Deutsche Bank
Markets Research

Global

Quantitative Strategy

Academic Insights

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Interesting ideas from academia

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From macro to micro

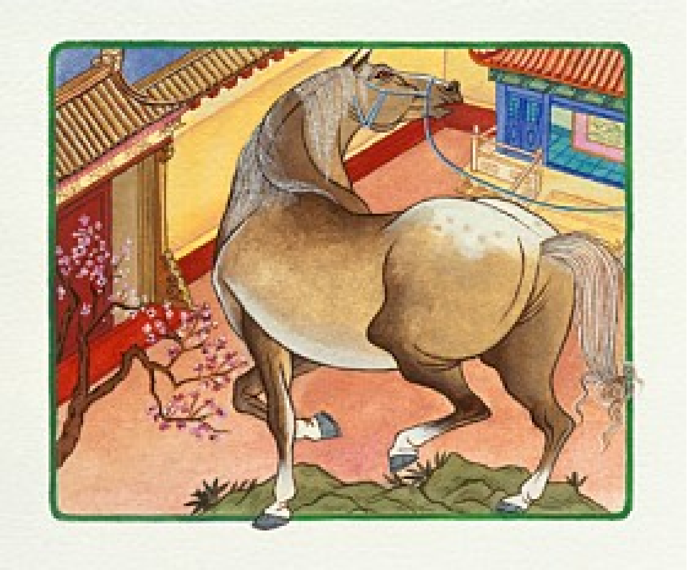
Theme of the month

This month, we discuss five papers in details. The paper that discusses the role of currency hedging in active equity portfolios is particularly interesting.

- The Role of "Other Information" in Analysts' Forecasts in Understanding Stock Return Volatility
- Tradable Aggregate Risk Factors and the Cross-section of Stock Returns
- To Hedge or Not to Hedge, the Slings and Arrows of Currency Risk in Minimum-Volatility Investing
- Exchange Rates and Commodity Prices: Measuring Causality and Multiple Horizons
- Breaking Bitcoin: Does Cryptocurrency Exchange Activity Lead to Increased Real Activity Outside Cryptocurrency Exchange?

The best of the rest

We also provide a list of other papers that are quite interesting. We organize the papers by topics: equity investing, other asset classes, asset allocation/global macro, derivatives, and trading research. Lastly, we highlight upcoming conferences in the quantitative investing field.



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I. Recommended papers

Paper 1: The Role of "Other Information" in Analysts' Forecasts in Understanding Stock Return Volatility

- Author: Yaowen Shan, Stephen Taylor and Terry Walter
- http://ssrn.com/abstract=2334799
- Reviewed by

Why it's worth reading

Campbell and Shiller[1] showed that unexpected stock returns are driven by either changes in cash flow and/or expected returns (i.e. the discount rate). Traditionally, investors tend to use dividends and accounting earnings to proxy future cash flow. However, they do not reflect changes in fundamentals. This paper proposes to use "other information", i.e. information on future earnings not in current earnings, to obtain a more timely proxy and shed light on how "other information" can drive return volatility.

Data and methodology

Annual accounting data, analysts' forecasts and daily stock returns from 1981 to 2011 are obtained from Compustat XPF, IBES and CRSP. "Other information" is measured by either: a). the residual from the annual regression of analysts' ROE forecasts on current book per share and current ROE, or b). the difference between analysts' ROE forecasts and the expected ROE based on an AR(1) process. Positive "other information" is regarded as good. The log of returns volatility is then regressed on good and bad "other information" and control variables such as variance of ROE and size. The regression is repeated with an extra dummy variable that discriminates between good or bad information environment. Following Vuolteenaho (2002)[2], a log linear VAR model is estimated for the state vector of stock returns, "other information", accounting earnings and book-to-market. The relative importance of these components is implied from the variance decomposition.

Results

Future volatility increases when current "other information" is less certain. Stock return volatility also increases more under unfavorable news, with one standard deviation increase in bad "other information" resulting in over 14% increase in return volatility[3].

Our take

This paper provides evidence that unexpected negative changes in cash flow increases future volatility significantly, although the study focuses on in-sample explanatory power instead of out-of-sample forecasts. In addition to volatility, it would also be useful to study if "other information" is priced and abnormal returns are driven by "other information".

[1] Campbell, John and Shiller, Robert (1988) "Stock Prices, Earnings and Expected Dividends" The *Journal of Finance*, 43(3) 661-676

[2] Vuolteenaho, Tuomo (2002) "What Drives Firm-Level Stock Returns?" *The Journal of Finance*, 57(1) 233-264

[3] The corresponding impact from good "other information" is merely around 3%.

Paper 2: Tradable Aggregate Risk Factors and the Cross-section of Stock Returns

- Author: Nikolay Doskov, Tapio Pekkala, Ruy M. Ribeiro
- http://ssrn.com/abstract=2200889
- Reviewed by Spyros Mesomeris

Why it's worth reading

In contrast to most other papers in the asset pricing literature, Doskov *et al* [2013] focus on *tradable* (market-based) risk factors to decompose the equity market return into multiple priced components and investigate whether such aggregate factors can explain the cross-section of returns of characteristic-sorted stock portfolios.

Data and methodology

The methodologies employed in this paper are rather straightforward and involve time-series and cross-sectional regressions. What is most interesting is the construction of tradable factors from market data and their application in asset pricing tests for factor portfolios. The authors believe that by employing tradable factors that capture market expectations of a state variable and the premium associated with it, they minimize the risk of data mining in factor selection. In addition, the factors employed are aggregate in that they capture market wide changes in growth and investment opportunities.

The authors motivate the choice of two dividend-related factors – dividend level and dividend growth – with the standard Gordon growth model. The dividend factors are calculated from dividend swap prices on the S&P 500 index provided by a broker. Returns on the market's expected dividend level are calculated as the monthly excess returns on the one-year dividend swap, while the expected dividend growth rate is computed as the spread return between the 5-year and the 1-year dividend swaps. The other three tradable factors are equity market risk (represented by implied volatility proxied using the returns on a VIX futures rolling strategy), the expected inflation rate (the return on the breakeven inflation from Treasury Inflation protected 10-year bonds, and interest rates (the return on a 10-year Treasury note futures rolling strategy).

Results

Time-series regression analysis reveals that the aggregate equity market largely responds to aggregate tradable factors in a way consistent with theory. In particular, in both in-sample and out-of-sample analysis, the authors find that dividend growth is sufficient to consistently explain the cross-section of size and book-to-market portfolios. Some of the other factors seem to be priced in the cross-section of other characteristic-sorted portfolios (sorted on earnings yield, cash flow to price, dividend yield).

Our take

The dataset on aggregate tradable factors is understandably short. Given the importance of the dividend growth factor though in the empirical results, we would like to caution that dividend swap prices tend to be driven as much by dividend expectations as by supply and demand imbalances. To have a greater degree of comfort with the latter, a similar analysis repeated with European data (where the structural demand/supply drivers are somewhat different to the US) would provide a greater degree of comfort.

Paper 3: To Hedge or Not to Hedge, the Slings and Arrows of Currency Risk in Minimum-Volatility Investing

- Author: Sanne de Boer, James Norman
- http://ssrn.com/abstract=2337198
- Reviewed by Miguel Alvarez

Why it's worth reading

Despite the abundance of literature underlying minimum volatility strategies in global equity markets, we had yet to encounter a paper which examines the role of currency exposure on their risk and return. This paper fills that void. It analyzes the effect of currency risk in minimum volatility portfolios and the potential to improve strategy performance by hedging the currency exposures. An appealing feature of the paper is that rather than following conventional practice by analyzing the hedging effects from strictly a USD perspective, it extends the analysis to the perspective of various developed countries.

Data and methodology

The minimum volatility portfolio construction methodology is simplified by limiting the assets in the analysis to country-sector indices rather than using the full breadth of global stocks. Using country-sector indices considerably reduces the dimensionality of the problem while preserving much of the risk-adjusted performance in global minimum risk strategies. The country-sector indices are created using capitalization weighted baskets of stocks representing the countries in the MSCI World Index and the sectors in GICS. For each domicile, the study constructs two minimum volatility portfolios: one using the local returns of each country-sector index (hedged); and the second using returns measured from the perspective of the domestic currency (unhedged). The portfolios are rebalanced every six months. The currency hedge is done monthly on the principal investment and uses forward currency rates to compute the revenue (carry) of the hedge.

Results

Overall, the results show that the hedging currency risks increases the risk-adjusted performance of minimum risk portfolios by reducing their volatility without diminishing the overall return. Going into more detail, the paper shows the amount of risk reduction achieved from minimizing the local equity risk and the further reduction from the currency hedging. The authors also show the robustness and the consistency of the results by comparing Sharpe ratios between the hedged and unhedged portfolios over three different periods across different domiciles. An additional and important finding – often overlooked – was that the unhedged portfolios possessed a significant home bias.

