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# Exploiting Excess Returns from Announced Share Buybacks

## The Compelling Opportunity Surrounding Share Buyback Announcements

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Corporate stock buybacks have become an increasingly popular form of payout to shareholders, and account for a significant percentage of capital market activity. There has been extensive examination of the subject, attempting to determine the motives of share repurchases as well as the impact on stock performance. While theory suggests buybacks enhance shareholder value, evidence for a sustainable improvement in long-term shareholder returns is elusive. However, short-term stock performances surrounding a buyback announcement are more significant with evidence pointing to a period of superior performance.

In this paper, we present an event study evaluating the return characteristics of stocks before and after repurchase announcements. We examine returns relative to the S&P 500 to determine the presence of excess return and analyze performance based on several factors to conclude if certain characteristics are associated with excess return potential. Based on our discovery that recency and size of the repurchase announcement contribute significantly to short-term excess return potential, we then present a rules-based strategy capitalizing on these factors to build a portfolio that provides noteworthy capital appreciation potential.

## Abstract

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- Our research into corporate stock buybacks (share repurchases) dating back to 1996 supports academic research findings that share buyback announcements provide a compelling signal for short-term post-announcement excess returns.
- **Recency** to the announcement and **size** of the share repurchase are the two factors that amplify the excess return potential.
- EquityCompass Strategies presents a rules-based strategy (the “Buyback Strategy”) that seeks to capture the short-term excess returns associated with share repurchase announcements by focusing on these two drivers of excess returns, while implementing size and liquidity constraints to reduce risk.
- Performance simulations, using out-of sample data, show that the Buyback Strategy outperformed the S&P 500 in 9 out of the 12 years returning 391.2% vs. 51.4% on a cumulative basis (13.77% vs. 3.42% annualized).
- Low correlation with most major asset classes suggests that the Buyback Strategy can be a satellite growth strategy that complements a long-term core investment plan anchored to timeless principles to help build a diversified portfolio.

## Section I

# What is a Stock Buyback?

**An in-depth look at stock buyback announcements, the short-term opportunity they present, and our study results**

Stock buybacks are a popular form of payout to shareholders. The payout is normally initiated with a board-authorized announcement to periodically repurchase outstanding company shares in the open market. The intended benefit is to accrete shareholder value by reducing outstanding shares. In the first four months of 2010, announced open market repurchases totaled over \$115 billion,<sup>1</sup> double the depressed levels in the first four months of 2009. Stock buybacks have been a prominent capital market activity. In the last 13 years, companies in the Russell 3000 announced \$4.6 trillion in stock buybacks, surpassing the \$3.7 trillion paid in cash dividends and the \$1.9 trillion of capital raised in worldwide IPOs.<sup>1</sup> The share demand from announced share buybacks has dwarfed the \$1.4 trillion of net inflow to U.S. open-end equity mutual funds from 1997.<sup>2</sup>

*The amount of stock buybacks has exceeded cash dividends in the last 13 years.*

The buyback phenomenon has been analyzed in depth by academic researchers for more than two decades. Various studies suggest that firms repurchase their own stock for a multitude of reasons:<sup>3</sup> to distribute excess cash, to signal undervaluation due to asymmetric information between managers and shareholders, to increase their leverage ratio, to fund employee and management stock options, to fend off unwanted takeover attempts, and to mimic competitors.

### The Opportunity with Buybacks

Academic studies also show that the stock market reacts positively to stock buyback announcements.<sup>4</sup> The more commonly accepted theories for the positive reaction include the signaling theory,<sup>5</sup> the agency/free cash flow theory,<sup>6</sup> and the capital structure theory.<sup>7</sup> The positive price reaction at buyback announcements does not, however, translate into predictable excess returns in the long-term. Factors such as the failure to complete the announced buyback, subsequent share issuance, the company's inability to continue creating value, etc., can impact a stock's long-term performance more than the mere announcement.

