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Brexit Challenges and Solutions for
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Editorial

Brexit Challenges and Solutions
for EU Financial Markets

Matthias Graulich

Matthias Graulich
Member of the Executive Board
Eurex Clearing

After the financial crisis, the G20 committed to bringing over-the-counter (OTC) derivatives markets towards more transparency and collateralization against risk exposures. In particular, central clearing via Central Counterparties (CCPs) has thus become the corner stone of risk management in financial markets. CCPs calculate risks in real-time, demand adequate collateral, and guarantee the fulfillment of transactions. Consequently, one crucial element for CCPs' ecosystem is an efficient supervisory setup.

This becomes especially evident when we look at OTC interest rate derivatives (IRD) as the largest derivatives market in the world: Clearing and risk management of these products are essential for the real economy and financial stability. IRD are closely interlinked with the monetary and liquidity policy of central banks and they are used by the buy-side to hedge against interest rate risks affecting their business.

Brexit Challenges for Systemically Important Clearing Activities
The UK currently acts as a wholesale hub for the

EU accounting for almost 80% of its financial market activity. As regards IRD denominated in the EU's currency – the most important currency in the OTC IRD market next to the US Dollar – even more than 95% are currently cleared at the London Clearing House (LCH). Amidst the significant volume in question, Brexit will lead to a situation in which a CCP with systemic importance for EU financial stability will operate outside the umbrella of EU regulation and supervision – ultimately leaving EU supervisors and central banks without appropriate tools for intervention.

This is why EU regulators are discussing how to enhance the EU's ability to manage potential systemic risks, which may result from Euro-denominated financial products cleared outside the EU jurisdiction: Joint supervision and location requirements for systemically important third-country CCPs.

Limits of Joint CCP Supervision When Financial Stability Matters Most
As regards joint supervision by EU authorities and the home supervisor of a third-country

CCP, cooperation is of course beneficial under fair weather. However, conflicts of interest might appear quickly in a crisis scenario. Then, a stabilizing measure from the perspective of the home supervisor might go against our interests from the EU perspective. This illustrates well the limits of joint supervision, entailing a right of information but no decision-making or enforcement powers for EU authorities. Relocation might be the only regulatory tool to ensure that the CCP in question is appropriately supervised and decisions by EU authorities can actually be enforced.

Establishing a Market-Led Solution for a EU27-Based Clearing Alternative
March 2019 is getting closer and a hard Brexit cannot be ruled out. It is more important than ever to get prepared now. In order to assist the market and regulators alike to cope with the unprecedented uncertainty around Brexit, Eurex Clearing, one of the world's leading CCPs, has developed a partnership program together with major participants in the IRD market. While we fully agree with the desire of

EU regulators that OTC IRD denominated in Euro must be cleared within the EU going forward, we believe that a market-led solution to develop a liquid, EU27-based alternative is preferable over any forced relocation. Our program has gained broad market support with 29 sell-side firms from the US, the United Kingdom, Asia, and Continental Europe on board and a strong increase in market share to 8% in May 2018 from close to nothing last year. Most importantly, we can observe a level playing field in OTC IRD execution prices. Bid-offer spreads for Eurex Clearing and LCH-cleared transactions which were assumed to drive adverse effects on EU end clients are essentially the same now, nullifying any concerns around price quality and costs for the industry. By establishing a competitive, efficient market-led solution, clients and the broader market place can benefit through greater choice and competition, improved price transparency and quality, as well as greater robustness of financial markets, bringing the EU closer to the G20 objective of strengthening financial stability.

Research Report

How Digitization Disempowers CIOs in Strategy Building

EXTANT STRATEGY CONCEPTS ARE CHALLENGED DUE TO THE ONGOING DIGITIZATION, WHICH FUNDAMENTALLY CHANGES CONDITIONS FOR ALL MARKET PARTICIPANTS. THIS RESEARCH COMPARES THE CONCEPT OF IT ALIGNMENT WITH THE RECENTLY INTRODUCED "DIGITAL BUSINESS STRATEGY" (DBS), WHICH DESCRIBES A CROSS-FUNCTIONAL AND AGILE FUSION OF BUSINESS AND IT STRATEGY. THE RESULTS REVEAL A TOTAL ABSENCE OF A DIRECT INFLUENCE OF IT LEADERS (CIOS) ON DBS, WHEREAS A HIGH IMPACT ON IT ALIGNMENT IS STILL GIVEN. BUSINESS LEADERS IN TURN IMPACT MORE ON DBS.

Nico Wunderlich

Roman Beck

Introduction

Digital business environments are characterized by higher interconnectedness and expanding interdependencies, questioning static approaches to compete in these markets. Uncertainty and dynamism in digitized markets demand for an increased agility of business strategies. Existing strategy concepts have to be revised due to the encompassing role of IT evolving from a mere business supporter towards an integral part of whole businesses.

