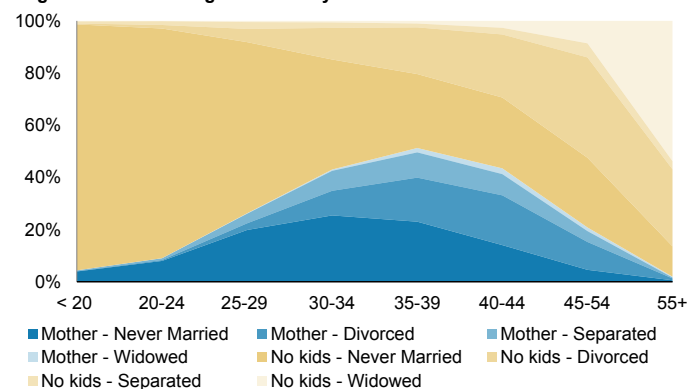


Source: Census Bureau

**Exhibit 19:**

In 2017, single mothers made up the highest proportion of single women in the 35-39 age bracket.

**Single Women and Single Mothers by Marital Status**

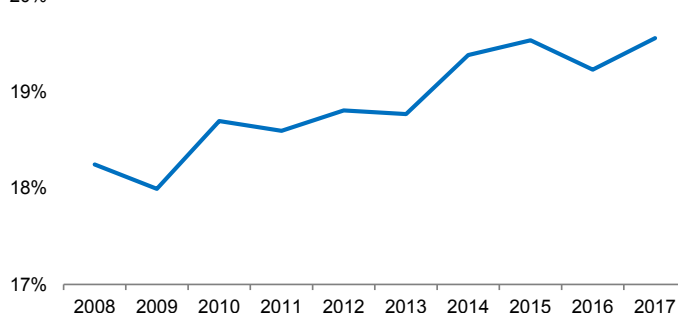


Source: Census Bureau (America's Families and Living Arrangements, 2017)

**Exhibit 20:**

The share of non-family female households has risen over the last decade

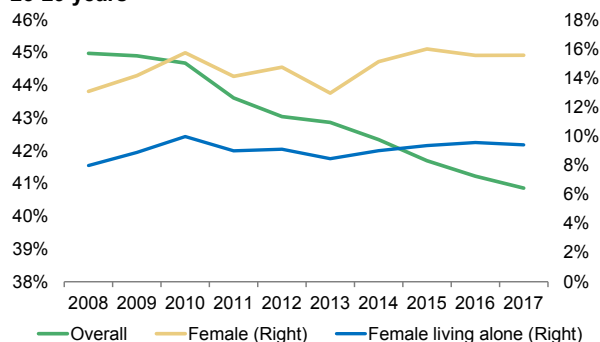
**Non-Family Female Households as a Share of Total Households**



Source: Census Bureau

**Exhibit 21:**

Female headship rates among single prime working age women has risen....

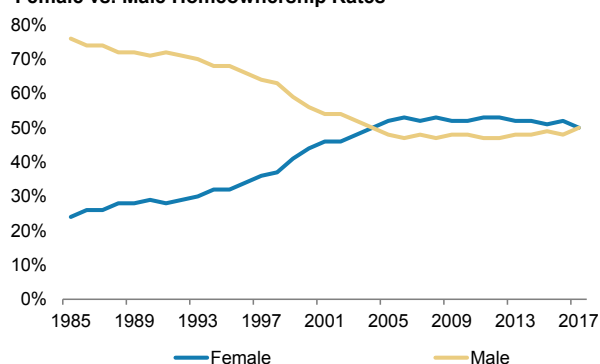
**25-29 years**

Source: Census Bureau

**Additionally, historical data shows that homeowners spend nearly double the amount of renters.** Based on CES data in 2017, average annual expenditures for homeowners was over \$70,000, whereas renter expenditures was \$43,000, a gap that looked to be widening into 2018. Looking as far back as 1985, female homeownership as a share of total homeownership has risen from 25% to 50% in 2017. Though homeownership rates for both women and men have topped out since 2005 at 50/50, our demographic projections suggest that with rising female labor force participation and closing of the wage gap, female homeowner spending should comparatively rise as well ([Exhibit 23](#)).

**Exhibit 23:**

Homeownership rates between men and women have converged to 50/50

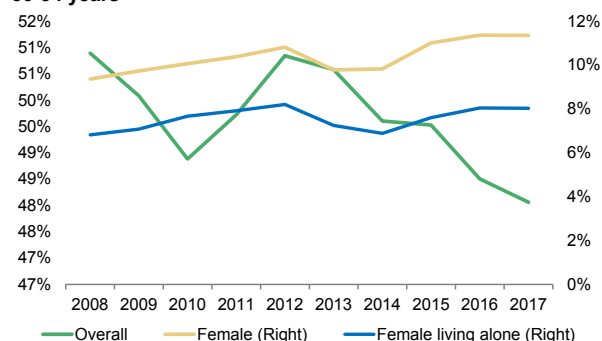
**Female vs. Male Homeownership Rates**

Source: Bureau of Labor Statistics

**The profile of the average American woman is also changing across multiple demographic categories.** The average 2017 woman was white, married, and in her 50s; she held a bachelor's degree and was employed in education or health services. Contrast that with the average woman expected in 2030, who is more likely

**Exhibit 22:**

...while overall headship rates have been trending down

**30-34 years**

Source: Census Bureau

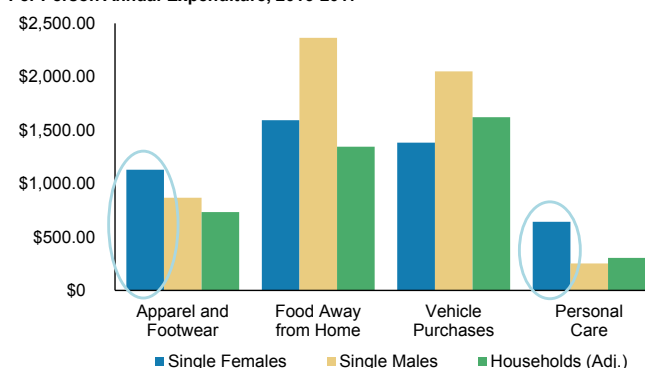
be younger, single, and a racial minority; to hold a bachelor's degree; and to be employed in business or professional services. We explored the economic impact of the growing youth and minority population in the US in our June 9 Blue Paper: [How the Gen Y+Z Boom Rolls Through the US Economy](#).

**Data from the BLS Consumer Expenditure Survey shows that single women outspend both single men and households as a share of income in apparel & footwear and personal care consumer segments ([Exhibit 24](#)).** We expect that change in demographic and life-style choices in the coming decades will shift spending profiles away from the household expenditure distribution and toward the singles distributions.

Based solely on our estimate that growth in the singles population will outpace the population as a whole, annual expenditures driven by single women should grow disproportionately to other spending cohorts. Additionally, the rise in labor force participation and closing wage gap should further influence this divergence.

**Exhibit 24:**

Single women outspend both single men and households as a share of income in the 'Apparel & Footwear' and Personal Care' categories

**Per Person Annual Expenditure, 2016-2017**

Source: Bureau of Labor Statistics, Consumer Expenditure Survey, Morgan Stanley Research, 2017

# Apparel & Footwear

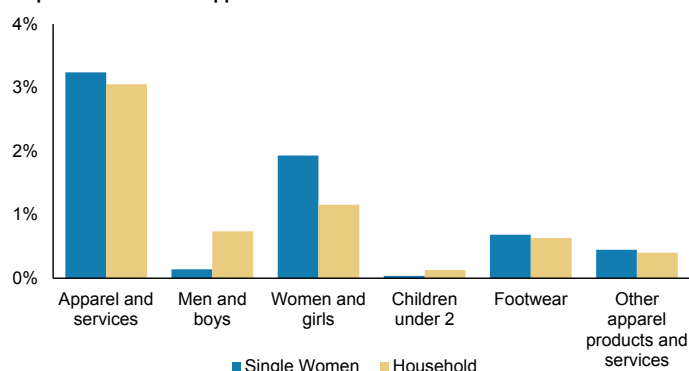
**Growth of single women may partially offset generational headwinds in some subsegments.** While we forecast a potential -164 bps headwind to Apparel & Footwear spending given changing age demographics (please see [The Impact of Gen Z: Be Selective](#)), on a per capita basis, single women spend meaningfully more than households on apparel, partially offsetting the generational headwinds. **We estimate tailwinds of +25 to +100 bps from marital status shifts, which may partially offset generational challenges.** By share of income, single women outspend households in every category except men's and children's clothing, as would be expected ([Exhibit 25](#)). In the women's clothing category, single women outspend single men and households per capita in terms of expenditure share and spend only 3% less than households in terms of absolute dollars. While households headed by married couples generally have higher disposable income, single women are more willing to spend their disposable income on apparel and footwear. Married couple households more often have to distribute their spending more widely as the presence of children requires additional spending on health care, savings, education, and more. **The growth in the number of single women, combined with a trend toward higher earnings for single women, should benefit names with high exposure to women.**

