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Sober Passion for Practical Reason

A Discussion about the Contribution of Descriptive Business Ethics to Business Ethics

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Abstract

What influences the judgment of individuals on economic actions and financial transactions? Why do we have negative views of actions such as gambling or speculation or of the banking sector? What kind of stereotypes prevail in the discourse on financial markets? Questions such as these have gained relevance given the intensifying discourse on sustainable finance and discrimination in the business and finance world. Recognizing the importance of cognitive biases in moral belief systems, this dissertation is dedicated to the contribution of descriptive business ethics to business ethics in general and examines, in three articles, different aspects of descriptive business ethics and its implications for normative questions. The first article addresses the conceptualization of investment, speculation, and gambling and the inherent limitations and ambiguities in discriminating between these three economic activities. In the second and third papers, empirical vignette studies were conducted to investigate the underlying reasons for certain moral judgments in investment contexts. The results of the second contribution show that persons with names perceived as being Jewish were more likely to be morally convicted for identical investment decisions than were persons with names perceived as being non-Jewish. The findings of the third article show that investments are considered more moral when they turn out to be profitable than when they turn out to be unprofitable. Moreover, profitable investments are more often referred to as "investments" while loss-making decisions are referred to as "speculation." This observation is stable across different investment contexts. These results suggest that we should be aware of the increasing moralization around investment decisions and reflect on our cognitive biases. These contributions and their findings form the bedrock of a more

general discussion on the contribution and purpose of descriptive business ethics. After a definition and classification of descriptive business ethics, a metaethical discussion first describes why descriptive methods contribute to business ethics. Subsequently, the four areas in which descriptive business ethics contributes to business ethics are described: The description of terms and classifications of actions, the description of moral judgements, the description of moral behavior, and the description of the implications of individuals' behavior. The final part addresses limitations of the argument of the thesis and concludes with the three articles on which the cumulative dissertation is based.

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Contents

1 Introduction

The spring of 2020 was characterized by a flood of global restrictions on private activities and national lockdowns that forced businesses to scale down and, in some cases, to cease their commercial activities following the first wave of the Covid-19 pandemic. The economic side effects of these measures manifested in sharp drops in sales for many companies, with a particularly strong impact on stationary retail. Due to the lack of revenue on the one hand and the ongoing payment obligations to employees and property owners on the other, the German parliament passed legislation to support tenants and organizations renting production facilities and retail properties. The law stated, inter alia, that property owners were "not permitted to terminate leases for land or premises merely on the ground that the tenant does not make a rental payment in the period from 1 April 2020 to 30 June 2020."[1] In response to the legislation, German sporting goods manufacturer Adidas SE declared its intention to defer rental payments for the sake of economic stability (Reuters 2020). This announcement—the actual implementation of which would have been legally possible beginning three days later, on April 1, 2020—sparked an outcry among large portions of the German public, demonstrated in ways that ranged from moral condemnation (behavior was "irresponsible" or "shabby") to the public burning of Adidas clothes by a politician (FAZ.net 2020). Was Adidas, as an entity, or were the decision makers of Adidas, as individuals, acting in a morally reprehensible way? Is a company allowed to take financial advantage of a law that legitimately grants it privileges even though, economically speaking, it may have alternatives for

[1] Act to Mitigate the Consequences of the COVID-19 Pandemic under Civil, Insolvency and Criminal Procedure Law of 27 March 2020 (Federal Law Gazette I, p. 569)

dealing with a crisis?

Business ethics, especially normative business ethics, deals with questions like these. The subject of business ethics is the question of how a person or an entity should act based on the means at his disposal and the general conditions of his actions. Addressing this question, which is normative by nature, requires a comprehensive understanding of the circumstances confronting the actor in question. Such an understanding of the circumstances could be supported by descriptive methods in business ethics. This thesis attempts to provide arguments for why and how descriptive methods can contribute to deal with such problems in business ethics.

In a globalized and structurally complex world, understanding the conditions and assumptions associated with normative judgements appears to have become more and more complicated. For example, the question of whether outsourcing the production of textiles to countries with lower wage levels than those of the home country of a company is morally problematic should be answered by both a deontologist and a consequentialist based on the conditions in both countries. People who arrive at different normative judgments on such questions could ask themselves why they arrive at different conclusions. While one person might argue that outsourcing is bad due to the negative impact of working conditions on people in countries with lower wages, another might posit the positive effects of job creation in regions of the world where, a few decades ago, many people still lived in absolute poverty. You could joke that in a conversation among three ethicists, you will get five normative assessments.

Descriptive questions such as the following could be used to examine the context in the Adidas example: What alternatives did the Adidas management have in this situation? How should the law have been formulated to prevent its application by Adidas given such an application was obviously not intended by the politicians who passed it? How do other individuals or entities behave in comparable situations? What direct and indirect economic and social effects could Adidas' application of the law have had? A sober, normative analysis of this behavior requires careful description of the underlying facts. In this paper, I present the motivation and methods of this description.

The present work is structured as follows. First, I define descriptive business ethics and describe how it differs from what is typically called morality or normative business ethics. In the second section, I present the argumentation around why descriptive business ethics contributes to business ethics. In the third section, I describe this contribution and present several methods used in descriptive business ethics. I then present the publications on which this thesis is based and embed them in the argumentation of this thesis. In the last section, I present the limitations of and counterarguments to the theses presented in this paper and close with concluding remarks.

The Adidas case was quickly resolved as two days after the outcry and before the law was applied, the management issued a press release apologizing for their earlier position (Adidas 2020). In the press release, Adidas referred to fairness and team spirit and announced that it would pay all rents on time. However, the damage to the company's reputation had already been done.

The 'world' is not rational, but it is the task of science
to rationalize it. 'Society' is not rational, but it is the
task of the social engineer to rationalize it.
(Popper, 1945, 1971, ch24, footnote 19)

2 What is Descriptive Business Ethics

In this thesis, I explain what descriptive business ethics contributes to business ethics. For this purpose, I first define descriptive ethics and distinguish it from normative approaches, and I discuss metaethical considerations around descriptive ethics. In a second step, I describe the metaethical motivation for descriptive ethics and its basis in classical objections to normative ethics. In a third step, I distinguish business ethics from ethics in general. In a fourth step, I bring these insights together and explain what is meant by descriptive business ethics.

2.1 Definition of Descriptive Ethics

Moral philosophy or ethics is the philosophical branch that deals with the moral behavior of humans. This branch of applied philosophy is usually divided into three areas: Metaethics, normative ethics and descriptive ethics (Lütge & Uhl 2017). Metaethics is concerned with the nature of morality in general, deals with the definition of goodness and badness, and tries to answer the question of whether normative judgements can have and general validity. Examples of a metaethical question are whether normative and descriptive ethics exist and whether and how they are distinguishable. Normative and descriptive ethics are usually distinguished by whether they address questions of what individuals ought to do (normative ethics) or describe what they actually do and how they do it (descriptive ethics) (e.g. Valdez-Martinez et al. 2006; Reese & Fremouw 1984). Other authors delineate descriptive ethics as the discipline that deals with someone's evaluations and views about good and bad (e.g. Nordenstam 1967). Cragg (2017) defines descriptive ethics as a branch of applied ethics that aims to use empirical methods to identify the values underlying the normative positions of people and to provide an accurate description of these attitudes. He also proposes the term moral geography for descriptive ethics.

