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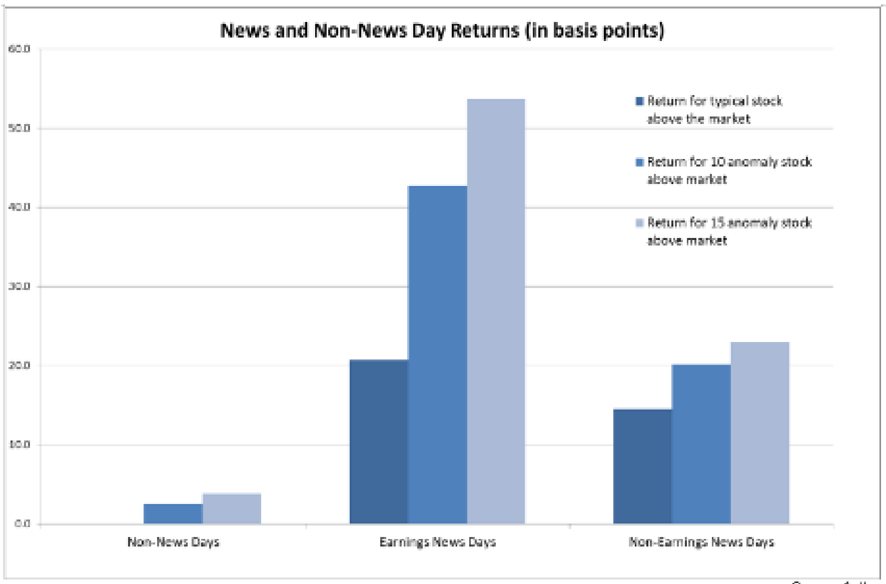
Anomalies and News

Joseph Engelberg (UCSD), R. David McLean (DePaul), Jeffrey Pontiff (Boston College)

Stock market investors are often surprised when news is released about a company they had put their hard earned money in. This happens when they have certain perceptions about the company they had invested in but in fact the actual news turns out to be different from what they had expected it to be.

The authors find that the effects are similar on both the long and short sides, and they survive adjustments for risk exposure and data mining. The study shows that anomaly signals predict errors in earnings forecasts made by analysts as their forecasts are systematically too long for anomaly-longs and too high for anomaly-shorts.



Source: Author

The chart compares the return magnitudes (in basis points) for a typical stock with no net anomaly exposure, with that of a stock with a positive 10 and positive 15 net anomaly exposure. The standard deviation of anomaly exposure is 6.1, so a 10 net exposure corresponds to a stock with 1.6 standard deviations above average and a 15 net exposures corresponds to a stock with 2.5 standard deviations above average. The chart shows that news and earnings days are good news on average, and that return differences based on anomaly exposure increase dramatically.

Anomalies and news is the subject of an interesting study by *Joseph Engelberg, R. David McLean* and *Jeffrey Pontiff.* Using a sample of 97 stock return anomalies documented in published studies, they find that anomaly returns are seven times higher on earnings announcement days and twice higher on corporate news days.

Taken together the study's results support the view that anomaly returns are the result of investors biased expectations. Thankfully, they are at least partly corrected when the correct actual news is released by the company.

Academic research shows that a large number of observable characteristics can predict the cross-section of stock returns.

While this research goes back over four decades, academics still disagree on what causes return predictability. There are three explanations for this cross-section predictability. First, predictability could be the result of cross-sectional differences in risk, reflected in discount rates. The second comes from behavioural finance and argues that return predictability reflects mispricing. A third explanation for return predictability is data mining.

To differentiate between these three views, the authors compare cross-sectional predictability on days when information specific to the firm is publicly released with days when there is no news about it.

Using a broad set of 97 anomalies not only gives the study more statistical power than earlier work, but allows the authors the authors to draw novel comparisons between categories of anomalies. They say their study is the first to relate a broad set of anomalies to analyst forecast errors, which are important because they are not subject to joint-hypothesis problem and are in agreement with the news and earnings announcement findings. The authors say that their paper is the only one to show that spurious anomaly strategies can also have higher returns on news days and earnings announcement days.

