#### **EDITORIAL**



# **Recent developments in Business Economics**

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#### 1 Introduction

In the preceding editorial of this special issue by Wolfgang Breuer, it was pointed out that the Journal of Business Economics has undergone a remarkable transformation under the leadership of Günter Fandel. What was once a German-only publication outlet is now an international journal that exclusively publishes articles in English. Since the turn of the century, the various subject areas of business economics have seen a dynamic development as well. In this regard, the Journal of Business Economics can claim a unique selling proposition due to its broad thematic scope, which is supported by a diverse board of department editors representing numerous sub-disciplines within the field of business research. This diversity makes it possible to offer a comprehensive overview of the evolution of different fields of business economics from experts' perspectives. Over the past two decades, articles in the Journal of Business Economics have contributed significantly to many issues under Günter Fandel's leadership. Indeed, the scope of contributions extends even further to topics such as production planning, organizational theory, and human resource



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management, which are omitted from this overview. Nevertheless, the authors hope that this survey dedicated to Günter Fandel provides an enjoyable and instructive tour through various subject areas of business economics, recognizing that the selection of topics is inevitably subjective.

## 2 Marketing

The rise of digital technologies has transformed virtually all aspects of marketing in the 21st century. Firms leverage digital technologies to differentiate themselves from competitors and to enhance customer experiences or customer engagement, while mitigating privacy concerns. A critical area of inquiry pertains to improving our understanding of how consumers respond to new technologies, such as robots, chatbots, and other data-driven applications (Plangger et al. 2022). A prominent stream of research in this field explores consumer behavior in immersive environments as implemented through augmented reality or virtual reality. Research has highlighted the potential of such applications for improving information delivery (e.g., by digitally overlaying product information at the point-of-sale; Hoffmann et al. 2022), product acceptance (e.g., Lichters et al. 2021), and social interaction (e.g., in the Metaverse; Hennig-Thurau et al. 2022). Digital technologies have also given rise to crypto marketing that includes "any marketing practice that leverages blockchain technology for the purpose of designing, pricing, promoting, and selling digital and non-digital goods" (Hofstetter et al. 2022, p. 706), typically implemented through non-fungible tokens (NFTs). Crypto marketing has the potential to revolutionize the field in several respects. Recent research argues that NFTs enhance consumers' sense of digital ownership (e.g., via psychological ownership) as each token is unique and its ownership exclusive. From a firm perspective, the ability to verify NFT ownership not only opens new revenue streams, but also offers opportunities of conferring status on users (e.g., by verifying ownership of posted NFT images on social media sites). Finally, NFTs challenge established marketing understanding of branding and product management as centralized marketing processes (Chohan and Paschen 2023; Hofstetter et al. 2022).

The rise of digital technologies has also fundamentally transformed the data foundations of marketing research as an academic discipline. During the last decades, the field has experienced a substantial shift from survey-based primary data to secondary (big) data (Hulland et al. 2018) in the form of, for example, social media content (e.g., likes, shares, mentions, and comments), website tracking and transactional data as well as sensor data measured through Internet of Things devices (Sarstedt and Hair 2021). This shift in data foundations has been accompanied by changes in the methodological sphere. Because of its focus on understanding consumer perceptions, attitudes, and beliefs, much of marketing research has traditionally strongly relied on the measurement of and relationships among latent constructs. Structural equation modeling methods like covariance structure analysis (Jöreskog 1970) and, more recently, partial least squares (Hair et al. 2022) and generalized structured component analysis (Hwang et al., 2022) have long dominated the field. With the advent of more secondary data sources,



marketing research has witnessed a shift towards machine learning methods that flexibly adapt to data constellations with the aim of improving task performance (e.g., classification of consumers into clusters). Many of these methods have a long-standing tradition in classic multivariate data analysis, but have recently been generalized to applications to large datasets. Examples of machine learning methods that feature prominently in marketing include naïve Bayes classifiers, support vector machines, decision trees, and different types of neural networks and clustering algorithms (Ngai and Wu 2022). Several of these methods have also been featured in a recent Journal of Business Economics special issue on advanced data analysis techniques with marketing applications (Paetz et al. 2022) as well as individual articles (e.g., Falke and Hruschka 2022). This change in research methods use has also induced a paradigm shift from explanatory-causal modeling, where the aim is obtaining the most accurate representation of the underlying theoretical model to predictive modeling, which seeks to minimize the combination of model bias and sampling variance (Hofman et al. 2017). Few researchers seem to be aware of the consequences of this shift for theory building, testing, and evaluation and the ensuing implications for deriving recommendations from the results (Shmueli and Koppius 2011; Sarstedt and Danks 2022).

But marketing has strived beyond researching digital technologies and machine learning applications, focusing on insights that benefit consumer welfare and quality of life for all beings affected by consumption across the world. This field, also referred to as transformative consumer research, has gained substantial momentum in recent years as evidenced in major journals' editorial research priorities and the publication of numerous special issues (e.g., Chandy et al. 2021; Davis and Pechmann 2013). The Journal of Business Economics has also featured several articles in this field, relating to, for example, sustainable consumption (Falke et al. 2022), product adoption (Chu et al. 2021), and product returns (Stöcker et al. 2021).

Another prominent stream of marketing research has explored the impact of sensory stimuli on consumer behavior in stationary retail settings (Sarstedt et al. 2023). Different from its online counterpart, stationary retailing has the potential to create multisensory experiences by providing consumers with sensory stimulation across their different senses. For example, smelling, hearing, feeling and – depending on the category – also tasting products can only be experienced in a real store environment. In the aftermath of the COVID 19-induced lockdowns, generating such unique sensory experiences has become more relevant as stationary retailers try to motivate consumers to return to brick-and-mortar stores (Sarstedt et al. 2023).

Like many other fields of scientific inquiry, marketing research has also witnessed debates regarding the findings' rigor and relevance (Bruhn et al. 2023, in this issue), particularly in the context of consumer research (Rigdon et al. 2020). As a result of increasing concerns regarding the replicability of seminal consumer research effects, the hurdles for publishing research in top-tier marketing journals have heightened. Most notably, researchers are increasingly required to offer support for their results' robustness on the grounds of multi-study designs—as evidenced in the high number of studies reported in many articles published in 2021 and 2022 in the Journal of



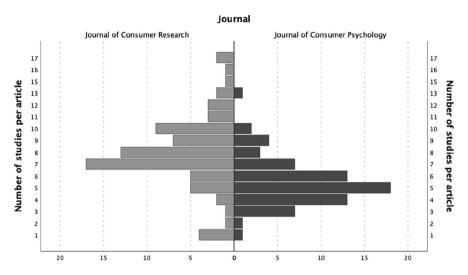


Fig. 1 Number of studies in articles published in JCR and JCP (2021–2022)

Consumer Research (JCR) and the Journal of Consumer Psychology (JCP), two top journals in the field of consumer research (Fig. 1).

Similarly, studies published in top-tier journals increasingly showcase the relevance of interventions on the grounds of actual behavior (e.g., using field experiments; Malodia et al. 2023) or sales data. Catering this development, research on the marketing-finance interface has gained prominence since the early 2000s. For example, marketing researchers have assessed the value relevance of key customer mindset metrics such as customer satisfaction and corporate reputation by quantifying their impact on (abnormal) stock returns (e.g., Raithel and Schwaiger, 2014). Similar developments can be witnessed in lab-based experimental research. With researchers increasingly acknowledging the limitations of running experiments in highly stylized environments in terms of the results' external validity, efforts have been made to increase the studies' realism while safeguarding internal validity. Facilitating procedures in, for example, context effect research include introducing real economic consequences and no-buy options, using meaningful attributes and attribute levels, and design choice options that participants can readily encode (Lichters et al. 2015). This trend toward more rigor and relevance can be expected to continue as the field evolves on theoretical and methodological grounds. Open science initiatives that enhance research transparency (e.g., preregistrations and open access to research materials and data) can be expected to further accelerate this development.

#### 3 Finance

Typically, the seminal works of Modigliani and Miller (1958) and Sharpe (1964) are considered the starting point of the modern theory of finance and capital markets. Both contributions are based on the assumption of a perfect capital market which



is characterized by the interplay of many price-taking market participants that are capable of instantaneous information-processing and only interested in financial results when trading financial securities without incurring transaction costs. The assumption of a perfect capital market proved attractive not because of its realism, but because of its unambiguous definition of a simple, rather "monolithic" reference model which allows to derive insightful results in an easy way. From the beginning, the strength of this reference model lied in the sphere of firm valuation, as the resulting valuation formulas according to Sharpe's (1964) Capital Asset Pricing Model (CAPM) can be applied easily in practice. According to the CAPM, expected cash flows of firms have to be discounted by the interest rate for riskless investments plus a risk premium which is determined by the overall risk aversion of all market participants (as described by the so-called market risk premium) and the correlation between the firm's cash flows with the cash flows of all other firms on the capital market under consideration.

In contrast, the irrelevance theorem for firms' financial decision-making according to Modigliani and Miller (1958) proved to be of much less practical applicability. Here, we only learnt under which conditions this decision adds no value to a firm, but this insight did not lead to meaningful practical recommendations.