Some authors use the terms descriptive ethics and empirical ethics interchangeably (e.g. O'Fallon & Butterfield 2013; Werhane 1994), whereas others tend to apply the term normal ethics for descriptive ethics and prescriptive ethics for normative ethics (e.g. Voskuijl & Evers 2007; Reese & Fremouw 1984). Another stream of literature uses the term comparative ethics for descriptive ethics (e.g. Britannica 2021; Lee 2013; Ginsberg 1953). In this thesis, descriptive ethics is understood as a discipline of ethics or moral philosophy dedicated to the identification of moral beliefs and principles and description of the actual implementation of moral beliefs principles by individuals. Hence, descriptive ethics does not involve any normative statements or value judgments but rather serves a means of understanding the prevailing values of a society and their translation into practice. In contrast, normative ethics offers individuals instructions on how to evaluate actions and attitudes of people, classifying them as good or bad.

The differences between normative and descriptive ethics can be illustrated in the form of a short thought experiment. Imagine several people standing together and talking about politics. One person expresses her moral disapproval of the killing of Osama Bin Laden in Pakistan in May 2011 by an elite unit of the United States forces. She argues that killing a person without a trial is a morally condemnable act. This statement quickly evokes emotions in her listeners. “Killing is fundamentally wrong. The fact that Osama Bin Laden was never convicted doesn’t even matter.” Another responds: “The reprehensible thing is that other innocent people were also killed during the military operation. That is not acceptable! Innocent people may never be killed.” A third person replies that it was perfectly legitimate to kill Osama Bin Laden because many Americans had died in terrorist attacks he had organized. Another person comes along and says: “Nobody wants to be killed. Therefore, nobody should kill anybody.” At this point at the latest, an ethicist could intervene and point out the problems with basing normative claims on empirical findings. Philosophers call this a naturalistic fallacy. This fallacy is also called Hume‘s Law or the Is-Ought problem (Hume 1739, 1896). A naturalistic fallacy occurs whenever a normative statement is derived from a descriptive statement without further explanation. “Nobody wants to be killed” is a descriptive statement, whereas “Therefore, nobody should kill anybody” is a normative statement. To derive the second statement from the first constitutes a breach of philosophical logic, as a deeper explanation of the relevance of preferences (“nobody wants to be killed”) would be required for ethical action. Although reasonable arguments can be made in defense of this assumption, one could challenge the assertion that the individual wishes of others matter in determining the ethically correct action. Hume elaborated in *A Treatise of Human Nature* on the change of a descriptive to a normative statement:

> This change is imperceptible; but is however, of the last consequence. For as this ought, or ought not, expresses some new relation or affirmation, ’tis necessary that it shou’d be observ’d and explain’d; and at the same time that a reason should be given; for what seems altogether inconceivable, how this new relation can be a deduction from others, which are entirely different from it.
> (Hume, 1739, 1896, p. 469)

The problem identified by Hume was further developed and extended by George Edward Moore. The fundamental issue that Hume and Moore address about this naturalistic fallacy is that it is difficult to bridge the gap between descriptive and normative ethics (cf. Moore 1903). A major purpose of this dissertation is therefore to examine how the difficulties in

integrating empirical observations into normative ethics have been dealt with and how descriptive ethics can contribute to normative business ethics.
The second problem faced in moral philosophy concerns the question of whether normative judgments can have any objective validity at all. Even if one accepts that normative statements can be linguistically objective, one still faces the question of whether normative statements are epistemologically and objectively valid. Questions of this kind fall often under the label of moral relativism. Here, one can distinguish between metaethical relativism and normative relativism. The premises of metaethical relativism have been summarized in the literature (Harman 1975, p. 3; Williams 1972, p. 20–21; Singer 1961, p. 332) as follows:

1. There are no universal principles.

2. One ought to act in accordance with the principles of one's own group.

3. Principle (2) is a universal moral principle

A communality of relativist positions is the notion that moral principles, judgments, or beliefs originate in different social, political, historical, economic, cultural, or personal contexts and do not represent objective truths at all.
Moral relativism would deny the universal validity of moral statements and question whether the statement of the thought experiment, "the killing of Osama Bin Laden was morally reprehensible," can be at all meaningful. At this point, I do not want to make an attempt to completely bridge the gap between moral relativists and universalists but rather to show the challenge that confronts ethics. This challenge is more difficult in a pluralistic and globalized world than in a homogeneous face-to-face society (cf. Lütge 2015).

The transition from descriptive to normative statements and the discussion about the validity of normative statements represent great challenges for moral philosophy. This thesis attempts to show the contributions of descriptive ethics to business ethics and to build a bridge across these gaps. In the next section, I try to distinguish the discipline of business ethics as applied ethics from ethics in general.

2.2 Definition of Business Ethics

The use of the term business ethics varies across languages, rendering it difficult to develop a common understanding or definition of what is labeled as business ethics (cf. Lewis 1985). While in German, the word Wirtschaftsethik (Wirtschaft = economy) has more of a reference to the economic system, in English and French the words business ethics and éthique des affaires are used, putting companies and commercial activities at the center. Furthermore, finding common ground on business ethics is complicated by the questions of how to distinguish business ethics within and from ethics in general; whether applied ethics relates to ethics; and whether business ethics is an applied ethics.

To answer the first question, I take two approaches and draw on the distinction made by Nida-Rümelin (1996) (cf. Ricken 2003). The first is the approach in that of early modern epistemological rationalism, as advocated by, for example, Singer (1986), and the second approach is the concept of coherence, as proposed by Nida-Rümelin. Ricken (2003) describes the approach attributed to Peter Singer as follows. The moral obligations that apply here and now are based on two premises: a normative principle (e.g. utilitarian maximization of utility) and empirical constraints that characterize the causality of public action to achieve this principle. In contrast, Ricken describes the coherence concept proposed by Nida-Rümelin as one which would describe applied ethics as domain ethics and assumes that different criteria are appropriate for different areas of human activity that cannot be traced back to a single system of rules and standards.

Karl Homann imputes to applied ethics that it regards business ethics as a seamless extension of general ethics and as ethics with an economic method (Homann 1996). Homann accuses applied ethics of remaining at the level of pure proclamations of general principles (such as solidarity or human dignity), of making moral appeals and searching for culprits, or even of prescribing totalitarian patterns of action. The main criticism of Homann's understanding of business ethics as applied ethics is that the validity of standards is treated separately from the central challenge of the implementation of standards. In his conception of business ethics, however, Homann suggests that the frameworks and conditions of human action must be designed in such a way that the actions of each actor lead to the desired principles (such as solidarity or human dignity).

The remainder of the thesis draws from both approaches to business ethics. While I employ Karl Homann's methodological approach to the implementation question, I stick to Nida-Rümelin's definition of business ethics as a domain ethics, given its wider acceptance.

Issues that business ethics addresses in the sense of a domain ethics are, for instance, the assessment of how high the salaries or bonus payments for managers should be compared to the average salary of the workforce, the provision of expensive medication in countries with lower income levels at adjusted, cheaper prices, or the targeted outsourcing of production processes to countries with lower wages and the acceptance of worse conditions for the personnel in those countries. Different business ethicists originating in different theories and worldviews would arrive at different normative conclusions when assessing these examples. While some business ethicists, especially virtue ethicists, would call on managers to be moderate when setting salaries, others might argue that the call for moderation could be detrimental to the system, which as a whole provides many benefits to all people. The later position is reflected in the writings of John Rawls, explicitly, in his *A Theory of Justice* 1971. The moral quality of self-interest also belongs to the most disputed fields in business ethics. Some would highlight the self-interest of companies in hiring the best managers by offering high salaries and argue that other competitive markets such as sport or media tend to offer similar wages. Others would identify a moral obligation of alleviating other people's suffering and call on companies to dedicate the financial resources spent for managers to other purposes that have a greater impact on human beings, such as charity.