This study's findings are consistent with investors who have overly optimistic expectations about the cash flows of some firms and overly pessimistic expectations on the cash flows of other companies. The results of study suggest that investors are surprised by news. When new information is released, they update their biased beliefs, which in turn cause prices to change. This in turn causes the observed return predictability. Evidence from sell-side equity earnings forecasts dovetail with the stock return evidence that analysts overestimate the earnings for firms on the short-side of anomaly portfolios and underestimate earnings for firms on the long-side.

Bribes and Firm Value

Stefan Zeume (U-M)

Most countries have laws to prevent businesses from resorting to bribing for promoting their business. The U.K. Bribery Act 2010 is a significant piece of legislation in this regard. *Stefan Zeume* sees the passage of the latest UK Bribery Act as a shock to U.K. firms' cost of doing business and studies the effect of bribes on firm value.

He noticed that around the time of the passing of the new law, U.K. firms operating in high corruption countries showed a drop in value. However, their non-U.K. competitors in the same countries experienced an increase in value. U.K. firms responded to the new law by reducing the expansion of their network of subsidiaries into the corrupt regions.

The study finds that compared to their non-U.K. competitors, the U.K. firms' sales in the corrupt countries grew 12 percentage points slower and their M&A activity actually declined. Taken together, the paper shows that giving bribes helps doing business in the corrupt areas. The author argues that imposing unilateral anti-bribery laws on some firms not only impacts their economic activity but actually benefits their unregulated competitors from other countries.

The evidence presented in "Bribes and firm value" by *Stefan Zeume* is consistent with the general belief that bribing is a part of doing business in some countries. While anti-bribery laws are costly for affected firms, the author cautions that part of the effect of the new U.K. Act on firm value may be due to higher expected legal costs and penalties associated with operating in perceived corrupt regions.

At the same time some U.K. firms may withdraw from such areas to avoid the costs of implementing new internal controls. In order to show that these alternative explanations do not explain the full effect, the author shows a decline in the revenues of the surviving subsidiaries owned by U.K. firms and a drop in value of non-U.K. firms that are subject to penalties and fines but exempted from the internal control requirements of the Act.

A key contribution of this study is to provide firm level evidence of anti-bribery regulation's impact on foreign operations, such as revenue, opening and closing of subsidiaries, and M&A activity. Also, the study adds the cost of doing business to the list of drivers of foreign activity and international cross-border flows.

The study also examines the spillovers of the U.K. Bribery Act on competitors of U.K. firms. It finds that competitors of U.K. firms may benefit through two channels. Some unregulated competitors' expected payoff from offering bribes may increase as regulated firms may decide to quit the corrupt regions thus resulting in reduced competition. Also, companies subject to anti-bribery regulations in their home country already but nevertheless competing in corrupt regions may benefit because the U.K. Bribery Act actually levels the field.

To shed more light on the drivers behind the drop in U.K. firms' value due to the U.K. Bribery Act, the study also examines the firms' response to the new law in terms of subsidiary locations and revenues, as well as M&A and joint venture activity.

Efficiently Inefficient Markets for Assets and Asset Management

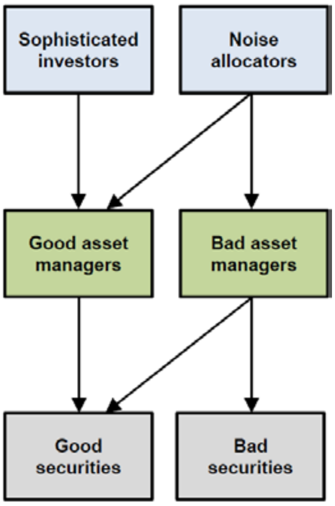
Nicolae Garleanu (Berkeley) and Lasse Heje Pedersen (CBS)

We know that asset managers play a key role in making financial markets efficient as their size allows them to spend significant resources on getting and processing information. At the same time, the asset management market is subject to its own frictions: investors — both institutional and individual — must search for informed asset managers, vet them, etc.