These different starting points in practical relevance also determined the further lines of research regarding firm's financial policy and capital market valuation. Regarding valuation issues, additional determinants of the firm specific risk premium besides the correlation with overall capital market returns where identified – mostly on an empirical basis. Important contributions are Fama and French (1992, 2015). Essentially, the assumption of perfect capital markets remained here unchanged.

It does not come as a surprise that subsequent research in the field of financial theory tried to identify market imperfections which may be responsible for firms' financial decision-making becoming relevant in practice (see, e.g., the Journal of Business Economics special issue "50 Years after MM: Recent Developments in Corporate Finance" by Breuer and Gürtler 2008). However, as a direct consequence of introducing market imperfections we also lose the elegance of the CAPM valuation formula. In this sense, firms' financing and investment decisions are interconnected not only in practice, but also in theory. Nevertheless, this interrelatedness seems to be declined quite often, when financial theory mainly aims at analyzing the impact of market imperfections while valuation theory tries to refine valuation formulas on perfect capital markets. Though a lot of progress has been made regarding potential determinants of firms' financial decisions and the valuation of investment projects, what is still missing is a theory of imperfect capital markets which explains simultaneously in a convincing and practically relevant way firms' financial and investment decisions. Against this background, it is not too surprising that several scholars deplore the state of knowledge of financial theory (see, e.g., Frank and Goyal 2009, as well as Graham and Leary 2011). For example, DeAngelo (2022, p. 413) concludes: "the unfortunate reality is that the literature has stagnated without any real clarity... What we have instead is a laundry list of frictions ... that might someday be sutured together (in some as yet-unspecified way) into a model that can explain observed capital structures." In a similar vein, the search for ever



more factors explaining adequate risk premia for firm valuation has led to an abundant "factor zoo" (Harvey and Liu 2019; Feng et al. 2020), making it quite hard to distinguish between relevant ones and irrelevant ones, since the introduction of new factors is mainly driven empirically instead of theoretically (see also the Journal of Business Economics special issue on "International Financial Management and Valuation" by Breuer and Santiago Ruiz de Vargas 2021). This somewhat sobering conclusion still holds true in 2023 and it remains unclear whether and when substantial progress in the field of finance and investment can really be made. However, there are certainly several recent developments, but they are more of a nuanced kind addressing important issues without resolving the "big" problems described above. To be more precise, these are the fields of sustainable finance and digital finance.

While the neoclassical paradigm assumes all subjects to be interested only in financial outcomes it has become clear for several years now that individuals also have non-monetary interests related to ecological and social issues. In this context, the term "sustainable finance" has been coined (see the Journal of Business Economics special issue on "Sustainable finance" by Breuer et al. 2013) which affects firm valuation as investors may be willing to forego returns when firms follow ecological or social goals. As a consequence, sustainability considerations become also relevant for firms' financial and investment decisions - this effect is even strengthened by pressure from other stakeholders like customers and employees. In fact, there has been a real "boom" of papers addressing topics in the realm of sustainable finance. In order to confirm this, six top finance journals (Journal of Finance, Journal of Financial Economics, Review of Financial Studies, Review of Finance, Journal of Banking and Finance, Journal of Financial and Quantitative Analysis) were examined over the years 1997–2021 and it was searched for the following keywords in the titles, abstracts, and keyword lists of the respective articles: sustainab\*, gender, divers\*, equality, pollution, social, carbon, climate, ecolog\*, environment\*, esg, csr, female, race, racial, discriminat\*, woman, women. The percentage of articles containing at least one of these words has been steadily rising from 8.9% for the time interval 1997–2001 to 21.25% for the period from 2017–2021 (see Fig. 2, Panel A). Apparently, sustainability issues have become an important pillar of research in finance, as there is a growing consciousness in society of its vital relevance - not least in the face of the severe implications of climate change.

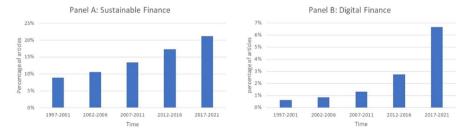


Fig. 2 Fractions of articles in top 6 finance journals containing word lists related to sustainable finance (Panel A) and digital finance (Panel B)



There is an even more dynamic development in the field of digital finance according to Fig. 2, Panel B, based on the following keyword list: text analysis, artificial intelligence, machine learning, fintech\*, insurtech\*, neural, network, word list. Starting from a share as low as 0.62% for the period from 1997–2001, an impressive 6.67% is reached for 2017–2021 (and even 9.56% for the first eight months of 2022). According to Breuer and Pfingsten (2022, p. 1418), "digital finance exhibits two distinct dimensions. On the one hand, this term refers to the increasing relevance of digitalization in financial decision making... On the other hand, utilizing such methods for empirical analyses of finance related issues by scholars is also referred to as 'digital finance'" (see also the Journal of Business Economics special issue on "Accounting and Finance in the Age of Digitalization by Breuer and Knetsch 2023). This development is driven by improved data accessibility known under the term of "big data", the increase in hardware power and the progress in the field of artificial intelligence approaches which in combination open up new opportunities for data processing. Among other things, here is also a connection to sustainable finance, as ethical concerns are of particular relevance for automated data processing because there is no "natural moral" in algorithms. In addition, progress in the field of digital finance may also help to resolve the main issue of the theory of firms' decision-making in the field of finance and investment. Based on algorithms describing the behavior of market participants we may also gain new insights in capital market equilibria under imperfect market conditions. This may take us one step nearer to a theory of finance and investment, and thus, valuation, on imperfect capital markets. So, there's a lot to expect from the future and the Journal of Business Economics together with its editors and authors will continue to accompany this process in the future!

# 4 Financial accounting

Research on financial accounting has traditionally been research on accounting regulation, i.e., the principles and rules that prescribe a company's external reporting practice. Such an analysis used to have a normative touch and the use of normative analysis in financial accounting research was still dominant in German-speaking countries until about 15 years ago. These studies developed proposals on how to arrive at an optimal design of rules and examined the consistency of extant regulation with such a framework of optimal regulation. Publications in the Journal of Business Economics are representative for this stream of research and address accounting rules on issues as diverse as the consolidation of reverse acquisitions (Reichelt and Schmidt 2005), pension obligations (Pellens et al. 2006), financial and non-financial debt (Wüstemann and Bischof 2006) or revenue recognition (Wüstemann and Wüstemann 2009).

However, as discussed by *Rolf Uwe Fülbier* and *Thorsten Sellhorn* in this issue, the use of empirical methods took over and has gained significant importance, if not dominance, in international accounting research today (Fülbier and Sellhorn 2023). The use of empirical methods has also shifted the attention away from the optimal design of regulation to questions about how managers decide to apply these rules and the economic consequences of these accounting choices. This stream of research



roots in the positive accounting theory and goes back to, at least, Watts and Zimmerman (1978, 1986). A key insight from this literature is the importance of managerial incentives. While accounting rules provide a legal framework, incentives matter for how managers apply these rules. For one, these decisions involve a choice of the level of compliance. The incentives to merely comply lie in the strength of a public enforcement system through agencies like the Securities and Exchange Commission in the US or the Bundesanstalt für Finanzdienstleistungsaufsicht in Germany and in the quality of the legal system as such (i.e., the ease with which private parties like shareholders or lenders can use litigation to force a disclosure). International data and empirical methods that exploit differences in the public enforcement and shareholder litigation rights across countries have documented that the exactly identical set of accounting rules can result in very different reporting practice when these incentives for managerial compliance differ (e.g., Ball et al. 2000; Ball et al. 2003; Leuz 2003).

Moreover, even while being fully compliant, managers have discretion in determining the level of transparency of their disclosures. Accounting rules can hardly be fully precise and generally leave some room for managerial discretion. Therefore, we can observe substantial heterogeneity in managerial reporting choices even within the same framework of a legal system and public enforcement. Financial accounting research has contributed to our understanding of many determinants of this heterogeneity, such as private versus public ownership, private versus public debt, and other market forces (e.g., Burgstahler et al. 2006). More recently, there is an increasing focus on non-financial markets. Questions like the use of accounting information by labor market participants or in supply chain relationships receive more attention. Overall, the information demand by the various stakeholders of a company as well as their opportunities to exert market pressure are important to understand the actual reporting choices by managers, and the ensuing level of corporate transparency.

Against this background, the content of regulation still matters. In fact, accounting regulation has evolved quite rapidly over the last two decades. Three trends are most noteworthy and have given rise to significant research activities. First, accounting regulation has very quickly converged internationally. With the adoption of International Financial Reporting Standards (IFRS) in 2005, the European Union was the first economically significant group of countries that agreed on the same set of accounting rules. More than 100 other jurisdictions have followed such that IFRS have become a truly global accounting language. The convergence has led to an increase in cross-country comparability of financial reports and the evidence is quite robust that it also helped the integration of global capital markets, with significant benefits for both investors and listed companies (see Becker et al. 2021, for an overview; Kiefer and Schorn 2009, in the Journal of Business Economics), especially when supported by concurrent capital market reforms that strengthen public and private enforcement and, thus, also change the reporting incentives (e.g., Christensen et al. 2013).

