Empirical Research Partners

Aram Rubinson 212 803-7930 | Wes Sapp 212 803-7945 | Yuntao Ji 212 803-7920

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Consumer Stocks: Balance Sheet Check-Up

A Stress Test, of Sorts

Sensitivity to Rates

- AB Inbev is a highly-regarded company in a stable business. That's what made its recent dividend cut so surprising. Weaker volumes might've been the catalyst, but a heavy debt burden was a big part of the problem too. With that as a backdrop, we thought it would be a good time to examine balance sheets across the consumer landscape. We're particularly interested in their sensitivity to changes in margins and interest rates.
- We estimate that one-quarter of the debt held by consumer companies is sensitive to higher interest rates. This accounts for variable-rate debt as well as the natural turnover of fixed-rate balances. The ratio is highest for hotel, cruise & casino operators where more than 60% of debt is sensitive to changes in rates, and is followed by restaurants that sport a ratio closer to 40%.
- If we multiply this share by the overall leverage ratio we can estimate that interest-sensitive debt amounts to 1.0x EBITDA for restaurants and 1.7x for hotel, cruise & casino operators. Consumer staples are less exposed at 0.5x, a results that's fairly consistent at the sub-industry level. Retailers and textile companies are better off since their debt burden is tied to operating leases that vary more with rental rates than interest rates.

Measuring the Impact to the P&L, Cash Flow and Balance Sheet

- Isolating the share of debt that's rate sensitive helps us estimate how much added interest expense might weight on company profits as rates rise. Hotel, cruise & casinos could see a (3)% profit pinch and restaurants might see a bit less, but some companies in these industries would face a risk as high as (10)%. Consumer staples would face a (1)% headwind consistently, but every point counts when growth is scarce.
- The P&L risk associated with rising rates is fairly small, but access to cheap credit has yielded other benefits that'll be hard to replicate. For example, rising debt levels have given companies firepower to return capital to shareholders. In recent years this served to amplify operating cash flow by as much as 7% annually for consumer staples and 15% for restaurants. Absent a further rise in leverage ratios, this performance would be hard to repeat.
- Leverage ratios for the core of the market that excludes commodity businesses are higher than they were a decade ago. The same is true for consumer staples that are operating with one additional turn of debt. Consumer cyclicals are not up by as much, but that belies a surge we've seen in restaurants. As restaurants have steadied their models with franchise fees, they've grown confident enough to finance their business more aggressively. They look almost identical to consumer staples when it comes to leverage and interest coverage. We can only hope that fundamentals and pricing power hold up better.

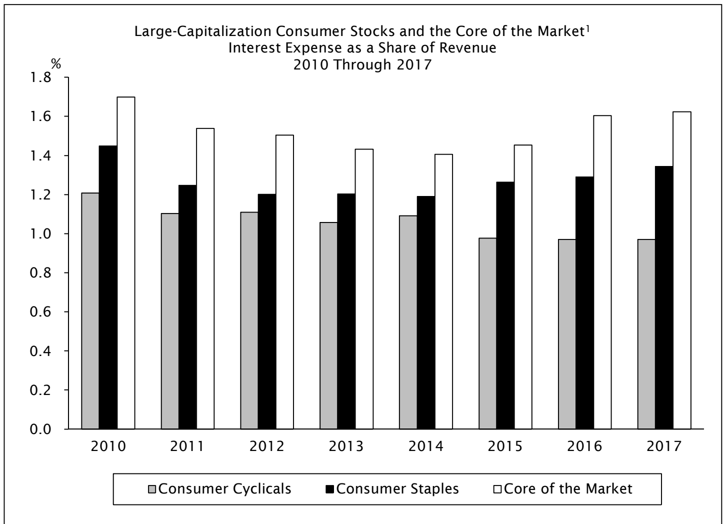
Conclusion: Debt Levels Can Help with Stock Selection

- There are times when investors have an appetite for owning leveraged companies. With valuation spreads widening and fears abound, this doesn't strike us as one of those times. Investors in consumer discretionary stocks can be agnostic to debt in the early stages of a business cycle. Ahead of a recession however, stocks with weaker balance sheets tend to underperform peers with the strongest ones by (10)%. This differential widens further in the throes of a recession. The market's been more reticent when it comes to consumer staples, but there's a clear preference to avoid the most indebted ones when a recession is near.
- The market has given debt a pass in recent years, but we've begun to see it favor businesses that are less leveraged in recent months. We wouldn't be surprised to see this persist. We highlight consumer cyclicals in the best and worst quintile of debt-to-equity in Appendix 1 on page 9. We do the same for consumer staples companies in Appendix 2 on page 10. We don't see an end to the current economic cycle, but we continue to recommend a defensive posture to guard against consumer fatigue and a tough comparison that's looming once the tax cut has run its course.

Nicole Price 212 803-7935 Sungsoo Yang 212 803-7925 Yi Liu 212 803-7942 Yu Bai 212 803-7919 Iwona Scanzillo 212 803-7915

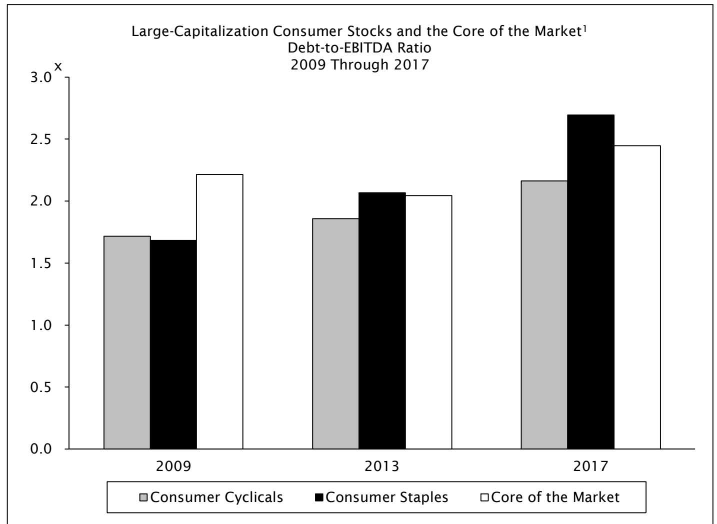
Conclusions in Brief

- Falling interest rates have not benefitted P&Ls by much…



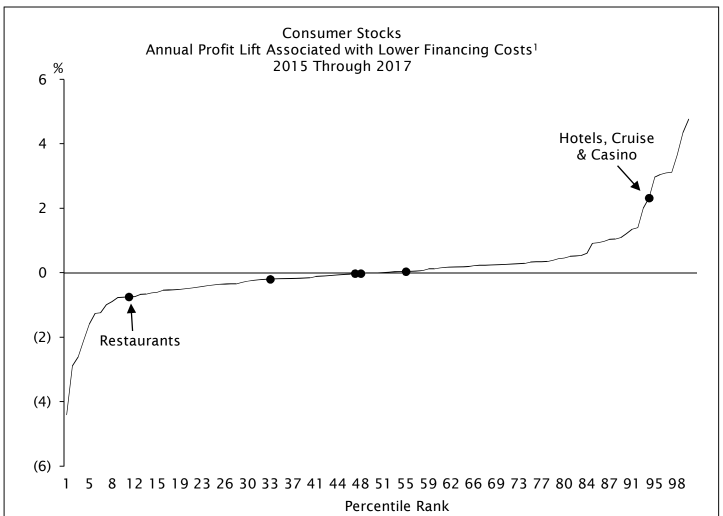
Source: Factset, Empirical Research Partners Analysis.
[1] Core of the market excludes energy, financials, autos and utilities.