2.3 Definition of Descriptive Business Ethics

Combining the preceding arguments, I derive the definition of descriptive business ethics that is used for the paper's remainder. Descriptive business ethics is a non-normative approach to business ethics that attempts to examine the conditions of human action, the normative assessment of a given or hypothetical situation, and the designation of these situations and the actual actions of people involved. The limitations of this approach are discussed in detail in chapter 6.

In the preceding section, I describe the discussion around the feasibility and objectivity of normative judgements. However, this (metaethical) controversy is only a marginal discussion in comparison to the academic and public controversy about normative assessments of special cases of application. Descriptive business ethics tries to understand the moral evaluation of people and the terms used by people and then examines how people behave in such situations.

In striving for a non-normative approach, I acknowledge the possible bias that is inherent in any descriptive approach. My ambition is therefore to be as non-normative as possible in what I call descriptive business ethics in this paper.

For if the moral law commands that we *ought* to be
better human beings now, it inescapably follows that
we must be *capable* of being better human beings.
(Kant, 1793, 2018, AA 6:50, p. 81)

3 Why Descriptive Business Ethics Contributes to Business Ethics

The discussions of the very definition of descriptive business ethics and of the nature of normative judgements shed light on the prospective contribution of descriptive business ethics to business ethics. As outlined before, normative business ethics concentrates on the evaluation of actions and suggests answers to the question of how someone ought to act.

How should a person derive the morally correct decision or what normative judgment should a person make? Attitudes and actions, such as the (pure) pursuit of profits or (voluntary) donation to the needy, are morally evaluated and imperatives are derived and formulated. While the assessment of these questions varies by approach, most thought traditions agree on Kant's formula, according to which ought implies can (Kant 1793, 2018). [1] Here, Kant particularly stresses the fundamental assumptions taken for granted when contemplating moral obligations, including the existence of free will and "natural conditions." He follows that it is impossible to fulfil obligations contradicting the laws of nature and that the validity of normative premises depends on their feasibility. This principle is similar to the principle

[1] For a more extensive study of this formula of Kant, we recommend Stern (2004).

ultra posse nemo obligatur, which implies that obligations (both moral and legal) for which fulfilment is impossible for an individual are invalid. Kant's argues that individuals should at least try their very best to achieve particular ends, even if they collide with their self-interest, and that they should do their utmost to conform with ethical norms. For the same reasons, he refuses to consider consequences when judging human action. The natural conditions that render moral obligations impossible to fulfill can be logical, physical, or psychological constraints. This implies that the validity of normative appeals itself depends on the feasibility of the demanded action. However, the threshold for logical, physical, or psychological constraints and the notion of moral over-demand can be interpreted in different ways (Lütge & Uhl 2017; Singer 1961), especially if we consider the demand for self-sacrifice for higher ethical purposes. An argument that is often formulated against the reference to ultra posse nemo obligatur is that the criticism of moral over-demand is often used as an excuse for inaction. Another constraint on human action concerns the role of knowledge. An individual might have good reasons to believe that she or he is unable to help another person from drowning, because she or he lacks knowledge of the location of the drowning person or the skill to swim. The natural conclusion is therefore that knowledge constitutes an important criterion when judging human action. In the absence of knowledge, one cannot expect that the addressee of this request can fulfil the request at all. The objection concerning the lack of realistic options and knowledge of the different options to realize ethical aims, therefore, constitutes a limitations to all major ethical theories. The establishment of a maxim, according to which an individual categorically should act, must be based on an assessment of the different options available to the individual in terms of knowledge and feasibility.

In addition, consequentialist theories stress the consequences of moral actions (cf. Stern 2004; Griffin 1998; Griffin 1992). As a result, they focus on examination of the conditions and possible consequences of human action. The question of what a person can do is, at this point, an empirical question for which descriptive business ethics could provide relevant information (cf. Gogoll 2018). Moreover, even staunch proponents of deontological theories including Immanuel Kant have accepted the notion of practicability and concluded that ethics cannot always be followed in practice, “alas” (cf. Kant 1795, 1917, p. 163). The realization of ethical aims, therefore, depends on empirical observations, which defines the contribution of descriptive to normative ethics. Its mission does not involve the solution of normative questions; it is the creation of a basis on which a reflection or discourse on normative judgements can take place. Suchanek (1999) points out that normative judgements, the demand for new laws, or proposals for the establishment of new institutions are always articulated on the basis of normative premises and empirical conditions. He suggests these demands proceed as follows:

1. Normative premises
2. Empirical conditions
3. Policy recommendations

Suchanek uses this sketch to illustrate his hypothesis that policy recommendations are often characterized by normative shortcuts, leading to false conclusions. He argues that policy recommendations often remain at level 1, without consideration of the empirical conditions, and that proposals are made solely on the basis of normative premises including societally desirable ideas such as solidarity, environmental protection, and human dignity. Suchanek thus assumes that little or no attention is paid to level 2, the empirical conditions to which these demands must inevitably be subjected. In regard to ecological issues, Luhmann (1986, 1989, p. 132) says that proposed policy recommendations often have “the advantage of being near at hand” even if they are “unrealistic.” “In a way that is almost impossible to explain, [these appeals] obfuscate social interdependencies and the mediation of effects” (ibid., p. 132). Suchanek (1999) identifies these social interdependencies in the empirical conditions (see level 2). These social interdependencies are increasingly difficult to grasp in a globalizing world with an increasingly anonymized society, which makes familiar normative concepts more difficult to implement (cf. Lütge 2015). Particularly, changes in social conditions are recognized in the discourse, which, regardless of their validity, leads to widely divergent normative conclusions and disputes. From this argument, another can follow that social scientists might produce reasonable theories based on empirical research that are realistic in the Luhmann sense but fail to communicate their research adequately, provoking normativistic or populistic shortcuts. Karl Popper, however, does not expect the social sciences to follow these steps and develop its own policy recommendation but rather to use their methods to criticize proposals that claimed to be scientifically valid. Popper in no way rejects empirical knowledge; he points out the inadequacy or incompleteness of knowledge. According to Popper (1968), the goal of empirical social sciences is not the acquisition of secure knowledge but contribution to lasting progress in knowledge. This approach, called critical rationalism, does not contradict the Suchanek's thesis that policy recommendations must be based on normative premises and empirical conditions but rather motivates the use of empirical methods for discovering errors in previous theories and thus enrich the discourse. In this sense, business ethics should not remain at Suchanek's level 1 but should also not use the scientific exploration of empirical conditions at level 2 as legitimation of its own theories as secure knowledge. Such reasonable considerations are often seen as the opposite of an emotional decision. Ethical judgements are often based on human feelings. When we are driven by emotions such as compassion or sympathy on the one hand, or anger and vindictiveness on the other, our judgement may be different from when we are uninvolved in a situation. People tend to accuse others of greed and selfishness and call for charity and solidarity. These ethical debates are often between those taking the pessimistic position that human beings are only out for their own benefit and those arguing that human beings are social beings and want to help others selflessly. This debate runs through the entire history of philosophy. Many also argue that human beings are in between selfish and selfless and react differently depending on situation, time, and social context. This results in a kind of puzzle that is often the subject of empirical research (cf. Smith 1998). In his Theory of Moral Sentiments, Adam Smith (1759, 2006) describes the need to reach the position of impartial spectators to be able to judge the sentiments and moral positions of other people and our own. Scholars see the ideas of the ideal observer as borrowed from the Stoic Marcus Aurelius and his image of a helmsman (cf. Jones 2010; Clarke 2000). Firth (1952) describes the idea of an ideal observer as omniscient with respect to non-ethical facts, omnipercipient, disinterested, dispassionate, consistent and normal. An ideal observer must therefore make an impartial ethical assessment in the spirit of the Roman goddess Iustitia. Smith perhaps saw in David Hume, his close friend, a person who came close to the idea of the impartial spectator. In a letter to his friend William Strahan, Smith wrote that he considered Hume "as approaching as nearly to the idea of a perfectly wise and virtuous man, as perhaps the nature of human frailty will permit" (Smith 1987, p. 221).

