









## Collateral Management after the Crisis

Individual Investors Trading and Performance around Earnings Announcements of Volatile and Short-Sale Constraint Stocks

Knowledge Transfer through Social Media Enabled Electronic Networks of Practice – The Case of a Financial Institution

LEIs – Regulating Identity to Build Transparency





## **Impressum**

Redaktion  
Prof. Dr. Peter Gomber  
Dipl.-Wirtsch.-Inform. Ulrich Lampe  
Dipl. rer. pol. techn. Kai Zimmermann

Herausgeber  
Prof. Dr. Wolfgang König  
Vorstandsvorsitzender des E-Finance Lab  
Frankfurt am Main e. V.  
Prof. Dr. Peter Gomber  
Stellvertretender Vorstandsvorsitzender des E-Finance Lab  
Frankfurt am Main e. V.

Kontakt  
info@efinancelab.com  
www.efinancelab.com

Gestaltung  
Novensis Communication GmbH  
Bad Homburg

4. Ausgabe, 2012  
Auflage 1.700 Stück

Copyright © by E-Finance Lab Frankfurt am Main e. V.

Printed in Germany  
ISSN 1866-1238

## Editorial

# Collateral Management after the Crisis

Swen Werner

Regulatory change developed in response to the financial crisis has increased the importance of collateral management, both to financial market participants and corporates. OTC derivatives have to be supported by higher levels of collateral. Revised capital rules penalize a bank's operational inefficiencies when managing collateral and funding constraints have increased the importance of collateralized financing. But there is also a more fundamental behavioral change. Buy-side participants have, in some instances, viewed collateral management as an operational hurdle to overcome, rather than a risk management tool. Post crisis, collateral management is now seen as pivotal to their risk management approach. All of this is causing change.

Many firms traditionally operate a number of collateral management silos that cover specific businesses, like equity or debt capital markets, prime brokerage, futures, structured products, or OTC trading. Such structures are no longer economically viable given the crisis,

which amplified the opportunity costs associated with these structural inefficiencies. For example, the type of collateral posted to counterparties is increasingly used to determine the appropriate discounting rate at which to price OTC derivatives. Going forward, other factors such as thresholds or frequency of the collateral exchange could affect how counterparties price transactions. This economic pressure will require many firms to invest heavily in internal capabilities or employ third-party providers to improve their operational efficiency and control over the collateral flows across multiple business lines.

In response, collateral management is developing at a fast rate and the need to continuously invest is unlikely to disappear. Regulation has created a permanently higher demand for collateral that will impact the wider market and business models. Yet, there is more change to come. The present work by the Financial Stability Board in the context of "shadow banking" seems to suggest a market-wide centralization of risk parameters if it



**Swen Werner**  
**Head of Regulatory Change & Strategy,**  
**Collateral Management**  
**J.P. Morgan**

were to finally recommend the introduction of minimum haircuts for collateral. Regulators are also discussing whether additional rules or processes are needed that would, for example, prevent cash lenders such as money market funds from taking on collateral that they could not properly manage or permissibly hold outright. Collateral management practices thus increasingly interact with rules applicable to the asset management industry.

The shift of OTC derivatives towards central clearing will significantly increase the demand for high quality collateral and could thereby have an impact on asset pricing. Academics and regulators are focusing on the consequences should different assets with identical payoffs be priced differently by the market, depending on their collateral value. Collateral rules thus can impact the overall capital allocation, causing unintended consequences.

There are wider systemic risk implications driven by a potential supply-demand imbalance

for collateral, aggravated by restrictive collateral eligibility requirements. Certain assets cannot be universally used for different exposures. Work is underway to discuss whether further fine-tuning of several related regulatory frameworks is necessary, with a view to look at the consistency (or lack thereof) of collateral eligibility between central counterparties, Basel III and central bank funding.

Finally, the industry may see the appearance of specialized collateral market infrastructures in the areas of collateral transformation or collateral liquidation because these activities involve a level of credit capacity to which not all market participants are able to commit.

Effective collateral management solutions must allow market participants to efficiently allocate collateral across various exposures. Those institutions that are able to manage their collateral to maximum advantage will have a competitive edge.

## Research Report

# Individual Investors Trading and Performance around Earnings Announcements of Volatile and Short-Sale Constraint Stocks

INDIVIDUAL INVESTORS ARE REPEATEDLY FOUND TO UNDERPERFORM RELATIVE TO A MARKET INDEX. BESIDES EXCESSIVE TRADING, LITTLE IS KNOWN WHEN RETAIL INVESTORS COLLECTIVELY LOSE. THIS ARTICLE SHOWS THAT TRADING IN SHORT-SELLING CONSTRAINED, VOLATILE STOCKS AROUND EARNINGS ANNOUNCEMENTS IS COSTLY TO INDIVIDUAL INVESTORS. THE EFFECT IS PARTICULARLY PRONOUNCED FOR LESS SOPHISTICATED INVESTORS.

