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The EFA Annual Meeting 2024 in Bratislava, Slovakia – and “Rise of the Machines”?

Wolfgang Breuer*

I. Overview

The 51st Annual Conference of the European Finance Association (EFA) took place at The National Bank of Slovakia, from 21st August until 24th August 2024. It was the first time that this prestigious finance conference was hosted in Slovakia. Professor Douglas W. Diamond, Merton H. Miller Distinguished Service Professor of Finance at the University of Chicago’s Booth School of Business, USA, could be won as the keynote speaker.

243 of all papers submitted were admitted for presentation which is 12.5% more than in the preceeding year. Unfortunately, and in contrast to previous annual meetings of the EFA, the organizing committee for Slovakia was not willing to share the number of total submissions. As a consequence, I am not able to report the corresponding acceptance rate for this annual meeting. Table 1 presents all the other developments since 2017 in detail.

A total of 720 scientists contributed to the 243 papers presented at the conference, with 47 authors – who participated in 26 papers – being from 16 universities and institutions based in Germany. The ratio of “German papers” of 26/243 matches quite well the average of 10.16% realized since 2009.

Measured by the number of downloads from the Social Science Research Network (SSRN; deadline: October, 16th, 2024), the three most successful contributions with German participation were:

1. *Acharya, V. V.* (NYU Stern)/*Jäger, M. D.* (Frankfurt School of Finance and Management)/*Gopal, M.* (Georgia Institute of Technology)/*Steffen, S.* (Frankfurt School of Finance and Management): Shadow Always Touches the Feet: Impli-

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I would like to thank Nadine Schramm very much for her valuable support when retrieving and analyzing all the data on conference papers. Of course, the usual disclaimer applies.

cations of Bank Credit Lines to Non-Bank Financial Intermediaries, 1,497 downloads, ranking position 11 based on total downloads.

2. *Nam, R. J.* (Goethe University Frankfurt): Open Banking and Customer Data Sharing: Implications for FinTech Borrowers, 1,417 downloads, ranking position 14 based on total downloads.

3. *Sastry, P.* (Columbia Business School)/*Marques-Ibanez, D.* (European Central Bank)/*Verner, E.* (MIT Sloan School of Management): Business as Usual: Bank Climate Commitments, Lending, and Engagement, 1,353 downloads, ranking position 16 based on total downloads.

This results in a total number of downloads of 4,267 with an average placement of 13.67, which is considerably better than the average of 20 since 2009 (see Table 1 again). The download figures reported for the years 2017 to 2024 are based on the figures from the first half of October of the respective year. In general, 186 of the 243 papers accepted at the Bratislava meeting are available for download via SSRN. The rate of 76.54% is considerably higher than the average of 69.51% achieved so far since 2009. The total number of downloads of 105,918 (until 16.10.2024) as well as the number of downloads per paper of 569 are also much better than the respective averages since 2009.

Table 1
Selected key figures in annual comparison 2017 to 2024

	Average 2009 – 2023	2017	2018	2019	2020	2021	2022	2023	2024
Submissions	1,753	1,800	1,900	1,900	1,884	2,144	1,908	2,039	n. a.
Acceptances	227	222	243	243	243	180	216	216	243
Acceptance rate	13.30 %	12.33 %	13.50 %	13.50 %	12.90 %	8.40 %	11.32 %	10.59 %	n. a.
“German” papers	23	27	22	27	23	21	25	19	26
Rate Germany	10.16 %	12.16 %	9.05 %	11.11 %	9.46 %	11.66 %	11.57 %	8.80 %	10.70 %
Downloads total	41,234	34,523	44,646	36,372	51,057	54,760	64,945	68,954	105,918
Available via SSRN	158	148	176	174	185	127	152	169	186
Rel. availability	69.51 %	66.67 %	72.43 %	71.60 %	76.13 %	70.56 %	70.37 %	78.24 %	76.54 %
Downloads per paper	264	233	254	209	276	431	427	408	569
Downloads German Top 3	1,699	1,729	2,213	2,421	915	2,728	1,476	2,463	4,267
Ranking German Top 3	20	15.67	13.33	12.33	23.33	22.33	36.67	20.67	13.67
Downloads Top 7	10,961	8,370	10,173	8,498	17,187	21,134	18,337	14,280	31,794
Percentage of downloads Top 7	25.87 %	24.24 %	22.79 %	23.36 %	33.66 %	38.59 %	28.23 %	20.71 %	30.02 %