- …In part because balance sheets have grown:



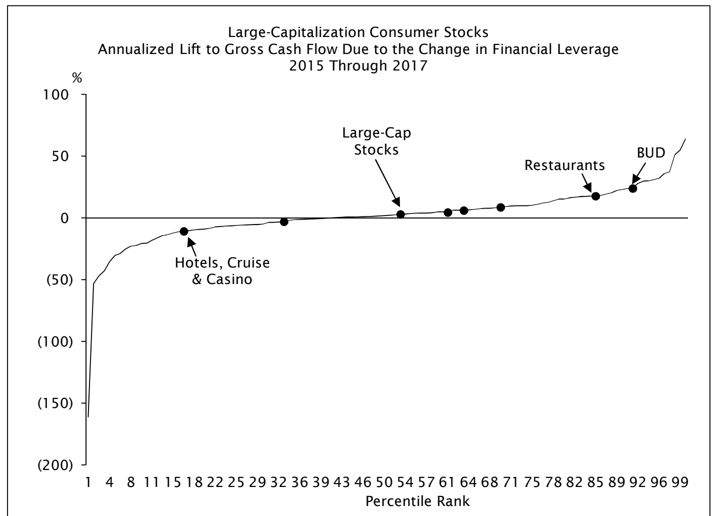
Source: Factset, Empirical Research Partners Analysis.
[1] Core of the market excludes energy, financials, autos and utilities.

- Consumer stocks have seen a minimal profit lift due to lower financing costs…



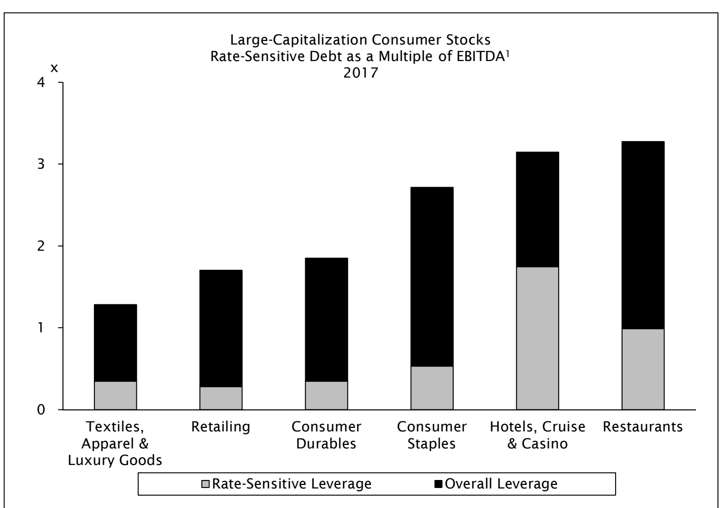
Source: Factset, Empirical Research Partners Analysis.
[1] Change in interest expense due to lower rates as a share of baseline pretax profits. Average annual benefit.

- …But they've reaped bigger rewards when it comes to cash flow:



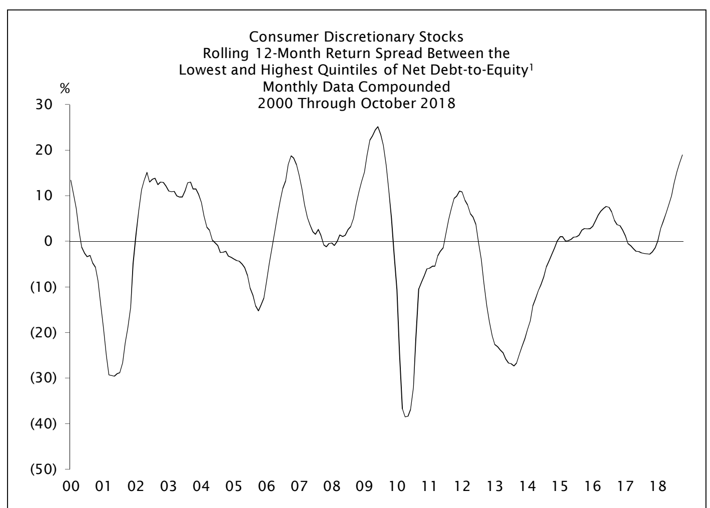
Source: Factset, Empirical Research Partners Analysis.
[1] Change in debt associated with leverage as a share of baseline gross cash flow..

- Interest rate-sensitive debt can account for as much 1.5x EBITDA…



Source: Factset, Empirical Research Partners Analysis and Estimates.
[1] Interest-sensitive defined as floating-rate and the average amount of fixed-rate debt to be refinanced in a single year.

- …And it'll be an important factor to watch now that the market seems to prefer less leveraged consumer businesses:

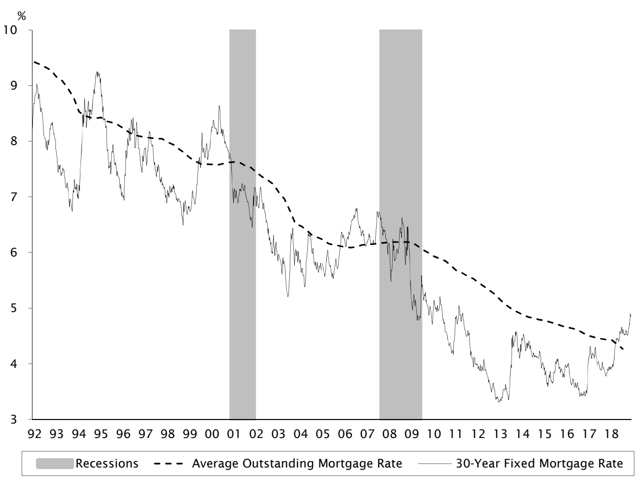


Source: Empirical Research Partners Analysis.
[1] Equally-weighted returns. Stocks ranked across the sector. Data smoothed on a trailing six-month basis.

What Higher Rates Might Entail

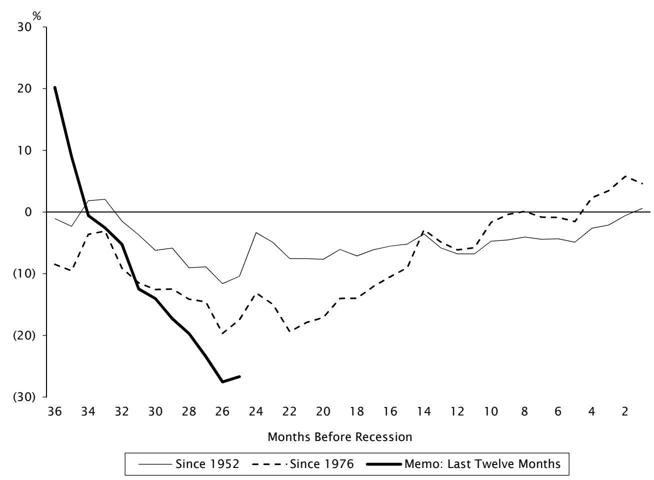
The market continues to wrestle with uncertainty caused by rising rates. That's because tightening monetary policy has historically had far-reaching consequences, including unintended ones. Housing has already begun to succumb to the trend now that the rate for a new mortgage has eclipsed that of the installed base (see Exhibit 1). Partly in response, stocks tied to housing and other big-ticket areas of the economy have begun to brace for increased odds of recession (see Exhibit 2). The focus of this report is to understand the implications rising interest rates might have for corporate balance sheets with a focus on the consumer sector. A recent high-profile dividend cut from AB Inbev makes this topic especially timely. We strive to identify capital structures that've benefitted most from low rates and accessible debt markets. These companies might find it hard to drum up a repeat performance in the years ahead. Conversely, companies that've been conservatively financed will be better able to weather a potential storm.

Exhibit 1: Average Rate on Outstanding Mortgages and the 30-Year Fixed Mortgage Rate 1992 Through October 2018



Source: Berger, D. W., Milbradt, K., Tourre, F. and Joseph Vavra, 2018. "Mortgage Prepayment and Path-Dependent Effects of Monetary Policy," NBER Working Paper 25157, Freddie Mac.

