The EFA Annual Meeting 2023 in Amsterdam, the Netherlands, and a special focus on climate finance

Wolfgang Breuer*

I. Overview

The 50th Annual Conference of the European Finance Association (EFA) took place at the Vrije Universiteit Amsterdam, the Netherlands, from 16th August until 19th August 2023. It was the fourth time that this prestigious finance conference was hosted by a Dutch university (twice in Rotterdam, 1981 and 1991, and once in Maastricht, 2004). Professor Antoinette Schoar from MIT Sloan School of Management, USA, could be won as the keynote speaker.

As in the previous year, only 216 of this time 2,039 papers submitted were admitted for presentation resulting in an acceptance rate of about 10.59% which is one of the smallest at least since 2009. Table 1 presents the development since 2016 in detail.

A total of 608 scientists contributed to the 216 papers presented at the conference, with 33 authors – who participated in 19 papers – being from 7 universities and institutions based in Germany. The ratio of "German papers" of 19/216 = 8.80% is well below the previous average of 10.25% realized since 2009.

Measured by the number of downloads from the Social Science Research Network (SSRN; deadline: October, 16th, 2023), the three most successful contributions with German participation were:

1. *Mariassunta, G.* (Stockholm School of Economics)/*Jasova, M.* (Columbia University)/*Loumioti, M.* (UT Dallas)/*Mendicino, C.* (European Central Bank): "Glossy Green" Banks: The Disconnect Between European Banks' Sustainability Reporting and Lending Activities, 881 downloads, ranking position 18 based on total downloads.

Table 1

Selected Key Figures in Annual Comparison 2016 to 2023

	Average 2009–2022	2016	2017	2018	2019	2020	2021	2022	2023
Submissions	1,732	1,853	1,800	1,900	1,900	1,884	2,144	1,908	2,039
Acceptances	228	243	222	243	243	243	180	216	216
Acceptance rate	13.50%	13.11%	12.33%	13.50%	13.50%	12.90%	8.40%	11.32%	10.59%
"German" papers	23.29	29	27	22	27	23	21	25	19
Rate Germany	10.25%	11.93%	12.16%	9.05%	11.11%	9.46%	11.66%	11.57%	8.80%
Downloads total	39,254	35,454	34,523	44,646	36,372	51,057	54,760	64,945	68,954
Available via SSRN	157	144	148	176	174	185	127	152	169
Rel. availability	68.89%	59.26%	66.67%	72.43%	71.60%	76.13%	70.56%	70.37%	78.24%
Downloads per paper	253	246	233	254	209	276	431	427	408
Downloads German Top 3	1.644	1,236	1,729	2,213	2,421	915	2,728	1,476	2,463
Ranking German Top 3	19.74	15	15.67	13.33	12.33	23.33	22.33	36.67	20.67
Downloads Top 7	10,677	9,313	8,370	10,173	8,498	17,187	21,134	18,337	14,280
Percentage of downloads Top 7	26.24%	26.27%	24.24%	22.79%	23.36%	33.66%	38.59%	28.23%	20.71%

2. *Levit*, D. (University of Washington)/*Malenko, N.* (University of Michigan)/ *Maug, E.* (University of Mannheim): The Voting Premium, 809 downloads, ranking position 21 based on total downloads.

3. *Acharya, V. V.* (NYU Stern School of Business)/*Chauhan, R. S.* (University of Chicago Booth School of Business)/*Rajan, R.* (University of Chicago Booth School of Business and NBER)/*Steffen, S.* (Frankfurt School of Finance & Management): Liquidity Dependence and the Waxing and Waning of Central Bank Balance Sheets, 773 downloads, ranking position 23 based on total downloads.

This results in a total number of downloads of 2,463 with an average placement of 20.67, which is slightly worse than the average of 19.74 since 2009 (see Table 1 again). The download figures reported for the years 2016 to 2023 are based on the figures from the first half of October of the respective year. In general, 169 of the 216 papers accepted at the Amsterdam meeting are available for download via SSRN. The rate of 78.24 % is considerably higher than the average of 68.89 % achieved so far since 2009. The total number of downloads of 68,954 (until 16.10.2023) as well as the number of downloads per paper of 408 are also much better than the corresponding averages since 2009.

