efl quarterly 03|2009
AN E-FINANCE LAB PUBLICATION

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Risk Management – It's about Culture

The Stability of German Banks – A Pre-Crisis Analysis

Analysis of the Relationship between Green IT and Grid Technology

OTC Derivatives Clearing

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GOETHE UNIVERSITÄT FRANKFURT AM MAIN

TECHNISCHE UNIVERSITÄT DARMSTADT

Impressum

Redaktion
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Dipl.-Wirtsch.-Ing. Julian Eckert
Dipl.-Wirtsch.-Inform. Dieter Schuller

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Gestaltung
Novensis Communication GmbH
Bad Homburg

3. Ausgabe, 2009
Auflage 1.600 Stück

Printed in Germany
ISSN 1866-1238

Editorial

Risk Management – It's about Culture

Robert Wagner

Christoph Benzinger

Risk Management is at the top of the agenda for banks and regulators worldwide following the turmoil in the markets. The loss tsunami which swept over the financial industry prompts a couple of questions:

Given the enormous efforts put in, promoted by both the industry and the regulators over the last years (Basel II), was it worth it? Why – with all the risk management around – wasn't the crisis avoided altogether or, at least, the effects dampened?

When looking across the industry, one thing becomes clear fairly quickly: less risk management is not the answer! Market participants with swift comprehensive risk management performed significantly better than others. Nevertheless the talk of the town is how to go about risk management in the future.

Comparing the current situation with history, the resemblance with previous events like the Asian crisis in the late 90's or the Latin America debt crisis in the 80's is striking. Common denominator is the vicious cycle of risk, i.e. first excessive growth assuming infinite prosperity, then sudden losses followed by tightened risk standards to avoid future losses, then market share losses, then expanded marketing to (re)gain market share by (excessive) growth.

Only if risk management acts as a cornerstone of the business (process) rather than as box-ticking exercise appeasing the regulator can the vicious cycle of risk be broken.

But how to go about it?

Simply investing in more cumbersome governance, risk management and control systems will not help if the industry continues to override these checks and balances when crucial decisions are made.

In other words it is not about technology, not about modeling, not about governance, although all these are essential risk management elements.

IT IS ABOUT CULTURE!

The leadership challenge is to establish a consistent risk culture across the firm, making risk and risk management a business responsibility at all levels, with decisions that are in line with the approved risk appetite set by overall business strategy. A solid risk culture permits more delegation down the line without jeopardizing the agreed risk/return balance. Furthermore, it provides the common basis for business and IT to fully explore advances in technology for risk management.

To foster a consistent risk culture across the firm requires three basic steps:

1. Communicate risk management objectives into business strategy,

2. Create/maintain a core competence in risk management in all key business lines,

3. Develop track record of decisions in line with the risk framework (no exceptions).

Risk Management needs to move from a support function often split by risk category into a core business function integrating across all risk categories. This is also the key finding of BearingPoint's recent risk management study.

Dr. Robert Wagner
VP/Managing Director
BearingPoint
Board Member, E-Finance Lab

Christoph Benzinger
Director, BearingPoint

Research Report

The Stability of German Banks – A Pre-Crisis Analysis

THE CURRENT FINANCIAL CRISIS CALLS FOR A THOROUGH ANALYSIS OF BANKING SYSTEM STABILITY. WE ANALYZE GERMAN BANKS FROM A LIQUIDITY PERSPECTIVE TO ANSWER HOW FRAGILE THE GERMAN BANKING SYSTEM IS AND HOW WELL IT CAN COPE WITH SUDDEN ILLIQUIDITY SHOCKS. RESULTS SHOW THAT ALTHOUGH BANKS CREATE LIQUIDITY FOR THE GERMAN ECONOMY AND THEREBY EXPOSE THEMSELVES TO ILLIQUIDITY RISK, THE AGGREGATE BALANCE SHEET STRUCTURES ARE SAFE AND STABLE.

