

## Quantitative Focus

GLOBAL

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# Academic Research Digest

## June Update

- **What's New in Academic Research** — In this issue of Academic Research Digest, we highlight three articles on stock selection strategies, one article in style risk, and one article on industry/style rotation. We also cite five additional working papers that we believe are of interest.
- **Avoid Stocks that Shock** — Stock selection based on large stock price increases/decreases.
- **Volatility, Retail investors and Stock Returns** — Short ideas based on retail investor trading.
- **Spot the Star Analyst** — Identifying informative recommendation changes.
- **Macro Surprises and Portfolio Returns** — Size- and book-to-market portfolios reactions to specific macro news
- **Rotation Strategies Involving Industry, Size, and Book-to-Market Sorted Portfolios** — Revisiting predictability of aggregate market components.

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See Appendix A-1 for Analyst Certification and important disclosures.

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## June ARD - Summary

### Avoid Stocks that Shock

The first paper of this issue is co-authored by Hai Lu, Kevin Q. Wang, and Xiaolu Wang. It deals with the impact of large short-term stock price shocks on subsequent price returns. The authors conclude that large shocks, whether positive or negative, are followed by negative long-lasting abnormal returns. The long memory effect is shown to be independent of systematic risk. A number of other potential explanations, including investor disagreement, idiosyncratic volatility, market frictions, microstructure effects, speculative preferences in retail trading, and news events are also generally ruled out.

### Volatility, Retail Investors and Stock Returns

Bing Han and Alok Kumar in the second paper of this issue, study the pricing (and clientele characteristics) of stocks that are heavily traded by retail investors. The authors show that retail investors prefer to hold and actively trade high volatility stocks, while institutions under-weight these types of stocks. The authors show that stocks with high levels of retail trading significantly under-perform low retail trading stocks. In addition they show that when trading is dominated by retail investors the average stock return is more negatively related to idiosyncratic volatility.

### Spot the Star Analyst

The third paper in this issue, co-authored by Roger K. Loh and René M. Stulz, explores the returns associated with specific analyst recommendation changes. Loh and Stulz conclude that relatively few analyst recommendation changes are influential – that is, only approximately 10%, in the sense that only these stocks have significant stock-price reactions. The probability of an influential recommendation is higher for particular analyst/recommendations characteristics and for certain firm attributes. Finally, influential recommendations are associated with increases in stock volatility and large absolute changes in consensus earnings forecasts.

### Macro Surprises and Portfolio Returns

In the fourth paper Tolga Cenesizoglu investigates the reactions of portfolios sorted on size and book-to-market ratios to news about a wide range of macroeconomic variables. The author identifies Employees on Nonfarm Payrolls, Core CPI, and the Federal Funds Target Rate as important macroeconomic variables that affect stock returns. Moreover the author is also able to identify several other important variables such as Hourly Earnings and Trade Balance. The results indicate that the reaction of large-growth stocks to news about employment is significantly stronger than that of small-value stocks.

### Rotation Strategies Involving Industry, Size, and Book-to-Market Sorted Portfolios

The last paper by Aiguo Kong, David Rapach, Jack Strauss, Jun Tu, and Guofu Zhou undertakes an extensive analysis of return predictability for three sets of component portfolios sorted on industry, size, and book-to-market. The authors show that returns are substantially more predictable for (i) particular industries, (ii) small-cap in contrast to large-cap stocks; and (iii) high as opposed to low book-to-value stocks. Moreover the authors show that component predictability has important asset-allocation implications in the use of a component-rotation investment strategy based on component predictability.

## Articles

### 1. The Long Memory in Stock Price Shocks

Hai Lu, Kevin Q. Wang, and Xiaolu Wang<sup>1</sup>, February 2009

A copy of this article is available on the Social Science Research Network website – [www.ssrn.com](http://www.ssrn.com)

#### Key Points:

- Short- and long-term shocks have asymmetric effects on stock prices;
- Large shocks - positive or negative - are followed by negative abnormal returns;
- Alphas can be as low as -8.28% annually for stocks experiencing large negative shocks.