Researchers have found, however, that abnormal returns following share repurchase announcements are more distinct in the shorter-term.<sup>8</sup> Studies have concluded the perception of increased liquidity and signaling by management of confidence in near-term prospects provides a buying catalyst leading to excess returns.<sup>9</sup>

1 Bloomberg

2 Investment Company Institute

3 To distribute excess cash (Jensen (1986), to signal undervaluation due to asymmetric information between managers and shareholders (Vermaelen (1981), Stephens and Weisbach (1998), Louis and White (2007), to increase their leverage ratio (Bagwell and Shoven (1988), to fund employee and management stock options (Fenn and Liang (2001), Kahle (2002), to fend off unwanted takeover attempts (Bagwell (1991), Billett and Xue (2007), and to mimic competitors (Massa, Rehman, and Vermaelen (2007).

4 Dann (1981), Vermaelen (1981), Lakonishok and Vermaelen (1990)

5 John and Williams (1985)

6 Jensen (1986)

7 Dittmar (2000), Lie (2002)

8 Vermaelen (1981), Comment and Jarrell (1991), Ikenberry, Lakonishok and Vennaen (1994)

9 De Ridder and Råsbrant (2009)

## Empirical Tests on the Short-Term Returns of Announced Buybacks and the Factors Driving Them

### Objective

The objective of the study was to validate the academic research findings regarding short-term excess returns, prove its relevance in the current market conditions, and identify the drivers of excess returns.

### Data and Methodology:

We analyzed the stock price performance relative to the S&P 500 in the 30 days prior to, and 100 days following, a stock buyback announcement for 10,070 unique open market share repurchase announcements (common stock only and adjusted for spin-offs and splits) made by members of the Russell 3000 from January 1, 1996 through April 30, 2010. (For a detailed discussion on the event study please refer to Appendix 1.)

*Abnormal returns are a persistent post-announcement feature of stock buybacks.*

### Short-Term Outperformance:

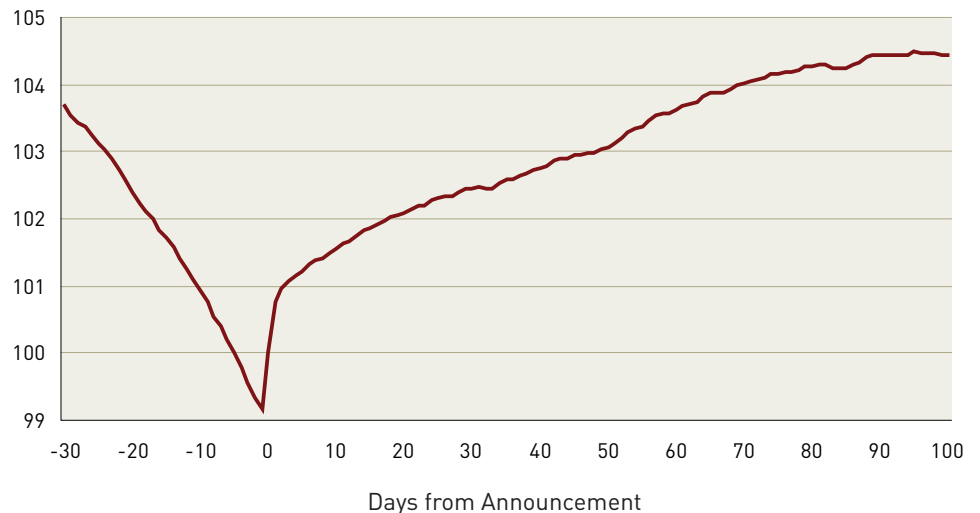
Our findings show a consistent and significant positive abnormal relative return post announcement for up to 100 days after, outperforming the S&P 500 by 4.45% on average, with the strongest returns occurring within the first 60 days from the announcement (**Chart 1**). Notable in the performance analysis is the poor performance in the 30 days prior to the announcement. The relative underperformance is a likely motivator for corporate management to announce a share buyback.

Chart 1

#### Share Buybacks Cumulative Indexed Relative Returns (vs. S&P 500 Index)

12/31/95 - 4/30/10

10,070 observations  
 Index level at announcement day (0) = 100  
 Dividends excluded  
 Source: EquityCompass Strategies, Bloomberg



**Excess Return Drivers:**

Our analysis also found that two conditions amplify the excess return potential: (1) the recency to the announcement (**Chart 2**) and (2) the size of the share repurchase (as a percent of shares outstanding) (**Chart 3**).

