

U.S. Small & Mid Cap Strategy

Buybacks can still work

Buybacks have been out of favor in recent years. Over the long term, buybacks have been a dependable source of returns in the small cap universe. Yet, since 2016, small caps engaged in high buybacks have underperformed the broader small cap market (-3.3% relative). Two catalysts appear to have triggered the start of underperformance of high buyback stocks; (1) a perceptible change in capital allocation priorities, away from buybacks towards reinvestment via capital spending; and (2) the anticipated and eventual corporate tax reform that reduced the attractiveness of debt-funded buybacks.

Stocks with high buybacks and low profitability have been hit the hardest. Digging deeper, we find that not all small caps engaged in high buybacks have underperformed. Companies with low profitability (defined as ROIC) that engaged in high buybacks were hit the hardest, especially in 2016 (+9.7% vs +21.3% for the R2000). Their underperformance versus those engaged in high buybacks but with higher profitability levels has accelerated since late '17. It is likely that companies with low profitability were negatively impacted by their relative inability to pivot to greater reinvestment in their businesses as the growth outlook improved.

Higher leverage appears to also have been a contributing factor. Since the November 2016 election, the negative impact of higher leverage on high buyback small caps has been far greater than that of lower levels of profitability (-4.1% relative to R2000). The sharp reduction in corporate taxes and the cap on interest rate deductibility meaningfully increased the after-tax cost of debt making it less attractive to fund buybacks. With small caps typically falling toward the lower end of the credit quality spectrum, this effect is higher and might have played a part in the underperformance of more levered small caps engaged in buybacks. However, our analysis also shows that the narrative of small caps increasing leverage to primarily fund buybacks is not strong.

Buybacks can still work. Our analysis shows that while buybacks have been out of favor among small caps over the last ~2 years, not all high buyback small caps have underperformed. We believe that most investors are likely to continue to reward companies engaged in buybacks financed by higher profitability, without having to increase their leverage. We highlight 14 small caps from the Barclays coverage universe that have high buybacks with higher levels of profitability and lower leverage levels.

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PLEASE SEE ANALYST CERTIFICATION(S) AND IMPORTANT DISCLOSURES BEGINNING ON PAGE 9.

INDUSTRY UPDATE

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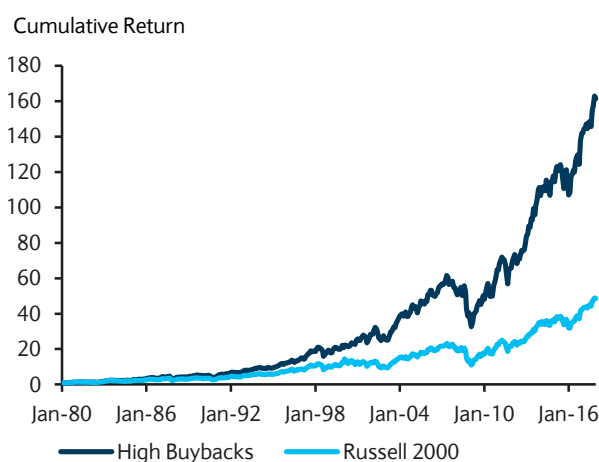
Buybacks fall out of favor

Over the long term, buybacks have consistently translated into better returns in SMID caps. However, since mid-2016, higher buyback¹ small caps have been underperforming the broader small cap market (Russell 2000).

We believe that this underperformance had two major catalysts: 1) starting early 2016, a perceptible shift began in capital allocation priorities within small caps, away from buybacks and towards reinvestment via increased capex, in part driven by early signs of improving growth prospects; and 2) the 2016 election and subsequent tax reform that made financing buybacks using leverage relatively unattractive.

FIGURE 1

Over the long term, high buyback small caps have outperformed the broader small cap market ...

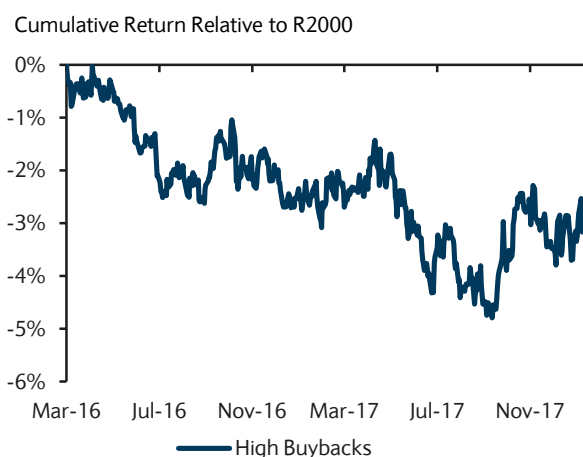


Source: Barclays Research, Thomson Reuters

Note: Data as of 2/20/2018. Returns are market cap weighted and the high buyback basket is rebalanced monthly.