**Do large short-term stock price changes have any predictive power for subsequent returns?**

In this research an investigation is carried out as to whether large short-term stock price changes have any predictive power for subsequent price returns. Lu, Wang and Wang show that indeed there is long memory in large stock price shocks with asymmetric effects. Large shocks, whether positive or negative, are followed by negative long-lasting abnormal returns. The authors show that the long memory effect is not caused by systematic risk, moreover when they risk-adjust their results the long memory effects tend to be even stronger. A number of other potential explanations, including investor disagreement, idiosyncratic volatility, market frictions, microstructure effects, speculative preferences in retail trading, and news events are also generally ruled out.

**The shock is defined as the maximum and minimum three-day abnormal stock returns in a month**

Lu, Wang and Wang utilise data for all stocks traded on NYSE, AMEX, and Nasdaq for the period July 1963 to December 2006. While the main source for the data is CRSP, additional sources include NYSE TAQ and ISSM (for trade size), IBES (analysts' forecasts), Standard and Poor's Compustat (earnings announcements), First Call (analysts revision and management forecasts), BestCalls.com (conference calls), Thompson Financial (insider trading), and SDC (M&A and SEO). As a proxy for large positive and negative price shocks, the authors use the maximum and minimum three-day abnormal stock returns in a month. The three-day window of either maximum or minimum abnormal return could be located at any point in the ranking month, which, for instance, could be either at the beginning or at the end of ranking month.

**Stocks having large price shocks - positive or negative – are followed by negative abnormal returns over the next year**

In the empirical part of the paper the authors sort stocks with respect to either the minimum or the maximum three-day abnormal return. When the ranking variable is the minimum three-day abnormal return, decile 1 (10) consists of stocks with large (small) abnormal price falls. In contrast, when the sample is sorted by the maximum three-day abnormal return, decile 1 (10) consists of stocks with small (large) positive price shocks. The negative alpha – with respect to a three factor Fama French model - of decile 1 (large negative shocks) is in annual term equal to -8.28% while the decile 10 portfolio, which contains stocks with large positive shocks, has an annual alpha of -4.80%. The month-by-month results indicate that alpha is significant for every of the 12 months in the t+1 to t+12 range examined (when t refers to the month the sorting takes place).

<sup>1</sup> Hai Lu, Kevin Q. Wang, and Xiaolu Wang are at University of Toronto.

**No explanation other than the shock is supported by the data**

The rest of the paper examines a number of potential explanations, including investor disagreement, idiosyncratic volatility, market frictions, microstructure effects, speculative preferences in retail trading, and news events. The analysis does not suggest that any of these effects can account for the long memory in large stock price shocks. The authors conclude that large shocks have strong predictive ability over subsequent stock returns although they have not been able to identify the source of the predictability.

**GQR comments and investment implications**

This paper advocates the size of short-term stock price changes as a predictive signal for negative subsequent returns. Surprisingly the results are no different for positive/negative shocks. And although the authors do provide an explanation for this anomaly, they show that their results are robust to a number of controls. Firms exhibiting large shocks are those experiencing the highest returns in the previous months, are small in size, and have high idiosyncratic volatility. While we believe it is necessary to understand the fundamentals that drive this anomaly, it would also be interesting to investigate whether the long memory in price shocks can be combined with other factors, such as momentum to enhance profitability.

## 2. Speculation, Realisation Utility, and Volatility-Induced Retail Habitat

Bing Han and Alok Kumar<sup>2</sup>, May 2009

A copy of this article is available on the Social Science Research Network website – [www.ssrn.com](http://www.ssrn.com)

### Key Points:

- High volatility stocks are the preferred “habitat” of retail investors;
- Stocks with high retail trading earn low average returns;
- The level of retail trading is an important determinant of the idiosyncratic volatility-return relations.

**Stocks with high levels of retail trading significantly underperform low retail trading stocks**

This paper studies the clientele characteristics and most importantly from the asset management perspective, the pricing of stocks that are heavily traded by retail investors. Han and Kumar show that stocks with high levels of retail trading significantly underperform low retail trading stocks. In addition the authors show that when trading is dominated by retail investors the average stock return is more negatively related to idiosyncratic volatility.

