Beating the market with buybacks

Six months ago, we invested in a portfolio of 24 stocks that we expected to beat the market using methodology we outlined in 'The nature and persistence of buyback anomalies' in the Review of Financial Studies (2008). The list of the stocks was posted in April 2009 on the INSEAD Knowledge website. Our methodology essentially involves buying shares of US-listed companies that announce open market share buyback programmes, and where it appears that the buyback is driven by the fact that the management believes its shares are undervalued.

During the last six months, the equally weighted portfolio earned a total return of 71.3 per cent, which compares favourably with the return on other indices (S&P 500: 32.5 per cent, NASDAQ: 38.8 per cent, Russell 2000: 42.9 per cent). The comparison with the Russell 2000 seems the most relevant, as :

- The daily volatility of the fund during the six-month period (2 per cent) is comparable to the volatility of the Russell 2000 (1.86 per cent)
- Most of our stocks are small firms and are part of the Russell 2000 index
- The beta of the fund measured relative to the Russell 2000 index is 1.00.

The beta of the portfolio is 1.3 relative to the S&P 500 index, which is not significantly different from the predicted beta six months ago (1.25). Hence, considering that the risk-free rate over the six-month period is essentially zero, we would expect the fund to outperform the S&P 500 by (0.3 * 32.5 per cent) or 9.75 per cent, if we assume that asset prices are driven by the Capital Asset Pricing Model. Hence, after adjusting for this higher risk bias, the *alpha* relative to the S&P 500 is 71.3 - 32.5- 9.75 = 29 per cent, roughly the same as the performance relative to the Russell 2000 (28.4 per cent).

The outperformance of the portfolio is stable over time: the portfolio beat all three market indices each month (April through September) except in July when the Russell 2000 beat the portfolio by 1.5 per cent. Table 1, column 3 (see below) shows the returns on all the stocks starting April 1, 2009 and ending September 30, 2009. With an average return of 71.3 per cent, 17 stocks (or 71 per cent) beat the S&P 500 and 15 (or 63 per cent) beat the Russell 2000, so the performance is not a result of a few outliers.

Table 1 : Returns, 2nd quarter earnings surprises and net insider buying : April 1-September 30 2009

1	2	3	4	5	6	7	8	9	10	11
Name	Ticker	Return	Beta	Forecast	Realised	Difference	N° analysts	Insider buys	Insider sells	net/total holdings
Arris	ARRS	76.5	1.44	0.22	0.27	0.05	11	0	20	-4.80%
Choice Hotels	CHH	22.7	0.68	0.42	0.44	0.02	9	0	10	-1.50%
Capital Source	CSE	258.7	1.98	-0.19	-0.82	-0.63	12	1	2	-18.10%
Exponent	EXPO	11.2	0.78	0.39	0.4	0.01	4	0	16	-20.10%
Female Health Co	FHCO	36.8	0.97	na	na	na	0	0	12	-3%
Comfort Systems	FIX	12.7	1.26	0.25	0.27	0.02	6	1	1	-11.20%
Graham	GHM	74	2.09	0.15	0.35	0.2	4	1	3	-5.40%
I-Flow	IFLO	212	1.97	0.03	0.04	0.01	2	0	0	0
Insteel Industries	IIIN	72.7	0.9	-0.05	0	0.05	1	0	2	-0.60%
Mult-Fineline Electronics	MFLX	70.5	0.07	0.31	0.37	0.06	2	0	19	-2.40%
Miller Industries	MLR	71.9	0.54	0.08	0.12	0.04	1	0	0	0
Matrix Service	MTRX	32.2	2.02	0.26	0.26	0	3	0	0	0
Orbital Science	ORB	25.9	0.93	0.14	0.15	0.01	7	0	3	-7.30%
Osteotech	OSTE	27.5	0.7	-0.01	-0.07	-0.06	1	0	0	0
Options Express	OXPS	51.6	1.2	0.26	0.28	0.02	9	0	0	0
Prepaid Legal Services	PPD	75.2	0.6	na	na	na	0	0	2	-0.20%
Perficient	PRFT	50.9	2.25	0.08	0.08	0	4	0	6	-11.60%
Reliance Electronincs	RELL	52.7	1.36	0.11	-0.59	-0.7	1	0	0	0.00%
Stepan	SCL	122.2	1.19	1.07	2.09	1.02	1	0	31	-6.20%
Seachange	SEAC	31.1	1.09	0.06	-0.01	-0.07	3	0	2	-0.50%
	SGI	65.3	0.99	-0.33	-0.03	0.3	1	2	0	0.30%
Teledyne	TDY	34.9	1.74	0.67	0.69	0.02	5	2	0	11.84%
Teletec	TTEC	56.7	1.5	0.2	0.32	0.12	9	1	5	-0.60%
Walter Industries	WLT	164	1.51	-0.05	0.21	0.26	12	1	0	-0.60%
Portfolio		71.2								
S&P 500		32.4								
Nasdaq		38.9								
Russell 2000		42.9								