FIGURE 2

... but have underperformed since early 2016



Source: Barclays Research, Thomson Reuters

Note: Data as of 2/20/2018. Returns are market cap weighted and the high buyback basket is rebalanced monthly.

Initially, the decline in the performance of high buyback small caps coincided with a general decline in the aggregate level of buybacks within small caps (Figure 4). We find that this has been a common pattern post-crisis, with performance of high buyback small caps rising and falling with the level of aggregate buybacks.

The shift away from buybacks within small caps picked up pace in mid 2016, as heightened valuation multiples, elevated levels of share repurchases, and an improving outlook for domestic growth caused companies to prioritize reinvestment in their businesses over buying back stock.

¹ High/low buybacks are defined as the highest/lowest quintile of stocks within each sector by their 12-month reduction in shares outstanding. Stocks are selected from the Russell 2000 and rebalanced on a monthly basis.

FIGURE 3

The beginning of 2016 was characterized by heightened valuations, high levels of aggregate buybacks, and improving growth prospects

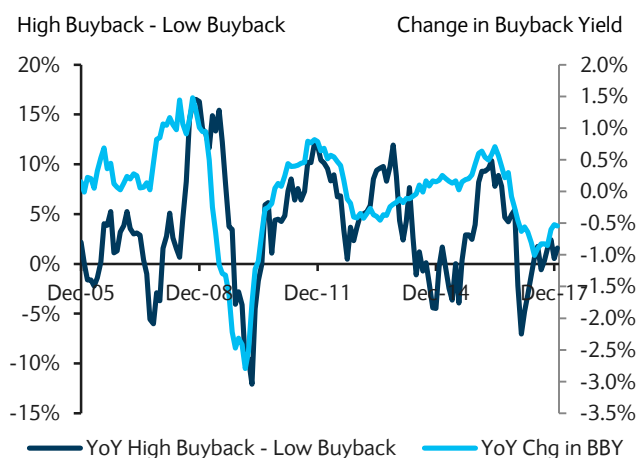
	Q1 2016	Prior 5yr Average
R2000 EV/EBITDA	12.0	10.9
Nominal Buybacks (\$Bil)	37.2	25.7
Most Recent Annual Real GDP Growth	2.9%	2.1%

Source: Barclays Research, Bloomberg, Thomson Reuters

As can be seen (Figure 5), capex has had a meaningful uptick relative to buybacks over this time frame.

FIGURE 4

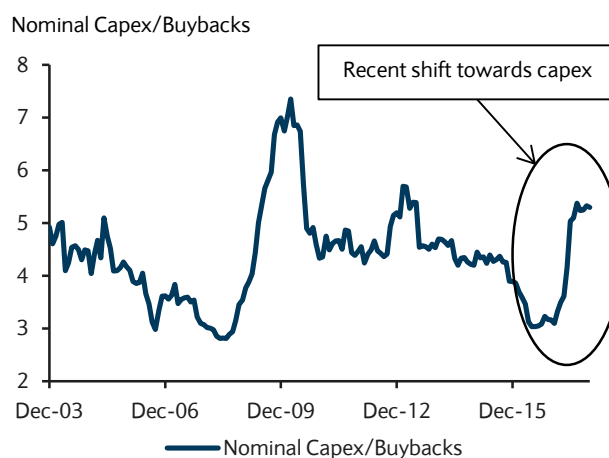
In the last ten years the performance of high buyback small caps have tracked the YoY change in aggregate buybacks



Source: Barclays Research, Thomson Reuters
Note: Data are as of 2/20/2018

FIGURE 5

Since mid 2016, capital allocation priorities have changed as seen in the perceptible shift away from buybacks towards capex