Christian Rauch

Introduction

The current financial crisis forces practitioners and researchers to reconsider bank system stability. The importance of a safe and sound banking system had been largely ignored – and quite understandably so – over the past decade since there were hardly any significant bank failures which could have had a negative impact on the economy or jeopardized the banking system as a whole. Yet, the failures of Bear Stearns and Lehman Brothers in 2008 reminded us again of what the systemic consequences of big and unexpected bank failures can be.

But why is it "good" when practitioners and researchers investigate and analyze bank stability? The major problem is that banks are fragile per se: by holding illiquid monetary items for the general public and providing the public with liquid monetary means – a process referred to as "maturity transformation" – banks exhibit a so-called "balance sheet fragility". In case of a sudden liquidity demand by a bank's lenders, a bank might not be able to turn enough illiquid assets into liquid assets (e.g. cash) to meet the liquidity demand. This can either happen on an institutional and interbank basis, for example Bear Stearns, or on a public basis with retail depositors, as in the case of Northern Rock in the UK. The fact that banks exhibit this fragility and are so closely intertwined in today's markets calls for thorough stability supervision even in non-crisis times. One example is the case of the German "Bankhaus Herstatt" which in 1974 suddenly became insolvent due to currency speculations. Although it was a minor bank with only few retail clients, the unexpected illiquidity shock almost triggered a worldwide banking system instability. The examples of Lehman, Bear Stearns, Herstatt and many other cases thus call for a thorough analysis of banking system stability.

How can banking system stability be investigated? One possibility is to analyze the fragility of banks' balance sheets to determine how well a bank could withstand a sudden illiquidity shock. There are two relevant questions which have to be answered: first, to what extent does a bank create liquidity for the economy or withhold liquidity for itself? And second, how flexible could a bank create liquid assets to meet a sudden liquidity demand? Our study tries to answer these questions and thereby to assess the stability of the German banking system. We thereby deliberately neglect the current crisis and instead focus on the years 1997-2006 to provide an unbiased picture of the German banking system stability.

Model

To analyze bank balance sheet fragility, we apply two measures: an absolute value method of total liquidity created by the bank (as developed by Berger and Bouwman, 2009) and a relative value of liquid deposits to liquid assets (as developed by Deep and Schaefer, 2004). Both methods enable us to determine the fragility of each bank's balance sheet in two ways. First, we know how much liquidity a bank either creates for the economy or retains for itself in an absolute EUR-denominated amount. Second, we know what percentage of deposits a bank turns into assets with longer maturities than the deposits. The underlying notion of the methods is to measure the amount of maturity transformation a bank performs. Both values therefore show to which extent a bank could withstand a sudden illiquidity shock. Taking the values of all banks together, we can draw conclusions about the stability of the overall German banking system.

Data

For our analyses we use standard balance sheet items, profit and loss accounts as well as off-balance sheet items. We perform the analysis for all German savings banks as well as for the five largest German private banks Deutsche Bank, Dresdner Bank, Commerzbank, Postbank and Bayerische Hypo- und Vereinsbank (all banks are observed separately, i.e. prior to the current mergers) and all seven German Landesbanken over the period 1997-2006. The balance sheet and profit and loss account data is publicly available for the private banks and the Landesbanken, for the savings banks we use a proprietary dataset provided to us exclusively by the Deutsche Sparkassen- und Giroverband (DSGV), covering all 457 active German savings banks.

Results

Our analyses reveal two major findings: first, all observed banks create liquidity for the German economy, meaning that banks perform maturity transformation. Second, relative fragility of banks' balance sheets is very

	Savings Banks	Private Banks	Landesbanken	Average
Total Liquidity 1997[1)]	120.7	350.8	138.8	203.4
Total Liquidity 2006[1)]	182.1	359.3	86.7	209.4
Mean[1)]	152.4	347.3	103.7	201.1
LT Gap 1997[2)]	0.13	0.07	-0.05	0.05
LT Gap 2006[2)]	0.14	-0.14	-0.05	-0.02
Mean[2)]	0.13	-0.01	-0.07	0.02
Liquidity as % of Assets	19%	7%	3%	9.7%
Equity as % of Liquidity	25%	38%	112%	58.3%