This suggests two challenges for business ethics. First, purely normative conclusions without regard to empirical conditions can create negative consequences as they originate in the emotions, ideologies, or personal interests of those formulating the positions, or as they depend on popularity, which itself tends to be inconsistent over time. Moreover, concepts of business ethics or moral appeals denying or even conflicting with empirical conditions can lead to undesired outcomes. This conclusion is close to the proverbs dating back to Virgil that the road to hell is paved with good intentions or "The Fable of the Bees" by Bernard Mandeville (cf. Mandeville 1714, 2019). However, empirical findings should not claim to represent absolute truths or be used as the sole justification of business ethicists or politicians but rather as criticism or falsification of existing policy recommendations or as part of the argumentation for the development of new proposals. Descriptive business ethics makes this contribution to business ethics. It does not compete with normative business ethics, but it provides a basis for improving and realizing normative business ethics in an ever more complex world.

A morality that believes itself able to dispense with the technical knowledge of economic laws is not morality but moralism. As such it is the antithesis of morality.
(Ratzinger, 1986, p. 204)

4 How Descriptive Business Ethics Contributes to Business Ethics

In this chapter, I suggest areas in which which the questions or methods of descriptive business ethics can contribute to business ethics. I describe four types of descriptions that could be used to support business ethics. First, I discuss the description of terms and classification of concepts. In the second section, I present descriptive approaches for describing the moral judgment of actions. In the third section, I discuss experimental business ethics in the classical sense as a description of the behavior of humans. In the fourth section, I explain how economics in general describes the conditions for action and provides a basis for normative judgements.

4.1 Description of the Denominations and Conceptual Classification of Actions

The area of descriptive ethics provides information on the language that is used in the context of business ethics discourse and its impact on human decision making. The use of terms is highly relevant in business ethics given their moral connotation. Labeling an action as, for instance, sustainable and responsible could lead to more approval for that action than for an action labeled as unsustainable and irresponsible. This naturally sparks questions: What makes an action sustainable? What makes is an action responsible? What is corporate social responsibility? When is an economic decision an investment and when is it speculation? When is a technically legal decision by an entrepreneur a wise economic decision, and when is it a legal exploitation of a law?

The definitions and concepts are themselves fiercely contested given their relevance for the ideologies, perceptions, and beliefs espoused by the key players and observers in the debate but also given the role of commercial interests. An example is the concept of sustainability. The Technical Expert Group (TEG) on Sustainable Finance set up by the European Commission in July 2018 addressed precisely this challenge. In the work plan for the TEG published in March 2018, the first and most important step was the establishment of a uniform taxonomy of what is considered to be climate-change related, environmentally sound, and socially sustainable (European Commission 2018). The definition of this measure and the ensuing debate make it clear that one of the main problems in the transformation of the financial sector toward a more sustainable model is precisely the designation of this sustainability. While the idea that sustainable management should be generally pursued is likely to be widely accepted both by the population as a whole and by actors in the financial sector, the clarity of the taxonomy initially presented by the TEG was questioned. To the question, “Do you believe the taxonomy will provide a clear indication of what economic activities should be considered environmentally sustainable?” 49.0% of the experts asked to provide feedback on the report presented by the European Commission in June 2019 answered no; 12.1% answered don’t know / no opinion / not relevant; and only 38.9% answered yes. These answers again underline the difficulty of this definition (European Commission 2020). Since its introduction in the Brundtland Report of the United Nations in 1987, the term sustainability has been used frequently in politics, economics, and science. However, there is no clear definition for this term, and it is used in very different ways. Since the claim to sustainable management is primarily a normative approach, it has been part of the discourse in business ethics at least since the publication of Carroll's Pyramid in 1991 (Carroll et al. 1991). Since then, there have been many attempts to define this term (cf. Moore et al. 2017; Johnston et al. 2007; Allen & Hoekstra 1993), but no uniform and widely accepted solution has prevailed. The underlying problem is that although a designation or label can lead directly to approval or rejection, the designated action or intention remains largely unaffected by this designation; both the endorsement of nuclear power plants and the rejection of nuclear power plants are described as sustainable.[1]

Various empirical studies have shown that the use of different terms or concepts, and also framing in general, might exert significant influence on the moral evaluation of actors or actions (e.g. Laham 2009; Petrinovich & O'Neill 1996).

The challenge of labeling actions and intentions and the separation of different concepts is the subject of the first paper (cf. Max et al. 2020) on which this dissertation is based. This paper is about differentiating the concepts of investment, speculation, and gambling and showing their similarities. Empirical tests we conducted in the course of the research show that decisions that are called speculation are more often morally condemned than are decisions that are called investment. The need for clear definitions and delimitations of these concepts is therefore apparent. In the next chapter, this paper is explained in more detail in an extended abstract. In the third paper on which this dissertation is based, argumentation from the second paper is taken up and empirically examined. The findings of the third paper support the theses in several ways. First, they show that the same action, when performed by different persons, is classified as investment and as speculation, and no consistent dis-

[1] Among others, the United States Department of Energy and Brook et al. (2014) describe nuclear energy as sustainable. In contrast, many NGOs describe nuclear power as not sustainable (e.g. von Hirschhausen 2018; WWF 2008; Weish 2007). The above mentioned June 2-19 taxonomy report of the TEG remains vague on the classification of nuclear power as sustainable or unsustainable.

tinction is possible. Furthermore, the normative classification of identical actions depends, above all, on the different designation of these identical actions. Actions called speculation are classified as significantly more immoral than those called investment. This finding is stable over several contexts (managers in banks, car manufacturers, and municipal treasuries). A further description of this study is also presented in the next chapter.

4.2 Description of Moral Judgment

Moral judgments are based on different factors. One important factor is intention, as human behavior is driven by different sets of emotions and aims. A deontological approach explicitly pays attention to the actor's intention when evaluating an action or concept. A consequentialist who evaluates actions based on the expected consequences also includes the intentions of the actor in a broader sense. Consequentialist theories assume that an intentional action has a causal effect. Thus, intentions are indirectly relevant for consequentialist theories. Knobe (2003) shows an interesting effect related to side effects that do not constitute the actual action but that must be taken into account in the moral evaluation of the action because the side effects are theoretically predictable. This effect, also known as the Knobe effect or "side-effect effect" Dworazik & Rusch (2014), describes an asymmetry between accusations that stem from negative side effects and praise that stems from positive side effects. In this vignette study, Knobe shows that a manager who intentionally accepted a negative side effect of an economic decision received significantly stronger responses to this decision than a manager who intentionally accepted a positive side effect of an economic decision. In the case of the negative side effect, the manager was accused of intentional action, whereas in the case of the positive side-effect in an identical setup, no intentional action was assigned. An important conclusion from Knobe's experiments is that normative evaluations of human action are inconsistent, which is an important finding for business ethics. Another empirical study on moral valuation or judgement that has received significant attention in recent months is the Moral Machine Experiment by Awad et al. 2018. Awad et al. (2018) created an internet site where participants had to make ethical decisions in a playful way along the lines of a trolley dilemma. Participants were each confronted with two scenarios and an autonomous car that had to decide in favor of one of the two scenarios, and they were asked to choose the scenario they preferred. Classic trade-offs between sacrificing one person in comparison to two persons or deciding between an older lady and a younger girl or between an animal and a human being were examined. The exciting thing about this experiment was that Awad et al. (2018) succeeded in collecting and comparing 40 million data sets from over 230 countries. The results show that there are significant global differences in preferences to protect younger people and preferences to protect several over a few. Although this study does not explicitly deal with questions of business ethics, the results are relevant for business ethics. For instance, people in countries with higher GDPs per capita and a more established rule of law were more likely to sacrifice people who crossed the road illegally than were people in countries with lower GDPs per capita. The study also shows that countries with higher economic inequality (as measured by the Gini coefficient) have more dramatic differences in the treatment of people with different social status. Such findings are important for normative questions such as how to prevent discrimination based on socio-economic status. Cultural background also appears to have a strong influence on judgements about how to enforce laws against criminal actions, what rights individuals have and how the role of the individual in relation to a group should be defined, and how much economic inequality is desirable in a society. The first research that tried to explicitly investigate experimental moral value judgements and, for example, the understanding of truth, was conducted by Arne Naess (1938) (cf. Appiah 2014). The work of Jean Piaget (1932, 1965) and Lawrence Kohlberg (e.g. 1974) on stages of moral development and the work of Jonathan Haidt (e.g. 2007a; 2007b), Goodwin and Darley (e.g. 2012, 2010, 2008), Feltz & Cokely (2008) and Al-Shehab (2002)) are examples of this approach.