Second, the accounting rules put more weight on current market values and less weight on historical cost information. This trend involves the increasing use of fair values in IFRS regulation (with similar concurrent developments in the United States and under US Generally Accepted Accounting Principles). The



use of fair values is controversial because it involves the trade-off between relevance and reliability. While it is little controversial that timelier information is more useful for decision-making than historical information, it is much less obvious whether fair values are actually able to reliably deliver timely information. This might be the case if managers can verifiably infer fair values from current prices of their assets and liabilities on active and liquid markets. However, the markets for most balance sheet assets and liabilities are illiquid. This does not only hold for fixed assets like property and equipment, but also for many financial assets (even banks can generally use market prices for less than 10% of their assets; see Becker et al. 2021, for a summary of the evidence). In all these instances, managers need to rely on internal models to arrive at their own estimates of current values. Against this background, it is not surprising that the evidence on the informational usefulness of fair value accounting is mixed – a question that has also been covered by the Journal of Business Economics (e.g., Schneider and Tran 2015).

Third, and most recently, the regulatory efforts increasingly involve nonfinancial disclosures. In this regard, accounting regulation follows the general trend towards more emphasis on environmental, social, and governance (ESG) issues and assigns greater weight to the informational interests of stakeholders other than financial investors. At the same time, regulators openly attempt to use greater transparency about a company's ESG activities (and problems) to exert market discipline, with investors and other stakeholders using these disclosures to put pressure on management to increase ESG performance. It is far too early to judge whether this regulatory attempt will be successful (see Christensen et al. 2021, for a more comprehensive overview). Especially, with the even larger degree of reporting discretion and the low standardization of non-financial disclosures (as of today), the concern is very serious that managers will use these disclosures for marketing efforts only ("green-washing") rather than real changes in their business model, especially if those changes might even reduce short-term profits. The Journal of Business Economics has recently devoted a special issue to exactly this question (Bischof et al. 2022b).

For the years to come, it is thus very likely that financial accounting research will examine even more questions related to the role of mandatory (and voluntary) disclosure in ESG regulation. Given that many of these disclosures are non-financial and much less structured in nature, it is also likely that a methodological trend continues, and researchers will use more innovative methods to capture the content and the quality of the disclosed information, facing the challenge of dealing with an even greater volume of data and the need to borrow even more methods from the data sciences. The greater availability of data and the introduction of new data sources (e.g., Bischof et al. 2022a) will also help open the black box of how managers generate the information within the firm and which incentives dominate this process. These fundamental questions of financial accounting research still remain the same, irrespective of the major changes in accounting regulation and the greater emphasis on non-financial



disclosures in recent years. The Journal of Business Economics will remain a place where answers to these questions are analyzed and discussed.

## 5 Management accounting

While the focus of financial accounting is on a firm's external communication, management accounting deals with a firm's internal supply of information and management control. These differences in focus result in distinct research questions and methods. Traditionally, normative questions related to regulation played an important role in financial accounting, especially in German speaking countries. Today, empirical research using advanced methods for causal identification and innovative data sources constitutes the mainstream research in financial accounting. In contrast, model-based analytical research and conceptualizing new methods of information provision were and continue to be of great importance in management accounting. More recently, empirical research has become important in management accounting as well. However, given the limited availability of within firm data, most empirical studies relate to experiments.

For many decades, management accounting studies focus on what Demski and Feltham (1976) call the *decision facilitating* and the *decision influencing* role of information. While the former role refers to the usefulness of accounting information for decision making, the latter role emphasizes the usefulness of accounting information for motivating individuals within organizations, whose objectives may differ from the organization's objectives. Important developments over the past two decades mark further advances in the underlying theoretical foundation, the methods applied to establish new insights, and the context within which management accounting practices are studied.

Regarding the theoretical foundation, decision theory, information economics, and, more generally, many theories based in economics, psychology, or sociology are crucial to the study of the decision-facilitating and decision-influencing roles of information, and thus fundamental to management accounting theory building. New developments or insights in fields such as economics, psychology, and sociology have had and will have implications for management accounting. For example, the recent emphasis on other-regarding or social preferences such as altruism, fairness, inequity aversion, and reciprocity has triggered studies on norms and their motivational effects (e.g., Hofmann and Schwaiger 2020). Norms may be embedded in an organization's culture and thus influence the more traditional means that organizations can use to motivate their employees such as performance evaluation and incentive compensation (e.g., Abernethy et al. 2022). More broadly, injunctive norms (i.e., perceptions of what others approve or disapprove of) feature a link to religion (Arruñada 2010), which prompts studies on the association between the religiosity of an organization's employees and the organization's objectives (van Aaken and Buchner 2020) and the means implemented to achieve these objectives, given the prevailing religiosity (e.g., Noreen 1988).



Regarding methodological developments, the last two decades have seen a large amount of field and laboratory experiments. Field experiments in accounting offer an opportunity to identify causal relations which is particularly relevant when applying accounting-related insights in a business context and increases the impact of management accounting studies (Van der Stede 2014). Lourenço (2019) provides an overview of field experiments in management accounting research. While laboratory experiments may face external validity concerns, the controlled environment in a laboratory offers the advantage of designing experiments at a granular level such that they can reject or refine theoretical considerations. For example, Schreck (2020) studies the trade-off between a volume strategy and a value strategy, and how relative performance information can improve the performance of employees who face such a volume-value trade-off. Roetzel et al. (2020) investigate the phenomenon of information overload, and whether, in such situations, decision makers are more prone to invest additional resources in a "losing course of action." The attractiveness of laboratory experiments and their acceptance in the field of management accounting is also indicated by the large and increasing fraction of experimental studies being presented at many international conferences.

Regarding the context within which management accounting practices are studied, management accounting research is shaped by environmental developments, but also has the potential to shape the application of management accounting practices in organizations and, consequently, the environmental context. First, in the wake of organizations' investments in digitalized processes and the COVID-19 pandemic, the phenomenon of employees working from home (WFH) has gained popularity. Consequently, organizational consequences of WFH arrangements and the design of management controls for organizations operating in WFH environments are of fundamental interest. For a Chinese firm that enabled WFH, Bloom et al. (2015) find an increase in productivity and employee job satisfaction. Flassak et al. (2022) provide survey evidence that supervising managers adapt the management controls to the WFH environment by more strongly standardizing operational processes and enabling employees to participate in the planning process.

Second, considerations of ESG objectives are becoming increasingly relevant for shareholders, employees, and other stakeholders, thereby affecting the design of management controls and the management accounting system more generally. Specifically, allowing for a manager's ESG preferences likely affects the conventional insights in the optimal design of management controls. For example, Smith (2022) considers an agency setting where a "virtuous" agent's distaste for conventional production-related activities can be mitigated by motivating sustainability-related activities which are directed towards broader societal goals. The study identifies conditions where the principal benefits from employing a virtuous agent, even if the sustainability-related activities destroy cash flows. It is straightforward that the principal's demand for decision-influencing accounting information in settings with a virtuous agent is different from the information demand in settings with a conventional agent.



ESG considerations also affect the design of management accounting systems providing decision-facilitating information. Accurate cost information is important for any operational and strategic decision, but arguably more important when considering long-term investment projects with large upfront investments. Many initiatives targeted towards improving an organization's environmental footprint are characterized by such large, initial investments. Friedl et al. (2023, in this issue) provides an overview on the emergence of levelized costs that are particularly suited to offer accurate cost information for such long-term investments.

To conclude, it may well be that the proper design of management accounting systems is the make-or-break criterion for whether an organization—and humanity more generally—is able to effectively implement climate technology and thereby address the many challenges associated with the climate change.

#### 6 Business taxation

Business tax research examines the financial and economic aspects of taxation as it relates to businesses, which are not restricted to corporations and can include self-employed individuals, private landlords, and employees. As an inherently multidisciplinary field, it encompasses elements of legal tax research, public economics, finance, and accounting (Hundsdoerfer et al. 2008). The intended audience for business tax research includes businesses and their representatives, as well as those involved in shaping public policy.

Business tax research covers a broad range of topics, including the study of business tax systems, the impact of taxes on firms' behavior, and the distribution and incidence of the tax burden. Research in this field examines the factors that shape national and international business tax systems, as well as the consequences of these systems. Legal tax research often analyzes specific aspects of these systems to comprehend and interpret tax regulations.

A key area of contemporary business tax research is the examination of how different taxes influence the behavior of firms and individuals. Much of the research in this field has focused on studying the impact of taxes on production, income generation, and investment and finance decisions, but there is also some research on the effects of taxes on personal choices as consumption. The effects of business taxation on investment and capital structure decisions are central to this line of research (Hundsdoerfer et al. 2008; Feld et al. 2013; Graham 2013; Hanlon and Heitzman 2022; Jacob 2022). In the field of accounting, studies have examined the relations between business taxation and managerial and financial accounting practices, such as conflicting incentives for internal transfer pricing, the usefulness of tax information in financial reports, the relations between aggressive financial reporting and aggressive tax planning, and the alignment of book and tax reporting (e.g., Shackelford and Shevlin 2001, Hanlon and Heitzman 2010, Graham et al. 2012). A significant area of study is tax avoidance and evasion behavior among firms and individuals (Hanlon and Heitzman 2010; Blaufus et al. 2022). Researchers in these areas have investigated the factors that drive, moderate, and mediate the effects of



business taxes on firm behavior. A subtopic of tax avoidance that has garnered significant attention recently is profit shifting within multinational companies, leading to a project on base erosion and profit shifting by the Organisation for Economic Cooperation and Development, resulting in country-by-country reporting, numerous national and multinational tax law changes, and the two-pillar approach. A widely-cited paper in this discussion is Heckemeyer and Overesch's (2017) meta-analysis.

