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Academic Insights

Harnessing the best ideas from academia

Welcome to our monthly Academic Insights report

Fresh insights from academia

The impact of news flow on stock returns is one of our pet topics. This month an interesting paper flips the table completely, and asks a simple question: is there information in the *absence* of news? The authors study M&A announcements, and determine that investors do not correctly price the fact that no news about a deal actually carries information in itself.

Another paper on the topic of news shows that firms with news stories that are textually similar tend to have higher correlation. At first this sounds obvious, but the result holds even after controlling for a whole host of other variables, including sector classification and past correlation. The next question is whether this idea could enhance the stock-by-stock covariance matrix.

Key papers this month

This month we focus on five papers spanning a range of topics including alpha generation, portfolio construction, and risk management:

- Comovement and the news
- No news is news: Do markets underreact to nothing?
- Macroeconomic uncertainty, risk and its effect on stock and bond returns: International evidence
- A comparison of industry classification schemes: A large sample study
- Which anomalies are more popular? (And why?)

Upcoming events

We also highlight upcoming conferences and seminars in the quantitative investing space that may be of interest.

The best of the rest

At the back of this report we include abstracts from some additional papers that we think are also quite interesting. These are arranged by topic to make skimming the list quicker. If you need any further information on any of the papers in this report, please contact the Deutsche Bank Equity Quantitative Strategy team at (+1) 212 250 8983 or (+44) 20 754 71684, or email us at DBEQS.Global@db.com.

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Introduction

Welcome to *Academic Insights*

The end of summer brings with it a slew of interesting papers

The end of summer (or winter for those lucky readers in the Southern Hemisphere) always brings with it a slew of interesting academic papers. After all, summer is when professors get the time to write without the distraction of lectures to prepare, exams to grade, and a steady stream of irate students banging on their doors.

One paper this month flips the tables and focuses on the information content in no news

When no news is the news

This month brings quite an eclectic bag of articles. The first two that we've chosen to review tackle a subject that regular readers will know is one of our favorite topics – the impact of new flow on stock returns. Or in the case of the first article, the impact of *no* news on stock returns. A new paper by Giglio and Shue [2012] argues that the passage of time and no news flow contains information in itself, and that this information is (probably not surprisingly) overlooked by investors. Specifically they study M&A announcements, and find that investors fail to price in the fact that the passage of time with no new information about the deal actually changes the odds of the deal going through. A savvy investor could exploit this oversight in a tradable strategy.

Textual similarity between the news flow of two companies positively predicts future return correlation

On the subject of news, a fascinating paper by Box [2012] shows that news similarity can actually predict future stock comovement. In other words, stocks with news stories that have similar text tend to have higher future correlation. On face value, this might not sound all that surprising – after all, stocks in the same industry for example are likely to have many of the same words in their news stories (Energy stocks for example are likely to have plenty of references to “oil”, “commodities” and so on in their news flow). However, the authors are careful to control for this and other possible predictors, and show that textual similarity is at least as important as past comovement in explaining future comovement.

Sector classification schemes might not sound like enthralling reading, but it is really quite important

The devil is in the data

One of the unglamorous aspects of quantitative investing is the enormous amount of time required to get the data right. With so many different bits and pieces to scrutinize, simple questions often get overlooked: for example: what's the best sector classification scheme to use? This may sound like less than enthralling bedtime reading, but it actually turns out to be quite important – as illustrated in a useful new paper by Hrazdil, Trottier, and Zhang [2012]. They compare the efficacy of four common industry classification schemes across a range of dimensions that go beyond simple share price comovement. For the record, GICS is the winner.

Risk premia are often thought of as a steady return stream we can harvest by taking on a risk; this does not appear to be the case

The mysterious case of the missing risk premia

In last month's edition of this publication, we reviewed a paper that suggested that the equity and bond risk premia are actually realized on a few select days when growth- or inflation-related news is released to the market, respectively. This month, a paper by Parikh and Jiang [2012] continues this train of thought. They argue that uncertainty around growth, inflation, and interest rate expectations are the keys to explaining the equity and bond risk premia. While the paper has some methodological issues that make it hard to use as a predictive tool, the concept is food for thought.

Regards,
The Deutsche Bank Quantitative Strategy Team

Five key papers this month

Paper 1: “Comovement and the news”

- Travis Box
- SSRN, available at <http://ssrn.com/abstract=2139708>
- Reviewed by Rochester Cahan

Why it’s worth reading

In a recent research paper, we showed how the “proximity” of companies on the web (i.e. how often they are mentioned together in the same blog post, tweet, web article, etc.) could be used to measure the strength of the relationships between companies.¹ Here a new academic paper builds on this idea, by suggesting that companies with “similar” news, in a textual sense, tend to be highly correlated. This finding, on face value, might not sound like much – after all we would, for example, expect firms in the same industry to have somewhat similar news at a given point in time. However, the author shows that even after controlling for past return correlation, firm characteristics, index membership, and so on, the news similarity metric is still important in predicting future comovement of stocks.

Data and methodology

The study considers all stocks listed on the NYSE, NASDAQ, or Amex from 2002 to 2010. The most important data source is the news data, which comes from Thomson Reuters News Analytics – the same provider we use in our research. In addition to these data, the author also has the underlying text of each news story. The methodology for measuring textual similarity is at the crux of the paper. At each point in time, the author constructs a term-document matrix, using all stories for the set of companies at that time over a specified lookback period (1, 3, 6, and 12 months). The columns of this matrix are firms, and the rows are the master set of unique words used across all the firm-stories in the sample at that time. The contents of the matrix is just the number of times each word occurs for each firm, over the lookback window. Special filters are used to remove or lessen the impact of frequent words like “this”, “that”, and “is”. The similarity for two firms is then the cosine of the angle between the matrix columns for firm i and j . Once this is computed at each point in time, a panel regression is used to measure the relationship between pairwise textual similarity and period-ahead pairwise return correlation. In this regression, numerous controls are used to eliminate other possible predictors of future correlation.

Results

The key finding is that news similarity is just as important as past correlation in predicting future price comovement. This result stands even after controlling for industry, size, momentum, book-to-market, index membership, geographical proximity, etc.

Our take

These results are fascinating; however, the next step would be to determine whether news similarity is useful in improving a risk model’s covariance matrix. This is the most common place where forecast correlations are used in the investment process. There are already well-established ways to improve the estimation of the covariance matrix that go beyond the simple sample covariance matrix (e.g. fundamental factor models, shrinkage), so a critical question is how much incremental improvement can be gained from news similarity.

This paper shows that the similarity of the text of news on two companies can predict future comovement, even after controlling for known predictors

The author uses the same news sentiment database that we employ, and uses a term-document matrix approach to measure similarity

Textual similarity is at least as important as past correlation in explaining future correlation

The next step would be to investigate how to improve a risk model covariance matrix using these findings

¹ Cahan et al., 2011, “Quant 2.0”, *Deutsche Bank Quantitative Strategy*, 18 November 2011

Paper 2: “No news is news: Do markets underreact to nothing?”

- Stefano Giglio and Kelly Shue
- SSRN, available at <http://ssrn.com/abstract=2139564>
- Reviewed by Yiyi Wang

The authors argue that the absence of news reports and the pure passage of time often contain important information.

The authors select Mergers and Acquisitions as the laboratory field.

They estimate the hazard rate of merger completion and study the relationship between this and average returns over event time.

The predictability of hazard rates of completion on returns indicates a profitable trading strategy. The authors argue it is the investors' underreaction to no news that causes this spread.

We find it intriguing to study “no news” as a new type of “news”.

Why it's worth reading

As paradoxical as the title sounds, according to the authors the absence of news reports and the pure passage of time often contain important information. In a rational setting, investors should perform Bayesian updating on the passage of time, and hence market prices could move even in the absence of the explicit news. But in reality investors often ignore the information hidden in “no news” and stick to their anchored belief. Indeed we have seen quite a lot of papers that study investors' underreaction to news, but this is the first one to empirically investigate market underreaction to *no* news.