Our take

This paper stands out as the first that measures the impact of currency exposure on global equity minimum risk strategies and the benefits of currency hedging. More generally, we are finding that institutional investors are beginning to gain interest in currency hedging across conventional active global equity strategies. This concern is gaining traction due to recent expected increases in currency volatility coupled with lower volatility across local equity markets.

Paper 4: Exchange Rates and Commodity Prices: Measuring Causality and Multiple Horizons

- Author: Hui Jun Zhang, Jean-Marie Dufour, John W. Galbraith
- http://ssrn.com/abstract=2369438
- Reviewed by Caio Natividade

Why it's worth reading

The relationship between commodities and FX is often discussed in the finance industry, but in-depth studies like this paper are unusual. Furthermore, the authors also study multiple frequencies.

Data and methodology

The low frequency study uses nine years of daily data ending in 2009, encompassing USD/CAD, GBP/CAD, AUD/USD, AUD/JPY, USD/CLP currency pairs, the effective exchange rates for AUD and CAD, the S&P 500, WTI, copper and gold. The high frequency database comprises four years of five-minute USD/CAD and WTI data ending in 2009. Causality is only evaluated between a commodity and the currency of a country whose trade is largely dependent on it (such as copper and the Chilean peso).

The authors measure causality as an extension of Granger causality, using multiple horizons and formalizing the dataset through invertible processes (i.e. VARMA). Autoregressive lags are chosen in sequential form through an information criterion (AIC). The authors use the USD and the S&P 500 as conditioning variables. In other words, they remove such effect so as to achieve a better understanding of true causality between commodities and local currencies.

Results

There are three main findings in this paper.

- Commodity price variations are more likely to cause FX price variations rather than the other way around. This becomes even clearer after removing the USD effect from the exchange rates.
- On a daily basis, the length of causality from commodities to FX extends up to one week on average. On its own, the S&P generates causality onto FX at even longer horizons.
- A dataset of five-minute time stamps in WTI could potentially predict up to one hour of USD/CAD.

Our take

Other than the forecast windows, the statistics compiled cannot be directly translated into a trading model. That said, the combinations that emit causality can be used in the estimation of fair value models.

It is always a pleasure to see academic work done in this particular space; we find it generally under-researched and full of opportunities. Our intraday models consistently look for divergences between commodities, FX and equity indices (see *DB Quantcraft*, May 2013).

Paper 5: Breaking Bitcoin: Does Cryptocurrency Exchange Activity Lead to Increased Real Activity Outside Cryptocurrency Exchange?

- Author: David Vitt
- http://ssrn.com/abstract=2371343
- Reviewed by John Chen

Why it's worth reading

Bitcoin is one of the hottest buzzes in recent months – its price once surpassed $1000. Participants either use powerful machines to mine Bitcoin or trade it on online exchanges. As we hear more businesses accept Bitcoin for payment, this paper provides a timely analysis for the link between the surge of Bitcoin transaction volumes and the use of Bitcoin in real life. The author develops a procedure to identify whether the exchange activity is subsequently being used for goods and services, or just a pure speculation gamble. The analysis also enables the author to identify the degree to which the exogenously determined money supply system increases transactions activity outside exchanges, along with whether money supply increases are correlated to higher levels of economic activity in the Bitcoin realm.

Data and methodology

The variables used in the paper include Transaction Volume, Price of Bitcoin, Hot Transactions of Bitcoin, Cold Transactions of Bitcoin, Search Frequency of Bitcoin, and Supply. The price of Bitcoin in USD term and transaction volume are collected or constructed via the data API provided by Blockchain.info. Transaction volume is the average daily volume across four Bitcoin exchanges: Mt. Gox, BTC-E, Camp BX, and Bitstamp. Data for Bitcoin search frequency is gathered from Google Trends. Transactions are divided into "hot transactions" and "cold transactions". The "top 100" wallets by volume are defined as "hot transactions", and the remaining are classified as "cold transactions". The Supply variable is the (log of) the number of Bitcoin's in circulation.

The author uses VAR model to exploit the innovative "perfect" ledger feature of Bitcoin to answer whether exchange innovations and money supply increases lead to increased real cryptocurrency activity. A reduced form VAR model with K=8 is used to address the endogeneity of the selected five variables.

Results

The author finds that increased exchange activity has asymmetric effects across wallet types. The exchange volume innovations tend to hurt the top 100 wallets more than the remaining wallets, many of which are associated with gambling. The test also finds that the response in the exchanges to news innovations is very persistent, which is a significant concern from a market manipulation standpoint. The author also finds that as the money supply increases, the top 100 wallets tend to benefit in the form of increased transactions, while the effect for the remaining wallets is ambiguous.

Our take

Bitcoin is one of many digital currencies emerged in recent years. Its future and impact are still unclear. We would like to see how these currencies may impact the global banking system and real economy.

II. Upcoming conferences

Americas

Figure 1: Upcoming conferences and events in the Americas

Date	Location	Conference
13 March, 2014	Newark, NJ	CQA Best Practices Seminar http://www.cqa.org
22 April, 2014	Las Vegas	CQA Spring Conference http://www.cqa.org
10 June, 2014	NYC	CQA Quantitative Trading Seminar http://www.cqa.org
10 July, 2014	Boston	CQA Academic Review Session http://www.cqa.org
10 September, 2014	Chicago	CQA Fall Conference http://www.cqa.org

Source: Deutsche Bank

Europe/EMEA

Figure 2: Upcoming conferences and events in Europe/EMEA

Date	Location	Conference
February 14, 2014	Munich	London London Quant Group Evening Seminar http://www.lqg.org.uk/evening-seminar-february-11th-2014
March 23-25, 2014	London	Vienna Inquire Europe Seminar Spring 2014 http://www.inquire-europe.org/seminars.html
March 25-26, 2014	London	London Edhec – Risk Days Europe 2014 http://www.edhec-risk.com/events/edhec_conferences/europedays2014
April 11, 2014	London	Zurich European Financial Management Association 17th SGF Conference http://www.efmaefm.org/announcments.shtml#events

Source: Deutsche Bank

Asia

Figure 3: Upcoming conferences and events in Asia

Date	Location	Conference
March 31 – April 3, 2014	Hong Kong	FundForum Asia 2014 http://www.fundforumasia.com/
May 19-23, 2014	Singapore	Deutsche Bank Access Asia Conference http://conferences.db.com/asiapacific/

Source: Deutsche Bank

III. Other papers of interest

1. Equity investing

Firm Complexity and Post-Earnings-Announcement Drift

- Alexander Barinov, Shawn Saeyeul Park, Celim Yildizhan
- November 26, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2360338
- Abstract: The paper shows that the post-earnings-announcement drift is stronger for conglomerates, despite conglomerates being larger, more liquid, and more actively researched by investors. We attribute this finding to slower information processing about complex firms and show that the post-earnings-announcement drift is positively related to measures of conglomerate complexity. We also find that the post-earnings-announcement drift is stronger for new conglomerates than it is for existing conglomerates and that investors are most confused about complicated firms that expand from within rather than firms that diversify into new business segments via mergers and acquisitions.

Customer-Base Concentration, Profitability and Distress Across the Corporate Life Cycle

- Paul J. Irvine, Shawn Saeyeul Park, Celim Yildizhan
- October 29, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2347095
- Abstract: Using a recently expanded data set on supplier-customer links, we examine how customer concentration affects firm profitability. We find that the relation between customer concentration and firm profitability is more complex than recent literature suggests. We confirm that customer concentration promotes operating efficiencies for profitable firms. However, we find a different result for younger, less profitable firms where customer concentration impairs firm profitability and significantly increases distress risk. Thus, the relation between customer-base concentration and profitability is non-linear; it is significantly negative in the early years of a firm's public life, turning positive as the relationship matures. The reason for this dynamic relation is that firms who serve a few major customers make customer-specific investments that result in larger fixed costs and greater operating leverage. These relatively high fixed costs mean that customer concentration is risky for young firms, but can significantly benefit the firm if the relationship survives.

Recession Analysts and Conservative Forecasting

- Michael B. Clement, Kelvin Law
- October 14, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2307253

- Abstract: This study investigates whether the properties of sell-side analysts' earnings forecasts are associated with the adverse macroeconomic conditions that exist at the time of their initial hire or major promotion. We find that "recession analysts" (i.e., analysts who begin their career in an economic recession) are more conservative in their earnings forecasts: they are more pessimistic, less likely to be leaders, deviate less from the consensus, and more (less) likely to issue negative (positive) bold revisions. They are also asymmetrically more likely to respond to bad rather than good news during recessions, when bad news is abundant. Our results are not subsumed by analysts' characteristics and incentives identified in prior literature. Overall, we find that their forecast properties are associated with the adverse macroeconomic conditions at the time of initial hire or major promotion.