Measuring the burden of business taxation, including the excess burdens, the distribution of the tax burden, and compliance costs, is a complex and challenging task. Both public economics and business tax research have analyzed the factors that determine the specific tax burden on individuals, firms, or groups, as well as people's subjective perception of the tax burden (Blaufus et al. 2022). Additionally, taxes affect market outcomes (tax incidence, implicit taxes), which raises questions about distributive equity and perceptions of average and marginal tax burdens.

The research methods used in business tax research have shifted in recent years. At the start of the century, legal tax research and the integration of business taxes into calculus (e.g., net present value) were the dominant methods used. There has been a notable development in legal tax research with the increased presence of EU laws, particularly in relation to the EU fundamental freedoms and state aid laws.

Analytical (model-based) business tax research uses mathematical models to represent real-world or potential business taxes, targets and incentives of firms or individuals, and information spaces. It has developed a powerful and robust toolset that can identify and explain complex and potentially hidden effects of business taxation and its interactions with accounting and finance. Multi-player settings, such as game theory and agency theory (Bauer et al. 2018), have been incorporated into this research, as well as a refined modeling of risk, such as real options. This line of research is "alive and kicking" (see Niemann and Sailer 2023, in this issue). Interestingly, the focus of modeling in business tax research seems to have shifted from providing tax planning recommendations for firms to providing explanations or predictions.

Empirical and experimental methods have significantly gained popularity in business tax research (Wagner 2022). This shift has been accompanied by a greater focus on international research questions and settings. The growth of archival research is closely linked to the increased availability of financial microdata. In the same time, experimental research has become a well-established method in both general business research and business tax research. In business tax research, the distinction between archival and experimental research is somehow blurred, as changes in the tax base, tax rate, or tax collection are often interpreted as plausibly exogenous variation in (often imperfect) field experiments. In general, the shift away from an engineering-style tax planning approach towards an explanatory social science approach can be seen as a paradigm shift in the field.

While qualitative methods are commonly used in management research, they are still an underutilized approach in business tax research. Nevertheless, there has been some recent progress in this area.



The advancement of empirical, experimental, and qualitative research methods in the field of business taxation holds great promise, but it also carries the risk of losing a theoretical foundation. In this regard, analytical tax research plays a crucial role in ensuring that the analysis of determinants and effects of business taxes is conducted on a sound theoretical basis. The availability of analytical tools *and* empirical/experimental data for this purpose can encourage the development of new approaches in business tax research.

## 7 Entrepreneurship

Studies on small and medium-sized enterprises (SMEs) have always been an important component of business research in Germany. The term SME refers to the size of a company, typically measured as the number of employees, as sales revenues or as balance sheet total. While there are different definitions of an SME, e.g., from the OECD or from the Institut für Mittelstandsforschung in Bonn, most scholars agree that an SME has less than 500 employees and less than 50 m Euros in sales revenues (Welge and Witt 2013, p. 186). In Germany, the term "Mittelstand" is frequently used synonymously for the term SMEs. However, some researchers and many practitioners also use the term "Mittelstand" to denote family-owned businesses. From a scholarly perspective, the two terms need to be differentiated clearly. SMEs are defined by their size. Family firms are defined by family ownership and/or family involvement in the management of the company (Hack 2009; Döring and Witt 2020). Empirically, both groups of companies clearly overlap. Many family-owned businesses are also SMEs. But some family-owned firms are larger than SMEs, and some are even very large, stocklisted companies.

The dominant goal of all SME studies is a comparison with large companies. Scholars tried (and still try) to find out if SME have size-specific disadvantages or advantages when competing with larger companies (Moog and Witt 2013). The obvious difficulty for answering this research question stems from the large variety of SMEs. They are active in different industries, come from different countries, pursue different business models, and have different organizational structures. Thus, many control variables and moderating variables need to be considered before a valid correlation between company size and corporate performance can be established. Furthermore, a distinction is necessary between established SMEs and start-ups. The relevant variables are age and growth ambitions. Entrepreneurship research predominantly deals with quickly growing start-ups, which technically qualify as SMEs, but want to become big corporations soon and therefore might behave very differently from established SMEs.

An important topic in SME research is employee relationships, which have been identified as a potential competitive advantage in several studies (Behrends 2007). The idea is that SMEs can offer more interesting workplaces, less bureaucracy, and more personal contact to the owners. At the same time, SMEs have clear disadvantages when competing with large firms on the labor market. They



have fewer financial and organizational resources, which might translate into lower salaries and fewer career options. An attractive company culture might be a factor to offset this disadvantage.

Another important area of SME research is marketing. SMEs may again have fewer resources, e.g., smaller advertising budgets or fewer advertising experts inhouse. However, they may also have competitive advantages over larger firms in the form of better customer orientation and closer customer relationships. Due to personal relationships between business owners and their customers as well as little bureaucracy, SMEs might be more flexible in their reactions to customer requests. They might also be able to create more customer loyalty via these personal relationships (Gilmore et al. 2001).

Another reoccurring topic in SME research is cooperation and networks. The idea is that SMEs try to overcome their resource restrictions by cooperating with other SMEs or larger companies. Due to smaller economies of scale and a less specialized workforce, SMEs may have difficulties in competing with larger firms when it comes to internationalization or large-scale R&D projects (Hummel et al. 2013). Therefore, they could team up with other companies, i.e., collaborate or form networks. A very recent contribution to this line of research is the paper by *David Audretsch* and *Christina Günther* (2023) in this special issue. The authors investigate SMEs' internationalization and innovation strategies. They point out that context matters and that inter-organizational collaborations help SMEs to compete with much larger companies.

Finally, government support for SMEs has been investigated repeatedly and in different contexts. The existence of competitive disadvantages for SMEs due to resource restrictions, especially in the areas of internationalization and innovation, can be seen as an indication of market failure and thus justify government support. This support can take many forms. The most typical form is a subsidy, e.g., a research grant or an export subsidy. However, these forms of public support for SMEs might be unnecessary, when SMEs do not have a competitive disadvantage, ineffective, when they do not achieve the economic policy goal, or inefficient, when they are more costly than other forms of support, e.g., tax breaks. Therefore, several studies have tried to evaluate existing subsidies for SMEs in terms of efficacy and efficiency (see, e.g., Hauser and Werner 2009).

## 8 Information systems

Information Systems (IS) is a discipline bridging business and information technology research. It has evolved significantly over the past decades regarding its theoretical core, philosophical foundation and research focus. Yet, while the field is still discussing what it is – and should be – about (Becker et al. 2015; Hirschheim and Klein 2003), IS research has grown from a strong focus on particular types of organizational information technology (IT) to reflect, understand and navigate the far-reaching intended and unintended implications of ubiquitous digitization.

In the early years, the discipline was called MIS (Management Information Systems) in the United States. A timeline of the development of the international IS



community, as curated by the Association for Information Systems (AIS), highlights its roots in reference disciplines such as represented by the American Accounting Association (founded in 1916), the Academy of Management (1936), the Association of Computing Machinery (1947), and the Operations Research Society of America (1952).

The first dedicated MIS course was probably data processing offered by Charles Moore at the college of business at the University of Alabama in 1957. For this course, Moore "would bring his data processing students from Tuscaloosa (U of Alabama) to Starkville (Mississippi State) at night because Alabama did not have a computer yet" (AIS 2023a). The first PhD in MIS was awarded at Harvard University in 1965 (AIS 2023b). The "Association for Computing Machinery Special Interest Group on Management Information Systems" (ACM SIGMIS), founded in 1961, is considered the first dedicated IS research association and still thriving. Its long focus on 'computer and people research' reflects the overall shift from IT systems to socio-technical systems. Other constituting pillars in the discipline are research groups interested in decision sciences, development (e.g., the International Federation for Information Processing 8.2) and use (e.g., the Special Interest Group on Adoption and Diffusion of Information Technology) of IS. Industry cooperation also played an important role for the discipline from the beginning, especially the establishment of SIM (Society for Information Management) in 1968 or a donation by IBM of USD 2 million each for 13 US Universities to create Doctoral programs in the mid-1980s. In a similar development in Germany, the early 1960s saw the emergence of a dedicated field of study focusing on automation and organization that would later be called Wirtschaftsinformatik. The first faculty at a German University that explicitly uses the term opened at the University of Bamberg in 2001 as a business faculty spin-off (WI 2001).