Table 2 shows the shares of authors from selected countries of origin over the years 2016 to 2023 for the respective total number of presentations. The authors were assigned to countries according to the location of the university or institution where they work. If there are several locations mentioned for an author, only the first one from the list was taken into account. Furthermore, each author was weighted according to his or her proportionate participation in a conference contribution (e.g. with 0.5 participation points for two authors or 0.33 for three authors). Germany achieves a share of 4.9 %, which is far below the long-term average for 2009 to 2022 of 6.7 % and a persistent pattern since 2018. As a consequence, Germany fell from rank 3 to rank 6, overtaken by the rising star China and even by France and Switzerland. The places 1 and 2 go to the "usual suspects" which are the USA and Great Britain. Somewhat surprisingly, the Netherlands as the country hosting the conference, is only able to reach an average submission success. At previous conferences, typically there was some "overrepresentation" of papers from the host country.

Table 3 reveals the relevance of individual topics of the EFA 2023 meeting according to the respective number of accepted manuscripts and the corresponding downloads. The classification according to the current EFA meeting was adopted. "Climate Finance", introduced in 2021, seems to be established as an important topic for the EFA annual meetings and ranks again #3 according to downloads just behind the traditionally important subjects of Asset Pricing and Corporate Finance. Although the number of papers in the field of Financial Intermediation is 2.5 times as high as those in the field of Climate Finance, down-

Table 2

Percentages of Authors by Country of Origin 2016 to 2023

	Average 2009–2022	2016	2017	2018	2019	2020	2021	2022	2023
USA	46.8%	40.2%	43.0%	49.3%	51.7%	46.2%	50.0%	50.7%	44.9%
Great Britain	9.7%	9.7%	9.5%	10.2%	11.0%	5.6%	9.6%	9.6%	7.4%
China	3.8%	3.6%	5.7%	3.0%	6.4%	6.4%	5.3%	4.6%	6.6%
France	4.2%	4.7%	2.1%	5.5%	3.7%	3.2%	5.3%	2.2%	6.0%
Switzerland	5.5%	4.8%	3.5%	3.6%	6.5%	6.0%	3.0%	2.7%	5.5%
Germany	6.7%	7.9%	8.1%	6.0%	5.8%	5.4%	5.4%	6.4%	4.9%
Canada	4.7%	4.3%	6.9%	3.6%	3.8%	6.2%	3.2%	5.5%	4.0%
Netherlands	3.9%	4.8%	2.5%	2.9%	3.1%	3.8%	1.5%	4.4%	3.9%
Sweden	1.8%	1.9%	3.3%	1.4%	1.6%	1.4%	2.8%	1.6%	2.5%
Norway	1.3%	2.1%	1.6%	0.8%	0.8%	0.8%	0.6%	1.5%	2.2%

Table 3

SSRN Downloads and Conference Contributions per Topic Area

	Number of downloads	Percentage of downloads	Number of conference contributions	Percentage of conference contributions
Asset Pricing	20,640	29.93 %	60	27.78 %
Corporate Finance	15,914	23.08 %	54	25.00 %
Climate Finance	10,274	14.90 %	18	8.33 %
Financial Intermediation	10,203	14.80 %	45	20.83 %
Market Microstructure	6,465	9.38 %	18	8.33 %
Norges Bank Investment Management	2,626	3.81 %	3	1.39 %
Household Finance	1,423	2.06 %	12	5.56 %
European Central Bank	882	1.28 %	3	1.39 %
Bank for International Settlements	527	0.76 %	3	1.39 %
Total	68,954	100 %	216	100 %

loads for both topics are almost identical expressing the rather high interest of the scientific community in issues related to climate change. Besides "Household Finance", there seems to be no room for a separate presentation of "marginal" topics like "International Finance" or "Real Estate Finance".