Monthly Beta Forecasting with Low, Medium and High Frequency Stock Returns

- Tolga, Qianqiu Liu, Jonathan J. Reeves, Haifeng Wu
- UNSW Australian School of Business Research Paper No. 2013 BFIN 07
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2321522
- Abstract: Generating one-month-ahead systematic (beta) risk forecasts is common place in financial management. This paper evaluates the accuracy of these beta forecasts in three return measurement settings; monthly, daily and 30 minutes. It is found that the popular Fama-MacBeth beta from 5 years of monthly returns generates the most accurate beta forecast among estimators based on monthly returns. A realized beta estimator from daily returns over the prior year, generates the most accurate beta forecast among estimators based on daily returns. A realized beta estimator from 30 minute returns over the prior 2 months, generates the most accurate beta forecast among estimators based on 30 minute returns. In environments where low, medium and high frequency returns are accurately available, beta forecasting with low frequency returns are the least accurate and beta forecasting with high frequency returns are the most accurate. The improvements in precision of the beta forecasts are demonstrated in portfolio optimization for a targeted beta exposure.

A Model of Emulation Funds

- Zhe Chen, F. Douglas Foster, David R. Gallagher, Adrian D. Lee
- September 12, 2013
- FIRN Research Paper, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2327368
- Abstract: Emulation funds are a potentially cost-effective way for multi-manager funds to improve their investment performance by delaying and netting trade signals from underlying managers. We develop a model to represent the expected sources of differential performance in an emulation fund relative to its underlying multi-manager portfolio. The model formalises the expected interaction between potential savings and opportunity costs, and allows us to observe complexities in the emulation process that are hidden without

a benchmark. Finally, the functional representation of the model allows sensitivity analysis of the emulation fund to key parameters, and enables us to determine theoretically optimal lag periods.

The Usefulness of Operating Cash Flow and Accrual Components in Improving the Predictive Ability of Earnings: A Re-examination and Extension

- Shadi Farshadfar, Reza Monem
- Accounting & Finance, Vol. 53, Issue 4, pp. 1061-1082, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2360838
- Abstract: We examine whether the components of accruals and operating cash flows improve the predictive ability of earnings for forecasting future cash flows. Unlike most previous studies, we avoid data estimation errors and sample self - selection bias because we exploit data from Australia where reporting of actual cash flow components had been mandatory since 1992. We show that accrual components and operating cash flow components together are more useful than (i) earnings, (ii) operating cash flows and total accruals and (iii) the combination of operating cash flows with accrual components in forecasting future cash flows. These results are robust to several contextual factors, including the length of the operating cash cycle, industry membership, firm profitability and firm size.

Market Response to Investor Sentiment

- Jördis Hengelbrock, Erik Theissen, Christian Westheide
- Journal of Business Finance & Accounting, Vol. 40, Issue 7-8, pp. 901-917, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2354738
- Abstract: This paper reconsiders the effect of investor sentiment on stock prices. Our main contribution is that, in addition to the intermediate term return predictability, we also analyze the immediate price reaction to the publication of survey - based investor sentiment indicators. We find that the sign of the immediate market response is the same as that of the predictability at intermediate time horizons. This is consistent with underreaction to cash flow news or with investor sentiment being related to mispricing. It is inconsistent with the alternative explanations of a rational response to cash flow news or sentiment indicators providing information about future expected returns.

Does Investor Sentiment Affect Earnings Management?

- Ana Vidolovska Simpson
- Journal of Business Finance & Accounting, Vol. 40, Issue 7-8, pp. 869-900, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2354737
- Abstract: I hypothesize and find that earnings management via accruals is driven partially by the prevailing market - wide investor sentiment. Managers inflate earnings in periods of higher sentiment, but report more conservatively during periods of low sentiment. Moreover, the likelihood of income - increasing earnings management

to avoid negative earnings surprises is also positively associated with investor sentiment. These results are robust to: (i) controls for time - varying firm characteristics such as growth, investment opportunity sets, future profitability, leverage and size; (ii) macroeconomic variables such as future inflation, GDP growth, and growth in industrial production; (iii) multiple proxies for investor sentiment; and (iv) discretionary revenues as alternative measure of earnings management. Cross - sectional analyses reveal that firms whose stock returns co - move more with investor sentiment are more (less) likely to manage earnings upward via abnormal accruals in quarters of higher (lower) sentiment. The findings of managers' strategic use of abnormal accruals show the need for increased attention from boards of directors, auditors and regulators to heightened managerial incentives to overstate earnings and to report optimistic earnings numbers during periods of high investor sentiment.

Earnings Announcements, Differences of Opinion and Management Guidance

- Sami Keskek, Lynn L. Rees, Wayne B. Thomas
- Journal of Business Finance & Accounting, Vol. 40, Issue 7-8, pp. 769-795, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2354736
- Abstract: Berkman, Dimitrov, Jain, Koch, and Tice (2009) document a negative relationship between differences of opinion and earnings announcement returns, and this relationship is more pronounced when short - sale constraints are likely to be high. These findings are interpreted as support for the theory in Miller (1977) that binding short sale constraints cause pessimists to be underrepresented in price formation. We conjecture that accounting information (i.e., earnings news) is likely to play a role in this returns pattern. After controlling for the level of earnings news, we find that the relationship between differences of opinion and stock returns is either eliminated or opposite from what is predicted by Miller's theory. Further, we present evidence that suggests the confounding effect of earnings news can be explained by (pessimistic) management earnings guidance. Our findings offer an alternative explanation for why low differences of opinion stocks earn greater abnormal returns around earnings announcements.

On Monetary Policy and Stock Market Anomalies

- Alexandros Kostakis
- Journal of Business Finance & Accounting, Vol. 40, Issue 7-8, pp. 1009-1042, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2354732
- Abstract: This study utilizes a macro - based VAR framework to investigate whether stock portfolios formed on the basis of their value, size and past performance characteristics are affected in a different manner by unexpected US monetary policy actions during the period 1967- 2007. Full sample results show that value, small capitalization and past loser stocks are more exposed to monetary policy shocks compared with growth, big capitalization and past winner stocks. Sub - sample analysis, motivated by variation in the realized premia and

parameter instability, reveals that the impact of monetary policy shocks on these portfolios is significant and pronounced only during the pre - 1983 period.

Has the IASB Been Successful in Making Accounting Earnings More Useful for Prediction and Valuation? UK Evidence

- Young-Soo Choi, Ken V. Peasnell, Joao Toniato
- Journal of Business Finance & Accounting, Vol. 40, Issue 7-8, pp. 741-768, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2354730
- Abstract: When producing International Financial Reporting Standards (IFRS), one of the main goals of the International Accounting Standards Board (IASB) was to create a set of standards which were more useful to investors as a predictive tool. We assess the success of the IASB in achieving this goal by investigating the effects of the introduction of IFRS on the relative information content of reported earnings and forecasted earnings under UK generally accepted accounting practices (GAAP) and IFRS. Results indicate that the value relevance of forecasted earnings is significantly lower under IFRS while the value relevance of reported earnings is significantly larger. These findings suggest that IFRS substitutes price - relevant information previously provided to the market in the form of analyst forecasts with information encoded by companies in their reported earnings. This implies that the IASB was indeed successful in its stated goal and points towards IFRS forecasts being more accurate and less dispersed than UK GAAP forecasts. This, in turn, implies that analysts are able to provide more informative forecasts under IFRS than under pre - IFRS regimes and that the aforementioned substitution effect is not a consequence of any decrease in the quality of forecasts under the new regime.

Institutional Investors' Reaction to SEC Concerns About IFRS and US GAAP Reporting

- Miles B. Gietzmann, Helena Isidro
- Journal of Business Finance & Accounting, Vol. 40, Issue 7-8, pp. 796-841, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2354731
- Abstract: For the period of 2006 to 2008, we collect Comment Letters issued by the SEC that question the application of US GAAP by US firms or the application of IFRS by European firms registered with the SEC. We investigate whether institutional investors react to the letters by changing their holdings and whether their responses vary for US registrants and European registrants. We do this via a treatment - effects model in which we test the hypothesis that institutional investors rebalance their portfolio holdings because they view Comment Letters as informative public signals. We find that institutional investors reduce their equity holdings when firms receive SEC Comment Letters, and their negative reactions are most marked for low turnover institutional investors, who we use to represent those informed investors most prepared to incur costs to closely monitor firms. Next, while noting that the number of Letters questioning

application of IFRS are smaller in number relative to those questioning application of US GAAP, we investigate whether there are different reactions to Comment Letters questioning different standards. We show that there is a higher probability of the SEC questioning the application of IFRS as compared to US GAAP. After controlling for firm - specific conditions that impact the issuance of a Comment Letter, we show that this higher probability has economic significance because institutional investors' react more negatively to Comment Letters that question the application of IFRS as compared to US GAAP. A content analysis confirms the economic importance of the Comment Letters. We find that in almost half of all IFRS cases the Comment Letters request amendments to financial statements.

