

Asia's Financial Integration –  
Developments and Challenges

Algorithmic Trading and its  
Impact on Markets

Innovative Tools: Idea Markets

Is Peer-to-Peer Lending a  
Threat to Banks?



accenture	BearingPoint Management & Technology Consultants	Deutsche Bank	DEUTSCHE BÖRSE GROUP	Postbank	DZ BANK Gruppe
FINANZ_IT	IBM	Microsoft	SIEMENS	••T••Systems•	
DAB bank	Interactive Data				

## Impressum

Redaktion  
Prof. Dr. Wolfgang König  
Dr.-Ing. Rainer Berbner  
Dipl.-Wirtsch.-Ing. Julian Eckert

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

Kontakt  
[info@efinancelab.com](mailto:info@efinancelab.com)  
[www.efinancelab.com](http://www.efinancelab.com)

Gestaltung  
Novensis Communication GmbH  
Bad Homburg

4. Ausgabe, 2007  
Auflage 1.250 Stück

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

Printed in Germany

## About us:

The E-Finance Lab's corporate image has been developing continuously over the last five years. We have integrated and reviewed the emerging elements and the results are already visible in our newsletter, 'efl quarterly', which you receive.

Notably, our logo has been updated, and in the upper left hand corner of all printed material, we now use an orange coloured square to identify the nature of the publication. We hope you like the changes and invite you to email us your comments.

## Editorial

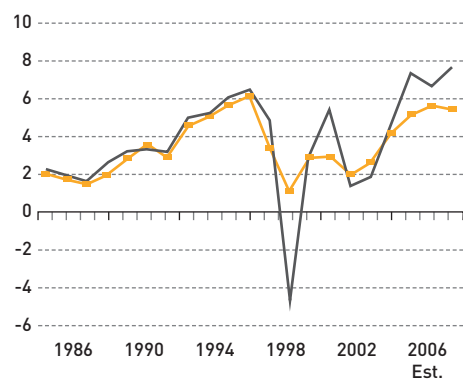
# Asia's Financial Integration – Developments and Challenges

Olaf Unteroberdoerster

As highlighted in the IMF's latest *Asia and Pacific Regional Economic Outlook* (IMF 2007), gross capital inflows into emerging Asia are exceeding again the highs reached during the pre-Asian crisis boom years. In 2006, gross capital inflows are estimated to have reached 8% of GDP, or some US\$455 billion. A less well known fact is that gross capital outflows have

risen even faster. In 2006 they reached an unprecedented level of nearly 7% of GDP – some US\$380 billion – or roughly double the levels a decade ago. These trends are consistent with greater financial integration through banks and capital markets, both within Asia and world-wide. While more financial integration can facilitate economic growth and devel-

### Inflow



— Emerging Asia 1/  
— Emerging Asia (excl. HKG and SGP)

### Outflow

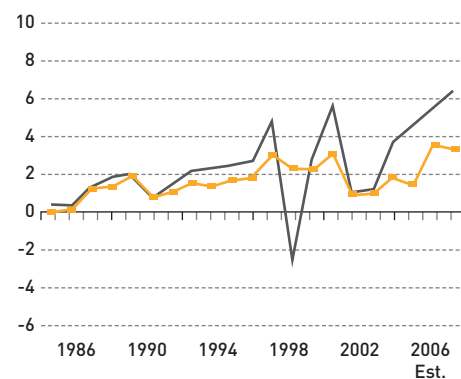


Figure 1: Emerging Asia : Gross Capital Flows (In percent of GDP)

Sources: CEIC Data Company, Ltd.; IMF, International Financial Statistics; WEO database; and IMF staff estimates. 1/ Excludes Hong Kong SAR until 1997.



Olaf Unteroberdoerster,  
IMF Resident Representative,  
Hong Kong SAR

opment by allowing firms and households to better diversify investments and savings, it has also increased countries' exposure to sudden shifts in flows. In the past, this caused economic problems in many parts of Asia. Hence, a key-policy question going forward is how to maximize the benefits of further financial integration, while minimizing the risks associated with larger and potentially volatile cross-border capital flows.

Approaches of meeting this dual objective fall broadly into two categories: The first relate to short-term macroeconomic management. For example, up until recently, a number of countries in Asia have been experiencing capital inflows in the context of higher inflation. However, tighter monetary policy could encourage further inflows. The challenges become more acute when inflows surge. The tools of macroeconomic management at hand, such as greater exchange rate flexibility, foreign exchange market intervention, policy

interest rate changes or administrative controls, can result in significant costs, however, and need to be carefully calibrated. For example, abrupt movements in the exchange rate can disrupt trade and affect financial stability, while administrative controls hamper market development and investor confidence.

The second set of approaches relate to longer-term structural reforms to enhance the resilience and efficiency of financial systems. The overall objective of policies should be to promote investor confidence and sound risk management; provide high quality, timely and relevant information; facilitate the productive use of investments; and reduce risks associated with high levels of leverage or mismatches. Policymakers in Asia have recognized the importance of strengthening financial systems and many initiatives have been launched at the national and regional level. Under the Asian Bond Market Initiative, countries cooperate to develop deeper local currency bond markets by strengthening information disclosure, corporate governance, legal and regulatory frameworks, as well as accounting, and creditrating standards. Moreover, foreign banks will likely be a key driver in the process towards further financial integration as WTO commitments (e.g., China and Vietnam) and banking sector consolidation (e.g., Taiwan (POC), Malaysia, Indonesia) offer new investment opportunities.