The last 25 years have been determined by attempts to overcome the gap between IT as kind of "intruder" into a historically grown business environment, which gave rise to the emergence of what is known as IT alignment (Coltman et al., 2015). IT alignment is characterized by a parallel existence of a business strategy and a separate IT strategy. Latest attempts underline the socially complex processes to achieve IT alignment through a shared understanding between business and IT executives about the role of IT in an organization.

In order to keep up with the aforementioned challenges of digitization, strategic concepts which prepare for an era after the digital transformation are requested, when business models completely rely on IT. A rethinking of traditional structures, control elements, and strategic concepts for IT underlines the challenge for organizations to develop a digital mindset, consolidated and formulated in digital business strategies (DBS), which suppose a fusion of IT and business strategy within one single program (Teece et al., 2016).

A DBS formulates a cross-functional business strategy, which integrates „digital" purposes by definition in order to leverage IT-related resources to create differential value (Bharadwaj et al., 2013).

Still, the two concepts mainly differ in terms of being structured by either the coordination of two separate strategies for business and IT (IT alignment) or one fused overall strategy (DBS). As the concept of DBS in contrast to extant strategy attempts is not clarified yet, the task of this research is to give first insights for a comparison with the established conception of IT alignment. Since organizational leaders are in charge of formulating strategy, this research focuses in particular on how top managers influence both concepts, strategic IT alignment and DBS separately.

Method

During December 2016 and January 2017, a quantitative survey was conducted among 944 participants of an online panel of senior IT decision makers in the U.S., resulting in N=255 completed questionnaires. In particular, we focused on knowledge-intensive organizations, as classified by the OECD, which are characterized by higher investments in IT and therefore most likely to already manage the challenges of the digitization. Assuring for the IT leader's decisional power, we considered companies with a firm size of 50 or more employees as well as maintaining IT departments with more than two employees. 35% of the respondents in our sample derive from the finance industry and the IT sector.

To our knowledge, our research (Wunderlich, 2018) is the first to gain a measurable conceptualization for the recently introduced concept of DBS. Due to the exploratory approach for quantifying DBS, we build on prior theoretical conceptualization (Bharadwaj et al., 2013). These theoretical considerations serve as input for executing an exploratory factor analysis based on the gained survey data. This statistical procedure reveals a four factor structure as quantitatively deployable representation of DBS (Table 1).

We apply the four items for DBS within a nomological network to achieve first content-related results in comparison to IT alignment. To explore the coherence with related organizational structures, this analysis tests all mentioned constructs

Digital Architecture	How effective is your company in appropriating value through the control of the firm's digital architecture?
Digital Business Model	How effective is your company in leveraging value from multisided business models?
Business Dynamism	How effective is your company in speeding up learning for improving strategic and operational decision making?
Information Management	How well does your company take advantage of data, information, and knowledge abundance?

Table 1: Measuring Digital Business Strategy: Surrogate Four-Item Conceptualization
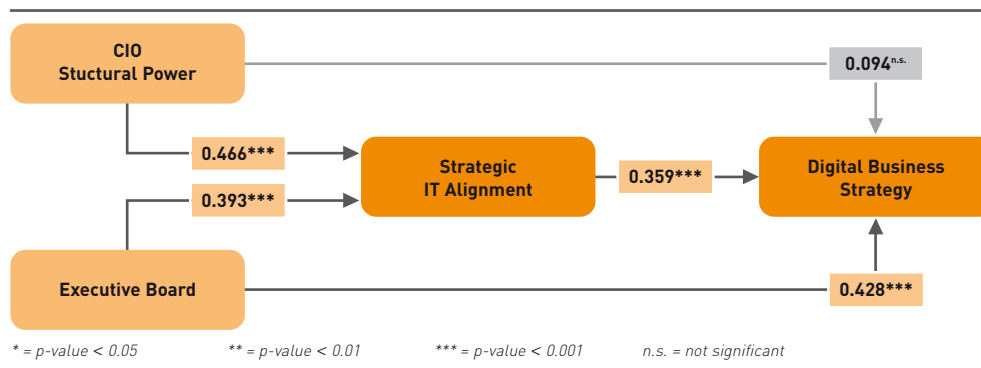
Figure 1: Influence of CIOs and Executive Board on IT Alignment and Digital Business Strategy

Empirical Findings

The two regarded strategic concepts, IT alignment and DBS, are influenced by different organizational leaders according to their affiliation to the IT side or business side. Confirmed by the applied statistical procedures, only the business side impacts a DBS in organizations: The highest influence in our model was found for the top management team affecting DBS. No direct impact of CIOs on DBS could be proven. Although being designated as "digital", DBS are predominantly determined by the business side.