Fair Value Accounting and its Usefulness to Financial Statement Users

- Vera Palea
- Journal of Financial Reporting and Accounting, Forthcoming
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2365712
- Abstract: This paper aims to discuss fair value accounting and its usefulness to financial statement users. Empirical research raises some doubts on fair value reliability. Furthermore, fair value accounting alone cannot provide information useful to evaluate stewardship. Historical cost is also needed. A dual measurement and financial reporting system could therefore deliver more complete and useful information to financial statement users.

Financial Signaling and Earnings Forecasts

- Iuliia Brushko
- CERGE-EI Working Paper Series No. 498, December 1, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2364933
- Abstract: This paper examines the extent to which financial signaling affects the analysts' and managers' forecast releases. The findings give evidence of heterogeneity of analysts' forecast errors between firms with strong financial indicators (high signal group), weak financial indicators (low signal group), and those with both positive and negative signals (mixed signal group). The paper further indicates that managers' forecast releases also depend on the type of the firm and that managers may try to use the heterogeneity in analysts' treatment. The findings also indicate that the analysts sometimes fail to adjust for managers' forecast biases and that is why may be misled by managers' forecasts. This provides evidence of inaccuracy on the part of analysts and potential gaming on information disclosures between analysts and managers.

Investor Reaction to Strategic Emphasis on Earnings Numbers: An Empirical Study

- M. Shibley Sadique, Mohammad Arifur Rahman Sheikh
- Contemporary Economics, Vol. 7, No. 3, pp. 51-64, 2013. December 2, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2362266

- Abstract: We analyze the earnings information and stock prices of S&P500 firms and find that investors following S&P500 stocks (i) respond more to pro forma earnings than to GAAP earnings, (ii) respond to an emphasis on pro forma earnings, and (iii) are fixated on pro forma earnings. We provide the first direct evidence that a strategic emphasis on earnings numbers may affect return volatility. Further, our results do not support the argument that a larger investor response to Street earnings might be driven by large differences between the Street numbers and GAAP numbers.

Lowball Guidance and Management's Credibility

- Jing Chen
- December 3, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2363258
- Abstract: This paper examines how a history of lowballing affects management’s credibility with respect to new guidance. Lowballing is firms’ intentional issuance of unrealistically low earnings guidance that is easily exceeded at earnings announcements. I also link lowballing to patterns of insider trades, as well as firm share buybacks and issuances. Results suggest the effect of a lowballing history on analysts’ responses to new guidance depends asymmetrically on the type of guidance issued. For firms who lowballed in the prior four quarters, analysts are less responsive to negative news guidance but more responsive to non-negative news guidance. Investors, however, are less responsive to guidance, regardless of the news type. The effect is stronger when firms lowballed more than once and weaker when prior lowball guidance becomes more of a distant event. Furthermore, I show that for firms who lowballed in the prior four quarters, investors respond less positively when firms meet or beat prevailing consensus.

In Short Supply: Equity Overvaluation and Short Selling

- Messod Daniel Beneish, Charles M.C. Lee, Craig Nichols
- November 15, 2013
- Rock Center for Corporate Governance at Stanford University Working Paper No. 165
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2362971
- Abstract: We use detailed security lending data to examine the relation between short sale constraints and equity overvaluation. We find that stocks’ “special” status exhibits a non - linear (U - shaped) relation with their short interest ratio (SIR), and that a stock’ s special status, rather than its SIR, predicts negative returns. We show that short - sellers trade on a variety of firm characteristics and against high sentiment. Specifically, we find: (1) the abnormal returns to the short - side of nine market ‘anomalies’ identified in prior work are attributable to special stocks; and (2) future negative returns to special stocks are directly related to the lendable inventory in each stock rather than to its shares borrowed. Overall, our results suggest returns to the short side of documented ‘anomalies’ may not be obtainable without significant cost, and that the supply (available inventory) of lendable shares is the primary binding constraint to informational arbitrage in the case of equity overvaluation.

Short-Horizon CEO Incentives and Abnormal Stock Returns, Insider Trading, and Earnings Management

- Jianxin Daniel Chi, Manu Gupta, Shane A. Johnson
- November 27, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2362420
- Abstract: Firms with short-horizon CEO incentives experience stock price inflation followed by reversal. Short-horizon CEOs exploit the price inflation by selling relatively more stock and making greater abnormal profits than long-horizon CEOs do. The stock price inflation is partly explained by greater earnings surprises and more positive investor reaction to the surprises. To sustain the inflated price, short-horizon firms are more likely to employ income-increasing discretionary accruals. The findings are consistent with recent theories linking short-horizon incentives to stock price inflation, suggest CEOs have some success in doing so, and shed light on the role earnings management plays in the process.

Aggregated, Voluntary and Mandatory Risk Disclosure Incentives: Evidence from UK FTSE All Share Companies

- Tamer Elshandidy, Ian A.M. Fraser, Khaled Hussainey
- International Review of Financial Analysis, Vol. 30, 2013, pp. 320-333, November 29, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2361372
- Abstract: This paper investigates the impact of corporate risk levels on aggregated, voluntary and mandatory risk disclosures in the annual report narratives of UK non-financial listed companies. We find that firms characterised by higher levels of systematic, financing risks and risk-adjusted returns and those with lower levels of stock return variability are likely to exhibit significantly higher levels of aggregated and voluntary risk disclosures. The results also show that firms of large size, high dividend-yield, high board independence, low (high) insider (outsider) ownership, and effective audit environments are likely to exhibit higher levels of aggregated and voluntary risk disclosures than other firms. Similarly, mandatory risk disclosures are influenced positively by firm size, dividend-yield and board independence and negatively by high leverage. The results suggest that managers of firms exhibiting greater compliance with mandatory regulations have a greater propensity to make voluntary risk disclosures. When we distinguish between high- and low-risk firms, we find that high-risk firms appear to be more sensitive to underlying risk levels, resulting in more disclosure of both voluntary and mandatory risk information than in the case of low-risk firms. The results generally support the present UK emphasis on encouraging rather than mandating risk disclosure. Nevertheless, under this regime, the voluntary risk disclosures of some firms, e.g., those characterised by higher-volatility market returns, do not reflect their underlying risk levels.

Financial Statement Impact of IFRS Adoption: The Case of Korea and Implication for IFRS Adoption in the U.S.

- Yoon Ho Kim, Jaywon Lee, Sang Hyun Park
- KAIST College of Business Working Paper Series No. 2013-033, October 1, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2360908
- Abstract: This study investigates the financial statement impact of adopting International Financial Reporting Standards (IFRS) using a unique set of manually collected sample of Korean firms who have early-adopted IFRS. We collect approximately 90 reconciliation items and document their respective influence on asset, liability, equity and net income. Applying IFRS, asset, liability, equity and net income values all decrease. In terms of value relevance, IFRS equity values are not more value relevant than Korean GAAP (K-GAAP) values while IFRS net income values are less value relevant than K-GAAP values. In regards to earnings management, we are unable to find any significant differences between IFRS and K-GAAP. Considering that K-GAAP resembles the U.S. GAAP in many aspects, we offer some implications for IFRS adoption in the U.S.

Accounting Ratios and the Cross-Section of Expected Stock Returns

- Adriana S. Cordis
- November 1, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2349296
- Abstract: Clean-surplus accounting implies that a firm's stock return can be decomposed into a function of the firm's return on equity, book-to-market equity ratio, and dividend-price ratio. Consequently, the variation in these ratios across firms should be indicative of cross-sectional variation in conditional expected returns. Although this prediction can be tested via cross-sectional regressions, the analysis suggests that ordinary-least-squares estimates of the regression coefficients are sensitive to extreme return observations. To address this issue, I develop an outlier-resistant approach for estimating the regression coefficients. The outlier-resistant estimates provide substantial evidence of the predicted cross-sectional relation between accounting ratios and expected returns.

How Fast Can the Market Get It? Evidence from Alliance Synergies

- Massimo Massa, Chengwei Wang, Hong Zhang
- January 1, 2014
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2373483
- We study how financial markets evaluate the synergies generated by alliances. Using the complete set of international alliances over the period 2002-2009, we find that fund managers choose to trade alliance stocks have superior information. Strategies based on fund rebalancing may deliver performance as high as 28% in the year after the alliance announcement. This profitability also increases in information proximity. The ability for the market to price synergies or learn from the trading of sophisticated investors, however, is rather limited.

