APRIL 2016

STOCK BUYBACKS

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This white paper will explore stock buybacks, one of the methods for companies to return capital to shareholders. It will include an explanation of stock buyback programs, their benefits to shareholders, recent market trends for companies executing buybacks, and the implication for investors.

HIGHLIGHTS

- Some of the biggest buyers in today's stock market are listed companies. Specifically, companies are buying back their OWN stock via stock buyback (or share repurchase) programs. Companies are buying more stock than individuals, hedge funds, and investment institutions.
- In Q4-2015, buybacks grew 5.2% year-on-year. On a trailing 12-months (TTM) basis, buybacks represented 58.3% of free cash flow before dividends, a 10% increase year-on-year.[1]
- CY 2015 saw 70 activist campaigns in which the return of capital to shareholders via dividends and/or buybacks was at least part of the stated objective.[2]
- Buybacks have both supporting fundamental and psychological factors, and tend to be met with positive price performance.
- The significance of a company's specific buyback program varies depending on the size of the company and may be offset by other corporate activity such as equity grants or secondary stock offerings.
- The most effective way to identify the significance of a company's buyback program is to look at the company's net reduction in total shares outstanding.
- Portfolios that consider net reduction in total shares outstanding demonstrate outperformance over time vs. benchmarks.

DRIVING THE STOCK MARKET /

Despite the recent return of volatility, the stock market has experienced a resounding recovery since the financial crisis of 2008. Major indexes are near record levels. After such a long, sustained bull market, one might ask: "Who are the buyers driving this market?"

The answer, perhaps surprisingly, is that listed companies themselves are among the biggest buyers of stock.[3]

WHERE DO BUYBACKS COME FROM? /

In the process of conducting business and other related activities, companies generate cash; the strategy surrounding its usage is critical for management and investor success.

Companies can deploy their cash in various ways. One option is to invest in growth opportunities such as research and development, acquisition activity, and general capital expenditures. Another is to return the cash to shareholders via a dividend payment or stock buyback. In the post-crisis economic environment which has offered fits of uncertainty, companies have increasingly chosen to return their cash to shareholders in lieu of investing in riskier growth-related activities.

THE MECHANICS OF A BUYBACK PROGRAM /

A stock buyback (or share repurchase) occurs when a company purchases shares of its own stock, often in the open market, thereby reducing the number of shares outstanding. A company typically uses cash to fund the purchase, though some companies finance the purchase.

The decision on whether to finance the purchase or to use cash is based on numerous factors such as the amount of cash the company has in reserve as well as the state of the lending environment, including current interest rates.

A company starts the buyback process by announcing publicly and to the SEC that it will repurchase shares. The company typically discloses (a) how much stock it intends to repurchase, usually a dollar amount; (b) a timeline for the repurchase, often spanning months or even years; and (c) whether or when it completes any part or all of its repurchase. SEC Rule 10b-18 outlines specific requirements for stock repurchases on the open market including (a) the manner of purchase, which requires that the company purchase from a single broker or dealer on any given day; (b) time and price constraints to ensure fair trading; and (c) volume limitations, prohibiting a company from purchasing more than 25% of its average daily volume on any given day.[4]

Stock buybacks are one of many transactions that a company can execute on its stock. At the same time that it is repurchasing shares, a company may also be issuing new shares via employee equity grants or stock options. It is often the case that share buyback programs are instituted to specifically offset new stock issuance via such grants or options. As a result, it is possible for a company to issue more shares than it repurchases over a stated buyback period.

BUYBACK MARKET TRENDS /

Share repurchase plans continued their recent upward trajectory in 2015 based on dollars spent. Buybacks in Q4-2015 grew 5.2% from Q4-2014 and represented the sixth largest dollar amount for any quarter since 2005, and the third-highest post-recession total.[5] Major U.S. companies that expanded their buyback programs in 2015 include Apple, which more than doubled its buyback program to a cumulative total of $200 billion by April 2017,[6] and Oracle, which announced a $10 billion increase to its program.[7] In the trailing 12 months from Q4-2015, S&P 500 companies spent $568.9 billion buying back their own stock.[8] While this is a slight decline from the equivalent period a year prior, 2015 still represents the second-largest year for buybacks since the Great Recession.[9]