Thomas Etheber  
Tilman Rochow  
Steffen Meyer

Dominik Hennen  
Andreas Hackethal

### Introduction

Whereas Schlarbaum et al. (1978) and Calvet et al. (2007) do not find American and respectively Swedish individual investors to significantly underperform the market, Barber and Odean (2000) – using a sample of US brokerage clients – document that individual investors underperform the market by 1.5% p.a. This underperformance is attributed to excessive trading. Barber et al. (2008), who analyze all trades on the Taiwanese stock exchange between 1995 and 1999, estimate that trades of private

investors underperform trades of institutional investors by roughly 3.8% p.a. According to the authors, the losses stem from aggressive orders of the investors. Moreover, in a study on German investors Meyer et al. (2012) look at the value of skill in the cross-section of individual investors and find a negative value of skill in excess of 7.0% p.a.

Besides the insight that private investors overtrade, little is known about sources of this massive underperformance of private investors.

In this paper, we tested the conjecture that private investors lose by trading around earnings announcements in stocks that are highly volatile and short-selling constrained (measured by low institutional ownership). This conjecture rests on two strands of literature:

On the one hand, for example, Berkman and Koch (2008) test the theory by Miller (1977) which postulates that short-sale constrained securities become overpriced when heterogeneous value expectations exist among investors. They find evidence that the information released at earnings announcement events can lead to an unraveling of the heterogeneous value expectations about these stocks, and document significant changes in trading activity for Miller's stocks and abnormal return patterns. In fact, for these stocks they observe a price run-up prior to earnings announcements and a price correction thereafter.

On the other hand, private investors are found to buy attention-grabbing stocks, i.e., stocks with a huge price increase, volume increase, or extensive media coverage (Barber and Odean, 2007). Earnings announcements with relatively strong news coverage are therefore likely to attract private investors' attention. Literature points out that private investors in fact strongly react to earnings announcements as trading volume around these announcements is shown to be abnormally high.

Combining the two strands of literature suggests that private investors lose by trading

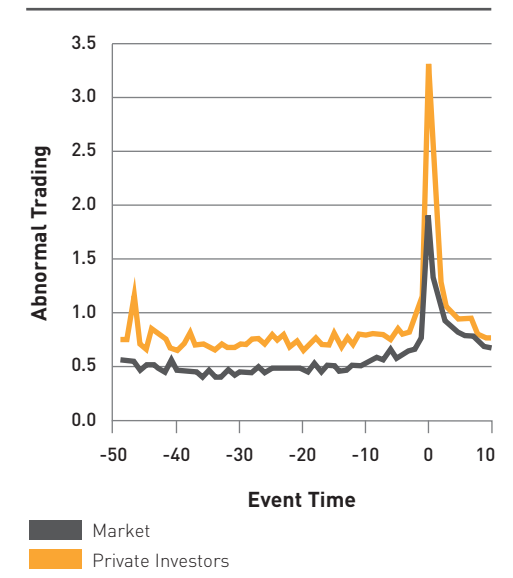
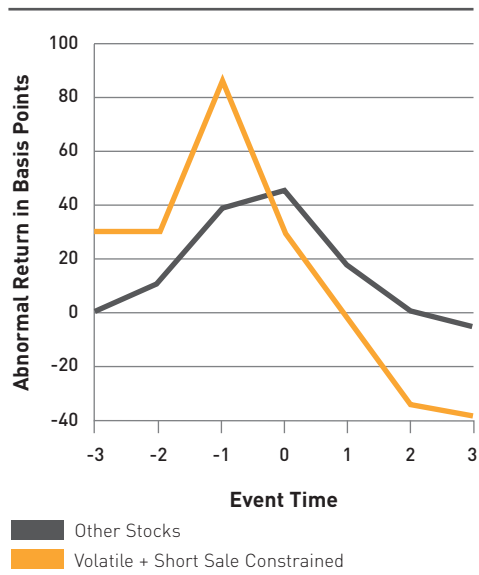


Figure 1: Development of abnormal trading volume

around earnings announcements of short-selling constrained and volatile stocks.

### Dataset and Methodology

We use a dataset of a large discount brokerage with trading data from mid-2000 until mid-2009. The dataset includes detailed information on more than 50,000 private investors. Moreover almost 13,000 earnings announcements for the German market (CDAX stocks) have been collected from various data providers. Alongside the earnings announcements, data has been collected to estimate the volatility of stocks as well as on the development of institutional ownership over the 2000 to 2009 period. Furthermore, data on a couple of investor characteristics has been provided by the broker, which enables us to analyze the impact of expe-



**Figure 2: Performance around earnings announcements ( $t = 0$ )**

rience and sophistication on trading and performance around earnings announcements.

The data on volatility and institutional ownership is employed to classify stocks whether they are highly volatile and/or short-sale constrained (low institutional ownership). In order to investigate the effects of earnings announcements on private investors' trading behavior and performance in these stocks, we use abnormal trading volume of private investors to measure trading activity and holding period as well as round-trip returns to measure performance.

An event window of +/- 20 days around each earnings announcement is chosen to measure the change in trading activity. Performance in

the holding period approach is calculated for a period of three days to 250 days. Round trip returns are calculated for the entire length of the round trips. An artificial cut-off is not assumed.

