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Big Data – More than a Hype

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Editorial

Big Data – More than a Hype

Peter Knapp

Peter Knapp
Managing Director
Interxion Germany GmbH

Every day, 2.5 exabytes of data are generated worldwide at a rate that doubles every 40 months. These days, through the Internet alone, there is more data exchanged in every second than was totally stored 20 years ago. As a result, many companies are no longer able to handle this huge amount of data on their own as they must have the capacity to handle the four big V's – Volume, Variety, Velocity and Veracity.

The growing data volumes constitute a blessing and a curse for many companies – a curse when the mountains of data become insurmountable, and a blessing when their IT and specialized departments use them to extract information that improves the company's competitive stand.

In addition to extracting the knowledge contained in Big Data, another key aspect for companies is transferring the large data volumes quickly, directly and without delay (latency).

Financial services is the sector with one of the greatest potential for the optimized use of Big Data. However, this requires ultimate data transfer, bandwidth, security, flexibility, and scalability capacities. The IT infrastructures of all players in the financial sector must offer the highest levels of data security and availability while being able to constantly adjust to the latest European rules and regulations.

To cope with these challenges, the financial sector has to improve its agility by creating more efficient, flexible and scalable IT infrastructures. Achieving this on their own would mean constant investments of significant sums in areas that are not part of their core business.

One of the key developments that help financial sector companies cope with the challenges of Big Data and utilize the economic potential inherent in them are carrier-neutral data centers. These allow companies to process all types of data in a single infrastructure that is always

technologically up-to-date while offering the needed capacities and performance. This type of infrastructure also meets the demands for high velocity as real-time data transfer provides the required data analysis speed.

By recognizing and utilizing potentials, companies face the challenge of handling huge amounts of data. The location Frankfurt is one of Germany's largest data hubs, offering the advantages of a concentration of a large number of network operators and the immediate vicinity to the core infrastructure of the Internet exchange point DE-CIX.

With an access to this hub, financial sector companies benefit from a highly secure and scalable option to host systems and data in the heart of the financial hub of Frankfurt and other key economic centers throughout Europe, allowing them to quickly respond to new challenges. Interxion supports these companies with access to the data center infrastructure on the campus in Frankfurt.

This creates a considerable competitive advantage in a sector where even the minutest delays in operative business can result in significant losses. Resembling a digital market place, a so-called cloud hub was established. In this model, different market players of a single sector settle in close vicinity to each other in a digital community that allows them to exchange data under the German privacy law along very short distances, with the lowest latency, and excellent connectivity. By offering this highly efficient networking capacity, the cloud creates extra value and promotes the growth of digital transactions.

As a result, Frankfurt is one of the world's best connected digital hubs and creates growth impulses for the entire German economy. To allow even more companies to utilize these opportunities, it is very important to invest further to continuously expand. Financial sector companies can confidently handle the challenges of Big Data and cost-efficiently position themselves to face the future of digitalization.

Research Report

Bitcoin – Asset or Currency?
Revealing Users' Hidden Intentions

DIGITAL CURRENCIES ARE A GLOBALLY SPREADING PHENOMENON THAT IS FRE-
QUENTLY AND PROMINENTLY ADDRESSED BY MEDIA, POLITICS AND ACADEMIA. WE
AIM AT GIVING EMPIRICAL INSIGHTS ON WHETHER USERS' INTEREST REGARDING
DIGITAL CURRENCIES IS DRIVEN BY ITS APPEAL AS AN ASSET OR ITS UTILITY AS A
CURRENCY. BASED ON OUR EVALUATION, WE FIND STRONG INDICATIONS THAT
ESPECIALLY UNINFORMED USERS APPROACHING BITCOIN ARE NOT PRIMARILY
INTERESTED IN AN ALTERNATIVE TRANSACTION SYSTEM, BUT SEEK TO PARTICIPATE
IN AN ALTERNATIVE INVESTMENT VEHICLE.

Florian Glaser

Martin Haferkorn

Michael Siering

Kai Zimmermann

Moritz Christian Weber

Introduction

Digital currencies propose a shift away from the established design of monetary system infrastructures. Information systems and technological solutions like peer-to-peer connectivity and cryptographic algorithms allow for decentralized organization, operational security, and transparency, thus opposing the centrally coordinated and less transparent traditional monetary systems' structures (Samuelson, 1968). Against the back-drop of the recent economic crisis, this new breed of currencies is gaining public attention and is becoming more relevant while introducing innovative concepts for future currency systems.