Testing the CAPM with Analyst Data

- Jozef Drienko
- January 1, 2014
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2373367
- We investigate the use of ex ante expectations to test the CAPM using generalised method of moments. Expected returns are derived from projected price and dividend levels of individual US securities provided by analysts in the form of 12-month consensus target forecasts. As such, we avoid the use of instrumental variable models that are likely to suffer from overfitting data concerns that would hinder subsequent analysis. We intend to find how far this analyst data can take us in asset pricing. In considering the testable implication of the CAPM, we find pricing errors that are statistically but not economically significant.

Financial Statement Comparability and Valuation of Seasoned Equity Offering

- Philip B. Shane, David B. Smith, Suning Zhang
- December 30, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2372965
- This study examines the relationship between financial statement comparability and the valuation of seasoned equity offerings (SEOs). We argue that financial statement comparability allows underwriters and investors to better assess the quality of the firms that tap into the seasoned equity market through better comparison with peer firms, thus reducing price protection on the part of the underwriter and manipulation of investor perceptions about the true underlying value of the firm's equity securities on the part of the firm. As a result, we find that that SEO firms with better comparability experience less underpricing at the time of seasoned equity offering. We also find that SEO firms with better comparability are less likely to have positive earnings surprises and to issue overvalued equity. Furthermore, we find that better financial statement comparability mitigates management's ability to sell overvalued equity especially for SEO firms with positive earnings surprises and relatively high real earnings management. Findings in this paper provide empirical evidence to support the decision usefulness of financial statement comparability.

Do Active Managers of Retail Mutual Funds Have an Incentive to Closet Index in Down Markets? Fund Performance and Subsequent Annual Fund Flows, 1997-2011

- Aron A. Gottesman, Matthew R. Morey, Menahem Rosenberg
- December 23, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2371371
- Closet indexing is the practice of staying close to the benchmark index while still claiming to be an active mutual fund manager and charging active-management fees. Recent work shows that active mutual fund managers are more likely to closet index during down markets. Around the time of the 2008 financial crisis, closet indexing became so

popular that it accounted for about one-third of all mutual fund assets. In this paper we set out to answer the question of whether there is an incentive for mutual fund managers to closet index during down markets. We examine the relationship between annual fund performance and subsequent annual fund flows in up and down markets. We find that the relationship between fund performance and subsequent net fund flows is significantly different in up-market years compared with down-market years. Specifically, we find that fund performance does not drive subsequent flows nearly as much in down markets as it does in up markets. In up-market years, we find a strong positive relationship between fund performance and subsequent flows. In downmarket years, we find that the magnitude of outperformance or underperformance does not significantly influence the next year's fund flows. Based on these results, which show that investors do not reward outperformance in down markets with higher subsequent flows, we conclude that active managers have an incentive to closet index in down markets.

Frog in the Pan: Continuous Information and Momentum

- Zhi Da, Umit G. Gurun, Mitch Warachka
- December 22, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2370931
- We test a frog-in-the-pan (FIP) hypothesis that predicts investors are inattentive to information arriving continuously in small amounts. Intuitively, we hypothesize that a series of frequent gradual changes attracts less attention than infrequent dramatic changes. Consistent with the FIP hypothesis, we find that continuous information induces strong persistent return continuation that does not reverse in the long run. Momentum decreases monotonically from 5.94% for stocks with continuous information during their formation period to -2.07% for stocks with discrete information but similar cumulative formation-period returns. Higher media coverage coincides with discrete information and mitigates the stronger momentum following continuous information.

Is Sell-Side Research More Valuable in Bad Times?

- Roger Loh, Rene M. Stulz
- December 18, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2368329
- In bad times, uncertainty is high, so that investors find it more difficult to assess the prospects of the firms they invest in. Learning models suggest that in such times investors should, everything else equal, value informative signals such as analyst forecasts and recommendations more than in good times. However, the higher uncertainty in bad times and career concerns stemming from troubled employers may make the task of analysts harder, so that analyst output is noisier and hence less valuable in bad times. Consequently, whether analyst forecasts and recommendations are more valuable during bad times is an empirical matter. We examine a large sample of analyst output from 1983 to 2011. We find that analysts work harder

in bad times, but their earnings forecasts accuracy is worse and that they disagree more. Despite more inaccurate earnings forecasts, revisions to earnings forecasts and stock recommendations have a more influential stock-price impact during bad times as predicted by a learning model.

A Simple Diversified Portfolio Strategy

- Bernd Hanke, Garrett Quigley
- December 18, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2368920
- We present a simple portfolio construction approach which is a blend of market weights and equal stock and sector weights. Our approach results in a highly diversified portfolio both on a stock level and on a sector level and generates higher portfolio returns at slightly lower risk than a market weighted index. We demonstrate that the higher returns of our diversified portfolio originate both from mitigating the link with market weights and from its higher return benefit due to diversification which we are able to capture because we rebalance our portfolio on a regular basis. Our diversified portfolio exhibits only slightly higher turnover than a market weighted index and is less concentrated in mega-cap stocks. Instead it assigns somewhat higher weight to smaller stocks and sectors than a market weighted index. At the same time the diversified portfolio retains the characteristics of a broad market index and is therefore highly implementable and has very high investment capacity. Our simple diversification strategy appears to be a superior way of capturing the equity risk premium compared to a market weighted portfolio. It therefore establishes a tougher benchmark for active fund managers than market weighted indexing as it results in well-diversified, high-capacity and low turnover portfolios that can be delivered very cheaply.

Macroeconomic News-Flow, Earnings Expectations and Return Predictability

- Jose Maria Carabias
- December 3, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2358454
- Abstract: By constructing a stylized calendar of monthly macroeconomic releases, I analyse the usefulness of the real-time macroeconomic news-flow as a leading indicator for firm-level end-of-quarter realized earnings. I find that the macroeconomic news-flow strongly anticipates end-of-quarter earnings. However, consistent with investors' inefficient use of macroeconomic news, I show in earnings announcements pricing tests that the macroeconomic news is not incorporated into market earnings expectations. Using a calendar-time portfolio approach, I subsequently show that this market failure is pervasive through the fiscal quarter and translates into monthly stock return predictability. A long-short trading strategy that exploits this predictable pattern yields monthly alphas of around 111 basis points.

Are Stars' Opinions Worth More? The Relation between Analyst Reputation and Recommendation Values

- Lily H. Fang, Ayako Yasuda
- Journal of Financial Services Research, Forthcoming, August 14, 2013
- Abstract: Using 1994–2009 data, we find that All-American (AA) analysts' buy and sell portfolio alphas significantly exceed those of non-AAs by up to 0.6% per month after risk-adjustments for investors with advance access to analyst recommendations. For investors without such access, top-rank AAs still earn significantly higher (by 0.3%) monthly alphas in buy recommendations than others. AAs' superior performance exists before (as well as after) they are elected, is not explained by market overreactions to stars, and is not significantly eroded after Reg-FD. Election to top-AA ranks predicts future performance in buy recommendations above and beyond other previously observable analyst characteristics. Institutional investors actively evaluate analysts and update the AA roster accordingly. Collectively, these results suggest that skill differences among analysts exist and AA election reflects institutional investors' ability to evaluate and benefit from elected analysts' superior skills. Other investors' opportunity to profit from the stars' opinions exists, but is limited due to their timing disadvantage.

The False Consensus Effect and Trading Around Earnings Announcements

- Jaewon Choi, Jared Williams
- November 25, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2356721
- Abstract: We model trade around earnings announcement under the false consensus effect, a well documented bias in social perception that people overestimate their similarity with others. The novel feature of our model is that investors assume others' private information is similar to their own unless the equilibrium price unambiguously proves that assumption wrong. Our model predicts prices to drift in the direction of earnings surprises and for trading volume to be highest when returns and earnings surprises are highest (in absolute value), consistent with empirical evidence. Our model generates several new testable predictions about the relationship between the firm's (ex ante) expected earnings persistence, earnings surprises, returns around earnings announcements, trading volume around earnings announcements, and post-earnings announcement drift.

How Good are Equity Valuation Models in Predicting Stock Prices?

- Christoph Hukelmann, Cesario Mateus, Irina Bezhentseva Mateus
- November 6, 2012
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2350681
- Abstract: This paper aims to test the accuracy of three well-known equity valuation models for the period 1990 to 2006. This was done to a sample of German listed firms which diverge from the US market in accounting standards, market maturity and corporate governance culture (bank-based in contrast to the market-based US regime) as

well as different market movements and trends which influence main input factors and estimations (e.g. market risk premium, inflation rate and GDP growth rate). To the best of our knowledge this is the first paper to address this issue for a sample of listed firms from the largest bank-based European economy.Using different accuracy measures such as absolute prediction error (average, median and central tendency) as well as multiple regression analysis the results show that dividend discount and abnormal earnings models tend to provide better accuracy than the free cash flow approach. Additionally, we find evidence of the importance in German accounting standards in the less accurate performance of the abnormal earnings model compared to previous studies due to the conservative accounting and the influence of hidden reserves. Finally, we did not find any significant valuation differences regarding the alternative values used for growth and discount rates.