Buybacks are not specific to a certain sector. The Information Technology (IT) sector was the top spender by dollar amount, with four of the top 10 companies coming from IT. However, the sectors with the largest year-on-year growth were Industrials and Consumer Discretionary, which posted growth of 43.8% and 25.8%, respectively. Industrial sector buyback growth was led by General Electric and United Technologies, both of which were among the overall top 10 in share buybacks.[10] The top buyback programs by dollar value in Q4-2015 included Apple ($6.0B), United Technologies ($5.1B), Gilead Sciences ($3.1B) and Walt Disney ($2.4B), some of the largest companies in the U.S. This diversity of companies illustrates the breadth of companies engaged in buybacks. It is important to note that despite very large buybacks by dollar amount, some companies saw only a small decrease in shares outstanding over the previous quarter. This can be the result of two factors. First, the size of the company can mask the effect of a share buyback. Microsoft spent almost $4 billion in share buybacks in Q4-15, but with a market capitalization of over $420B, the result of the buyback was less than a 1% decrease in shares outstanding for the quarter. Alternatively, as mentioned before, the issuance of new shares via actions such as secondary offerings or employee equity grants can offset the effect of a buyback.

HOW SHAREHOLDERS BENEFIT /

When a company announces or executes a share buyback, excess returns to the stock price can be attributed to a combination of fundamental and psychological factors.

A share buyback reduces the number of shares outstanding. Other things equal, this can increase the earnings per share growth rate for a company. In its simplest form, a reduction in shares outstanding has a direct inverse relationship to earnings per share and at a constant price/earnings ratio will drive the stock price higher. Share repurchases at prices below a company's book value per share will have the effect of increasing that valuation measure.

Table 1 below helps illustrate the dynamics. Here we see a company with a reported trailing 12-month earnings of $1,000, which we will hold fixed as an estimate for the upcoming 12 months. At that moment, which precedes any buyback, the company's earnings are $10.00 per share with 100 shares outstanding. With a 15 P/E, the share price is $150.00.

TABLE 1

	PRE-BUYBACK	5% BUYBACK	10% BUYBACK
A. Total Earnings Trailing 12 Months	$1,000	$1,000	$1,000
B. Total Shares Outstanding	100	95	90
C. Earnings Per Share (A/B)	$10.00	$10.53	$11.11
D. Price to Earnings Ratio	15	15	15
E. Current Price (C*D)	$150.00	$157.89	$166.67
F. Return		5.26%	11.11%

If the company were to announce and execute a 5% buyback, the total shares outstanding would be reduced. This capital activity has no impact on the company's earnings' prospects, and now leaves $1,000 in earnings for 95 shares. The company's earnings would be $10.53 per share and, holding the P/E constants at 15, the share price would be $157.89. This is an increase of 5.26%.

Further, the announcement and implementation of a buyback can also have a positive effect on investor confidence. Buybacks are seen as an indication of management's faith in the company and that management believes the stock may be "cheap" at the current price.

Finally, repurchases provide net higher share demand and price support.

Consequently, a share buyback announcement and/or implementation of a buyback program tend to be met with positive price performance.[11]

The aforementioned January 2014 study by Capital IQ found that U.S. firms that authorize and announce share repurchase programs have outperformed the general market following the buyback announcement, a trend that has held true for the past nine years. The trend is most significant in small capitalization stocks where the outperformance continues past the first few trading days following the announcement. In large capitalization stocks, the market response is faster, occurring mostly in the first few trading days following the announcement.

STOCK BUYBACK EXAMPLES /

Real-world examples provide important insight into how buybacks unfold in practice. Unlike dividends, for which investors have well-established preferences for stability and predictability following an announcement, buyback programs tend to demonstrate more ad-hoc and "lumpy" dynamics.

Viacom (VIA), a leading global entertainment content company, started returning cash to shareholders in June 2010 via both a regular quarterly cash dividend payment and a share repurchase. The dividend of $0.15 per share, resulting in a 1.22% yield and a total cash payout of $91M, was the first since 2006 when it split with CBS. Concurrently, Viacom announced the resumption of its share repurchase program that had been suspended in early 2009 due to unfavorable economic conditions. It authorized $4B for repurchasing shares and finished fiscal 2010 having repurchased 4.7 million shares totaling $162M.[12]