II. The Most Important Contributions

In line with the findings of Section I., German authors have not managed to enter the list of the top 7 papers according to total download numbers. 20.71 % of all downloads are accounted for by these top 7, which is clearly below the average of 26.24 % observed since 2009. Furthermore, the top 7 are presented in detail according to their total download numbers.

1. Edmans, A. (London Business School)/*Levit, D.* (University of Washington)/ *Schneemeier, J.* (Indiana University): Socially Responsible Divestment, 3,235 downloads, ranking position 4 based on downloads per day.

This purely theoretical paper examines the optimal investment strategy of a socially responsible investor seeking to minimize the externalities generated by a brown firm. While excluding the firm, which means refraining from investing in it altogether, reduces the stock price and, consequently, the extent of harmful externalities the firm can produce, it fails to incentivize the firm to enact corrective measures. In contrast, adopting a tilting approach, i.e. holding a brown stock if the firm has taken corrective measures, offers incentives for the firm to reduce externalities, albeit at the expense of providing capital to a brown firm and enabling its expansion. The optimal strategy for the investor is to employ the tilting approach when corrective actions are effective in reducing externalities and have minimal impact on the firm's value. This strategy is particularly advantageous when the manager's stock price concerns are substantial, as it obviates the need for a significant investment commitment to persuade the manager to take corrective actions and thus avoid stock price reductions in the wake of divestments by socially responsible investors. Several model extensions are examined, in particular situations where the corrective action is not perfectly observable and situations where the socially responsible investor is partially profit-motivated. The latter implies greater incentives to tilt for the investor, because doing so involves buying shares from risk-averse households and hence earning trading profits for risk-bearing. There are several implications for policymakers. In particular, sustainable funds may be allowed to also hold brown stocks.

2. Bryzgalova, S. (London Business School)/*Lerner, S.* (Stanford University)/*Lettau, M.* (Stanford University)/*Pelger, M.* (CEPR): Missing Financial Data, 2,995 downloads, ranking position 5 based on downloads per day.

Missing data is a prevalent but often overlooked aspect of company fundamentals. For instance, the conventional source of fundamental firm-level data is the Compustat database, comprising more than 1,000 individual variables. Nevertheless, in this context, R&D information is missing for 42 % of all firms between 1980 and 2006. In this paper, the authors examine the structure of missing financial data and present a systematic approach to address it. Through a comprehensive empirical study, they establish four significant stylized facts. First, the issue of missing financial data is widespread, affecting over 70 % of firms, representing approximately half of the total market capitalization. Second, the problem becomes notably acute when multiple characteristics need to be present. Third, firm fundamentals are not missing at random, undermining traditional ad-hoc methods for data imputation and sample selection. Fourth, stock returns themselves are influenced by the presence of missing data. The authors propose an innovative imputation method to create a fully observed panel of firm fundamentals. This method leverages both time series and cross-sectional dependencies of firm characteristics to impute their missing values while accounting for general systematic patterns of missing data. This novel approach significantly outperforms standard empirical procedures, such as using cross-sectional averages or past observations. The findings of this paper have significant relevance for various applications in asset pricing, as this research has shown that asset returns are influenced by the absence of firm characteristic data, with these effects becoming especially pronounced when a comprehensive set of characteristics needs to be observed.

3. Gabaix, X. (Harvard University)/*Koijen, R. S. J.* (Chicago Booth)/*Mainardi, F.* (Chicago Booth)/*Oh, S. S.* (Chicago Booth)/*Yogo, M.* (Princeton): Asset Demand of U.S. Households, 2,066 downloads, ranking position 6 based on downloads per day.