Data and methodology

As pointed out by the authors, the main empirical challenge of this topic lies in the construction of a counterfactual: how *should* agents behave if they were to update rationally on the passage of time? They smartly select Mergers and Acquisitions as the laboratory field. In particular, they focus on mergers without known expiration dates, so that both the timing and outcome of merger resolution is of great uncertainty. Using a sample of over 5000 mergers in the US from 1970 to 2010, the authors estimate the hazard rate of merger completion, defined as the probability that a merger will complete in event week n conditional on it not completing nor withdrawing prior to week n . If the hazard rate of completion is non-constant over the event life of a merger, then the passage of time contains information about merger completion. Meanwhile, they calculate returns in the year following merger announcement, and study the relationship between hazard rates and average returns over event time. In order to test the two alternative conjectures to explain the return predictability: behavior-driven (investors' underreaction to no news) and risk-driven, the authors go on to analyze if the systematic risk (Fama-French factors), downside risk and idiosyncratic risk have changed throughout the interim period.

Results

The authors find that hazard rates of completion rise from zero in the first weeks after announcement, peak around event week 20, and then decline to zero one year after announcement. A similar hump-shaped return profile is observed, indicating a strong predictability of returns by hazard rates of completion. A trading strategy that invests in deals when hazard rates are high delivers a higher alpha than a strategy that invests in deals in event weeks when the hazard rates are low, as well as a naïve Buy and Hold strategy that invests in deals for their entire event life. On the other hand, there is no significant difference in systematic, downside or idiosyncratic risk at different periods in event horizon, ruling out the possibility that the spread is risk-driven.

Our take

We find it intriguing to study “no news” as a new type of “news”, and indeed in such an information-exploding market, “news” is relative. Another interesting point that converges with our recent research is we can squeeze more juice out of commonly-exploited arbitrage trades with more clever and selective criteria – often by taking advantage of behavioral bias, i.e., buying stocks in high-hazard-rate weeks reaps higher alpha than a blind merger-arbitrage strategy. We have investigated similar ideas on Shares Buyback² and Insider Dealing³.

² Salvini et al, 2012, “Share Buybacks: Is It Worth It?”, *Deutsche Bank Quantitative Strategy*, 14 March 2012

³ Avettand-Fenoel et al, 2012, “Are Insiders Alpha Generators?”, *Deutsche Bank Quantitative Strategy*, 26 Sep 2012

Paper 3: “Macroeconomic uncertainty, risk and its effect on stock and bond returns: International evidence”

- Bhavik Parikh and Christine Jiang
- SSRN, available at <http://ssrn.com/abstract=2140026>
- Reviewed by Yin Luo

Recent academic literature has suggested that asset class risk premia are not as steady or constant as often depicted

This paper shows that equity and bond risk premia depend on uncertainty in growth, inflation, and interest rate outlooks

Growth uncertainty increases equity returns, while inflation uncertainty is negative

The idea is interesting, but would need to be modified to build a forward-looking, predictive model rather than an explanatory one

Why it's worth reading

This paper continues on a theme from a paper we reviewed last month, on the relationship between risk premia and macroeconomic announcements⁴. Whereas the previous paper looked at risk premia associated with expected news releases, this research focuses on how uncertainty in GDP growth, interest rates, and inflation impact stock and bond returns. Consistent with intuition, the authors find that uncertainty in growth tends to increase stock returns but uncertainty in inflation decreases stock returns. In contrast, bond returns are higher when there is inflation uncertainty, but lower when there is interest rate uncertainty.

Data and methodology

The authors studied equity and bond returns in 15 countries. Equity indices are from Datastream, while bond indices are from Bloomberg. Macroeconomic uncertainties are computed using GDP, inflation, and interest rate data sourced from Blue Chip Economic Indicators. Uncertainty itself is defined as (Actual – Consensus Forecast)/Actual⁵. The authors also defined a few versions of global uncertainty, weighted by either GDP or market capitalization of each country. A series of fixed effect panel regressions are then estimated⁶. For example, for equities the model is:

$$F(\text{stock excess return}) = \alpha + \beta_1(\text{GDP or inflation uncertainty}) + \beta_2(\text{predicted vol}^7) + \beta_3(\text{unexpected vol}) + \beta_4(\text{global uncertainty}) + \text{country fixed effect} + \text{year fixed effect} + \varepsilon_{it}$$

Results

The authors find there is a positive equity risk premium for GDP (and global GDP) uncertainty, while inflation (and global inflation) uncertainty has a negative impact on equity returns. Interest rate uncertainty is negative for bonds, while global inflation uncertainty increases bond returns. Volatility has a negative effect for both stock and bond returns.

Our take

While we think there is merit in the concept itself, we have a few serious concerns that limit the use of the results in a predictive sense. The authors only tested the contemporaneous relationship⁸ between equity (and bond) returns and economic surprises/risks, while practitioners care much more about predicting future returns. The frequency of economic data used was yearly, rather than monthly or quarterly. More importantly, we would argue GDP growth is not necessarily the most widely watched economic growth metric; rather, measures like non-farm payroll, ISM, and industrial productions tend to provide more timely pictures of the economy.

⁴ See Cahan, et al., 2012, “Academic Insights”, *Deutsche Bank Quantitative Strategy*, 23 August 2012.

⁵ Practitioners tend to call this “economic surprise” rather than “economic uncertainty”. Uncertainty could probably be better captured by the dispersion (or cross-sectional standard deviation) of analyst estimates.

⁶ There are seven nested sub-models for each of the equations for equities and bonds.

⁷ Predicted volatility is based on a simple ARCH model, while the unexpected volatility is simply the difference between realized volatility and the predicted component.

⁸ Even more problematically, the economic surprise factor for year 2000 GDP, for example, is calculated as the difference between consensus 2000 GDP (from Blue Chip data published in January 2000) and announced 2000 GDP (from December 2001 publication). Therefore, by December 31, 2000, the equity/bond returns/risk factors can be calculated, but not the economic surprises (which only becomes available in December 2001 or a year later). The GDP data published in December 2001 (about 2000 GDP) is also revised, instead of first-reported. Therefore, there are some serious look-ahead biases in this paper.

Paper 4: “A comparison of industry classification schemes: A large sample study”

- Karel Hrazdil, Kim Trottier, and Ray Zhang
- SSRN, available at <http://ssrn.com/abstract=2138603>
- Reviewed by Ada Lau

Why it's worth reading

On face value, a paper on industry classification schemes doesn't sound like exciting bedtime reading, or indeed daytime reading for that matter! But as this paper shows, it can make a big difference; accurate industry classifications are vital for numerous parts of the investment process, as seen in one of the papers we reviewed in last April's edition of *Academic Insights*⁹. This paper looks at a large data set and compares four different classification systems: Global Industry Classification Standard (GICS), Standard Industry Classification (SIC), North American Industry Classification System (NAICS), and the Fama-French (FF) industry classification, and tells us which system is the best for research.

Data and methodology

20 years of data (1990-2009) are considered for all firms in NYSE and NASDAQ. GICS code are obtained from S&P, while other variables are obtained from Compustat, CRSP and I/B/E/S. Industry groups with less than five firms are removed. Four industry classification systems are compared: GICS, SIC, NAICS and FF. Following Bhojraj et al. [2003]¹⁰, equivalent levels for each classification are obtained by comparing the first 2-digit SIC codes with the first 6-digit GICS codes, the first 3-digit NAICS codes, and the 48 FF industry classifications. 12 variables such as price-to-book and return-on-equity are analyzed to see if there is intra-industry homogeneity for each classification. To test this, an OLS regression is performed, where a test variable for firm i at year t is regressed on the yearly average of that variable for all firms in the same industry classification as firm i . The R-squared of the regression is obtained, with higher R square indicating a larger extent of industry homogeneity.

Results

The authors find that the GICS classification gives the highest R-squared in the regression among the all classification systems, indicating that GICS provides the most homogeneous industry classifications and hence is superior to the other 3 competitors in the study. GICS is superior in 7 out of the 12 variables such as stock return co-movements, enterprise-value-to-sales, and research and development expense divided by net sales. In particular, the superiority of GICS increases with the analyst coverage, which is not surprising as GICS is developed by analysts with the purpose of enhancing investment research.