Exhibit 2: Household Durables Stocks[1] Relative Returns Prior to Recessions Forward Twelve-Month Returns 1952 Through October 2018



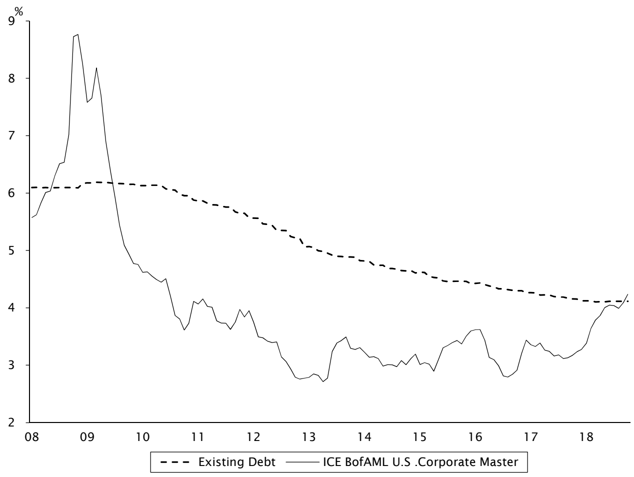
Source: NBER, Empirical Research Partners Analysis.

[1] Equally-weighted returns. Drawn from the largest 1,500 stocks.

The most intuitive reward companies have reaped from a persistently low-rate environment is cheaper financing. Companies across the market have benefitted as new debt has come online at a lower coupon than the installed base. The graph in Exhibit 3 reflects a similar convexity to the one facing would-be home buyers with one important distinction. Homeowners can't move without securing a new mortgage at higher rates. Corporate activity does not face the same threat of immobility. The benefit of falling rates can be seen in Exhibit 4 that depicts interest expense as a share of debt for the core of the market and for consumer stocks. The benefit was greatest in the wake of the recession, but it's waned in more recent years as the cost of financing has begun to approach the rate paid on outstanding balances.

But a funny thing happened on the way to the bank. Falling coupons have not translated into lower interest expense, at least not in recent years. We graph interest expense as a share of revenue for the core of the market and broad classifications of consumer stocks in Exhibit 5. We highlight some of the most indebted consumer industries in Exhibit 6. Hotel, cruise & casino operators have made the most progress on chipping away at financing costs, but restaurants seem to be headed in the opposite direction. Restaurants have seen an outright increase in interest costs as a share of sales. We plot the benefit that falling financing costs have had on pretax profits in a sliding curve in Exhibit 7. Overall, the impact has been smaller than we might've expected, but that's because the change in rates doesn't tell the whole story. For one thing, businesses have been expanding their balance sheets by adding leverage and thereby muting the expense benefit they'd otherwise have seen.

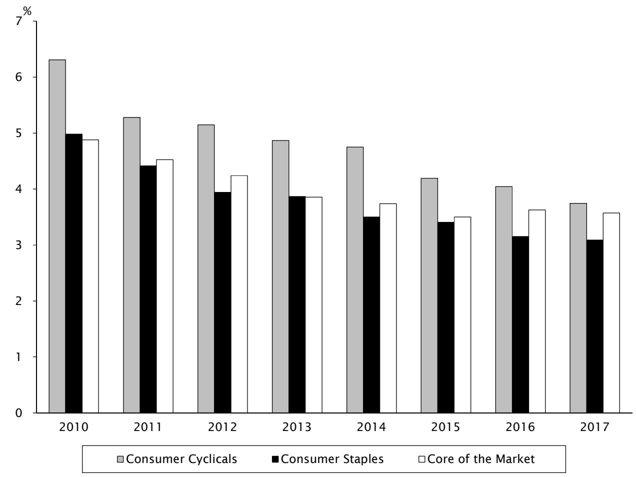
**Exhibit 3: The S&P 500 (ex-Financials)
Coupon Rate Paid on Existing Fixed-Rate Debt[1]
and U.S. Corporate Master Yield index
2008 Through October 2018**



Source: FactSet Research Systems, Bloomberg L.P., Empirical Research Partners Analysis.

[1] Coupon is weighted by share of total debt outstanding.

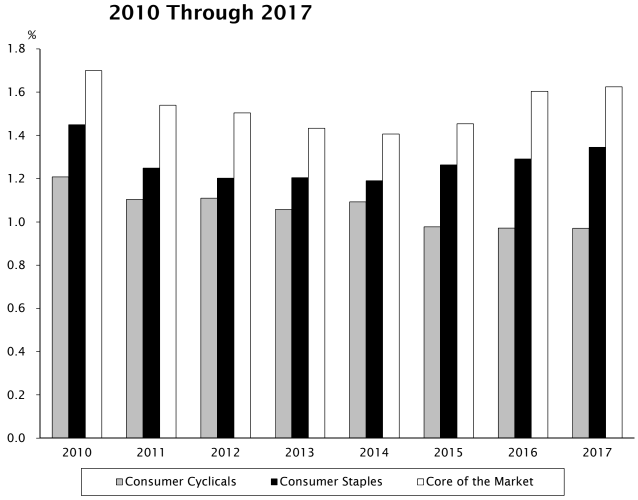
**Exhibit 4: Large-Capitalization Consumer Stocks and the
Core of the Market[1]
Interest Expense as a Share of Debt
2010 Through 2017**



Source: Factset, Empirical Research Partners Analysis.

[1] Core of the market excludes energy, financials, autos and utilities.

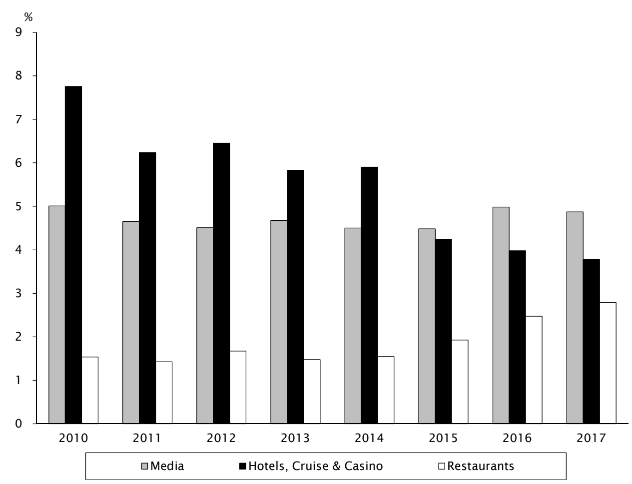
**Exhibit 5: Large-Capitalization Consumer Stocks and the
Core of the Market[1]
Interest Expense as a Share of Revenue
2010 Through 2017**



Source: Factset, Empirical Research Partners Analysis.

[1] Core of the market excludes energy, financials, autos and utilities.

**Exhibit 6: Large-Capitalization Consumer Stocks
Interest Expense as a Share of Revenues
2010 Through 2017**

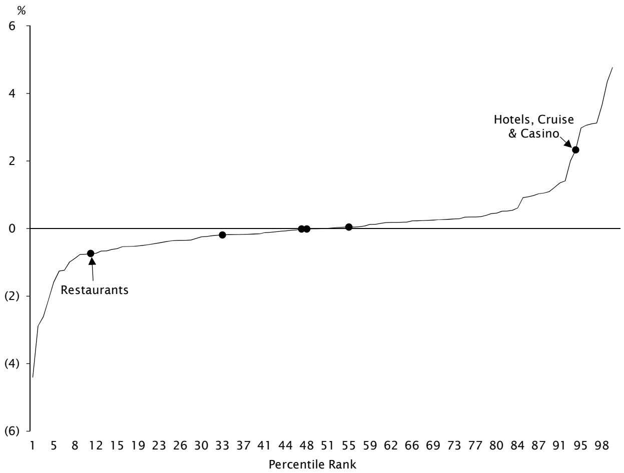


Source: Factset, Empirical Research Partners Analysis.

AB Inbev Reminds Us to Keep a Close Eye on Leverage Ratios

Leverage ratios for the market overall are now above the levels seen in 2009 (see Exhibit 8). Some sectors like consumer staples have surpassed prior heights by a fairly wide margin. Consumer cyclicals have been a bit more conservatively financed. Of those, hotel, cruise and casino operators were the most diligent in managing debt balances post-crisis. Restaurants however, have picked up their slack perhaps as they've been emboldened by a rising dependence on franchise fees that tend to be recurring (see Exhibit 9). This form of revenue represents an important source of stability, and together with a high margin structure, it's helped restaurants shoulder an increasing debt load. But if margin risk surfaces on the back of tight labor markets or higher food costs, we could see further erosion to an already-low interest coverage ratio (see Exhibit 10).