1) Values are in bn EUR
2) Values are LT Gap values, varying between +1 and -1

Table 1: Bank Liquidity in Germany 1997-2006

small, meaning that the amount of maturity transformation is not very large. How can these findings be interpreted? In terms of stability, banks can either provide liquidity for the economy or retain liquidity for themselves. A higher liquidity creation for a given economy decreases the stability of a bank. By choosing to hold illiquid monetary items and providing the economy with liquid monetary items, banks are prone to illiquidity risk in times of strong liquidity demand. As can be seen in Table 1, our results show that German banks create a total amount of over 610 billion EUR in 1997 which increases to over 628 billion EUR in 2006. Broken down to the three different banking groups, savings banks create on average 152 billion EUR, private banks 347 billion EUR and Landesbanken 103 billion EUR over the observation period. These volumes seem rather large and could hint at the fact that banks tend to be relatively fragile. After all, banks create large amounts of liquidity for the economy – these amounts might be missing in case of a sudden liquidity demand. However, looking at the relative amount of maturity transformation, we find that aggregate balance sheets are by far more stable than the total liquidity figures suggest. The relative amount of deposits to liquid assets is on average not larger than 0.1, meaning that banks transform the maturities of only 10% of all deposits. As bank instability is the direct result of illiquidity due to maturity transformation, bank balance sheets are stable whenever a bank chooses not to transform large amounts of liquidity. The fact that, on average, banks show maturity transformation of only 10% of total deposits, banks can be regarded as relatively safe. The large absolute numbers therefore seem to be not that large anymore, as they are only the result of a very minor maturity transformation. Looking at the relative amount of maturity transformation for each banking group, we find an average amount of 13% for savings banks and negative values of -1% and -7% for private and Landesbanken respectively. This is another interesting finding, indicating that private banks and Landesbanken use the maturity transformation process to retain more liquidity for themselves than to create for the economy. These results are supported when we analyze the relative amount of total liquidity to total assets. Savings banks – banks which are per se more stable than e.g. private banks due to the savings banks network – also create the largest amount of liquidity relative to their size: the ratio of liquidity to total assets is 19%, whereas the same ratio is only 7% for private banks and 3% for Landesbanken.

Conclusion

The purpose of our analysis is to investigate the stability of German banks in the pre-crisis period 1997-2006. Our stability proxy is the amount of created liquidity through the maturity transformation process. We believe this to be a valid stability proxy since, especially in the current financial crisis, banks' stability is mostly jeopardized by liquidity shortages. Our results show that although German savings banks, private banks and Landesbanken create large amounts of absolute liquidity for the German economy, their relative balance sheet fragility, as represented by the amount of maturity transformation, is limited: on average, banks transform the maturities of less than 10% of their total deposits. The interpretation is thus straightforward: although banks provide the economy with liquid monetary means, they still exhibit very stable balance sheets. Coming back to the initial research question it can be said that German banks are relatively stable and seem to be capable of coping well with sudden illiquidity shocks over the observation period 1997-2006.

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Research Report

Analysis of the Relationship between Green IT and Grid Technology

THIS ARTICLE DEPICTS THE RESULTS OF AN ANALYTICAL APPROACH TO FIND PARALLELS BETWEEN GREEN IT REQUIREMENTS AND THE ECONOMICAL AND ECOLOGICAL BENEFITS OF GRID TECHNOLOGY IMPLEMENTATION.

Jens Vykoukal
Martin Wolf
Roman Beck

Introduction

During the last few years, the awareness that CO_2 emissions are a major cause for global warming and the changes of weather patterns has grown steadily. Therefore, enterprises, governments, and society at large are beginning to consider environmental issues in the process of technology adoption. This includes the reduction of electric power consumption of IT hardware which needs significant amounts of electricity and places a heavy burden on the power grids. According to a report provided by the Department of Energy, data centers were estimated to have used 1.5% of all electricity in the United States in 2006, and their power demand is projected to grow 12% per year through 2011. Furthermore, many data centers are responsible for 30 to 40% of the energy consumption of an enterprise. Therefore, a major objective of the IT industry and also the financial services industry with its high computational demands is to reduce the power consumption and the environmental impact of IT to facilitate the emergence of a more sustainable environment.