Chart 2  
**Buyback Announcement Performance**  
**Impact of Recency to the Announcement Date**  
 12/31/95 - 4/30/10

10,070 transactions

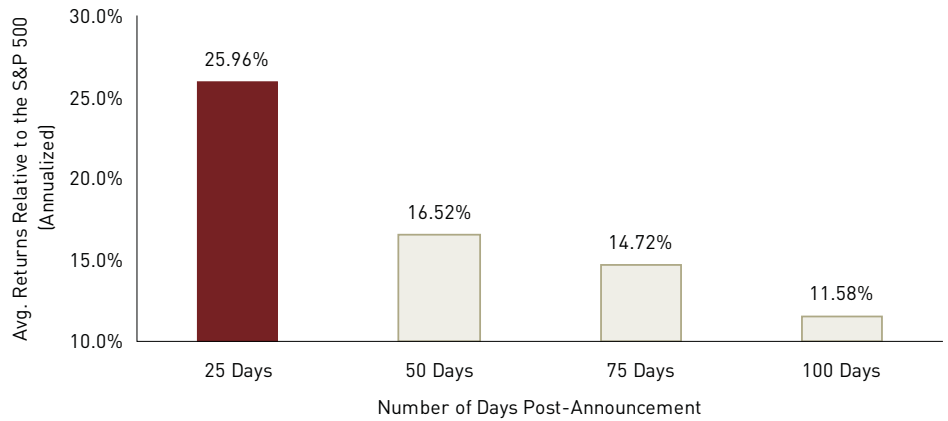
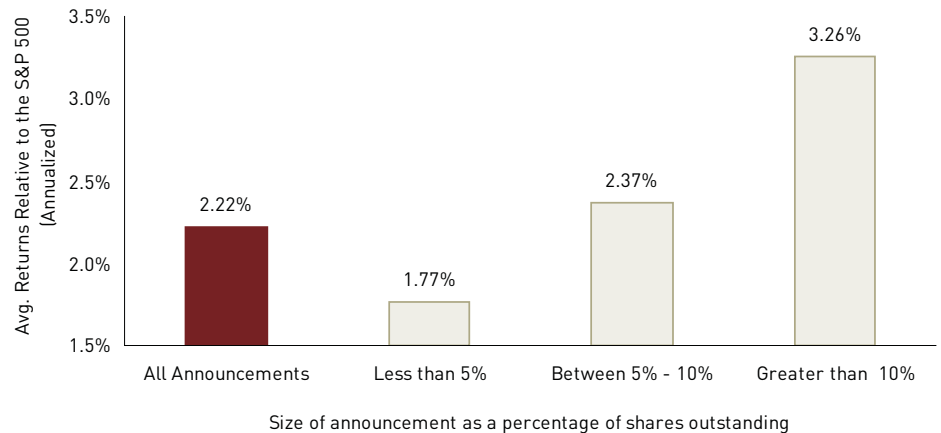


Chart 3  
**Buyback Announcement Performance**  
**Impact of Size of the Buyback**  
 12/31/95 - 4/30/10

10,070 transactions  
 Performance period is one-month forward from announcement.



### Investing in Buybacks

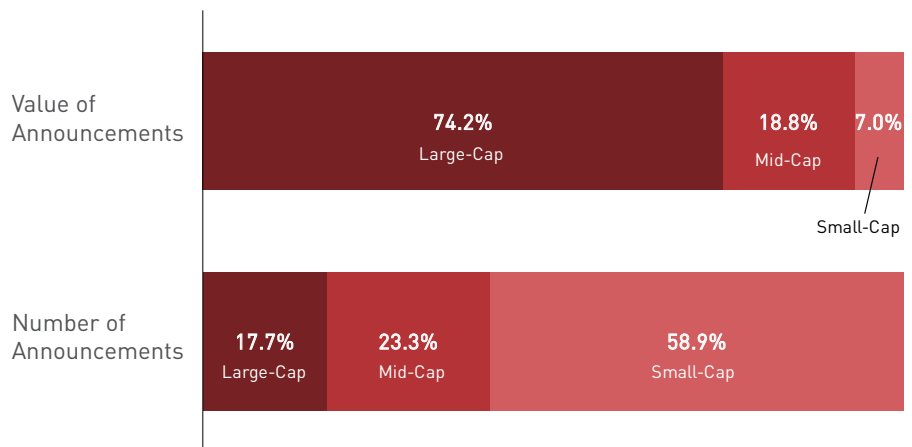
Despite the support from academic research and historical evidence, very few practical strategies exist that systematically exploit excess return potential of buyback announcements. This can be attributed to two reasons. First, exploiting the announced buyback strategy necessitates high turnover, which involves execution risk and higher trading costs.