### Reference

(IMF 2007) International Monetary Fund, Asia and Pacific Regional Economic Outlook, April 2007, Washington, DC.

# Researchreport

## Algorithmic Trading and its Impact on Markets

AUTOMATED EXECUTION STRATEGIES LIKE ALGORITHMIC TRADING GAIN SIGNIFICANT MARKET SHARE ON ELECTRONIC MARKET VENUES WORLDWIDE, ALTHOUGH THEIR IMPACT ON MARKET OUTCOME HAS NOT BEEN INVESTIGATED IN DEPTH YET.

Markus Gsell

### Introduction

A dramatic revolution of electronic trading on international financial markets can be observed: The industry experiences increasing

demands on speed and cost efficiency. As both demands are to some extent satisfiable by technological advances, more and more stages of the trading process have been radically

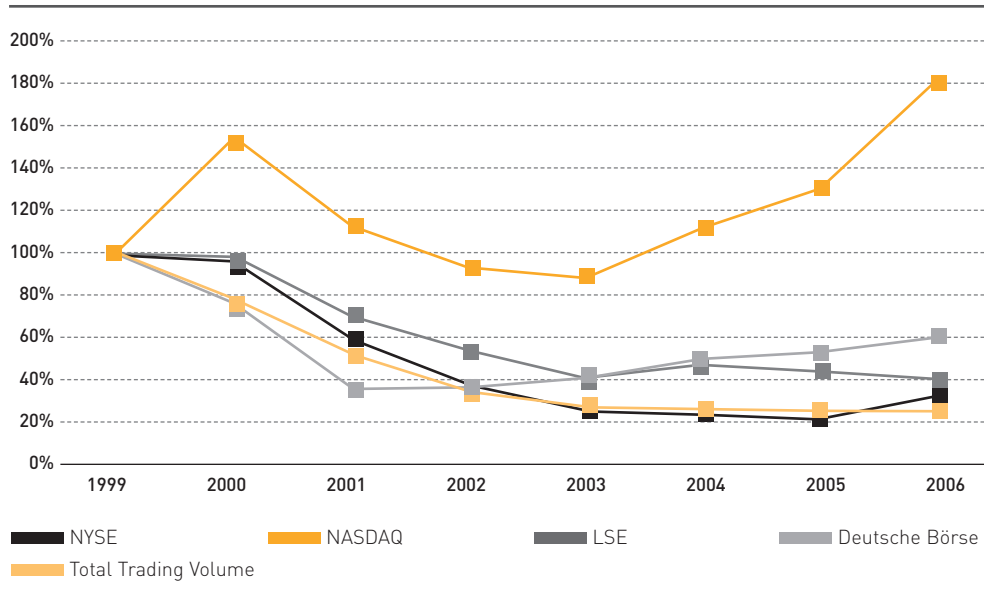


Figure 1: Shrinking average value of trades at major market venues based on data provided by the World Federation of Exchanges

altered by electronic means. One of the most recent developments is Algorithmic Trading, which primarily focuses on the minimization of implicit transaction costs in order execution.

If a large order is sent to one market venue implementing an open order book, displaying the intended trade volume causes adverse price movement. In order to avoid this, a block trader may circumvent the disadvantages of an open order book by submitting the order to a non-transparent block trading system. Alternatively, a block trader may adapt to the characteristics of an open order book by blurring the intended trade volume - which is achieved by Algorithmic Trading. It emulates via electronic means a broker's core competence of slicing a big order into a multiplicity of smaller orders and of timing these orders to minimize market impact. The determination of the size of the slices and their time of submission is based on mathematical models, which consider historical and realtime market data.

### Evolution of Algorithms

Algorithmic Trading models aim at achieving or beating a specified benchmark by their executions. The first generation of execution strategies implemented in algorithms aims to meet benchmarks generated by the market itself which are largely independent from the actual order, e.g. by using the volume weighted average price (VWAP) or an average of daily open-high-low-close (OHLC) prices. A second generation of implemented execution strategies aims to meet order centric benchmarks, i.e. benchmarks generated at the time of order

submission to the algorithm. The execution strategy targets at minimizing the implementation shortfall, i.e. the difference between decision price and final execution price. Such second generation algorithms implement static execution strategies, as they predetermine (before the start of the actual order execution) how to handle the trade-off between minimizing market impact costs on the one hand by trading slowly and minimizing the variance of the execution price on the other hand by trading immediately. Third generation algorithms implement dynamic execution strategies, as they reevaluate their strategy at each single decision time, which enables them to respond to market developments dynamically by altering their aggressiveness of trading adequately.

### Assessing the impact on markets

The increasing usage of automated slicing concepts leads to manifold consequences on the markets themselves. Shrinking average trade sizes are observable at major market venues worldwide although traded volume has raised (Figure 1), which indicates an increasing usage of slicing concepts. As more and more investors rely on those fast and automated trading concepts, latency becomes a critical factor: Leading market venues already offer special dedicated high-speed data feed and colocation services, which allow investors to move their algorithmic trading servers nearby the market servers in order to minimize latency.

However, further effects have not been thoroughly investigated yet in academic research. In order to assess the impact of such concepts



on the market outcome, e.g. effects on the price formation or the volatility of prices, we have setup a simulation environment that provides implementations of algorithmic trading behavior and allows for modeling latency. Here, lower latency is modeled as an increased probability for a single trader to submit an order to the market.