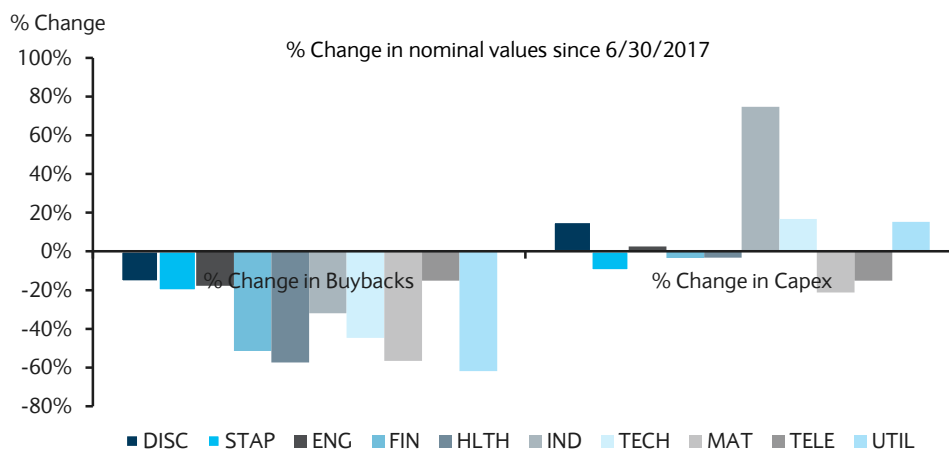


Source: Barclays Research, Thomson Reuters
Note: Data are as of 2/20/2018

At an aggregate level, the rise in capex was especially pronounced in Industrials with reasonable strength across sectors. On the other hand, the decline in buybacks has been broad based across all sectors.

FIGURE 6

The shift away from buybacks has been seen across all small cap sectors, while the rise in capex has been predominantly driven by Industrials



Source: Barclays Research, Thomson Reuters

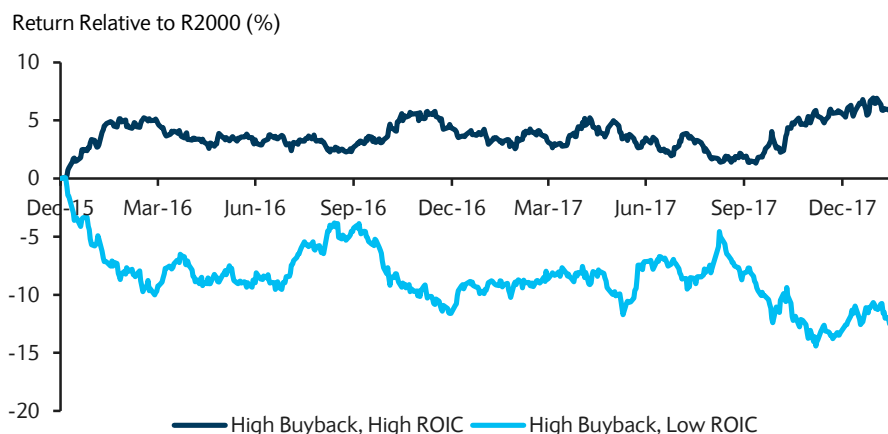
Note: Data as of 2/20/2018

Not all buybacks have underperformed

In trying to understand the drivers of buyback underperformance, we found that companies with high buybacks and low profitability were hit the hardest. The underperformance was especially pronounced in 2016, with high buyback stocks with low profitability (defined by ROIC) returning only 9.7% compared to 21.3% for the Russell 2000.

FIGURE 7

Amongst small caps engaged in high buybacks, profitability has mattered meaningfully



Source: Barclays Research, Thomson Reuters

Note: Data are as of 2/20/2018. High buybacks, High/Low ROIC is defined as the Highest/Lowest tercile of stocks by ROIC within the High buybacks group. Returns are cap-weighted and baskets are rebalanced on a monthly basis.

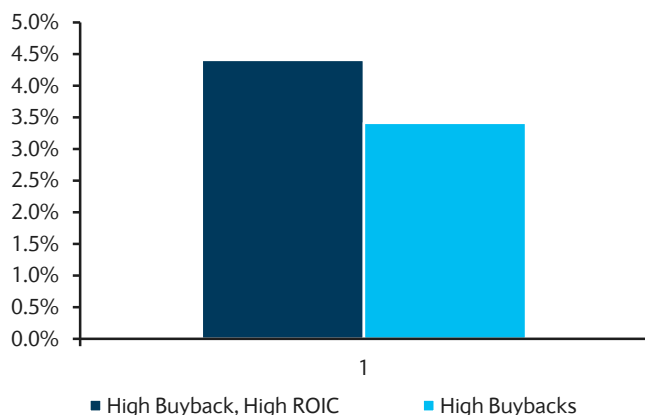
Although the recent underperformance of high buyback stocks with low profitability is consistent with long-term trends, this level of underperformance is especially high (Figure 8). It is likely that companies with low profitability were negatively impacted by their relative inability to pivot to greater reinvestment in their businesses. This is consistent with our prior research in which we found that small caps with lower capital spending (defined as low Capex/Sales) typically have the lower profitability as well (see *"Capex: A double-edged sword?"*, 10/15/2015).

Digging further, we find that within small caps engaged in high buybacks, the outperformance of high profitability companies was most evident within the largest small cap sectors. Higher ROIC companies engage in buybacks outperformed in ~85% of sectors by weight. This suggests that investors have continued to value companies with stronger profitability that engaged in high buybacks, consistent with longer-term trends.