Coincidentally, the path for a CIO to influence DBS is of indirect manner by affecting the IT strategy within the IT alignment process only. The results for IT alignment are in line with the defined structure of the concept: Both leader groups (CIOs and business managers) influence the formation of IT alignment on comparable level. Our research shows a slightly higher determination of IT alignment by the IT side than from the business side, stating the CIO's structural power as leading to higher strategic decision-making authority within the IT alignment process.

The findings for the influence of IT alignment on DBS may be traced back to achieved social alignment and shared understanding about IT between business and IT leaders. IT alignment serves as suitable predecessor of building a DBS in the regarded organizations, even more since the tracked IT knowledge of the business side serves as a profound resource of business leaders in formulating the digital facets of a DBS in particular.

Conclusion

This research demonstrates how organizational decision making changes under the progressively ongoing digitization. The influence of the business side as well as from the IT side on two IT-related strategic concepts was assessed on managerial level in knowledge-intensive industries. The findings reveal a differentiated view on which organizational leaders influence which strategy concept. Due to its conceptualization as coordinating the business and IT strategies, IT alignment is determined by both the CIO as well as the executive board to a comparable extent. For DBS, we find a complete different picture: As main finding of our study, we especially emphasize that CIOs as highest IT leaders in an organization do not share any direct influence on DBS.

Our research presents the two concepts IT alignment and DBS as highly correlated. After a decade to overcome the gap between business and IT via IT alignment, the well-balanced influence by both the IT and the business side on IT alignment highlights this concept as approved. This research confirms IT alignment as preceding DBS; especially the measured strategic IT domain knowledge of the business managers derives from achieved social IT alignment between business and IT leaders.

The changed importance of IT demands strategic concepts that facilitate increased agility for organizations. This study finds a significant influence of business managers on IT related strategy building in knowledge-intensive industries, in particular for fused business strategies encompassing digital facets. Our analysis demonstrates an already executed responsibility and accountability of the business side for coping with these challenges of the digitization, since the concept of DBS incorporates dynamic capabilities for firms to answer the challenges of increasing market interconnectivity and interdependencies.

Business managers appear capable of assessing strategic aspects of digitization. On the one hand, this indicates good conditions for a profoundly implemented digital mindset shouldered by both the IT and the business side in the regarded organizations. On the other hand, IT competence of business managers shifts the strategic IT decision making authority from the IT side to the business side, as our research reveals.

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within one structural equation model (SEM). This statistical operation estimates interrelations in multiple linear regressions simultaneously for a whole research model. All gained path coefficients were found highly significant or clearly not verifiable (Figure 1).

Research Report

The Impact of Robo-Advice on Fund Savings Plan Choices

IN THE CURRENT REGIME OF LOW INTEREST RATES, TAKING SOUND SAVINGS DECISIONS POSES A SIGNIFICANT CHALLENGE TO MOST INDIVIDUALS. FUND SAVINGS PLANS ALLOW TO ACCUMULATE PRIVATE SAVINGS VIA AUTOMATED RECURRING INVESTMENTS IN SELECTED FUNDS. LOW FEES AND SMALL MINIMUM INVESTMENT AMOUNTS MAKE THEM A SUITABLE SAVINGS VEHICLE ALSO FOR LOW NET-WORTH INDIVIDUALS. WHILE TRADI-TIONAL FINANCIAL ADVISORS ONLY RELUCTANTLY PROVIDE ADVICE ON SMALL-SCALE INVESTMENTS, THE RECENT SURGE OF ROBO-ADVISORS ENABLES ACCESS TO ADVICE ON SAVINGS PLAN CHOICES FOR INVESTORS FROM ALL WEALTH BANDS. IN THIS REPORT, WE PRESENT EMPIRICAL RESULTS ON THE IMPACT OF INTRODUCING AN AUTOMATED INVESTMENT TOOL AT A LARGE GERMAN ONLINE BANK ON PRIVATE INVESTORS' SAVINGS DECISIONS.

Konstantin Bräuer

Introduction

During the past years, households have been confronted with exceptionally low interest rates making savings decisions increasingly difficult. At the same time, declining levels of pension benefits have shifted the responsibility to provide for one's old age towards the individual. Households are thus more than ever required to make adequate savings decisions. In this context, fund savings plans (SPs) have increas-ingly been promoted by the media, government institutions and, more recently, by robo-advi-sors as a powerful tool to help individuals build up savings.