How does this search for asset managers affect capital allocation and the efficiency of the security market? How large an outperformance can investors expect from asset manages before and after fees? What type of managers can be expected to outperform? Which type of investors should use active, rather than passive, investing?

Nicolae Garleanu and *Lasse Heje Pedersen* try to address these questions in their study **Efficiently Inefficient Markets for Assets and Asset Management** through a model with two levels of frictions: investors' costs of searching for informed asset managers and asset managers' cost of collecting information about assets. They say that despite this apparent complexity, the model is very tractable and delivers several new predictions that link the levels of inefficiency in the security market and the market for asset management.

The authors use the term *efficiently inefficient* to refer to the equilibrium level of inefficiency given the two layers of frictions in the notion of "an equilibrium degree of disequilibrium", where prices in efficiently inefficient markets reflect information, but only partially, so that some managers have an incentive to spend resources to get information, but not all, so investors have an incentive to spend resources to find informed managers.



Source: Author

The study finds that asset managers can increase asset price efficiency by letting investors essentially share information costs, but their ability to do so is limited by the search friction in the asset management industry. Therefore, the efficiency of the asset markets is fundamentally connected to the efficiency of the asset management market. The authors' model shows how lower search frictions in asset management lead to improved asset price efficiency, lower asset management fees, less outperformance by asset managers before and after fees, fewer and larger asset managers, improved market liquidity, and potential welfare improvements.

To compensate investors for their search cost associated with finding an informed asset manager, informed managers must outperform passive investing after fees, a new prediction that helps explain the empirical evidence that the best mutual funds, hedge funds, and private equity firms do in fact deliver such outperformance. Further, the study finds that large sophisticated investors should search for informed active managers, while smaller investors are better served by passive investing as the search costs outweigh the potential gains from improved performance of a small portfolio. Therefore, the model implies that asset managers with larger and more sophisticated investors should perform better on average, consistent with the evidence that institutional managers outperform retail managers and a number of other consistent facts. The authors consequently say that the model helps explain a number of empirical facts that were puzzling in the light of existing models and it lays the ground for further analysis of asset markets and asset management.

Mortgage Refinancing, Consumer Spending, and Competition: Evidence from the Home Affordable Refinancing Program

Sumit Agarwal (NUS), Gene Amromin (FRBCHI), Souphala Chomsisengphet (OCC), Tomasz Piskorski (Columbia & NBER), Amit Seru (Chicago Booth) and Vincent Yao (GSU)

In their paper **Mortgage Refinancing, Consumer Spending, and Competition: Evidence from the Home Affordable Refinancing Program,** *Sumit Agarwal, Gene Amromin, Souphala Chomsisenghet, Tomasz Piskorski, Amit Seru* and *Vincent Yao***,** examine the American government's ability to impact mortgage refinancing activity and spur consumption by focusing on the Home Affordable Refinancing Program (HARP). The policy allowed intermediaries to refinance insufficiently collateralized mortgages by extending government credit guarantee on such loans.

The study uses proprietary loan-level panel data from a large market participant with refinancing history and social security number matched consumer credit records of each borrower. Its design based on eligibility requirements of the program showed a substantial increase in refinancing activity by the program as three million eligible borrowers with mostly fixed rate mortgages, which are the predominant contract type in the U.S., refinanced their loans under HARP. Borrowers got a reduction of around 140 basis points in interest rate, on average, thanks to HARP refinancing, amounting to about $3,500 in annual savings for each borrower – a 20 % reduction in monthly mortgage payments.

After refinancing there was a significant increase in the spending on durable goods by borrowers, with large increase among the more indebted borrowers. The study found that regions more exposed to the program saw a relative increase in non-durable and durable consumer spending, a decline in foreclosure rates, and faster recovery in house prices. The authors say that a variety of identification strategies showed that competitive frictions in the refinancing market may have partly hampered the program's impact. On average, these frictions reduced take-up rate among eligible borrowers by 10% to 20% and cut interest rate savings by 16 to 33 basis points, with larger effects among the most indebted borrowers who were the key target of the program.