FIGURE 8

Over the long term high buyback, high ROIC small caps have outperformed high buyback, low ROIC small caps

Long-Term Average Annualized Return relative to R2000



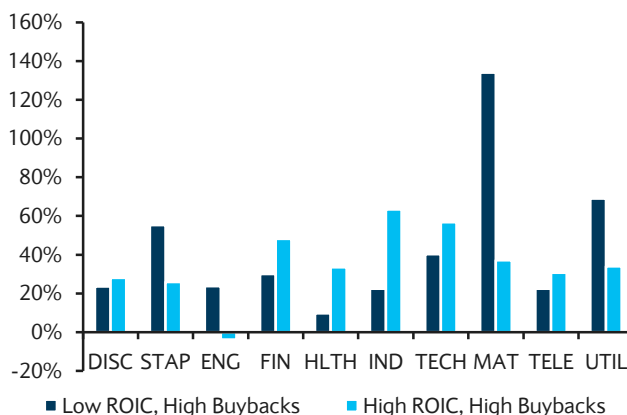
Source: Barclays Research, Thomson Reuters

Note: Data as of 2/20/2018. Long-term returns are the average monthly returns from 12/31/1979 – 1/31/2018.

FIGURE 9

Since 2016, high buyback, high ROIC small caps have outperformed in the largest small cap sectors

Return Since 2016



Source: Barclays Research, Thomson Reuters

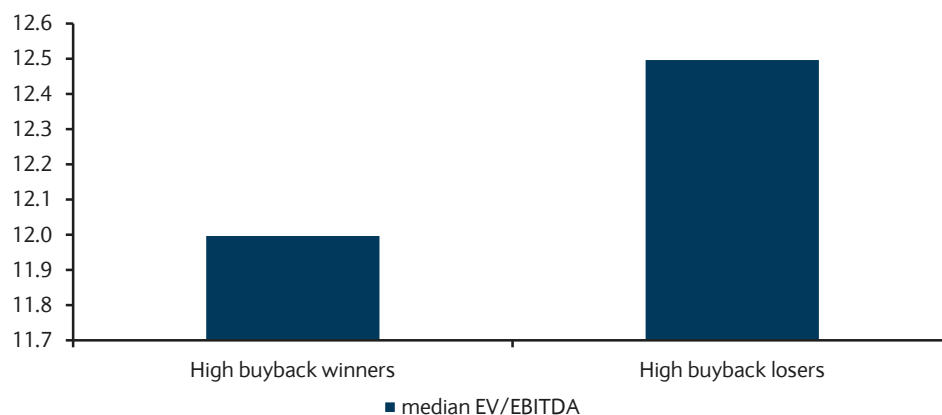
Note: Data as of 2/20/2018.

We also explored if valuations had an impact on the recent performance of stocks engaged in buybacks. Our past research has shown that small caps tend to engage in higher buybacks when their relative valuations are cheap. Intuitively, engaging in higher buybacks at cheaper valuations makes sense. Our analysis shows that since 2016, cheaper valuations did indeed contribute to the outperformance of high buyback stocks.

FIGURE 10

In recent years, valuations also appear to have contributed to the performance of high buyback small caps

Median EV/EBITDA since 2016



Source: Barclays Research, Thomson Reuters

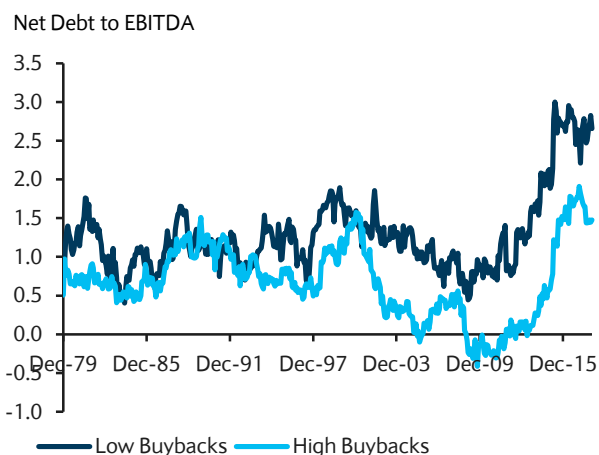
Note: Data as of 2/20/2018.

The second blow to share repurchases in small caps came with the 2016 election when anticipated reduction in corporate tax rates reduced the attractiveness of debt-funded

buybacks. Post crisis, a sustained period of low interest rates and relatively tight credit spreads made debt funding attractive. Reflecting this, we saw a pick-up in leverage across the small cap universe. Our analysis shows that while companies engaging in high buybacks have increased their leverage, their leverage levels have been lower relative to companies that have not engaged in aggressive buybacks. This suggests that the narrative of small caps increasing leverage to fund buybacks is not strong.