**Single women growth and exposure analysis from MRI data suggest Off-Price retailers in particular are well positioned.** While we estimate a spending tailwind of +25 to +100 bps to apparel & footwear from the growing single population, this is not enough to offset the -150 bp drag from an aging population over the next 10 years. However, there are pockets of apparel that we think will see an out-sized benefit from the increase in single women. We advocate staying selective and see activewear and off-price as best positioned to capitalize on these trends. An increase in the number and proportion of singles is likely to boost athletic apparel & footwear names like Nike (NKE) and Lululemon (LULU), as research has shown that both single women and single men spend significantly more time exercising than their married counterparts (single women exercise 1.5 hours more per week than their married counterparts). Additionally, not only are Ross Stores (ROST) and TJX Companies (TJX) highly exposed to women, both above 60% according to MRI ([Exhibit 26](#)), but their value proposition should resonate with single women whose incomes are lower than their married counterparts but are more

**Exhibit 25:**

Single women outspend households in the majority of Apparel and Footwear sub-segments

**Expenditure Share on Apparel and Footwear**

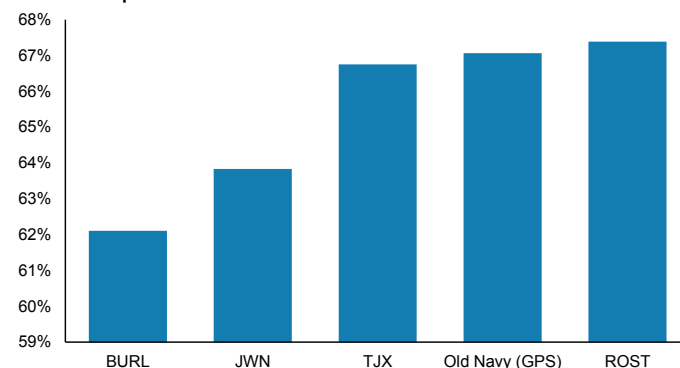


Source: Bureau of Labor Statistics (2017 Consumer Expenditure surveys)

**Exhibit 26:**

Off-price retailers have high exposure to women

**Customer Exposure to Women**



Source: MRI

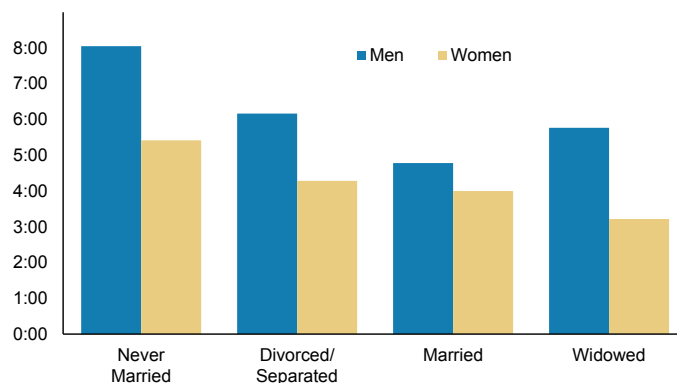
willing to spend on clothing and shoes. Women also enjoy the "treasure-hunt" experience more than men. Off-price should also benefit from greater home furnishing spending as women spend more on home décor than men, and will likely be living alone longer than previous generations. Finally, our past research has indicated that off-price retailers are relatively better positioned given significant Millennial and Gen Z customer growth, as well as high Hispanic customer exposure. Trends in women's economic status position them even better.

**An increase in the number and proportion of singles is also likely to boost athletic apparel and footwear names like Nike (NKE) and Lululemon (LULU).** Research has shown that both single men and single women spend significantly more time exercising on a weekly basis than their married counterparts ([Exhibit 27](#)). Increased time spent exercising both increases demand for athletic apparel and footwear and increases the replacement cycle of athletic goods as increased use accelerates wear-and-tear. More singles means more people exercising more frequently, buying more athletic goods, and replacing them more often. Because this trend applies to both single men and women, customer exposure to women is less important, though LULU's 70% of revenue in women's apparel does lend it a slight advantage. Thus, LULU should benefit from both increasing single women's exposure and increasing incomes.

#### Exhibit 27:

Singles spend significantly more time per week exercising, which will likely benefit athletic apparel and footwear brands

Hours Per Week Spent Exercising



Source: Journal of Marriage and Family



# Restaurants

**We estimate an +80 bps tailwind to spending on food away from home by 2030 based on marital status distribution shifts,** assuming expenditure shares are constant. On a per person basis, both single men and single women outspend households on food away from home. The estimated tailwind is a result of a greater skew toward singles, leading to an increase in the average amount spent per person per year on restaurants. On average, single men and women spend 6.5% and 4.6%, respectively, of their annual income on food away from home compared with 5.6% for the average household ([Exhibit 28](#)); in actual dollars, on a per person basis, single men significantly outspend households, while single women show less pronounced outspending. Meaningful progress in wage gap closure and an increase in women's income will likely supplement tailwinds from a shift toward singles as women's current underspending as a share of expenditure relative to men's is more likely a function of relatively low income than preference. This estimate does not take into account the rise of Gen Z into prime spending years and their preference for food away from home relative to grocery. Ongoing growth in alternative restaurant access channels — e.g., delivery and mobile ordering — is also not accounted for in this estimate.

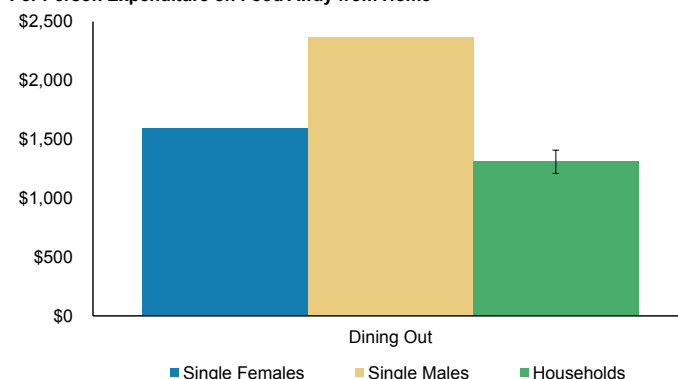
**We believe lower incomes, not preference, is the primary reason for women's lower expenditure share in Food Away from Home relative to single men.** Spending on food away from home as a share of total expenditure increases as income increases among single females ([Exhibit 29](#)). Therefore, as single women's incomes increase over time with increased labor force participation, we expect the average spending share to move higher as income distribution shifts. At the highest income level measured, single women actually outspend men as a share of expenditure, so wage gap closure could add further tailwinds to the sector, partially offsetting headwinds from an aging population (i.e., older people spend less on restaurants and are growing as a share of the population; *please see [The Impact of Gen Z: Be Selective](#)*).

**Fast casual dining brands exhibit higher exposure to women and are likely the greatest beneficiaries.** Within our restaurant coverage, several fast casual and coffee chains, in comparison to traditional fast food, have higher exposure to female customers, offer healthier options, and have a higher price point. We expect that as the cohort of higher earning, single women grows, these same chains will be the relative beneficiaries. Chains offering healthier options, such as Panera (now private) or Chipotle, already enjoy high exposure to

**Exhibit 28:**

Single men and women outspend households on a per person basis in the Food Away from Home category

**Per Person Expenditure on Food Away from Home**

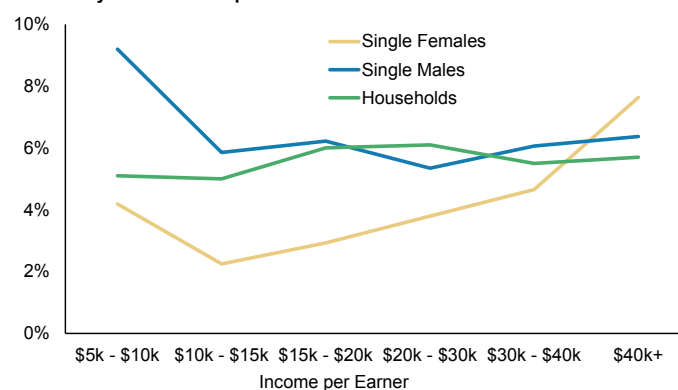


Source: Bureau of Labor Statistics (2017 Consumer Expenditure surveys), Morgan Stanley Research

**Exhibit 29:**

Spending on Food Away from Home appears moderately elastic among single women

**Food Away from Home Expenditure Share**



Source: Bureau of Labor Statistics (2017 Consumer Expenditure surveys)

females, and we'd expect this to remain a differentiator for the group of women discussed here. Note that the below demographic chart doesn't distinguish between customers dining alone vs with families; WING, for example, has high exposure to women though anecdotally we believe this skews toward families more so than for some of the other chains. Some ice cream, bakery and pizza chains in traditional fast food also have a similar dynamic. We also view casual dining as more family driven per data and anecdotally, and would view lower rates of family formation as less favorable for most chains in this segment.