Just over a year later, in November 2011, Viacom announced that it would more than double its existing share repurchase plan by $6B to a total of $10B.[13] As seen in Table 2, it completed the 2011 fiscal year having repurchased 55.7 million shares, totaling $2.5B while paying $417M in cash dividends. During 2012, Viacom bought back 59.9 million shares totaling $2.8B and paid $554M in dividends. In August 2013, the company announced plans to again double the buyback program from $10B to $20B and increased the pace of its buyback.[14] In 2013 it repurchased 69.2 million shares totaling $4.8B and paid $555M in dividends.[15] As of the quarter ending December 31, 2015, Viacom had $4.9B of remaining capacity under the current program. This past quarter also saw the company repurchase 2.1 million shares for an aggregate purchase price of $100M.[16]

Table 2: Viacom Cash Returned to Shareholders (in millions)[17]

YEAR ENDED	SHARES REPURCHASED	DOLLAR AMOUNT SPENT ON SHARE REPURCHASE	DIVIDEND PAYMENTS	TOTAL CASH RETURNED TO SHAREHOLDERS
2010	4.7	$162	$91	$253
2011	55.7	$2,500	$417	$2,917
2012	59.9	$2,800	$554	$3,354
2013	69.2	$4,800	$555	$5,355
2014	40.7	$3,400	$541	$3,941
2015	21.1	$1,500	$564	$2,064

This timeline is a representative example of how U.S. companies have been announcing and executing share repurchases in recent years. After the announcement, the company keeps shareholders apprised of the changes by disclosing the number of shares repurchased and the dollar amount of the repurchase. While Viacom was on track to complete its initial $10B repurchase in 2013, it instead announced that it would double the original authorized amount and continue repurchasing shares. In today's friendly repurchase environment, many other companies are following a similar schedule.

Some companies have an ongoing share repurchase plan that can last for years, even decades. For example, Intel has repurchased shares every year since 1990, resulting in 4.8 billion shares repurchased at a cost of $105B. As of December 26, 2015, it has $9.4B left in authorized repurchases.[18]

On the other hand, companies that announce share buybacks are under no legal obligation to complete them. In March 2012, JPMorgan announced plans to repurchase $15 billion worth of shares over the course of one year. Just two months later, it rescinded the plan following a multibillion-dollar trading loss. Shares had surged following the repurchase announcement but retreated immediately following the trading loss and buyback cancelation.[19]

BUYBACK PROGRAMS ≠ BUYBACK PORTFOLIO /

As illustrated above, many companies announce buyback programs, but there is wide variation in their implementation. As a result, not all companies making such announcements ultimately fulfill the program's stated objectives and thus do not generate the excess returns normally associated with the segment. In fact, when constructing portfolios of companies buying back their own stock, one must identify companies that have executed or completed a buyback program but have not offset the reduction in shares outstanding through new share issuance. Properly capturing such information means looking for those companies with a net reduction in total shares outstanding.

UNDERSTANDING TOTAL SHARES OUTSTANDING /

To explore the relationship between net reduction in total shares outstanding and stock price performance, we worked closely with Ford Equity Research to compile a 13-year time series of U.S. companies and total shares outstanding information using their equity universe database. This is a database of more than 4,000 U.S. securities, all of which are measured for changes in total shares outstanding (TSO) from various sources including original filings. Ford has performed this research since 1971.

For each year, we split the companies into buckets according to their change in TSO. The results are summarized in Table 3.

Table 3: Number of Stocks by Change in Total Shares Outstanding

	TOTAL	SECURITIES WITH NET INCREASE IN TSO	SECURITIES WITH NET DECREASE IN TSO	SECURITIES WITH ΔTSO<= X%				
YEAR END	UNIVERSE	ΔTSO ≥ 0%	ΔTSO < 0%	< -1%	< -2%	< -3%	< -4%	< -5%
2003	4,564	3,622	942	719	517	376	282	210
2004	4,590	3,854	736	569	415	300	213	160
2005	4,624	3,792	832	668	515	364	279	205
2006	4,543	3,512	1,031	850	644	495	376	290
2007	4,425	3,261	1,164	994	790	646	526	402
2008	4,421	3,025	1,396	1,162	952	750	592	482
2009	4,336	3,478	858	655	481	334	235	186
2010	4,147	3,385	762	595	438	323	250	191
2011	4,148	3,175	973	790	627	493	399	318
2012	4,021	3,030	991	779	601	480	386	303
2013	4,098	3,162	936	716	549	421	320	255
2014	4,164	3,127	1,037	824	650	490	362	262
2015	4,133	2,938	1,195	962	738	552	405	310

For each year, we can see the total number of securities in the universe. We then split this universe into those securities that have either no change or a net increase in TSO (≥0%) and those that have a net decrease in TSO (<0%).