FIGURE 11
High buyback small caps typically have lower levels of debt

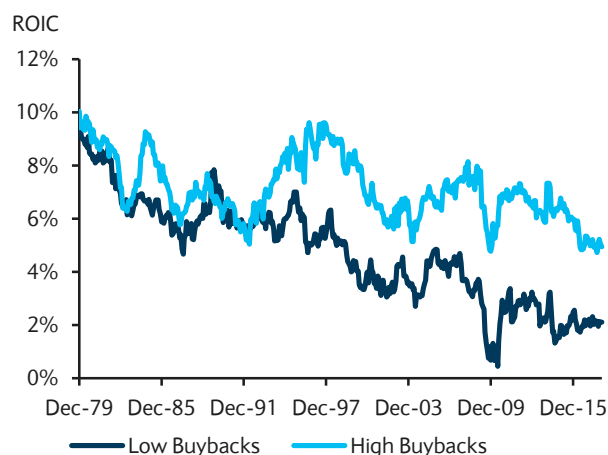
...



Source: Barclays Research, Thomson Reuters.

Note: Data is as of 2/20/2018. Results are ex-Financials, ex-Real Estate.

FIGURE 12
... and higher levels of profitability



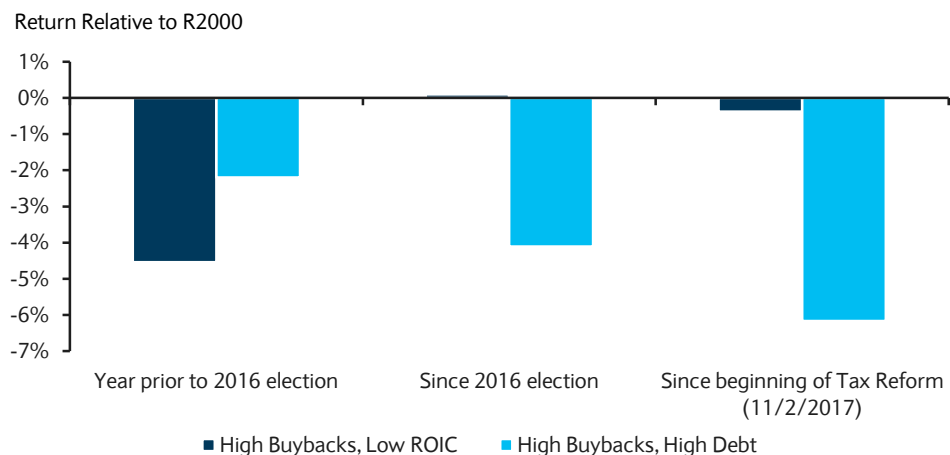
Source: Barclays Research, Thomson Reuters.

Note: Data is as of 2/20/2018.

However, leverage does appear to have been a contributing factor in the underperformance of companies engaged in high buybacks. Post election, as anticipation of corporate tax reform took hold, high buyback small caps with high leverage levels have underperformed the Russell 2000 by 6.2%, compared to an outperformance of 0.1% for high buybacks stocks with low profitability. The sharp reduction in corporate taxes and the cap on interest rate deductibility meaningfully reduced the tax shield benefits of debt and increased the after-tax cost of debt. This has a greater impact on non-investment grade issuers and highly levered companies. In other words, the advantage of using debt to fund buybacks has reduced following the recent tax reform. With small caps typically falling on the lower end of the credit quality spectrum, this effect is higher and might have played a part in the underperformance of more levered small caps engaged in buybacks.

FIGURE 13

Within high buyback stocks, low ROIC companies tended to underperform prior to the 2016 election while companies with higher leverage have underperformed since



Source: Barclays Research, Thomson Reuters

Note: Data are as 2/20/2018. High buybacks, High/Low ROIC is defined as the Highest/Lowest tercile of stocks by ROIC within the High buybacks group. High/Low Debt is defined as the Highest/Lowest tercile of stocks by Net Debt/EBITDA within the High buybacks group (ex-Financials, ex-Real Estate). Returns are cap-weighted and baskets are rebalanced on a monthly basis.

Buybacks can still work

In light of our analysis, we believe that companies with high levels of buybacks but with low profitability and higher debt levels will continue to face headwinds in 2018. We expect that investors are likely to continue to reward companies engaged in buybacks financed by higher profitability rather than relying on increasing their leverage levels.

Based on this view, we recommend 14 stocks from our Barclays coverage universes that have high buybacks, high profitability, low debt, and our analysts have an Overweight rating.