Traders are simulated by software agents, each representing a special combination of characteristics of stylized trader types, i.e. informed trader, momentum trader and noise trader as described in standard market microstructure theory (Schwartz & Francioni, 2004). As simulations allow for reproducing exactly the same basic situation, an assessment of the impact of algorithmic trading models can be conducted by comparing different simulation runs including/excluding an agent constituting an algorithmic trading model in its trading behavior.

Two implementations of algorithmic trader agents have been used. One implementation represents a static execution strategy, where the order is worked linearly over time. The other implementation represents a dynamic execution strategy, where aggressiveness varies over time, depending on the current market situation and the strategies previously achieved performance with regard to the applied benchmark. Both implementations are tested for different order sizes and for different qualities of latency. The order sizes that have to be executed by the algorithmic trading models are expressed as percentage of the average daily trading volume

(%ADV) in the market without algorithmic trader agents. Latency is expressed as a multiple of the uniformly distributed probability for a trader agent to submit the next order, i.e. the algorithmic trader agent's probability to submit an order is higher. The multiplier is referred to as the latency factor. A higher latency factor yields a lower latency.

### Initial results

Increasing volumes that have to be executed by the algorithmic trader agent lead (as expected) to an increasing impact on the price curve. High volumes to buy raise the prices generated on the market, while high volumes to sell beat down the price.

Furthermore, the impact of different volumes and latency factors on market volatility has been investigated. On the basis of Kissel (2007) a Wilcoxon signedrank test has been applied in order to compare the market volatility of a simulation run excluding algorithmic traders with the market volatility of simulation runs including an algorithmic trader. Figure 2 shows, based on this test, the error probability for the assumption that the algorithmic trader will lower market volatility. The results indicate that lower latency, i.e. a higher latency factor, yields lower volatility of the simulated market. This might be explained by the fact, that due to lower latency more orders can be submitted to the market and therefore the size of the sliced orders is decreasing. Smaller order size will lead to fewer partial executions, which means that generated prices will not change as often. This yields lower volatility. Though, if the vol-

ume to execute is raised, the error probability is increasing as well. This can be explained by the fact that an increasing size of the sliced orders will cause more partial executions and hence more price changes.

### Outlook

Further extensive simulations will be conducted to confirm these results and to identify further impacts on the markets itself that might arise from the increasing usage of Algorithmic Trading concepts. Their impact on the quality of markets will be assessed in order

to derive policy implications for market participants and market operators.

### References

#### Kissel, R.:

Statistical Methods to Compare Algorithmic Performance, *Journal of Trading*, Spring 2007, pp. 53-62.

#### Schwartz, R.; Francioni, R.:

Equity Markets in Action: The Fundamentals of Liquidity, Market Structure & Trading. Wiley, Hoboken, NJ, 2004.

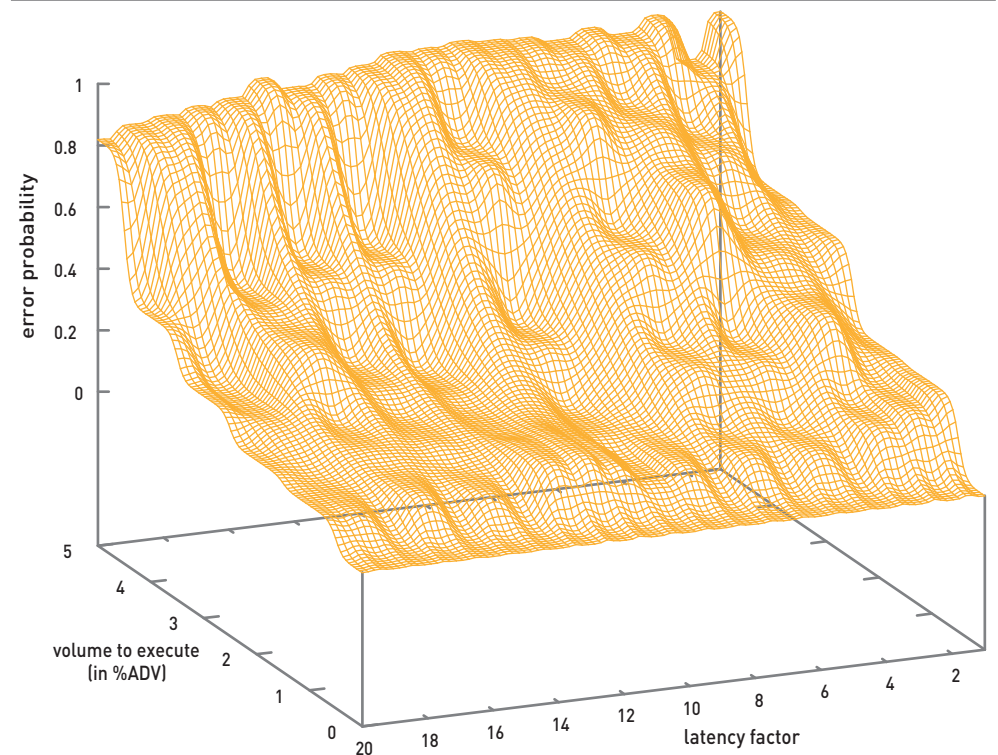


Figure 2: Error probability for the assumption that an algorithmic trader will lower market volatility (interpolated)

## Researchreport

# Innovative Tools: Idea Markets

USING THE WISDOM OF THE CROWDS FOR GENERATING AND EVALUATING  
NEW PRODUCT IDEAS.