The authors utilize new monthly security-level data on portfolio holdings, flows, and returns of US households to gain insights into asset demand across multiple asset classes. This data is sourced from Addepar, a wealth management platform for investment advisors, and provides detailed information on securities, including holdings, flows, and returns that aggregate into both specific asset classes and broader asset categories. The data spans from January 2016 to August 2021 and offers two notable advantages over existing datasets for US households. Firstly, the authors possess data on UHNW (Ultra High Net Worth) individuals, including nearly a thousand households with assets exceeding $100 million. Secondly, their data boasts comprehensive coverage across various asset classes and is available at high frequencies. This study reveals three main sets of

findings: First, flows into liquid risky assets and cash exhibit a strong negative correlation on average. Investors tend to sell during economic downturns, and the level of disagreement among investors increases during turbulent times. Second, the authors estimate how flows into liquid risky assets respond to aggregate stock returns across different wealth groups. Remarkably, they find that this sensitivity diminishes as wealth increases. While less affluent households tend to act pro-cyclically, UHNW households purchase equities during downturns, thereby stabilizing markets through increased elasticity. Third, the authors introduce a straightforward decomposition method using principal components analysis to estimate the primary rebalancing directions among risky assets. Approximately 65 % of all rebalancing variation across 14 different asset classes can be attributed to the first three principal components (the long-term equity risk premium, the credit premium, and the premium for municipal bonds and global equities in comparison to US equities). Subsequently, the authors introduce a novel framework for estimating demand curves across asset classes. Their innovative estimator for asset demand curves leverages variations in the second moments of returns and portfolio rebalancing, and can be applied even in cases where only a portion of market holdings is observable. Their findings suggest that asset demand elasticities are generally lower than what standard theories would suggest. These elasticities exhibit considerable variation across different wealth segments and, interestingly, are negative for certain groups, indicating the presence of positive feedback trading.

4. Duchin, R. (Boston College)/*Ga, J.* (Georgetown University)/*Xu, Q.* (University of Illinois at Urbana-Champaign): Sustainability or Greenwashing: Evidence from the Asset Market for Industrial Pollution, 1,667 downloads, ranking position 11 based on downloads per day.

   In response to mounting pressure from activists, regulators, and governments, a growing trend in corporate finance involves divesting from polluting assets. Such a trend raises questions about its effectiveness. In this study, the authors analyze changes in pollution levels associated with ownership transfers, identify the buyers and sellers of pollutive assets, and estimate the gains from trading these assets. They explore two possibilities: The first is that divestitures of pollutive assets redirect ownership to parties more likely to address pollution. The second is that divestitures occur in response to external environmental pressures, transferring ownership from firms under stronger pressures to those under weaker pressures or better equipped to handle them. To investigate these scenarios, the authors compile a dataset covering 888 divestitures of pollutive industrial plants from 2000 to 2020, examining their determinants and consequences for buyers and sellers. Pollution is measured plant-by-plant using toxic release amounts and emission intensity, the ratio of toxic release to cumulative chemical production. Regressions reveal no difference in pollution changes be-

tween divested and non-divested plants. Additionally, there is no disparity in pollution abatement efforts at sold and unsold plants, and pollution levels at sellers' and buyers' other plants remain unaffected post-divestiture. The authors also find no support for obsolescence or capital reallocation, as productivity growth and survival rates are similar between sold and unsold plants, with no introduction of new plants following divestitures. Furthermore, firms are more inclined to divest highly pollutive assets, especially when facing environmental risk exposure. However, buyers of pollutive assets appear to be under weaker pressures to manage these assets responsibly. Notably, sellers do not benefit from transferring their environmental liabilities to distressed firms with bankruptcy protection against environmental litigation. On average, buyers have lower default probabilities than sellers. In summary, these findings suggest that public firms experiencing growing ESG (Environmental, Social, and Governance) pressures divest their most pollutive assets to firms facing weaker ESG pressures. Such results align more with "greenwashing" implying that ESG rating agencies, environmental regulators, and ESG-focused investors may fail to recognize that divestitures of pollutive assets do not effectively reduce industrial pollution. A policy implication of this is that regulators and ESG ratings should consider Scope 3 pollution, which encompasses pollution generated along the firm's value chain, including suppliers and strategic partners.