**The factor: “retail trading proportion” (RTP), the ratio of buy- and sell-initiated small trades volume over the total stock trading volume**

Data for this study are obtained from various sources. For example, stock-level measures of retail trading are from the Institute for the Study of Security Markets and the Trade and Quote databases. The study covers the period 1983 to 2000. The authors define retail trades as those trades not exceeding US\$5,000 in size. Additional data are obtained from CRSP COMPUSTAT and Thomson Reuters. Han and Kumar construct a measure of retail trading intensity, i.e. the stock’s “retail trading proportion” (RTP), as the ratio of the total month buy- and sell-initiated small trades (trade size below \$5,000) dollar volume and the total stock trading dollar volume in the same month.

**High volatility stocks are the preferred “habitat” of retail investors**

Han and Kumar’s first set of tests explores retail behavior and the stock preferences of retail investors. This analysis reveals that high volatility stocks are the preferred habitat of retail investors. Then they focus on three hypotheses. First, the hypothesis that high RTP stocks, influenced by risk-seeking and trading by speculative investors who are willing to pay a premium, earn low average returns. Second, that the volatility-return relation within and outside of the volatility-induced retail habitat are different, and in particular it is stronger (more negative) within the volatility-induced retail habitat. And third, that the results in the previous hypotheses are stronger for stocks with speculative characteristics and high arbitrage costs.

**The lowest RTP quintile outperforms the highest RTP quintile by about 5% per month**

The analysis with respect to the first hypothesis is based on RTP quintile portfolios that are formed at the end of each month. The results indicate a strong negative RTP-return relation. The lowest RTP quintile earns a value-weighted mean monthly return of 1.765%, while the highest RTP quintile earns a large negative monthly return of -3.231%. The results are similar for equal-weighted as well as when performance is measured through alphas (relative to the Fama-French three factors plus a momentum factor model).

<sup>2</sup> Bing Han and Alok Kumar are at The University of Texas at Austin.

**The level of retail trading is an important determinant of the idiosyncratic volatility-return relation**

When the authors test for the impact of RTP and (idiosyncratic) volatility through double-sorted portfolios, the increase in the spread return is substantial. In particular, the high RTP stocks on average underperform low RTP stocks by 2.80% per month in the lowest volatility quintile, but by 7.64% in the highest volatility quintile. These results suggest that the level of retail trading is an important determinant of the idiosyncratic volatility-return relation. Additional evidence suggests that the volatility-return relation is stronger among stocks with speculative characteristics (e.g. high idiosyncratic skewness stocks).

In summary, this paper studies the pricing (and clientele characteristics) of stocks that are heavily traded by retail investors. The authors show that retail investors prefer to hold and actively trade high volatility stocks, while institutions underweight them. High RTP stocks earn low average returns; the relation between volatility and average returns is more negative among high RTP stocks; and these results are stronger among more speculative stocks.

**GQR comments and investment implications**

Recent studies mainly in the behavioural finance literature have shown that certain types of investors might be naturally drawn toward stocks with high volatility. The authors study the information content of retail investors' trades and conclude that one should avoid (or even short) stocks that are heavily traded by retail investors. The authors show that stocks with high levels of retail trading significantly underperform low retail trading stocks. The alpha of a portfolio that buys stocks with low retail trading and sells stocks with high retail trading earns an abnormal return of 4.585% monthly (adjusted for market, size, value, and momentum). Moreover the resulting strategy is almost market neutral, i.e. the market exposure is statistically insignificant. We believe this is a substantial alpha but at the same time we also think that the greatest challenges for setting up a retail trading factor signal would be data-related.

### 3. When are Analyst Recommendation Changes Influential?

Roger K. Loh and René M. Stulz<sup>3</sup>, May 2009

A copy of this article is available on the Social Science Research Network website – [www.ssrn.com](http://www.ssrn.com)

#### Key Points:

- Not all stock recommendation changes are equal;
- Influential recommendations can be identified based on certain recommendation/analyst characteristics;
- Firm characteristics could create conditions that make it more likely that analysts could make significant recommendation changes.