Bernd Skiera

Arina Soukhoroukova<sup>1)</sup>

Martin Spann<sup>1)</sup>

### Introduction

"The wisdom of the crowds" is the title of a book written by James Surowiecki about the aggregation of information in groups, resulting in decisions that are often better than those by any single member of the group. The author builds upon research in the area of Internet-based virtual stock markets of Forsythe/Nelson/Neumann/Wright (1992) and Spann/Skiera (2003) and argues that such markets are an innovative approach that can be used to predict future market developments and events, e.g., of political as well as business and economic interest. Such markets are nowadays used by companies such as Microsoft, Google, Hewlett Packard and Ely Lilly for predicting, among others, the sales of products. Yet, so far there are no reports about applications of virtual stock markets in the financial service industry. This is surprising as "real-world" stock markets are central for financial institutions.

### Basic idea of virtual stock markets

The basic idea of such a virtual stock market is

to bring a group of participants together via the Internet and let them trade shares of virtual stocks. These stocks represent a bet on the outcome of future market situations. Their value depends on the realization of these market situations, thus making the stock prices predictors of these market situations. Participants in the virtual stock market use their (individual) expectations of the outcome to derive an (individual) expectation of the value of the related share of virtual stock. Accordingly, they compare their expected cash dividend with the market's aggregate expectation as a means to trade their individual expectations. For example, if a participant anticipates that an innovative pay-as-you-drive insurance insurance product will attract 50,000 new customers, the cash dividend of the related share of virtual stock would be \$500, and every 100 customers would correspond to \$1. In the case of a current stock price of \$95 (\$105)—that is, an expectation of 95 (105) points—the stock is undervalued (overvalued), according to the estimates of this participant, who therefore could try to attain an expected profit of \$5 by

buying (selling). If the potential gains in the virtual portfolio value create a sufficiently high incentive for participants to perform well in the virtual stock market, it becomes their best strategy to engage in transactions on the basis of their best individual expectations. Hence, virtual stock markets are a method to organize Internet-based interactions with experts, consumers, and other persons in order to elicit their information concerning future events.

Given the lack of recognition of virtual stock markets in the financial service industry, we show in this article how to use idea markets, a special form of virtual stock markets, to generate and evaluate new product ideas. Such new product ideas could cover a wide range of innovative product ideas such as pay-as-you-drive insurances, the use of corporate blogs, "peer-to-peer mortgage lending", new electronic payment systems, plastic surgery loans or the use of new channels to target new customer groups. The objective of idea markets is to create a virtual market where all participants can suggest new product ideas and collectively evaluate those ideas through a market mechanism. Idea markets use idea stocks to represent new product ideas, let participants trade the stocks on a virtual market place, and use the efficiency of markets and the resulting stock prices as indicators for the possible success of the different new product ideas. The description of an idea stock can contain textual descriptions and multimedia enhanced content.

The basic principle behind using the market

mechanism for idea generation is to exploit the power of markets to efficiently evaluate a large number of stocks. Idea markets are very likely a good forecasting instrument because they (i) allow participants' self-selection according to their relevant information, (ii) entail appropriate reward mechanisms that provide participants with an incentive to reveal their knowledge, (iii) preserve participants' anonymity which reduces their fear of reprisal for revealing unpopular expectations, (iv) present a natural mechanism for active group interplay, and (v) provide a natural aggregation mechanism.

### Description of Idea Market Application

We implemented our idea market in a large German technological company that operates in more than 100 countries. Its revenues totaled more than 2 billion US\$ in 2006, 90% of which yielded from high technological B2B products and with 80% outside the home country. The parent company has various subsidiaries worldwide and holds a very diverse product portfolio.

The idea market was designed based on extensive discussions with responsible executives and was carried on with their constant contact and approval. Its aim was to identify (i) new technologies for the company in 2016 (i.e. technological forecasting), (ii) new product ideas for a specific product category, (iii) innovative product and business ideas for the company as well as (iv) increase the involvement of their employees in new product development. Therefore, we set up three different categories of stocks: For stocks of category a, the price of

an idea stock reflected the estimated percentage of revenues influenced by the respective technology in ten years. For stocks in category b, the price of an idea stock depended on the estimated number of units that will be sold of such a product in ten years. The last category c was a miscellaneous category for product and business ideas of any kind, of which the ten best ideas were worth 100\$ and 0\$ otherwise. The Idea Market lasted 36 days and was open to all employees. The web application provided a look-and-feel that was close to the one of real financial markets. The user interfaces were in German and English, and were adapted to corporate design conventions to ease the training for novice users. Since the company did not have any experience with such an Idea Market, we provided our own software which was applied in several projects before. In addition, a discussion board was provided. The best ten traders received prizes worth 3,000 € altogether, ranging from 100 € to 1,500 €. The first prize was handed out to the winner during a major corporate event on innovation. The Idea Market used a virtual currency. The participation was free of charge and participants could trade with the virtual currency, which could not be exchanged for a realworld currency. After the registration on the intranet, each trader was endowed with 10,000 virtual cash (for the ease of explanation, we use '\$' for the virtual currency).

**Screening of New Product Ideas**

To avoid too many product ideas with a rather moderate quality on the Idea Market, we used the screening process described in Figure 1.