Table 2 displays the shares of authors from selected countries of origin over the years 2017 to 2024, based on the total number of presentations. Authors were assigned to countries according to the location of the university or institution where they are employed. If an author is associated with multiple locations, only the first one listed was considered. Additionally, each author was weighted according to their proportional contribution to a conference presentation (e.g., 0.5 participation points for two authors or 0.33 for three authors). Germany accounts for a share of 6.2%, which is below the long-term average of 6.7% from 2009 to 2023 and reflects a consistent trend since 2018. However, compared to 2023, Germany has improved its position, rising from sixth place back to fourth, just behind China. The top two positions continue to be held by the “usual suspects,” namely the USA and Great Britain. The most significant decline among the Top 10 appears to be France, which saw its share drop from 6% in 2023 to only 1.7% in 2024.

Table 3 illustrates the relevance of individual topics from the EFA 2023 meeting based on the number of accepted manuscripts and their corresponding downloads. The classification follows that of the current EFA meeting. With 21 papers presented at the conference, “Climate Finance,” which was introduced in 2021, once again proves to be a crucial part of the annual meeting. However, compared to 2023, this topic has dropped one position and is now directly behind “Financial Intermediation.” As in the previous year, the top two ranks are held by “Asset Pricing” and “Corporate Finance.” Overall, there is little movement in the ranking compared to 2023. Notably, peripheral topics such as “International Finance” and “Real Estate Finance” are still absent from the list. More strikingly, there are no special sessions dedicated to “Digital Finance,” even though at least two of the seven most frequently downloaded papers from this meeting pertain to this subject, as will be discussed in the next section.

Table 2
Percentages of authors by country of origin 2017 to 2024

	Average 2009 – 2023	2017	2018	2019	2020	2021	2022	2023	2024
USA	46.8 %	43.0 %	49.3 %	51.7 %	46.2 %	50.0 %	50.7 %	44.9 %	50.6 %
Great Britain	9.7 %	9.5 %	10.2 %	11.0 %	5.6 %	9.6 %	9.6 %	7.4 %	9.3 %
China	3.8 %	5.7 %	3.0 %	6.4 %	6.4 %	5.3 %	4.6 %	6.6 %	6.3 %
Germany	6.7 %	8.1 %	6.0 %	5.8 %	5.4 %	5.4 %	6.4 %	4.9 %	6.2 %
Switzerland	4.6 %	3.5 %	3.6 %	6.5 %	6.0 %	3.0 %	2.7 %	5.5 %	4.6 %
Canada	4.7 %	6.9 %	3.6 %	3.8 %	6.2 %	3.2 %	5.5 %	4.0 %	3.8 %
Netherlands	3.9 %	2.5 %	2.9 %	3.1 %	3.8 %	1.5 %	4.4 %	3.9 %	3.4 %
Sweden	1.8 %	3.3 %	1.4 %	1.6 %	1.4 %	2.8 %	1.6 %	2.5 %	3.0 %
Singapore	1.4 %	3.2 %	1.3 %	0.8 %	1.0 %	0.0 %	1.0 %	1.3 %	2.0 %
France	4.2 %	2.1 %	5.5 %	3.7 %	3.2 %	5.3 %	2.2 %	6.0 %	1.7 %

Table 3
SSRN downloads and conference contributions per topic area

	Number of downloads	Percentages of downloads	Number of conference contributions	Percentages of Conference contributions
Asset Pricing	46,922	44.30 %	66	27.16 %
Corporate Finance	16,201	15.30 %	60	24.69 %
Financial Intermediation	15,308	14.45 %	51	20.99 %
Climate Finance	12,697	11.98 %	21	8.64 %
National Bank of Slovakia	6,745	6.36 %	3	1.23 %
Household Finance	2,425	2.28 %	18	7.41 %
Norges Bank Investment Management	1,903	1.80 %	3	1.23 %
Market Microstructure	1,679	1.62 %	15	6.17 %
Bank for International Settlements	1,424	1.34 %	3	1.23 %
European Central Bank	614	0.57 %	3	1.23 %
Total	105,918	100 %	243	100 %

II. The most important contributions

As rather frequently in previous years, German authors have not managed to enter the list of the top 7 papers according to total download numbers. 30.02 % of all downloads are accounted for by these top 7, which is clearly above the average of 25.87 % observed since 2009. Furthermore, the top 7 are presented in detail according to their total download numbers.

1. *Goulding, C. L.* (Auburn University)/*Harvey, C. R.* (Duke University)/*Kurtović, H.* (Université de Lausanne): Disagreement of Disagreement, 16,439 downloads, ranking position 1 based on downloads per day.