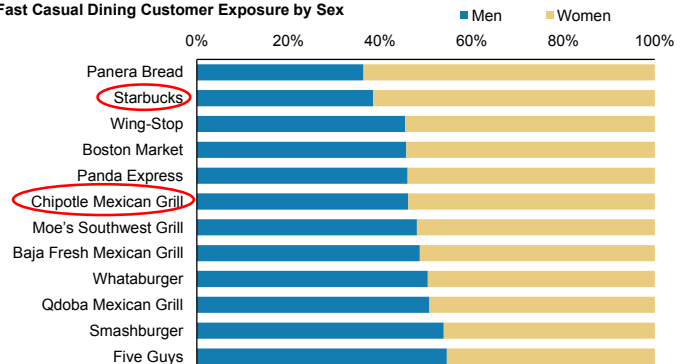
**We view Starbucks (SBUX) and Chipotle (CMG) as well-positioned within our publicly traded universe to capitalize on an increase in singles and a rise in women's average income.**

Starbucks is already popular with women, and due to its association with and exposure to working professionals, it is likely to be a beneficiary of a combination of high exposure to women and increased labor force participation of single women. Chipotle also exhibits higher exposure to women, and has both a healthier image vs. most limited service restaurants and relatively high exposure to urban, professional customers. We'd expect this to remain an advantage as single women increase spending power.

### Exhibit 30:

SBUX and CMG have over 50% female customer exposure...

Fast Casual Dining Customer Exposure by Sex

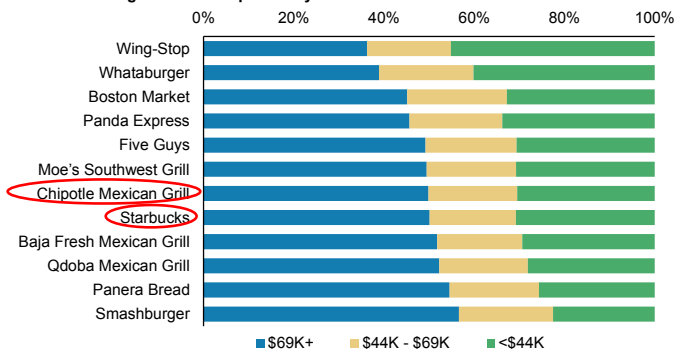


Source: 2016 Doublebase, Mediamark Research, Morgan Stanley Research

### Exhibit 31:

... and exposure to higher income levels.

Fast Casual Dining Customer Exposure by Income



Source: 2016 Doublebase, Mediamark Research, Morgan Stanley Research

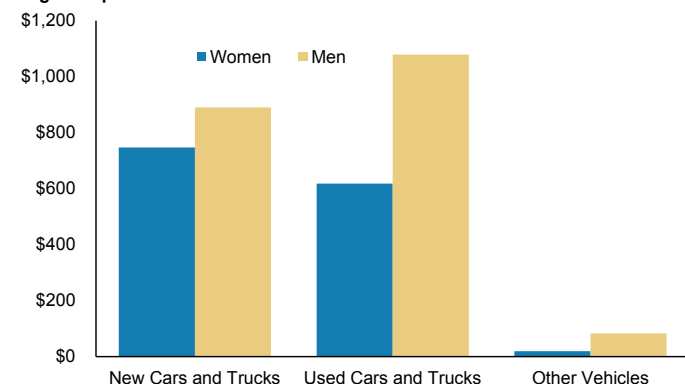
# Autos

**Singles spend less on vehicle purchases than households, both in terms of absolute dollars and expenditure share**, so a distribution shift toward more singles will likely cause headwinds for auto manufacturers. Single women, single men, and households spend 4.0%, 5.6%, and 6.7%, respectively, of annual expenditures on vehicle purchases (**Exhibit 32**). However, within vehicle purchases, single women spend more on new cars than used cars, while the opposite is true for single men and households. Further, an increase in women's average incomes is likely to drive growth in some subsectors, specifically electric vehicles.

## Exhibit 32:

Single men outspend single women on vehicle purchases; however, unlike single men, single women are more likely to purchase a new car than a used one

### Singles Expenditure on Vehicle Purchases



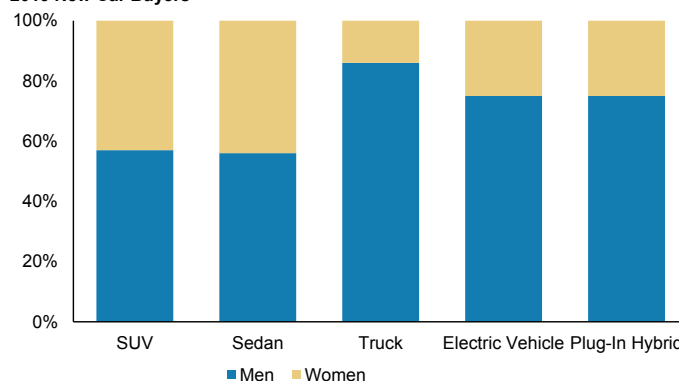
Source: Bureau of Labor Statistics (2017 Consumer Expenditure surveys)

**Women significantly under-index in truck and alternative fuel vehicle purchases**, according to third party market research data from Hedges and Company (**Exhibit 33**).<sup>2</sup> Men's dominance in the trucks category can be largely attributed to occupational differences between men and women. Men work with vastly higher frequency in jobs that require a truck, like farming, forestry, construction, maintenance, installation, etc. (sometimes at a ratio of 100:1 vs. women, according to BLS data). Women's under-purchasing in the alternative fuel vehicle category has more runway for change.

## Exhibit 33:

A survey of 2019 new car buyers by Hedges and Company found women vastly under-index to trucks and alternative fuel vehicles

### 2019 New Car Buyers



Source: Hedges and Company

**Survey data seem to confirm the widely-held perceptions that men care more about the appearance and status indicator aspects of cars, while women are more focused on functionality.**

It is worth examining the role of preferences and income constraints on the purchasing differences between men and women. Within the luxury category, MRI data suggest men own or lease 54% of luxury cars, while women own or lease 46%. Luxury goods are highly elastic, so the difference is likely a combination of preference and women's lower average incomes.

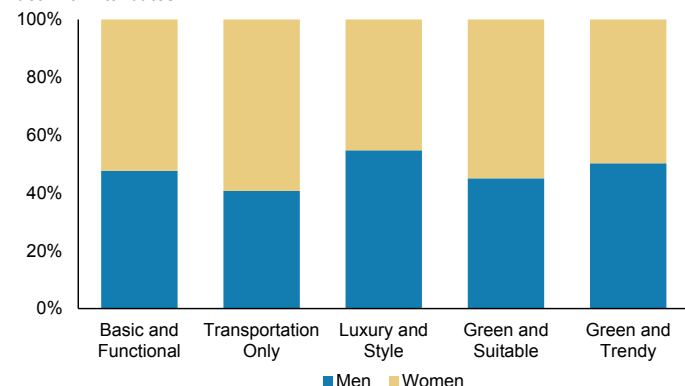
**Interestingly, women made up a slight majority of respondents who prioritize environmental impact.**

In keeping with women's prioritizing of functionality, and men's of style, women's majority was slightly larger in the Green and Suitable category than the Green and Trendy category. This preference profile would suggest the large gap in ownership of alternative vehicles is a result of income constraints.

<sup>2</sup>The significant difference between men's and women's ownership of electric vehicles was confirmed down to a single percent by a study for the California Air Resources Board.