The digital currency that attracts most attention within this context is Bitcoin. Bitcoin can be described as an electronic financial mechanism providing features that resemble an established currency system with its own money creation and transaction regime. However, it relies on a decentralized organizational structure. Money creation in the Bitcoin system is transparently realized by a distributed and open algorithm which facilitates the reliability of expectations about the future supply of money. Likewise, the infrastructure allows near real-time transaction execution and monitoring via the public peer-to-peer network. The entire transaction history is stored in a "block chain" which represents all verified and valid transactions between users of the network. In contrast to previous digital currencies, which can rather be seen as community currencies, Bitcoin has a wider focus and is independent from a central institution responsible for money creation. Thus, such an innovative system is not only attracting a steadily increasing level of media attention, but also increasing global dissemination. As of December 2013, it shows a market capitalization of roughly USD 13 billion.

However, the story of Bitcoin is indeed controversial. The considerable increase in dollar value and, foremost, the highly volatile exchange rates in early and late 2013 incur the attention of national regulators. It further raises concerns about the utility of the Bitcoin transaction system and the rationality of its users. At the same time, this development has led to an ongoing discussion about whether Bitcoin is primarily an alternative currency or just a speculative asset (European Central Bank, 2012). The high exchange rate volatility provides indications that Bitcoin is rather considered as the latter. Taking into account these considerations, we pose the central research question: *What are users' intentions when changing their domestic currency into a digital currency?*

Research Design

In order to provide answers to this question, we rely on the following rationale: Bitcoin users are left to determine the value of Bitcoin themselves, doing so by gathering and evaluating information in news and Web resources, e.g., on Wikipedia as a first step. Their aggregate valuation is reflected in quoted prices and trades executed on Bitcoin exchanges.

People that received information about Bitcoin and additionally identify a personal utility regarding the innovative features are likely to become users. If this innovation is diffusing globally and the rate of potential users reached is growing faster than the supply of Bitcoin, exponentially increasing prices on exchanges should be observed. Every new user will generate trading volume on an exchange by changing his/her domestic currency into Bitcoin. If users want to use Bitcoin as a means of trade, one would expect that, after buying Bitcoin at an exchange, users are going to spend some of their newly acquired Bitcoins to buy goods or pay for services. This behavior would then increase the Bitcoin network transaction volume that is tracked in the block chain. In this case, we should observe a relation between the number of new Bitcoin users and the Bitcoin network volume, or, indirectly, a relation between exchange volume and network volume.

If Bitcoin users seek to use Bitcoin primarily as an asset, they will not leave a footprint in the block chain, i.e., the Bitcoin transaction tracking system. This is further supported by

the common practice of exchanges to keep internal accounts on behalf of their customers, meaning that exchanges do not transfer the acquired Bitcoins through the block chain. Hence, we would expect that those users' Bitcoins primarily remain within the exchanges' internal systems.

Dataset

The time window to be analyzed in this study covers the range from 2011/01/01 through 2013/10/08. We obtain time series transaction data for the most relevant exchange in terms of volumes. Traded volumes increase when users change traditional money into Bitcoin. In order to determine the Bitcoin network volume, daily aggregated data stored within the Bitcoin block chain is acquired. The Bitcoin network volume comprises Bitcoin transfers caused by transactions within the Bitcoin currency network. A user will increase block chain network volumes when he either (1) transfers Bitcoin from or to the exchange internal account, (2) pays for a good, or (3) transfers his Bitcoin to another entity. To identify the mass of uninformed users who acquire initial information from an initial source of information, we use the number of daily hits on the English Bitcoin Wikipedia page (Figure 1) as a proxy for measuring user attention (Wang 2013).