Changes in TSO are measured versus the prior year. Using 2015 as an example, we had Ford compare the 12/31/15 TSO figure for any given security to its TSO figure from that date in the prior year, which would be 12/31/14. The database is adjusted for splits and other corporate actions so that the comparison is apples-to-apples.

Those securities with a net decrease in TSO are further segmented according to the magnitude of the TSO decrease. Here, the figures are a subset of the <0% segment. For example, on 12/31/2015, there were 1,195 securities identified as having ΔTSO < 0%. Of these, 962 securities were identified as having ΔTSO < -1%; of these, 738 securities were identified as having ΔTSO < -2%; and so on. This segmentation was carried out in 1% increments to <-5%.

We can make two important observations from the collective data set. First, there are vastly more positive changes in TSO than negative changes, with a ratio of roughly 75%/25%. Second, of the securities with a decrease in TSO, only about a quarter have a ΔTSO<-5%. This means that the set of securities with ΔTSO<-5% is about 6% of the universe.

On a year-by-year basis, the number of securities varies as does the number of securities with a net increase or net decrease. However, we can clearly see the largest number of securities with net decreases in TSO during the 2008 financial crisis and the two years leading up to it. Due to unfavorable economic conditions, many companies shied away from investment-for-growth opportunities. This, coupled with depressed share prices, provided a friendly environment for share repurchases.

Despite a largely recovered economy and rising share prices, 2015 saw the most securities with a net decrease in TSO of any year other than 2008. As noted in the above sections, this is consistent with the popularity of buybacks that we have seen over the past couple of years. Should the economy continue this recovery while the market maintains a strong valuation, it is possible that companies will start to shift their attention from buybacks to an investment-for-growth strategy. That said, the number of companies decreasing TSO has increased over the last two years. It is possible that uncertainties over diverging monetary policy, emerging market duress, and low aggregate demand will continue to weigh on the investment landscape and thus push companies to further their efforts in returning capital to shareholders.

LINKING TOTAL SHARES OUTSTANDING AND EXCESS RETURNS /

Next, we calculated the total return performance for each segment, or portfolio, for each year: all securities in the universe, those with ΔTSO>=0%, those with ΔTSO<0%, and those with ΔTSO meeting each of the incremental ΔTSO thresholds. The results are summarized in Table 4.

Table 4: Annual Performance of Stocks by Change in Total Shares Outstanding

	TOTAL	SECURITIES WITH NET INCREASE IN TSO	SECURITIES WITH NET DECREASE IN TSO	SECURITIES WITH ΔTSO<= X%				
YEAR END	UNIVERSE	ΔTSO ≥ 0%	ΔTSO < 0%	< -1%	< -2%	< -3%	< -4%	< -5%
2004	20.6%	20.1%	21.4%	20.9%	21.1%	21.8%	22.8%	23.1%
2005	4.3%	3.4%	7.3%	7.7%	8.5%	8.3%	10.1%	9.7%
2006	17.6%	17.6%	16.9%	16.3%	16.7%	17.4%	18.0%	19.2%
2007	-5.8%	-5.8%	-5.4%	-5.3%	-5.3%	-5.3%	-5.6%	-5.1%
2008	-44.2%	-45.9%	-38.0%	-37.6%	-37.5%	-38.1%	-39.0%	-39.2%
2009	66.8%	76.0%	50.8%	48.5%	51.8%	52.0%	55.4%	56.1%
2010	28.8%	28.3%	30.6%	29.9%	27.7%	30.5%	33.0%	34.1%
2011	-7.5%	-9.2%	2.8%	2.6%	2.8%	4.1%	4.2%	5.7%
2012	20.2%	21.1%	18.3%	18.2%	18.7%	18.6%	17.1%	17.1%
2013	42.8%	42.9%	43.8%	43.4%	44.6%	44.7%	45.7%	48.1%
2014	3.7%	2.0%	10.1%	9.5%	9.5%	10.8%	8.9%	8.6%
2015	-6.9%	-8.4%	-3.1%	-1.7%	-2.9%	-3.4%	-3.7%	-3.7%
Annual	8.1%	7.8%	10.4%	10.3%	10.5%	10.8%	11.1%	11.6%
Ann. Volatility	19.2%	19.9%	17.4%	17.1%	18.1%	17.1%	17.4%	17.5%

For the purposes of this study, at each observation date, we assigned an equal weight to all securities in the respective portfolios. We then calculated the total return of each portfolio for the following month. At the end of the month, we rebalanced the portfolio back to an equal weight across all securities. The same set of securities was carried forward each month for the entire year until the next observation date when the new qualifying securities replaced the prior year's securities. The process was repeated each year.