Robo-advisors offer automated and low-cost investment advice and asset management servi-ces available at substantially lower investment requirements compared to traditional advisory services. These online tools promise to provide unbiased advice primarily by recommending in-vestments in low-cost passively managed ex-change-traded funds (ETFs) thereby overcoming problems of traditional personal advice, such as distorted incentives that push clients towards high-cost products and harm performance (e.g., Hackethal et al., 2012; Mullainathan et al., 2012). First empirical studies, however, emphasize im-portant limitations of the robo-advisors' matching algorithms. In particular, several tools match clients to risky portfolios based on only a handful of questions about a client's risk preferences while others elicit risk preferences more com-prehensively but only offer a few portfolios to match with (Tertilt and Scholz, 2017). Despite their simplicity and associated concerns about suitability, robo-advisors have seen a tremen-dous growth in assets under management (AuM). For instance, Oliver Wyman (2017) pre-dicts AuM of German robo-advisors to increase by 165% p.a. from about EUR 0.8 billion in 2017 to EUR 35 billion in 2021. Currently, robo-advi-sors are continuously becoming more sophisti-cated aiming at offering a more individualized advice process and eventually holistic financial planning services.

Motivated by these trends, we investigate the effect of robo-advice on SP choices of individual investors using data from an online bank that provides an automated investment solution to its clients.

Data

We obtain data from a large German online bank that provides a wide range of retail bank-ing products, such as checking and savings accounts as well as brokerage services. In 2014, the bank introduced an automated investment solution (robo-advisor) that offers a guided process for investments in funds through lump sum investments and SPs.

To set up an SP, the robo-advisor requires an investor to make several decisions. Specifically, the investor has to decide on the recurring in-vestment amount (contribution rate), the inten-ded investment horizon in years, the desired risk-level ("low", "medium", "high"), and the fund type (passive ETFs or actively managed mutual funds or a blend of both). Based on these entries, the robo-advisor proposes a specific asset allo-cation and provides one fund recommendation within each recommended asset class and re-gion (e.g., European equities). The investor is free to change these default fund recommen-dations by choosing alternative funds from an interactive list consisting of a broad universe of ETFs and active mutual funds.

Who Uses Robo-Advice Savings Plans?

We compare investment choices of investors who set up SPs with guidance of the robo-advi-sor (robo-advice SP users) to choices of inves-tors who do not make use of the tool when set-ting up an SP (self-directed SP users). The average contribution rate per SP amounts to EUR 341.3 for robo-advice SP users and to EUR 276.47 for self-directed SP users, or 5.3% and 4.1% when stated relative to investors' total assets deposited at the bank. Around 80% of SPs in the sample see contributions at a monthly frequency.

We find that robo-advice SP users have both sub-stantially lower total assets under management (EUR 22,018 vs. EUR 35,844 on average) and lower portfolio assets (EUR 13,490 vs. EUR 25,491 on average) while there is no significant difference in income between both groups. Moreover, robo-advice SP users on average trade less than non-users and have a shorter relationship with

their bank. Overall, descriptive statistics indicate that among SP investors there is selection of younger, less experienced, and less wealthy individuals into the observed robo-advisor.

How Does the Tool Shape Savings Plans of First-Time Users?

In a first step of our analyses, we construct a sample of investors who set up their first SP at the bank after introduction of the robo-advisor tool during July 2014 – December 2015 and never invested through an SP before. Specifically, we compare investors who set up their first SP with the help of the robo-advisor (treatment group) to self-directed investors who set up their first SP in the same time period but do not use the tool (control group).

To account for self-selection, we use a matching methodology that performs a nearest-neighbor propensity score matching but restricts the matching to groups that are similar with respect to specific ranges of demographic and account characteristics. Figure 1 presents differences in means between treatment and control group investors and shows that both groups differ substantially along several SP characteristics.