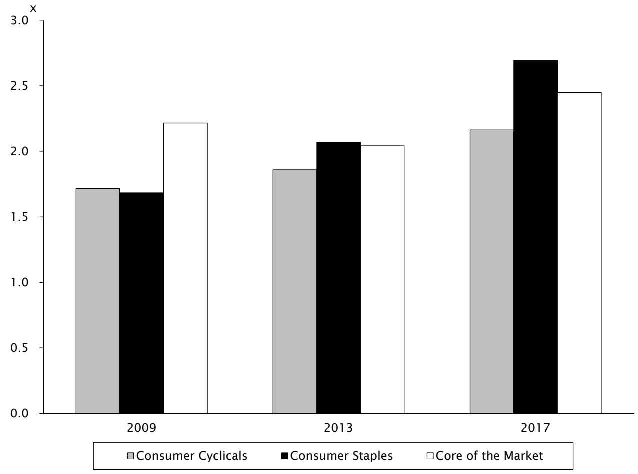
Exhibit 7: Consumer Stocks
Annual Profit Lift Associated with Lower Financing Costs[1]
2015 Through 2017



Source: Factset, Empirical Research Partners Analysis.

[1] Change in interest expense due to lower rates as a share of baseline pretax profits. Average annual benefit.

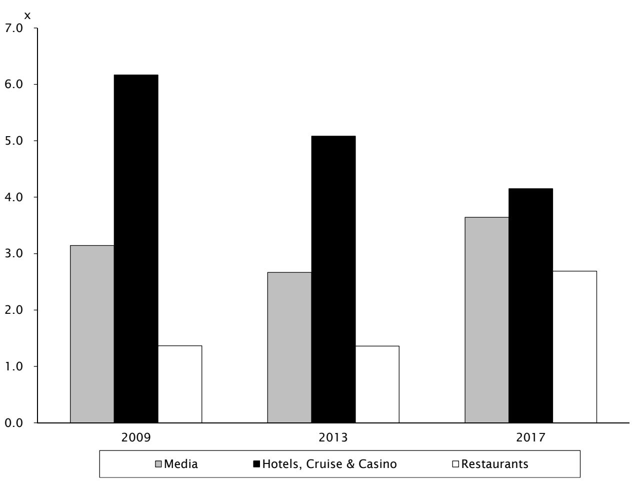
Exhibit 8: Large-Capitalization Consumer Stocks and the Core of the Market[1]
Debt-to-EBITDA Ratio
2009 Through 2017



Source: Factset, Empirical Research Partners Analysis.

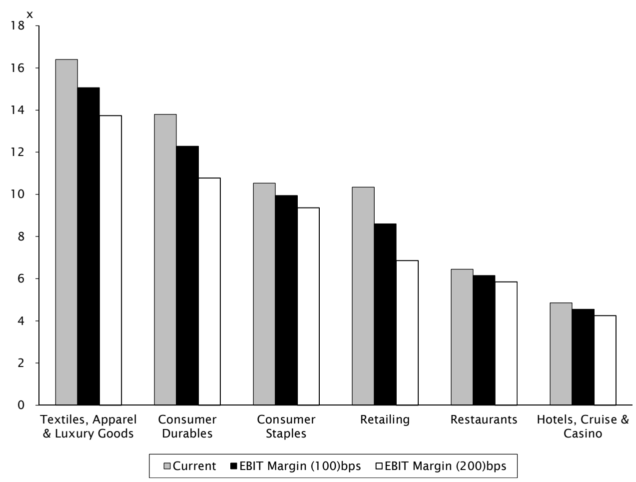
[1] Core of the market excludes energy, financials, autos and utilities.

Exhibit 9: Large-Capitalization Consumer Stocks
Debt-to-EBITDA Ratio
2009 Through 2017



Source: Factset, Empirical Research Partners Analysis.

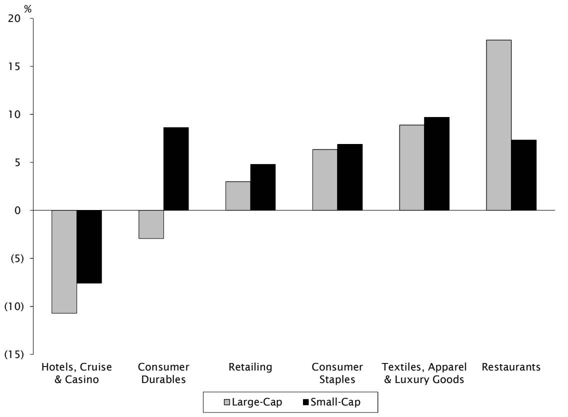
Exhibit 10: Large-Capitalization Consumer Stocks
Interest Coverage Depending on EBIT Margins
2017



Source: Factset, Empirical Research Partners Analysis and Estimates.

The ability for companies to borrow at low costs has allowed them to supplement operating cash flow with cash raised in the debt markets. This in turn has enabled the return of capital to shareholders. Restaurants for example, have borrowed enough to augment cash from operations by 15% per annum (see Exhibit 11). This is well higher than the market's pace and it's close to matching the aggressive pace set by acquisitive consumer staples companies like General Mills and AB Inbev (see Exhibit 12). In the past it was flattering to look like consumer staples whose stability was afforded a high multiple often in spite of a heavy debt load. Restaurants seem to have taken a liking to the analogy as their balance sheets have evolved to look a lot like those of consumer staples companies (see Exhibit 13). Restaurants can only hope that the similarity to staples does not play out in fundamentals. Valuation of consumer staples has compressed to match a falling fundamental stability score that has been depressed in part due to an erosion in pricing power (see Exhibits 14 and 15). The market has rewarded restaurants with valuations that are more generous than the ones afforded to consumer staples (see Exhibit 16). Some of the love affair might prove to be fleeting since restaurants seem to have seen a disproportionate benefit from increased spending on the back of the tax cut (see Exhibit 17). With sentiment high, leverage ratios up, interest coverage down and tax cuts set to anniversary, we think the risk associated with restaurants is greater than the reward.

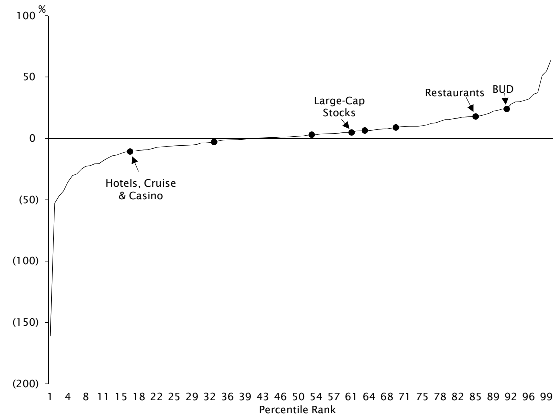
**Exhibit 11: Consumer Stocks[1]
Annualized Lift to Gross Cash Flow Due to the Change in Financial Leverage[2]
2015 Through 2017**



Source: Factset, Empirical Research Partners Analysis.

[1] Excludes autos. Drawn from the largest 750 and smallest 2,000 stocks.
[2] Change in debt associated with leverage as a share of baseline gross cash flow.

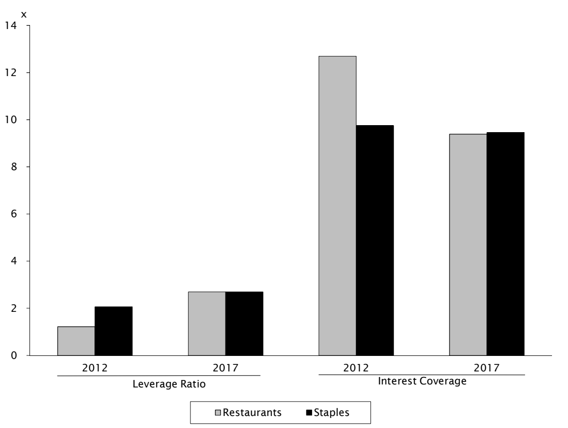
**Exhibit 12: Large-Capitalization Consumer Stocks
Annualized Lift to Gross Cash Flow Due to the Change in Financial Leverage
2015 Through 2017**



Source: Factset, Empirical Research Partners Analysis.