### Empirical Findings

First, for the entire German market, we observe a price run-up prior to the earnings announcement followed by a sharp price correction afterwards, which is mostly pronounced for volatile and short-sale constrained stocks. This also replicates the results from the United States (Berkman and Koch, 2008).

Second, individual investors' trading activity increases significantly during earnings announcement periods with volumes about four times higher than in the preannouncement period (see Figure 1). The key driver is a sharp increase in buy trades.

Third, individual investors underperform when trading around earnings announcements compared to non-announcement trades (see Figure 2). In particular, transactions conducted in a three-day window around the event exhibit the worst holding period (daily underperformance of up to 17 basis points) and round-trip returns (daily underperformance of 10 basis points). Thereby, the underperformance is even more pronounced for volatility and short-sale constrained stocks albeit statistically insignificant.

Finally, experience and sophistication apparently plays a major role in this context. Particularly when trading in volatile and short-

sale constrained stocks, experience is of crucial importance. We find strongly negative round-trip returns by inexperienced investors (abnormal daily negative returns of 36 basis points) and a return differential of 41 basis points compared to experienced investors, which is both economically and statistically significant.

### Conclusion

We analyzed private investors' trading and performance around earnings announcements with a focus on volatile stocks also exhibiting short-sale constraints (Miller stocks) in Germany. For private investors, we find that abnormal private investor trading is higher around earnings announcements, compared to the average market. On these trades private investors underperform relative to non-announcement trades. Trading in these stocks generates strongly negative returns. Thereby, returns are particularly negative for inexperienced and unsophisticated investors.

### References

#### Barber, B.; Odean, T.:

Trading Is Hazardous to Your Wealth: The Common Stock Investment Performance of Individual Investors. In: *The Journal of Finance*, 55 (2000) 2, pp. 773-806.

#### Barber, B.; Odean, T.:

All That Glitters: The Effect of Attention and News on the Buying Behavior of Individual and Institutional Investors. In: *Review of Financial Studies*, 21 (2007) 2, pp. 785-818.

#### Barber, B.; Lee, Y.; Liu, Y.; Odean, T.:

Just How Much Do Individual Investors Lose by Trading? In: *Review of Financial Studies*, 22 (2008) 2, pp. 609-632.

#### Berkman, H.; Koch P.:

Disagreement, Short-Sale Constraints, and Speculative Trading before Earnings Announcements. In: Working Paper (2008).

#### Calvet, L.; Campbell, J.; Sodini, P.:

Down or Out: Assessing the Welfare Costs of Household Investment Mistakes. In: *Journal of Political Economy*, 115 (2007) 5, pp. 707-747.

#### Meyer, S.; Schmoltzi, D.; Stammschulte, C.; Hackethal, A.:

Just Unlucky? – a Bootstrapping Simulation to Measure Skill in Individual Investors' Investment Performance. In: Working Paper (2012).

#### Miller, E.:

Risk, Uncertainty, and Divergence of Opinion. In: *The Journal of Finance*, 32 (1977) 4, pp. 1151-1168.

#### Schlarbaum, G.; Lewellen, W.; Lease, R.:

The Common-Stock-Portfolio Performance Record of Individual Investors. In: *The Journal of Finance*, 33 (1978) 2, pp. 429-441.

## Research Report

# Knowledge Transfer through Social Media Enabled Electronic Networks of Practice – The Case of a Financial Institution

IN DISTRIBUTED WORK ENVIRONMENTS, IT IS ESSENTIAL FOR ORGANIZATIONS TO IMPLEMENT KNOWLEDGE MANAGEMENT SYSTEMS FOR ENABLING EFFICIENT KNOWLEDGE TRANSFER BETWEEN THEIR EMPLOYEES. IN A STUDY, WE THEREFORE DEVELOP AND EMPIRICALLY TEST A CONCEPTUAL MODEL TO DEEPEN OUR UNDERSTANDING ABOUT THE FACTORS WHICH INFLUENCE KNOWLEDGE TRANSFER QUALITY IN SOCIAL MEDIA ENABLED ELECTRONIC NETWORKS OF PRACTICE. ACCORDINGLY, THE FINDINGS PROVIDE GUIDANCE FOR THE DESIGN AND EVALUATION OF INFORMATION SYSTEMS THAT SUPPORT THE TRANSFER OF KNOWLEDGE BETWEEN PHYSICALLY DISTRIBUTED CO-WORKERS.

Immanuel Pahlke  
Christoph Seebach

Roman Beck

### Introduction

Since knowledge is an organization’s most valuable resource for differentiating from competitors and thus achieving competitive advantage, its integration and effective management is of central importance for firms. However, as work settings become more global and distributed, it has proven to be difficult to integrate and transfer the knowledge from workers that are physically dispersed across different locations and time zones (Tsai, 2001). With their information-driven business processes and globally-oriented business models, this challenge is certainly one of the central issues for

financial services institutions. Thus, knowledge management systems are needed to support an efficient exchange of knowledge between distributed workers and improve access to diverse experts of an organization (Alavi and Leidner, 2001).