Our take

Evidence shows that academics and practitioners should use GICS as an industry classification method because it gives a more homogeneous classification than other systems. Apart from the 12 fundamental variables being tested in the paper, we would like to see if this homogeneity is also found in analyst factors such as analyst EPS growth estimates and EPS revisions. Furthermore, it would be interesting to see if industry misspecification based on GICS could be a useful signal for obtaining abnormal returns.

Before you skip this paper, take note: industry classifications are much more important and interesting than you might think!

The authors compare and contrast four classification schemes: GICS, SIC, Fama-French, and NAICS

GICS gives the highest homogeneity among sectors across a range of different fundamental and market-related variables, e.g. EV/Sales, R&D, etc.

This paper is useful as an objective measure of which sector classification scheme to use

⁹ Krueger, P., A. Landier, and D. Thesmar, 2011, “Categorization bias in the stock market”, SSRN working paper, available at <http://ssrn.com/abstract=2034204>

¹⁰ Bhojraj, S, C. Lee, and D. Oler, 2003, “What's my line? A comparison of industry classification schemes for capital market research”, *Journal of Accounting Research*, 41: 745 769

Paper 5: “Which anomalies are more popular? (And why?)”

- Byoung-Hyoun Hwang and Baixiao Liu
- SSRN, available at <http://ssrn.com/abstract=2138547>
- Reviewed by John Chen

Why it's worth reading

One of our most popular research papers this year examined the “crowdedness” of quant factors, by measuring the extent to which investors seek to short stocks that rank as unattractive on each factor.¹¹ So it was with great interest that we read this recent academic paper, where the authors take a somewhat similar approach, albeit at a quarterly/yearly frequency rather than the daily frequency that we used in our study.

Data and methodology

The data sample consists of non-financial stocks listed in NYSE, AMEX, and NASDAQ during the period of 1988 through 2010. All stocks must have short interest information. The share prices are required to be at least \$5 to remove the illiquid impact. The short interest data used are obtained directly from the stock exchanges as listed firms are required to report their short positions each month to NYSE, AMEX, and NASDAQ. The crux of the study is then to measure whether there is an abnormal increase (decrease) in short interest when a firm enters (leaves) the bottom deciles (i.e. the short portfolio). As with much of the academic literature, the authors focus on portfolios formed annually or quarterly (in contrast, we considered daily movements in shorting demand). The paper examines 11 well-publicized anomalies from the academic literature, including accruals, asset growth, capital investment, share issuance, Ohlson default probability, etc.¹² For each anomaly the authors measure “popularity” (similar to our crowdedness) as the abnormal change in residual short interest when a stock moves into or out of the bottom decile. The residual point is important – because short interest can be different for firms with different characteristics (e.g. small versus large caps) it is important to strip these out (as we also did in our study). Here the authors regress raw short interest against a range of factors known to impact short interest, to ensure the results are being driven by investors chasing a factor strategy, and not other firm characteristics (e.g. buying large caps).

Results

Similar to our results, the authors do find changes in short interest associated with stocks moving into and out of the short-leg of factor portfolios. Interestingly, they find that accruals, asset growth, and capital investment strategies show the most “popularity”. An interesting extension is to compare the results before and after publication in an academic journal. They find that investors tend to trade anomalies even before publication, but there is a jump in popularity after publication. Another interesting result is that popularity appears to be more related to upside returns rather than downside returns (i.e. the most popular strategies are those with high average returns, even if they show occasional large drawdowns).

Our take

This paper is an excellent independent corroboration of our recent work in crowding. However, we do think it is worth tracking measures of crowdedness at a higher frequency than this paper does – we used new databases of securities lending data to overcome the fact the exchange-provided data only comes out monthly. We illustrated that in times like the 2007 “quant crisis” having a more granular read on crowdedness is crucial.

Using securities lending data to measure factor popularity is something we are big believers in

The authors use monthly short interest data from the exchanges, rather than the daily data we used

Similar to our results, the authors do find evidence that investors trade many of the common anomalies proposed in the academic literature

This paper provided independent verification of some of the results we found in our recent research

¹¹ Cahan et al., 2012, “Standing out from the crowd”, *Deutsche Bank Quantitative Strategy*, 1 February 2012

¹² We discussed most of these anomalies in more detail in Cahan et al., 2012, “The Tree of LIFO”, *Deutsche Bank Quantitative Strategy*, 26 April 2012

Upcoming conferences

Europe

Figure 1: European event calendar

Date	Location	Conference
30 Sep – 2 Oct	Bath, England	Inquire UK Autumn Seminar: Factors http://www.inquire.org.uk/index.php?option=com_content&task=view&id=15&Itemid=80
8/9 October 2012	Stockholm/London	Axioma Research Seminar www.axioma.com
18-19 October 2012	Prague	Fifth Annual CFA European Investment Conference http://eic.cfainstitute.org/
20 December 2012	Paris	10 th International Paris Finance Meeting http://www.ima.org.uk/conferences/conferences_calendar/mathematics_in_finance.cfm
28 Feb – 1 Mar 2013	Venezia, Italy	IMA Conference on Mathematics in Finance http://www.quant.it/
8-9 April 2013	Edinburgh	Quantitative and Asset Management Workshop 2013 http://www.eurofidai.org/december2012.html

Source: Deutsche Bank

North America

Figure 2: North American event calendar

Date	Location	Conference
17 October 2012	New York	Thomson Reuters News Research Roundtable http://forms.thomsonreuters.com/NRRT_NY_2012/
17-20 October 2012	Atlanta	2012 FMA Annual Meeting http://www.fma.org/
4-6 January 2012	San Diego	2013 AFA Annual Meeting http://hq.ssrn.com/Conference/Reports/conf_preliminary_program.cfm?conflink=AFA-2013-San-Diego
22-24 March 2013	Miami	International Mathematical Finance Conference http://www.bradley.edu/academic/continue/professionals/imfc/

Source: Deutsche Bank

Asia

Figure 3: Asian event calendar

Date	Location	Conference
24 October 2012	Hong Kong	CQA Asia Fall Conference http://www.cqa.org/
9-11 January 2013	Hong Kong	1 st Asian Quantitative Finance Conference http://cqf.nus.edu.sg/AQFC2013/aqfc2013.htm
19-22 May 2013	Singapore	66 th Annual CFA Institute Annual Conference http://www.cfainstitute.org/learning/products/events/Pages/05192013_66150.aspx

Source: Deutsche Bank

Other papers of interest

Alpha generation and stock-selection signals

Equity performance of zero debt firms vis-à-vis their leveraged counterparts

- Soumya Guha Deb, Prithviraj Banerjee, and Pradip Banerjee
- SSRN, available at <http://ssrn.com/abstract=2151156>
- Abstract: "The purpose of this paper is to find out if firms that operate with debt free balance sheet are rewarded more by the investors at large. For this we form portfolios of debt free firms and compare their performance with performance of matching portfolios of leveraged firms from the same industry and of similar size. Both absolute and risk-adjusted return measures are used as performance proxies. Our results show that debt-free firms tend to outperform the leveraged counterparts both in terms of absolute and risk adjusted performance measures."

Buy on bad news, sell on good news: How insider trading analysis can benefit from textual analysis of corporate disclosures

- Michael Hagenau, Adriana Korczak, and Dirk Neumann
- SSRN, available at <http://ssrn.com/abstract=2138154>
- Abstract: "We demonstrate how insider trading analysis may benefit from textual analysis. We analyze reported insider trading behavior and explain the association between corporate as well as 3rd-party news announcements on directors' dealings activity. Previous approaches are extended by adding the sentiment of news to the research setting. We find strong evidence that insiders follow the stock market adage "Buy on bad news, sell on good news": They tend to buy (sell) securities in those years where their respective companies issue negative (positive) news. Likewise, insiders tend to buy (sell) stocks in years when 3rd-party news coverage is pessimistic (optimistic). The impact of corporate news on insider trading is higher than for 3rd-party news, as corporate news are subject to direct influence by the insiders. We also find that insiders buy when next year's news improves compared to the current year. Looking more concretely into the language, we also demonstrate that insiders buy when expressing insecurity and uncertainty. Overall, the findings reveal additional insights for insider trading analysis and demonstrate how finance may benefit from textual analysis."