The authors construct empirical proxies of investor disagreement corresponding to three major categories of thought, as guided by the literature: (a) analyst forecast dispersion for individual firms, (b) idiosyncratic volatility (IVOL), and (c) trading volume. Ironically, the level of disagreement across these categories is relatively high, with the average correlation among these measures being under 0.15. The low correlation among disagreement proxies suggests that empirical results are likely to depend on the chosen proxy. Furthermore, many candidates for measuring disagreement can also serve as proxies for other phenomena or yield mixed evidence regarding the predictability of disagreement for returns. Therefore, if one proxy indicates a high level of disagreement while another indicates a low level, how should researchers decide when to favor one proxy over another or whether to temper the indication of one proxy with that of another, given that the true level of disagreement remains unobserved?

To answer such and other questions, the authors develop a unified theoretical model that incorporates these measures into a novel nonlinear composite disagreement measure. Based on this model and additional empirical analyses, the paper makes several contributions. First, for each disagreement proxy considered in isolation, the model provides new theoretical support for its connection to investor disagreement. Second, because the model encapsulates a collection of disparate measures within a unified frictionless framework, it offers theoretical guidance on the relationships among many proxies. Third, these connections are utilized to construct a composite measure of disagreement – a nonlinear combination of several proxies into a single score. Fourth, in contrast to the predominant short-sales-based explanation for the negative relationship between disagreement and expected returns, empirical support is provided for a frictionless explanation. Fifth, although it is well-documented that the disagreement-expected return effect is concentrated in smaller stocks, this model extends its scope by offering a novel explanation for this concentration. Sixth, it establishes a disagreement-based rationale for the IVOL effect and presents evidence that this disagreement proxy absorbs the return predictability attributed to IVOL

even after controlling for other standard cross-sectional determinants discussed in the literature.

2. *Chen, Y.* (University of Chicago)/*Kelly, B.* (Yale University)/*Xiu, D.* (University of Chicago): Expected Returns and Large Language Models, 4,343 downloads, ranking position 4 based on downloads per day.

The authors' primary research contribution revolves around demonstrating the advantages of Large Language Model (LLM) representations for effectively modeling stock returns. Unlike traditional word-based methods, such as bag-of-words or word vectors, the contextualized representation provided by LLMs captures both the syntax and semantics of text, thereby offering a more comprehensive understanding of its meaning. Additionally, the authors compare the performance of LLMs with supervised machine learning models commonly employed in existing finance literature. The first exercise involves sentiment analysis, where sentiment information is extracted from financial news text to examine how this information influences the dynamics of stock returns. In the second exercise, they leverage the predictive power of financial news text directly to model the short-term cross-section of expected stock returns.

The authors investigate three large-scale pre-trained LLMs: BERT (developed by Google), RoBERTa (by Meta), and OPT (also by Meta). They compare these models with SESTM, a sentiment analyzer based on bag-of-words representation trained on task-specific text data. Additionally, they study a second word-based model, Word2vec, which is a word-vector representation framework developed by Google. The inputs to their modeling framework consist of global news text data from Refinitiv's Thomson Reuters Real-time News Feed (RTRS) and Third Party Archive (3PTY) databases spanning from January 1996 to June 2019. This data is merged with individual stock data from CRSP (for U.S. stocks) and Datastream-EIKON (for international stocks). Their study encompasses data from 16 international equity markets and news articles in 13 different languages, providing polyglot evidence of news-induced return predictability.

The authors find several significant empirical results. First, econometric models utilizing pre-trained LLM embeddings outperform prevailing text-based machine learning return predictions. In various extensions, they analyze the differential role of subtle information captured by LLMs that is often missed by bag-of-words models. Specifically, they explore the impact of emotional context within an article and the influence of negation words – both aspects tend to be challenging to infer from bag-of-words representations due to their reliance on term counts rather than meaningful ordering and cross-referencing within documents. Furthermore, they delve into analyzing how news recency affects the relative performance of different models. Essentially, a simple representation of recent news can yield comparable performance to more sophisticated representations derived from older news.

3. Fos, V. (Boston College)/Kempf, E. (Harvard Business School)/Tsoutsoura, M. (Washington University in St. Louis): The Political Polarization of Corporate America, 2,711 downloads, ranking position 28 based on downloads per day.