Is International Stock Return Predictability a Stylized Fact?

- Nicola Zanella
- December 4, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2363535
- Abstract: Forecasting stock returns over the long term with a better accuracy of prediction than that offered by the historical average would have been possible in the past, but only in some countries at the international level. This result would have been achieved, for example, through the use of a prediction model called returns decomposition model, as shown previously by Bogle (1991) and Estrada (2006). The historical average would have been beaten consistently by the model's predictions only in the markets in which the initial dividend-price ratio had a positive correlation with the future dividend growth, but not in those in which the correlation was negative. The future sign of this relation is thus very important to our forecasts, as well as for asset pricing models. Unfortunately, in the social sciences, such as economics and finance, it is unrealistic to rely on stationary relations, valid for every country and in every period. Consequently, explaining “stylized facts” of finance requires historical contextualization: for example, the predictability of stock returns measured over the particular period examined may be due only to a lucky combination of historical episodes.

The Consequences of Untimely Quarterly and Annual Financial Reporting

- Eli Bartov, Mark L. DeFond, Yaniv Konchitchki
- December 17, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2368413
- We find that while the market reacts negatively to all late filing announcements, the reaction is stronger to late quarterly-filing announcements than to late annual-filing announcements, especially when accounting problems explain the delay. This is consistent with accounting problems signaling deeper problems when they delay quarterly filings than when they delay annual filings. Moreover, the market responds negatively when managers declare they intend to file within the SEC’s allowed grace period, even though such filings are

considered timely. Interestingly, the market also "sees through" managers' assertions that they will file within the SEC's allowed grace period when they subsequently fail to do so. This is consistent with investors not accepting managements' assertions in the late filing announcements at face value. In addition, abnormal returns continue to decline during the months following late filing announcements. Finally, operating performance also declines during the months following the delay announcement. We contribute to the literature by finding that delayed quarterly-filings have distinctly different valuation implications than delayed annual-filings; that accounting-problems play a unique role in signaling the seriousness of the delay; that the market does not naively accept managements' delay-related assertions at face value; and that delay announcements signal continued poor performance.

European Equity Investing Through the Financial Crisis: Can Risk Parity, Momentum or Trend Following Help to Reduce Tail Risk?

- Andrew Clare, James Seaton, Peter N. Smith, Steve Thomas
- December 17, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2368208
- A growing body of literature suggests that over widely varying historical eras and across a wide range of asset classes momentum investing, often accompanied by a trend following overlay, provides superior risk-adjusted returns. We examine the effectiveness of applying these methodologies to pan-European equity asset allocation through periods of potentially substantial market dislocation, in particular, with the advent of the single currency and the equity market crashes of the early 2000's and 2008. With the introduction of the Euro there has been much discussion of the benefits of diversification via country based portfolios versus industry sector portfolios. Early studies simply looked at changing return correlations over time. The simple conclusion that increasing country correlations over time drives superior risk-adjusted portfolios towards diversification across sectors has been increasingly challenged. Our approach is different in that we apply momentum and trend following investing strategies and assess whether it is sectoral or country indices which dominate our portfolios through periods of structural changes and extreme volatility. Diversification via sectors is clearly the best strategy in times of equity market stress. In addition, the application of trend following offers a substantial improvement in risk-adjusted performance compared to traditional buy-and-hold portfolios. The terms momentum and trend following have often been used interchangeably although the former is a relative concept and the latter absolute. By combining the two we find that one can achieve the higher return levels associated with momentum portfolios but with much reduced volatility, tail risk and drawdowns due to trend following. We observe that a flexible asset allocation strategy that allocates capital to the best performing instruments irrespective of asset class enhances this further. Such methodologies offer superior risk adjusted returns, especially through periods of raised market volatility.

2. Fixed income, currency, commodities, and other asset classes

Is This Time Different? Trend Following and Financial Crises

- Mark C. Hutchinson, John J. O'Brien
- January 7, 2014
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2375733
- Abstract: Following large positive returns in 2008, CTAs received increased attention and allocations from institutional investors. Subsequent performance has been below its long term average. This has occurred in a period following the largest financial crisis since the great depression. In this paper, using almost a century of data, we investigate what typically happens to the core strategy pursued by these funds in global financial crises. We also examine the time series behaviour of the markets traded by CTAs during these crisis periods. Our results show that in an extended period following financial crises trend following average returns are less than half those earned in no-crisis periods. Evidence from regional crises shows a similar pattern. We also find that futures markets do not display the strong time series return predictability prevalent in no-crisis periods, resulting in relatively weak returns for trend following strategies in the four years immediately following the start of a financial crisis.

Corporate Governance and the Cost of Borrowing

- Pascal Frantz, Norvald Instefjord
- Journal of Business Finance & Accounting, Vol. 40, Issue 7-8, pp. 918-948, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2354735
- Abstract: This paper analyzes the theoretical link between governance (defined loosely as the degree of protection offered to outside shareholders), and the cost of borrowing. We find, consistent with empirical evidence, that improvements in governance reduce the likelihood of default. Also, we find that improvements in governance will monotonically increase or reduce the cost of debt, where the sign of the relationship depends on the firm's restructuring cost in default. Finally, we find that the strength of the governance mechanism can influence the incentives to carry out risk shifting.

Asset Volatility

- Maria M. Correia, Johnny Kang, Scott A. Richardson
- December 11, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2361686
- Abstract: Asset volatility is a primitive variable in structural models of credit spreads. We evaluate alternative measures of asset volatility using information from (i) historical security returns (both equity and credit), (ii) implied volatilities extracted from equity options, and (iii) financial statements. For a large sample of US firms, we find that combining information from all three sources improves the

explanatory power of corporate bankruptcy models and cross-sectional variation in credit spreads. Market based (accounting) measures of asset volatility appear to reflect systematic (idiosyncratic) sources of volatility and combining both sources of information generates a superior measure of total asset volatility that is relevant for understanding credit spreads.

Political Risk Spreads

- Geert Bekaert, Campbell R. Harvey, Christian T. Lundblad, Stephan Siegel
- Columbia Business School Research Paper No. 13-91, October 21, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2361472
- Abstract: We introduce a new, market-based and forward looking measure of political risk derived from sovereign yield spreads. Our political risk spread extracts the part of the sovereign spread that is due to political risk, making use of political risk ratings. We provide new evidence that these political risk ratings are predictive, on average, of future risk realizations. In using our measure to account for political risk in evaluations of international investments, it does not double count systematic risk as some conventional measures do. We show that a one percent reduction in the political risk spread is associated with a 10 percent increase in net-inflows of foreign direct investment.

Model Dynamics and Risk Premia in the Short Term Market for Crude Oil

- Karl Larsson
- December 30, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2320687
- This paper investigates model dynamics and risk premia in the short term market for crude oil futures. Stochastic volatility models, with and without jumps, are estimated using data on both futures and option prices. As an economic application we apply the estimated models to the pricing of crude oil variance swaps and an evaluation of the associated variance risk premium. The empirical results point to a positive return risk premium attached to diffusive stochastic volatility while there is not strong evidence of jump risk being priced in the market. Negative volatility and variance risk premia stand out as a robust and significant feature of the data. Jumps play a minor role for representing data and the jump risk component in both variance swaps and variance risk premia is small. Finally, a non-affine model that allows for level dependent volatility of volatility is found to have the best fit to data.

3. Asset allocation, multi-asset, GTAA, and global macro

Forecasting Economic Fundamentals and Stock Returns with Equity Market Order Flows

- Nuri Volkan Kayacetin, Aditya Kaul
- February 9, 2009
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2015568
- Abstract: This paper examines the information content of two different measures of aggregate equity-market order flow for future macro fundamentals and expected stock market returns. The first measure, the cross-sectional average of individual stock order flows, predicts future growth rates for industrial production and real GDP, but not for corporate earnings. The second measure, the difference between the average order flow for big stocks and the average order flow for small stocks, has strong forecast power for industrial production and real GDP, as well as corporate earnings, up to four quarters ahead. The significance of the two order flow-based measures is robust to controls for common equity pricing factors. This suggests a role for aggregate order flows in predicting stock returns. We show that a positive shock to the second factor, the order flow differential, forecasts higher returns for ten size sorted portfolios and greater market and size premiums in the subsequent quarter, even after accounting for a host of variables including the common return factors, experts' earnings growth forecasts, default and term spreads, new equity capital, and market wide liquidity. These findings are consistent with a world where aggregate order flow brings together dispersed information from heterogeneously informed investors.