One specific form of knowledge management systems is based on social networks, which enable electronic communication between individuals that share a common practice (Wasko and Faraj, 2005). As prior research has shown, these so-called electronic networks of practice (ENoP) foster social connections and

interactions even between strangers, thereby improving access to the dispersed knowledge of an organization (Alavi and Leidner, 2001).

In this regard, ENoP enabling social media technologies, such as social networking sites, content sharing communities, blogs, and microblogs seem to be promising. As it has been shown, such platforms improve communication transparency and foster rich interaction between individuals thereby bridging the gap between knowledge seekers and knowledge contributors through connecting otherwise disconnected people (Kang et al., 2010). Consequently, many firms have invested in innovative social media technologies

to establish ENoP behind an organization’s firewall (Richter et al., 2011) for improving workers’ access to internal information and knowledge (Stuart et al., 2012). Offering new and innovative functions – such as the follower feature, tagging mechanisms, and deep profiling – social media platforms improve interaction transparency and provide network members with a better sense of others’ social identity. For example, since most user activities on social media platforms are visible to every user, individuals can sense rich information about their colleagues online. This may then result in higher awareness about the work environment, eventually leading to improved collaborative work and inter-

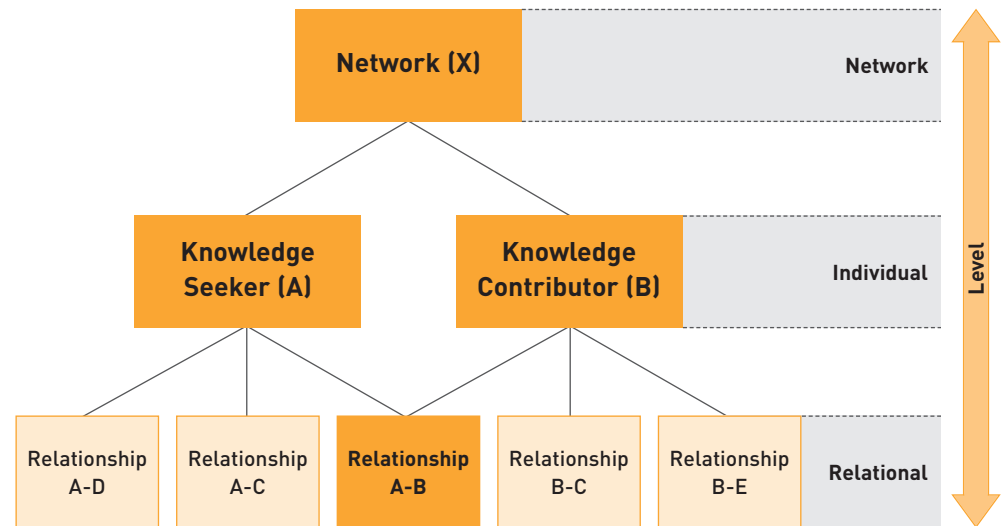


Figure 1: Knowledge Transfer from a Multi-Level Perspective

personal knowledge transfer specifically in distributed settings.

However, even with capable platforms in place social and psychological issues might hinder individuals from interacting and transferring knowledge through social media enabled ENoP (Kankanhalli et al., 2005). Since members of an ENoP often do not know each other personally or never meet face-to-face, receiving help from others somewhat depends on the kindness of strangers. It is therefore important to develop a deeper understanding of the social relationships and psychological factors that influence interpersonal knowledge transfer processes in social media enabled ENoP. Hence, in this study we develop and empirically test a conceptual model to provide guidance for the design and evaluation of information systems that support an efficient knowledge transfer between co-workers in dispersed settings.

**Research Approach**

Following Szulanski (1996), we investigate knowledge transfer as a dyadic interaction process in which knowledge is transferred between a source and a recipient. Since we focus on interactions between workers who participate in social media enabled ENoP, our definition thus views knowledge transfer as a communication process between a knowledge seeker and a knowledge contributor. In this regard, we categorize the influencing factors of knowledge transfer in social media-enabled

ENoP into characteristics of the knowledge seeker (e.g., social status, network centrality), characteristics of the knowledge contributor (e.g., habit of cooperation, identification), and characteristics of the relationship between the two (e.g., norm of reciprocity, strength of relationship). As Figure 1 depicts, these influencing factors are embedded in a hierarchical structure, which illustrates that knowledge transfer depends on factors on the dyadic interaction, the individual, as well as the network level. For instance: knowledge transfer in an ENoP occurs between a knowledge seeker A and a knowledge contributor B. Based on prior interactions, A has built relationships with B, C, and D. In the same way, B has developed relationships with A, C, and E. With respect to this hierarchical structure, knowledge transfer between A and B thus depends on their individual characteristics, characteristics of the relationship between the two, as well as on factors on the network level.