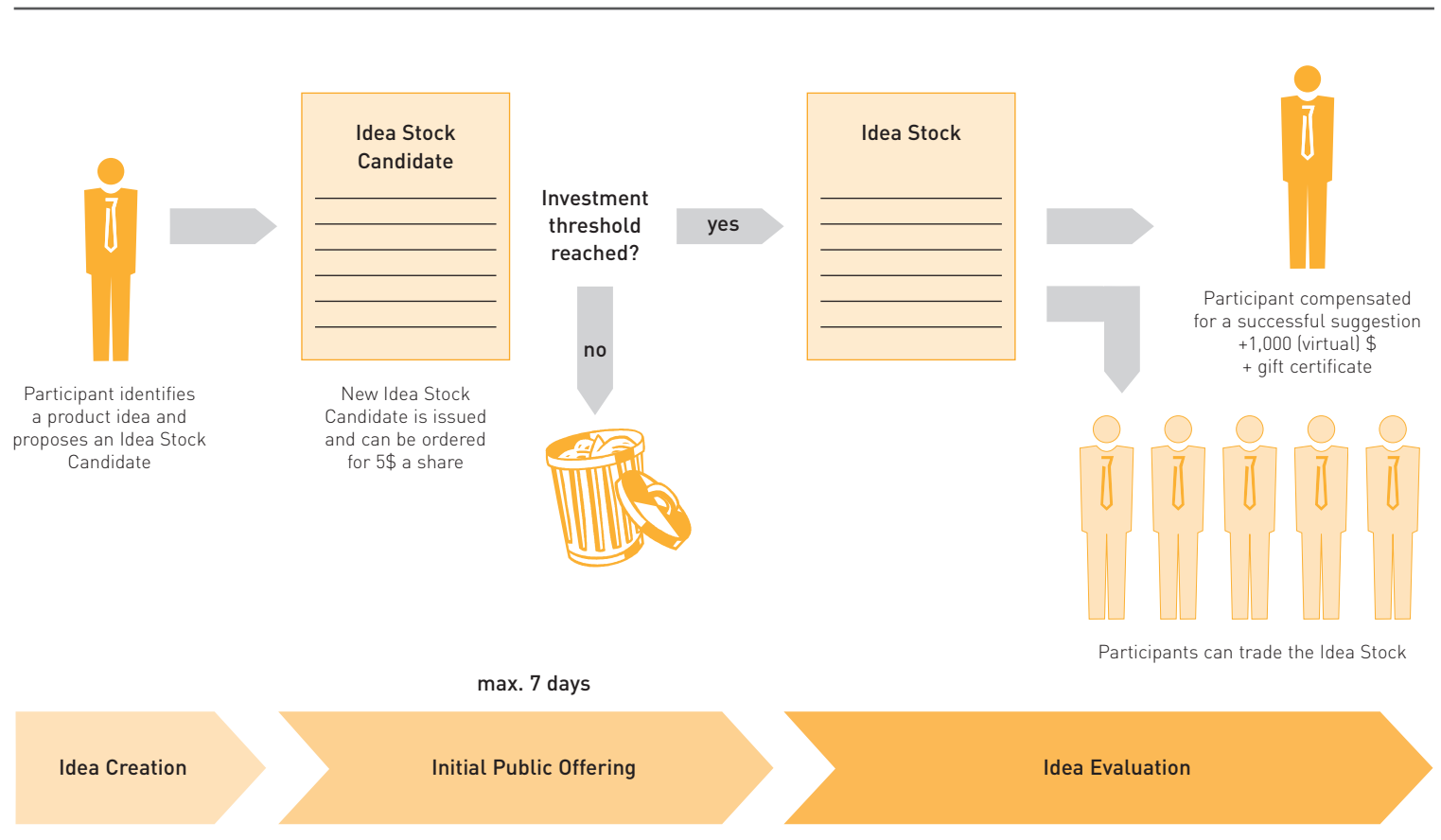


Figure 1: Screening Process for Floating New Product Ideas

Every participant was allowed to suggest a new product idea. The rules for idea suggestions were that the product idea had to be "new to the Idea Market" (first come, first serve principle) and "new to the company", meaning not developed or sold as a product yet. No other formal restrictions were put on the way as to how the participants had to describe their new product idea. They could also enter external

links, quote other publications or upload respective images or sketches. The participants were asked to submit their ideas both in English and German, if not they were translated into the other language. Each new product idea was formed to an idea stock candidate and was offered to the participants of the Idea Market by a uniform price IPO mechanism. During the next seven days, the shares of idea

stock candidates could be ordered for 5\$ of virtual currency each. In case the new product idea reached the threshold quantity, it became an idea stock and was traded in the market; otherwise it was dropped from the list of idea stock candidates, but was still visible on the website. To lessen the possibility of collusion and to limit the influence of single participants on the IPO, each trader could only buy for a

maximum of 4,000\$, equivalent to 800 shares of each idea stock candidate.

### Results of the Application

642 participants registered for the Idea Market and 576 logged in at least once. 36,435 trades were made. 397 participants executed at least one trade or submitted at least one product idea. An overwhelming majority of 86% of the registered participants - especially employees with access to a PC with Internet connection - was from the company's home country (Germany); the second largest group was from the United States (9%). The remaining 5% came from 17 different countries, which indicates the ability of the Idea Market to draw interest among a diverse group of participants. The majority of the registrations occurred on the 7th day; shortly after an email announcement was sent out. On average, the Idea Market attracted on working days a remarkably high number of 157 participants a day. Figure 2 shows that this number remained fairly constant during the five weeks that the Idea Market was running. Such a continuously high transparency and interest among participants is a good indicator of a successful virtual stock market application. During the 24 days of the idea submission period, 128 traders (33% of all active traders) suggested 252 unique product ideas. The maximum number of ideas suggested by a single trader was eleven of which three made the IPO.