Hirschheim and Klein (2012) have identified four eras of IS research from the 1960s to 2010s. The first era, from the 1960s to the mid-1970s, was characterized by the new opportunities offered to organizations by mainframe computers and databases and mostly concerned with Decision Support Systems, Human-Computer Interaction and possibilities for automating systems development. Early research often used a systems, set-theoretic ("systemeering") or cybernetic approach but also tried to integrate sociological perspectives to explain otherwise unexplainable relevant phenomena in "social-technical" systems'. The second era, mid-1970s to mid-1980s, was partly driven by the proliferation of PCs and added a focus on IS business value creation, IS impact and success, and related organizational designs. The third era, mid-1980 to late 1990s, extended the IS value strand in addressing the IT productivity paradox and asking if (and how) IS can provide any strategic competitive advantage beyond just being useful, identifying IT business alignment as a major non-technical IS success factor, and establishing outsourcing research and a stronger process-based view. This research phase was strongly shaped by the emergence of the public Internet and the early days of working over the Internet and E-Commerce. The fourth era, late 1990s to early 2010s, continued many former approaches but also reflected the new ubiquity of mobile computing. Much research hence was about electronic marketplaces, virtual teams and organizations but also



on globalization, cross-cultural IS and knowledge management as well as business intelligence.

Our Journal of Business Economics special issue on "The Impact of Information Systems and Technology in the E-Business Age" (Vol 85, Issue 4, May 2015) marks the emergence of the fifth era of IS research with diverse topics from IT-related burnout to capital market effects of IT capabilities. There have also been many calls for more research focused on societal and environmental goals, as reflected in the AIS adopting for Information and Communication Technology (ICT) a "grand vision of an ICT-Enabled Bright Society" (Lee 2015). The initiative motivated and created a series of panels, workshops and special issues in IS journals to look for ways towards a brighter IT-enabled future and "identify the major sources and risks and propose approaches that can drastically eliminate the problems". Initially, the initiative had a strong emphasis on cybersecurity, privacy and security but also called for more research on how IT can help reduce energy consumption and carbon emissions.

Parallel to advances in technology shaping and being shaped by the IS field, the discipline matured in a long debate that circled around epistemology, the structural nature of theory and managerial relevance in IS research. At its core, the question was how to integrate different philosophical positions and opposing (ontological, epistemological, socio-political) self-identities. Many researchers have argued to integrate such perspectives and dare to overcome stereotypes of traditional hard and somewhat softer social sciences (e.g., Lee 1991). As a result, very instructive contributions on, among others, the role of qualitative methods (e.g., Walsham 1995, Klein and Myers 1999) and how to distinguish theories for (1) analyzing, (2) explaining, (3) predicting, (4) explaining and predicting, and (5) for design and action in IS (Gregor 2006) were instrumental in keeping the discipline rigorous and relevant for both, researchers and practitioners. After all, the IS field has evolved significantly over the past 60 years. On the one hand, this has followed the fundamental discussions about the scientific self-conception, the spectrum of methods and the theoretical core of the discipline. On the other hand, society, technology, and challenges have evolved. For example, modern IS is still concerned with business information systems (the "M" in the original MIS), but also with questions of the broader digitization of the world, including digital transformation, innovation and platform ecosystems, and the use of IT by private individuals (such as social media) and the related intended and unintended consequences (e.g., social media addiction, technostress).

This broader spectrum extends the scope of the bright-ICT initiative and is also reflected in the research tracks at current conferences. The most recent International Conference on Information Systems, the flagship conference of the discipline, was held under the motto of "Digitization for the Next Generation" and featured tracks covering the entire history of the field, including traditional areas such as "IS Design, Development, and Project Management", newer topics such as "IS and the Future of Work" and also calls for "Societal Impact of IS" and "AI in Business and Society". Similarly, the headline of the most recent German IS conference, WI 2022 in Nürnberg, was "IS for Grand Challenges, Grand Challenges for IS". The conference tracks were linked to the United Nations 17 Sustainable Development Goals



and included "Digital Health & Wellbeing", "Digitalization & Human Rights", "ICT and Responsible Consumption as well as Production", and "Sustainable Information Systems, Energy Informatics, and Climate Protection" (WI 2022).

These important topics set the stage for a sixth IS era. One recent example is the paper by Büsching et al. (2023) in our special issue on "Business Economics in a Pandemic World" who show the possibilities but also challenges in using IS to fight COVID. Following this path, *Daniel Veit*, senior editor at the Journal of the Association for Information Systems, and *Jason Thatcher*, past president of the AIS, argue in their contribution to this special issue that we need more concerted IS research on sustainability. They call for going beyond studying the adoption of IT for sustainability to also understand sustainable behaviors, such as extending the lifecycle of technology, and probing the environmental costs of digitization. If we do so, Veit and Thatcher (2023) contend IS research will make important contributions to economic, social and environmental sustainability.

Considering the characteristic multi-disciplinarity of IS as a bridging discipline between Management, Computer Science and other fields, it seems in good shape to develop contributions for a better and more responsible digital world.

### 9 Business ethics

Scholars generally agree that the discipline of business ethics comprises both, the "is" and the "ought" of morality in business. The last decades have yielded fascinating insights on how individuals and organizations do behave and have brought forward sound arguments on how they should behave. By now, we know a lot about relevant topics and theories as diverse as cooperation (Chaudhuri 2011), trust (Berg et al. 1995), fairness (Güth and Kocher 2014), ethical decision making (Bazerman and Gino 2012; Cremer and Tenbrunsel 2012; Treviño et al. 2006), normative business ethics (Arnold et al. 2020, Brenkert and Beauchamp 2010), normative theories of the firm (Donaldson and Walsh 2015; Elms et al. 2010; Pies et al. 2021) and ethic-oriented leadership theories (Brown et al. 2005; Maak and Pless 2006).

The Journal of Business Economics has been part of both the positive and the normative debates. Be it with respect to methods in Business Ethics (Journal of Business Economics special issue on "Experimental (Business) Ethics" by Küpper and Schreck 2017), specific subdomains, such as sustainability (Journal of Business Economics special issue on "Frameworks for Sustainability Management: Analysing their Contribution" by Hörisch et al., to be published in 2023), or specific topics, such as the ethics of digitization (Journal of Business Economics special issue on "The Ethics of Digitalization and Emerging Corporate Responsibilities in the Digital Age" by Schreck et al., to be published in 2024).

Despite the great advances we have observed in the field of business ethics, there is still a considerable gap between those working primarily empirically, and those working primarily normatively. On the one side, scholars mainly in areas such as



management, behavioral ethics, and behavioral economics, focus on analyzing the "is" of moral judgments and behavior, without addressing the normative implications of their positive work. On the other side, normative business ethics scholars focus on the "oughts" of judgment and behavior, without systematically discussing empirical restrictions on the individual and contextual levels.

To find solutions for the challenges of business ethics and understand its questions, both empirical and normative approaches are necessary. Many scholars have argued that the two fields need each other and should engage in true dialogue. In a nutshell, positive research cannot provide normative guidance on its own, while normative theory is incapable of implementing the ethically desirable without knowledge on empirical restrictions (Dunfee and Donaldson 2002; Güth and Kliemt 2010; Schreck et al. 2013; Treviño and Weaver 1994; Weaver and Trevino 1994).

One particular question that has repeatedly been asked in business ethics in both positive and normative terms, is about the scope of companies' social responsibilities: about which goals firms (should) pursue and about the kind of value they (should) create (Pies et al. 2021). Important controversies in the debate remain unsettled, mainly about which goals should be prioritized when they stand in conflict (Jensen 2002; Jones and Felps 2013), and whether pursuing some goals (like stakeholder value) may serve as a means towards the end of pursuing other goals (such a shareholder value).

Thomas Donaldson's paper "Value creation and CSR," submitted to the special issue at hand, makes an important contribution to this debate (Donaldson 2023). We are happy to have the contribution of our esteemed colleague, who has for long been a key protagonists in the business ethics literature, and who, together with various co-authors, has often sought to integrate positive and normative approaches (Donaldson 1994, 2012, Donaldson and Dunfee 1994, Donaldson and Preston 1995, Schreck et al. 2013).

Donaldson's paper is remarkable. Not only because it provides a timely overview of the discussion to the interested reader, but mainly because it develops a novel conception of value creation that is truly inclusive: It aims at reconciling previously opposing views on which maxims firms should follow; and it offers a model that integrates facts ("is") and values ("ought"). We believe this contribution is ideally suited to move the debate forward and to advance existing theories of Corporate Social Responsibility.

#### 10 Conclusion

Looking back over the past two decades, it becomes clear how much the field of business economics has changed. New sub-disciplines have emerged and research questions have become more differentiated within these disciplines. Sustainability and digitalization issues, in particular, have become prevalent in almost all areas of business research. The COVID-19 pandemic has also left its mark on the



field. Given these developments, we can continue to expect exciting and significant research contributions to the subject of business research in general and in the Journal of Business Economics in particular. We look forward to continuing to participate in this with Günter Fandel!