Costly talk in earnings conference calls and short selling

- Benjamin Blau, Jared DeLisle, and McKay Price
- SSRN, available at <http://ssrn.com/abstract=2148705>
- Abstract: "We examine the short-selling response to earnings conference call linguistic tone and find short selling is inversely related to conference call tone (soft information) and unrelated to the earnings surprise (hard information). An exception to this relation is that short sellers target firms with both high earnings surprise and high tone, indicating short sellers may suspect "inflated" call language by managers that can lead to stock price overreaction. Additionally, we provide some evidence that positive tone weakens short sellers' return predictability in most cases. This is not true, however, for earnings announcements with both positive earnings surprise and positive tone."

Analyst/investor days as a disclosure medium

- Marcus Kirk and Stanimir Markov
- SSRN, available at <http://ssrn.com/abstract=2144972>
- Abstract: "Analysts/investor days are company-organized mini-conferences whose express purpose is the provision of information to equity analysts and institutional investors. We shed light on analyst/investor days as a disclosure medium by exploring their informational consequences and determinants. We find that analyst/investor days have substantial information content for investors based on abnormal stock market activity and for analysts based on revisions after the analyst/investor day. After hosting an analyst/investor day, companies experience an increase in institutional ownership and analyst following. Finally, hosting firms have larger institutional investor clientele and valuation uncertainty than non-hosting firms. Our findings establish the significance of analyst/investor days as a disclosure medium, and broaden our knowledge of corporate disclosures and their consequences."

Improving time-series momentum strategies: The role of trading signals and volatility estimators

- Akindynos-Nikolaos Baltas and Robert Kowsowski
- SSRN, available at <http://ssrn.com/abstract=2140091>
- Abstract: "Constructing a time-series momentum strategy involves the volatility-adjusted aggregation of univariate strategies and therefore relies heavily on the efficiency of the volatility estimator and on the quality of the momentum trading signal. Using a dataset with intra-day quotes of 12 futures contracts from November 1999 to October 2009, we investigate these dependencies and their relation to time-series momentum profitability and reach a number of novel findings. Momentum trading signals generated by fitting a linear trend on the asset price path maximise the out-of-sample performance while minimizing the portfolio turnover, hence dominating the ordinary momentum trading signal in literature, the sign of past return. Regarding the volatility-adjusted aggregation of univariate strategies, the Yang-Zhang range estimator constitutes the optimal choice for volatility estimation in terms of maximizing efficiency and minimizing the bias and the ex-post portfolio turnover."

Do style and sector indexes carry momentum?

- Linda Chen, George Jiang, and Xingnong Zhu
- SSRN, available at <http://ssrn.com/abstract=2139210>
- Abstract: "Existing literature documents that cross-sectional stock returns exhibit both price momentum and earnings momentum. In this paper, we examine whether commonly used style and sector indexes also have momentum patterns. We show that style indexes exhibit strong price momentum, but little evidence of earnings momentum. On the other hand, sector indexes exhibit both significant price momentum and earnings momentum. Moreover, we provide evidence that price momentum in style indexes can be explained by individual stock return momentum, whereas price momentum in sector indexes is driven by earnings momentum. Finally, we show that a dynamic momentum strategy can further enhance the performance of style investment even after adjusting for transaction costs."

Access to management and the informativeness of analyst research

- T Clifton Green, Russell Jame, Stanimir Markov, and Musa Subasi
- SSRN, available at <http://ssrn.com/abstract=2144543>
- Abstract: "We study the effects of broker-hosted investor conferences on the informativeness of analyst research. We find analysts' stock recommendations have significantly larger price impacts when the broker has a conference-hosting relationship with the firm. The incremental effect is most pronounced in the quarter following the

conference and remains significant for three quarters. The post-conference effect is stronger for small, volatile stocks and when the analyst has more experience covering the firm. Analysts at brokers with a conference-hosting relation also issue more accurate earnings forecasts than non-hosts in the post-conference period. Our findings suggest access to management remains an important source of analysts' informational advantage following the passage of Regulation Fair Disclosure."

Optimal parameters to pairs trading

- Kirikk Temlyakov
- SSRN, available at <http://ssrn.com/abstract=2140111>
- Abstract: "Pairs trading is a very common trading strategy, and being able to obtain parameters that tell us when to trade and when to get out is of great importance. In this paper I propose a methodology that can improve the performance of traditional pairs trading strategy. I use stochastic beam search algorithm to find the best parameters in in-sample data within a given industry, and then test those parameters on out of sample data. My results outperform the results obtained by tools traditionally employed by the industry practitioners."

How do stock returns on the U.S. manufacturing industry respond to raw materials price shock?

- Vichet Sum
- SSRN, available at <http://ssrn.com/abstract=2137442>
- Abstract: "This paper analyses how stock returns on the U.S. manufacturing industry respond to raw materials price shock. Using monthly return data of the U.S. manufacturing industry and the changes in U.S. raw materials price index from 1978:M2 to 2011:M12, the vector auto regression (VAR) analysis shows that returns on the manufacturing industry negatively respond to raw materials price shock in the seventh month (after two quarters). However, higher stock returns on the manufacturing industry predict higher raw material price in the first and fourth months; the raw materials price is lower in the eighth month and goes up again in the ninth month following the increase stock returns on the manufacturing industry. The Wald causality test results show that changes in raw materials price and stock returns on the manufacturing industry Granger-cause each other."

Do fund investors know that risk is sometimes not priced?

- Fabian Irek and Thorsten Lehnert
- SSRN, available at <http://ssrn.com/abstract=2136899>
- Abstract: "Using the sentiment index of Baker and Wurgler (2006), we find that market risk is only a priced factor of expected fund returns when investor sentiment is low. When sentiment is high, the market risk premium becomes insignificant. We then analyze the performance of fund investors in the cross-section of market risk. Although sentiment leads to interesting pattern of funds' returns in excess of the market smart investors seem aware that funds' alphas do not vary with the state of sentiment. One of our key findings is that smart investors prefer the safest funds. The effects we document are economically large: a trading strategy which is long in the positive cash flow portfolio and short in the negative cash flow portfolio yields an annualized alpha of 3.72 percent for the group of safest funds even after controlling for size, book-to-market and momentum."

Pricing of firm specific jump risk

- Marius Ascheberg, Holger Kraft, and Yildiray Yildirim
- SSRN, available at <http://ssrn.com/abstract=2148239>
- Abstract: "This paper studies the relationship between the cross section of stock returns and firm specific jump risk. Using option data, we estimate various option-based time-series. Sorting firms according to their firm specific jump risk, we find that this risk is priced for small stocks. Furthermore, we show that it is genuinely idiosyncratic, and not related to systematic volatility or systematic jump risk. We also find that firms have similar exposures to upward and downward jumps and both jumps are negatively priced, but the effect is more pronounced for downward jumps. Besides, it is documented that our results are closely linked to the idiosyncratic volatility (ivol) anomaly by Ang et al. (2006). Therefore, if ivol proxies for an omitted factor, our results suggest that the exposure to idiosyncratic jump risk is related to this factor."

International price and earnings momentum

- Harald Lohre and Markus Leippold
- SSRN, available at <http://ssrn.com/abstract=2147715>
- Abstract: "In this paper, we find that price and earnings momentum are pervasive features of international equity markets even when controlling for data-snooping biases. For Europe, we show price momentum to be subsumed by earnings momentum on an aggregate level. However, this rationale can hardly be sustained on a country level. Also, the above explanation is confined to certain time periods in the USA. Since we cannot establish a decent relation between momentum and macroeconomic risks, we suspect a behavior based explanation to be at work. In fact, we find momentum profits to be more pronounced for portfolios characterized by higher information uncertainty. Hence, the momentum anomaly may well be rationalized in a model of investors underreacting to fundamental news. Finally, we find that momentum works better when limited to stocks with high idiosyncratic risk or higher illiquidity, suggesting that limits to arbitrage deter rational investors from exploiting the anomaly."