The participants and the senior management perceived the Idea Market to be very useful for the company. The senior management con-

firmed even more strongly that the Idea Market should be conducted again and 84% of all senior managers would also recommend the use of Idea Markets to other companies. In addition to this, our discussions with executives of the company revealed that the Idea Market involved more employees of the company in a new product development process than any other method in the past. An overwhelming majority of 89% participants stated that they would participate again at the Idea Market. 57.6% of participants testified that the Idea Market increased their interest for new product development. Several product ideas are currently under consideration for further ascertainment. In addition, the initiating and responsible manager of the company was promoted after the end of the stock market and the Idea

Market project team recently won a corporate award. That award especially highlighted the unique feature of the Idea Market to integrate employees from all over the world. A similar award was not rewarded for any other new product development method before. Apart from these measurable results, the company might benefit in the longterm by the increased interest of their employees in new product development.

### Conclusions

Our application shows that idea markets are a new and capable tool for supporting the development of new product ideas. They are building upon the idea of using the "wisdom of the crowds" and the use of intelligent platforms that allow for collaboration and sharing

between users. Markets have much more to offer for the financial service industry than is currently recognized and we hope that financial service institutions start to benefit from those markets much the same way as our high-tech B2B company did. It might also be a tool that stronger involves banking and insurance customers in the new product development, an idea that describes the success of many Web 2.0 applications. We feel that idea markets are a tool to better deal with the ongoing challenge of creating innovative and appropriate financing and banking solutions.

### References

#### Fama, E.F.:

Efficient Capital Markets: A Review of Theory and Empirical Work. In: Journal of Finance 25 (1970), pp. 383-417.

#### Forsythe, R.; Nelson, F.; Neumann, G.R.; Wright, J.:

Anatomy of an Experimental Political Stock Market. In: American Economic Review 82 (1992), pp.1142-1161.

#### Hayek, F.A.v.:

The Use of Knowledge in Society. In: American Economic Review 35 (1945), pp. 519-530.

#### Spann, M.; Skiera, B.:

Internet-Based Virtual Stock Markets for Business Forecasting. In: Management Science 49 (2003), pp. 1310-1326.

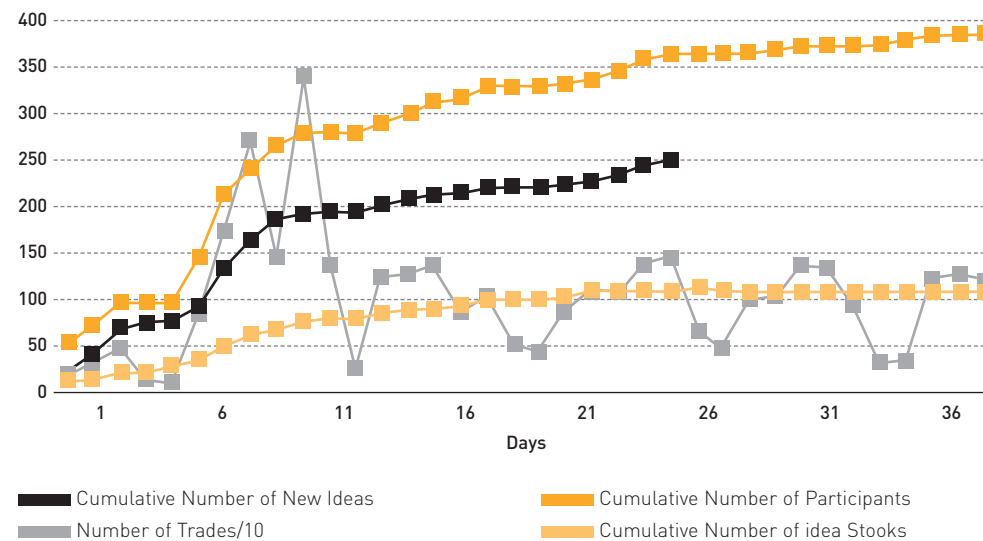


Figure 2: Overview over Activities on the Idea Market



## Insideview

# Is Peer-to-Peer Lending a Threat to Banks?

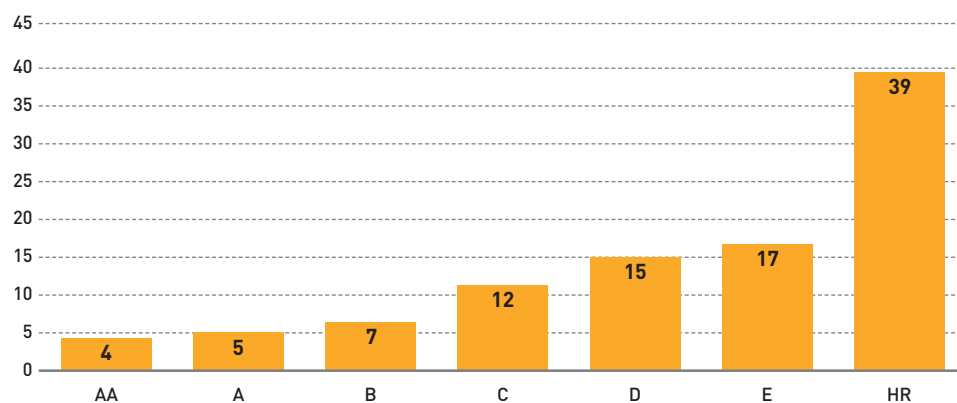
Interview with Dr. Thomas Meyer  
Economist; Deutsche Bank Research

A new report of Deutsche Bank Research investigates online lending platforms sprawling in the US (e. g. [www.prosper.com](http://www.prosper.com)) as well as in Great Britain ([www.zopa.co.uk](http://www.zopa.co.uk)) and in continental Europe (in Germany e. g. [www.smava.de](http://www.smava.de)). Online lending platforms match people needing small loans with those who have extra-cash – without an institutionalized bank as a mediator so that, step by step, some funds may be deviated from

the banks. P2P lenders typically bear the credit risk. Therefore, a core question is how to pick the right loan. Prosper for example allows borrowers to explain publicly who they are and why they need money – and customers bid on the loan requests they like. [www.circlelending.com](http://www.circlelending.com) for which radio ads are run in the US builds on the credit discipline among families and friends.