Empirical Findings

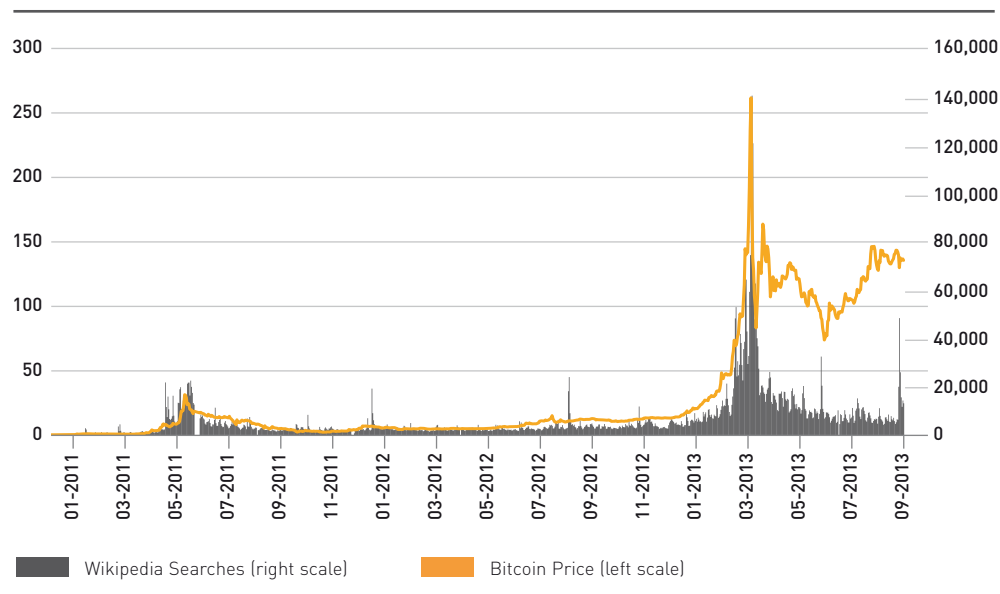By applying a set of GARCH-Models, we find that, on average, people searching on Wikipedia for Bitcoin information are likely to eventually participate in exchange trading. In particular, we observe that an increase in Wikipedia search volume for Bitcoin drives the growth of future exchange trading volume. In contrast, we do not observe such an effect on network transaction volumes. One explanation might be that there is a transitory delay in the migration from the exchange to the network system. That is, users might need additional time, exceeding our modeled 7-day time window, after buying Bitcoins to actively use them for payment purposes. However, both increases in Wikipedia searches or exchange volumes do not affect network volumes.

Discussion

Given these results, we argue that new users most likely focus on exchange trading after their first contact. Put differently, they hold Bitcoin as an alternative investment asset and neither contribute to nor participate in the Bitcoin currency network. The interest of new users has an influence on the Bitcoin volume traded at the exchange but not on the volume within the Bitcoin system. One interpretation of the results is that exchange users buying Bitcoin for the first time are likely to keep these Bitcoins in their exchange wallet for speculation purposes and do not have the intention to use these newly acquired Bitcoins for paying goods or services. To add further robustness to our analysis, we included manifold control parameters while our results stay the same. We therefore contribute to the literature on digital- and crypto-currencies in general and to the literature on

Bitcoin in specific by providing indications that currently new Bitcoin users rather use Bitcoin as an asset and not as a currency as originally intended.

Conclusion

New users tend to trade Bitcoin on a speculative investment intention basis and have low intention to rely on the underlying network as a means for paying goods or services.

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Figure 1: Bitcoin prices and Wikipedia searches

Research Report

Managing Risk of Customer Loss by Customer Equity Reporting

FINANCIAL SERVICE PROVIDERS FACE SERIOUS PROBLEMS IF MANY OF THEIR CUS-TOMERS LEAVE QUICKLY BECAUSE SUCH CUSTOMERS HAVE LITTLE LONG-TERM VALUE. STILL, CURRENT REPORTING PRIMARILY FOCUSES ON CURRENT PROFITABILITY THAT REPRESENTS THE SHORT-TERM VALUE OF THE CUSTOMERS. THE LONG-TERM VALUE TYPICALLY RECEIVES LITTLE ATTENTION. CUSTOMER EQUITY REPORTING PRESENTS A MEANS TO FOCUS ON THE LONG-TERM VALUE OF THE COMPANY'S CUS-TOMERS. IT AVOIDS THE RISK THAT SHORT-TERM PROFITS ARE INCREASED AT THE EXPENSE OF LONG-TERM VALUE CREATION AND ITS CENTRAL METRIC, CUSTOMER EQUITY, SERVES AS AN EARLY WARNING INDICATOR FOR RISK MANAGEMENT SYSTEMS THAT FOCUS ON CUSTOMER LOSS.

Bernd Skiera

Introduction

Nowadays, managers are confronted with a huge amount of information that helps them running their company. Although gathering company information is very time consuming, structuring the available information in such a way that it provides guidance for the company may prove to be even more difficult. Numerous metrics evaluating managers' performance tend to reflect past performance rather than future performance. As such, they provide limited guidance for long-term oriented management. Even worse, short-term oriented management was certainly also responsible for the breakout of the financial crisis.