Optimization, portfolio construction, and risk management

Managing risks in a risk-on/risk-off environment

- Marcos Lopez de Prado
- SSRN, available at <http://ssrn.com/abstract=2150877>
- Abstract: "Every structure has natural frequencies. Minor shocks in these frequencies can bring down any structure, e.g. a bridge. An Investment Universe also has natural frequencies, characterized by its eigenvectors. A concentration of risks in the direction of any such eigenvector exposes a portfolio to the possibility of greater than expected losses (indeed, maximum risk for that portfolio size), even if that portfolio is below the risk limits. This is particularly dangerous in a risk-on/risk-off regime. Managing Risk is not only about limiting its amount, but also controlling how this amount is concentrated around the natural frequencies of the investment universe."

Assessing investment performance under non-normal and serially-correlated returns

- Marcos Lopez de Prado
- SSRN, available at <http://ssrn.com/abstract=2150879>
- Abstract: "Because the Sharpe ratio only takes into account the first two moments, it wrongly "translates" skewness and excess kurtosis into standard deviation. As a result: (1) It deflates the skill measured on "well-behaved" investments (positive skewness, negative excess kurtosis); (2) It inflates the skill measure on "badly-behaved" investments (negative skewness, positive excess kurtosis). Sharpe ratio estimates need to account for Higher Moments, even if you assume that investors only care about two moments (Markowitz framework)."

Active asset allocation among a large set of stocks: How effective is the parametric rule?

- Huacheng Zhang
- SSRN, available at <http://ssrn.com/abstract=2139878>
- Abstract: "In this study we measure the value of active money management. We explore this issue by comprehensively examining the parametric rule proposed by Brandt, Santa-Clara and Valkanov (2009) (the BSV rule) out-of-sample for cross-sectional portfolio choice among a large number of assets and comparing this rule to the mean-variance (MV) rule and the naïve 1/N rule recently advocated by DeMiguel, Garlappi and Uppal (2009). We find that the BSV rule outperforms both the MV and 1/N rules and the outperformance is robust to investment horizons and stock market states. The BSV rule is effective for investors with different preferences or investment opportunities either. The effectiveness of the BSV rule is robust to data screening criteria, estimation periods, portfolio performance evaluation models, the business cycle, and stock market states. Our results suggest that active allocation rules, at least the BSV rule, are useful."

Volatility, correlation, and the market trend

- Christoph Becker and Wolfgang Schmidt
- SSRN, available at <http://ssrn.com/abstract=2142037>
- Abstract: "The influence of past stock price movements on volatilities and correlations is essential for understanding diversification and contagion in financial markets. While conventional models only investigate the influence of current returns on volatilities and correlations, we show that employing information about recent market movements leads to a superior model for the behavior of stock returns in a downturn. Our approach offers a fresh perspective on the behavior of stock markets unavailable with prior methods, and provides a more reliable alternative to the concept of exceedance correlation. We provide strong evidence for the existence of contagion in financial markets that cannot be absorbed by diversification."

Option-implied information and predictability of extreme returns

- Grigory Vilkov and Yan Xiao
- SSRN, available at <http://ssrn.com/abstract=2147437>
- Abstract: "We study whether option-implied conditional expectation of market loss due to tail events, or tail loss measure, contains information about future returns, especially the negative ones. Our tail loss measure predicts future market returns, magnitude, and probability of the market crashes, beyond and above other option-implied variables. Stock-specific tail loss measure predicts individual expected returns and magnitude of realized stock-specific crashes in the cross-section of stocks. An investor, especially the one who cares about the left tail of her wealth distribution (e.g., disappointment-averse), benefits from using the tail loss measure as an information variable to construct managed portfolios of a risk-free asset and market index. The tail loss measure is motivated by the results of the extreme value theory, and it is computed from observed prices of out-of-the-money put as the risk-neutral expected value of a loss beyond a given relative threshold."

The bottom-up beta of momentum

- Pedro Barroso
- SSRN, available at <http://ssrn.com/abstract=2144204>
- Abstract: "The unconditional beta of momentum with respect to the market is -0.27, but this is highly misleading. The bottom-up beta of momentum, estimated from the betas of individual stocks, varies between -1.71 and 2.09 over time. It increases in bull markets and decreases in bear markets. Using bottom-up betas explains up to 40% of the risk of momentum, out-of-sample. This is 17 times more than one unconditional model achieves. Hedging in real time the time-varying systematic risk does not avoid momentum crashes though."

Portfolio quality and mutual fund performance

- David Gallagher, Peter Gardner, Camille Schmidt, and Terry Walter
- SSRN, available at <http://ssrn.com/abstract=2151658>
- Abstract: "This study investigates how the quality of stocks owned by mutual funds affects the performance of those funds during the 20-year period 1990-2009. Funds which hold the lowest quality stocks exhibit significant underperformance; the evidence shows that stocks in the lowest decile of quality perform particularly poorly, with a mean monthly DGTW alpha of -1.11% (-12.58% p.a.). Interestingly, we discover a trend to funds investing in higher quality stocks over time. Furthermore, funds holding lower quality stocks have higher portfolio turnover, higher expenses and are slightly younger on average. The quality of a stock is positively related to its size, while quality is inversely related to volatility. Evidence of the downside protection offered by quality stocks in volatile market conditions is also provided."

Measuring the risk impact of social screening

- Patrick Geddes
- SSRN, available at <http://ssrn.com/abstract=2144484>
- Abstract: "Since the nineteenth century investors have incorporated social or ethical values into their portfolios, an approach described over time with such labels as SRI (socially responsible investing), ESG (environmental, social, governance), or MRI (mission-related investing). Among investment professionals a contentious debate rages as to whether SRI is a well-intentioned effort doomed to suffer a performance penalty or a viable alternative with the potential for alpha due to screening based on the assumption that such screening will be rewarded in the market. The performance debate has been covered in other research; this article focuses on the measurement of risk introduced by SRI screening for public equities. For simplicity, the term SRI is used as

the term for screened investing in general, with ESG used as a term for the specific environmental, social, and governance issues screened.”

Asset allocation and country/sector/style rotation

What matters in international equity diversification?

- Chun-Hung Chen and Wenling Lin
- SSRN, available at <http://ssrn.com/abstract=2144447>
- Abstract: "Over the past decade, investors and financial advisors have shown renewed interest in increasing international equity exposure. Investors confront one of two key issues in making decisions on their strategic allocations, depending on the starting point of their portfolios: 1) for a U.S.-only equity portfolio, the issue is which strategies produce the most beneficial international exposure; 2) for a portfolio already with significant international exposure, the issue is what benefits are there in exploring small cap, micro cap, and new frontiers in international equity investing. We use mean-variance spanning and optimization tests of indexes to assess the comparative benefits of competing paths to international diversification of the equity segment of an investor's portfolio. We find that for investors with a U.S.-only stock segment in their portfolios, any of the international indexes examined substantially improve risk and return characteristics — more evidence that home bias is costly. No clear winners emerge among the indexes, however. For the investor who already has a diversified portfolio of U.S. large and small cap, developed ex-U.S. large cap, and emerging markets large cap, an extension to frontier markets would be beneficial. The additional diversification and return benefits from extending to developed ex-U.S. small and micro cap as well as emerging markets small and micro cap are small."