For example, the average share of passive funds (passive share) amounts to 89.4% for robo-advice SPs and 69.8% for self-directed SPs. As a result, the average total expense ratio (TER) of robo-advice SPs is 35 basis points (bps) lower than the average TER of self-directed SPs. While this difference potentially reflects a selection mechanism of investors preferring ETFs selecting into robo-advice it is, however, not solely driven by a higher share of passive funds in robo-advice SPs. Robo-advice SPs also contain less costly funds than self-directed SPs both within the group of active and passive fund choices. In particular, the majority of robo-advice users (87.4%) adheres to the tool's default fund recommendations and, importantly, these funds are by and large less costly than funds selected by self-directed investors. Robo-advice users can be expected to significantly benefit from this cost advantage (e.g., French, 2008).
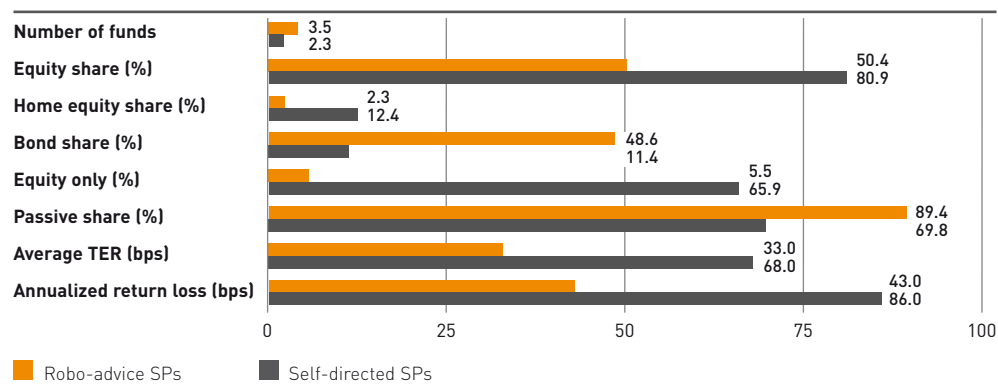
Additionally, robo-advice SPs on average have an equity (bond) share of 50.4% (48.6%) while self-directed SPs have an average equity (bond) share of 80.9% (11.4%). Only 5.5% of robo-advice SPs are allocated to equity funds only. On the contrary, 65.9% of self-directed SPs are equity-only portfolios. Hence, SP portfolios set up with the help of the tool exhibit substantially different risk-return characteristics. Finally, our results indicate that robo-advice SP portfolios are also more diversified. In particular, they have a smaller allocation to home equity (i.e., German equities) and exhibit a lower return loss measured as the vertical distance to the capital market line in a mean-variance diagram (Calvet et al., 2007). Thus, results suggest that robo-advice users benefit from the tool's recommendations since portfolio underdiversification has been shown to significantly impair risk-adjusted returns (e.g., Goetzmann and Kumar, 2008).

All the aforementioned unconditional differences in means are confirmed in a regression setting when controlling for various observable investor characteristics pointing towards highly statistically and economically significant effects of using the tool on diversification and cost properties of SPs.

How Does the Tool Change Investors' Savings Plan Choices?

To further validate and isolate the treatment effect of the tool, we conduct a differences-in-differences analysis using monthly data of SP users. The sample consists of investors who use SPs during January 2013 – June 2014 (pre-treatment period) and then set up a new SP during July 2014 – December 2015 (post-treatment period) with the help of the tool (treatment group) or self-directed (control group), respectively. Figure 2 depicts a monthly time-series of four key portfolio measures and suggests that using the robo-advisor significantly changes investors' SP choices. We test for the significance of the illustrated treatment effect and find that our previous results for first-time SP users also hold in a within-subject setting that controls for observable investor characteristics as well as unobservable investor and time fixed-effects. Specifically, our estimates indicate that setting up a new SP with guidance of the robo-advisor significantly decreases (increases) the equity (bond) share by 14% (23%), increases the passive share by 28%, and decreases the average TER of SP funds by 45.2 bps relative to the effects when setting up a new SP in the post-treatment period without guidance of the tool. Most importantly, also in a within-subject setting we find that the robo-advisor significantly alters the risk-return (i.e., diversification) characteristics of users' SPs. That is, we observe a decrease in the annualized return loss of 31 bps through tool usage. More precisely, setting up an SP with guidance of the tool slightly decreases expected returns, which shifts overall SP portfolios away from the efficient frontier, but substantially decreases total and idiosyncratic volatility, which shifts them disproportionately closer to the efficient frontier, as compared to when setting up a new SP without using the tool. This results both from less aggressive asset allocations and a selection of more diver-
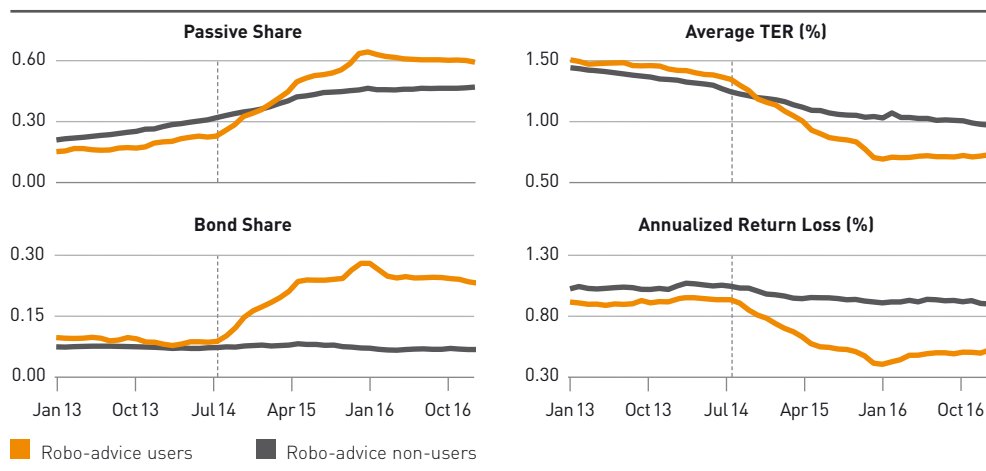