In this regard, it is interesting to note that existing studies have mostly focused on knowledge contributors’ characteristics only, e.g. (Wasko and Faraj, 2005). Thus, a deep and comprehensive understanding of the phenomenon of interest – the knowledge transfer process in social media-enabled ENoP – is still missing in existing research. This hinders the targeted and outcome-oriented design and implementation of purposeful social media platforms for establishing ENoP within organizations. In our study we therefore address this gap by con-

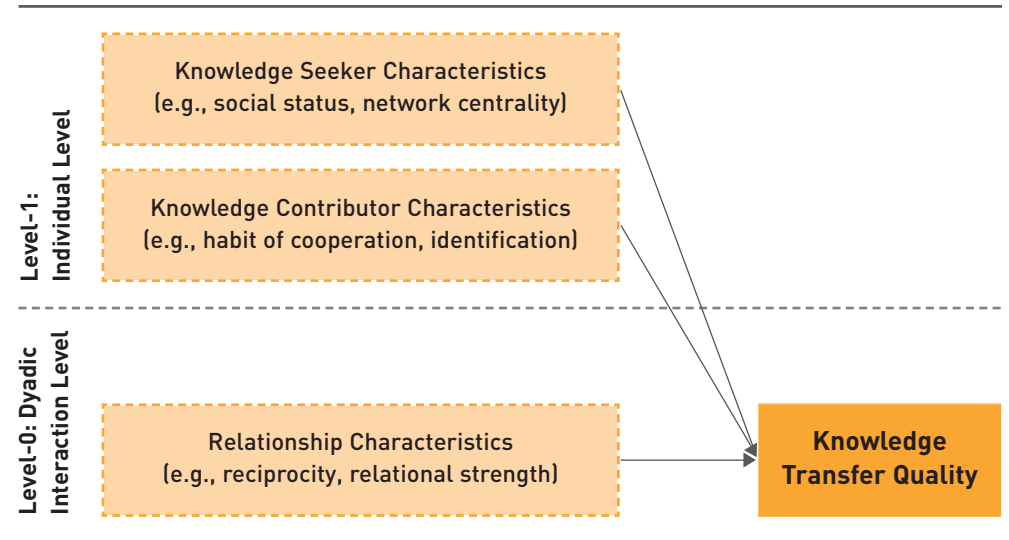


Figure 2: Knowledge Transfer in Social Media Enabled ENoP

ceptualizing and empirically testing a multi-level model of knowledge transfer in ENoP (see Figure 2) focusing on characteristics of knowledge seekers, knowledge contributors, and the dyadic relationship between the two. For empirically testing the research model, depicted in Figure 2, data was collected from a large international financial institution, which had established an enterprise micro-blogging platform for improving global collaboration and knowledge integration. The data set contains more than 15,000 messages sent by almost 1,200 workers during the second half of 2010.

**Discussion of the Results**

A hierarchical model was conceptualized for simultaneously examining the influencing

factors of knowledge transfer on multiple levels. For this purpose, a Hierarchical Linear Modelling (HLM) approach was applied making it possible to separately analyze variations on individual and dyadic levels within a single research model. Analyzing a large dataset of more than 15,000 Enterprise Microblogging messages, the analysis suggests that characteristics of the knowledge seeker as well as relational factors between the seeker and potential knowledge contributors are the primary driving antecedents of knowledge transfer in social media enabled ENoPs.

Transferring knowledge to others in an ENoP requires the knowledge contributor’s willing-

ness to dedicate personal resources, such as time and codification efforts (Wasko et al., 2009). However, contrary to what prior research has found, this study's results indicate that the knowledge contributor's characteristics seem to play only a subordinate role with respect to knowledge transfer in ENoPs. Instead, individual factors of the knowledge seeker, such as social presence and social status, are important for understanding the antecedents of successful knowledge transfer in ENoPs. This may be explained by the increasing adoption of innovative features, such as follower lists, tagging, rating, or profile functionalities, which provide members of an ENoP with valuable information about whom they are interacting with (Stuart et al., 2012). However, the empirical results also go beyond the individual level due to the analysis on how the specific characteristics of the relationship between a knowledge seeker and a knowledge contributor influence knowledge transfer processes in ENoPs. In detail, the results demonstrate that norm of reciprocity – as an instance of a relational factor – seems to be a central concept for sustaining and regulating cooperative behavior in ENoPs as well. Thus, knowledge contributors seem to be more motivated to engage in knowledge transfer if they perceive that their efforts will be reciprocated in the future.

### Conclusion

The findings of our study indicate that social media technologies are a promising solution for improving knowledge transfer in organiza-

tions. The results demonstrate that the most valuable sources of knowledge are often people that knowledge seekers are not aware of. This shows that technologies such as Enterprise Microblogging platforms are able to bridge gaps between knowledge demand and knowledge supply through connecting otherwise disconnected people. In particular, this may be relevant for large and globally operating organizations, where it becomes impossible for workers to stay aware of all their colleagues' skills and knowledge. Moreover, such technologies might help to improve knowledge integration capabilities since new joiners as well as their knowledge can be quickly integrated in the organization's interpersonal communication network. In this regard, the findings provide important implications for organizations that aim at developing and sustaining collaboration systems to foster interpersonal knowledge exchange and improve their employees' access to distributed know-how.