**Exhibit 34:**

Men prioritize luxury and style more often than women, who more often prioritize functionality

**Ideal Car Attributes**

Source: MRI

**The income distribution of alternative fuel vehicle owners/leasers confirms that income is likely the primary cause of the gap between men's and women's ownership.**

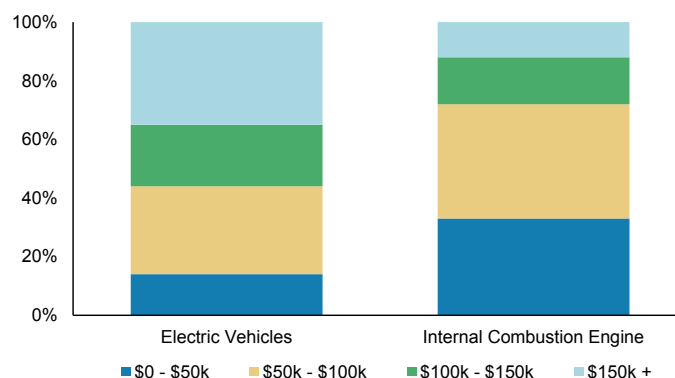
For internal combustion engines, the distribution of owners/leasers across income brackets more closely resembles the population-wide income distribution while owners/leasers of electric vehicles skew disproportionately to high income levels according to a California [study](#). As occupational shifts and delayed marriage and child-bearing lead women's incomes to rise in-line with men's, household income among married couples and single women should increase, making electric vehicles more accessible.

**Considering women's relative preference for environmentally friendly cars compared with men's, income increases among women are likely to be accompanied by women purchasing more electric vehicles.**

The shift will be helped by women's continued disproportionately high attainment of post-secondary degrees, which is correlated with electric vehicle purchase as documented in a [study](#) by the Center for Sustainable Energy. The mechanism behind this correlation could be higher income associated with educational attainment or perhaps environmental concern. Tesla (TSLA) is a potential beneficiary of this trend, although its relatively higher price points could delay the impact. As multiple manufacturers begin to expand their electric offering at accessible price points, they will be poised to quickly capture female-driven growth.

**Exhibit 35:**

Over half of EV owners/leasers have an annual household income over \$100k in contrast with less than one third of ICE owners/leasers

**Income Distribution of Car Owners/Leasers**

Source: University of California Davis, National Center for Sustainable Transportation

While no data sets break down car preferences or purchasing habits by marital status, we can draw some logical conclusions. Minivans are generally perceived as "family" cars, or in some cases "soccer-mom" cars. As fewer women get married and have children and average family sizes shrink, it is possible minivan sales will be pressured. While SUVs and cross-overs are often perceived as "family" cars as well, they are also known for their versatility, and thus may not see the same headwinds as minivans. The smaller average size of electric vehicles insulates the segment from drops in the number and size of families and a rise in singles relative to the minivan and SUV segments.

# Personal Care and Beauty

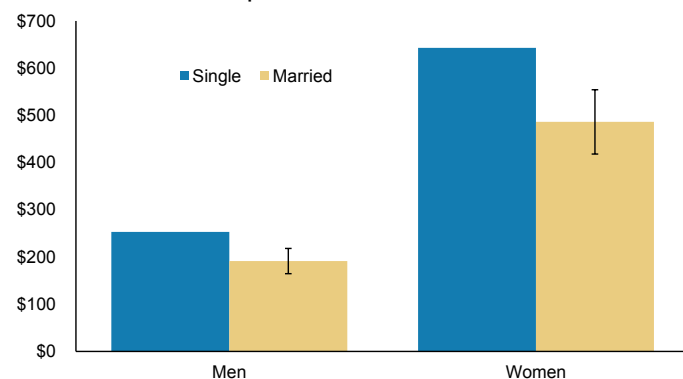
**We estimate that a growing population shift toward single women will result in a spending tailwind of between +35 bps and +110 bps.** This tailwind range is a function of our estimated expenditure values for married men and women to personal care ([Exhibit 36](#)). Single men and women both outspend their married counterparts in the personal care segment. Single women are especially high spenders in this category and spend close to the household average, even though the household average reflects the expenditures of 2.58 people ([Exhibit 37](#)). The tailwinds we estimate in this sector are a result of a shift from the "married" spending profile to the "single" profile which includes higher expenditures for both men and women, although the difference for women is more striking.

**Sephora (LVMH, covered by Ed Aubin in London), Ulta Beauty (ULTA), and Estee Lauder (EL, covered by Dara Mohsenian) are over 75% exposed to women and are likely to see healthy growth from demographic shifts** toward delayed marriage and Gen Z aging into peak incomes. Among single women, spending on personal care and beauty appears elastic, so as delayed marriage and child-bearing translates into higher incomes spending in this category is likely to accelerate. Past [Morgan Stanley Research](#) has found brands are important to Gen Z in purchasing beauty products, which gives additional advantage to these names. Due to the more "essential" nature of items like shampoo and razors, we estimate the incremental increase in spending from demographic shifts will be absorbed by the beauty industry rather than shampoo, body wash, or razor manufacturers.

## Exhibit 36:

Both single men and single women outspend their married counterparts on personal care.

### Estimated Personal Care Expenditure

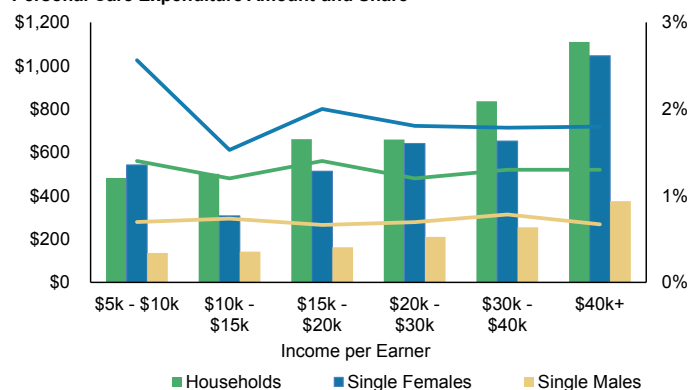


Source: Bureau of Labor Statistics (2017 Consumer Expenditure surveys), Morgan Stanley Research

## Exhibit 37:

Single Females spend close to the household values even though households include 2.58 individuals on average

### Personal Care Expenditure Amount and Share

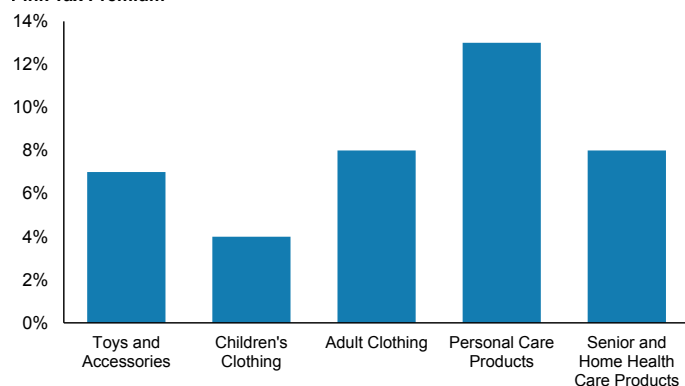


Source: Bureau of Labor Statistics (2017 Consumer Expenditure surveys)

**Women's significantly higher spending likely has two significant components: a "pink tax" and spending on women-specific products like cosmetics.** The term *pink tax* refers to the extra amount women are charged for certain products and services. The pink tax applies to everything from dry cleaning to car maintenance to toys, but it's most pronounced in personal care products. A 2015 [study](#) by the New York City Department of Consumer Affairs found women pay a 13% premium on personal care products compared with men ([Exhibit 38](#)). While the samples for this study were only from New York, similar studies in other US regions have had similar findings. The study also found that women pay more than men for comparable products 56% of the time while men pay more only 13% of the time (pricing is equal in 31% of cases). If the 13% pink tax accounts for a proportionate amount of the gap between men's and women's personal care spending, there is still a \$357 gap between single men and women and a \$264 gap between married men and women left unaccounted for. The significant difference in spending between both single and married men and women can be attributed to women's spending on products and services that men tend not to use, like makeup and hair coloring, as well as higher prices on services like haircuts.