FIGURE 14

Small caps with high buybacks, high profitability, and low leverage

Ticker	Company	Sector	MCAP (\$Mil)	Buyback Percentile	ROIC Percentile	Debt Percentile
FL	Foot Locker	Consumer Discretionary	5954	90	90	14
TEN	Tenneco	Consumer Discretionary	2885	69	72	40
SFM	Sprouts Farmers Market	Consumer Staples	3431	82	89	28
BUFF	Blue Buffalo Pet Products	Consumer Staples	6816	71	100	11
PB	Prosperity Bancshares	Financials	5366	69	71	14
HDS	HD Supply Holdings	Industrials	6811	96	89	48
NCS	NCI Building Systems	Industrials	1118	94	66	42
CBPX	Continental Building Products	Industrials	1020	91	70	29
JBLU	JetBlue Airways	Industrials	6506	87	77	19
USG	USG	Industrials	4769	83	68	23
PAYC	Paycom Software	Information Technology	5688	90	96	38
ORBK	Orbotech	Information Technology	2601	78	100	31
LOGM	LogMeIn	Information Technology	6220	76	52	35
BMS	Bemis	Materials	4158	87	65	38

Source: Barclays Research, Thomson Reuters, WorldScope, Compustat

Note: Data as of 2/20/2018. The selected stocks meet the following criteria: Market cap under \$8Bil and above \$500mil, an Overweight rating from a Barclays Equity Analyst, in the top tercile of 12-months reduction in shares outstanding within sectors, in the top half of ROIC within sectors, in the bottom half of Net Debt/EBITDA (or Debt/Equity for Financials) within sectors, not in the Real Estate Sector.

It should be noted that since high buybacks, low debt, and high profitability all have value characteristics, combining the three creates a strong value exposure. For instance, the Russell 2000 is currently trading at a EV/EBITDA ~ 13.9x while high buyback small caps have a median EV/EBITDA of 12.1x and high buyback/low Debt/high ROIC small caps have a median EV/EBITDA of 11.5x.

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Materially Mentioned Stocks (Ticker, Date, Price)

Bemis Company (BMS, 20-Feb-2018, USD 45.64), Overweight/Positive, CD/CE/J

Blue Buffalo Pet Products Inc. (BUFF, 20-Feb-2018, USD 34.76), Overweight/Neutral, CE/J/K/M

Continental Building Products, Inc. (CBPX, 20-Feb-2018, USD 26.85), Overweight/Neutral, J

Foot Locker (FL, 20-Feb-2018, USD 48.17), Overweight/Positive, CD/CE/J/K/N

HD Supply Inc (HDS, 20-Feb-2018, USD 36.16), Overweight/Neutral, CE/J/K/M

JetBlue Airways Corporation (JBLU, 20-Feb-2018, USD 20.02), Overweight/Positive, CE/J/K/M

LogMeIn, Inc. (LOGM, 20-Feb-2018, USD 117.40), Overweight/Positive, CE/E/J/L

NCI Building Systems, Inc. (NCS, 20-Feb-2018, USD 16.85), Overweight/Neutral, D/E/J/K/L/M

Orbotech (ORBK, 20-Feb-2018, USD 54.06), Overweight/Neutral, CE/FA/J/K/M/N

Paycom (PAYC, 20-Feb-2018, USD 95.76), Overweight/Positive, CE/J

Prosperity Bancshares, Inc. (PB, 20-Feb-2018, USD 76.53), Overweight/Neutral, J

Sprouts Farmers Market Inc (SFM, 20-Feb-2018, USD 26.00), Overweight/Neutral, CE/J

Tenneco Inc. (TEN, 20-Feb-2018, USD 55.79), Overweight/Neutral, CD/CE/D/J/K/L/M/N

USG Corp. (USG, 20-Feb-2018, USD 33.78), Overweight/Neutral, CD/CE/J

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In addition to the stock rating, we provide industry views which rate the outlook for the industry coverage universe as Positive, Neutral or Negative (see definitions below). A rating system using terms such as buy, hold and sell is not the equivalent of our rating system. Investors should carefully read the entire research report including the definitions of all ratings and not infer its contents from ratings alone.

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Overweight - The stock is expected to outperform the unweighted expected total return of the industry coverage universe over a 12-month investment horizon.

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Neutral - industry coverage universe fundamentals/valuations are steady, neither improving nor deteriorating.

Negative - industry coverage universe fundamentals/valuations are deteriorating.