Consider, for example, the profitability analysis in Figure 1 that was done for two consecutive periods evaluating a manager's performance in a company with contractual relationships, such as a bank, an insurance company or a telecommunications provider. The results clearly indicate that the manager has done an excellent job: all metrics increased substantially and profit rose by more than 30%. So why bother?

The problem is that these profitability metrics are short-term oriented. They mirror the current year's results, but do not outline what is likely to happen in the coming years. What is worse, they might even provide incentives for short-term oriented management like reducing advertising spending in order to improve profitability at the expense of diminishing consumers' awareness and their intention to buy in the future.

Such behavior can be avoided by reporting customer equity. Customer equity measures the long-term value of a company's customer base, which is the discounted profit that a company will make with its current customers – now and in the future. An important metric to accomplish this long-term perspective is the retention rate of customers that describes their expected probability of staying with the company.

This idea is illustrated by including the number of acquired and lost customers in our profitability analysis example (see Table 1). They enable calculating the churn rates and retention rates. The churn rate describes the percentage share of last year's customers who leave the company and the retention rate describes the share of customers who stay with the company. Both rates together add up to 100%. The churn rate is derived by dividing the number of lost customers by the average number of customers in the given period. The latter is simply the average number of customers at the beginning and end of the respective period. Unfortunately, this
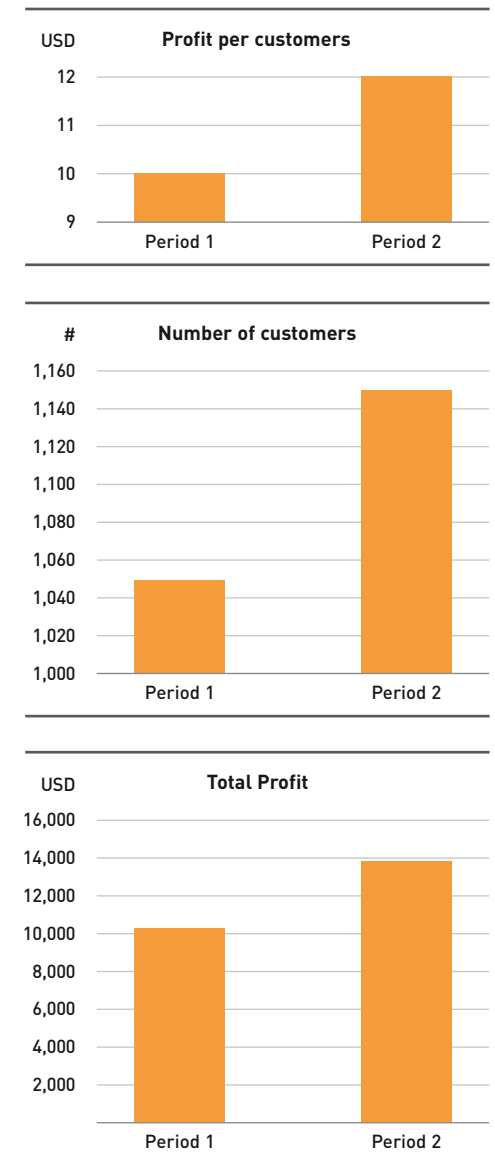

Figure 1: Profitability Analysis

	Period 1	Period 2	Percent Change
Profit per customer (in USD)	10.00	12.00	20.00
Total profit (in USD)	10,500	13,800	31.43
Total number of customers, in 1,000 (beginning of period)	1,000	1,050	5.00
Total number of customers, in 1,000 (ending of period)	1,050	1,150	9.52
Number of acquired customers, in 1,000 (during the period)	150	300	100.00
Number of lost customers, in 1,000 (during the period)	100	200	100.00
Churn rate (in %)	9.76	18.19	86.37
Retention rate (in %)	90.24	81.81	-9.34
Customer lifetime value (in USD)	55.67	46.83	-15.89
Customer equity (in USD 1,000)	58,451	53,848	-7.87
Change in customer equity (in USD 1,000)		-4,602	

Table 1: Customer Equity Analysis

churn rate increased by 86.37%. If we consider the first eight rows of Table 1, evaluating whether management has done a good job is quite difficult. Some metric changes are positive, whereas others are negative, yet the overall effect remains unclear.