**Only about 10% of analyst recommendation changes are influential**

This study explores the extent to which a purer analyst recommendation signal can be constructed by minimising the impact of confounding news. Loh and Stulz conclude that relatively few analyst recommendation changes are influential, i.e. only approximately 10%, in the sense that they only have significant stock-price reactions. They also show that influential recommendations are associated with analysts sharing some common characteristics (e.g. large broker, well-rated analyst) as well as with firms with particular characteristics.

**Mean and median CARs following recommendation changes are quite dispersed**

The study period extends from 1993 to 2006. Data are sourced from IBES and contain analyst ratings. The authors focus on rating changes as opposed to levels. The analysis is undertaken at the analyst level - not at the broker level. For each recommendation change, the authors compute the three-day cumulative buy-and-hold abnormal return. Exploratory analysis indicates that the mean CAR for a one-point upgrade is 2.687% and that for a two point upgrade is 2.783% (the respective medians are 1.530% and 1.694%). The means and medians that refer to downgrades tell a similar story, i.e. means are far from medians. This picture remains unchanged even after firm news events as well as outlier recommendations are removed.

**Influential recommendations are those associated with extreme CARs**

With that shown, Loh and Stulz aim to identify the characteristics of influential recommendation changes. First they classify a recommendation change as “influential” if the CAR is greater than 1.96 times the standard deviation of the firm’s prior three month idiosyncratic return. They alternatively classify a recommendation change as influential when its normalised CAR, i.e. CAR divided by idiosyncratic volatility, is more than 1.96 standard deviations better than the mean prior 12-month normalized CAR of the similar rating change category across all firms. With these definitions, 10.0% (3.2%) of all recommendation changes are defined as influential using the first (second) definition.

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<sup>3</sup> Roger K. Loh is at Singapore Management University and René M. Stulz is at Ohio State University, NBER, and ECGI.

**Analyst as well as firm characteristics are associated with influential recommendation changes**

The next step of the empirical analysis involves comparison of the average characteristics of influential recommendation changes versus non-influential changes for each rating change category. The authors also consider firm characteristics because firm characteristics could create conditions that make it more likely that analysts could make significant recommendation changes. Influential recommendations are more likely to be from analysts with larger leader-follower ratios, large brokers, away-from-consensus revisions, issued contemporaneously with earnings forecasts, and more experienced analysts.

**A probit model can determine the probability that a recommendation change will be influential**

With respect to firm characteristics, growth firms, small firms, high institutional ownership firms, high prior turnover firms and low prior number of earnings forecasts firms are more likely to be associated with influential recommendations. Further more the authors present evidence that is consistent with a paradigm shift for firms that experience influential recommendation changes: if a firm has an influential recommendation change, its stock's turnover increases, its volatility increases and analysts make more and bigger forecast changes. Finally, Loh and Stulz also combine their inferences in a probit model that aims to predict ex ante influential rating changes.

Collectively, the authors show that stock recommendation changes are not all equal. More than one-third of the stock-price reactions to analyst recommendation changes have the wrong sign and only approximately 10% have significant stock-price reactions. The probability of an influential recommendation is higher for particular analyst/recommendations characteristics and for certain firm attributes. Finally, influential recommendations are associated with increases in stock volatility and large absolute changes in consensus earnings forecasts.

**GQR comments and investment implications**

Research investigating the analyst recommendation signal typically focuses on average effects in large samples. The authors of this paper challenge the "averaging" approach through analysis that tries to identify star analysts. The findings are striking: one of the key takeaways being that only 10% of all recommendation changes can be identified as influential. There are two interesting practical aspects of this paper in our view. First, the analysis that tries to isolate the characteristics of influential recommendation changes, and second, the attempt to create a predictive model for influential changes. Although the latter idea is not pursued to a large extent, we believe it is perhaps the most interesting idea in this paper from the portfolio manager perspective. Extending these ideas to earnings forecasts revisions may provide stronger results given our prior that earnings revision is a stronger signal compared to recommendation changes.