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Delta Air Lines, Inc. (DAL)	JetBlue Airways Corporation (JBLU)	Southwest Airlines Co. (LUV)
Spirit Airlines, Inc. (SAVE)	United Continental Holdings, Inc. (UAL)	

U.S. Autos & Auto Parts

Adient plc (ADNT)	American Axle & Mfg. (AXL)	Aptiv plc (APTV)
Autoliv, Inc. (ALV)	Avis Budget Group Inc. (CAR)	BorgWarner Inc. (BWA)
Dana Incorporated (DAN)	Delphi Technologies PLC (DLPH)	Ford Motor (F)
General Motors (GM)	Hertz Global Holdings Inc. (HTZ)	Lear Corporation (LEA)
Meritor, Inc. (MTOR)	Sensata Technologies Holding NV (ST)	Tenneco Inc. (TEN)
Tesla, Inc. (TSLA)	Visteon Corp. (VC)	

U.S. Emerging Technologies

Allot Communications, Ltd. (ALLT)	Arris International plc (ARRS)	CEVA, Inc. (CEVA)
Coherent Inc. (COHR)	Corning Inc. (GLW)	Electronics for Imaging, Inc. (EFII)
Finisar Corp. (FNSR)	Keysight Technologies, Inc. (KEYS)	Kornit Digital Ltd. (KRNT)
Lumentum Holdings Inc. (LITE)	Mellanox Technologies (MLNX)	Orbotech (ORBK)
Radware Ltd. (RDWR)		

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B&G Foods (BGS)	Blue Buffalo Pet Products Inc. (BUFF)	Campbell Soup (CPB)
Conagra Brands (CAG)	General Mills (GIS)	Hain Celestial (HAIN)
Kellogg Co. (K)	Lamb Weston Holdings, Inc. (LWWI)	McCormick & Co. (MKC)
Mondelez International (MDLZ)	Pinnacle Foods., Inc. (PF)	Post Holdings, Inc. (POST)
The Hershey Company (HSY)	The J.M. Smucker Company (SJM)	The Kraft Heinz Company (KHC)
TreeHouse Foods (THS)		

U.S. Food & Staples Retailing

Big Lots, Inc. (BIG)	Casey's General Stores Inc (CASY)	Chefs' Warehouse Inc (CHEF)
Costco Wholesale Corp. (COST)	Dollar General Corporation (DG)	Dollar Tree Inc (DLTR)
Five Below, Inc. (FIVE)	GNC Holdings Inc. (GNC)	Kroger Co. (KR)
Natural Grocers by Vitamin Cottage Inc (NGVC)	Performance Food Group Co. (PFGC)	Smart & Final Stores Inc (SFS)
SpartanNash Co (SPTN)	Sprouts Farmers Market Inc (SFM)	SYSCO Corp. (SYY)
United Natural Foods, Inc. (UNFI)	US Foods Holdings Corp (USFD)	Vitamin Shoppe Inc (VSI)
Walmart Inc. (WMT)		

U.S. Homebuilding & Building Products

Advanced Drainage Systems Inc. (WMS)	BMC Stock Holdings, Inc. (BMCH)	Builders FirstSource Inc. (BLDR)
Continental Building Products, Inc. (CBPX)	D.R. Horton Inc. (DHI)	Forterra Inc. (FRTA)
Fortune Brands Home & Security, Inc. (FBHS)	Foundation Building Materials, Inc. (FBM)	GMS Inc. (GMS)
JELD-WEN Holding, Inc. (JELD)	KB Home (KBH)	Lennar Corp. (LEN)
Masco Corp. (MAS)	Meritage Homes Corp. (MTH)	Mohawk Industries Inc. (MHK)
NCI Building Systems, Inc. (NCS)	Owens Corning Inc. (OC)	PulteGroup Inc. (PHM)
Realogy Holdings Corp. (RLGY)	SiteOne Landscape Supply Inc. (SITE)	Taylor Morrison Home Corp. (TMHC)
Toll Brothers Inc. (TOL)	Tri Pointe Group Inc. (TPH)	USG Corp. (USG)

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Associated Banc-Corp (ASB)	Bank of Hawaii Corp. (BOH)	Bank of the Ozarks (OZRK)
BankUnited, Inc. (BKU)	Commerce Bancshares, Inc. (CBSH)	Cullen/Frost Bankers, Inc. (CFR)
Dime Community Bancshares (DCOM)	East West Bancorp (EWBC)	First Financial Bancorp (FFBC)
First Hawaiian, Inc. (FHB)	First Horizon National (FHN)	First Interstate BancSystem Inc. (FIBK)
First Republic Bank (FRC)	Fulton Financial Corp. (FULT)	Investors Bancorp Inc. (ISBC)
New York Community Bancorp (NYCB)	People's United Financial (PBCT)	Popular, Inc. (BPOP)
Prosperity Bancshares, Inc. (PB)	Signature Bank (SBNY)	SVB Financial Group (SIVB)
Synovus Financial (SNV)	TCF Financial (TCF)	Texas Capital Bancshares (TCBI)
Umpqua Holdings Corp. (UMPQ)	Webster Financial (WBS)	Western Alliance Bancorporation (WAL)
Zions Bancorporation (ZION)		