Using the available information to estimate an easily applicable model of customer life-time value (CLV), the present value of all current and future customer profits shows that CLV diminished by 15.89%. Customer equity, here defined as CLV multiplied by the number of customers, also decreased by 7.87% (USD -4.602 million). Hence, it would appear this manager has increased the profit margin at the expense of customer's loyalty, here reflected in the decrease of the retention rate. In terms of short-term profit a wise decision, but not in terms of the long-term success of the company. So instead of congratulating the manager for increasing the current period's profitability by 31.43%, we should ask why he has destroyed so much long-term value.

Customer Equity Reporting

For the specific purpose of this kind of reporting, customer equity is defined as the sum of the CLVs (after marketing cost) of all of the company's current customers in a period. CLVs before marketing cost result from several customer metrics, such as profit per customer (including loan loss provisions in case of a bank) and the duration of a customer's relationship with the company known as customer lifetime. To retain or acquire customers, a company must invest money; the measures of retention and acquisition costs per customer reflect those investments. Combining customer metrics with an appropriate discount rate provides a calculation of the present value of all profits of a customer (CLV before marketing cost) and the present value of all costs necessary for retaining a customer (lifetime retention cost). These metrics are labeled as customer value metrics because they determine the value of a particular customer. Altogether, they determine each customer's CLV after marketing cost.

The number of customers at the end of a period equals the number of customers at the beginning of a period plus the number of customers acquired minus the number of customers lost. The number of existing customers (at the beginning of a period) and the number of new and lost customers (during a period) are customer quantity metrics. Multiplying the CLV of an average customer before marketing cost by the number of existing, new, or lost customers provides the corresponding value of existing, new, or lost customers before marketing cost. A similar calculation for acquisition and retention costs is equally valid. These various combinations of customer value and quantity metrics provide the different components of customer equity.

What to do if there are huge differences across customers?

It is important to keep in mind that an estimate like customer lifetime value is an expected value and the actual value of a single customer can deviate from its predicted value. The simple reason is that actual retention is a binary event, 0 or 1. Thus, if banks calculate with a retention rate of 80%, then this prediction will deviate at least by 20 percentage points from the actual event, which is 100% if the customer remains loyal. The law of large numbers, however, says that these prediction errors cancel out if you look at all customers together.

Still, if banks observe strong differences between their customers, then they should form segments. For example, a bank might certainly want to distinguish between private and business customers. In such a case, banks simply need to repeat these calculations described above for all the segments they have.

Can you cheat in Customer Equity Reporting?

As with most reporting systems, there is some flexibility in determining the precise value of each metric. For example, in contrast to companies like utility providers,

customers of banks do not always need to pay for using a banking account so that banks often observe a situation in which a customer still has some money left in a savings account but did not have any transaction for a long time. Even if this customer is still a customer from a legal perspective, the business perspective would most likely no longer consider him to be an active customer. Still, banks might use different criteria to determine the point in time that a customer is no longer an active customer. Some might consider six months, others twelve months or even longer and others might use even more elaborate models to separate active from inactive customers.

These different treatments lead to differences in the number of customers. Yet, profit per customer is total profit divided by the number of customers. Thus, those banks who are more generous in calculating the number of customers will automatically end up with lower estimates on profit per customers. To some extent, the metrics and the resulting customer equity will balance out different treatments. In addition, customer equity should be tracked over time and as long as the flexibility in determining some metrics does not differ across time, it should not have a major impact on these comparisons across time.

Who should use Customer Equity Reporting?

Managers who would like to create long-term value have to use reporting systems that take a long-term perspective. Popular systems like EVA (economic value added) do not have this characteristic because they only look at the short-term value that is reflected in current earnings. A consequence is that investments into the customer relationships that will pay off in the future are frequently postponed to increase the current year's earnings.

Investors know that long-term value of banks is much higher than its short-term value, which is also reflected in double-digit price-to-earnings ratios of banks. Long-term value occurs because current customers are very loyal or the bank is able to acquire many new customers in the future. While the latter is difficult to evaluate, the retention rate nicely captures the loyalty of existing customers. Thus, investors should carefully examine this important metric and should also push banks and insurance companies to provide information about the loyalty of their customers.