First of all, the findings highlight that social distance and infrequent relationships are important for obtaining valuable knowledge since these are more likely to provide access to novel, non-redundant information. Responsible managers should focus on encouraging their employees to create relationships across different professions, hierarchies, and locations to ensure access to heterogeneous knowledge. However, the findings clearly indicate that there is also a need for creating 'strong' relationships within sub-networks (of groups or teams) for creating cohe-

sive social units in which accumulation of knowledge is possible. In particular, the study empirically demonstrates how interpersonal similarities based on interests, activities, beliefs, and opinions improve knowledge transfer processes.

In addition, our findings demonstrate that the more a knowledge seeker engages in activities for establishing social presence in the network, the more trust and uncertainty reduction seems to occur on the knowledge contributor side, improving the quality of the knowledge received. In this regard, this study suggests that ENoP enabling systems should offer effective features for self-presentation and reputation management. Typical social media functions for identity management, social network building, and rating mechanisms therefore might be promising starting points for further improvement of such systems (Stuart et al., 2012).

### References

- Alavi, M.; Leidner, D. E.:**  
Review: Knowledge Management and Knowledge Management Systems: Conceptual Foundations and Research Issues.  
In: MIS Quarterly, 25 (2001) 1, pp. 107-136.
- Kankanhalli, A.; Tan, B. C.; Wei, K.:**  
Contributing Knowledge to Electronic Knowledge Repositories: An Empirical Investigation.  
In: MIS Quarterly, 29 (2005) 1, pp. 113-143.
- Kang, M.; Kim, Y.-G.; Bock, G.-W.:**  
Identifying Different Antecedents for Closed vs. Open Knowledge Transfer.  
In: Journal of Information Science, 36 (2010) 5, pp. 585-602.
- Richter, D.; Riemer, K.; Brocke, J.:**  
Internet Social Networking.  
In: Business & Information Systems Engineering, 3 (2011) 2, pp. 89-101.
- Stuart, H. C.; Dabbish, L.; Kiesler, S.; Kinnaird, P.; Kang, R.:**  
Social Transparency in Networked Information Exchange: A Framework and Research Question.  
In: Proceedings of the ACM Conference on Computer-Supported Cooperative Work, Seattle, Washington, United States, 2012.
- Szulanski, G.:**  
Exploring Internal Stickiness: Impediments to the Transfer of Best Practice within the Firm.  
In: Strategic Management Journal, 17 (1996) 1, pp. 27-43.
- Tsai, W.:**  
Knowledge Transfer in Intraorganizational Networks: Effects of Network Position and Absorptive Capacity on Business Unit Innovation and Performance.  
In: The Academy of Management Journal, 44 (2001) 5, pp. 996-1004.
- Wasko, M. M.; Faraj, S.:**  
Why Should I Share? Examining Social Capital and Knowledge Contribution in Electronic Networks of Practice.  
In: MIS Quarterly, 29 (2005) 1, pp. 35-57.



## Insideview

# LEIs – Regulating Identity to Build Transparency

INTERVIEW WITH CHRIS PICKLES, HEAD OF INDUSTRY INITIATIVES, GLOBAL BANKING & FINANCIAL MARKETS, BT

**“Know Your Customer” (KYC) has been a part of the business process of banks and other financial institutions for many years now. Why do regulators think that a new Legal Entity Identifier (LEI) should now be a global compliance requirement?**

Having processes in place is just a start for making positive changes happen. Having processes that work, that work every time and that regulators can understand is the next vital step.

Banks and brokers in financial markets have processes in place for order management, execution, clearing, and settlement, and think that they are working well – doing as well as their peers – if just 2% of their transactions fail. That is a failure rate of 2 parts per 100. As a comparison, as long as 25 years ago car manufacturers had quality standards that permitted a maximum failure rate of only 6 parts per million. Business processes within financial institutions are too often prone to failure. Not only that, but financial institutions cannot always clearly define who they were doing the transac-

tion on behalf of or who they are doing the transaction with.

**But surely banks would not do business with organizations they do not know?**

Sometimes it is also a question of how well you know who you are doing business with. While the 2008 crash was happening, firms were offloading bad positions and risks onto other market participants in order to get out of the market – only to find that those market participants actually belonged to the firm itself!

It is also a question of whether the risk managers and regulators can clearly identify the party in question. Financial institutions tend to be siloed in their internal structures, with different business units using different identifiers for the same counterparty or client. That makes it difficult and expensive for an internal risk manager to identify where the firm’s risks lie. And it can make it impossible for a regulator to identify those same risks.



**Chris Pickles**  
Head of Industry Initiatives,  
Global Banking & Financial Markets  
BT

With firms trading in multiple markets and across borders and reporting to multiple regulators – sometimes by asset class as well as by country – getting a true picture of a firm’s global risk, of a national economic risk or of systemic risk is almost unthinkable today.