U.S. Multi-Industry

Allegion plc (ALLE)	Colfax Corporation (CFX)	Danaher Corp. (DHR)
Dover Corporation (DOV)	Eaton Corporation (ETN)	Emerson Electric Co. (EMR)
Fortive Corporation (FTV)	Gardner Denver (GDI)	General Electric (GE)
HD Supply Inc (HDS)	Honeywell International Inc. (HON)	Ingersoll-Rand Plc (IR)
Johnson Controls International (ICI)	Kennametal (KMT)	Lennox International (LII)
Pentair plc (PNR)	Regal Beloit Corporation (RBC)	Rexnord (RXN)
Rockwell Automation Inc. (ROK)	Roper Technologies Inc (ROP)	SPX Flow (FLOW)
Stanley Black & Decker Inc. (SWK)	The 3M Company (MMM)	United Technologies Corporation (UTX)

U.S. Paper & Packaging

Ardagh Group S.A. (ARD)	Avery Dennison Corp. (AVY)	Ball Corporation (BLL)
Bemis Company (BMS)	Berry Global Group Inc. (BERY)	Crown Holdings Inc. (CCK)
International Paper Co. (IP)	KapStone (KS)	Owens-Illinois Inc. (OI)
Packaging Corp. of America (PKG)	Sealed Air Corp. (SEE)	Silgan Holdings Inc. (SLGN)
Sonoco Products Co. (SON)	Veritiv Corp. (VRTV)	WestRock Co. (WRK)

U.S. Retail Broadlines/Hardlines

Advance Auto Parts Inc. (AAP)	AT HOME GROUP INC (HOME)	AutoZone Inc. (AZO)
Bed Bath & Beyond Inc. (BBBY)	Best Buy Co., Inc. (BBY)	Dick's Sporting Goods (DKS)
Finish Line Inc. (FINL)	Fitbit (FIT)	Floor & Decor (FND)
Foot Locker (FL)	Home Depot Inc. (HD)	Lowe's Companies, Inc. (LOW)
Lululemon Athletica Inc. (LULU)	Nike Inc. (NKE)	O'Reilly Automotive Inc. (ORLY)
Party City Holdco Inc. (PARTY)	Restoration Hardware (RH)	Target Corp. (TGT)
The Container Store Group (TCS)	Tractor Supply Co. (TSCO)	Under Armour Inc. (UAA)
Williams-Sonoma Inc. (WSM)		

U.S. Software

Adobe Systems Inc. (ADBE)	Amdocs Ltd. (DOX)	Ansys, Inc. (ANSS)
Appian Corporation (APPN)	Apptio, Inc. (APTI)	Autodesk Inc. (ADSK)
CA Technologies (CA)	Carbonite, Inc. (CARB)	Check Point Software Technologies Ltd. (CHKP)
Citrix Systems (CTXS)	Cornerstone OnDemand Inc. (CSOD)	Coupa Software Inc. (COUP)
CyberArk Software (CYBR)	Ellie Mae Inc. (ELLI)	FireEye (FEYE)
Five9, Inc. (FIVN)	Fortinet, Inc. (FTNT)	Hortonworks, Inc. (HDP)
Intuit Inc. (INTU)	LogMeIn, Inc. (LOGM)	Magic Software Enterprises Ltd. (MGIC)
Microsoft Corp. (MSFT)	Mimecast Ltd. (MIME)	MobileIron, Inc. (MOBL)
MongoDB, Inc. (MDB)	MuleSoft, Inc. (MULE)	Nice Ltd. (NICE)
Nuance Communications, Inc. (NUAN)	Oracle Corp. (ORCL)	Palo Alto Networks (PANW)
Paycom (PAYC)	PTC Inc. (PTC)	Rapid7 (RPD)
Red Hat Inc. (RHT)	Salesforce.com Inc. (CRM)	SAP SE (SAP)

IMPORTANT DISCLOSURES CONTINUED

Sapiens International Corp (SPNS)	SecureWorks (SCWX)	ServiceNow, Inc. (NOW)
Splunk Inc. (SPLK)	Symantec Corp. (SYMC)	Tableau Software, Inc. (DATA)
Talend S.A. (TLND)	Teradata Corp. (TDC)	Varonis Systems, Inc. (VRNS)
VMware Inc. (VMW)	Workday Inc. (WDAY)	

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