Following this argumentation, the empirical studies of this dissertation provide a contribution to business ethics. In a vignette study, we investigated how the moral evaluation of investment decisions changes based only on variation in the name of the person making the investment decision. The fifth chapter contains an extensive abstract, and the entire paper is included in the appendix. These descriptive studies describe the moral evaluations of business-related actions and thus contribute to business ethics. Of course, a normative evaluation cannot be derived from them directly, but understanding what drives the evaluations of others is relevant.

4.3 Description of Moral Behavior

In addition to the moral judgment of an action, studying the actual behavior of individuals is also of interest for business ethics. Moral judgments, on the one side, and the implementation of action, on the other, might not align. For example, if there is a consensus that not paying for public transport tickets is immoral but individuals still do not pay, this insight should at least be taken into account when considering how to create rules. This classic case of the free rider problem is just one example that is of interest in this context. It is through this lens that would like to see much of the literature on experimental ethics understood. Although, for example, Knobe's studies are also subsumed under the category of experimental ethics, this section is explicitly concerned with the empirical observation of actual actions and not with intentions. Experimental ethics research has two intentions, and these approaches can be separated as follows (Lütge & Uhl 2017; Tietz & Weber 1980). First, it tests established economic theories and measures their validity using various factors. Second, the knowledge gained forms a basis for the development of new realistic theories.

Experimental ethics constitutes an important domain within descriptive ethics, aimed at examining observable patterns of human behavior. In experiments ethics, the literature traditionally distinguishes between experiments to investigate human behavior that are conducted in the field and those conducted in a laboratory (Lütge & Uhl 2017). Field experiments take place in the natural environment of the test subjects and have a high degree of external validity because the subjects do not know that they are participating in an experiment. In laboratory experiments, artificial scenarios are created to measure human behavior. Moreover, the exclusion of many external effects generates higher internal validity. The participants know that they are participating in an experiment. Due to this fact, some question the ability of laboratory experiments to produce conclusions about the real world. The counter-question, why laboratory experiments should not be considered the real world or what the real world actually is, is an answer to this question. Laboratory experiments can counter the fundamental objection or problem of the social sciences to create a ceteris paribus condition.

What questions does experimental ethics deal with? Questions that are described empirically are, for example, how fairly a person behaves or how selfishly a person deals with existing goods. Here, theoretical assumptions about a strictly (self-) benefit maximizing actor are compared with actual behaviors based on a given set of rules with real money paid out. Game theoretical models, such as ultimatum games, are used to answer this question. The ultimatum game was first presented by Güth et al. (1982) and describes a situation in which two individuals act one after the other. Each person decides only once. Person A has endowment E. In the first step, person A makes an offer to person B, which includes share p of endowment E. After person B has been informed of the offer by person A, person B has the option to accept payment pE, thereby leaving payment (1-p)E to person A, or rejecting the offer. If person B rejects the offer made by person A, both are left empty-handed. The game can be displayed as a game tree or a payoff matrix, which shows the decision paths or decision options and the resulting payoffs. The payoffs in brackets should be read as follows. First the payout for person A is named and then the payoff for person B.

	person B	
person A	(1-p)E ; pE	0; 0

Figure 4.1: Payoff matrix ultimatum game

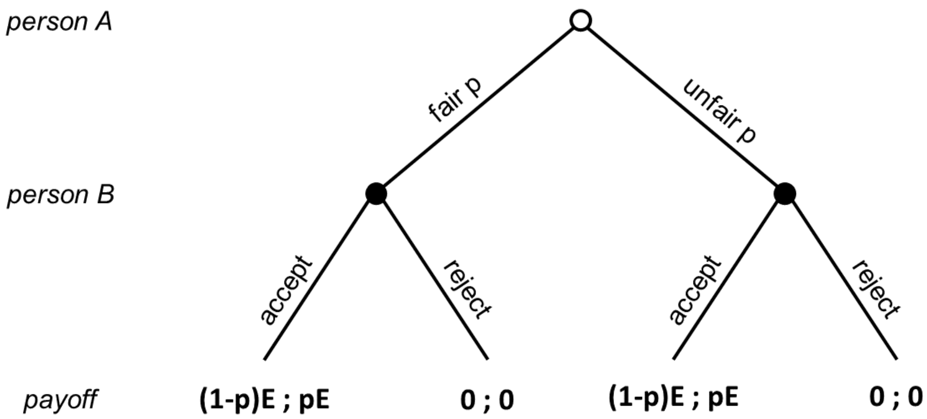

Figure 4.2: Game tree ultimatum game

Following the logic of the game, person A has an incentive to offer a high percentage p to person B in order not to go away empty-handed. An offer is considered fair when p=0.5. In some versions of the ultimatum game, only certain values for p may be selected. The number of strands from person A to person B depends on the number of values that can be selected for p. If any value between 0 and 100 can be chosen for p, there should theoretically be an infinite number of strands between person A and person B. For the sake of simplicity, I have limited this example to two option: fair and unfair. Fair is meant not only in the sense that p=0.5 but also in the broader sense of the word, which is not clearly defined. Assuming they are consistent utility maximizers for whom utility is defined only by the receipt of monetary units, person B would accept any offer for which $p>0$, since any receipt of payment is better than 0. Person A would offer the minimum possible p in anticipation of this behavior to maximize the monetary payoff. This behavior would be unfair by the above definition. What is the result of this experiment?

The ultimatum game is one of the standard games of experimental ethics and has been refined and adapted to generate more detailed insights into human actions. For example, several studies focused on whether and how p (i.e. the amount of money transferred to the recipient) varies across countries or continents (cf. Oosterbeek et al. 2004; Buchan et al. 1999; Roth et al. 1991). In an analysis of 37 papers on the ultimatum game, Oosterbeek et al. (2004) determined that the average for p is 40 and that offers are rejected in 16% of cases. For instance, according to this study, the average p in Germany is 36.7, and the rejection rate is 9.5%. Germans are, in this sense, less fair or willing to take a higher risk that their offer will be rejected. Another observation is that delay leads to a decrease in the rejection rate, even for bad offers. According to Grimm & Mengel (2011), a reduction change of about 10 minutes in person B's decision time is associated with an increase in rejection rates from below 20% to about 60-80%. Oechssler et al. (2015) show the same trend. Comparable studies have also been conducted in great apes. The result indicated that apes tend to behave similarly and are more likely to share their equipment E (Proctor et al. 2013). To counter the argument that person A chooses a $p>0$ just to minimize the risk of going away empty-handed in the end, one could use empirical results from the dictator game. The dictator game, which is not actually a game in a strict sense because only one person receives compensation, is a variation of the ultimatum game. In the dictator game, person A again has endowment E and in the first and only turn of the game offers person B share p of the endowment. In contrast to the ultimatum game, person B has no choice and must accept the amount pE from person A. Person A is therefore called a dictator.