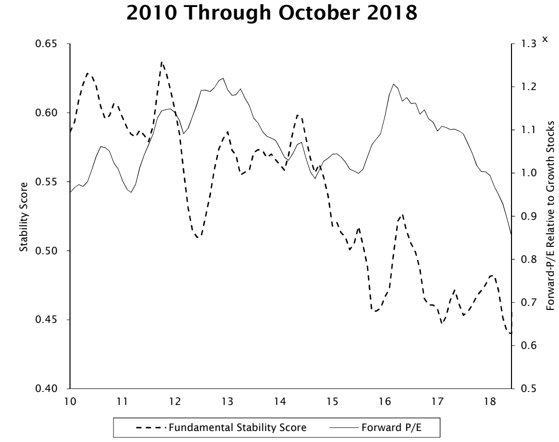
[1] Change in debt associated with leverage as a share of baseline gross cash flow..

**Exhibit 13: Large-Capitalization Restaurants and Consumer Staples
Leverage Ratio and Interest Coverage
2012 and 2017**



Source: Factset, Empirical Research Partners Analysis.

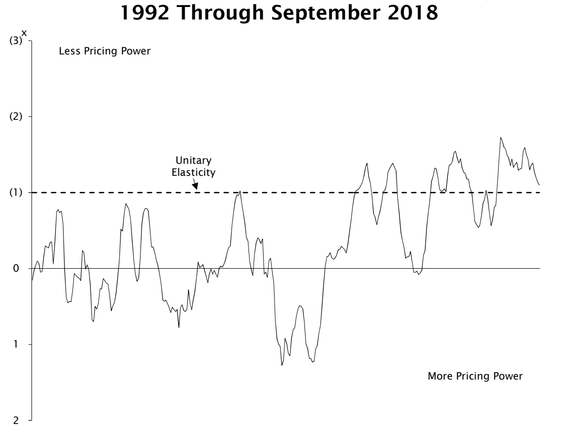
**Exhibit 14: Mega-Cap Consumer Staples[1]
Fundamental Stability Score and
Forward-P/E Relative to Large-Cap Growth Stocks[2]
2010 Through October 2018**



Source: National Bureau of Economic Research, Empirical Research Partners Analysis.

[1] Top 13 by market capitalization, excluding drug stores.
[2] Data smoothed on a trailing three-month basis.

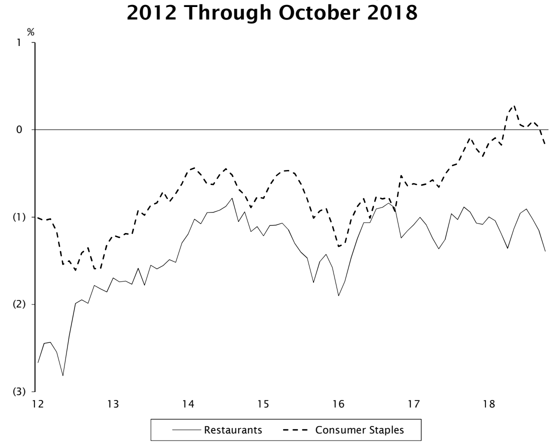
**Exhibit 15: Price Elasticity of Consumer Staples[1]
Change in Volume Relative to Change in Price[2]
1992 Through September 2018**



Source: Bureau of Economic Analysis, Empirical Research Partners Analysis.

[1] Staples averages elasticity for beverages, cereal, household supplies, cosmetics and tobacco.
[2] Data smoothed six months.

**Exhibit 16: Restaurants and Consumer Staples Stocks[1]
Relative Forward Earnings Yield
2012 Through October 2018**

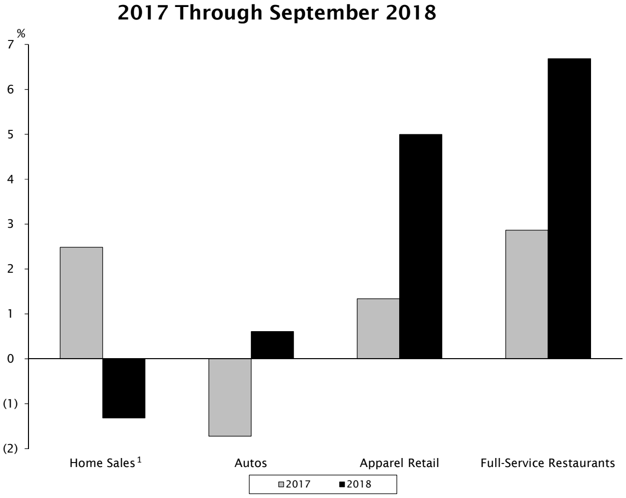


Source: Empirical Research Partners Analysis.

[1] Drawn from the largest 1,500 stocks.

Not all debt is created equal. The term matters as does the debt load's sensitivity to interest rates. As it relates to term, we've not seen as big a move towards longer maturities as we might've expected (see Exhibit 18). The average consumer company's debt load has been steady over time with a term of roughly 9 years. If this load were to be refinanced ratably over time, it would mean that 11% of it would be sensitive to higher rates. We calculate this balance for each company and add it to the amount of floating-rate debt outstanding to arrive at our estimate of interest-sensitive debt. In Exhibit 19 we show what share of each sector's debt can be considered interest sensitive. We see a more complete picture in Exhibit 20 that depicts what multiple of EBITDA interest-sensitive debt represents. Retailers and apparel companies are lightly exposed in part because their debt load is tilted towards lease liabilities that are sensitive to changes in rental rates more than interest rates. Hotels, cruise lines and casinos appear to have the greater exposure here with over 1.5x leverage stemming from interest-sensitive debt. Restaurants aren't far behind.

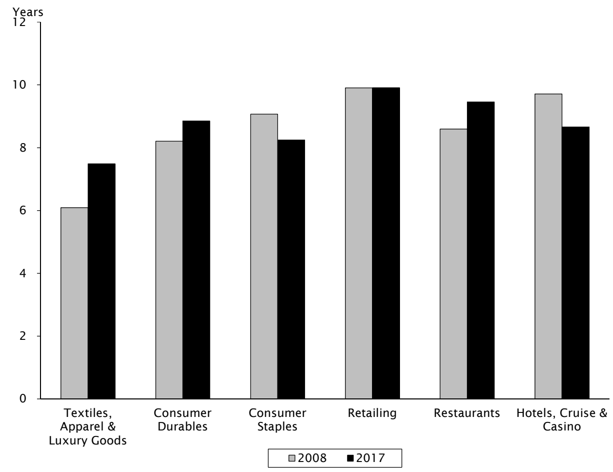
Exhibit 17: Demand Before and After the Tax Cut
Year-Over-Year Growth
2017 Through September 2018



Source: Bloomberg, L.P., Census Bureau, National Association of Realtors, Empirical Research Partners Analysis.

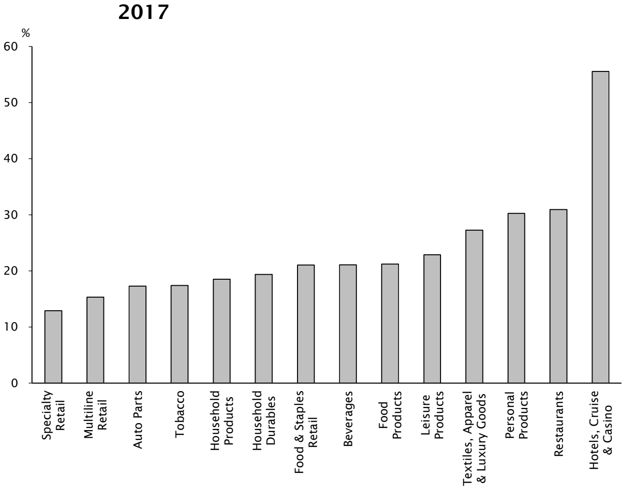
[1] New and existing home sales.

Exhibit 18: Large-Capitalization Consumer Stocks
Average Debt Term
2008 and 2017



Source: Factset, Empirical Research Partners Analysis and Estimates.