5. Kakhbod, A. (University of California, Berkeley)/*Kazempour, S. M.* (Rice University)/*Livdan, D.* (University of California, Berkeley)/*Schuerhoff, N.* (University of Lausanne): Finfluencers, 1,500 downloads, ranking position 2 based on downloads per day.

Financial influencers, commonly referred to as finfluencers, are individuals who offer unsolicited investment advice on social media platforms. Despite their increasing impact, there is limited knowledge about the quality of the unsolicited financial guidance provided by finfluencers, as well as the competition and economic incentives they encounter. This paper delves into the quality of investment advice from finfluencers and whether competition among them for the attention of retail investors leads to the exclusion of unskilled finfluencers from the market. Leveraging user-level data from StockTwits, the authors assess the investment performance of over 29,000 finfluencers. 28% of them provide valuable investment advice, resulting in monthly abnormal returns averaging 2.57%. In contrast, 16% of finfluencers offer uninformed advice. However, the majority, constituting 56%, are categorized as "antiskilled" defined as having negative skill, and adhering to their investment advice results in monthly abnormal returns of −2.31%. Both unskilled and antiskilled finfluencers tend to have more followers, exhibit greater activity, and wield more influence on retail trading than skilled finfluencers. This suggests that distinguishing skill from manipulation and noise is a challenging task. Moreover, the authors find that, in prin-

ciple, social media users can discern skill among finfluencers. Skilled finfluencers tend to be less active, and their tweets exhibit contrarian behavior regarding returns, social sentiment, and news. Conversely, antiskilled finfluencers tend to follow momentum in returns and social sentiment. Social media users can rely on tweet behavior to identify skilled finfluencers. However, more skilled finfluencers tend to have fewer followers, while less skilled ones amass larger followings. The authors find that social media users cannot follow uninformed finfluencers and still make sound investment decisions. More strikingly, one can achieve abnormal returns by going against the advice of antiskilled finfluencers, which the authors describe as the "wisdom of the antiskilled crowd".

6. Mittal, V. (Columbia Business School): Desperate Capital Breeds Productivity Loss: Evidence from Public Pension Investments in Private Equity, 1,416 downloads, ranking position 8 based on downloads per day.

Private capital markets have experienced substantial growth over the past two decades, reaching $5.6 trillion in North America by 2021. Nevertheless, the economic ramifications of private equity (PE) remain a subject of controversy. Two primary inquiries are addressed: First, what are the impacts of private equity buyouts on employment, revenue, and labor productivity within the firms in which PE funds invest (referred to as target firms)? Second, does the origin of PE capital play a role in elucidating these effects on employment and productivity? The author finds that five years after a buyout, employment in target firms experiences a decline of 23.8 % in comparison to control firms, while revenue decreases by 23.2 %, and labor productivity registers a 0.4 % reduction. This outcome underscores the fact that, despite workforce reductions and substantial declines in revenue due to PE firm restructuring, there are no efficiency gains as measured by labor productivity. Notably, the seemingly inconclusive productivity result in the overall dataset conceals a significant shift over time. For PE transactions spanning the period from 1999 to 2011, a positive cumulative productivity change of 7.3 % in the two years following the buyout is observed. However, for PE deals occurring from 2011 to 2018, the author documents a negative two-year productivity change of −5.4 %. This finding of reduced productivity resulting from PE investments coincides with an increase in the proportion of PE capital sourced from underfunded pension funds. In fact, labor productivity registers a significant change, with a decrease of −5.2 % for firms supported by the most underfunded pensions compared to a +5.2 % increase for other investors. Driven by a pressing need for returns to offset their deficits and confronted with low fixed income returns, underfunded public pensions allocate their capital to private equity. Regrettably, the most under-funded pension funds tend to direct their capital toward lower-quality PE funds, resulting in diminished productivity within the firms and inefficient capital allocation. The author calls this central mechanism at play here the concept of "desperate capital".