Second, half of the buyback announcements are made by smaller capitalized companies (market-capitalization below \$1.4 billion) with low daily trading volume (**Chart 4**). Substantial purchases of these shares could impact the market price and significantly impact the performance advantage. Additionally, small-cap stocks with less trading liquidity can disproportionately suffer in periods of high market turbulence, creating volatility that can be unacceptable to investors.

Chart 4

#### Buyback Announcements Across Market Capitalizations

Market-Cap defined as:  
 Small-Cap: <\$2 billion  
 Mid-Cap: >\$2 billion <\$8 billion  
 Large-Cap: >\$8 billion



We believe that a focused, risk-managed portfolio with regular rebalancing is required to effectively capture the short-term excess returns while keeping the market impact to a minimum. Being a high-turnover strategy, this might be more suitable for investors who are not constrained by tax concerns. The ideal solution for the tax-sensitive investor will be an investment vehicle that shields him/her from the portfolio turnover.

## Section II

# The Buyback Strategy

## Key Considerations, Investment Process, Performance and Risk

### Key Considerations

1. Capturing excess returns associated with stock buyback announcements by focusing on the two performance drivers identified in our empirical tests (recency of an announcement and size of the repurchase).
2. Managing portfolio risks by introducing size and liquidity constraints to reduce the bias to small-cap companies.
3. Reconstituting and rebalancing frequently enough to optimize exposure to drivers of excess return (monthly).
4. Utilizing an adequate number of positions to mitigate market impact while maintaining focus on drivers of excess returns (30 stocks).

### Investment Process

*Portfolio strategy to exploit excess return potential from announced share buybacks*

#### **Determining the Universe**

Only stocks that are members of the Russell 3000 Index as of the most recent year end are considered for inclusion.

#### **Identify Portfolio Candidates**

Only the companies that have announced the intention to buy back their common stock in the open market within the previous 3 calendar months are considered. On constitution date, the company must have a market-capitalization of at least \$500 million and annual share trading volume of at least 15 million shares in the previous year.

#### **Setting the Portfolio Constituents**

The portfolio candidates are ranked using a 2-factor model based upon:

1. Days since announcement (announcement date to constitution date) – *Lower is better*
2. Significance of announcement (as a % of shares outstanding) – *Higher is better*

The average ranking of each factor determines the overall composite rank. The 30 stocks with the highest overall composite rank will form the portfolio. In the event of a tie (i.e., the 30th and 31st stock have the exact same composite rank), the stock with the highest market-capitalization will be selected. A list of constituents as of 5/28/2010 can be found in the Appendix (pg. 14).

#### **Rebalancing**

The portfolio is reconstituted monthly on the last trading business day.

## Performance

To gain risk and reward insights to the Buyback Strategy, we simulated the portfolio from 12/31/1997 through 4/30/2010. All criteria used for the initial construction of the portfolio, as well as all subsequent changes, were based on out-of-sample data as of the most recent month-end at the time the ratings were derived. The historical constituent data was carefully assembled to include eligible companies even if they no longer exist for various reasons including acquisition, delisting, merger, bankruptcy, etc. The simulation included dividends, but did not include the impact of transaction costs or management fees.

## Simulated Results

The following is a comparison of performance simulation of the Buyback Strategy to its benchmark, the S&P 500 Total Return Index (**Chart 5, Table 1**). During the period, the Buyback Strategy outperformed the benchmark in 9 out of the 12 years. The Buyback Strategy generated total returns of 391.2% vs. 51.4% for the S&P 500 (13.77% vs. 3.42% when annualized) and is up 10.1% in the first four months of 2010 vs. 7.1% for the S&P 500.