### High-risk borrowers request the most loans

Share of requested loan volum (%), by credit score at Prosper



Credit quality decreases from AA to E; HR=High Risk

Figure 1: Sources: DB Research, Wiseclerk.com as of 14 Sep 2007



Dr. Thomas Meyer,  
Economist, Deutsche Bank Research,  
author of: "The power of people: Online P2P  
lending nibbles at banks' loan  
business" (E-Banking Snapshot, July 2007)

### How does group pressure work reliably in P2P online lending platforms like Prosper?

Some platforms allow borrowers to organize in groups. The group's reputation is an important signal to lenders. It depends on the punctual payment by all members. Hence, groups only admit those whom they trust not to dilute the achieved credit standing. Acceptance by a group of borrowers is thus a sign of confidence. After joining the group, there is social pressure to behave well – i.e., to service outstanding debt on time – in order to protect the group's reputation. Often, the group members know each other personally which makes late payments even more shameful. Our research shows that both mechanisms (selection and monitoring) seem to work: group members are more likely to receive funding and their default rates are typically lower – other things being equal.

**You conjecture that high-risk borrowers and non-standard loans are the untapped potential for P2P lending. Why?**

There are two reasons. Firstly, P2P sites may leverage their social networks of groups, endorsements from friends, and interaction within the community to make better judgments on the credit worthiness of riskier or out-of-the-ordinary borrowers than traditional banks could. Secondly, there is cut-throat competition in the market for standardized, low risk loans. This limits the growth potential of P2P sites in this segment because potential borrowers can choose among many attractive alternatives from traditional banks. This shows, for instance, in the composition of loan applicants at Prosper (see Figure 1): less than 10% of loans (by volume) are requested by borrowers with a credit score of AA or A (the best) whereas more than 70% of requests come from borrowers with a credit score of D or worse. However, this potential is yet untapped because most P2P-lenders have so far ignored riskier borrowers.

**To which extent is P2P lending a threat to banks?**

The key challenge for P2P lending sites is to convince many more lenders to fund loan requests. This may be difficult given the inherent risks and the multitude of attractive investment alternatives. Thus, it seems unlikely that P2P lending will be more than a niche product to those who enjoy the social aspect and want to immerse themselves in screening the credit requests.

**Thank you for this interesting conversation.**

# Infopool

## News



Since 01.09.2007, IBM is offering some members of the E-Finance Lab office rooms in the IBM Office in Frankfurt. The team (from left: Fabian Gleisner, Christian Jansen, Markus Fritsch, Ralf Gerhardt, Kim Wüllenweber, Felix Schwarze und Christian Rauch) appreciates the excellent working conditions in Sossenheim. The E-Finance Lab cordially thanks IBM for housing the researchers until the completion of the House of Finance in spring 2008.

In September, Felix Schwarze, Kim Wüllenweber, Andreas Hackethal, and Mark Wahrenburg published the EFL book „**Moderne Banksteuerung – Aktueller Stand und Zukunft der Banksteuerung bei den 640 größten Kreditinstituten aus Deutschland, Österreich und der Schweiz**“ (ISBN 978-3-8370-0687-2).

Based on a survey with Germany's, Austria's, and Swiss' largest 640 banks, the authors show that banks tend to increase the use of cash flow oriented revenues, operating costs measures, credit loss measures, costs of economic capital, and some non-financial measures in their management accounting. The authors identify factors that drive or hinder management accounting improvements: while top management is asking for more transparency in business unit's results, IT capabilities are often insufficient to support the intended developments.

### Team members

Since 16.05.2007, Dipl.-Kfm. Christian Messerschmidt is supporting the "FinGrid"-team of Cluster 3 as a research assistant. He explores the adoption of grid computing in the financial service industry.

### Two nominations for "Best Paper Award"

Two papers from the E-Finance Lab focusing on different aspects of business process outsourcing in the German banking industry have been nominated for the Best Paper Award at the 13th Americas Conference on Information Systems (AMCIS 2007) in Keystone, Colorado:

- Cornelia Gellings and Kim Wüllenweber received a nomination for their paper "Differences in Contracting: Anchoring Formal and Relational Norms within BPO Governance".
- Sebastian Martin, Daniel Beimborn, Mihir Parikh, and Tim Weitzel received a nomination for their article "Getting ready for success: may alignment be of help?".

## Selected E-Finance Lab publications

### Beimborn, D.; Franke, J.; Wagner, H.; Weitzel, T.:

The Impact of Operational Alignment on IT Flexibility – Empirical Evidence from a Survey in the German Banking Industry. In: 13th Americas Conference on Information Systems (AMCIS 2007). Keystone, Colorado, USA, 2007.

### Bosch, O.:

Information Asymmetry and the Pricing of Private Debt: Evidence from European Syndicated Loans. In: European Finance Association Annual Meeting. Ljubljana, Croatia, 2007.