Another major source of environmental problems is the production and disposal of IT. This triggered a green wave that is sweeping the IT industry and the business domain. The trend of "greening" IT products, applications, services, and practices will likely continue since Green IT provides opportunities to reduce the accumulation of greenhouse gases in the atmosphere by reducing global CO_2 emissions. The current Green IT initiatives are especially reinforced by social and political pressure, governmental regulation, rising costs of waste disposal, corporate images, and public perception.

Since little research has been conducted on Green IT, this article depicts the results of an analytical approach to find parallels between Green IT requirements and the characteristics of Grid technology. In doing so, the article outlines to what extent Grid technology can be facilitated to implement the concepts of Green IT and to leverage the inherent ecological and economical benefits.

Green IT

According to Murugesan (2008), Green IT is defined as "the study and practice of designing, manufacturing, using, and disposing of computers, servers, and associated subsystems (monitors, printers, storage devices, etc.) efficiently and effectively with minimal or no impact on the environment". This definition illustrates that the term "Green IT" is multifaceted and aims to cover manifold aspects of environmentally sound IT solutions and practices. Since IT is a major source of environmental problems at each stage of its lifecycle – from its production, throughout its use, and into its disposal – Green IT strives to achieve both economic viability and improved system performance while regarding social and ethical responsibilities.

Figure 1, which is derived from Murugesan (2008), depicts a model that comprehensively addresses the environmental impacts of IT and illustrates three different dimensions of Green IT.

"Green IT design" aims at designing environmentally sound and energy efficient IT equipment to reduce the environmental impact of IT. Prominent examples are the move from single-core to multi-core CPUs and the move from 65 to 45 nanometer chips that have increased energy efficiency and improved performance per watt ratios.

"Green IT use" aims at decreasing energy costs and minimizing the greenhouse gas emissions by increasing the efficiency and reducing the energy consumption of IT resources. IT efficiency can be improved, e.g., by using virtualization technology as a major strategy to reduce the energy consumption of data centers. In typical data centers, average utilization is only 20-30%. Server virtual-

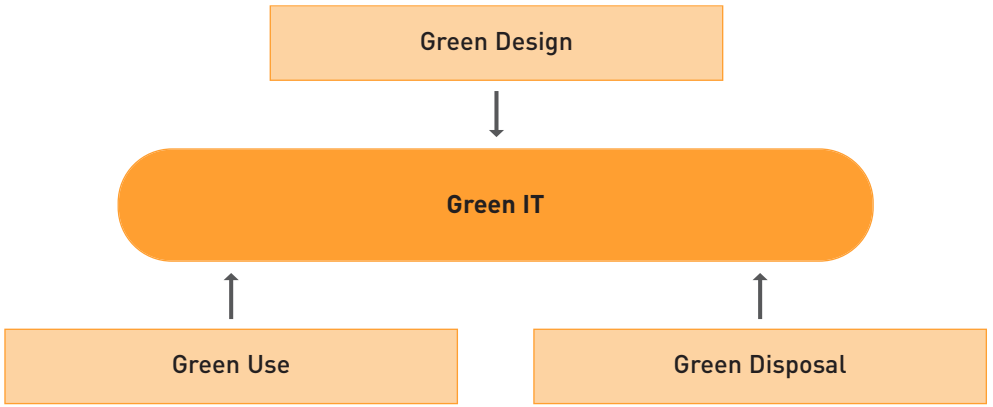

Figure 1: Dimensions of Green IT

ization aims at splitting hardware resources into several smaller virtual machines, enabling more than one virtual machine on a single hardware component, thereby increasing multitasking capability, fostering the utilization of servers, and improving energy efficiency. Enterprises can thus shut down servers and thereby reduce power usage leading to a significant cost reduction.

It is common practice for many companies to replace their older IT equipment with new, more energy efficient ones in an effort to become more environmentally friendly. However, this practice is not always the most environmentally sound solution due to the need to dispose the old IT equipment. Therefore, "Green IT disposal" aims at reusing, refurbishing, or recycling old IT equipment in environmentally sound ways.