We can make several immediate observations. First, it is generally the case that the ΔTSO<0% portfolio outperforms the ΔTSO>0% portfolio; this lends credibility to the assertion that there are excess returns to be found in securities that execute buyback programs. Second, it is generally the case that ΔTSO<-5% portfolio outperforms the ΔTSO<0% portfolio; this evidences the positive relationship between the magnitude of the executed buyback program and the magnitude of the excess returns.

We further analyzed the performance of the stocks whose TSO reductions exceeded 5%. In particular, we assessed whether the observed difference in performance of these stocks compared to those with no buybacks was large enough to be deemed "statistically significant." Using a variety of statistical methods, and data from all 12 years in the sample, we do in fact find that the performance differential of about 3% is statistically significant. (Table 4 shows, a 12-year average performance of 7.8% for the non-buyback stocks and 11.6% for the <-5% group.)

Finally, the ΔTSO<0% portfolio showed lower average annual volatility than the ΔTSO>0%, an indication that the excess returns of the group of stocks that lowered their TSO came at a lower historical risk than the group of stocks that increased their TSO.

BUYBACK INDEXES /

Investors seeking buyback-themed indexes now encounter a growing array of possibilities in the U.S. market. Given the number of elements that can be used to measure buybacks, these indexes have widely varying methodologies and it pays to analyze their construction thoroughly.

We can turn to two examples of indexes designed to track the performance of companies that execute buyback programs: Nasdaq U.S. Buyback Achievers Index and the S&P 500 Buyback Index. Their methodologies differ, of course, but the goal for each is to capture the excess returns typically generated by companies that buy back their own stock.

The Nasdaq U.S. Buyback Achievers Index, launched on December 20, 2006, is constructed to include securities issued by U.S. corporations that have reduced the number of shares outstanding via buyback programs. In order to be eligible for inclusion in the index, a security must achieve a net reduction in shares outstanding of 5% or more in the trailing 12-month period. The index currently has 233 components with a market capitalization of $1.9 trillion.[20]

As shown in Chart 1, the Nasdaq U.S. Buyback Achievers Total Return Index, which accounts for dividend reinvestment, has outperformed the Nasdaq U.S. Benchmark Total Return Index, particularly since late 2011. Buybacks started to increase in 2009 and posted very strong years from 2012-2014. As buybacks tend to support a company's stock price, this outperformance by the components of the Nasdaq U.S. Buyback Achievers Total Return Index is not surprising. The PowerShares Buyback Achievers ETF (PKW) is the leading product that tracks the performance of the Nasdaq U.S. Buyback Achievers Index and currently has $1.7B assets under management.[21]