Figure 1: Savings Plan Characteristics by Type of Savings Plan

Figure 2: Savings Plan Characteristics Over Time and the Impact of Robo-Advice

sified funds. Figure 3 illustrates these differences by depicting the position of SPs in a mean-variance diagram as well as corresponding 90% confidence ellipses for our before/after and user/non-user observations. For example, 90% of robo-advice users' SPs are

located within the orange ellipse in the left panel of Figure 3 after investors have used the tool. It becomes apparent that after using the robo-advisor, users' SPs are located significantly closer to the efficient frontier (the capital market line) and become substantially more
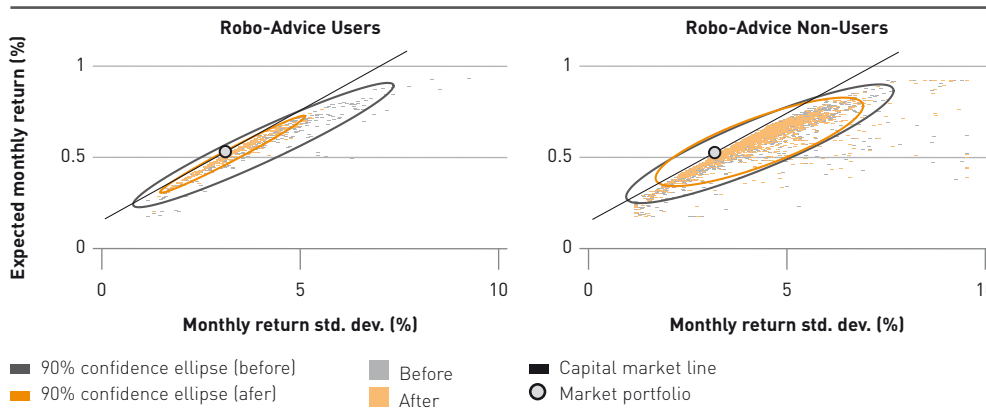

Figure 3: Savings Plan Efficiency and the Impact of Robo-Advice

similar to each other, i.e., the robo-advisor leads to more homogenous portfolios. This results primarily from the high rate of adherence to the tool's default fund recommendations, which leads to similar fund choices among robo-advice users.

As shown in Figure 2, also for control group investors we find an increase (decrease) in the passive share (average TER) but the magnitudes of the effects are much smaller. Thus, also control group investors change their SP choices in the post-treatment period when setting up a new SP. As illustrated in Figure 2 and 3, however, self-directed investors' diversification choices are largely unchanged.

Conclusion

Our results suggest that investors can benefit from automated investment tools in building up well-diversified and low-cost (SP) portfolios. On the other hand, we find that investors substantially alter their asset allocation choices when using the tool even though recommendations are based on only a few input parameters rather than a more comprehensive individual risk profile. These findings raise concerns about the suitability of digital advice that focuses on simplicity by offering generic advice and only little individualization. Moreover, the large fraction of users adhering to default fund recommendations points out the importance of appropriate default (fund) settings in automated investment solutions. As a next step, we will further elaborate on the causal effect of the tool on investor choices.

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Insideview

Buy-Side Trading – First Impressions: 180 Days into MiFID II

INTERVIEW WITH CHRISTOPH HOCK

Christoph Hock
Head of Multi Asset Trading
Union Investment

Since January 3rd, 2018, MiFID II has to be applied in the European Union. What are the main implications of MiFID II and has the regulatory initiative changed your role as trading desk?

Our role as a trading desk has not changed at all. In MiFID II, just as it was under the rule of MiFID I, our ultimate goal has always been to deliver a true best-in-class service to our clients – internally, our portfolio managers, externally, our investors – and to offer best execution at all times. Reaching this aim is not just another box to tick but requires both deep market insight and strong relationships with other market participants as well as a sophisticated electronic approach. In this context, and in particular under the regime of MiFID II, it is key to have access to the very best sources of liquidity in order to fulfill the highest standard of our best execution policy.

What are your main observations? Do you think that the cost of trading, i.e., your market impact, has decreased?