Implementation of Green IT Concepts by Adopting Grid Technology

Most Green IT efforts take time to break-even since many enterprises cannot afford a short-term replacement of their existing systems with newer, Green IT solutions. Grid technology provides enterprises with the opportunity to build an own Green IT solution by interconnecting existing IT hardware into a Grid, thereby providing users and applications with immediate access to a large pool of IT resources, such as supercomputers, servers, desktop computers, storage systems, and databases. They can then be used as a unified resource. Regardless of their operating characteristics, Grid technology enables heterogeneous and geographically dispersed IT resources to be virtually shared and accessed across an industry, enterprise, or workgroup. A thorough literature overview of the benefits of Grid technology and suitable application domains for Grid architectures in the industry domain is provided in a recent article by Vykoukal et al. (2009).

As presented in Figure 2, the implementation of Grid technology addresses the three dimensions of Green IT: Green design, Green use, and Green disposal of IT.

Green Design

The migration to a Grid infrastructure can be seen as Green design of IT systems since companies can, e.g., build an Enterprise Grid to reduce power consumption of IT resources. In addition, enterprises can purchase energy efficient Grid resources from external services providers on a pay-per-use basis, called Cloud computing.

- **Enterprise Grid** – Enterprises increasingly need high computational power to meet dynamically changing and expanding business needs. This can be achieved by exploiting Grid resources. In an Enterprise Grid, all major computing and storage resources of an enterprise (including IT resources of data centers) are consolidated and shared across the departments of the entire company. The benefits of an Enterprise Grid in regard to Green IT are higher resource utilization and significant cost savings for businesses, since they do not need to purchase expensive, high-end IT equipment that in most cases consume large amounts of power for the purpose of running their high performance applications.