Variance risk premiums and forward premium puzzle

- Juan-Miguel Londono and Hao Zhou
- SSRN, available at <http://ssrn.com/abstract=2133569>
- Abstract: "This paper presents evidence that the foreign exchange appreciation is predictable by the currency variance risk premium at a medium 6-month horizon and by the stock variance risk premium at a short 1-month horizon. Although currency variance risk premiums are highly correlated with each other over longer horizons, their correlations with stock variance risk premiums are quite low. Interestingly the currency variance risk premium has no predictive power for stock returns. We rationalize these findings in a consumption-based asset pricing model with orthogonal local and global economic uncertainties. In our model the market is incomplete in the sense that the global uncertainty is not priced by local stock markets and is therefore a forex-specific phenomenon — the currency uncertainty's effects on the expected stock return are off-setting between the cash flow channel and the volatility channel."

Does the stock markets equity risk premium respond to consumer confidence or is it the other way around?

- Abdur Chowdhury and Barry Mendelson
- SSRN, available at <http://ssrn.com/abstract=2144494>
- Abstract: "The increase in the equity risk premium during the 2007–2009 Great Recession and the aging of the baby boomers in the United States have led analysts and financial industry experts to believe that risk aversion among stock investors has moved to a more-permanently higher range. If so, stocks would cease being an attractive asset class to be investing in for the future. In the past few years private investors have by and large shunned equities, just when stocks have become attractively priced and offer long-term potential for superior above-historical average returns. Our empirical findings show that the recent increase in the equity risk premium (ERP) primarily reflects a temporary collapse in consumer confidence and that the ERP will mean revert once confidence returns. As long as consumer confidence in the sustainability of the economic recovery remains low, today's elevated risk premium will persist. Once confidence starts to

recover — as it has done after every recession since the 1960s — the required return premium among stock market investors also should diminish.”

The destruction of a safe haven asset?

- Dirk Baur and Kristoffer Glover
- SSRN, available at <http://ssrn.com/abstract=2142283>
- Abstract: “Gold has been a store of value for centuries and a safe haven for investors in the past decades. However, the increased investment in gold for speculative or hedging purposes has changed the safe haven property. We demonstrate theoretically and empirically that investor behavior has the potential to destroy the safe haven property of gold. The results suggest that an asset cannot be both an investment asset and an effective safe haven asset. This finding has important implications for financial stability since assets are more likely to exhibit excess comovement and volatility in the absence of a safe haven.”

Low-high basis factor in the commodity future market

- Daehwan Kim
- SSRN, available at <http://ssrn.com/abstract=2139416>
- Abstract: “We consider the profit to the “buy low-basis commodities and sell high-basis commodities” strategy as a pricing factor in the commodity futures market. We call this factor the low-high basis factor, or LHB factor, in short. We first document the significant premium accruing to the LHB factor. We then report a substantial reduction in the pricing errors of factor models. In particular, the zero-intercept hypothesis of factor models is no longer rejected by the data once the LHB factor is included in the model. Finally, we show that the time-variation in the LHB factor return can be predicted, to some extent, by the implied volatility spread. We relate our findings to Keynes’ normal backwardation theory and Kaldor’s theory of storage and convenience yield.”

Cross-sectional PEG ratios, market equity premium, and macroeconomic activity

- Xiaoquan Jiang and Qiang Kang
- SSRN, available at <http://ssrn.com/abstract=2137295>
- Abstract: “This paper exploits information contained in cross-sectional PEG ratios to extract estimates of the market’s expectations for aggregate returns and economic fundamentals. By combining the loglinear present-valuation model and the Capital Asset Pricing Model (CAPM) logic, we establish a theoretic link between PEG ratios and expected returns of stocks. Using this theoretic link, we construct one proxy for aggregate market equity premium and one proxy for macroeconomic fundamentals. The equity premium proxy outperforms alternative predictors and has considerable power in forecasting future market returns over the period of May 1983 to December 2009. The equity premium proxy is also able to forecast future macroeconomic activity such as nonfarm payroll growth, personal consumption expenditure growth, nondurable consumption growth, inflation, and unemployment rate. The fundamentals proxy is highly correlated with unemployment rates both concurrently and intertemporally. The results are generally robust across subsample and to various econometric methods for standard-error adjustments. Our study suggests that the choice of cross-section data is critical to information extraction and that the CAPM remains a vital theoretic tool to guide empirical work.”

Residual equity momentum for corporate bonds?

- Daniel Haesen, Patrick Houweling, and Jeroen Van Zundert
- SSRN, available <http://ssrn.com/abstract=2131032>
- Abstract: “It is well documented that equity momentum has predictive power for corporate bond returns. We show that an equity momentum strategy applied to

corporate bonds exhibits significant time-varying exposures to common equity and bond risk factors. The strategy thus bets on the persistence of these factor returns. We are able to improve upon a traditional momentum strategy, by focusing on the firm-specific component of stock returns. This residual momentum strategy not only lowers the exposures to the risk factors, but also reduces the volatility of the strategy with about 50%, resulting in a substantially higher Sharpe ratio. We find that our results are robust to changes in the formation and holding period of the strategy, the estimation window, the specification of the factor model, and the formation of subsamples based on liquidity and credit rating."

Trading and market impact

Low-frequency traders in a high-frequency world: A survival guide

- Marcos Lopez de Prado
- SSRN, available at <http://ssrn.com/abstract=2150876>
- Abstract: "Multiple empirical studies have shown that Order Flow Imbalance has predictive power over the trading range. The PIN Theory (Easley et al. [1996]) reveals the Microstructure mechanism by which: (1) Market Makers adjust their trading range to avoid being adversely selected by Informed Traders; (2) Informed Traders reveal their future trading intentions when they alter the Order Flow; (3) Consequently, Market Makers' trading range is a function of the Order Flow imbalance. VPIN is a High Frequency estimate of PIN, which can be used to detect the presence of Informed Traders, monitor liquidity conditions and forecast microstructural volatility."

Investor sentiment – Relationship between VIX and trading volume

- Violet Lei, Simon So, and Maggie Zou
- SSRN, available at <http://ssrn.com/abstract=2136802>
- Abstract: "As noise traders affect stock market by trading, sentiment, as a signal of noise, may have relationships with trading volume. This paper explores the effect of sentiment on the stock market's trading volume. Increase in Volatility Index (VIX) can explain the percentage increase in trading volume, but only in high VIX period. Besides, higher level of VIX is likely to be associated with greater variability of trading volume. The noise traders add liquidity to the market and provide more chances for investors to time their trade as the volatility of liquidity increases. These two kinds of impact lower rational investors' required return. The noise traders not only drive the price deviating from fundamental value, but also influence the liquidity dimensions."

Fleeting local information: Intraquarter trading and performance of local institutional investors

- Gennaro Bernile, Alok Kumar, Johan Sulaeman, and Qin Wang
- SSRN, available at <http://ssrn.com/abstract=2102078>
- Abstract: "Using a large dataset of institutional trades, we analyze whether and how trading profitability varies with investment horizon and distance from firm locations. We document that institutional investors display a substantial local trading bias and earn significantly higher intraquarter trading profits on local stocks than non-local ones, even after adjusting for risks and transaction costs. Indeed, the performance of local trades almost exclusively drives institutional investors' superior aggregate intraquarter performance. Consistent with an information rationale for local trades, investors' local trading performance is directly related to their local trading propensity. Funds with high (increasing) relative local performance tend to have stronger (increasing) local trading propensity. Local trades are more prevalent in stocks with less efficient prices – smaller, less liquid, or with more speculative features. Local informational advantage, however, is short-lived, as quarterly net changes in their local positions do not predict subsequent quarter's returns. Moreover, local performance is less persistent than non-local performance, consistent with the former being due to opportunistic access to short-term local (private) information and the latter due to investor innate trading/selection skills. These two sources of trading advantage are positively related, as investors with higher non-local performance also display superior local performance."