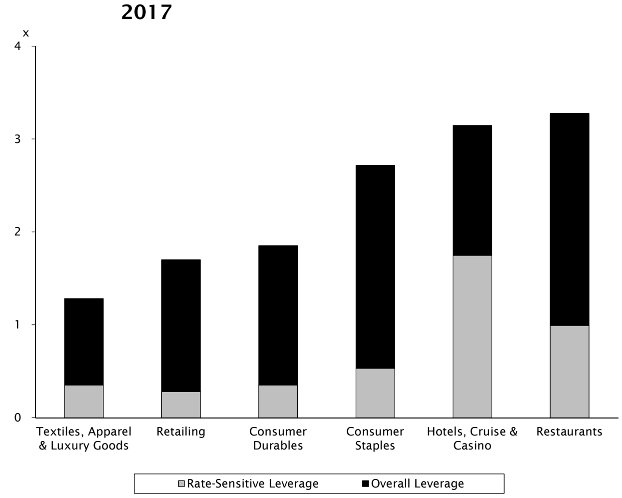
Exhibit 19: Large-Capitalization Consumer Stocks
Interest-Sensitive Debt as a Share of Total Debt[1]
2017



Source: Factset, Empirical Research Partners Analysis and Estimates.

[1] Interest-sensitive defined as floating-rate and the average amount of fixed-rate debt to be refinanced in a single year.

Exhibit 20: Large-Capitalization Consumer Stocks
Rate-Sensitive Debt as a Multiple of EBITDA[1]
2017

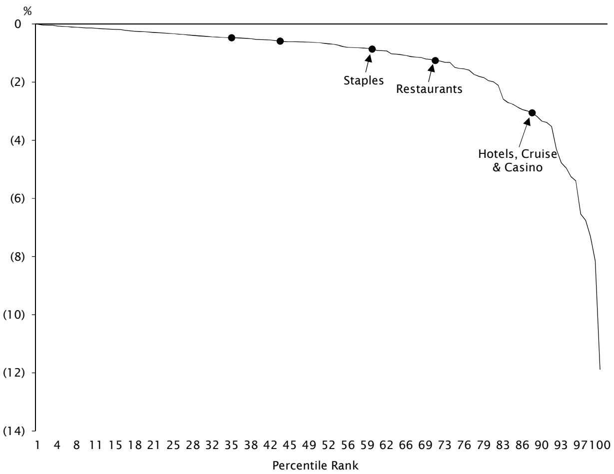


Source: Factset, Empirical Research Partners Analysis and Estimates.

[1] Interest-sensitive defined as floating-rate and the average amount of fixed-rate debt to be refinanced in a single year.

If borrowing costs were to rise by 100 basis points and we apply that to the debt balances that are interest sensitive, we can estimate what share of profit would be eroded by incremental interest expense. In Exhibit 21 we use a sliding curve to illustrate the impact. Hotel, cruise & casino operators might represent a (3)% profit risk. The impact to other sectors would be smaller. The companies at the far right of the graph are listed more clearly in Exhibit 22.

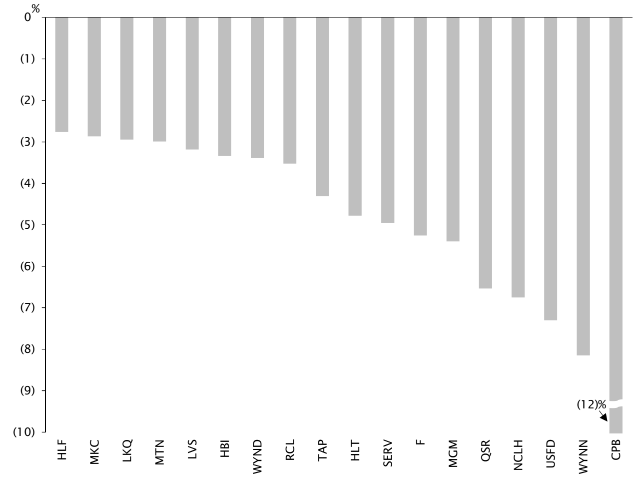
Exhibit 21: Large-Capitalization Consumer Stocks
Profit Sensitivity to a 100 Basis-Point Increase in Borrowing Costs[1]
2017



Source: Factset, Empirical Research Partners Analysis.

[1] Applied to interest-sensitive debt. Defined as floating-rate and the average amount of fixed-rate debt to be refinanced in a single year.

Exhibit 22: Large-Capitalization Consumer Stocks
Profit Sensitivity to a 100 Basis-Point Increase in Borrowing Costs[1]
2017



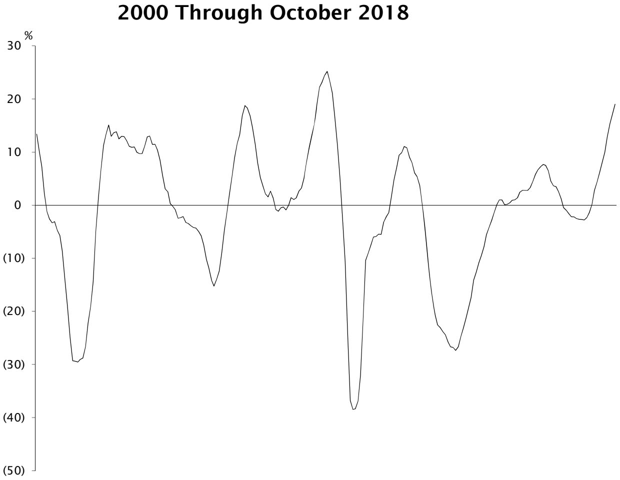
Source: Factset, Empirical Research Partners Analysis and Estimates.

[1] Applied to interest-sensitive debt. Defined as floating-rate and the average amount of fixed-rate debt to be refinanced in a single year.

Conclusion: Debt Matters If and When Times Get Tough

It's not always the case, but the market historically preferred companies with lower debt loads. At the moment, consumer discretionary stocks seem to be shunning the risk associated with debt. Stocks in the lowest quintile of debt-to-equity have been handily outperforming those in the highest quintile (see Exhibit 23). The market's been more reticent when it comes to consumer staples stocks after a high-profile miscue by BUD and uncertainty in the tobacco industry (see Exhibit 24). As a group, consumer staples seem to boast returns that are unaffected by debt. The only caveat is that it's best to avoid the highest quintile of debt before and during a recession (see Exhibit 25). Investors in consumer discretionary stocks might need to be more agile in navigating balance sheet issues (see Exhibit 26). Discretionary stocks in the lowest quintile of debt have tended to outperform those in the highest quintile by +10% before the onset of a recession. The differential is closer to +17% in the throes of a recession. In Appendix 1 on page 9 we highlight consumer discretionary stocks in the best and worst quintile of debt as measured with debt-to-equity. We do the same for consumer staples stocks in Appendix 2 on page 10.

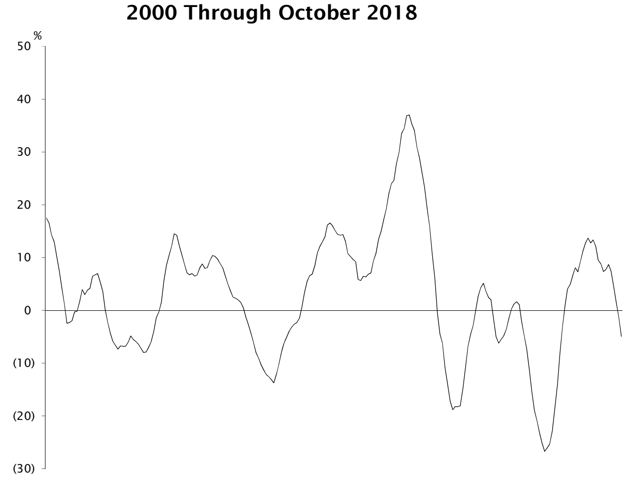
Exhibit 23: Consumer Discretionary Stocks
Rolling 12-Month Return Spread Between the Lowest and Highest Quintiles of Net Debt-to-Equity[1]
Monthly Data Compounded
2000 Through October 2018



Source: Empirical Research Partners Analysis.