I think it is too early for a comprehensive review of the impact of MiFID II, despite the fact that the regulatory initiative has been live for roughly 180 days. At first glance, though, the costs are improving slightly in favor of our clients. Our internal transaction cost analysis (TCA) confirms this.

Do you see differences in market segments and trading venues concerning the impact of the new regulatory set of rules?

Most definitely. In lit markets, average spreads tend to be at levels pretty similar to what we have experienced in 2017. However, order book depth has diminished substantially. Another observation is that due to the implementation of MiFID II and its double volume caps, dark pool activity as in multilateral trading facilities is reduced substantially. The regulators' goal to somehow limit dark pool trading has been at least partially achieved. Looking at new sources of liquidity, we notice enhanced market activity.

Could you provide us with some examples for new sources of liquidity?

Of course. We do notice that central risk books at bulge brackets firms and conditional LIS (large-in-scale) venues are being used more actively. The same holds true for systematic internalisers and periodic auctions. These liquidity sources benefit from the double volume caps. They allow for more flexibility on the one hand and simultaneously require an enhanced skill set of our traders on the other hand.

So what's next? Do you see further modifications from regulators' perspectives, e.g., MiFID III?

We are in constant exchange with our regulators to serve as a partner and consultant in case that modified regulatory measures are to be planned and eventually installed. Our objective is to support the development and improvement of a functional regulatory framework. We do this in order to be up to date and to offer our market insights to regulators. At the same time, it is our goal to take part in the process and to make sure that the cost of trading is further reduced to offer our clients and our investors the best service possible. This applies to equity trading as well as to fixed income, FX, derivatives, commodities, and securities lending.

What is the role of the trading desk in the investment process as of today?

Trading has become much more crucial in the world of asset management. This development is not entirely new and we have been playing an active role in it for the last years. What we do notice more recently is the intensified focus that investors put on a professional high-quality trading desk. From a process perspective, top-notch trading capabilities are of the highest importance to clients. It appears to be an integral part of the investment process.

Thank you for this interesting conversation.

Infopool

News

University Award of the DAI Goes to Dr. Haferkorn
The "Deutsches Aktieninstitut" (DAI) annually awards outstanding academic research in the field of capital markets and securities with the DAI-Hochschulpreis. Dr. Martin Haferkorn (layer 2, supervisor Prof. Gomber) received the award for his dissertation "High-Frequency Trading in Fragmented European Equity Markets – Implications for Market Quality".

Dr. Ringel Wins EHI-Dissertation Award 2018
On February 28th, the 11th award ceremony of the EHI Science Award 2018 took place in Düsseldorf. The EHI Science Award recognizes young scientists for their excellent scientific work and co-operation projects. Winner in category "Dissertation" is Dr. Daniel M. Ringel (layer 3, supervisor Prof. Skiera).

TU Darmstadt Dissertation Award for Dr. Björn Richerzhagen
Björn Richerzhagen (layer 1, supervisor Prof. Steinmetz) has received the Dissertation Award for his thesis "Mechanism Transitions in Publish/Subscribe Systems – Adaptive Event Brokering for Location-based Mobile Social Applications". The Dissertation Award is provided by the association "Freunde der TU Darmstadt" and honors once a year the best dissertations at TU Darmstadt.

Prof. Skiera Appointed as Fellow of the European Marketing Academy
At this year's EMAC conference in Glasgow, the European Marketing Academy will recognize Professor Skiera's outstanding contributions to the scholarship and practice of marketing and award him with a membership among a very selected group of Fellows of the European Marketing Academy ("EMAC Fellow").

New Colleague at the Chair of Prof. Hackethal
René Bernard has joined the Chair of Prof. Hackethal (layer 3) as an external doctoral student in March 2018. He holds a Master's Degree in Economics from the University of Cologne. During his doctoral studies he will focus on different influences on the savings and investment behavior of individuals. Since 2017, René is working as a research assistant at the Research Centre of the Deutsche Bundesbank.

Professors Hinz and Skiera Win Sheth Foundation/Journal of Marketing Long-Term Impact Award
The Sheth Foundation rewarded Professors Hinz and Skiera (layer 3) with the Journal of Marketing Award for the long term contributions to the field of marketing for their article Hinz, O., Skiera, B., Barrot, C., & Becker, J. U.: "Seeding strategies for viral marketing: An empirical comparison". In: Journal of Marketing, 75 (2011) 6, pp. 55-71. The award honors the article published in the Journal of Marketing between 2008 and 2012 that has made the largest contribution to the field. The selection committee honored its more than 450 citations in Google Scholar.