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### References

- Abernethy MA, Bouwens J, Hofmann C, van Lent L (2022) Altruism, social norms, and incentive contract design. Rev Acc Stud. https://doi.org/10.1007/s11142-021-09649-x
- AIS (2023a) University of Alabama: Probably the First "MIS" Course http://www.tiki-toki.com/timeline/entry/60693/MIS-Institutions/#vars!panel=543903!, Accessed Jan 30, 2023
- AIS (2023b) Harvard University: 1st PhD in MIS Awarded To Warren McFarlan. http://www.tiki-toki.com/timeline/entry/60693/MIS-Institutions/#vars!panel=543904!, Accessed Jan 30, 2023
- Arnold DG, Beauchamp TL, Bowie NE (2020) Ethical theory and business, 10th edn. Cambridge University Press, England. https://doi.org/10.1017/9781108386128
- Arruñada B (2010) Protestants and catholics: similar work ethic, different social ethic. Econ J 120(547):890–918. https://doi.org/10.1111/j.1468-0297.2009.02325.x
- Audretsch D, Günther C (2023) SME research: SMEs' internationalization and collaborative innovation as two central topics in the field. J Bus Econ This Issue. https://doi.org/10.1007/s11573-023-01152-w
- Ball R, Robin A, Kothari SP (2000) The effect of international institutional factors on properties of accounting earnings. J Account Econ 29(1):1–51. https://doi.org/10.1016/S0165-4101(00)00012-4
- Ball R, Robin A, Wu J (2003) Incentives versus standards: properties of accounting income in four east asian countries. J Account Econ 36(1–3):235–270. https://doi.org/10.1016/j.jacceco.2003.10.003
- Bauer T, Kourouxous T, Krenn P (2018) Taxation and agency conflicts between firm owners and managers: a review. Bus Res 11:33–76. https://doi.org/10.1007/s40685-017-0054-y
- Bazerman MH, Gino F (2012) Behavioral Ethics: toward a deeper understanding of Moral Judgment and dishonesty. Annual Rev Law Social Sci 8(1):85–104. https://doi.org/10.1146/annurev-lawsocsci-102811-173815
- Becker J, Brocke v, Heddier J, Seidel M, S (2015) Search of Information Systems (Grand) challenges: a community of Inquirers Perspective. Bus Inform Syst Eng 57(6):377–390. https://doi.org/10.1007/s12599-015-0394-0
- Becker K, Bischof J, Daske H (2021) IFRS: markets, practice, and politics. Found Trends® Acc 15(1–2):1–262. https://doi.org/10.1561/1400000055



- Behrends T (2007) Anreizstrukturen im Mittelstand—ein empirischer Vergleich zwischen KMU und Großunternehmen. J Bus Econ 77(6):21–52 (Special Issue)
- Berg J, Dickhaut J, McCabe K (1995) Trust, reciprocity, and social history. Games Econ Behav 10(1):122–114. https://doi.org/10.1006/game.1995.1027
- Bischof J, Dörrenberg P, Rostam-Afschar D, Simons D, Voget J (2022a) The German business panel: Evidence on accounting and business taxation. TRR 266 Accounting for Transparency Working Paper Series No. 46 https://doi.org/10.2139/ssrn.3777306
- Bischof J, Dutzi A, Gros M (2022b) Sustainability reporting and risk governance. J Bus Econ 92(3):349–353. https://doi.org/10.1007/s11573-022-01096-7
- Blaufus K, Chirvi M, Huber H-P, Maiterth R, Sureth-Sloane C (2022) Tax misperception and its effects on decision making Literature review and Behavioral Taxpayer Response Model. Eur Acc Rev 31(1):111–144. https://doi.org/10.1080/09638180.2020.1852095
- Bloom N, Liang J, Roberts J, Ying ZJ (2015) Does working from home work? Evidence from a chinese experiment. Q J Econ 130(1):165–218. https://doi.org/10.1093/qje/qju032
- Brenkert GG, Beauchamp TL (2010) The Oxford handbook of business ethics. Oxford University Press, USA
- Breuer W, Haase M, Breuer C (eds) (2013) Special issue sustainable finance. J Bus Econ 83(6)
- Breuer W, de Vargas R, S. (eds) (2021) Special Issue on International Financial Management and Valuation. Journal of Business Economics 91(5)
- Breuer W, Knetsch A (eds) (2023) Special Issue on Accounting and Finance in the Age of Digitalization. Journal of Business Economics, forthcoming
- Breuer W, Gürtler M (eds) (2008) Special Issue 50 Years after MM: Recent Developments in Corporate Finance. Journal of Business Economics 78
- Breuer W, Pfingsten A (2022) Non-standard issues in business finance: an overview. J Bus Econ 92(9):1417–1430. https://doi.org/10.1007/s11573-022-01122-8
- Brown ME, Treviño LK, Harrison DA (2005) Ethical leadership: a social learning perspective for construct development and testing. Organ Behav Hum Decis Process 97(2):117–134. https://doi.org/10.1016/j.obhdp.2005.03.002
- Bruhn M, Gröppel-Klein A, Kirchgeorg M (2023) Managerial marketing and behavioral marketing when myths about marketing management and consumer behavior lead to a misconception of the discipline. J Bus Econ This Issue. https://doi.org/10.1007/s11573-023-01141-z
- Burgstahler DC, Hail L, Leuz C (2006) The importance of reporting incentives: earnings management in european private and public firms. Acc Rev 81(5):983–1016. https://doi.org/10.2308/accr.2006. 81.5.983
- Büsching FB, Steininger DM, Veit DJ (2023) Governing digital crisis responses: platform standards and the dilemma of COVID-19 contact tracing. J Bus Econ 93:267–323. https://doi.org/10.1007/s11573-022-01118-4
- Chandy RK, Johar GV, Moorman C, Roberts JH (2021) Better marketing for a better world. J Mark 85(3):1–9. https://doi.org/10.1177/0022242921100369
- Chaudhuri A (2011) Sustaining cooperation in laboratory public goods experiments: a selective survey of the literature. Exp Econ 14(1):47–83. https://doi.org/10.1007/s10683-010-9257-1
- Chohan R, Paschen J (2023) NFT marketing: how marketers can use nonfungible tokens in their campaigns. Bus Horiz 66(1):43–50. https://doi.org/10.1016/j.bushor.2021.12.004
- Christensen HB, Hail L, Leuz C (2013) Mandatory IFRS reporting and changes in enforcement. J Account Econ 56(2–3):147–177. https://doi.org/10.1016/j.jacceco.2013.10.007
- Christensen HB, Hail L, Leuz C (2021) Mandatory CSR and sustainability reporting: economic analysis and literature review. Rev Acc Stud 26:1176–1248. https://doi.org/10.1007/s11142-021-09609-5
- Chu W, Kim H, Im M (2021) Patience and the adoption of electric vehicles: an application of the dual-self model. J Bus Econ 91(6):851–866. https://doi.org/10.1007/s11573-020-01018-5
- Davis B, Pechmann C (2013) Introduction to the special issue on transformative consumer research: developing theory to mobilize efforts that improve consumer and societal well-being. J Bus Res 66(8):1168–1170. https://doi.org/10.1016/j.jbusres.2012.08.008
- De Cremer D, Tenbrunsel AE (2012) Behavioral Business Ethics: Shaping an Emerging Field. Routledge, London
- DeAngelo H (2022) The capital structure puzzle: what are we missing? J Financial Quant Anal 57(2):413–454. https://doi.org/10.1017/S002210902100079X
- Demski J, Feltham G (1976) Cost determination: A conceptual approach. Iowa State Press, USA



Donaldson T (1994) When Integration fails: the logic of prescription and description in Business Ethics. Bus Ethics Q 4(2):157–169. https://doi.org/10.2307/3857487