**Exhibit 38:**

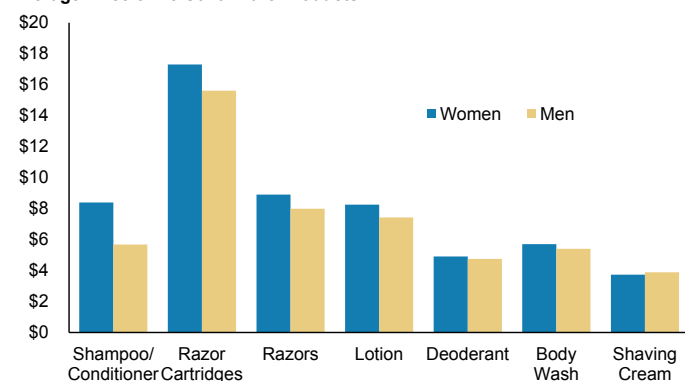
Women pay more than men for comparable products across a range of categories

**Pink Tax Premium**

Source: New York City Department of Consumer Affairs

**Exhibit 39:**

Women usually pay a premium on comparable men's products in the personal care category

**Average Price of Personal Care Products**

Source: New York City Department of Consumer Affairs

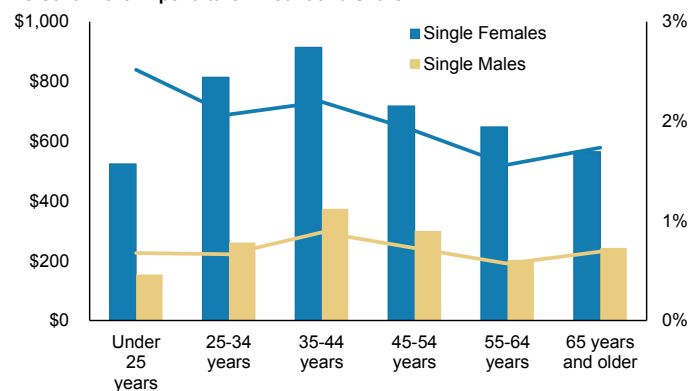
**Single people spend more time as well as more money on personal care.** According to the US Census Bureau's American Time Use Survey, single people spend just under 10 hours per day sleeping, showering, dressing, and engaged in health-related self-care and personal activities compared with married people's 9.24 hours per day. The same study found married people spend 41 more minutes per day on housekeeping activities, which may be cutting into time spent on personal care.

**Further tailwinds to the sector are possible as Millennials and Gen Z become the most important consumer segments.**

Millennials have driven growth in the beauty sector over the past decade, and their past spending habits indicate they will spend more than past generations on anti-aging products as they grow older. Gen Z women spend more on makeup than any generation before them did at their age, and as they age into prime spending years while delaying marriage the beauty industry will likely see further growth. Some estimates put women's lifetime spending on makeup at a whopping \$15,000. Growth in singles and the larger attributable spending on makeup will likely grow that figure.

**Exhibit 40:**

Spending on personal care peaks with incomes in the 35-44 age range

**Personal Care Expenditure Amount and Share**

Source: Bureau of Labor Statistics (2017 Consumer Expenditure surveys)

# Appendix: Women's Changing Economic Status

— Ellen Zentner, Robert Rosener, Sarah Wolfe

**While educational attainment and rising labor force participation were the dominant drivers of women's economic status in the past, future drivers are likely to be shifts in corporate behavior and fiscal policy,** such as, 1) child-care subsidies, 2) paid maternity and paternity leave, 3) compensation parity, and 4) work schedule flexibility. These policies would have meaningful impacts in pursuit of greater equity in women's economic status. Globally, the gender wage-gap is lowest in European countries that have implemented these policies. Still, there is a portion of the wage gap left unaccounted for by race, age, and occupational and educational variables, which could be the result of other forms of discrimination. While the changes currently occurring are slow-moving, significant progress has been made in advancing women's economic status.

**Since the 1970s, women in the United States have experienced a significant rise in their economic opportunities and status.** Between 1970 and 2018, the female labor force participation rate increased from 43.3% to 56.8%, while men's labor force participation dropped from 79.7% to 69.2%, according to the BLS. From 1990 to 2018, the female-to-male labor force participation ratio rose from 74.7% to 82.2% ([Exhibit 41](#)). Increases in women's average income can be attributed to the rise in participation, leading women to contribute to larger proportions of household income over time (*please find more detail in [Women as Economic Agents](#)*).

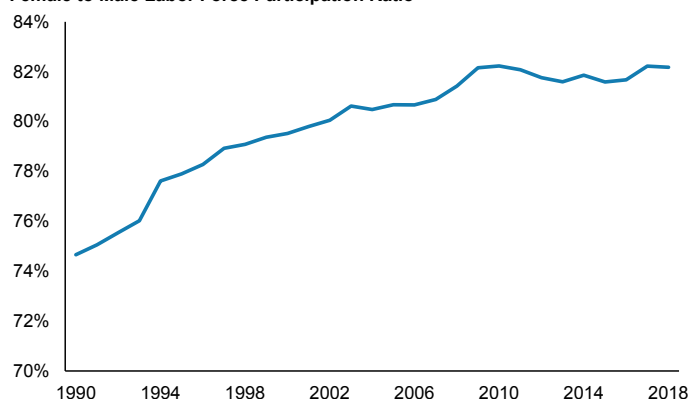
Gains in labor force participation rates have flattened since 2010 as educational enrollment rates among younger workers have risen, increasing life expectancy has allowed older workers to stay in the labor force for longer, and limited childcare social programs in the US have made it continuously difficult for mothers to stay at work (see [Labor Force Participation: Fighting Against a Downtrend](#)).<sup>1</sup>

<sup>1</sup>Findings show that the labor force participation rate is only weakly procyclical. While recessions cause workers to lose their jobs at a higher rates, sending the unemployment rate higher, most unemployed individuals still stay in the labor force and therefore do not drive a large decline in the participation rate. Therefore, the decline since 2010 would only modestly be due to the 2009 recession.

## Exhibit 41:

The female-to-male ratio of labor force participation peaked at 82% in 2010 and has since flat-lined

Female to Male Labor Force Participation Ratio



Source: Bureau of Labor Statistics

**Women's influence over consumer expenditures is likely to increase as their incomes constitute a growing share of overall household income.** A combination of shifting life-style norms is enabling women with or without children to be more fully employed, which provides the opportunity to move higher on the career ladder. We forecast continuity of trends favorable to women's heightened incomes and economic independence including **1)** a 1.5-month annual increase in the average marital age, **2)** a 2-month annual increase in average age when women have their first child, **3)** increasing educational attainment, and **4)** a shift toward higher paying jobs ([Exhibit 42](#)).

## Exhibit 42:

Women are getting married later in life, in addition to getting divorced at higher rates after the age of 55

	2000a	2010a	2020e	2030e
<b>Average Age at Marriage (years)</b>	25.1	26.1	28.1	29.5
<b>55+ Divorce Rate (per 1000 marriages)</b>	7.5	10.1	11.4	12.7
<b>Married Women (% of population)</b>	54.70%	52.40%	50.40%	48.30%
<b>Never Married Women (% of population)</b>	25.10%	27.40%	30.00%	32.80%
<b>Number of Women (millions)</b>	114	127	139	149
<b>10 year AR</b>	-	1.10%	0.90%	0.70%
<b>Number of Single Women (millions)</b>	52	60	69	78
<b>10 year AR</b>	-	1.60%	1.30%	1.20%

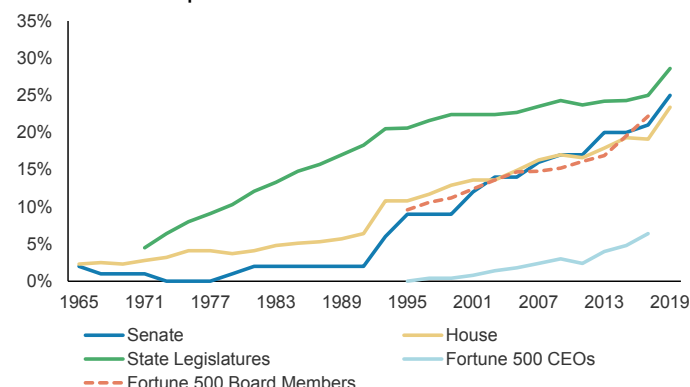
Source: Note: AR = annual rate  
Source: Census Bureau, Morgan Stanley Research



**There has been growth in the number of women in positions of power, both politically and economically,** though that growth is not necessarily directly tied to broader shifts in women's status. Today, women make up nearly 25% of Congress, compared to about 2% in 1970 ([Exhibit 43](#)), and more women than ever before now populate the business world's upper echelons as CEOs and board members of successful companies ([Exhibit 44](#)). While the relationship between the timing and pace of these gains and gains for the broader women's population is unclear, the trend does indicate shifting attitudes and norms surrounding women in positions of power and influence.