Chart 5

### Buyback Strategy Performance Hypothetical Growth of \$100,000

12/31/97 - 4/30/10

12/31/97 = \$100,000  
Assumes equally-weighted positions, includes dividends, monthly reconstitution and is gross of fees and transaction costs.

Source: EquityCompass Strategies, Bloomberg, FactSet

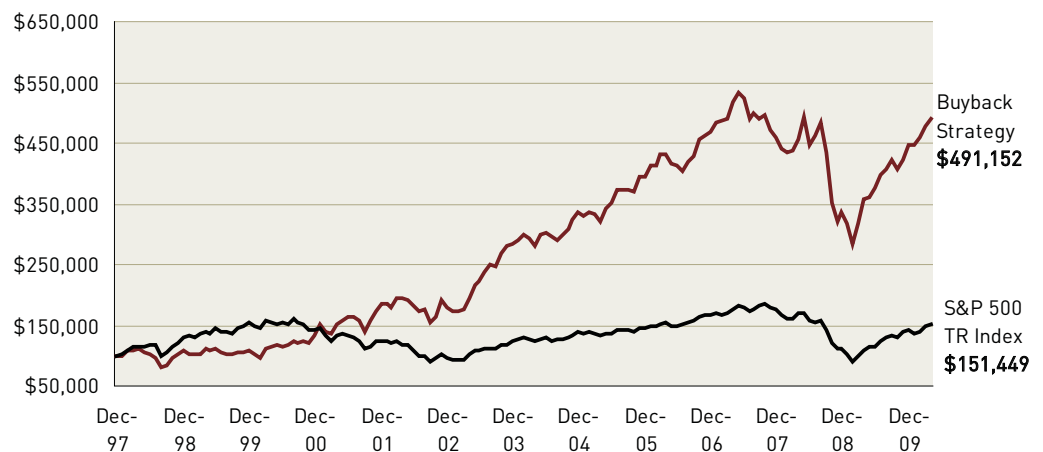


Table 1

**Buyback Strategy Performance**

12/31/97 - 4/30/10

Assumes equally-weighted positions, includes dividends, monthly reconstitution and is gross of fees and transaction costs. Periods larger than one-year are annualized.

	Buyback Strategy	S&P 500 TR Index
<b>Monthly Returns</b>		
Best	15.6%	9.8%
Worst	-19.3%	-16.8%
<b>Trailing 12-Month Returns</b>		
Best	71.9%	53.6%
Worst	-34.8%	-43.3%
<b>Trailing 24-Month Returns</b>		
Best	37.9%	22.6%
Worst	-24.5%	-28.1%
<b>Trailing 5-Year Returns</b>		
Best	28.3%	15.5%
Worst	-1.0%	-6.6%

**Total Returns - Cumulative**

	1-Month	3-Month	6-Month	YTD 2010	Inception
Buyback Strategy	2.6%	10.1%	20.9%	10.1%	391.2%
S&P 500 Total Return Index	1.6%	11.0%	15.7%	7.1%	51.4%

**Annualized Total Compounded Returns**

	1-Year	2-Year	3-Year	5-Year	Inception
Buyback Strategy	37.3%	3.6%	-1.8%	8.9%	13.8%
S&P 500 Total Return Index	38.8%	-5.2%	-5.0%	2.6%	3.4%

**Calendar Year Returns**

	1998	1999	2000	2001	2002	2003
Buyback Strategy	7.8%	1.8%	22.4%	37.8%	-3.2%	58.4%
S&P 500 Total Return Index	28.6%	21.0%	-9.1%	-11.9%	-22.1%	28.7%

	2004	2005	2006	2007	2008	2009
Buyback Strategy	18.3%	17.1%	19.4%	-2.2%	-26.9%	33.0%
S&P 500 Total Return Index	10.9%	4.9%	15.8%	5.5%	-37.0%	26.5%

The three calendar years the Buyback Strategy underperformed the S&P 500 were 1998, 1999, and 2007. The macro environment provides an important context. In the late 1990s, investors became almost singularly focused on growth and momentum investing, particularly in the Information Technology and Telecommunication sectors. Announced stock buybacks often occur after periods of price weakness when management believes their stock is mispriced. This value criteria was out-of-sync with investor preferences for growth and momentum. In 2007, a year of record announced buybacks (\$738 billion), corporate management's confidence in outlook was misplaced considering the ensuing financial crisis.