This paper establishes a new stylized fact, namely that executive teams in U.S. firms are becoming increasingly partisan, leading to the political polarization of corporate America. The authors utilize political affiliations from voter registration records between 2008 and 2020, matched with information on top-earning executives of S&P 1500 firms, to track the partisanship of executive teams over time. By combining Execucomp data on top executives in U.S. S&P 1500 firms with voter registration records, they demonstrate that executive teams became more partisan between 2008 and 2020. The authors characterize the partisanship of an executive team as the degree to which one party's views prevail within that team. Using Monte Carlo simulations to generate measures of randomly occurring partisanship, they document that 61 % of the increase in partisanship is driven by an increased tendency for executives to align with others who share their political views. The remaining 39 % results from the overall executive population becoming more politically homogeneous (i.e., Republican). Furthermore, they reveal that a significant majority (78 %) of the increases in partisanship within firms can be attributed to turnover in the executive team, while the remainder is roughly equally divided between executives registering with a party for the first time and those switching parties.

The authors' findings indicate that executives who share the same political affiliation are 34 % more likely to work at the same firm. To further illuminate how political views influence executive-team formation, they provide evidence suggesting that these views affect executives' departures from their firms. Within any given firm-year, executives misaligned with their team's political majority have a probability of leaving that is 3.2 percentage points higher than their aligned counterparts. This effect corresponds to a 24 % increase in departure likelihood relative to an unconditional turnover probability of 13 %. Moreover, studying abnormal stock returns around departures reveals that exits by politically misaligned executives lead to significantly larger losses for shareholders. Specifically, incremental losses associated with these departures amount to over \$200 million for the average firm in their sample. The authors also find indications that departures among misaligned CEOs tend to be involuntary. Collectively, these findings suggest that shareholders perceive departures by misaligned executives as detrimental to firm value. Additionally, the authors show that executives with differing party affiliations often hold profoundly divergent views on how their firms should be managed.

4. Kim, A. G. (University of Chicago)/Muhn, M. (University of Chicago)/Nikolaev, V. V. (University of Chicago): From Transcripts to Insights: Uncovering Corporate Risks Using Generative AI, 2,402 downloads, ranking position 5 based on downloads per day.

This study aims to bridge the gap between generative AI technology and risk assessment methodologies by examining the potential of large language models (LLMs) to detect and analyze critical aspects of corporate risk. Recent literature has given substantial attention to evaluating firm risks through textual analysis of corporate disclosures. A distinctive feature of these studies is their utilization of dictionary-based bigram (n-gram) frequencies to quantify various types of risks. However, recent advancements in AI technology present a valuable opportunity to explore textual data more deeply, allowing for a richer and more nuanced understanding of corporate risks. The new generation of language models can comprehend complex relationships within texts, consider the context in which relevant topics are discussed, and even draw inferences – elements that are crucial for a comprehensive analysis of intricate corporate risks. Moreover, the rapidly evolving political, environmental, and technological landscape can quickly render existing dictionaries outdated or incomplete. Two additional features make generative language models particularly appealing for analyzing corporate risks. First, their general nature enables them to transcend the specific context of a given text. Second, an important advantage of this new generation of language models is their ability to synthesize extracted information into coherent and understandable narratives. This capability allows for not only quantitative assessments but also explanations that support those assessments. Despite this potential, the ability of LLMs to evaluate firm-level risks remains largely unexplored.

This study addresses this question by developing measures of firm-level risk exposure using OpenAI's GPT-3.5 Turbo LLM. The focus is on sources of corporate risks that hold significant importance for stakeholders: political risk, climate-related risk, and AI-related risk. For each type of risk measure, two forms of output are generated: (1) risk summaries and (2) risk assessments. In creating risk summaries, GPT is specifically instructed to concentrate solely on the document contents without making judgments. In contrast, risk assessments leverage LLMs' unique ability to integrate document context with general knowledge to form judgments. The approach taken involves computing the ratio of the length of risk summaries (or assessments) to that of the entire transcript; higher ratios indicate greater risk exposure. The main analysis employs a market-based approach to assess whether GPT-based proxies effectively measure firm-level risks by examining if these measures can explain future stock price volatility. Focusing on the primary sample period from 2018 to 2021 reveals a strong and robust positive relationship between GPT-based risk exposure measures and

stock price volatility. Additionally, consistent evidence indicates that GPT-based proxies provide more informative insights compared to bigram-based proxies in explaining stock price volatility for these two types of risks – highlighting significant value derived from this new technology. More importantly, when comparing GPT-based measures against one another, it becomes evident that risk assessments outperform risk summaries in both political and climate-related contexts. This finding implies that AI-generated insights play a crucial role in uncovering corporate risks effectively.