Impact of Macroeconomic Announcements on US Equity Prices: 2009-2013

- Daniel Nadler, Anatoly B. Schmidt
- December 5, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2364077
- Abstract: Returns of several US equity ETFs on the days of major macroeconomic announcements are examined for the period of January 2009-July 2013. The ARMA GARCH model with external linear regression terms that describe announcement events and their surprises is used. It is found that mean daily returns may be notably higher on the announcement days than those for the buy-and-hold strategy though their difference may be not statistically significant. The choice of announcements with statistically significant regression coefficients yields higher mean daily returns and better Sharpe ratio but possibly lower compound returns.

Predictive Regressions Based on Ex Ante Index Futures Market Information

- Junhua Zhong
- September 29, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2342151

- Abstract: The index futures market allows for accurate measure of expected dividends from the aggregate stock market. This paper uses the dividend information exclusively extracted from the S&P 500 futures market to construct the implied dividend yield, implied capital gains and novel measures of cash flow characteristics such as equity duration and convexity as improved predictors for excess market returns. For the period from April 1982 to December 2008, the implied dividend yield, equity duration and convexity have substantial predictive power for equity premium, both in-sample and out-of-sample, over both short- and long-horizon. The implied dividend yield outperforms the historical dividend yield which has severe limitations in forecasting returns. The equity duration and convexity negatively predict the excess returns, which is in line with the findings of a downward sloping term structure of equity premium documented in Binsbergen, Brandt and Koijen (2012). Given the insight that implied dividend yield and implied duration are actually the two different versions of the same type of measure, this paper highlights the important role of cash flow characteristics in the determination of time-varying expected returns.

Measuring the Fundamental Value of a Stock Index through Dividend Future Prices

- Masataka Suzuki
- October 11, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2339000
- Abstract: This study analyzes the dynamic relationship between stock prices and stock fundamentals. We focus on the Euro Stoxx 50 index, a major eurozone stock index, and its dividend futures. From the observed prices of the dividend futures and Euribor (swap) rates, we calculate the transition of term structures for expected dividend growth rates, market risk premiums, and interest rates. Then, we estimate the fundamental values of the stock index through the expected present value formula. Our empirical analyses show that our fundamentals measure is cointegrated with the index price, and that the index price-fundamentals ratio strongly predicts future index returns. These results suggest that the fundamental value constructed in this study could be used as a reasonable measure that tells us whether the current stock price is over- or undervalued. Furthermore, we show from a variance decomposition analysis that the fluctuations in both expected dividend growth rates and risk premiums explain a considerable part of the index variability, while the contribution of the change in interest rates is negligible.

Stock Return and Dividend Growth Predictability Across the Business Cycle

- Stig Vinther Møller, Magnus Sander
- October 3, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2335428
- Abstract: The predictive ability of dividend yields for future stock returns and dividend growth strongly depends on the stage of the business cycle. Stock returns are highly predictable during recessions but are only weakly predictable during expansions. Conversely,

dividend growth is not at all predictable during recessions but is weakly predictable during expansions. To carry out the predictability tests, we use Cochrane's (2008) joint hypothesis framework, which we extend to allow for variation in the predictability patterns across business cycle regimes.

Predictability of Stock Returns and Asset Allocation Under Structural Breaks

- Davide Pettenuzzo, Allan G. Timmermann
- Journal of Econometrics, Vol. 164, No. 1, September 2011
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2182775
- Abstract: This paper adopts a new approach that accounts for breaks to the parameters of return prediction models both in the historical estimation period and at future points. Empirically, we find evidence of multiple breaks in return prediction models based on the dividend yield or a short interest rate. Our analysis suggests that model instability is a very important source of investment risk for buy-and-hold investors with long horizons and that breaks can lead to a negative slope in the relationship between the investment horizon and the proportion of wealth that investors allocate to stocks. Once past and future breaks are considered, an investor with medium risk aversion reduces the allocation to stocks from close to 100% at short horizons to 10% at the five-year horizon. Welfare losses from ignoring breaks can amount to several hundred basis points per year for investors with long horizons.

Stock Return and Cash Flow Predictability: The Role of Volatility Risk

- Tim Bollerslev, Lai Xu, Hao Zhou
- November 16, 2012
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2177046
- Abstract: We examine the joint predictability of return and cash flow within a present value framework, by imposing the implications from a long-run risk model incorporating both time varying volatility and volatility uncertainty. We provide new evidence that the expected return variation and the variance risk premium positively forecast both short-horizon returns and dividend growth rates. Our equilibrium-based "structural" factor GARCH model permits much more accurate inference than the reduced form VAR and univariate regression procedures traditionally employed in the literature. The model also allows for the direct estimation of the underlying "structural" shocks and economic transmission mechanisms, including a new volatility leverage effect.

Dynamic Asset Allocation under Regime Switching, Predictability and Parameter Uncertainty

- Huy Thanh Vo, Raimond Maurer
- March 25, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2165029
- Abstract: This paper solves the dynamic asset allocation problem under stock return predictability based on the dividend price ratio with

regime shifts and parameter uncertainty in a fully Bayesian framework. Intertemporal hedging demands are simultaneously induced by predictability, regime shifts, parameter uncertainty, and learning about the regimes. Optimal policies display non-monotonic horizon effects whereby regime shifts tend to induce negative hedge demands in the short-run, while predictability induces positive hedge demands in the long-run. The economic costs of ignoring regime switching and predictability are high even in the light of regime and parameter uncertainty.

The Orthogonal Response of Stock Returns to Dividend Yield and Price-to-Earnings Innovations

- Vichet Sum
- Accounting and Finance Research, 2(1), 47-53, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2164847
- Abstract: This study investigates how returns on the S&P 500 index respond orthogonally to dividend yield and price-to-earnings innovations. The unrestricted vector autoregressive (VAR) analysis of monthly data from 1871 to 2012 shows that the response of returns on the S&P 500 index to dividend yield innovation, based on the 12-month horizon, is positive in the first three months, negative in the 4th through 7th months and positive again after that. The returns on the S&P 500 index are negative in the first five months following price-to-earnings shock. The results of the Granger causality tests indicate that dividend yield and price-to-earnings cause the movement in stock returns.

Is Economic Growth Good for Investors?

- Jay R. Ritter
- Journal of Applied Corporate Finance, Vol. 24, Issue 3, pp. 8-18, 2012
- Abstract: When measured over long periods of time, the correlation of countries' inflation - adjusted per capita GDP growth and stock returns is negative. This result holds for both developed countries (for which the correlation coefficient is - 0.39 using data from 1900–2011) and emerging markets (the correlation is –0.41 over the period 1988–2011). And this means that investors would have been better off investing in countries with lower per capita GDP growth than in countries experiencing the highest growth rates. This seems surprising since economic growth is generally assumed to be good for corporate profits. In attempting to explain this finding, the author begins by noting that economic growth can be achieved through increased inputs of capital and labor, which don't necessarily benefit the stockholders of existing companies. Growth also comes from technological advances, which do not necessarily lead to higher profits since competition among firms often results in the benefits accruing to consumers and workers. What's more, it's important to recognize that growth has both an expected and an unexpected component. And one explanation for the negative correlation between growth and stock returns is the tendency for investors to overpay for expected growth. But there is another - and in the author's view, a more important - part of the explanation. Along with the negative correlation between long -

run average stock returns and per capita growth rates, the author also reports a strong positive association between (per share) dividend growth rates and overall stock returns. Such an association is not surprising since unusual growth in dividends is a fairly reliable predictor of increases in future earnings. But another effect at work here is the role of dividends - and, in the U.S., stock repurchases too - in limiting what might be called the corporate "overinvestment problem," the natural tendency of corporate managers to pursue growth, if necessary at the expense of profitability. One of the main messages of this article is that corporate growth adds value only when companies reinvest their earnings in projects that are expected to earn at least their cost of capital - while at the same time committing to return excess cash and capital to their shareholders through dividends and stock buybacks.

The Cross-Section and Time-Series of Stock and Bond Returns

- Ralph S. J. Koijen, Hanno N. Lustig, Stijn Van Nieuwerburgh
- CEPR Discussion Paper No. DP9024. July 2012
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2153456
- Abstract: Value stocks have higher exposure to innovations in the nominal bond risk premium than growth stocks. Since the nominal bond risk premium measures cyclical variation in the market's assessment of future output growth, this results in a value risk premium provided that good news about future output lowers the marginal utility of wealth today. In support of this mechanism, we provide new historical evidence that low return realizations on value minus growth, typically at the start of recessions when nominal bond risk premia are low and declining, are associated with lower future dividend growth rates on value minus growth and with lower future output growth. Motivated by this connection between the time series of nominal bond returns and the cross-section of equity returns, we propose a parsimonious three-factor model that jointly prices the cross-section of returns on portfolios of stocks sorted on book-to-market dimension, the cross-section of government bonds sorted by maturity, and time series variation in expected bond returns. Finally, a structural dynamic asset pricing model with the business cycle as a central state variable is quantitatively consistent with the observed value, equity, and nominal bond risk premia.