### Bosch, O.; Steffen, S.:

Informed Lending and the Structure of Loan Syndicates – Evidence from the European Syndicated Loan Market. In: European Finance Association Annual Meeting. Ljubljana, Croatia, 2007.

### Gellings, C.; Wüllenweber, K.:

Differences in Contracting: Anchoring Formal and Relational Norms within BPO Governance. In: 13th Americas Conference on Information Systems (AMCIS 2007). Keystone, Colorado, USA, 2007.

### Gensler, S.; Skiera, B.; Böhm, M.:

Einfluss der Nutzung des Online-Bankings auf das Produktnutzungsverhalten und die Profitabilität von Bankkunden. In: Zeitschrift für Betriebswirtschaft 77 (2007) 6.

### Gerstmeier, E.:

Sensitivity of Profits to Deviations from the Optimal Bidding Strategy in Search Engine

Marketing – Profitable Compensation Systems for Financial Services. In: INFORMS Marketing Science. Singapore, 2007.

### Gomber, P.; Chlistalla, M.; Gsell, M.; Pujol, G.; Steenbergen, J.:

Umsetzung der MiFID in Deutschland – Empirische Studien zu Status Quo und Entwicklung der MiFID-Readiness der deutschen Finanzindustrie. Books on Demand GmbH, Norderstedt, 2007.

### Gomber, P.; Lutat, M.:

Applying Pricing Engineering for Electronic Financial Markets. In: Electronic Markets 17 (2007) 4.

### Repp, N.; Schulte, S.; Eckert, J.; Berbner, R.; Steinmetz, R.:

An Approach to the Analysis and Evaluation of an Enterprise Service Ecosystem. In: ICISOFT'07, Workshop on Architectures, Concepts and Technologies for Service Oriented Computing. Barcelona, Spain, 2007.

### Schwind, M.; Hinz, O.; Beck, R.:

A Cost-based Multi-Resource Auction for Service-oriented Grid Computing. In: 8th IEEE/ ACM International Conference on Grid Computing (Grid 2007). Austin, Texas, USA, 2007.

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

[www.efinancelab.de/results/pubs/index.php](http://www.efinancelab.de/results/pubs/index.php)

## Infopool

### Research outside the E-Finance Lab

#### RESEARCH PAPER: PUBLIC DISCLOSURE AND PRIVATE DECISIONS: EQUITY MARKET EXECUTION QUALITY AND ORDER ROUTING

In the context of securities trading, public reports (Dash-5) provide additional data on the execution quality of orders such as execution speed and costs across different order types and sizes. This new information is used to examine whether order-routing decisions are sensitive to (past) execution quality. The authors develop an econometrical model of order-routing behavior to compare the order-flow within different markets and to measure the influence on execution quality. They conclude that low execution costs and, to some extent, slow execution speed reduce a market's future share of order flow.

Boehmer, Ekkehart; Jennings, Robert H.; Wei, Li  
In: The Review of Financial Studies 20 (2007) 2, pp. 315-358.

#### RESEARCH PAPER: IDENTIFICATION AND DESIGN OF SERVICES – PROCEEDING AND EXEMPLARY USE IN THE FINANCIAL SERVICES SECTOR

(in German language)

The article describes an approach to developing services for a Service-Oriented Architecture (SOA) in the financial services sector. Contrary to the majority of the current publications concerning SOA, it is focused on the design and not the implementation of the services. In particular, a methodology is proposed that helps to decide which parts of the business processes should – or should not – be packaged within one service. The article starts with a specification of the requirements which a service to be used in a SOA should meet. For example, the service should be generic so that it can be used in different instances of a class of problems thus avoiding redundancies of different implementations of a common functionality. On the other hand, these services should be easily applicable. In the next step it is considered how one can proceed to correspond to these requirements during the identification, design, and implementation of services. The underlying business example is the calculation of the root of a function.

Winkler, Veronica  
In: Wirtschaftsinformatik 49 (2007) 4, pp. 257-266.

### 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. Wolfgang Koenig, E-Finance Lab,  
Frankfurt University,  
Mertonstr. 17, D-60054 Frankfurt, Germany.**

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 at the Goethe University, Frankfurt.  
For more information about the House of Finance, please visit [www.houseoffinance.eu](http://www.houseoffinance.eu).

THE E-FINANCE LAB IS AN INDUSTRY-ACADEMIC RESEARCH PARTNERSHIP BETWEEN FRANKFURT AND DARMSTADT UNIVERSITIES AND PARTNERS ACCENTURE, BEARINGPOINT, DEUTSCHE BANK, DEUTSCHE BOERSE GROUP, DEUTSCHE POSTBANK, DZ BANK GRUPPE, FINANZ\_IT, IBM, MICROSOFT, SIEMENS, T-SYSTEMS, DAB BANK, AND INTERACTIVE DATA MANAGED SOLUTIONS, LOCATED AT J. W. GOETHE UNIVERSITY, FRANKFURT AM MAIN.

For further  
information  
please  
contact:

Prof. Dr. Wolfgang Koenig  
E-Finance Lab Chairman  
Frankfurt University  
Mertonstraße 17  
60054 Frankfurt

**Phone** +49 (0)69 / 798 - 236 57  
**Fax** +49 (0)69 / 798 - 285 85  
**E-Mail** [wkoenig@efinancelab.com](mailto:wkoenig@efinancelab.com)

**Press contact**  
**Phone** +49 (0)69 / 798 - 231 85  
**Fax** +49 (0)69 / 798 - 285 85  
**E-Mail** [presse@efinancelab.com](mailto:presse@efinancelab.com)

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