- Donaldson T (2012) The Epistemic Fault line in corporate governance. Acad Manage Rev 37(2):256–271. https://doi.org/10.5465/amr.2010.0407
- Donaldson T (2023) Value reation and CSR. Journal of Business Economics. This Issue https://doi.org/ 10.1007/s11573-022-01131-7
- Donaldson T, Dunfee TW (1994) Toward a Unified Conception of Business Ethics: integrative social contracts theory. Acad Manage Rev 19(2):252–284. https://doi.org/10.5465/amr.1994.9410210749
- Donaldson T, Preston LL (1995) The Stakeholder Theory of the Corporation: concepts, evidence, and implications. Acad Manage Rev 20(1):65–91. https://doi.org/10.5465/amr.1995.9503271992
- Donaldson T, Walsh JP (2015) Toward a theory of business. Res Organizational Behav 35:181–207. https://doi.org/10.1016/j.riob.2015.10.002
- Döring H, Witt P (2020) Knowledge management in family businesses—empirical evidence from Germany. Knowl Manage Res Pract 18(2):175–187. https://doi.org/10.1080/14778238.2019.1621224
- Dunfee TW, Donaldson T (2002) Social Contract Approaches to Business Ethics: bridging the 'is-ought' gap. In: Frederick RA (ed) A companion to Business Ethics. Blackwell, Oxford, pp 38–55. DOI: https://doi.org/10.1002/9780470998397
- Elms H, Brammer S, Harris JD, Phillips RA (2010) New directions in Strategic Management and Business Ethics. Bus Ethics Q 20(3):401–425. https://doi.org/10.5840/beq201020328
- Falke A, Hruschka H (2022) Analyzing browsing across websites by machine learning methods. J Bus Econ 92(5):829–852. https://doi.org/10.1007/s11573-021-01067-4
- Falke A, Schröder N, Hofmann C (2022) The influence of values in sustainable consumption among millennials. J Bus Econ 92(6):899–928. https://doi.org/10.1007/s11573-021-01072-7
- Fama EF, French KR (1992) The cross-section of expected stock returns. J Finance 47(2):427–465. https://doi.org/10.1111/j.1540-6261.1992.tb04398.x
- Fama EF, French KR (2015) A five-factor asset pricing model. J Financ Econ 116(1):1–22. https://doi.org/10.1016/j.jfineco.2014.10.010
- Feld LP, Heckemeyer JH, Overesch M (2013) Capital structure choice and company taxation: a metastudy. J Banking Finance 37(8):2850–2866. https://doi.org/10.1016/j.jbankfin.2013.03.017
- Feng G, Giglio S, Xiu D (2020) Taming the factor zoo: a test of new factors. J Finance 75(3):1327–1370. https://doi.org/10.1111/jofi.12883
- Flassak K, Haag J, Hofmann C, Lechner C, Schwaiger N, Zacherl R (2022) Working from home and management controls. J Bus Econ 93(1–2):193–228. https://doi.org/10.1007/s11573-022-01123-7
- Frank ZF, Goyal VK (2009) Capital structure decisions: which factors are reliably important? Financ Manage 38(1):1–37. https://doi.org/10.1111/j.1755-053X.2009.01026.x
- Friedl G, Reichelstein S, Bach A, Blaschke M, Kemmer L (2023) The emergence of levelized cost modeling: a review and directions for future research. J Bus Econ. This Issue
- Fülbier RU, Sellhorn T (2023) Understanding and improving the language of business: how accounting and corporate reporting research can better serve business and society. J Bus Econ This Issue. https://doi.org/10.1007/s11573-023-01158-4
- Gilmore A, Carson D, Grant K (2001) SME marketing in practice. Mark Intell Plann 19(1):6–11. https://doi.org/10.1108/02634500110363583
- Graham JR (2013) Do taxes affect corporate decisions? a review. In: Constantinides G, Harris M, Stulz R (eds) Handbook of the economics of finance, vol 2. North Holland, Amsterdam, pp 123–210 https://doi.org/10.1016/B978-0-44-453594-8.00003-3
- Graham JR, Leary MT (2011) A review of empirical capital structure research and directions for the future. Annual Rev Financial Econ 3:309–345. https://doi.org/10.1146/annurev-financial-102710-144821
- Graham JR, Raedy JS, Shackelford DA (2012) Research in accounting for income taxes. J Account Econ 53(1–2):412–434. https://doi.org/10.1016/j.jacceco.2011.11.006
- Gregor S (2006) The nature of theory in Information Systems. MIS Q 30(3):611–642. https://doi.org/10. 2307/25148742
- Güth W, Kliemt H (2010) What ethics can learn from experimental economics if anything. Eur J Polit Econ 26(3):302–310. https://doi.org/10.1016/j.ejpoleco.2009.11.008
- Güth W, Kocher MG (2014) More than thirty years of ultimatum bargaining experiments: motives, variations, and a survey of the recent literature. J Econ Behav Organ 108:396–409. https://doi.org/10.1016/j.jebo.2014.06.006



- Hack A (2009) Sind Familienunternehmen anders? Eine kritische Bestandaufnahme des aktuellen Forschungsstands. J Bus Econ 79(2):1–29 (Special Issue)
- Hair JF, Sarstedt M (2021) Data, measurement, and causal inferences in machine learning: opportunities and challenges for marketing. J Mark Theory Pract 29(1):65–77. https://doi.org/10.1080/10696679. 2020.1860683
- Hair JF, Hult T, Ringle CM, Sarstedt M (2022) A primer on partial least squares structural equation modeling (PLS-SEM), 3rd Edition. SAGE Publications Inc. ISBN: 978-1544396422
- Hanlon M, Heitzman S (2010) A review of tax research. Journal of Accounting and Economics 50 (2–3), 127 78. DOI: https://doi.org/10.1016/j.jacceco.2010.09.002
- Hanlon M, Heitzman S (2022) Corporate debt and taxes. Annual Rev Financial Econ 14:509–534. https://doi.org/10.1146/annurev-financial-101221-103806
- Harvey CR, Liu Y (2019) A census of the factor zoo. Available at SSRN: https://ssrn.com/abstract= 3341728
- Hauser C, Werner A (2009) The impact of foreign trade promotion on the foreign sales intensity of smes. J Bus Econ 79(6):67–112
- Heckemeyer JH, Overesch M (2017) Multinationals' profit response to tax differentials: Effect size and shifting channels. Can J Econ 50(4):965–994. https://doi.org/10.1111/caje.12283
- Hennig-Thurau T, Aliman DN, Herting AM, Cziehso GP, Lindner M, Kübler RV (2022) Social interactions in the metaverse: framework, initial evidence, and research roadmap. J Acad Mark Sci. Advance online publication 51(4):889–913. https://doi.org/10.1007/s11747-022-00908-0
- Hirschheim R, Klein H (2003) Crisis in the IS Field? A critical reflection on the state of the Discipline. J Association Inform Syst 4(5):237–293. https://doi.org/10.17705/1jais.00037
- Hirschheim R, Klein H (2012) A glorious and Not-So-Short history of the Information Systems Field. J Association Inform Syst 13(4):189–235. https://doi.org/10.17705/1jais.00294
- Hoffmann S, Joer
  ß T, Mai R, Akbar P (2022) Augmented reality-delivered product information at the point of sale: when information controllability backfires. J Acad Mark Sci 50(4):743–776. https:// doi.org/10.1007/s11747-022-00855-w
- Hofman JAM, Sharma A, Watts DJ (2017) Prediction and explanation in social systems. Science 355(6324):486–488. https://doi.org/10.1126/science.aal3856
- Hofmann C, Schwaiger N (2020) Religion crime and financial reporting. J Bus Econ 90(5–6):879–916. https://doi.org/10.1007/s11573-020-00982-2
- Hofstetter R, de Bellis E, Brandes L, Clegg M, Lamberton C, Reibstein D, Rohlfsen F, Schmitt B, Zhang JZ (2022) Crypto-marketing: how non-fungible tokens (NFTs) challenge traditional marketing. Mark Lett 33(4):705–711. https://doi.org/10.1007/s11002-022-09639-2
- Hörisch J, Schaltegger S, Weissbrod I, Schreck P (eds) (2023) Frameworks for Sustainability Management. Special Issue of The Journal of Business Economics 93(4)
- Hulland J, Baumgartner H, Smith KM (2018) Marketing survey research best practices: evidence and recommendations from a review of JAMS articles. J Acad Mark Sci 46(1):92–108. https://doi.org/ 10.1007/s11747-017-0532-y
- Hummel D, Karcher B, Schultz C (2013) The financial structure of innovative SMEs in Germany. J Bus Econ 83(5):471–503. https://doi.org/10.1007/s11573-013-0662-8
- Hundsdoerfer J, Kiesewetter D, Sureth C (2008) Forschungsergebnisse in der Betriebswirtschaftlichen Steuerlehre eine Bestandsaufnahme. Z für Betriebswirtschaft 78(1):61–139. https://doi.org/10. 1007/s11573-008-0004-4
- Hwang H, Sarstedt M, Cho G, Choo H, Ringle CM (2022) A primer on integrated structured component analysis. Eur Bus Rev 35(3):261–284. https://doi.org/10.1108/EBR-11-2022-0224
- Jacob M (2022) Real Effects of Corporate Taxation: a review. Eur Acc Rev 31(1):269–296. https://doi. org/10.1080/09638180.2021.1934055
- Jensen MC (2002) Value Maximization, Stakeholder Theory, and the corporate objective function. Bus Ethics Q 12(2):235–256. https://doi.org/10.2307/3857812
- Jones TM, Felps W (2013) Stakeholder happiness enhancement: a neo-utilitarian objective for the modern corporation. Bus Ethics Q 23(03):349–379. https://doi.org/10.5840/beq201323325
- Jöreskog KG (1970) A general method for analysis of covariance structures. Biometrika 57(2):239–251. https://doi.org/10.1093/biomet/57.2.239
- Kiefer K, Schorn P (2009) Auswirkungen der IFRS-Umstellung auf die Risikoprämie für Unternehmensanleihen Eine empirische Studie für Deutschland, Österreich und die Schweiz. J Bus Econ 79(3):335–365. https://doi.org/10.1007/s11573-008-0222-9



Klein H, Myers M (1999) A set of principles for conducting and evaluating interpretive Field Studies. MIS Q 23(1):67–93. https://doi.org/10.17705/1jais.00294