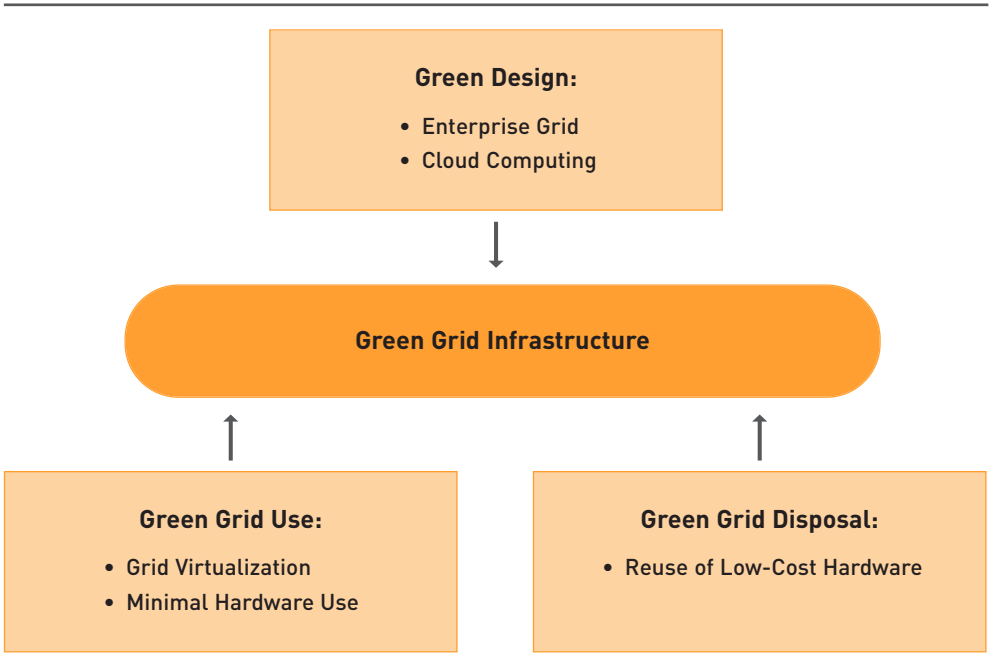

Figure 2: Grid infrastructure as an implementation of Green IT

- **Cloud Computing** – Besides the development and implementation of an own Grid infrastructure, Grid technology allows enterprises to purchase IT resources (most commonly computing or storage resources) directly from external services providers over the Internet on a use-on-demand, pay-per-use basis. In order to offer a large pool of IT resources to customers, external services providers interconnect a large number of IT resources into a Grid and virtualize the resulting Grid infrastructure. Since the virtualized Grid is a fully scalable and abstract infrastructure that can host a large number of applications, the Grid may also be called "the Cloud". The main characteristic of Cloud computing is that the use of Grid resources is billed by consumption.

Since third-party Grid resource providers increasingly expand their network of massive data centers with hundreds of thousands of servers, petabytes of data, and hundreds of megawatts of power, they tend to be more conscious concerning power consumption than enterprises that utilize less IT resources. Due to the exploitation of economies of scale in provisioning, powering,

cooling, and recycling of IT equipment, Grid services providers are able to invest in energy efficient practices and technologies. Therefore, future Grid infrastructures are likely to be far more power efficient than today. In addition, Grid providers increasingly adopt energy efficient servers, apply virtualization technology to maximize the utilization of hardware, and build new data centers in locations with specific climates (e.g., Iceland or Siberia). By using cold outside air for cooling the data center, there is less need for power to operate mechanical chillers to produce cool air, thus reducing overall energy consumption. For example, Microsoft, that is about to offer Grid resources on-demand to customers, has built a large data center in Ireland which is, due to the moderate climate, air-cooled and therefore 50% more energy efficient than other comparably sized data centers. As a result, enterprises that are not able to invest in own energy efficient and power effective IT equipment have the opportunity to purchase IT resources from external services providers that have already invested in Green IT initiatives and therefore offer power and cooling efficient Grid resources.

Green Use

As illustrated in the following, the environmentally sound use of IT resources can be implemented by virtualizing a Grid infrastructure to minimize the number of servers, storage, and other IT equipment that consume significant power.

- **Grid Virtualization** – Instead of more powerful and expensive servers or storage devices, Grid technology provides enterprises with the opportunity to integrate commodity servers and network storage into a Grid infrastructure leading to increased computing power and storage capacity. In addition, if Grid resources are underutilized, resources can be removed from the Grid without affecting the resilience and stability of the Grid. These characteristics lead to an increased flexibility and scalability of the entire Grid infrastructure and higher levels of resource utilization, which can be further enhanced by the application of virtualization technology.

  Grid virtualization technology can be combined with autonomic resource and data management solutions to automatically handle fluctuating workloads and peak demands by adding resources to the Grid infrastructure or by removing them from the Grid. As a consequence, effective Grid virtualization leads to minimal power consumption since the number of running hardware components of a Grid can dynamically and automatically be scaled to fit the fluctuating demand and to maximize the resource utilization.

- **Minimal Hardware Use** – In order to further decrease the number of running hardware components in a large enterprise, Grid technology allows for the development and implementation of a globally distributed Grid infrastructure that may interconnect data centers of a multi-national enterprise located across multiple time zones. By sharing idle resources of such a Global Grid among geographically dispersed sites or branches, enterprises can take advantage of the different time zones and use idle resources of different time zones across the world in peak hours. Thereby, enterprises can further reduce expenses for new resources and reduce power consumption while providing significant computational and storage capacity to the branches.

Green Disposal

- **Reuse of Low-Cost Hardware** – Grid technology also contributes to the Green disposal of IT since it allows for the integration of heterogeneous IT resources into a Grid. Therefore, even less powerful servers and desktop computers that are designated to be disposed of can be reused in a Grid infrastructure. As a consequence, an enterprise does not need to invest in more powerful and expensive servers to meet the ever increasing business demand for powerful IT infrastructures.

Conclusion and Outlook

Several parallels between Green IT requirements and the characteristics and benefits of Grid technology can be observed. Against this background, we presented an analytical approach to analyze and evaluate the extent to which an enterprise can reduce the power consumption of its IT equipment by developing and implementing a Grid infrastructure.