Regulators already consider the most extreme form of customer churn, namely the case in which all customers want to leave the bank. Regulators are well aware that this case, called "bank run", can easily generate its own momentum and destabilize the bank as well as the whole financial system. Thus, they are willing to fight such "bank runs". However, they are currently less concerned about smaller changes in the loyalty of banks' customers and also make little effort in calculating the long-term value of the customer base of a financial service institution. Customer equity reporting would allow them for easily doing so.

Conclusions

Reporting customer equity assists managers in leading their company, taking decisions that are rather long-term than short-term value-oriented, and avoiding increasing short-term profits at the expense of long-term value creation. Such reporting is especially valuable for banks and insurances because they benefit from a rather high loyalty of their customers, at least compared to industries such as the telecommunication industry that suffers from yearly churn rates of 20% and upwards.

Exploiting this loyalty too strongly is particularly dangerous for banks and insurances because short-term profitability just captures a small part of the total value of a customer. For example, a decrease in the yearly retention rate of five percentage points, for example from 95% to 90% decreases customer lifetime value and customer equity by at least 25%.

Top executives but also investors and regulators need tools to detect such decreases and risk management systems need to stronger focus on the risk of losing customers' loyalty. Customer equity reporting is the perfect tool for doing so.

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This article summarizes research of the author that was previously published in the following papers:

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Linking Customer and Financial Metrics to Shareholder Value: The Leverage Effect in Customer-Based Valuation.
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Insideview

The Future Role of Asia-Pacific in the Global Financial Markets

INTERVIEW WITH ROLAND SCHWINN

Roland Schwinn
**Executive Director and
Head of Sales Asia and Middle East
Eurex Group, Singapore**

The Asia-Pacific region can be characterized by a growing presence in global financial markets and, thus, is said to have an important future role. What are the most significant characteristics of this growing presence and why will this region have an increasingly important future role?

One of the most important characteristics of this huge geographical region is its cultural diversity and the respective maturities when it comes to economical developments, political stability, and international orientation. Here you find huge countries like Indonesia with a population of around 250 million but only USD 4,700 GDP per capita and also geographically small neighbors like Singapore, with more than USD 60,000 GDP per capita. In addition, the financial markets in Asia-Pacific are highly fragmented, there is, for example, no single currency like in the Eurozone and the US.

What are the great opportunities for interna-

tional firms and investors regarding this region?

As a result of the strong economic growth rates averaging above 5% over the last years in countries like China, Mongolia, Indonesia, and Sri Lanka, the middle classes are expanding fast and consumption also results in a strong demand for now affordable products, including quality food, luxury goods and not to forget German automobiles particularly in China. That growth in wealth across the region also generates an increasing demand for investment and insurance products and services. On the other hand, labor cost is still comparatively low in some countries.

What countries of the Asia-Pacific region are of most interest for exchange investments, e.g., of Eurex, and why?

Singapore currently is seeing an additional boost as an infrastructural and financial hub. The political stability, the reliable legal and regulatory

framework is the ideal ground for the Asian headquarter of an international exchange organization. Additionally, the cultural diversity and high level of education is also a valuable talent pool for further business expansion like our new clearinghouse Eurex Clearing Asia. Countries where we see significant future potential for further growth are India and Greater China, simply because of their market capacity and the current developments.

Looking at the People's Republic of China, financial markets' development has notably been influenced by new politics and opportunities for foreign investments. What have been the most important changes here?

The ongoing opening process of China is definitely the most important change happening. Step by step, China is giving its domestic investors more opportunities to invest overseas and gradually also is adding additional channels for foreign investors into China. The new Shanghai free

trade zone in Pudong is probably one of the most interesting developments at the moment. Here in Asia, the opportunity is well accepted and a number of international financial institutions have already started to establish presence there.

Just a few weeks ago, initiatives of renminbi (RMB) clearing at Germany's financial center Frankfurt have been announced. What does this development mean for European and Chinese markets?

Hong Kong, Taiwan and Singapore have already established significant RMB offshore centers. Now, it´s time for Europe to catch up and it´s important for Frankfurt as a financial center to be part of it, not only because Germany is one of the largest trading partners of China. For China the relevance of supporting overseas RMB hubs is to internationalize the currency and facilitate RMB backflow into China.

Thank you for this interesting conversation.

Infopool

News

Best Paper Award
The FMPM Best Paper Award 2013 was presented to Ralf Gerhardt (formerly layer 3) and Steffen Meyer (layer 3) for their article "The Effect of Personal Portfolio Reporting on Private Investors", published in Financial Markets and Portfolio Management, 27 (2013) 3, pp. 257-273. Congratulations!