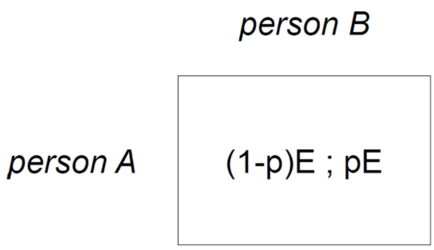

Figure 4.3: Payoff matrix dictator game

In this game, a rational actor whose utility function contains purely monetary values (or the values of which endowment E consists) and, by definition, has the goal of maximizing his utility function, must choose a p=0, since he does not have to anticipate a decision of person B.

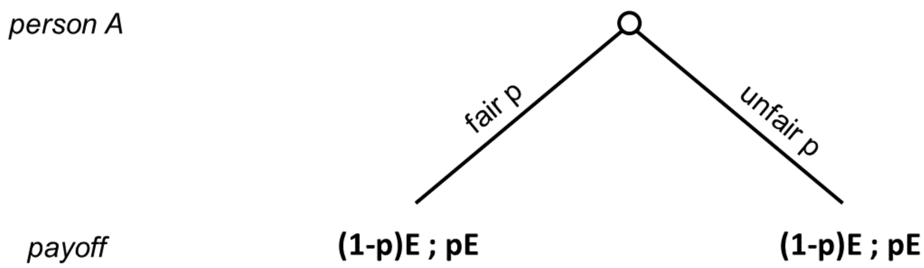

Figure 4.4: Game tree dictator game

Any p chosen by person A will prevail. How do dictators behave during the experiments? In a meta-study including 129 games with 616 treatments, Engel (2011) shows that dictators, on average, choose a p of around 28.3% depending on the calculation. This percentage can be interpreted as a gift for person B. Again, a value of p=0.5 can be considered fair. Person A is therefore neither completely sadistic nor fair.

What can we learn from these results? In both games or in game theory experiments in general, results depend on the setting of the experiment. Emotional proximity and less anonymity correlate with significantly larger proportions for the receiver's p (cf. Rigdon et al. 2009; Charness & Gneezy 2008; Frey & Bohnet 1995). Nevertheless, the experimental findings are not sufficient to explain the normative question of what amount should be considered fair. The determination of the morally correct amount is therefore addressed by concepts of normative ethics such as the Kantian categorical imperative, with consequentialist considerations or religious teachings, that might determine a value of p=0.5, p=0.3, and so on as moral. Perhaps the Judeo-Christian formula "Love your neighbor as yourself" could be the easiest to translate with a value of p=0, which implies that the entire amount should be transferred to the counterparty.

Empirical methods for investigating moral behavior are not exclusively experimental, and there are alternatives as well. Regarding the ethical behavior of ethicists, Schwitzgebel (2009) discovered an interesting finding. In his study, Schwitzgebel measured the ethical behavior of various academic disciplines by the amount of stolen books in academic libraries. The figures indicate that ethics books have a 50% higher probability of being stolen than non-ethics books.

Why are these results relevant to business ethics? First, it is important to know the many factors determining human actions and that ideas of fairness or altruism that play a role in human decision-making. This applies to ultimatum games and dictator games. Another adverse insight is that the presence of altruistic patterns depends on social conditions or the general framework. I conclude from the studies that individuals in anonymous markets act less altruistically. This finding is relevant against the background of the increasing use of the anonymous internet as a marketplace. Business ethics, which is defined as the examination of the right way to enforce norms, must consider these findings and develop a mechanism that compensates for anonymity and emotional distance. In the design of digital markets, for example, a reduction in anonymization and a stronger focus on the enforcement of consumer protection legislation could lead to less selfish actions among individuals.

The examples described here suggest that the participants of the experiments made their decision consciously. However, in practice, many factors that influence human decisions are of an unconscious nature. In particular, between-subject experiments show that individuals often consciously or unconsciously act against their own convictions. I found this result in the third work underlying this dissertation. In the experiment, test persons were asked about the moral evaluation of decisions. In one case, they were shown two decisions, and in another case, they were shown only one. The observation of the moral evaluation showed a significant difference. Although the subjects initially assessed the decisions, which differed only by the actual outcome after the decision, as having the same moral evaluation, I showed in a between-subject design that the actual outcome did have an influence on the moral evaluation. One can conclude from this that individuals consider the actual outcome of a decision to be morally relevant, although they say that this should actually not be the case. Ethics does not often consider this discrepancy.

4.4 Descriptions of the Implications of the Behavior of Individuals

As the late Pope Benedict XVI. stated, the understanding of economic relationships is essential for business ethics. He said, "A morality that believes itself able to dispense with the technical knowledge of economic laws is not morality but moralism. As such it is the antithesis of morality" (Ratzinger 1986, p. 204). It is therefore not only the observation of individual behavior that matters for the norms and moral desiderata but also the effects of collective action.

The role of collective behavior has been highlighted in the publications of Ingo Pies and especially his empirical work on speculation with food commodities. Since the advent of the 21st century, and especially during and after the global financial crisis of 2008, the prices of food commodities (e.g. wheat, corn, rice) have risen sharply, especially on futures markets. This fact has led to controversial discussions, especially in Germany. Nongovernmental organizations such as Hachfeld et al. (2012) have organized campaigns to condemn food commodities on futures markets by players, such as Deutsche Bank AG, due to the perceived connection between increase in prices, hunger, and speculation. Ingo Pies and colleagues from Halle-Wittenberg had taken this accusation as a motivation to conduct empirical studies on the connection between institutional trading in food commodities on futures markets and the sharp rise in food prices (Will et al. 2015; Pies et al. 2013a; Pies et al. 2013b). These studies show that the price increase could be traced back to developments in the real economy and political decisions.[2] Irrespective of the real causal linkage and the veracity of the claims made by NGOs and scholars, the example sheds light on the relevance of empirical work for solving ethical issues such as the eradication of hunger or stability in financial markets. Proponents and opponents of food speculation (cf. Pies et al. 2013a) need therefore to consider the economic consequences of either permitting or prohibiting these kinds of economic activities.

Another similar example discussed in business ethics is the trade of ivory. There is wide consensus that killing elephants to acquire ivory constitutes a morally condemnable act. The argument is that killing animals is generally immoral, that killing elephants is specifically immoral because elephants are a rare and endangered species, or that killing animals is forbidden beyond natural procurement. As a result, processing, trading, buying, or presenting ivory has been scrutinized in order to reduce the demand and supply of ivory. Since

[2]For further literature on this topic, I recommend Hielscher et al. (2016), Conrad et al. (2014), Chowdhury (2011), Wahl (2009) and Robles et al. (2009).

ivory often comes from illegal sources and the trade is legally prohibited in many countries, according to the Washington Convention,[3] since 1975, poachers and illegal traders have become a major challenge to regulate, and it is difficult to enforce the moral conviction to protect elephants. With around 8% of the world's elephant population being lost annually due to poaching, many governments are resorting to high-profile measures to deter and supposedly combat poaching and to promote the consumption of ivory as taboo (Sosnowski et al. 2019). In April 2016, a record 105 tons of ivory were burned by the Kenyan government out of this motivation. As a result, 105 tons of ivory worth up to 220 million USD were taken off the world market through this measure. The motivation for ivory burns was to create general awareness of the issue, reduce supply, make consumption taboo and thus reduce demand, and make poaching and trade taboo (Braczkowski et al. 2018). Although this burning of ivory was by far the largest incineration to date, 21 countries have burned some 263 tons of ivory since 1989. Although these measures are meant to improve elephants' living conditions, they may have exactly the opposite effect. Prices on illegal markets increase after reducing the supply to such an extent, thus making poaching even more attractive as an economic activity (Biggs et al. 2016; T'Sas-Rolfes et al. 2014). Scientists are calling for this effect to be extended in order to regulate legal trade (Walker & Stiles 2010).