**Exhibit 43:**

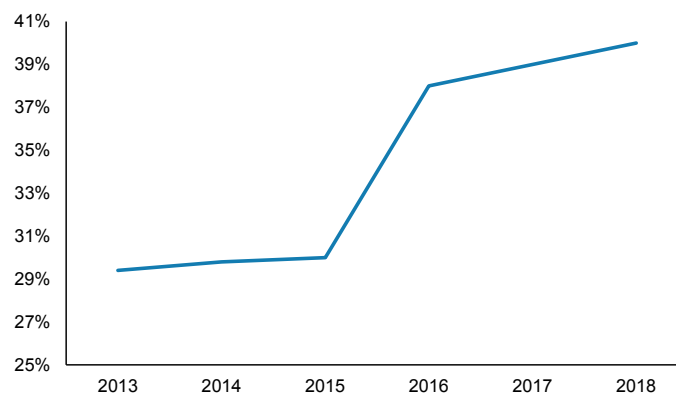
Women's presence in traditional power roles has been steadily increasing since the 1960s

**Women in Leadership**

Source: Bureau of Labor Statistics

**Exhibit 44:**

Even in the last few years, there has been significant growth in the number and success of women-owned businesses

**Women-Owned Business Share**

Source: Bureau of Labor Statistics

**Taking a closer look at employment trends over the last ~10 years, ongoing improvements in women's representation in the workforce have been made, though progress varies across geographies and throughout different levels of organizations.** As discussed in our Quant team's recent report [Introducing HERS: Employing Diversity Pays Off](#), in North America, women representation in the boardroom has increased 9%, with more modest growth in female representation at the manager and executive levels (3% and 4%, respectively). Globally, the greater improvement at the board level has likely been aided by specific programs and policies to encourage greater board diversity. Several European countries, including Norway, Belgium, France, and Italy, have corporate quotas requiring 30-40% of non-executive board members to be female. In the US, California recently enacted legislation to require up to three female board members for CA-based companies by 2021 ([Exhibit 45](#)).

**Exhibit 45:**

Women have made the largest gains in the board room and at the executive level

**MSCI World: Percentage Point Increase/Decrease vs 2010, as of May 2019**

	% of Women Employees	% of Women Managers	% of Women Executive Members	% of Women on the Board
Europe	1%	3%	8%	20%
Asia ex-Japan	1%	5%	11%	11%
North America	1%	3%	4%	9%
Japan	-3%	-6%	1%	3%

Source: Asset4, FactSet, Morgan Stanley Research

**The level of female representation also varies significantly across sectors.** The average percentage of women executives is fairly homogeneous across sectors (with the exception of Industrial at 10%); interestingly, the range of average percentage of women on the board is between 17% (Technology) at the lowest and 24% (Utilities) at the highest, in a pretty tight distribution. Overall, Financials, Healthcare, and Real Estate stand out as having the highest overall representation of female employees ([Exhibit 46](#)).

**Exhibit 46:**

Financials, Health Care, and Real Estate have the highest average % of women employees

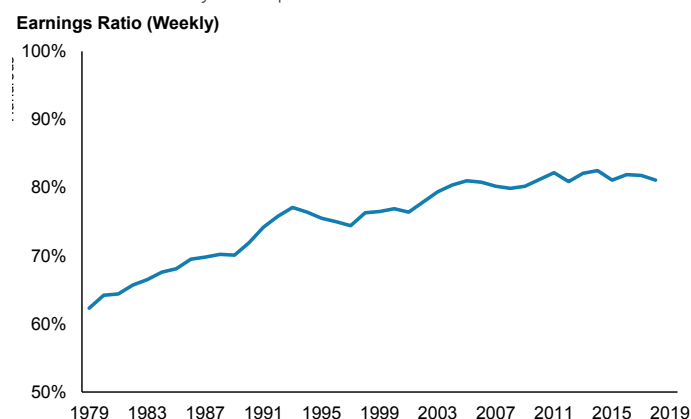
**MSCI World: Average % of Corporate Representation by Sector as of May 2019**

	% of Women Employees	% of Women Managers	% of Women Executive Members	% of Women on the Board
Financials	51%	35%	16%	25%
Health Care	47%	33%	14%	22%
Real Estate	45%	35%	15%	19%
Discretionary	42%	30%	13%	20%
Staples	40%	31%	14%	23%
Comm Services	36%	28%	14%	23%
Technology	29%	19%	12%	17%
Energy	28%	23%	13%	22%
Industrials	26%	18%	10%	19%
Utilities	24%	21%	15%	24%
Materials	20%	16%	12%	19%

**Despite this progress, a stubborn wage gap remains.** Estimates of women's pay relative to men's vary among researchers and are dependent on hourly, weekly, or annual figures, among other variables, but most agree women make somewhere between 77 to 85 cents for every dollar made by men. This is a significant improvement from 1980, when women made approximately 64 cents per dollar made by men. However, progress in shrinking the wage gap has stagnated in the last 10-15 years, closing only 0.7% between 2004 and 2018 compared with 8.5% between 1990 and 2004 and 9.7% between 1989 and 1990 ([Exhibit 47](#)).

**Exhibit 47:**

The ratio of women's earnings to men's peaked at 82.5% in 2014 but has leveled considerably in the past decade.



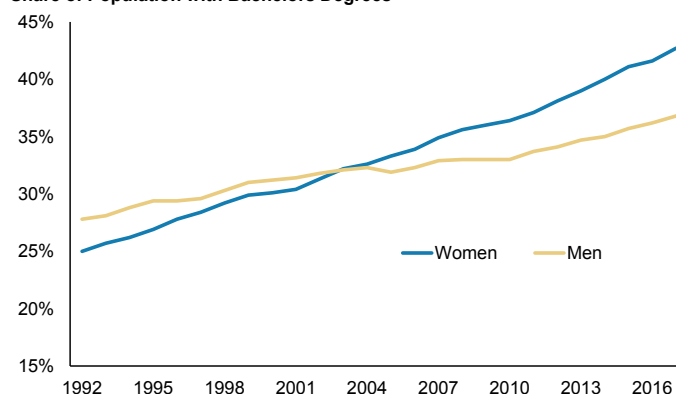
Source: Bureau of Labor Statistics

**Factors influencing the male-female wage gap include educational attainment, occupational choice, and labor force experience.** Women now obtain more bachelor's degrees than men ([Exhibit 48](#)), which has helped reduce the wage gap, but occupational choice and labor force experience are still significant forces.

Occupational choice refers to women's tendency to enter lower paying jobs. Whether these jobs are lower-paid due to objective factors or as a consequence of a female-dominant work-force is unclear, and both likely play a role. Women are most often teachers, nurses, and administrators, while men most often work in sales, management, and construction. This is slowly changing as more women enter management roles and traditionally male STEM fields like engineering.

**Exhibit 48:**

Women's rate of bachelors degree attainment surpassed men's in the early 2000s, and the gap has widened since then

**Share of Population with Bachelors Degrees**

Source: Bureau of Labor Statistics

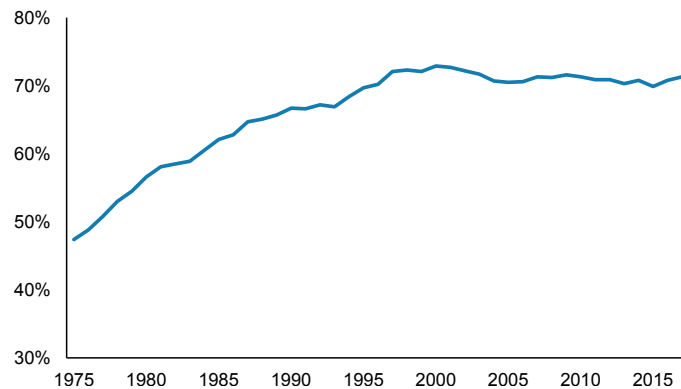
**Motherhood is the major contributor to women's deficiency in labor force experience relative to men's.** The social view that women should be the primary caretakers of children is still surprisingly widely held. Maternity leave, shifts to part time, and shortened work days associated with having children reduce women's labor force experience. These factors likely play a role in the "funnel" phenomenon observed in many industries, where women make up close

to equal proportions of the low level jobs but are poorly represented in mid-level management and the C-suite.<sup>2</sup> Estimates<sup>3</sup> quantify the decline in women's earnings after they have their first child as between 20% and 40%. However, certain shifts in life style choices have potential to reduce this loss in earnings. For example, more mothers are staying in the labor force after having children ([Exhibit 49](#)).