**So how do regulators believe that a new LEI will help to fix this problem?**

Though regulators can exchange information with each other, they have no practical means of reconciling that information when the same firm uses different identifiers for the same client or counterparty and where the regulators themselves have no standards for identifiers.

The industry has come together and defined a new international standard for the Legal Entity Identifier – ISO 17442 – and the regulators of the G20 economies have indicated that they intend to adopt that standard for regulatory reporting purposes. The first regulator to move in this direction is the CFTC, the US regulator of derivatives markets.

In return, the regulators see that the more widely this standard can be used for financial activities, the greater the potential economies of scale for banks are, thus making it even more worthwhile for banks to use LEIs as widely as possible across their business activities.

**Will this be a major change for financial institutions?**

It is likely to be an enormous change – but a change for the better. When you hear of a bank that has over 4,000 separate systems for identifying its own customers and counterparties, you start to register what an expensive and complex mess underpins market operations across the global financial community, and why transaction failure rates are so high.

And it is a change driven by regulators – a change that financial institutions will have to make, and therefore a change that will definitely happen, starting from 2013.

**Thank you for this interesting conversation.**

# Infopool

## News

### Peter Feldmann accepts honorary membership in the EFL council

Frankfurt's recently elected mayor Peter Feldmann has accepted the honorary membership of the Council of the E-Finance Lab. Likewise his predecessor, former mayor Petra Roth, Mr. Feldmann pursues the cooperation between the E-Finance Lab and the city of Frankfurt. We cordially thank Mrs. Roth for the many years of continued support and Mr. Feldmann for his engagement!

### André Miede appointed Professor of Computer Science and Business Information Systems

As of September 1<sup>st</sup>, 2012, Dr.-Ing. André Miede (formerly with layer 1) has been appointed Professor of Computer Science and Business Information Systems at the University of Applied Sciences Saarbrücken. Prior to this, Prof. Miede worked in IT and management consulting for several years and participated in E-Finance Lab's cooperative PhD program at TU Darmstadt, where his research focused on security in service-oriented computing. Congratulations!

### Successful Disputations

Dipl.-Kffr. Lisa Schöler (layer 3) has received her doctoral degree on August 31<sup>st</sup>, 2012 with her dissertation on "Marketing: Value Creation or Value Destruction". Congratulations!

Dipl.-Math. Markus Lilienthal (layer 3) has received his doctoral degree on August 31<sup>st</sup>, 2012 with his dissertation on "Cloud Pricing and Management". Congratulations!

### New Colleagues

Ilya Gvozdevskiy joined the team of layer 2 in September 2012. Ilya is a PhD candidate at the University of Frankfurt and will be supervised by Prof. Dr. Peter Gomber. In his research, Ilya will focus on high frequency as well as OTC trading.

Franca Kemmerer and Felix Gehrmann will join the team of Prof. Dr. Andreas Hackethal (layer 3) in November 2012 as external doctoral candidates. Franca studied at the EBS Business School and the Imperial College London. Felix studied at the Goethe University Frankfurt and also the Imperial College London. Afterwards, both of them worked for an international consulting firm.

Marten Risius joined Prof. Dr. Wolfgang König's team in layer 1 of the E-Finance Lab. He holds a degree in Psychology from the Universität Osnabrück, where he completed his studies in August 2012. As a consultant, he conducted market research investigations in the field of social media for two years alongside his studies. In his research, Marten will focus on social business platforms in the financial services industry.

## Selected E-Finance Lab publications

**Buhl, H.; Fridgen, G.; König, W.; Röglinger, M.; Wagner, C.:**

Where's the Competitive Advantage in Strategic Information Systems Research? Making the Case for Boundary-Spanning Research based on the German Business and Information Systems Engineering Tradition.

In: Journal of Strategic Information Systems, 21 (2012) 2, pp. 172-178.

**Gommel T.; Gomber P.:**

Neuaustrichtung des OTC-Derivate-Marktes als Chance begreifen.

In: Zeitschrift für das gesamte Kreditwesen, 65 (2012) 17, pp. 867-871.

**Lampe, U.; Schulte, S.:**

Self-Adaptive Semantic Matchmaking using COV4SWS.KOM and LOG4SWS.KOM.

In: Blake, M. B.; Cabral, L.; König-Ries, B.; Küster, U.; Martin, D. (eds.): Semantic Web Services: Advancement through Evaluation, Springer, Heidelberg, 2012, pp. 141-157.

**Skiera, B.; Abou Nabout, N.:**

PROSAD: A Bidding Decision Support System for PProfit Optimizing Search Engine Advertising. Forthcoming in: Marketing Science (2012).

**Schlereth, C.; Skiera, B.:**

Measurement of Consumer Preferences for Bucket Pricing Plans with Different Service Attributes.

In: International Journal of Research in Marketing, 29 (2012) 2, pp. 167-180.

**Siering, M.:**

Investigating the Market Impact of Media Sentiment and Investor Attention.

In: Proceedings of the FinanceCom, Barcelona, Spain, 2012.

**Schlereth, C.; Eckert, C.; Skiera, B.:**

Using Discrete Choice Experiments to Estimate Willingness-to-Pay Intervals.