Dr. Lisa Schöler awarded with dissertation prize
Dr. Lisa Schöler, former doctoral student of Prof. Dr. Bernd Skiera (layer 3) and colleague of the E-Finance Lab, was awarded the dissertation prize of the Deutsche Marketing-Verband e.V. Congratulations!

Professor Dr. Ralf Steinmetz appointed as "Chair of Excellence" of University Carlos III of Madrid
The University Carlos III of Madrid (UC3M) has announced that Prof. Dr. Ralf Steinmetz (layer 1) is the recipient of a Cátedra de Excelencia Universidad Carlos III de Madrid for the academic year 2014/15. The Chairs of Excellence program aims to boost the UC3M's international research profile through the incorporation of internationally distinguished professors in all disciplines.

ISPRAT research grant for layer 1
Layer 1 raised a research grant for staffing a position of a research assistant for one year from the "Interdisziplinäre Studien zu Politik, Recht, Administration und Technologie e.V." (ISPRAT) for conducting research in the area of information system infrastructures. The application was submitted by Prof. König in collaboration with the former E-Finance Lab member Prof. Beck (IT University Copenhagen).

New Colleague
Since May 2014, Steffen Försch is a new colleague in the E-Finance Lab and doctoral student at the Chair of Prof. Dr. Bernd Skiera (layer 3). Welcome!

Kai Zimmermann wins Federation of European Securities Exchanges (FESE) De la Vega Prize 2014
EFL Researcher Kai Zimmermann (layer 2; supervised by Prof. Gomber) is the winner of the De la Vega Prize for his outstanding research paper "Price Discovery in European Volatility Interruptions". The prize was awarded by FESE President Christian Katz, CEO of SIX Swiss Exchange, at the Gala Dinner of the FESE 2014 Convention in Zurich. Congratulations!

Selected E-Finance Lab Publications

Benthaus, J.:
Making the right Impression for Corporate Reputation: Analyzing Impression Management of Financial Institutions in Social Media. Forthcoming in: Proceedings of the 22nd European Conference on Information Systems (ECIS), Tel Aviv, Israel, 2014.

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How to Enable Automated Trading Engines to Cope with News-Related Liquidity Shocks? Extracting Signals from Unstructured Data. In: Decision Support Systems, Vol. 62, pp. 32-42, 2014.

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Robust Cloud Monitor Placement for Availability Verification. In: Proceedings of the 4th International Conference on Cloud Computing and Services Science (CLOSER), Barcelona, Spain, 2014.

For a comprehensive list of all E-Finance Lab publications see
http://www.efinancelab.com/publications

Infopool

RESEARCH PAPER: WIDESPREAD WORRY AND THE STOCK MARKET

In this paper, the authors investigate the relation between the mood expressed within an online blog environment and the S&P 500 index. Specifically, the study focuses on the negative mood in terms of three anxiety measures of over 20 million posts made on the site Live-Journal. A panel-regression analysis reveals that increases in anxiety predict downward pressure on the S&P 500 index over 174 trading days in 2008. Regarding the empirical impact, one standard deviation rise in the anxiety index corresponds to S&P 500 returns 0.4% lower than otherwise expected. The findings show how the mood of millions in a large online community, even one that primarily discusses daily life, can anticipate changes in a seemingly unrelated system.

Gilbert, E.; Karahalios, K.
In: Proceedings of the 4th International Conference on Weblogs and Social Media, Washington DC, USA, 2010.

RESEARCH PAPER: CONTROL THYSELF: SELF-CONTROL FAILURE AND HOUSEHOLD WEALTH

Biljanovska and Palligkinis examine the relationship between household wealth and self-control. Although self-control has been linked to consumption and financial behavior, its measurement remains an open issue. The authors employ a definition of self-control failure that follows literature in psychology and they suggest that three factors can render self-control defective: lack of planning, lack of monitoring, and lack of commitment to pre-set plans. This new measure combines those three ingredients and can be computed using a standard representative survey. The authors find that self-control failure is strongly associated with different household net wealth measures and with self-assessed financial distress.

Biljanovska, N.; Palligkinis, S.
In: Working paper available on www.ssrn.com, 2014.

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 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
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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

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Further information about the E-Finance Lab is available at www.efinancelab.com.

The E-Finance Lab is a proud member of the House of Finance of Goethe University, Frankfurt.
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