#### Exhibit 49:

Maternal labor force participation peaked at 72.9% in 2000 and has declined slightly since then

##### Labor Force Participation Rate of Mothers (Married and Single)



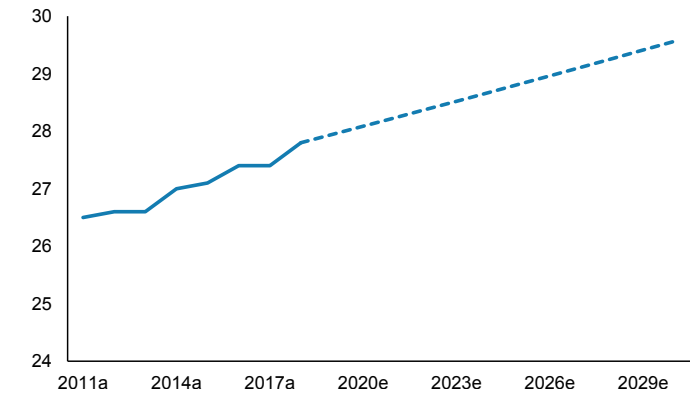
Source: Bureau of Labor Statistics

**Women have been getting married 1.5 months later each year for the last 25 years ([Exhibit 50](#) ). Since 2009, women have been waiting over 2 additional months each year, on average, to have children ([Exhibit 51](#) ).** These two factors, combined with a declining US birth rate, mean fewer women are having children. If they do have children, they have them later in life, so even if the same decrease in earnings occurs, it kicks in at a higher earnings level as they have been in the work force longer. We will discuss later that this shift is not accompanied by a growth in the number of single mothers. While the segment of never married women is growing, the proportion of that segment with children is dropping.

#### Exhibit 50:

Women are waiting longer to get married...

##### Women's Median Age at First Marriage

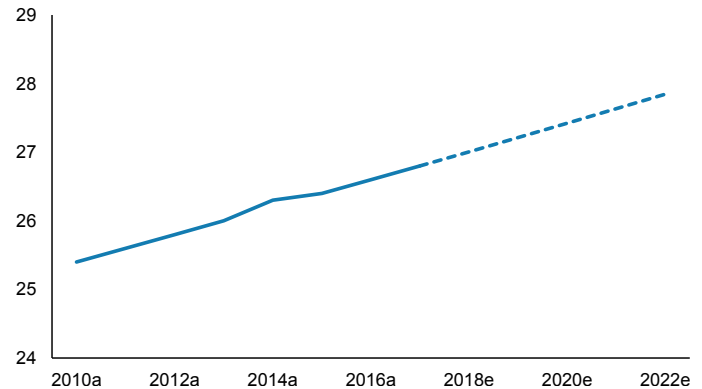


Source: Census Bureau, MS Research

#### Exhibit 51:

... and to have children

##### Mean Age at First Birth



Source: Centers for Disease Control and Prevention, MS Research

<sup>2</sup> C-suite refers to top senior staffers, including chief executive officer (CEO), chief financial officer (CFO), chief operating officer (COO), and chief information officer (CIO).

<sup>3</sup> Henrik Kleven, et al (2019): "Child Penalties Across Countries: Evidence and Explanations"; <https://www.nber.org/papers/w25524>

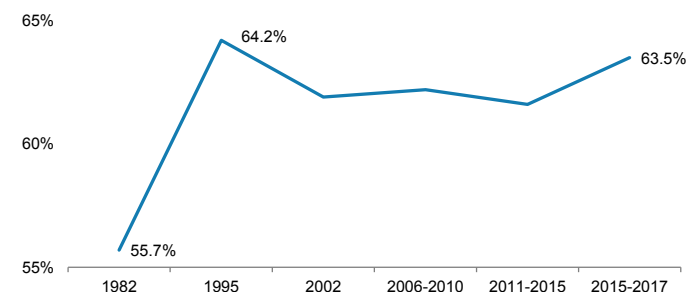
**Researchers also highlight the role contraception has played in women deciding to enter or stay in the labor force.** Economist Claudia Goldin showed that the diffusion of the birth control pill across the country during the late 1980s enabled women to marry later and attend college at a higher rate.<sup>4</sup> The proportion of U.S. women using contraception sharply rose from 56% in 1982 to 64% in 1995 ( **Exhibit 52** ). Since 1995, the percent of women using birth control has flattened out. The rise in contraception use in 1982-95 corresponds with the changing economic status of women in the United States since the 1970s. As shown above, the female to male labor force participation ratio, women to men's earnings ratio (wage gap), and share of wives out-earning husbands all accelerated during the 1982-95 period.

From 1995 to present, although the proportion of US women using contraception has flattened, the method of contraception has evolved, with increasing popularity of long-term removable contraception, which are primarily IUDs, and decreasing popularity of short-term contraception methods, such as the pill ( **Exhibit 53** ). In 2002-17, the use of the pill has declined from 19.0% to 13.9%, while the use of IUD's has risen from 1.3% to 4.4%, with the highest rates seen among women age 20-29. Simultaneously, female sterilization as a method of birth control has significant declined since 1995, from 17.8% to 14.2% in 2017. This data suggests that women still plan to have children, but are turning to longer-term birth control methods for reasons that may be supported by women's decision to receive a college education, marry later, and work longer.

#### Exhibit 52:

Contraception use has risen since the 1980s....

**Percent of Women Currently Using Any Contraception Method**



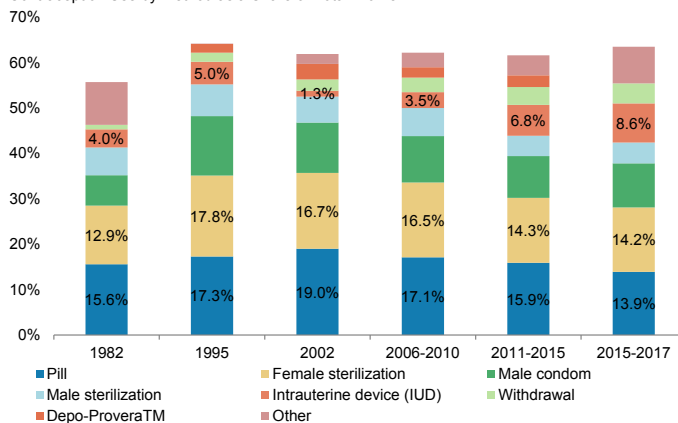
Source: Centers for Disease Control and Prevention, MS Research

#### Exhibit 53:

...and women increasingly choose long-term birth control methods.

**Long-term Contraception has become increasingly popular**

Contraception Use by Method as a Share of Total Women



Source: Centers for Disease Control and Prevention, MS Research

4 Goldin (2006): "The Quiet Revolution That Transformed Women's Employment, Education, and Family."

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Stock Rating Category	Coverage Universe		Investment Banking Clients (IBC)			Other Material Investment Services Clients (MISC)	
	Count	% of Total	Count	% of Total IBC	% of Rating Category	Count	% of Total Other MISC
Overweight/Buy	1124	36%	281	42%	25%	516	37%
Equal-weight/Hold	1405	45%	309	46%	22%	663	47%
Not-Rated/Hold	1	0%	0	0%	0%	1	0%
Underweight/Sell	577	19%	77	12%	13%	233	16%
Total	3,107		667			1413	

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## INDUSTRY COVERAGE: Branded Apparel & Footwear

COMPANY (TICKER)	RATING (AS OF)	PRICE* (08/20/2019)
<b>Kimberly C Greenberger</b>		
Levi Strauss & Co (LEVI.N)	E (04/15/2019)	\$16.46
PVH Corp. (PVH.N)	O (04/09/2019)	\$71.84
Yeti Holdings Inc. (YETI.N)	E (03/29/2019)	\$28.08
<b>Lauren Cassel</b>		
Foot Locker Inc (FL.N)	E (08/08/2019)	\$39.21
Nike Inc. (NKE.N)	O (08/01/2018)	\$80.53
Skechers USA Inc. (SKX.N)	E (08/01/2018)	\$30.40
Under Armour Inc. (UAA.N)	E (08/01/2018)	\$18.55

Stock Ratings are subject to change. Please see latest research for each company.

\* Historical prices are not split adjusted.