7. Zhang, S. (Ohio State University): Carbon Returns Across the Globe, 1,401 downloads, ranking position 12 based on downloads per day.

During the process of global decarbonization, brown firms find themselves more vulnerable to carbon transition risk, which implies that they should yield higher expected returns, often referred to as the "carbon premium". On the other hand, green firms can potentially outperform when policy shocks come into play, when consumer attention shifts, and when investor preferences pivot toward the transition to a net-zero economy. Conversely, if investors pay minimal attention to the carbon footprint, there might be no significant outperformance from either green or brown firms. This study delves into the concept of "carbon return", which denotes the return differential between brown and green stocks in the US and a comprehensive selection of international stock markets. The author utilizes the most up-to-date carbon emission data available to investors and empirically demonstrates that, in the US, brown firms, as measured by carbon intensity (or emissions per unit of sales), yield lower returns than green firms. Specifically, the value-weighted return spreads per month amount to -0.39% and -0.27% for Scope 1 and 2 carbon intensities, respectively. It is worth noting that the carbon premium documented in prior studies is a consequence of forward-looking biases rather than a genuine risk premium. Turning to international evidence, there does not appear to be a consistent outperformance by either brown or green firms on a global average basis at first glance. Nevertheless, the carbon returns exhibit substantial variation across different countries. These international variations in carbon returns can be attributed to differences in expected risk premiums and various unforeseen shocks within the sample period, including cash flow shocks and shifts in climate concerns. Cash flow shocks, in particular, account for up to 7% of the variance in carbon returns. Furthermore, carbon returns tend to be higher in countries with a civil law legal system and a greater share of renewable energy. This positive correlation aligns well with the level of stringency in climate policies observed in these countries, reflecting compensation for increased policy-related risks. Despite such findings, developed countries show lower carbon returns as a consequence of a more pronounced increase in climate concerns. In summary, the global transition toward heightened carbon awareness is well underway, signaling a significant shift in the approach to addressing climate change.

III. The Growing Importance of Climate Finance – not only in "Real Life", but also at the EFA Annual Meetings

As mentioned earlier, the significance of climate finance issues has noticeably increased in recent years. Notably, among the top 7 papers with the highest download numbers, three are related to climate finance topics (papers #1, #4, and #7). While only 6 papers were categorized under climate finance at the 2021

annual EFA meeting, the number increased to 15 in 2022 and 18 in 2023. Additionally, there are other papers allocated to different sessions that also address climate finance problems. This is particularly true for paper #1 in the preceding section, which was assigned to a session on corporate finance. Consequently, the count of 39 papers on climate finance during the last three annual meetings of the European Finance Association underestimates the true relevance of this topic. Out of these papers, as of November 2023, four have already been published. All of them are from the 2021 EFA annual meeting: (1) *R. De Haas/A. Popov* (2023), Corporate Finance and Green Growth, The Economic Journal 133 (650), 637-668, (2) *A. Reghezza/Y. Altunbas/D. Marquez-Ibanez/C. Rodriguez d'Acri /M. Spaggiari* (2022), Do Banks Fuel Climate Change?, Journal of Financial Stability 62, (3) *E. Ilhan/P. Krüger/Z. Sautner/L. T. Starks* (2023), Climate Risk Disclosure and Instutional Investors, Review of Financial Studies 36 (7), 2617-2650, (4) *L. Pástor/R. F. Stambaugh/L. A. Taylor* (2022), Dissecting Green Returns, Journal of Financial Economics 146 (2), 403-424.