## 4. Size, Book-to-Market Ratio and Macroeconomic News

Tolga Cenesizoglu<sup>4</sup>, April 2009

A copy of this article is available on the Social Science Research Network website – [www.ssrn.com](http://www.ssrn.com)

### Key Points:

- Employment and Federal Funds Target Rate are the most important macroeconomic variable across size and book-to-market ratio portfolios;
- The reaction of large-growth stocks to news about employment is significantly stronger than that of small-value stocks;
- Size captures the sensitivity of a firm's discount rate to changing business conditions while the book-to-market ratio captures the sensitivity of its future expected cash flows.

Macroeconomic news has variable price impact across the size- and book-to-market dimensions

The aim of this paper is to investigate the reactions of portfolios sorted on size and book-to-market ratios to news about a wide range of macroeconomic variables. Cenesizoglu argues that when the aggregate market portfolio does not react significantly to news about a specific macroeconomic variable, it does not necessarily imply the unimportance of that variable for stock returns. The author motivates this observation with an example, where one might mistakenly conclude that news about export price index and consumer credit are not important variables for stock returns from the insignificant reaction of the value-weighted index – which is, by definition, skewed towards larger stocks – but, in reality, these variables seem to significantly affect returns on small- and mid-cap stocks, respectively.

Macroeconomic news surprises

Cenesizoglu uses data for the period July 1963 and December 2004. The dataset includes Ken French's return data on the ten value-weighted size (market equity) sorted, the ten value-weighted book-to-market (book equity/market equity) ratio sorted and the ten value-weighted industry portfolios. Data on real-time macroeconomic variables as first reported and the market's expectations about these macroeconomic variables are sourced from the Money Market Services International (MMS) data. This is a weekly survey comprising forecasts for the upcoming week's announcements.

Macroeconomic data are grouped into 6 subgroups: Real Activity, consumption, Investment, Net Exports, Prices, and Forward-Looking. A "surprise" measure is used to study the impact of macroeconomic news, i.e. the difference between the actual released announcement and the consensus median market forecast from the MMS divided by the sample standard deviation of this difference.

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<sup>4</sup> Tolga Cenesizoglu is at HEC Montreal.

**Large stocks are more sensitive to employment data than small stocks**

The author shows that large stocks react more strongly to news about Employees on Nonfarm Payrolls, Industrial Production, Trade Balance, Housing Starts and the Federal Funds Target Rate than small stocks. A one standard deviation positive surprise in the employment numbers decreases the return on large stocks by 21 basis points. The effect is only 5 basis points and insignificant for the return on small stocks. The interpretation of the reaction to other variables is similar. A one standard deviation positive surprise in Housing Starts significantly increases the return on large stocks by 11 basis points, whereas the small stocks do not react to news about this variable<sup>5</sup>. A 25 basis point unexpected raise in the target rate significantly decreases the one-day return of large stocks by 799 basis points, whereas it leads to a one-day return on small stocks of -28 basis points. The difference in the reaction of small and large stocks is 51 basis points and is significant.

**Large-value stocks react stronger to news about the target rate than small-value stocks.**

The ten BM-sorted portfolios react significantly to news about Employees on Nonfarm Payrolls, Hourly Earnings, Trade Balance, Core CPI and the Federal Funds Target Rate. In particular, a one standard deviation positive surprise about Employees on Nonfarm Payrolls, on average, decreases the one-day return on growth stocks by 22 basis points and value stocks by only 4 basis points. The reaction of growth firms to other news variables is not significantly different than that of value firms. In terms of the 25 size and BM cross-sorted portfolios, reactions to news about Employees on Nonfarm Payrolls and the Federal Funds Target Rate (the most important factors) results in large-growth stocks reacting stronger to employment news than small-value stocks. Further, large stocks continue to react stronger to news about the target rate than small stocks and the difference in the reactions is strongest between large-value stocks and small-value stocks.