Importantly, while the paper shows that HARP had considerable impact on refinancing, it also shows that a significant number of eligible borrowers did not take advantage of the program. The study finds that limits to competition in the refinancing market can also help explain part of the shortfall. By adversely altering refinancing activity competitive frictions may have in fact significantly reduced the program's effect on eligible households' consumption.

The study's evidence suggests that provisions limiting the competitive advantage of incumbent banks with respect to their existing borrowers should be an active consideration when forming stabilisation policies like HARP. The authors say that this insight would also apply to other policies whose implementation depends on the intermediaries who may have some incumbency advantage in regard to targeted agents.

The authors note that their analysis using conforming market pricing as a benchmark does not imply that the conforming refinancing market was fully competitive. In fact recent evidence provided by another study in 2014, suggests that there was also significant frictions limiting competition in the regular conforming refinancing market. The other study's finding suggests that the estimates in this paper, if anything, are a lower bound on the overall effects of importance of competition for program implementation.

The authors say that their findings have implications for future policy interventions, pass-through of monetary policy through household balance sheets, and design of the mortgage market.

Service Quality in Financial Intermediaries

Jiang Cheng (SUFE), Wenlan Qian (NUS) and David M. Reeb (NUS & ABFER)

This study uses a novel dataset of customer complaints to state regulators about insurance companies to measure financial service quality in the United States. Insurance companies are an important part of the financial sector with written premiums amounting to $1.1 trillion and an asset size of $5.1 trillion in 2014. The data used allows the capture of multiple stages of customer experience with insurance companies on marketing, underwriting, services and claim handling.

In their research on **Service Quality in Financial Intermediaries,** *Jiang Cheng, Wenlan Qian* and *David M. Reeb* first see if the number, outcome and nature of customer complaints differ between stock and mutual insurers. The top three specific complaint types are delay in claim (31%), reduced settlement offer (20%) and denial of claim (11%). The full sample comprises of 1,224 stock insurers and 522 mutual insurers. Then they study the effectiveness of market competition to improve service quality through reputational incentives. Finally, they examine if the strength of the regulator matters in protecting consumer interests in the financial services sector.

The authors manually collected customer complaint information for each firm and each state from the website of the National Association of Insurers from 2005 to 2011. The data contain a rich set of information about customer complaints and their outcomes in the adjudication process. The analysis shows that stock insurers get 21-25% more complaints every year than their matched, mutual counterparts.

However, the study does not find any differences in customer complaint success rates between mutual and stock insurers. This suggests that the differing number of complaints between stock and mutual insurers stem from disparities in insurer service quality and reflects the difficulties customers have in evaluating the reputation or service quality of these financial intermediaries.

The study finds evidence of significant service quality problems, which are especially pronounced in concerns over the handling of claims, customer care and misconduct. In particular, customers face substantial service quality problems after natural disasters.

Further analysis shows that competition among insurers aggravates service quality problems. The authors also discover evidence about weak regulatory oversight of service quality, which they say could possibly due to constraints from multiple regulatory objectives. Overall, the author's findings suggest the need for further improvement in regulatory oversight and in particular greater service quality disclosure.

The paper makes three important contributions. First, it focuses on an ignored aspect of financial intermediary regulatory goal of providing financial service quality. Compelling evidence is provided that customers experience substantial problems with financial intermediaries regarding settlement delay, reduced settlement offers and misconduct. Second, the study's approach gives evidence on how consumer actions reveal evidence about their perspectives on regulatory efficiency regarding financial intermediaries.

Finally, this paper adds to the literature on the regulatory oversight of financial intermediary service quality by highlighting the impact of multiple regulatory objectives. Customers appear to bear substantial costs from poor service quality in the form of greater personal bankruptcies. In summary, the analysis shows the need for improvements in regulatory oversight and transparency of financial intermediary service quality.