**Risk**

Despite the limit to 30 stock holdings (equally weighted) and no sector constraints, the portfolio's volatility, as measured by the standard deviation of returns, was 20.0% vs. 16.4% for the benchmark (**Table 2**). The Sharpe ratio during the same period was 0.57 for the Buyback Strategy and 0.06 for S&P 500. Of final note, the beta, or market exposure, in relation to the S&P 500 Index was 1.01, indicating that additional risks were not assumed to generate excess returns.

Table 2

**Buyback Strategy Risk Statistics**

12/31/97 - 4/30/10

(1) versus the S&amp;P 500

Assumes equally-weighted positions, includes dividends, monthly reconstitution and is gross of fees and transaction costs.

	Buyback Strategy	S&P 500 TR Index
Beta <sup>(1)</sup>	1.01	1.00
Standard Deviation	19.96%	16.35%
Sharpe	0.57	0.06
R Squared <sup>(1)</sup>	0.68	1.00

## Section III

# The Role of Buyback Portfolio in Asset Allocation

### How to Incorporate the Strategy and Our Conclusions

At EquityCompass, we are constantly trying to distinguish between *timeless* principles that successfully capture long-term market returns and *timely* opportunities that are created from a changing economy and investor preferences. The core of a long-term investment plan should be anchored in timeless principles, and complemented with flexible and adaptable satellite investments that seek to exploit opportunities in the dynamic marketplace. In addition to providing the potential for opportunistic gains, adaptable satellite strategies can also provide a diversification benefit as market activity favors certain investment themes or styles. Based on return and risk characteristics, we believe the Buyback Strategy outlined in this paper is appropriate as a satellite component that can provide the dual benefit of generating excess return and enhancing portfolio diversification within a broader portfolio.

A key concept when considering diversification is the correlation between assets. Assets that are less correlated to the stock market provide a more significant diversification benefit, as their price movement is less connected to that of the market. **Table 3** shows the correlation between several different asset classes and the S&P 500. Given the Buyback Strategy's low correlation with most major asset classes (0.68 to the S&P 500), it can be a valuable tool in building a diversified portfolio seeking above average risk adjusted returns.

### Conclusion

Our empirical study supports findings from more than two decades of academic research that the announcement of a share buyback provides a compelling signal for short-term post-announcement excess returns. The conditions that amplify short-term excess return potential are the recency to the announcement and the size of the share repurchase.

To develop a feasible portfolio strategy, we employed a rules-based approach that systematically captured recency and size to exploit the opportunity from announced share buybacks, and established constraints for the number of holdings and minimum trading volume to control for risk factors. A simulation using out-of-sample data produced superior risk/reward characteristics. The Buyback Strategy outperformed the S&P 500 in 9 out of the 12 years and by 10% on an annualized basis. Given the Buyback Strategy's low correlation to the general equity markets, it can be a valuable tool in building a diversified portfolio with above average returns.

Table 3

#### Buyback Strategy Correlation with Other Asset Classes

12/31/97 - 5/31/10

(1) Generic 1st 'GC' Future (Ticker: GC1 Comdy)

(2) Generic 1st 'CL' Future (Ticker: CL1 Comdy)

Monthly data points

S&P 500	0.68
Dow Jones SmallCap Value	0.66
Dow Jones SmallCap Growth	0.47
Dow Jones MidCap Value	0.69
Dow Jones MidCap Growth	0.54
Dow Jones LargeCap Value	0.59
Dow Jones LargeCap Growth	0.51
Bloomberg REIT Index	0.34
Gold Near Future <sup>(1)</sup>	0.001
Crude Oil Near Future <sup>(2)</sup>	0.004
Barclay's Aggregate Bond Index	0.002

## Appendix I

# Share Repurchase Announcement Event Study

### Our Data, Methodology and Special Observations

#### Data

The companies considered for the study were members of the Russell 3000 Index as of the most recent year end. As an example: all announcements recorded from January 1, 1996 through December 31, 1996 were based on companies that were Russell 3000 Index members as of December 31, 1995.