5. *Meier, J.-M.* (University of Pennsylvania)/*Servaes, H.* (London Business School)/*Wei, J.* (Southwestern University of Finance and Economics)/*Xiao, S. C.* (University of Texas at Dallas): Do Consumers Care About ESG? Evidence from Barcode-Level Sales Data, 2,206 downloads, ranking position 16 based on downloads per day.

A popular viewpoint is that firms can be “doing well by doing good,” meaning that corporate investments in Environmental and Social activities (E&S) can help firms achieve higher profits and maximize shareholder value. Despite a substantial number of articles addressing this issue, the mechanisms through which E&S activities affect corporate performance and value creation remain poorly understood. There are two primary channels through which E&S investments could influence firm value. The first is the discount rate channel, where shareholders adjust their required rate of return based on firms’ performance in E&S-related practices. The second is the cash flow channel, wherein E&S investments may impact firm value through various means: for instance, customers might alter their demand according to a firm’s E&S practices, employee productivity may be influenced by the employer’s E&S policies, or firms with strong E&S commitments might manage to pay lower wages.

This paper aims to shed light on the cash flow channel, particularly focusing on how consumers in retail markets respond to a firm’s E&S investments. The authors approach this question using Nielsen Retail Scanner Data. A key advantage of their study compared to prior work is the availability of detailed barcode-level sales data for specific products sold at the county level in the U.S. This granularity allows for comparisons between very similar products sold in the same location at the same time by companies with varying levels of E&S activities. Utilizing these barcode-level sales data from local markets over the period from 2008 to 2016 and employing a brand owner’s E&S rating as an empirical proxy for perceived E&S performance, the authors find that a brand owner’s E&S performance positively correlates with local product sales. Their estimates indicate that a one-standard-deviation increase in the owner’s E&S rating corresponds to a 9.2% increase in sales for the average product sold in the same county during the subsequent year. This estimate remains robust even after controlling for a range of high-dimensional fixed effects. Next, the authors investi-

gate various demographic characteristics that may elucidate local consumer responses to corporate E&S investments. Positive and significant point estimates emerge for interactions between E&S scores and both the share of Democratic voters and average income within a county. These findings align with consumers' political leanings and financial conditions influencing their preferences toward products offered by socially responsible companies.

The authors also assess whether local product market competition affects consumer responses to E&S policies. They find that a firm's product sales within a county are negatively related to the E&S performance of local rivals selling similar products in that area. To further strengthen their analysis while minimizing concerns regarding an omitted variable bias or endogeneity, they conduct two additional analyses and discover that negative news regarding firms' E&S practices precedes declines in product sales but does not follow them – indicating that consumers reduce demand in response to adverse news related to these practices. Additionally, the authors exploit major natural and environmental disasters as shocks increasing consumer awareness of E&S activities among neighboring counties unaffected by those disasters. By measuring event salience based on geographic distance, they find that sales become more sensitive to E&S ratings following disasters – especially concerning environmental and community ratings – and observe that this effect diminishes with distance from disaster-affected counties over time.

6. *Eskildsen, M.* (Copenhagen Business School)/*Ibert, M.* (Copenhagen Business School)/*Jensen, T. I.* (Yale School of Management)/*Pedersen, L. H.* (Copenhagen Business School): In Search of the True Greenium, 1,848 downloads, ranking position 3 based on downloads per day.

ESG investors and sustainable finance regulators aim to enhance the environment by lowering the cost of capital for green firms while increasing it for brown firms. The success of this mechanism hinges on the size of the greenium – the cost of capital for green relative to brown firms – making the estimation of this greenium a focal point in a rapidly growing body of literature. By collecting data on 23 measures of greenness from existing research, the authors estimate the corresponding greeniums using a unified methodology and data samples that span time and geography.

The first main finding reveals that all these estimates of the greenium are statistically insignificant when accounting for multiple testing. More broadly, the authors demonstrate that estimating the greenium based on realized returns necessitates centuries' worth of data, whereas much of the existing literature relies on just over a decade's worth. In the second part of their study, the authors seek to estimate the greenium with reduced noise and investigate its properties. They mitigate noise by constructing a "robust green score" (the independent variable) and utilizing forward-looking expected returns instead of realized returns (the

dependent variable). With these measures, they find a statistically significant equity greenium of -25 basis points (bps) annualized per standard deviation increase in the robust green score. This greenium translates to an expected return of -50 bps per year for a green-minus-brown (GMB) tercile portfolio due to its two-standard-deviation spread in greenness. Although this greenium is economically meaningful, it is more modest than prominent estimates found in existing literature and represents only a small portion of the overall equity premium. Furthermore, the authors observe that the equity greenium has become increasingly negative over time and is more pronounced in greener countries.