Long-Term Interest Rates and Bank Loan Supply: Evidence from Firm-Bank Loan-Level Data

Arito Ono (CHUO), Kosuke Aoki (TODAI), Shinichi Nishioka (BOJ), Kohei Shintani (BOJ) and Yosuke Yasui (BOJ)

This paper examines the effects of long-term interest rates on bank loan supply using Japanese data. The study aims to provide simple but strong evidence that the decline in long-term interest rates does indeed stimulate bank loan supply. To do so, the authors construct a unique and massive firm-bank loan-level panel dataset for Japan covering the period 2002-2014, which makes it possible to address the identification challenge that the effect of long-term interest rates on loan supply needs to be disentangled from the effect on loan demand by controlling for time-varying unobserved firm heterogeneity with firm-year fixed effects.

The empirical analysis shows that an unanticipated decrease in long-term interest rates led to an increase in banks' loan supply, providing evidence for the existence of the portfolio balance channel, which consists of the net outcome of the substitution effect and the income effect when banks are subject to the value-at-risk (VaR) constraint. The study also finds that an increase in banks' net worth as a result of an increase in the value of bond holdings brought about by a decline in long-term interest rates led to an increase in loans to firms, providing evidence for the bank balance sheet channel. The authors' also find that the bank balance sheet channel is stronger in the case of loans to smaller, more leveraged, and less creditworthy firms, which suggests that a stronger balance sheet leads banks to increase their loan supply to credit-constrained and riskier firms.

economic impact of these channels is modest, in order to get a better understanding of the transmission of monetary policy it is necessary to decompose the sluggish loan growth during the lost decades in Japan into demand and supply factors in a more rigorous manner.

Main results (Table 3)

	(i)		(ii)		(iii)	
Key independent variables						
$\Delta BONDRATE$	-1.59	*				
	(0.84)					
$BK\_CAPGAIN$	4.60	***	3.57	*	4.65	*
	(1.36)		(2.05)		(2.78)	
Macroeconomic controls	YES		NO		NO	
Bank characteristics	YES		YES		YES	
Firm characteristics	YES		YES		NO	
Fixed effects						
Firm	YES		YES		-	
Year	NO		YES		-	
Firm-year	-		-		YES	
Bank	YES		YES		YES	
Observations	379,989		379,989		379,989	
Adjusted R^2	0.04		0.04		0.21	

Source: Author

The authors' say that while they provide evidence for the existence of the portfolio balance sheet channel and the bank balance sheet channel, how important they are in quantitative terms relative to demand factors remains an open question. While their estimation results suggest that the

While the study finds that changes in long-term interest rates affect banks' loan supply, such changes in loan supply may not materially affect client firms' real activities such as investment and employment if firms are able to tap other source of funds. In order to assess the real significance of the two transmission channels, the authors' say that one has to know the elasticity with which borrower firms can switch between borrowing from banks and other sources of funds. This may be heterogeneous depending on firms' and banks' characteristics as well as the closeness of firm-bank relationships.

The authors' say that while there is evidence that a reduction in long-term interest rates led banks to particularly increase loan supply to credit-constrained and riskier firms, whether banks' portfolio composition shifted towards riskier assets remains an open question. It may well be the case that the magnitude of the changes in banks' portfolio composition differs across banks, so that one has to find a way to control for the aggregate loan demand that each bank faces in examining the shift in bank portfolios, they add.

About ABFER

The Asian Bureau of Finance and Economic Research is an institute founded by academics from Asia, North America, and Europe. The Bureau intends to create a virtual and independent network of high-quality academics akin to the NBER/CEPR, as well as conferences and workshops.

The purposes of the Bureau include:

- to promote Asia-Pacific oriented financial and economic research at local, regional and international levels;
- to connect globally prominent academic researchers, practitioners and public policy decision-makers on Asia-Pacific related financial and economic issues;
- to enhance the research capabilities and development of strong clusters of finance and economic research groups in academic institutions and other institutions in Singapore and Asia-Pacific.

This Digest summarizes selected papers presented in the ABFER's 4th Annual Conference which was held in May 2016 at the Shangri La Hotel, Singapore. More information on the conference can be found here.

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