The transactions considered were limited to open-market share repurchase announcements of common stock, which represent the vast majority of all share repurchase types. There was no consideration given to an announcement in the event of an amendment after the company's initial announcement.

When corporations announce an intention to repurchase their shares in the open market they typically do so in one of three ways: (1) as a fixed percent of outstanding shares, (2) as a fixed dollar value, or (3) as a fixed share quantity. To determine the significance of the announcement, we either measure the intended percentage (if expressed as a fixed percent of shares) or derive it. If a fixed dollar value is announced we calculate the announced value as a percentage of the total market value of the stock as of the most recent month end. If a fixed share quantity is announced we calculate the announced quantity as a percentage of all outstanding shares as of the most recent month end. All share, market value, and pricing data were obtained from Factset's Compustat database on an as-of-as-reported basis. Share-repurchase announcements data were obtained from Bloomberg's corporate actions calendar service.

Our screening criteria identified 10,070 unique announcements. The impact of survivorship bias appears to be insignificant as only 128 (1.3%) of the announcements were removed from some of the calculations and analyses due to a lack of available historical data.

From a compositional perspective, small-cap companies accounted for 58.9% of the announcements, but comprised only 7% of the total implied dollar value of the share repurchases (**Tables 4 and 5**). On the announcement date, the average stock price was \$32.35 and the average buyback percentage was 8.28%, implying that while larger companies tend to make more significant announcements, an overwhelming majority (50% with market-caps below \$1.4B) were made by smaller companies.

Table 4

**Number of Buyback Announcements**

12/31/95 - 4/30/10

	Large-Cap	Mid-Cap	Small-Cap	All
1996	8	13	43	64
1997	87	124	372	583
1998	87	154	650	891
1999	105	162	651	918
2000	106	156	581	843
2001	84	113	331	528
2002	62	90	364	516
2003	79	130	374	583
2004	172	216	387	775
2005	194	219	425	838
2006	232	253	399	884
2007	326	286	546	1158
2008	136	235	487	858
2009	46	110	169	325
YTD 2010	38	60	80	178
Total	1,762	2,321	5,859	9,942
% of Total	17.7%	23.3%	58.9%	100%

Table 5

**Total Value of Buyback Announcements (\$ bil)**

12/31/95 - 4/30/10

	Large-Cap	Mid-Cap	Small-Cap	All
1996	\$41	\$5	\$3	\$49
1997	195	43	20	257
1998	231	49	32	312
1999	160	62	37	260
2000	175	49	28	252
2001	128	23	13	164
2002	122	27	18	168
2003	150	29	19	198
2004	306	43	21	371
2005	346	279	32	657
2006	545	84	28	657
2007	622	82	34	738
2008	242	59	28	329
2009	87	20	9	116
YTD 2010	94	17	4	115
Total	\$3,445	\$872	\$326	\$4,642
% of Total	74.2%	18.8%	7.0%	100%

## Methodology

For performance monitoring purposes, an index for each stock identified in the study was created using closing prices adjusted for splits and spin-offs. From 30 days prior to the announcement date through 100 days after, daily returns of the underlying security relative to that of the S&P 500 Index were calculated. The relative return events were then synchronized by days to/from their announcement date and were averaged in order to derive daily and cumulative relative returns.

## Event Study Special Observations

There are some interesting observations from this study, particularly the strong relative returns in the day preceding the announcement date. At first glance one might conclude that an information leakage of the company's intention to announce a repurchase may be occurring before it was publicly disseminated. Due to the nature of the data that we are using, we do not believe there is sufficient information to confirm or deny this notion. We used the closing price for the security on the announcement day as the base level for performance measurement. However, if an announcement was made before the market opened on a particular day, it is feasible that the first available opportunity to purchase the stock would have been on the open of that same day. Additionally, if the announcement was made after the market closed, then market participants would not be able to purchase the security until the market opened the following day.