1) Name
2) Ticker symbol
3) Return from April 1 until September 30 2009
4) Beta
5) EPS forecast 2nd quarter 2009
6) EPS reported
7) EPS surprise
8) Number of analysts
9) Number of insider buy transactions from April 1 until September 3à 2009
10) Number of insider sales
11) Net insider buying (selling) as a percentage of insider holdings

Outperformance and analyst bias

In our research we found that the outperformance is systematically a result of analyst mistakes: before the buyback, analysts were too optimistic, but afterwards became too pessimistic. Excessive pessimism may well be the rule rather than the exception in today's crisis environment. In order to check whether this can explain some of our outperformance, we collected data on analysts' forecasts from Yahoo finance for the second quarter of 2009.

Columns 5 through 7 show, respectively, the second quarter EPS forecast, realisation and forecast errors for all companies except two who have no analysts' coverage: Female Health Corporation (FHCO) and Prepaid Legal Services (PPD). Of the 22 cases on which we have forecasts, only four firms came in with earnings numbers below expectations. Two firms met expectations, but 16 out of the 22 firms (73 per cent) for which we have forecasts beat analyst expectations. However, according to Thomson Reuters data, this is exactly the number of all firms in the S&P 500 that beat expectations in the second quarter, well above the 61 per cent average for a typical quarter. Hence, while the second quarter was full of pleasant surprises, it cannot by itself explain the outperformance of the buyback stocks or the buyback decision. Rather, the buyback seems to be motivated by a belief that stock prices don't reflect long-term fundamentals, together with the fact that the few firms that buy back stock are not financially distressed (i.e. they have excess cash).

We have not sold any companies because none of our companies has given a clear signal that its stock is no longer undervalued. One such signal would be an equity issue. As far as we know, no firm in our sample has issued stock during the last month, except Capital Source Corporation. We did not sell because the company at the same time issued debt as well. Moreover Capital Source is a bank and banks have to issue equity to meet capital requirements, so it is more difficult to argue that banks are issuing stocks because they are overvalued.

Insider trading versus buybacks

Often we are asked whether net insider buying would not also be a good signal of undervaluation. The problem with the use of insider trading data as a signal is threefold. First, insider trading on the basis of superior information is illegal, while buying back stock is not. Second, many insiders are selling according to pre-specified sale plans. Finally, insider sales are often driven by insider-specific consumption reasons or other events unrelated to information. Columns 9, 10 and 11 show the number of insider purchases, sales and net purchases (sales) as a percentage of total insider holdings during our six-month investment period. One striking conclusion is that net insider buying has been negative or zero for all companies except Teledyne. In general, the percentage sold has been small. In the few cases where insiders sold more than 10 per cent of their holdings the sales were made by one large investor.

Hence it is difficult to arrive at any conclusion other than insiders don't seem to share the enthusiasm of their companies in buying the shares of their company. One explanation could be that as insider ownership represents a significant fraction of shares outstanding, a repurchase is somewhat a substitute for insider buying. This, combined with liquidity constraints and excessive risk aversion, may well explain the lack of net insider buying activity.

Still a cold period

Six months ago we noted that 2009 was one of the coldest buyback years in history. As The Economist points out in their October 3 issue, "even though shares for many firms still look relatively cheap, companies are opting to hold on to their cash rather than hand it back to shareholders. The return of share repurchases on a grand scale will be giving a sign that defrosting is giving way to overheating." There seems to be little concern for overheating today: during the last six months theonlineinvestor.com only reported 100 buyback announcements, which is less than one per trading day. We are still experiencing one of the coldest buyback periods in history.

Urs Peyer is an Associate Professor of Finance at INSEAD and Theo Vermaelen is Professor of Finance at the school.