**The book-to-market ratio is related to the sensitivity of a firm's cash flows to changing business conditions**

Additional tests include investigations of the reaction of a firm's fundamentals to macroeconomic news. The author's results suggest that the book-to-market ratio of a firm is related to the sensitivity of its cash flows to changing business conditions whereas the size of a firm is related to the sensitivity of the discount rate used by investors. All in all the paper identifies Employees on Nonfarm Payrolls, Core CPI, and the Federal Funds Target Rate as important macroeconomic variables that affect stock returns. Moreover the author is able to also identify several other important variables such as Hourly Earnings and Trade Balance.

**The size of a firm is related to the sensitivity of the discount rate used by investors**

<sup>5</sup> Hence, a portfolio long in large stocks and short in small stocks reacts significantly to news about Housing Starts by 11 basis points.

### GQR comments and investment implications

Asymmetry in style returns is a topic that has been investigated by several authors. We discussed one recent paper in our October 2008 issue of ARD (see: "Value versus Growth: Time-Varying Expected Stock Returns") which looked at the impact of interest rate shocks and the default spread on the returns of value and growth firms. A similar study<sup>6</sup> has looked at the impact of these variables on portfolios sorted on firm size. This paper takes a more comprehensive approach by looking at a battery of macroeconomic news, and in particular at the impact of surprises on this news on the return of size- and book-to-market- sorted portfolios. It shows that employment, inflation, and Federal Funds Target Rate data are the macroeconomic variables that most affect stock returns. These predictions have important investment implications for managers engaging in style rotation strategies. The study also provides a useful framework for the study of the impact of macroeconomic news surprises on the return of other styles. This is of great interest in particular in the current market conditions where stock market returns are influenced substantially by macro factors.

## 5. How Predictable are Components of the Aggregate Market Portfolio?

Aiguo Kong, David Rapach, Jack Strauss, Jun Tu, and Guofu Zhou<sup>7</sup>, March 2009

*A copy of this article is available on the Social Science Research Network website – [www.ssrn.com](http://www.ssrn.com)*

#### Key Points:

- The sum of predictabilities is higher than the predictability of the sum;
- Predictability varies across industries, size, and book-to-market;
- A component-rotation strategy based on the predictability of component portfolio returns.

Three sets of component portfolios:  
industry, size, and book-to-market

This paper undertakes an extensive analysis of return predictability for a variety of component portfolios using a large number of potential predictors from the literature on aggregate market return predictability. Focusing on three sets of component portfolios sorted on industry, size, and book-to-market, the authors show that returns are substantially more predictable for (i) particular industries, (ii) small-cap in contrast to large-cap stocks, and (iii) high as opposed to low book-to-value stocks. Moreover the authors show that component predictability has important asset-allocation implications in the use of a component-rotation investment strategy based on component predictability which often leads to sizeable investment gains.

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<sup>6</sup> See Perez-Quiros, Gabriel and Allan Timmermann, 2000, Firm size and cyclical variations in stock returns, *Journal of Finance* 55 (3), 1229–1262.

<sup>7</sup> Aiguo Kong is at Fudan University, David Rapach and Jack Strauss are at Saint Louis University, Jun Tu is at Singapore Management University, and Guofu Zhou is at Washington University.

**Predictors include economic variables or industry returns**

The authors consider three sets of component portfolios: 33 industry portfolios, 10 portfolios sorted on market capitalization, and 10 portfolios sorted on book-to-market value. The dataset covers the period December 1945 to December 2004. Two groups of predictive variables are considered: 14 economic variables and lagged industry returns. The analysis is undertaken in the context of a bivariate predictive regression model, i.e. one potential predictor.

**Combined forecast are computed by averaging individual predictions from bivariate regressions...**

The analysis indicates that returns on long-term government bonds (LTR), inflation (INFL), term spread (TMS), Treasury bill rate (TBL), dividend yield (D/Y), and net equity expansions (NTIS) are significant predictors of out-of-sample industry portfolios excess returns. LTR, INFL, and TMS are significant for the 10 portfolios sorted on market capitalization, while LTR displays the greatest overall predictive ability for book-to-market value-sorted portfolios. In addition the authors use a combined forecast, that is, the mean of the 14 industry/size/value component portfolio return forecasts generated by the individual predictive regression models. The combination forecasts are shown to improve out-of-sample forecasting performance relative to the individual predictive regression models. Interestingly, when lagged industry returns are used as predictive variables the out-of-sample predictability improves.