Trading restrictions, exchange traded funds, and regulatory arbitrage

- Rustin Yerkes
- SSRN, available at <http://ssrn.com/abstract=2143272>
- Abstract: "As of January 2012, there were 1,155 Exchange Traded Funds (ETFs) with \$1.134 trillion in assets and daily dollar trading volume exceeding 35% of total exchange trading. Academics and regulatory agencies are increasingly beginning to investigate the market impacts of traditional, leveraged, and inverse ETFs. The extraordinary growth and innovation in ETFs and a recent spike ETF delistings and liquidations should be of concern to financial market participants. This paper studies the current market for ETFs and specifically examines whether investors substitute ETFs and inverse ETFs for short positions in individual financial securities while short sale trading restrictions are in place. Even though ETFs are the preferred vehicle among short sellers, no studies are known to have examined whether ETF's are a viable substitute. I find large declines in ETF trading volume (-51%) and large declines in ETF short interest (-46%) suggesting there are impediments to circumventing the ban with ETFs. This suggests trading restrictions in conventional securities had negative spillover effects to ETF markets and adds further evidence in support of constrained short selling, limits to arbitrage, and overvaluation."

Decomposing the probability of informed trading measures

- Wang Chun Wei, Alex Frino, and Dionigi Gerace
- SSRN, available at <http://ssrn.com/abstract=2137398>
- Abstract: "This paper aims to analyze the dynamics of information asymmetry in market microstructure through the Easley et al. (2002)'s PIN framework in two segments. Firstly, we test to see if factors such as size, value and illiquidity can be used to explain PIN. Secondly, we extend beyond the traditional literature by examining individual components of PIN, especially the informed and uninformed trade intensities. We contribute to the literature by documenting non-linear relationships between trade intensities, and their autocorrelation functions. Our study show that uninformed intensity is more persistent than informed trading and that there exists statistically significant spillover effects from informed trading into liquidity trades, suggesting that liquidity trades lag behind that of informed trades."

Finance theory and techniques

Data snooping and the global accrual anomaly

- Harald Lohre and Markus Leippold
- SSRN, available at <http://ssrn.com/abstract=2147723>
- Abstract: "Naively testing for accruals mispricing in 26 equity markets one market at a time we find statistical evidence of anomalous returns in some countries. However, some of these findings might well be spurious because of data snooping biases that arise when simultaneously testing several hypotheses. While the accrual anomaly is not deemed to be robust in some countries when properly accounting for multiple testing, we find the international momentum effect to by and large pass the battery of multiple testing procedures. Moreover, we find the few robust accrual anomalies vanishing in recent times, indicating that investors have been exploiting the mispricing."

A new measure of equity duration: The duration-based explanation of the value premium revisited

- David Schroder and Florian Esterer
- SSRN, available at <http://ssrn.com/abstract=2079559>
- Abstract: "This paper proposes a new methodology to estimate a share's equity duration by using analysts' cash-flow forecasts. We find that short duration is associated with high expected and realized returns - which cannot be attributed to the shares' systematic risk exposure as implied by the market beta. Instead, we show that this measure of a company's average cash-flow maturity is a priced risk factor that has similar properties as the Fama-French factor B/M ratio. Our analysis suggests that the value premium might be a compensation for the value firms' higher exposure to cash-flow risk."

Momentum in style portfolios: Risk or inefficiency?

- Paul Docherty and H. Chan
- SSRN, available at <http://ssrn.com/abstract=2137498>
- Abstract: "Momentum is a pervasive asset-pricing anomaly that has been shown to exist in a number of markets and asset classes. Three possible explanations for momentum have emerged in the literature; risk, positive autocorrelation and negative cross-serial correlation. Lewellen (2002) adds to this literature by providing evidence of strong momentum returns in style portfolios that can be explained by negative cross-serial correlation. However, a critique of this explanation by Chen and Hong (2002) argues that it is driven by the methodology used to decompose momentum returns and the in-sample negative autocorrelation within the market. Our paper examines style momentum in a market that exhibits positive auto-correlation across our sample period. We use an alternative empirical framework and test whether style momentum may be explained by different phenomena when the formation and investment periods are varied. We report no evidence to support negative cross-serial correlation but evidence to support momentum in style portfolios that can be explained by autocorrelation over short horizons, supporting the under-reaction hypothesis. However, we show that autocorrelation decreases when longer periods are used to form portfolios, resulting in expected returns substantively explaining returns over a 12-month horizon."

Fear and loathing in the housing market: Evidence from search query data

- Marcelle Chauvet, Stuart Gabriel, and Chandler Lutz
- SSRN, available at <http://ssrn.com/abstract=2148769>
- Abstract: "We use Google search query data to develop a novel and direct index of investor distress in the housing market. This measure is highly correlated with negative housing sentiment. We find that our Housing Distress Index (HDI) is contemporaneously related to and predicts national housing returns, the VIX index, foreclosures, and returns

on ABX subprime mortgage credit default swaps. The Housing Distress Index also predicts housing returns among a cross-section of cities. Results further indicate that the relationship between the HDI and national housing returns is asymmetric and stronger during times of market crisis. Overall, the relationship between the HDI and housing returns resembles that between the VIX and stock returns.”

How informative is qualitative management guidance compared to quantitative guidance?

- Matt Hart
- SSRN, available at <http://ssrn.com/abstract=2150280>
- Abstract: “Management earnings guidance is one of the primary sources of earnings expectations for market participants. Broadly speaking, managers disclose their guidance either quantitatively or qualitatively. Comparing these guidance forms by type of news, I find that qualitative bad news forecasts are more informative to investors (i.e., have a stronger market reaction) and analysts (i.e., have larger earnings revisions) than quantitative bad news forecasts. With respect to good news earnings forecasts, I find no significant effect of guidance form. By way of an explanation, I find that qualitative bad news forecasts are more accurate ex post than quantitative bad news forecasts. Empirical results indicate that investors view qualitative bad news forecasts as a signal that the forthcoming earnings surprise may be more negative than anticipated. This result contrasts with prior studies which generally find that more precise earnings guidance is more informative – at least among alternative types of quantitative earnings guidance. Supplemental analysis reveals that managers’ concern for litigation exposure provides a potential explanation as to why firms might issue qualitative bad news forecasts over quantitative forecasts.”

A comparison of industry classification schemes: A large sample study

- Karel Hrazdil, Kim Trottier, and Ray Zhang
- SSRN, available at <http://ssrn.com/abstract=2138603>
- Abstract: “In a large sample setting, we compare four broadly available industry classification schemes in their effectiveness to group stocks with similar operating characteristics. We demonstrate the advantage of the Global Industry Classification Scheme to be consistent across different application schemes common to capital market research and across different groups of firms.”

Informed trading behavior of institutions and individuals around earnings announcements

- Yu-Chen Wei
- SSRN, available at <http://ssrn.com/abstract=2140199>
- Abstract: "In the framework of the earnings announcements, there are studies using institutional ownership to proxy for the informed trading (Utama and Cready, 1997; Ekholm, 2006; Bushee and Goodman, 2007) and examine the behavior of informed traders at earnings announcements. Vega (2006) applies the probability of informed trading (PIN) to proxy the private information-based trading variable and empirically measure the effect of private and public information on the post-announcement drift (PEAD). The differences between this study and the previous literatures lie in that the investor types are considered and distinguished as institutions and individuals. By referring and adjusting EHO (2002), this study constructs the institutional- and individual-based PIN and investigates the impact of the informed trading behaviors of institutions and individuals to the PEAD around the earnings announcement. Besides, the trading date effect is considered to examine the informed trading behaviors. The findings show that informed trading behavior could be distinguished by institutions and individuals. Informed traders may not include only the institutions. Some individuals may own the relevant information and prompt them to trade prior or after the earnings announcement."

Dividend size, yield, clienteles and REITS

- William Hardin III, Kartono Liano, and Gow-Cheng Huang
- SSRN, available at <http://ssrn.com/abstract=2138168>
- Abstract: "Dividend size and dividend yield are typically highly correlated which substantially hinders the empirical assessment of ex-dividend stock pricing. The ability to disentangle the joint effect of dividend yield and dividend size on ex-dividend stock prices is thus of central importance in assessing existing theories. Fortunately, the REIT asset class provides data having a low correlation between dividend size and dividend yield allowing for a cleaner assessment of the extant theories. Evidence from the present study indicates that results that are typically interpreted as confirmatory of the tax-induced clientele effect may be spurious. Instead, transaction costs and limit order adjustments are likely the determinants of the observed relationships between the change in price to dividend ratio, dividend yield, and dividend size."