Macro Model for Macro Funds

- Adam Zaremba
- December 30, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2372959
- The paper concentrates on value and size effects in country portfolios. It contributes to academic literature threefold. First, I provide fresh evidence that the value and size effects may be useful in explaining the cross-sectional variation in country returns. The computations are based on a broad sample of 66 countries in years 2000-2013. Second, I document that the country-level value and size effects are indifferent to currency conversions. Finally, I introduce an alternative macro-level Fama-French model, which, contrary to its prototype, employs

country-based factors. I show that applying this modification makes the model more successful in evaluation of funds with global investment mandate than the standard CAPM and FF models.

Quality Investing and the Cross-Section of Country Returns

- Adam Zaremba
- December 27, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2372152
- In this paper I investigate the role of financial quality as the determinant of country stock returns. The paper is divided into two parts. Initially, I review the existing literature on quality investing. Then, I perform an empirical analysis of quality premium in global markets. The computations are based on listings of 66 country portfolios in years 2000-2013. I find that the cross-sectional variation of country returns may be explained by profitability and debt ratios: the more profitable and less indebted stock market, the better its performance. The results are indifferent to the choice of fundamental currency. Finally, the financial quality can be combined with value, size and momentum factors so as to enhance the abnormal returns.

An Investor's Guide to the Index Fund Controversy

- Walter Rexford Good, Robert Ferguson, Jack L. Treynor
- December 24, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2353672
- Ideally, an index fund should provide the best possible tradeoff between expected return and risk for the investor who has no research advantage. A number of practical problems arise, however, when one attempts to translate this ideal into practice. Even in the absence of a research advantage, a managed portfolio can compete effectively with index funds in coping with these problems. But if such an advantage is available, the managed portfolio can capitalize on it.

The Business Cycle and the Correlation between Stocks and Commodities

- Geetesh Bhardwaj, Adam Dunsby
- December 23, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2371355
- Measured over long horizons, the correlation between stocks and commodities is close to zero. However, it varies widely over time. Using historical data extending back to 1960 we study the stock-commodity correlation and show: (1) Stock-commodity correlation has a business-cycle component: it is higher during periods of economic weakness. (2) The same pattern is observed in the average intra-commodity correlation. Our results are consistent with recession-increased risk aversion causing investors to treat all risky assets the same, and also with firms adjusting variable input use more quickly during tough times. (3) This business-cycle effect can explain the spikes in the stock-commodity correlation in the early 1980s and the late 2000s. (4) The link between stock-commodity correlation and business cycle is stronger for industrial commodities than for agricultural commodities.

Investment Style and Performance: Evidence for International and European Equity Mutual Funds

- Bernhard Breloer
- December 23, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2370512
- In this paper we study the performance and persistence in performance of 586 international and 1.009 pan-European equity mutual funds classified by fund investment styles. We use a best-fit index methodology to yearly sort funds based on the style dimensions size and value/growth. Doing so, we find that i) the performance of international and European funds largely differs among style categories, ii) based on a five-factor alpha most international style portfolios exhibit performance persistence, and iii) some of the top performing international style portfolios show significant outperformance while this not the case for top European style portfolios. Moreover, when using alternative ranking criteria to examine persistence in performance (e. g. a conditional five-factor alpha and the Sharpe ratio) we find our results to be robust.

Response of Asset Prices to Monetary Policy Under Abenomics

- Kazuo Ueda
- December 21, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2370674
- In this paper, I investigate the causes of the recent sharp response of the yen and Japanese stock prices to the discussion of, and the subsequent implementation of bold monetary easing by the Bank of Japan as demanded by Prime Minister Abe. I present statistical evidence that the response of the two asset prices have indeed been unusually large relative to the past experience with nonconventional monetary policy (NCM) even after allowance is given for the rise in global economic activity and asset prices. I also point out that the rally has been led by speculative trading by foreign investors, while domestic investors have largely stayed on the sidelines. I discuss possible reasons for such foreign investor behavior. Simply put, the unprecedented political pressure raised hopes of the adoption of bold measures by the Bank of Japan. I discuss, however, the possibility that the room for further action by the Bank is quite limited apart from what might be called a targeted helicopter drop of money. I also point out the possibility that investor behavior may have not been based on economic fundamentals. The asset price volatility since April 2013 is interpreted in the light of such discussions.

4. Derivatives and volatility

Option-Implied Correlations and the Price of Correlation Risk

- Joost Driessen, Pascal J. Maenhout, Grigory Vilkov
- Netspar Discussion Paper No. 07/2013-061, July 26, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2359380
- Abstract: Motivated by extensive evidence that stock-return correlations are stochastic, we analyze whether the risk of correlation changes (affecting diversification benefits) may be priced. We propose a direct and intuitive test by comparing option-implied correlations between stock returns (obtained by combining index option prices with prices of options on all index components) with realized correlations. Our parsimonious model shows that the substantial gap between average implied (39.5% for S&P500 and 46.0% for DJ30) and realized correlations (32.5% and 35.5%, respectively) is direct evidence of a large negative correlation risk premium. Empirical implementation of our model also indicates that the index variance risk premium can be attributed to the high price of correlation risk. Finally, we provide evidence that option-implied correlations have remarkable predictive power for future stock market returns, which also stays significant after controlling for a number of fundamental market return predictors.

Efficient Estimation of Integrated Volatility Incorporating Trading Information

- Yingying Li, Shangyu Xie, Xinghua Zheng
- January 1, 2014
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2373489
- In this paper we consider the setting when market microstructure noise is a parametric function of the trading information. We show that our proposed estimator of the parameters provides rate n convergence. This enables us to estimate the "latent prices" with high precision, based on which we propose a new estimator of integrated volatility which we call "estimated-price realized volatility'' (ERV). We show that ERV has a convergence rate of $\sqrt{n}$ (instead of $n^{1/4}$ under usual noisy settings). Simulation studies demonstrate the efficiency gain compared with existing popular volatility estimators. We further obtain some interesting empirical findings -- for certain stocks, a simple model of market microstructure noise that involves trading volumes and whether a trade is buyer- or seller-initiated works effectively. Our framework is readily applicable to more comprehensive models incorporating any (possibly individualized) available trading information.

What Drives Index Options Exposure?

- Timothy C. Johnson, Mo Liang, Yun Liu
- December 31, 2013
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2373560
- This paper documents the history of aggregate positions in U.S. index options and investigates the driving factors behind use of this class of

derivatives. We compile several time series that measure the scale of the S&P 500 options market. The quantity of outstanding index options is surprisingly small. The level of options exposure is driven by stochastic trends in equity market activity and by wealth effects. Outstanding position values also increase more than mechanically with the level of volatility but not with skewness. A significant positive role is also found for the market dividend yield. Survey data on OTC index options exhibit very similar trends until 2007. Recent growth in volatility exposure through listed VIX derivatives is substantial but not anomalous. The study lays the groundwork for theoretical efforts to explain the evolution of option quantities in equilibrium.

5. Trading research

High-Frequency Trading - New Realities for Traders, Markets and Regulators

- Edited By David Easley, Marcos López de Prado and Maureen O'Hara
- October 21, 2013
- http://riskbooks.com/high-frequency-trading-new-realities-for-traders-markets-and-regulators
- Abstract: This is the survival guide for trading in a world where high-frequency trading predominates in markets, accounting for upwards of 60% of trading in equities and futures, and 40% in foreign exchange. High-frequency trading is the subject of extensive debate, particularly as to whether it is beneficial for traders and markets or instead allows some traders to benefit at others expense. This book provides you with an important overview and perspective on this area, with a particular focus on how low-frequency traders and asset managers can survive in the high frequency world.

Multi-Asset Trading Costs

- Robert Kissell
- The Journal of Trading, Fall 2013, Vol. 8, No. 4: pp. 69-80
- http://www.iijournals.com/doi/abs/10.3905/jot.2013.8.4.069#sthash.eKsVZtOm.dpbs
- Abstract: In this article, we provide insight into some of the industry's developing trends pertaining to transaction cost analysis across multi-asset classes and its role in portfolio construction. We provide all investors—managers, analysts, traders, programmers, and so on—with a transparent process to evaluate and test transaction cost models across all asset classes. Most importantly, we provide a process that will allow managers to evaluate these costs and construct portfolios that are consistent with the fund's investment objective, without worry of information leakage or having an outside party potentially reverse-engineer the investment decision process, because the data and analysis never leave the investor's own desktop.

Appendix 1

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