[1] Equally-weighted returns. Stocks ranked across the sector. Data smoothed on a trailing six-month basis.

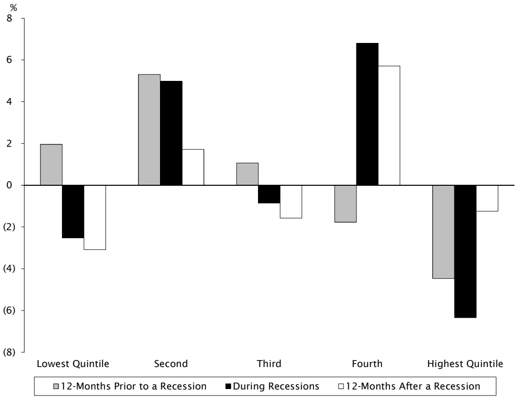
Exhibit 24: Consumer Staples Stocks
Rolling 12-Month Return Spreads Between the Lowest and Highest Quintiles of Net Debt-to-Equity[1]
Monthly Data Compounded
2000 Through October 2018



Source: Empirical Research Partners Analysis.

[1] Equally-weighted returns. Stocks ranked across the sector. Data smoothed on a trailing six-month basis.

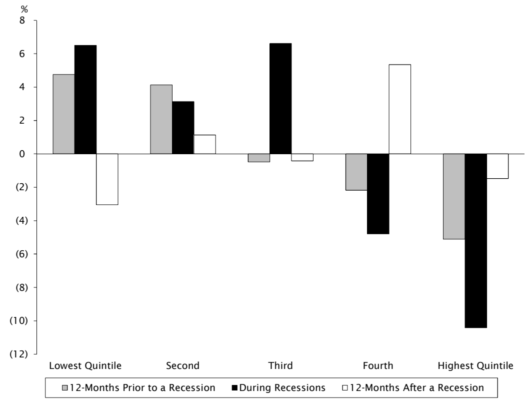
Exhibit 25: Consumer Staples Stocks
Annualized *Sector*-Relative Returns by Quintile of Net Debt-to-Equity Around Recessions[1]
Monthly Data Compounded
1963 Through October 2018



Source: Empirical Research Partners Analysis.

[1] Equally-weighted returns. Stocks ranked across and returns relative to the sector.

Exhibit 26: Consumer Discretionary Stocks
Annualized *Sector*-Relative Returns by Quintile of Net Debt-to-Equity Around Recessions[1]
Monthly Data Compounded
1963 Through October 2018



Source: Empirical Research Partners Analysis.

[1] Equally-weighted returns. Stocks ranked across and returns relative to the sector.

Appendix 1: Consumer Discretionary Stocks
Core Model Ranking Report
Stocks in the Lowest and Highest Quintiles of Net Debt-to-Common Equity
Sorted by Net Debt-to-Common Equity and Core Model Ranks
As of Mid-November 2018

			Quintile Ranks (1=Best; 5=Worst)						Memo:				
			Super Factors										
Symbol	Company	Price	Valuation	Capital Deployment	Earnings Quality and Trend	Market Reaction	Core Model Rank	**Net Debt-to-Common Equity**	Downside Risk	Failure Candidate (1=Yes)	Forward P/E Ratio	YTD Returns	Market Capitalization ($ Million)
ROST	ROSS STORES INC	$101.77	4	1	1	1	1	1	3	-	23.3 x	27.8 %	$38,049
BBY	BEST BUY CO INC	67.15	1	1	2	3	1	1	4	-	12.6	(0.1)	18,533
RL	RALPH LAUREN CORP	121.03	3	1	4	1	1	1	3	-	17.4	18.4	9,743
ETSY	ETSY INC	50.71	5	2	1	1	1	1	5	-	81.6	148.0	6,109
FL	FOOT LOCKER INC	50.89	1	1	2	2	1	1	2	-	10.8	11.7	5,884
HRB	BLOCK H & R INC	28.39	1	1	1	2	1	1	4	-	14.5	11.5	5,835
URBN	URBAN OUTFITTERS INC	39.87	2	1	2	2	1	1	4	-	14.2	13.7	4,351
DECK	DECKERS OUTDOOR CORP	132.67	3	1	2	1	1	1	1	-	19.1	65.3	4,029
AEO	AMERICAN EAGLE OUTFITTERS INC	21.19	1	2	1	1	1	1	1	-	13.4	14.9	3,758
SHOO	MADDEN STEVEN LTD	32.12	3	1	1	3	1	1	2	-	16.9	4.4	2,818
SBH	SALLY BEAUTY HOLDINGS INC	21.60	1	1	1	1	1	1	2	-	9.8	15.1	2,595
YUM	YUM BRANDS INC	89.45	5	1	1	1	2	1	2	-	23.8	11.1	27,998
AZO	AUTOZONE INC	792.60	2	2	2	2	2	1	4	-	13.7	11.4	20,403
ULTA	ULTA BEAUTY INC	308.99	4	4	2	1	2	1	2	-	25.8	38.2	18,500
LULU	LULULEMON ATHLETICA INC	135.42	5	5	1	1	2	1	4	-	34.3	72.3	17,934
CMG	CHIPOTLE MEXICAN GRILL INC	489.67	5	3	1	1	2	1	2	-	45.4	69.4	13,609
COLM	COLUMBIA SPORTSWEAR CO	91.64	5	1	4	1	2	1	4	-	23.2	28.5	6,414
GRPN	GROUPON INC	2.93	2	1	1	5	2	1	1	-	13.1	(42.5)	1,672
YUMC	YUM CHINA HOLDINGS INC	36.36	4	1	4	3	3	1	1	-	23.5	(8.5)	13,890
DPZ	DOMINO'S PIZZA INC	269.09	5	4	1	1	3	1	3	-	29.3	43.3	11,197
LB	L BRANDS INC	37.02	1	2	4	5	3	1	5	-	13.8	(35.3)	10,183
LOPE	GRAND CANYON EDUCATION INC	127.03	5	4	4	1	3	1	1	-	25.1	41.9	6,130
PLNT	PLANET FITNESS INC	51.10	5	5	1	1	3	1	3	-	38.2	47.6	5,062
SKX	SKECHERS U S A INC	28.85	2	1	5	5	3	1	5	-	14.7	(23.8)	4,560
MIK	MICHAELS COS INC	17.76	1	3	5	5	3	1	4	-	7.2	(26.6)	3,044
PLCE	CHILDRENS PLACE INC	143.13	3	1	3	3	3	1	1	-	15.7	(0.4)	2,353
MCD	MCDONALD'S CORP	184.37	5	4	1	2	4	1	2	-	22.8	9.2	142,133
FIVE	FIVE BELOW INC	123.41	5	5	4	1	4	1	3	-	43.1	86.1	6,877
SIX	SIX FLAGS ENTERTAINMENT CORP	56.26	3	2	4	5	4	1	5	-	20.4	(12.5)	4,749
JACK	JACK IN THE BOX INC	80.67	4	3	2	4	4	1	1	-	17.9	(16.6)	2,199
PZZA	PAPA JOHNS INTERNATIONAL INC	55.91	3	2	2	5	4	1	4	-	38.3	1.4	1,764
MELI	MERCADOLIBRE INC	322.00	5	5	3	5	5	1	4	1	NM	2.3	14,555
CHH	CHOICE HOTELS INTL INC	77.44	4	5	4	3	5	1	3	-	19.1	0.6	4,386
WTW	WEIGHT WATCHERS INTERNATIONAL INC	47.80	3	5	4	5	5	1	5	-	14.1	7.9	3,195
SGMS	SCIENTIFIC GAMES CORP	20.96	1	5	4	5	5	1	5	-	NM	(59.2)	1,922
LOW	LOWE'S COMPANIES INC	95.65	2	1	1	4	1	5	5	-	17.1	4.8	77,572
JWN	NORDSTROM INC	64.30	1	1	1	1	1	5	1	-	17.3	38.5	10,839
DNKN	DUNKIN' BRANDS GROUP INC	73.39	4	3	1	1	1	5	3	-	25.0	15.7	6,062
ORLY	O'REILLY AUTOMOTIVE INC	349.41	4	3	2	1	2	5	5	-	20.3	45.3	28,074
BURL	BURLINGTON STORES INC	172.40	4	5	2	1	2	5	1	-	25.6	40.1	11,646
WEN	WENDY'S CO	17.32	4	1	3	3	2	5	1	-	27.4	7.1	4,128
WYND	WYNDHAM DESTINATIONS INC	41.41	1	2	2	5	2	5	4	-	8.0	(18.9)	4,036
PAG	PENSKE AUTOMOTIVE GROUP INC	43.99	1	4	4	3	2	5	3	-	7.9	(5.3)	3,733
CHDN	CHURCHILL DOWNS INC	260.31	4	2	1	2	2	5	1	-	20.6	11.9	3,540
BYD	BOYD GAMING CORP	23.65	2	1	1	5	2	5	4	-	14.8	(32.2)	2,658
ERI	ELDORADO RESORTS INC	33.03	2	4	2	2	2	5	5	-	13.8	(0.4)	2,556
MGM	MGM RESORTS INTERNATIONAL	25.18	2	1	5	5	3	5	2	-	20.1	(23.7)	13,394
HBI	HANESBRANDS INC	16.17	1	2	4	5	3	5	5	1	9.1	(20.0)	5,833
SERV	SERVICEMASTER GLOBAL HLDGS	42.48	3	3	5	2	3	5	1	-	24.8	23.8	5,763
IGT	INTL GAME TECHNOLOGY PLC	14.95	2	1	1	5	3	5	4	1	10.0	(42.2)	3,043
MAR	MARRIOTT INTERNATIONAL INC	115.07	4	4	2	4	4	5	3	-	18.2	(14.5)	39,354
SCI	SERVICE CORP INTERNATIONAL	44.64	4	3	5	3	4	5	2	-	23.0	21.2	8,078
BFAM	BRIGHT HORIZONS FAMILY SOLTN	117.35	5	4	3	1	4	5	1	-	34.1	24.8	6,873
AN	AUTONATION INC	39.41	1	5	3	5	4	5	4	-	8.5	(23.2)	3,544
LAD	LITHIA MOTORS INC -CL A	83.68	1	4	5	5	4	5	2	1	8.2	(25.4)	2,001
QSR	RESTAURANT BRANDS INTL INC	55.96	4	4	3	4	5	5	3	-	20.5	(6.8)	26,782
HLT	HILTON WORLDWIDE HOLDINGS	70.19	5	3	2	5	5	5	3	-	23.2	(11.4)	20,844
WYNN	WYNN RESORTS LTD	99.50	4	2	5	5	5	5	5	1	15.9	(40.2)	10,820
ARMK	ARAMARK	34.59	3	5	4	4	5	5	4	-	13.6	(18.4)	8,526
W	WAYFAIR INC	91.58	5	5	5	4	5	5	4	1	NM	14.1	8,460
POOL	POOL CORP	148.06	5	3	4	2	5	5	5	-	24.3	15.2	5,993
CZR	CAESARS ENTERTAINMENT CORP	8.18	5	4	5	5	5	5	4	1	NM	(35.3)	5,673
RRR	RED ROCK RESORTS INC	23.06	3	5	1	5	5	5	4	-	15.2	(31.0)	2,689
HGV	HILTON GRAND VACATIONS	27.15	3	4	5	5	5	5	5	1	9.6	(35.3)	2,631