In general, papers on climate finance address the question of how companies or their managers contribute to the transformation of our economy from "brown" to "green". If corporate decision-making is guided by an inherent interest in this transformation due to their sustainable preferences, then there would not be much to discuss. However, the scenario is different when this transformation is assessed through cost-benefit analyses, and pressures mainly exerted by public authorities and investors become relevant. Only a handful of the 39 papers considered here also examine the impact of customers and their "green" preferences, highlighting their significance in influencing the environmentally responsible behavior of companies (see, for example, "Corporate Environmental Policy and Product Market Competition" by *Y. Grinstein/Y. Larkin*). This finding may be attributed to the context of a finance conference. For similar reasons, other interest groups, such as activists that are not also investors (see "Environmental Activism, Endogenous Risk, and Stock Prices" by *R. Jagannathan/S. Kim/ R. McDonald/S. Xia*), play a minor role in the papers on climate finance from the EFA annual meetings.

Public authorities can exert regulatory pressure through various means, including legal mandates, prohibitions, and the introduction of prices for environmental pollution, particularly for carbon dioxide emissions. Legal mandates also encompass increased transparency requirements. One primary focus of papers exploring the consequences of regulatory pressure on company behavior is to determine whether the overall impact genuinely leads to a reduction in environmental pollution or simply results in the outsourcing of stigmatized behavior to other firms or countries where these concerns are less prominent. According to papers such as "Outsourcing Climate Change" by *R. Dai/R. Duan/H. Liang/ L. Ng* and #4 from the preceding section, this outsourcing may indeed occur. As presented in the paper "Green or Greed? Corporate Donations to Politicians

and their Votes on Environmental Legislation" by *E. M. Fich/G. Xu*, another response of companies, especially those with high ESG scores, may be to intensify lobbying efforts to reduce political pressure which the authors call "environmental cost-cutting".

Beyond the pressure exerted by public authorities, companies may encounter pressure from their investors, notably banks as creditors and equity funds as shareholders. Investors, especially institutional ones, may either possess their own "green" preferences or simply respond to regulatory pressure or the demands of their retail investors and depositors. Analyses suggest some evidence that the latter effect may predominate. For instance, banks appear to be quite responsive to changes in regulatory rules, as indicated by the previously mentioned published paper (2) by *Reghezza* et al. (2022).

In response to increased pressure, investors may pursue two potential avenues. Firstly, they might opt to steer clear of such investments altogether. The repercussions for brown companies would then involve a diminished investor base, leading to a higher cost of capital. Several papers are delving into this return effect, though the evidence thus far remains inconclusive. As highlighted in the published paper (4) by *Pástor* et al. (2023) mentioned earlier, analyses in this domain are complicated by the fact that sudden spikes in green investments result in higher realized rates of returns for green companies, which could be misconstrued as a sign of a higher cost of capital. Consequently, several papers strive to pinpoint return and cost of capital effects as accurately as possible. An additional example in this regard is presented in paper #7 of our top 7 list from the preceding section.

Alternatively, a more direct approach to influencing the behavior of brown companies may involve attempts to impact their decision-making. However, according to *V. Atta-Darkua/S. Glossner/P. Krüger/P. Matos* in "Decarbonizing Institutional Investor Portfolios: Helping to Green the Planet or Just Greening Your Portfolio?", it appears that mutual funds prefer the former alternative over the latter, thereby reducing overall pressure on brown companies.

In summary, while certainly not exhaustive, some of the most crucial issues in climate finance appear to be:

(1) the response of brown companies to regulatory and investor pressure,

(2) the general reaction of creditors and shareholders to the heightened importance of environmental issues (whether to divest or engage),

(3) how environmental risks are priced in capital markets.

As the issues are far from being completely settled, we can be certain that climate finance will continue to be of high importance at upcoming annual meetings of the European Finance Association.

IV. Concluding Remarks

In the aftermath of the 2008/09 financial crisis, the financial academic community faced criticism for not timely identifying potential crisis signals and for contributing little to the resolution of the financial crisis. Climate change undoubtedly has the potential to become one of the greatest crises in the coming years and decades. This threat can only be addressed through an interdisciplinary approach. At least for highly developed countries, the (potential) contribution of the financial sector to the necessary transformation of the economy should not be underestimated. Therefore, it is right and commendable that corresponding issues are increasingly being addressed at the EFA annual meetings. This time, the contribution of the financial academic community may be just in time.