- Küpper HU, Schreck P (eds) (2017) (eds.) Experimental (Business) Ethics. Special Issue of The Journal of Business Economics 87(9)
- Lee A (1991) Integrating Positivist and interpretive approaches to Organizational Research. Organ Sci 2(4):342–365. https://doi.org/10.1287/orsc.2.4.342
- Lee JK (2015) Guest Editorial: Research Framework for AIS Grand Vision of the Bright ICT Initiative. MIS Quarterly 39(2):iii–xii
- Leuz C (2003) IAS Versus U.S. GAAP: information asymmetry–based evidence from Germany's New Market. J Accounting Res 41(3):445–472. https://doi.org/10.1111/j.1475-679X.2003.00111.x
- Lichters M, Sarstedt M, Vogt B (2015) On the practical relevance of the attraction effect: a cautionary note and guidelines for context effect experiments. AMS Rev 5(1–2):1–19. https://doi.org/10.1007/s13162-015-0066-8
- Lichters M, Möslein R, Sarstedt M, Scharf A (2021) Segmenting consumers based on sensory acceptance tests in sensory labs, immersive environments, and natural consumption settings. Food Qual Preference 89:104138. https://doi.org/10.1016/j.foodqual.2020.104138
- Lourenço S (2019) Field experiments in managerial accounting research. Found Trends® Acc 14(1):1–72. https://doi.org/10.1561/1400000059
- Maak T, Pless NM (2006) Responsible leadership in a stakeholder society–a relational perspective. J Bus Ethics 66(1):99–115. https://doi.org/10.1007/s10551-006-9047-z
- Malodia S, Dhir A, Hasni MJS, Srivastava S (2023) Field experiments in marketing research: a systematic methodological review. Eur J Mark Adv online publication 57(7):1939–1965. https://doi.org/ 10.1108/EJM-03-2022-0240
- Modigliani F, Miller MH (1958) The cost of capital, corporation finance and the theory of investment. Am Econ Rev 48(3):261–297
- Moog P, Witt P (eds) (2013) Mittelständische Unternehmen. Journal of Business Economics 83(Special Issue 4)
- Ngai EWT, Wu Y (2022) Machine learning in marketing: a literature review, conceptual framework, and research agenda. J Bus Res 145:35–48. https://doi.org/10.1016/j.jbusres.2022.02.049
- Niemann R, Sailer M (2023) Is analytical tax research alive and kicking? insights from 2000 until 2022. J Bus Econ This Issue. https://doi.org/10.1007/s11573-023-01157-5
- Noreen E (1988) The economics of ethics: a new perspective on agency theory. Acc Organ Soc 13(4):359–369. https://doi.org/10.1016/0361-3682(88)90010-4
- Paetz F, Steiner WJ, Hruschka H (2022) Advanced data analysis techniques with marketing applications. J Bus Econ 92(4):557–561. https://doi.org/10.1007/s11573-022-01101-z
- Pellens B, Crasselt N, Sellhorn T (2006) Bilanzierung leistungsorientierter Pensionszusagen nach IFRS: Auswirkungen auf die intertemporale Ergebnisvolatilität. J Bus Econ 76(Special Issue 6):111–138
- Pies I, Schreck P, Homann K (2021) Single-objective v. multi-objective theories of the firm: using a constitutional perspective to resolve an old debate. RMS 15(3):779–811. https://doi.org/10.1007/s11846-019-00376-x
- Plangger K, Drewal D, de Ruyter K, Tucker C (2022) The future of digital technologies in marketing: a conceptual framework and an overview. J Acad Mark Sci 50(6):1125–1134. https://doi.org/10.1007/s11747-022-00906-2
- Raithel S, Schwaiger M (2014) The effects of corporate reputation perceptions of the general public on shareholder value. Strateg Manag J 36(6):945–956. https://doi.org/10.1002/smj.2248
- Reichelt D, Schmidt M (2005) Notwendigkeit zur konzeptionsgerechten Fortentwicklung der Konzernrechnungslegung das Beispiel sog. "umgekehrter" Unternehmenserwerbe. J Bus Econ 75:43–70
- Rigdon EE, Sarstedt M, Becker JM (2020) Quantify uncertainty in behavioral research. Nat Hum Behav 4:329–331. https://doi.org/10.1038/s41562-019-0806-0
- Roetzel P, Pedell B, Groninger D (2020) Information load in escalation situations: combustive agent or counteractive measure? J Bus Econ 90(5–6):757–786. https://doi.org/10.1007/s11573-020-00987-x
- Sarstedt M, Danks NP (2022) Prediction in HRM research a gap between rhetoric and reality. Hum Resource Manage J 32(2):485–513. https://doi.org/10.1111/1748-8583.12400
- Sarstedt M, Imschloss M, Adler S (2023) Multisensory design of retail environments: vision, sound, scent. Springer, Heidelberg
- Schneider F, Tran DH (2015) On the relation between the fair value option and bid-ask spreads: descriptive evidence on the recognition of credit risk changes under IFRS. J Bus Econ 85(9):1049–1081. https://doi.org/10.1007/s11573-015-0776-2



- Schreck P (2020) Volume or value? How relative performance information affects task strategy and performance. J Bus Econ 90(5–6):733–755. https://doi.org/10.1007/s11573-020-00974-2
- Schreck P, Edinger-Schons L, Uhl M (eds) (204) The Ethics of Digitalization and Emerging Corporate Responsibilities in the Digital Age. Special Issues of the Journal of Business Economics. In preparation
- Schreck P, Aaken D, Donaldson T (2013) Positive economics and the normativistic fallacy: bridging the two sides of CSR. Bus Ethics Q 23(2):297–329. https://doi.org/10.5840/beq201323218
- Shackelford D, Shevlin T (2001) Empirical tax research in accounting. J Account Econ 31:321–387. https://doi.org/10.1016/S0165-4101(01)00021-0
- Sharpe WF (1964) A theory of market equilibrium under conditions of risk. J Finance 19(3):425–444. https://doi.org/10.1111/j.1540-6261.1964.tb02865.x
- Shmueli G, Koppius OR (2011) Predictive analytics in information systems research. MIS Q 35(3):553–572. https://doi.org/10.2307/23042796
- Smith M (2022) Monetizing virtuous employees. Acc Organ Soc 98:101307. https://doi.org/10.1016/j. aos.2021.101307
- Stöcker B, Baier D, Brand BM (2021) New insights in online fashion retail returns from a customers' perspective and their dynamics. J Bus Econ 91(8):1149–1187. https://doi.org/10.1007/s11573-021-01032-1
- Treviño LK, Weaver GR (1994) Business ETHICS/BUSINESS Ethics: one field or two? Bus Ethics Q 4(2):113–128. https://doi.org/10.2307/3857484
- Treviño LK, Weaver GR, Reynolds SJ (2006) Behavioral Ethics in Organizations: a review. J Manag 32(6):951–990. https://doi.org/10.1177/0149206306294258
- Van Aaken D, Buchner F (2020) Religion and CSR: a systematic literature review. J Bus Econ 90(5–6):917–945. https://doi.org/10.1007/s11573-020-00977-z
- Van der Stede W (2014) A manipulationist view of causality in cross-sectional survey research. Acc Organ Soc 39(7):567–574. https://doi.org/10.1016/j.aos.2013.12.001
- Veit DJ, Thatcher JB (2023) Digitalization as a problem or solution? Charting the path for research on sustainable information systems. J Bus Econ This Issue. https://doi.org/10.1007/s11573-023-01143-x
- Wagner FW (2022) Neue Herausforderungen für eine Steuerlehre als betriebswirtschaftliche Disziplin. Steuer und Wirtschaft 99(4):336–348. https://doi.org/10.9785/stuw-2022-990410
- Walsham G (1995) Interpretative Case Studies in IS Research: Nature and Method. Eur J Inform Syst 4(2):74–81. https://doi.org/10.1057/ejis.1995.9
- Watts RL, Zimmerman JL (1978) Towards a positive theory of the determination of Accounting Standards. Acc Rev 53(1):112–134
- Watts RL, Zimmerman JL (1986) Positive accounting theory. Prentice-Hall Inc., Available at SSRN https://ssrn.com/abstract=928677
- Weaver GR, Trevino LK (1994) Normative and empirical business Ethics: separation, marriage of Convenience, or marriage of necessity? Bus Ethics Q 4(2):129–143. https://doi.org/10.2307/3857485
- Welge M, Witt, P. (eds) (2013) Corporate Governance in mittelständischen Unternehmen. Journal of Business Economics 83(Special Issue 2). DOI: https://doi.org/10.1007/978-3-658-02429-1\_1
- WI (2001) Wirtschaftsinformatik, https://de.wikipedia.org/wiki/Wirtschaftsinformatik, Accessed Jan 30, 2023
- WI (2022) Call for Papers, https://wi22.de/en/en\_call-for-papers/ Accessed Jan 30, 2023
- WKWI (2023) Wirtschaftsinformatik, https://de.wikipedia.org/wiki/Wirtschaftsinformatik, Accessed Jan 30, 2023
- Wüstemann J, Bischof J (2006) Der Grundsatz der Fair-Value-Bewertung von Schulden nach IFRS: Zweck, Inhalte und Grenzen. J Bus Econ 76(6):77-110 (Special issue)
- Wüstemann J, Wüstemann S (2009) Betriebswirtschaftliche Bilanzrechtsforschung und Grundsätze ordnungsmäßiger Gewinnrealisierung für Werkverträge. J Bus Econ 79(1):31–58. https://doi.org/10.1007/s11573-009-0010-1

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