It is obvious that both examples differ in at least one crucial factor. In the first example, the normative statement (i.e., that speculating with futures contracts with the underlying of food commodities is immoral) would be in vain in the absence of a causality between the trade of futures contracts, price fluctuations, and food shortages in low-income countries. In the second example, a normative evaluation would be completely independent of the described effect of the public burning of ivory because this is not directly concerned with the actual normatively condemned killing of elephants but rather the evaluation of measures, such as this aim of protecting elephants that can be achieved. To pick up on Suchanek's

[3] Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) signed by 182 countries and the European Union.

scheme, the example of speculation with food is about both levels (1) and (2), whereas the example of the burning of ivory is only about level (2)(cf. Suchanek 1999).

The role of incentives concerns other examples as well. A similar effect where a target was missed due to a wrong economic incentive would be the cobra effect in India (cf. Chollete & Harrison 2021; Siebert 2001) or the rat effect in Vietnam Vann 2003. Beyond these rather microeconomic examples, macroeconomic methods are also relevant for business ethics. Business ethics can only be enriched by economic methods, which are ultimately descriptive economic/ethical methods in the broader sense. This enrichment takes place not only on the level of how a normatively desirable circumstance can be achieved but also in regard to whether something is at all normatively desirable.

5 Contributions - Extended Abstracts

The dissertation is based on three articles, which are the foundation of this cumulative doctoral thesis. The copyright of the papers lies with the respective journals. The complete papers are attached in the Appendix. At this point, I summarize the main findings of the papers so as to put them into the context of this thesis.

5.1 Study 1: Economic Activities under Uncertainty: The Difference between Speculation, Investment, and Gambling

The first paper was published in the *Journal of Management and Sustainability* (Max et al. 2020, doi:10.5539/jms.v10n1p28). The starting point of the contribution is that definitions matter if they entail normative implications, as in the case of the distinction between murder, manslaughter, and grievous bodily harm resulting in death. The communality of this criminal act is that human action leads to the death of the person and that various aspects of the act of killing carry specific moral dimensions. The act of murder results in a longer sentence in prison than an act of manslaughter. A similar distinction appears in the context of investment, speculation, and gambling as well, where the act of buying and selling a share or another instrument generates various normative implications. While gambling and speculation are often regarded as immoral, investment is more often regarded as an economic activity generating an added value for society. Given the lack of a formalized conceptual framework for differentiating between speculation, investment, and gambling, the contribution addresses the underlying properties of speculation, investment, and gambling and considers whether the differentiation between these companies is meaningful and consistent.

Critical reflection of the conceptual background and differences of investment, speculation, and gambling generates the following insights: In practice, there appears to be a tendency to brand successful deals as investment and unsuccessful activities as speculation. However, distinguishing between economic activities requires consistency over time, which means that an economic activity has to be classified in the same way before and after it is implemented. Otherwise, it would be an arbitrary judgment. This implies that the differentiation of speculation, gambling, and investment cannot logically depend on the outcome. If the normative assessment of specific actions is possible ex post, the business ethical discussion would be absurd because it implies that morality depends on moral luck and that the better investor is morally superior. The second conclusion is that gambling differs structurally from investment and speculation. The differences between gambling and the other economic actions originate in the classic distinction between quantifiable risks and non-quantifiable uncertainty, as well as the separation between consuming and non-consuming activities. Gambling is traditionally associated with luck and consumption and not with arbitrage, information gathering, and foresight. The third insight is that investment and speculation share too many similarities to be separated in a consistent and meaningful way. We regard investment as a euphemism and speculation as a dysphemism rather than a distinct concept. Analysis of the similarities and dissimilarities of investment and speculation was carried out in the criteria established in the literature, and it concerned aspects of the time frame of the economic activity or risk exposure. The only remaining difficulty was the distinction based on the actual interest of a person in the acquired or traded instrument. However, this distinction struck us as unpractical given the fact that the distinction of investor and speculator does not focus on the individual case (i.e., whether person A or B is a speculator or investor) but rather labels specific economic sectors or markets (i.e., whether speculation appears in market A or B).

The conclusions of the paper form the basis of the remainder of this thesis. We regard speculation as all economic activities under uncertainty and refuse the idea that investment can be separated in a consistent and meaningful way. Moreover, speculation and investment face seemingly inherent and contingent ethical dilemmas, as the phenomenon of speculation or the characteristics of what is deemed to be speculation can be encountered beyond financial markets. Economic activities under uncertainty are ubiquitous and share a more or less reasonable intention to generate future rewards. The later concepts will be depicted as arbitrage. Since pure or perfect arbitrage is not subject to uncertainty, it has different characteristics and must be treated ethically differently. The argument in this thesis is not based on financial market-specific challenges but tries to develop a generally valid concept for deciphering common patterns of human action and specific problems that accompany them.

5.2 Study 2: The Downside of Moralizing Financial Markets: Anti-Semitic Stereotypes in German MTurkers

The second article used for this dissertation was published in the *Journal of Behavioral and Experimental Finance* (Max & Uhl 2021, 10.1016/j.jbef.2021.100512). The paper entitled “The Downside of Moralizing Financial Markets: Anti-Semitic Stereotypes in German MTurkers” is an empirical study with its own collection, evaluation, and classification of data.

Against the background of heated normative debates on investment decisions, we examine the underlying reasons for certain judgements. To test a hypothesis that could be widely accepted, we investigated whether an investor’s arbitrary characteristics could be decisive factors in the moral evaluation of his behavior. In this study, we therefore test whether individuals violate the moral rule of impartiality (Jollimore 2017; Frankena 1973). The basic moral rule that, for example, the length of a convicted person’s stay in prison should not depend on gender, origin, sexual preference, or religion should be widely accepted. Age discrimination might be necessary in some situations to protect minors from kidnappers. However, this argument is not meant here. We mean that the same action should not be judged differently depending on the person performing the action. After pretesting with a variation of gender, we decided to use the centuries-old stereotype of the "greedy Jew" as a basis for the test (Ribbens 2018; Berinsky & Mendelberg 2005).

To test the existence of this stereotype, we first examined in the first study whether certain names or surnames suggest a religious background. This investigation was very clear and led to the selection of six male German first and last names. These names, three perceived as Jewish and three perceived as non-Jewish, were then varied in vignette studies in identical investment contexts. The results were unambiguous. Persons with names perceived as Jewish were significantly more likely than persons with names perceived as non-Jewish to be morally accused for making identical investment decisions. We then examined whether the assessment of an investment's issues as immoral violates the generally accepted principle of moral impartiality—that is, the view that the moral assessment of actions should not depend on the arbitrary personal characteristics of the actor. In the control studies, we examined whether the difference in moral classification was due to outgroup bias or consisted of familiarity cues. To rule out a potential outgroup bias, we conducted the same study with Italian and British names. The result was that German Jewish names were also classified as significantly more immoral than British and Italian names. We investigated familiarity cues using another between-subjects survey in which we asked subjects about familiarity. The result was again that a familiarity bias could be excluded because all names were classified as equally familiar or unfamiliar.