In: Marketing Letters, 23 (2012) 3, pp. 761-776.

**Rai, A.; Keil, M.; Hornyak, R.; Wüllenweber, K.:**

Hybrid Relational-Contractual Governance for Business Process Outsourcing.

Forthcoming in: Journal of Management Information Systems (2012).

**Wenge, O.; Siebenhaar, M.; Lampe, U.; Schuller, D.; Steinmetz, R.:**

Much Ado about Security Appeal: Cloud Provider Collaborations and their Risks.

In: Proceedings of the European Conference on Service-Oriented and Cloud Computing, Bertinoro, Italy, 2012.

**Zickert, F.; Beck, R.:**

A Mapping Model for Assessing Project Effort from Requirements.

Forthcoming in: Information Systems and e-Business Management (2012).

For a comprehensive list of all E-Finance Lab publications see

<http://www.efinancelab.com/publications>

## Infopool

### RESEARCH PAPER: NATURE OR NURTURE: WHAT DETERMINES INVESTOR BEHAVIOR?

Using data on identical and fraternal twins' complete financial portfolios, Barnea, Cronqvist and Siegel decompose the cross-sectional variation in investor behavior. They find that a genetic factor explains about one-third of the variance in stock market participation and asset allocation. According to their work, family environment has an effect on the behavior of young individuals, but this effect disappears as an individual gains experience. Frequent contact among twins results in similar investment behavior beyond a genetic factor. Twins who grew up in different environments still display similar investment behavior.

Barnea, A.; Cronqvist, H.; Siegel, S.

In: *Journal of Financial Economics*, 98 (2010) 3, pp. 583-604.

### RESEARCH PAPER: EVALUATING SENTIMENT IN FINANCIAL NEWS ARTICLES

Investors have to gather a variety of information in order to make valuable decision on stock investments. In this regard, financial news articles provide a huge amount of information. Beside the opportunity to analyze news articles regarding keywords, sentiment analyses, which capture the mood of an author, are proposed to improve the prediction quality of stock pricing. In this respect, Schumaker et al. developed and empirically tested a system to predict the market trends of stock prices by analyzing the relationship between sentiments in financial news articles and stock prices. The empirical results provide evidence that regarding the tone of articles prediction quality is improved when using subjective news articles and regarding the polarity of articles, negative articles are easiest to predict price direction.

Schumaker, R. P.; Zhang, Y.; Huang, C.-N.; Chen, H.

In: *Decision Support Systems*, 53 (2012) 3, pp. 458-464.

## Electronic newsletter

The E-Finance Lab conducts two kinds of newsletters which both appear quarterly so that each six weeks the audience is supplied by new research results and information about research in progress. The focus of the printed newsletter is the description of two research results on a managerial level – complemented by an editorial, an interview, and some short news. For subscription, please send an e-mail to [eflquarterly@efinancelab.com](mailto:eflquarterly@efinancelab.com) or mail your business card with the note “please printed newsletter” to

**Prof. Dr. Peter Gomber**  
**Vice Chairman of the E-Finance Lab**  
**Goethe University**  
**Grüneburgplatz 1**  
**60323 Frankfurt**

The Internet-type newsletter uses short teaser texts complemented by hyperlinks to further information resources in the Internet. To subscribe, please send an e-mail to

[newsletter@efinancelab.com](mailto:newsletter@efinancelab.com).

**Further information about the E-Finance Lab is available at**  
**[www.efinancelab.com](http://www.efinancelab.com)**.



The E-Finance Lab is a proud member of the House of Finance of Goethe University, Frankfurt.  
For more information about the House of Finance, please visit [www.hof.uni-frankfurt.de](http://www.hof.uni-frankfurt.de).

THE E-FINANCE LAB IS AN INDUSTRY-ACADEMIC RESEARCH PARTNERSHIP BETWEEN FRANKFURT AND DARMSTADT UNIVERSITIES AND PARTNERS DEUTSCHE BANK, DEUTSCHE BOERSE GROUP, DZ BANK GRUPPE, FINANZ INFORMATIK, IBM, T-SYSTEMS, 360T, AND INTERACTIVE DATA MANAGED SOLUTIONS LOCATED AT THE HOUSE OF FINANCE, J. W. GOETHE UNIVERSITY, FRANKFURT.

For further  
information  
please  
contact:

Prof. Dr. Peter Gomber  
Vice Chairman of the  
E-Finance Lab  
Goethe University  
Grüneburgplatz 1  
D-60323 Frankfurt am Main

**Phone** +49 (0)69 / 798 - 346 82  
**Fax** +49 (0)69 / 798 - 350 07  
**E-Mail** [gomber@wiwi.uni-frankfurt.de](mailto:gomber@wiwi.uni-frankfurt.de)

**Press contact**  
**Phone** +49 (0)69 / 798 - 338 74  
**Fax** +49 (0)69 / 798 - 339 10  
**E-Mail** [presse@efinancelab.com](mailto:presse@efinancelab.com)

**or visit our website**  
<http://www.efinancelab.com>