**A component-rotation strategy**

The authors' next challenge is to show that the information contained in the predictive variables can be used with for meaningful investment strategies. They develop the idea of the "maximum portfolio", i.e. a portfolio that is allocated to the component with the highest forecasted return for the next month. The component with the highest expected return is identified using either the combination or historical average forecast of component returns. With the exception of book-to-market components based on economic variables, the average monthly return is higher and standard deviation lower when the authors identify the component with the highest expected return using the combination instead of the historical average forecast. The results indicate that the component-rotation investment strategy delivers sizeable returns over the years that exceed, substantially, the return of the aggregate market portfolio.

All in all this paper analyses return predictability for a variety of components of the aggregate market, including portfolios sorted on industries, size, and book-to-market. Considering 14 economic variables and 33 lagged industry returns as predictors, the authors show that returns for certain component portfolios are substantially more predictable. In addition, portfolios of small-cap and high book-to-market firms typically display greater predictability. Perhaps the most important finding from the practical point of view is that predictability can be exploited with a component-rotation investment strategy.

**GQR comments and investment implications**

In our October 2008 issue of ARD we discussed a paper (see: "Forecasting Stock Market Returns: The Sum of the Parts is More than the Whole") which looked at a similar issue. However, the objective there was to derive predictions of the market return as the sum of the predictions on its three components, i.e. dividend yield, earnings growth, and price-earnings ratio growth. This paper advocates predictions for three different groups of the aggregate market, namely stocks sorted by industry, by size, and by book-to-market ratio. The authors show that fundamental factors as well as lagged industry returns can better predict the component portfolio return compared to the market. As a by-product of their analysis the authors present an interesting portfolio construction strategy that allocates wealth to the various industry, size, or book-to-market portfolios. The building blocks of the methodology are very simple. It is all based on bivariate predictive regressions and a simple averaging scheme of the forecasts obtained. While averaging forecasts results in portfolios with high excess returns, the strategy is associated with extremely high volatility and as a result not-so-high Sharpe ratios, i.e. 0.12 to 0.22.

## Short Coverage

This section cites five additional papers that we consider relevant and thought provoking.

**'Best Ideas' by Randy Cohen, Christopher Polk, and Bernhard Silli, March 2009**

A copy of this article is available on the Social Science Research Network website – [www.ssrn.com](http://www.ssrn.com).

This paper shows that the stock that active managers display the most conviction towards ex-ante, outperforms the market, as well as the other stocks in those managers portfolios.

**'Dynamic Trading with Predictable Returns and Transaction Costs' by Nicolae Garleanu and Lasse Heje Pedersen, March 2009**

A copy of this article is available on the Social Science Research Network website – [www.ssrn.com](http://www.ssrn.com).

This paper derives in closed form the optimal dynamic portfolio policy when trading is costly, and security returns are predictable by signals with different mean reversion speeds.

**'Stock Market Trading Volume' by Andrew W. Lo and Jiang Wang, May 2009**

A copy of this article is available on the Social Science Research Network website – [www.ssrn.com](http://www.ssrn.com).

This article develops well-articulated economic models of asset prices and volume.

**'A new method to estimate PIN (Probability of Informed Trading)' by Yuxing Yan, March 2009**

A copy of this article is available on the Social Science Research Network website – [www.ssrn.com](http://www.ssrn.com).

This paper develops a new method for computing the PIN which addresses all problems identified in the literature with respect to current PIN calculation methodologies.

**'Portfolios Weighted by Repurchase and Total Payout' by Jack Clark Francis, Christopher Hessel, Jun Wang and Ge Zhang, April 2009**

A copy of this article is available on the Social Science Research Network website – [www.ssrn.com](http://www.ssrn.com).

This paper finds that repurchase weighted and total payout weighted portfolios have higher excess returns and higher Sharpe ratios than the most common fundamental weighted portfolio (namely, the dividend weighted portfolio).

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