What's hot in finance? (2007-2011)

- Utpal Bhattacharya
- SSRN, available at <http://ssrn.com/abstract=2142203>
- Abstract: "As in years past, to catalyze the students in my Ph.D. F798 class to think of finance ideas, I asked each one of them to read the abstracts of finance articles published in the last 5 years in JF, JFE, RFS and JFQA. Their report is attached. Here are some general observations from the hard data above and the soft data generated from classroom discussions: (1) Classification into sub-topics is even more difficult than last year. There are more papers published which are not only inter-topic, but also interdisciplinary. Finance is very driven by the issues of the day. Issues do not fit in neat silos. (2) Though empirical papers dominate, theoretical papers or theoretical papers with empirical tests have trended up slightly. (3) Though empirical corporate remains the most popular field, its popularity is not rising. Asset pricing papers and particularly papers in investments (mutual funds and hedge funds) are trending up. (4) Finance journals dominate. Amongst finance journals, RFS has climbed steadily to become no 1 and it remains there. (5) Top non-finance journals publish many finance papers (on an average 15%-20%). Curiously, with the notable exception of QJE, all the other top economic journals have seen dramatic drops in cite counts."

The relation between earnings and price momentum: Does it vary across regimes?

- Yao Zheng, Peiwan Wei, and Eric Osmer
- SSRN, available at <http://ssrn.com/abstract=2139642>
- Abstract: "This paper investigates the time varying relationship between earnings momentum and price momentum. Using a Markov-switching framework that allows for variations between high volatility and low volatility states, we find that price momentum is significantly more influenced by earnings momentum in the high volatility state. Further for price momentum we find that loser firms display a higher degree of differential response to earnings momentum across the low and high volatility, relative to winner firms. Limited financing and investor's sensitivity to future investment opportunities might explain these two results."

The impact of insider ownership level on equity market timing decisions

- Frank D'Souza and Curya Chekikani
- SSRN, available at <http://ssrn.com/abstract=2140231>
- Abstract: "Equity market timing refers to the issuance of equity when a firm's stock is overvalued. Despite such efforts resulting in these firms significantly underperforming in the long run, managers are assumed to be acting in the best interests of current shareholders. Agency theory and current events clearly show that managers do not always act in the shareholders' interest. Therefore it is imperative that this issue of shareholder benefit be further investigated. This paper attempts to overcome the hurdle of superior insider information, and determine if shareholders do indeed benefit. We use Logit and Probit models to evaluate the propensity of managers to issue new equity conditioned upon the degree of alignment (as measured by managers' equity ownership) of their interests with those of shareholders. Specifically, how does the likelihood of equity market timing change in relation to the level of insider ownership? Our results indicate that the probability of issue increases with managerial holdings of common stock. Managers are acting for shareholder benefit, since they are more likely to issue equity when they themselves are heavily invested in the firm's common stock."

International equity valuation: The relative importance of country and industry factors versus company-specific financial reporting information

- George Foster, Ron Kasznik, and Baljit Sidhu
- SSRN, available at <http://ssrn.com/abstract=2143493>
- Abstract: "The relative importance of country- and industry-specified factors vis-à-vis company-specific financial statement-based information in explaining equity valuation multiples in an international setting is examined. Both country-specific effects via previously identified variables and an indicator variable approach are analysed. While company-specific factors are predominant in explaining cross-sectional differences in valuation, country and industry factors have sizable incremental explanatory power over them; the latter are not independent, so their relative importance is influenced by how we adjust for this commonality. Using country indicators provides larger incremental explanatory power than using country-specific factors, suggesting that previously identified factors may be measured with sizeable error or omitted factors are important."

When firms talk, do investors listen? The role of trust in stock market reactions to corporate earnings announcements

- Mikhail Pevzner, Fei Xie, and Xiangang Xin
- SSRN, available at <http://ssrn.com/abstract=2144835>
- Abstract: "We examine whether the level of trust in a country affects investors' perception and utilization of information transmitted by firms through financial disclosure. Specifically, we investigate the effect of societal trust on investor reactions to corporate earnings announcements. We test two competing hypotheses: on the one hand,

corporate earnings announcements are perceived as more credible by investors in more trusting societies and therefore elicit stronger investor reactions; on the other hand, societal trust mitigates outside investors' concern of moral hazard and reduces the value of corporate earnings announcements to them, thereby weakening their reactions to these events. We analyze the abnormal trading volume and abnormal stock return variance during the earnings announcement period in a large sample of firm-year observations across 25 countries, and find that both measures of investor reactions to earnings announcements are significantly higher in more trusting countries. We also find that the positive effect of societal trust on investor reactions to earnings news is more pronounced (1) when a country's investor protection and disclosure requirements are weaker, suggesting that trust acts as a substitute for formal institutions, (2) when a country's average education level is lower, consistent with less educated people relying more on trust in making economic decisions, and (3) when firm level information asymmetry is higher, supporting the notion that trust plays a more important role in poorer information environments."

Derivatives and volatility

What makes the VIX tick?

- Warren Bailey, Lin Zheng, Yinggang Zhou
- SSRN, available at <http://ssrn.com/abstract=2143891>
- Abstract: "We seek the roots of one-minute changes in VIX, an index of S&P 500 option prices, to understand risk neutral volatility and its risk premium component. Beyond leverage and risk premium effects, macroeconomic influences and some proxies for noise trading in the S&P 500 ETF market are significant, though measures of small investor sentiment have little significance. VIX changes display negative serial correlation suggesting liquidity provision in the options market. Temporary price effects are observed around macroeconomic news releases. Though often viewed as an exogenous state variable, a significant portion of VIX variability relates to trader behavior and macroeconomic fundamentals."

The addition and deletion effects of the Standard and Poor's 500 index on options markets

- Qi Rong and Libo Sui
- SSRN, available at <http://ssrn.com/abstract=2147013>
- Abstract: "This paper studies the movements of option markets around the time of S&P 500 index changes. We find evidence that supports the equity market liquidity and information hypothesis of addition and deletion effects from the option market. We find that active arbitrage activities and heavy inside trading activities before the index changes become effective. We derive the mean implied risk-neutral probability density function to show the option market reactions. We find that Standard & Poor prefers to delete stocks which have left-shift implied RNDs and add stocks that have right-shift implied RNDs. According to the implied RNDs, we find that the difference between addition and deletion group exists even before the information is released. Markets have positive expectations for addition group stocks and negative expectations for deletion group stocks even before the addition and deletion information is known."

What can we learn from the option market about the post-earnings announcement drift?

- Suresh Govindaraj, Sangsang Liu, and Joshua Livnat
- SSRN, available at <http://ssrn.com/abstract=2146181>
- Abstract: "The Post-Earnings Announcement Drift (PEAD) anomaly refers to the tendency of stock prices to continue drifting in the same direction as earnings surprises well through the subsequent earnings announcements, seemingly ignoring the autocorrelations in extreme earnings surprises across adjacent quarters. The two major competing theories to explain PEAD are: the risk premium hypothesis (RPH), which argues that the anomaly exists only because risk has been measured improperly; and, the under-reaction (behavioral) hypothesis (URH), which assumes investors do not completely utilize the auto-correlations of earnings surprises. We test the former (RPH) by using a finer metric for risk than used in prior research, namely, the change in implied volatilities obtained from options prices immediately before and after the earnings announcements. Inconsistent with the predictions of RPH, (1) we do not find a positive correlation between the implied volatility changes and earnings surprises; and (2) we find that that implied volatilities (risk) actually decrease most after the earnings announcements for firms with the most positive earnings surprises. Using volatility based option trading strategies (straddles), we examine if option traders have a similar URH bias to those of equity traders. We find that option straddles based on extreme earnings surprises in the prior quarter are not more profitable than straddles on mild

earnings surprises, indicating that option traders incorporate the prior earnings surprise in option prices.”

Appendix 1

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