Source: Empirical Research Partners Analysis.

Appendix 2: Consumer Staples Stocks
Core Model Ranking Report
Stocks in the Lowest and Highest Quintiles of Net Debt-to-Common Equity
Sorted by Net Debt-to-Common Equity and Core Model Ranks
As of Mid-November 2018

			Quintile Ranks (1=Best; 5=Worst)										
			Super Factors						Memo:				
Symbol	Company	Price	Valuation	Capital Deployment	Earnings Quality and Trend	Market Reaction	Core Model Rank	**Net Debt-to-Common Equity**	Downside Risk	Failure Candidate (1=Yes)	Forward P/E-Ratio	YTD Returns	Market Capitalization ($ Million)
HLF	HERBALIFE NUTRITION LTD	$54.33	3	1	1	1	1	**1**	1	-	17.6 x	60.5 %	$8,482
VGR	VECTOR GROUP LTD	14.05	2	1	2	5	2	**1**	3	-	22.2	(29.6)	1,983
PM	PHILIP MORRIS INTERNATIONAL	87.96	3	5	1	3	3	**1**	5	-	16.8	(13.4)	136,736
LW	LAMB WESTON HOLDINGS INC	82.14	5	5	2	1	3	**1**	1	-	27.3	47.2	12,030
SEB	SEABOARD CORP	3,556.65	4	1	3	4	3	**1**	2	-	NM	(19.2)	4,165
LANC	LANCASTER COLONY CORP	179.85	5	5	3	1	4	**1**	1	-	32.9	41.1	4,944
MNST	MONSTER BEVERAGE CORP	54.75	5	5	2	4	5	**1**	3	-	28.5	(13.5)	30,275
FIZZ	NATIONAL BEVERAGE CORP	101.45	5	5	4	3	5	**1**	5	1	27.1	4.1	4,730
SAFM	SANDERSON FARMS INC	105.28	3	2	5	5	5	**1**	3	1	64.6	(23.2)	2,404
KR	KROGER CO	31.37	1	1	1	2	1	**5**	2	-	14.3	15.9	25,015
POST	POST HOLDINGS INC	91.97	2	4	2	1	1	**5**	2	-	17.7	16.1	6,127
PEP	PEPSICO INC	116.97	4	2	2	2	2	**5**	3	-	19.9	(0.0)	165,162
SYY	SYSCO CORP	67.37	3	2	2	2	2	**5**	1	-	19.8	13.4	35,043
ENR	ENERGIZER HOLDINGS INC	60.25	3	1	3	2	2	**5**	1	-	17.2	27.5	3,601
BGS	B&G FOODS INC	29.32	1	3	3	4	2	**5**	3	-	14.2	(12.2)	1,933
KO	COCA-COLA CO	49.87	5	2	1	2	3	**5**	3	-	22.8	11.6	212,272
UN	UNILEVER NV	54.54	4	1	3	4	3	**5**	2	-	19.4	(0.4)	93,616
K	KELLOGG CO	64.30	2	4	2	4	3	**5**	2	-	14.7	(3.1)	22,313
USFD	US FOODS HOLDING CORP	31.46	2	3	5	2	3	**5**	3	-	14.6	(1.5)	6,836
RAD	RITE AID CORP	1.30	1	2	5	5	3	**5**	5	-	81.3	(34.0)	1,387
KMB	KIMBERLY-CLARK CORP	110.38	3	2	3	3	4	**5**	1	-	16.4	(6.0)	38,258
HSY	HERSHEY CO	108.67	4	4	4	2	4	**5**	3	-	19.5	(2.2)	22,790
CLX	CLOROX CO/DE	161.07	5	3	4	1	4	**5**	4	-	25.6	11.3	20,561
MKC	MCCORMICK & CO INC	149.23	4	4	4	1	4	**5**	2	-	27.8	48.4	19,657
SPB	SPECTRUM BRND HLDG INC	64.38	2	4	1	5	4	**5**	5	1	14.2	(38.5)	3,438
PFGC	PERFORMANCE FOOD GROUP CO	32.54	2	5	5	2	4	**5**	3	-	18.4	(1.7)	3,422
GIS	GENERAL MILLS INC	45.68	2	5	5	4	5	**5**	4	1	14.9	(19.7)	27,236
BF.B	BROWN FORMAN CORP	48.28	5	5	2	3	5	**5**	4	-	28.0	(9.7)	23,230
CPB	CAMPBELL SOUP CO	39.17	2	5	4	5	5	**5**	4	1	16.1	(15.8)	11,790
COT	COTT CORP QUE	15.21	4	4	4	4	5	**5**	2	-	43.2	(7.7)	2,122

Source: Empirical Research Partners Analysis.