Prof. Gomber Refuses Offer of University of Luxembourg and Stays in Frankfurt
The University of Luxembourg has offered the "PayPal-FNR PEARL Chair in Digital Financial Services" to Prof. Gomber (layer 2). The Chair was combined with a PEARL Grant of the Luxembourg National Research Fund (FNR) of EUR 5 Million. Prof. Gomber has now decided to refuse this offer and stays at Goethe University Frankfurt and at the E-Finance Lab.

Daniel Blaseg Receives Best Doctoral Paper Award
Daniel Blaseg has received the Best Doctoral Paper Award at the 8th Leuphana Conference on Entrepreneurship in Lüneburg, Germany for his manuscript "Consumer Protection under Laissez-Faire Regulation".

Selected E-Finance Lab Publications

Gomber, P.; Kauffman, R. J.; Parker, C.; Weber, B. W.:
On the Fintech Revolution: Interpreting the Forces of Innovation, Disruption and Transformation in Financial Services.
In: Journal of Management Information Systems, 35 (2018) 1, pp. 220-265.

Hanspal, T.:
The Effect of Personal Financing Disruptions on Entrepreneurship.
In: American Finance Association (AFA), Philadelphia (PA), US, 2018.

Koch, J.; Lausen, J.; Kohlhase, M.:
Towards Internalizing the Externalities of Overfunding – Introducing a 'Tax' on Crowdfunding Platforms.
In: Proceedings of the 26th European Conference on Information Systems (ECIS); Portsmouth, UK, 2018.

Müller, P.; Bergsträßer, S.; Rizk, A.; Steinmetz, R.:
The Bitcoin Universe: An Architectural Overview of the Bitcoin Blockchain.
In: Lecture Notes in Informatics (LNI), (2018) 283, pp. 15-34.

Nguyen, T. A. B.; Rettberg-Päplow, M.; Meurisch, C.; Meuser, T.; Richerzhagen, B.; Steinmetz, R.:
Complex Services Offloading in Opportunistic Networks.
In: Proceedings of IFIP Networking, Zürich, Switzerland, 2018.

Siering, M.; Deokar, A.; Janze, C. :
Disentangling Consumer Recommendations: Explaining and Predicting Airline Recommendations Based on Online Reviews.
In: Decision Support Systems, (2018) 107, pp. 52-63.

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

Infopool

RESEARCH PAPER: THE ECONOMICS OF PRIVACY

Focusing on the economic value and trade-offs associated with the privacy and disclosure of personal information, this article reviews the literature on the economics of privacy. The three keys are: First, there is no consensus on a single unifying understanding of the economic theory of privacy. Second, the impact of privacy protection on the individual and societal welfare is context-specific. Third, due to information asymmetries between consumers and firms regarding the purpose, consequences, and time of the data collection, consumers are unable to make informed decisions about their privacy. This suggests that the protection of personal privacy is emerging as one of the most significant public policy issues.

Acquisti, A.; Taylor, C.; Wagman, L.
In: Journal of Economic Literature, 54 (2016) 2, pp. 442-492.

RESEARCH PAPER: EFFECTS OF ONLINE RECOMMENDATIONS ON CONSUMERS' WILLINGNESS TO PAY

Recommender systems are an integral part of the online retail environment. In this study, the authors used three controlled experiments in the context of purchasing digital items to explore the willingness-to-pay judgments of consumers after being shown personalized recommendations. The first experiment revealed strong evidence that randomly assigned recommendations affected participants' willingness to pay, even when controlling for participants' preferences and demographics. In the second experiment, participants viewed actual system-generated recommendations that were intentionally perturbed (introducing recommendation error), and similar effects were observed. The third experiment showed that the influence of personalized recommendations on willingness-to-pay judgments was obtained even when preference uncertainty was reduced through immediate and mandatory sampling prior to pricing. The results demonstrate the existence of important economic side effects of personalized recommender systems and inform our understanding of how system recommendations can influence preference judgments.

Adomavicius, G.; Bockstedt, J. C.; Curley, S. P.; Zhang, J.
In: Information Systems Research, 29 (2018) 1, pp. 84-102.

E-Finance Lab Quarterly

The E-Finance Lab publishes the Quarterly in the form of a periodic newsletter which appears four times a year. Besides a number of printed copies, the EFL Quarterly is distributed digitally via E-mail for reasons of saving natural resources. The main purpose of the newsletter is to provide latest E-Finance Lab research results to our audience. Therefore, the main part is the description of two research results on a managerial level – complemented by an editorial, an interview, and some short news.

For receiving our EFL Quarterly regularly via E-Mail, please subscribe on our homepage www.efinancelab.de (→ news → sign up / off newsletter) as we need your E-mail address for sending the EFL Quarterly to you. Alternatively, you can mail your business card with the note "EFL Quarterly" to the subsequent postal address or send us an E-mail.

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www.efinancelab.com.

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

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