These findings carry clear implications for ESG investors who must weigh the benefits associated with investments against potential risks and environmental impacts related to the greenium. Similarly, estimated greeniums are pertinent for firms evaluating the costs associated with transitioning to greener practices compared to reductions in their cost of capital, as well as for regulators considering interactions between carbon taxes and sustainable finance. Additionally, these insights contribute to finance theory regarding ESG investing.

7. *Dickerson, A.* (The University of New South Wales)/*Julliard, C.* (London School of Economics)/*Mueller, P.* (The University of Warwick): The Corporate Bond Factor Zoo, 1,845 downloads, ranking position 8 based on downloads per day.

Despite its significance and first-order relevance for firm financing, after six decades of empirical research, there remains minimal consensus regarding the sources of risk that drive prices in the corporate bond market. By employing a flexible and powerful Bayesian method to study linear factor models, the authors aim to fill this gap and provide a comprehensive analysis of all factors and models proposed to date, along with their potential combinations and interactions with asset pricing factors identified in the equity market literature. This approach enables them to identify both robust sources of priced risk and a novel benchmark stochastic discount factor (SDF) that prices corporate bonds – both in-sample and out-of-sample – significantly better than existing models. The authors empirically analyze over 562 trillion models derived from the joint array of corporate bond and equity factors while relaxing the cornerstone assumptions prevalent in previous studies: namely, the existence of a unique, low-dimensional, correctly specified, and well-identified factor model.

First, they discover that the “true” latent SDF for corporate bonds is dense within the space of observable bond and equity factors; literally dozens of factors – both tradable and non-tradable – are necessary to span the risks influencing bond prices. Importantly, this density implies that the sparse models considered in earlier literature suffer from severe misspecification. As demonstrated by the authors’ findings, these sparse models are outperformed by the most likely four to eight SDF components they identify. Second, they show that a Bayesian

model averaging–stochastic discount factor (BMA-SDF) encompassing all possible models (including bond, equity, and non-tradable factors) explains corporate bond risk premia more effectively than any existing models or most likely factors – both in- and out-of-sample.

Third, while analyzing tradable factors designed to price corporate bonds reveals that most are unlikely sources of priced risk, compelling evidence emerges for a novel tradable factor – a theoretically motivated concept previously unused for asset pricing – that captures the bond post-earnings announcement drift (PEADB). This factor should be included in the SDF with very high probability. Additionally, two non-tradable factors aimed at capturing inflation risk and the slope of the term structure of interest rates – a well-documented predictor of economic activity – are likely components of the SDF. A broad-based corporate bond market index is also likely part of this framework. When expanding the set of candidate pricing factors to include equity-based ones, measures such as firm size, market liquidity, and long-term reversal exhibit posterior probabilities exceeding their prior values for inclusion in the SDF. Finally, beyond individual factors mentioned above, both non-tradable and equity-based factors collectively play an important role in the BMA-SDF. These components are more probable candidates for inclusion in pricing measures than all other bond-based tradable factors. The results of this paper can be directly utilized to motivate and implement smart beta strategies for corporate bond portfolios.

III. Conclusion

In their paper on the measurement of corporate risks with the help of ChatGPT, *Kim et al.* (#4 in the list of Section II.) distinguish between political risk, climate-related risk, and AI-related risk. As pointed out in Section I., the discussion of climate related risk is becoming more and more an established part of the EFA annual meetings. In the presence of papers like that of *Kim et al.*, one would expect a similar development in the field of digital finance. However, although their paper and that of *Chen and Xiu* (#2 in the list of Section II.) on modelling stock returns with the help of large language models are ranked among the top 7 of all contributions to this conference based on total downloads, when we search the titles of presentations at the annual meeting for keywords related to digital finance, the resulting numbers appear to be quite small. In three titles, we find “digital,” in only two (large) “language” (models), the same is true for “machine,” and there are no papers with “intelligence” in their titles. So, whether we are living in an age with “the rise of the (intelligent) machines” remains questionable for the time being – at least for the field of finance, which is rather surprising. However, we look forward to the annual EFA conferences to come in the next years!