Chart 1

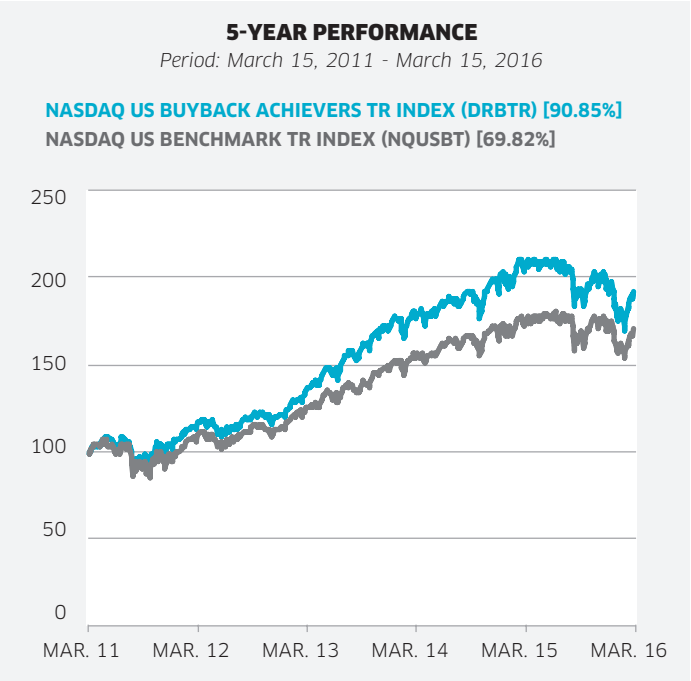
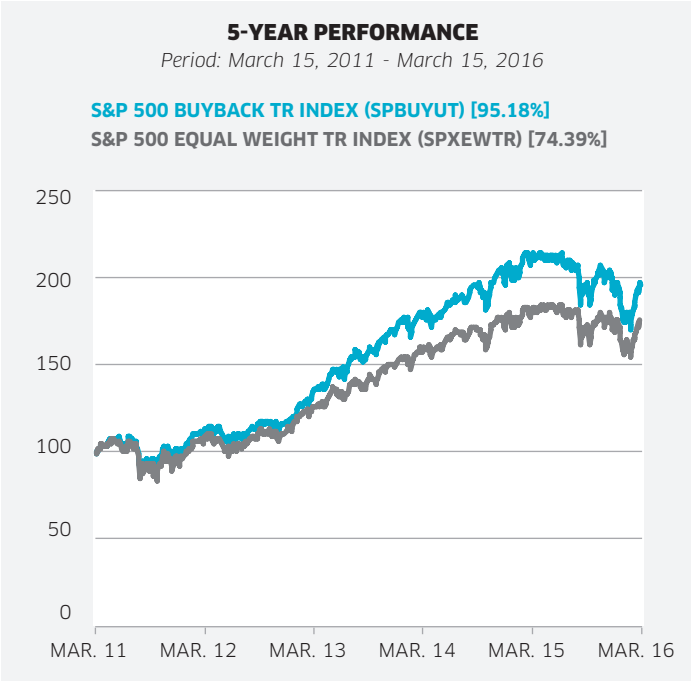


Chart 2



In contrast, the S&P 500 Buyback Index has a different methodology for tracking buyback companies. Instead of accounting for the overall reduction in shares outstanding, S&P uses the monetary amount of cash paid for buying back common shares over the previous four calendar quarters and divides it by the total market capitalization of common shares at the beginning of the buyback period to calculate a "buyback ratio" for each S&P 500 component. The 100 securities with the highest buyback ratio are then equal-weighted to form the buyback index.

Starting in March 2011, the S&P 500 Buyback Total Return Index generally tracked its benchmark, the S&P 500 Equal Weight Total Return Index, but started to outperform it in early 2013 (Chart 2).

Looking beyond the performance statistics, there are two important differences between the indexes that highlight how the methodology drives the portfolio and ultimately captures the buyback alpha. First, and perhaps most obvious, the Nasdaq index uses the 2,700 stock Nasdaq U.S. Benchmark as its starting universe, and S&P uses the S&P 500, which is a much smaller pool that skews heavily towards large cap companies. This allows the Nasdaq index to consider far more (and smaller) companies for inclusion, many of which appear in Table 3 above.

Second, the Nasdaq U.S. Buyback Achievers Index requires a net reduction in total shares outstanding (TSO) of 5%, which accounts for new share issuance, and allows for inclusion all securities issued by a US company that meet this threshold. As such, the number of components varies from year-to-year.

In contrast, S&P takes a different approach by choosing its securities based on the dollar value spent on buying back common stock without consideration for changes in TSO. Further, it also fixes the number of securities eligible for inclusion at 100, so securities do not enter or exit the index during reconstitution based solely on the absolute strength of their buyback programs, but on their relative strength. This means that many companies within the index may not meet the 5% reduction in TSO; it is also possible that some included stocks have increases in TSO since share issuance is not considered.

As a result of the combined methodology differences, only 65 of the 100 components in the S&P 500 Buyback Index are included in the NASDAQ US Buyback Achievers Index.

CONCLUSION /

This paper illustrates the mechanics of stock buyback programs, and evidences the relationship between the reduction in total shares outstanding and excess returns. Investors seeking to capture such excess returns must build their portfolio using relevant market data and should weight the portfolio constituents in proportion to the reduction.

Timothy R. Alward, CFA, President and CEO of Ford Equity Research, contributed research to this article.

ENDNOTES /

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DISCLAIMER /

Nasdaq