**INDUSTRY COVERAGE: Restaurants**

COMPANY (TICKER)	RATING (AS OF)	PRICE* (08/20/2019)
<b>John Glass</b>		
BJ's Restaurants, Inc. (BJRI.O)	E (09/16/2015)	\$35.48
Bloomin' Brands Inc (BLMN.O)	E (12/19/2018)	\$15.26
Brinker International Inc. (EAT.N)	U (01/17/2017)	\$38.04
Chipotle Mexican Grill, Inc. (CMG.N)	E (04/17/2019)	\$820.14
Darden Restaurants Inc. (DRI.N)	E (10/30/2014)	\$118.87
Dominos Pizza Inc. (DPZ.N)	O (04/17/2019)	\$232.43
Dunkin Brands Group Inc (DNKN.O)	E (09/06/2011)	\$83.10
Jack in the Box Inc. (JACK.O)	E (05/21/2019)	\$87.69
McDonald's Corporation (MCD.N)	O (11/29/2018)	\$218.47
Red Robin Gourmet Burgers, Inc. (RRGB.O)	E (01/09/2013)	\$32.90
Restaurant Brands International, Inc. (QSR.N)	O (03/26/2018)	\$75.46
Shake Shack Inc (SHAK.N)	E (12/07/2017)	\$96.32
Starbucks Corp. (SBUX.O)	E (06/20/2018)	\$95.63
Texas Roadhouse, Inc. (TXRH.O)	E (01/17/2017)	\$50.05
The Cheesecake Factory, Inc. (CAKE.O)	E (03/27/2008)	\$36.47
The Wendy's Company (WEN.O)	E (01/08/2015)	\$20.67
Wingstop Inc (WING.O)	E (10/18/2018)	\$102.90
Yum! Brands, Inc. (YUM.N)	E (01/09/2014)	\$116.57
Stock Ratings are subject to change. Please see latest research for each company.		
* Historical prices are not split adjusted.		

**INDUSTRY COVERAGE: Autos & Shared Mobility**

COMPANY (TICKER)	RATING (AS OF)	PRICE* (08/20/2019)
<b>Adam Jonas, CFA</b>		
Avis Budget Group Inc (CAR.O)	U (06/26/2018)	\$26.23
Ferrari NV (RACE.N)	O (05/09/2019)	\$155.03
Fiat Chrysler Automobiles NV (FCHA.MI)	O (02/24/2016)	€11.53
Fiat Chrysler Automobiles NV (FCAU.N)	O (02/24/2016)	\$12.36
Ford Motor Company (F.N)	O (08/06/2019)	\$8.96
General Motors Company (GM.N)	O (04/09/2018)	\$36.96
Harley-Davidson Inc (HOG.N)	O (05/06/2013)	\$31.88
Hertz Global Holdings Inc (HTZ.N)	U (09/14/2017)	\$12.40
Tesla Inc (TSLA.O)	E (05/15/2017)	\$225.86
<b>Armintas Sinkevicius, CFA, CPA</b>		
Adient PLC (ADNT.N)	U (07/31/2018)	\$22.43
American Axle & Manufacturing Holdings Inc (AXL.N)	O (03/22/2018)	\$6.65
Aptiv Plc (APT.V.N)	U (12/05/2017)	\$82.19
Asbury Automotive Group Inc (ABG.N)	E (07/10/2018)	\$90.49
AutoNation Inc. (AN.N)	U (07/10/2018)	\$47.33
BorgWarner Inc. (BWA.N)	O (03/22/2018)	\$31.75
Carmax Inc (KMX.N)	O (07/10/2018)	\$83.34
Carvana Co (CVNA.N)	U (01/14/2019)	\$76.62
Delphi Technologies PLC (DLPH.N)	E (10/15/2018)	\$14.10
Goodyear Tire & Rubber Company (GT.O)	E (08/13/2018)	\$11.57
Group 1 Automotive, Inc (GPI.N)	O (05/06/2019)	\$77.93
Lear Corporation (LEA.N)	O (07/31/2018)	\$109.00
Lithia Motors Inc. (LAD.N)	O (07/10/2018)	\$129.48
Magna International Inc. (MGA.N)	U (03/22/2018)	\$47.82
Penske Automotive Group, Inc (PAG.N)	O (07/10/2018)	\$42.63
Sonic Automotive Inc (SAH.N)	U (07/10/2018)	\$26.81
Tenneco Inc. (TEN.N)	E (08/14/2019)	\$8.99
Visteon Corporation (VC.O)	U (03/22/2018)	\$67.50
Stock Ratings are subject to change. Please see latest research for each company.		
* Historical prices are not split adjusted.		

**INDUSTRY COVERAGE: Hardline/Broadline/Food Retail**

COMPANY (TICKER)	RATING (AS OF)	PRICE* (08/20/2019)
Simeon Gutman, CFA		
Advance Auto Parts Inc (AAP.N)	O (06/23/2014)	\$135.38
At Home Group Inc (HOME.N)	E (06/10/2019)	\$5.38
AutoZone Inc. (AZO.N)	E (07/06/2017)	\$1,091.11
Bed Bath & Beyond Inc. (BBBY.O)	E (04/05/2019)	\$7.74
Best Buy Co Inc (BBY.N)	E (01/19/2016)	\$66.04
BJ'S Wholesale Club (BJ.N)	E (07/23/2018)	\$21.63
Costco Wholesale Corp (COST.O)	E (10/06/2017)	\$272.97
Dick's Sporting Goods (DKS.N)	E (05/20/2016)	\$32.37
Dollar General Corporation (DG.N)	O (02/16/2016)	\$137.21
Dollar Tree Inc (DLTR.O)	E (02/16/2016)	\$93.63
Five Below Inc (FIVE.O)	O (06/30/2019)	\$112.06
Floor & Decor Holdings Inc (FND.N)	E (11/12/2018)	\$45.40
Grocery Outlet Holding Corp (GO.O)	E (07/15/2019)	\$42.96
Home Depot Inc (HD.N)	O (02/23/2017)	\$217.09
Kroger Co. (KR.N)	E (06/19/2017)	\$22.91
Lowe's Companies Inc (LOW.N)	O (01/21/2015)	\$97.87
Lumber Liquidators Holdings Inc (LL.N)	E (03/02/2015)	\$8.41
National Vision Holdings Inc. (EYE.O)	O (11/20/2017)	\$27.83
O'Reilly Automotive Inc (ORLY.O)	E (07/06/2017)	\$383.24
Ollie's Bargain Outlet Holdings Inc (OLLI.O)	E (09/25/2017)	\$78.15
Party City Holdco Inc (PRTY.N)	E (01/19/2016)	\$4.80
Sally Beauty Holdings Inc (SBH.N)	U (11/08/2017)	\$12.06
Target Corp (TGT.N)	E (05/20/2019)	\$85.53
The Michaels Companies, Inc. (MIK.O)	E (05/20/2019)	\$5.32
Tractor Supply Co (TSCO.O)	E (06/23/2014)	\$100.87
Ulta Beauty Inc (ULTA.O)	O (01/17/2018)	\$323.08
Valvoline Inc. (VVV.N)	E (10/18/2016)	\$22.07
Walmart Inc (WMT.N)	O (01/23/2019)	\$112.05
Wayfair Inc (W.N)	E (04/25/2018)	\$112.30
Williams-Sonoma Inc (WSM.N)	U (01/23/2019)	\$64.70

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\* Historical prices are not split adjusted.

**INDUSTRY COVERAGE: Retail, Specialty Retail**

COMPANY (TICKER)	RATING (AS OF)	PRICE* (08/20/2019)
Kimberly C Greenberger		
Abercrombie & Fitch Co. (ANF.N)	U (02/26/2015)	\$15.66
Acushnet Holdings Corp (GOLF.N)	O (11/22/2016)	\$25.56
American Eagle Outfitters, Inc. (AEO.N)	U (03/11/2014)	\$15.84
Capri Holdings Ltd (CPRI.N)	E (11/14/2016)	\$27.67
Chico's FAS Inc. (CHS.N)	E (05/13/2013)	\$3.21
Gap Inc (GPS.N)	U (03/16/2016)	\$16.31
J. Jill Inc (JILL.N)	E (10/12/2017)	\$1.67
L Brands Inc (LB.N)	E (08/23/2018)	\$19.92
Lululemon Athletica Inc. (LULU.O)	E (09/02/2016)	\$179.67
Revolve Group Inc (RVLV.N)	O (07/02/2019)	\$23.77
TAPESTRY INC (TPR.N)	E (10/17/2018)	\$21.04
Tiffany & Co. (TIF.N)	E (11/04/2011)	\$82.26
Urban Outfitters Inc. (URBN.O)	O (01/09/2019)	\$20.91

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\* Historical prices are not split adjusted.

**INDUSTRY COVERAGE: Retail, Department Stores**

COMPANY (TICKER)	RATING (AS OF)	PRICE* (08/20/2019)
Kimberly C Greenberger		
Kohl's (KSS.N)	U (03/19/2013)	\$44.88
Macy's Inc. (M.N)	U (05/10/2018)	\$15.36
Nordstrom (JWN.N)	E (01/08/2019)	\$25.15

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