The results of this conceptual article are intended to provide a valuable contribution to theory and practice. Since little research has been conducted on Green IT so far, this is an initial approach to theoretically analyze the relationship between Green IT and Grid technology. The next step will be to empirically measure the economical and ecological impact of Green IT and Green Grid initiatives and its drivers.

Besides the theoretical contribution, our results are of interest for enterprises planning to reduce power consumption of their IT systems while providing significant computational and storage capacity to their departments. Grid technology is shown to be suitable for the implementation of Green IT concepts leading to increased competitiveness of the assimilating enterprise.

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Insideview

OTC Derivatives Clearing

INTERVIEW WITH THOMAS BOOK, EUREX FRANKFURT AG

As a consequence of the financial crisis, OTC clearing has become an important piece of the public policy discussion on how to improve the integrity of OTC derivatives markets. International clearing houses including Eurex Clearing are currently preparing to deliver OTC clearing solutions.

Please briefly explain the role of a Clearinghouse /Central Counterparty (CCP).

Clearing is the process after trading and before settlement of transactions. Basically, it delivers two key value propositions: operational efficiency with central trade management services and effective risk management to mitigate counterparty default risk. As a CCP, the clearinghouse takes over counterparty risk of every transaction and guarantees delivery. In exchange, clearing members have to collateralize open risk positions to protect the clearinghouse against adverse market movements, i.e. a CCP is comparable to an insurance model on a mutual basis.

What were challenges and issues for Clearinghouses in the crisis and what are the main lessons learned?

Over a long time, market integrity and stability has been taken for granted – this is obviously not the case. The crisis again highlighted the importance of sound market infrastructure. Latest with the event of a major market participant defaulting, a massive revaluation of counterparty risk took place and markets experienced exceptional volatility – all this challenged also the clearing value proposition. As a main lesson learned, clearinghouses have proven robust and resilient, risk management processes have worked smooth and effectively. On that background, CCP clearing is a key element to a sustainable reduction of systemic risk – to reduce the likelihood of a possible next crisis, or at least, to limit its negative consequences.

How will the markets benefit from centralized clearing in OTC products and how does your organization contribute to these benefits?

There is an on-going public policy discussion on how to improve market integrity as a consequence of the crisis. Central clearing is standard for regulated markets so far, but given the fact that some 80% of notional value in the global derivatives market refer to OTC, one logic step is to expand the reach of CCP services also beyond listed derivatives. Centralized clearing delivers counterparty risk mitigation, reduces gross market exposure by multilateral netting and improves the transparency of open risk positions. Clearing members benefit by balance sheet relief and the efficient use of collateral. More important, the market as a whole benefits by reduced incentives to build-up unaffordable individual risk positions, negative spill-over effects on other market participants in case of a default are avoided. Overall, market integrity can be expected to be strengthened significantly. Over the last months, Eurex has developed a European OTC clearing solution for Credit Default Swaps – Eurex Credit Clear. Our solution is designed to support the commitment of major credit dealers to the EU Commission to shift European CDS products from a bilateral to a multilateral market structure in clearing by the end of July. Today, we are running the simulation together with market participants and will launch Eurex Credit Clear aligned with the industry commitment.

Dr. Thomas Book
Member of the Executive Board
of Eurex Frankfurt AG

Some market observers point out that the accumulation of OTC risk positions might lead to a new systemic risk, i.e. the potential collapse of a Clearinghouse. What is your response to this attitude?

We all just recently experienced the default of a major market participant with all its negative consequences. In contrast, clearinghouses managed this event well for the benefit of other clearing members. I think the message out of this experience is quite clear – rely on what has proven valid during times of crisis. In the end, market risks are best managed in a neutral and transparent environment with the collateralization of open positions. From my perspective, central clearing can contribute much to improve the risk management capabilities of financial markets in that sense.

Thank you for this interesting conversation.