We presume the anomalous performance one day prior to be heavily influenced by announcements made before the market open, and the subsequent market reaction created a positive price influence on the stocks throughout the day which resulted in positive performance from the previous day's closing price ( $T = -1D$ ) to the closing price on the announcement date ( $T = 0D$ ). To further examine the plausibility of pre-market open announcements as an explanation of what appears to be information leakage, we also studied the performances of the events in the day 2 days preceding the announcement and did not find any indication of positive price drift.

Expanding on the notion that perceived undervaluation of the firms' shares is a possible motive for making a share repurchase announcement, we confirm that these stocks tend to (on average) underperform the market leading up to a share repurchase announcement and subsequently outperform.

Table 6

**Buyback Strategy Model Portfolio**

As of 5/28/10

(1) As a percentage of shares outstanding

*Historical constituents in the study are available upon request.*

Symbol	Company Name	Buyback Announcement Date	Size of Buyback <sup>(1)</sup>	Mkt.-Cap (Mil)
EAT	Brinker International Inc	3/26/10	13.7%	\$1,823
VRX	Valeant Pharmaceuticals International	3/30/10	13.7%	\$3,640
HAS	Hasbro Inc	4/19/10	11.1%	\$5,637
DOX	Amdocs Ltd	4/22/10	11.9%	\$5,862
JBHT	JB Hunt Transport Services Inc	4/28/10	11.4%	\$4,397
K	Kellogg Co	4/29/10	12.3%	\$20,303
DUF	Duff & Phelps Corp	4/29/10	8.9%	\$561
TIBX	TIBCO Software Inc	5/3/10	15.9%	\$1,887
OCR	Omnicare Inc	5/3/10	6.6%	\$3,018
BMJ	Bristol-Myers Squibb Co	5/4/10	7.5%	\$39,921
BMC	BMC Software Inc	5/5/10	14.9%	\$6,732
DVN	Devon Energy Corp	5/5/10	12.3%	\$28,528
UFS	Domtar Corp	5/5/10	5.7%	\$2,637
GENZ	Genzyme Corp	5/6/10	15.4%	\$12,965
RLI	RLI Corp	5/6/10	8.6%	\$1,163
AWH	Allied World Assurance Co Holdings Ltd	5/7/10	22.1%	\$2,266
SGMS	Scientific Games Corp	5/10/10	20.8%	\$962
HS	Healthspring Inc	5/10/10	9.9%	\$1,006
LM	Legg Mason Inc	5/11/10	20.7%	\$4,831
GILD	Gilead Sciences Inc	5/11/10	15.4%	\$32,394
AMP	Ameriprise Financial Inc	5/11/10	14.6%	\$10,242
WRC	Warnaco Group Inc/The	5/12/10	11.3%	\$1,891
MHS	Medco Health Solutions Inc	5/13/10	11.4%	\$26,363
CA	CA Inc	5/13/10	4.8%	\$10,317
FRX	Forest Laboratories Inc	5/18/10	16.5%	\$7,826
FSR	Flagstone Reinsurance Holdings SA	5/18/10	5.3%	\$946
UNM	Unum Group	5/20/10	6.5%	\$7,687
AN	AutoNation Inc	5/26/10	7.3%	\$3,402
HRL	Hormel Foods Corp	5/26/10	3.7%	\$5,313
IM	Ingram Micro Inc	5/27/10	3.6%	\$2,805

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## Disclosures

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### Additional Information Available Upon Request

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EquityCompass Strategies is the research and investment advisory unit of Choice Financial Partners, a wholly owned subsidiary and affiliated SEC registered investment adviser of Stifel Financial Corp. (NYSE:SF). EquityCompass professionals have been providing investment research, analysis, and advice for more than 10 years. The firm adheres to a disciplined and rules-based investment process, offering a broad range of benchmark-relative, absolute-return, and risk-management portfolio strategies to individuals, financial intermediaries, and institutional clients. Additionally, EquityCompass has partnered with institutional clients in the U.S. and Europe to develop investment solutions tailored to specific objectives.

### **Resources of A Large Firm, Focus of A Specialist**

As a Stifel Financial company, EquityCompass is able to leverage the resources and infrastructure of its affiliate, Stifel Nicolaus, one of the leading full-service financial services firms in the U.S., for risk management oversight and a global infrastructure for trading, record keeping, reporting, and risk control, while maintaining the autonomy and service of a pure investment firm.

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