Infopool

News

Awards

Prof. Dr. Bernd Skiera (cluster 3) ranks number 32 at the "Handelsblatt" top 100 ranking for research and publication achievements. On account of his top position he is the best ranked professor of the Goethe-University Frankfurt. The ranking comprises publication achievements in academic journals of German-speaking professors of business administration. The E-Finance Lab is happy to support the efforts of the Goethe-University Frankfurt to improve the quality of research and its excellent academic performance.

Assistant Prof. Dr. Oliver Hinz, supporting the E-Finance Lab since 01/2009 (cluster 3), was awarded for the overall best lecture in the diploma program in the previous winter semester. For his interactive course style in the lecture "Electronic Commerce" he received a degree of 5.53 out of 6 (=best possible evaluation) which is outstanding. Congratulations!

Team Members

As of August 1st 2009, Tim Uhle will support cluster 5 of the E-Finance Lab. He holds a degree in Mathematics earned after studying in Berlin, Durham (UK) and Frankfurt. He worked in the financial risk management group for KPMG for more than two years and is currently a member of the PhD program "Finance and Monetary Economics". His research will focus on algorithmic trading and IT architectures in trading.

On April 2nd 2009, Dipl.-Math. Lars Arne Turczyk (cluster 2) has received his doctoral degree with a dissertation on "Information Lifecycle Management – Eine Methode zur Wertzuweisung von Dateien". We congratulate him on his PhD, wish him all the best for the future and welcome him as a new E-Finance Lab alumnus!

The E-Finance Lab fall conference 2009 "Nine Theses on the Future of Personal Finance"

Cluster 4 arranges this year's E-Finance Lab fall conference with the focus "Nine Theses on the Future of Personal Finance". The conference is scheduled for September 17th, 2009 (workshops starting at 11.00; main conference at 14.00), and takes place at the campus Westend.
For further information and registration see
http://www.efinancelab.de/events/conferences/herbsttagung-2009/.

Selected E-Finance Lab publications

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In: International Journal on Advances in Systems and Measurements 2 (2009) 1, p. 33-43.

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Process Reliability in Service-Oriented Architectures.
In: Proceedings of the Third IEEE International Conference on Digital Ecosystems and Technologies (DEST); Istanbul, Turkey, 2009.

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

Infopool

RESEARCH PAPER: THE EFFECT OF SERVICE PRICE INCREASES ON CUSTOMER RETENTION – THE MODERATING ROLE OF CUSTOMER TENURE AND RELATIONSHIP BREADTH

Price increases are sometimes unavoidable, but they represent a potential threat to the establishment and maintenance of long-term customer relationships and loyalty in banks. This paper examines the impact of actual price increases on customer retention and how the effect of a price increase is moderated by both tenure and breadth of the customer's relationship. Findings of the analysis indicate that tenure is associated with a lower customer sensitivity to price increases. The results also reveal that relationship breadth can exacerbate the adverse effect of price increases on customer retention. The implication for financial service institutions is that they must pay special attention to short-tenure and broad-breadth customer segments when implementing price increases.

Dawes, John
In: Journal of Service Research 11 (2009) 3, pp. 232-245.

RESEARCH PAPER: LESSONS LEARNED: 50 YEARS OF INFORMATION TECHNOLOGY IN THE BANKING INDUSTRY – THE EXAMPLE OF DEUTSCHE BANK AG

Based on the lessons learned from the last 50 years, statements are derived of which the authors claim that these will continue to be valid in future: Information technology in the banking industry supports business processes – selecting and designing processes will continue to decide about economic success in future. The necessity of handling a growing business volume will still be the major driver for using new information technology in the banking industry. It will be even more important than the aim of reducing costs by automation. Industrialization of IT will also change the use of technology in the banking industry. Hence, banks do not necessarily have to run their systems alone but may outsource services if required. The definition of the major business fields will significantly influence the banks' IT strategy and, among other factors, will decide on the market success of a bank. Technological development will have an increasing effect on the banking business, will change it, and enable new business models. Successfully dealing with technology-induced changes predominantly depends on a company's employees.

Lamberti, Hermann-Josef; Büger, Matthias
In: Business & Information Systems Engineering 1 (2009) 1, pp. 26-36.

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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

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