We understand this study to be an important contribution to descriptive business ethics, in the sense of the above arguments, and to normative business ethics, since it shows that obviously irrelevant factors significantly influence normative judgements. Our research was not intended to investigate the existence of anti-Semitic tendencies in contemporary Germany; this finding was a quasi, secondary finding. Our intention was to show that, in a normative discourse, we should pay close attention to whose decisions we consider to be morally good or bad and why.

5.3 Study 3: We find profitable investments more moral although we think we shouldn't

This study had not yet been published at the time of submission of this dissertation and was in the review process at the *Journal of Behavioral and Experimental Economics*. To avoid plagiarism and copyright violations, the complete paper is not included in the Appendix, and the findings are described only briefly. The article, written with Matthias Uhl, combines the results of the first two studies and examines empirically how moral investment decisions are seen in various contexts.

From a methodological perspective, we designed the experiment as a vignette study to examine the moral evaluation of investment decision. The difference from the second study is that the object of investigation was not the investor but rather the investment decision itself. The aim of this article was to contribute to the descriptive discussion of ethical and sustainable investments. In December 2016, the European Union set up the High-Level Group on Sustainable Finance and, among other things, has tasked it with creating a taxonomy by which investments can be classified as sustainable (cf. Cullen 2018).

For us, the question of whether the classification into ethical and unethical investments depends on the economic outcome of the decision was intriguing. Every investment decision is initially made under uncertainty, and an ethical ex ante assessment of this decision consequently also follows under uncertainty. Regarding this question, reference is again made to Study 1 of this dissertation (cf. Max et al. 2020). The observation of this classification ex post becomes interesting if it is possible to examine whether this decision had economic success.

We see this inquiry in the context of Bernard Williams' (1981) and Thomas Nagel's (1979) discussion of moral luck. The discussion raises the question of the extent to which the ethical evaluation of an action should depend on the outcome of that action.

In an online experiment, we investigated whether the ethical evaluations of investment decisions depend on their arbitrary outcomes and whether the interpretation of the nature of the decision is driven by the outcomes. The question addressed in this paper is therefore whether the moral classification of an investment decision depends on the outcome of the investment, and the paper presents cases in which the same decision resulted in a loss and a profit. To get a more comprehensive picture, we presented the same scenario in three contexts in the vignettes. The investor worked once in a bank, an automobile company, and a municipality, respectively. Using a 2x3 design, the vignette described a positive and a negative outcome for the same investment decision in each of the three contexts. Following the vignette, the subjects were asked how they would evaluate the decision morally and how they would label the behavior. The specific questions included the following: “How would you evaluate Mrs. Roberts' behavior?” and “What would you call Mrs. Robert's behavior?” The options were as follows: “Mrs. Roberts was investing,” “Mrs. Roberts was speculating,” and “Mrs. Roberts was gambling.” Mrs. Roberts is the name of the investor described in the vignette. Given the design of this experiment, the subjects were asked to judge the investment decision ex post as they already knew the economic outcome of the investment decision.

The result was that, across all contexts, successful investment decisions were rated as significantly more moral. Also across all contexts, profitable decisions were described as an "investment" significantly more often than investment decisions that turned out to be economic failures.

In the second part of the study, we examined whether the results described above were the product of a rational deliberation process on the part of the subjects or whether they were the result of an unreflective moral intuition. Just as in the first experiment, the investment scenarios were presented to the subjects across the three different contexts. The only difference was that this time they could not directly see the economic outcome. The subjects had to morally evaluate the decision and label it as investment, speculation, or gambling before they knew whether it would result in a loss or profit. Hence, an ex ante decision was asked here. After answering the question, subjects were presented with the economic outcome of the investment decision and given the opportunity to change their moral classification and labeling. The result was that the moral evaluation of the decision and the labeling did not differ significantly in the case of a loss and a profit.

In this between-subjects experiment, subjects rated economically successful investment decisions ex post as more moral than unsuccessful decisions, even though they believed in a rational deliberation process that the moral evaluation of the decision should not be influenced by the outcome. We concluded that we should be careful and sensitive to our own cognitive biases as we make increasingly ethical investment decisions.

An empirical science cannot tell anyone what he
should do–but rather what he can do–and under
certain circumstances–what he wishes to do.
(Weber, 1904, p. 27, translation by the author)

6 Limitations of Descriptive Business Ethics

The following chapter concentrates on the possible objections to and limitations of the arguments above. The underlying question is whether a non-normative descriptive business ethics can exist at all and whether the contribution of descriptive business ethics is based on a broad foundation or only replicates existing worldviews. This goes along with the question of whether the insights yielded in the dissertation contribute to the general discourse. The ambition in this section is not to engage in a discussion of the theory of science but merely to outline possible objections to the approach presented in this paper. Can descriptive business ethics be independent of normative business ethics or non-normative? If a descriptive business ethics approach is based on normative classifications or ideas, this would mean that the approach is not descriptive. However, if any descriptive business ethics is normative per se, it can be concluded that descriptive business ethics cannot exist at all and that distinction between descriptive and normative ethics is invalid. Werhane (1994) argues that there is and can be neither a pure empirical or descriptive nor a pure normative method in business ethics. Her argumentation could be transferred to other applied disciplines or domains of ethics. She believes that because people of the Western have a Judeo-Christian foundation, because their scientific approaches are based on the Enlightenment, and because they build on classical economics, especially in business ethics, they can never be completely independent or impartial. According to Werhane's argumentation, a descriptive method cannot be independent because every questioning, collection of data, interpretation, and discussion of the data is embedded in its own tradition, education, culture, and experience. De Graaf (2006) continues this line of argument. Willmott (1998) also argues that descriptive (business) ethics always hinges on the researcher's concept of value and can therefore never be purely descriptive. Ellertson et al. (2016) follow this argumentation, especially with regard to the methods of behavioristic business ethics described in Chapter 4.3. Pronin et al. (2002) describe the human bias of believing oneself to be completely free or at least freer from influence than others, as well as being able to pursue a fully descriptive business ethic as a bias blind spot. Blasi (1990) argues that the claim that empirical methods can be used to help normative reasoning could undermine the necessary rigor for empirical research. Other disciplines in humanities also deal with the same challenges and questions (cf. Mohanty 2001; Goddard 1973; Strauss 1950). These arguments are generally referred to as fact/value dichotomy and are closely related to the naturalistic fallacy presented by Hume (cf. Botha 2017; Putnam 2002). Previous scholars have addressed some aspects of this critique (cf. Harris 2011; Appiah 2008; Victor & Stephens 1994; Weaver & Trevino 1994).

Many aspects of the fundamental critique on descriptive ethics and social sciences in general apply not only to the presented argument but constitute more general implications for the very nature of descriptive studies. Most prominently, Max Weber can also be referred to as an example for the view that distinguishing between descriptive and normative approaches is possible and necessary (Weber 1904). The researcher's main task is therefore to minimize potential human biases and to separate between descriptive and normative approaches. Most of these positions outline that value neutrality constitutes the fulcrum of descriptive sciences and that scholars should to approximate to the most accurate description of the world. This approximation process of trying to develop more precise theories and models for explaining reality constitutes therefore to the primary task of social sciences.

7 Concluding Remarks

The basic mission of all moral philosophers is probably to answer the question of what is good and bad. Business ethicists try to argue for a better world based on this challenge and create a system that in their eyes makes the world a better place. The ideas and arguments of business ethicists are, however, often very different, and in many places, there are seemingly insurmountable rifts between various streams and traditions in business ethics. These scholarly disputes should always be understood as a fight for a better world, although these schools might not even acknowledge each other as having this goal of improving the world. The reason as to why various positions are often fundamentally different is not the actual intention of the representatives but because there are different assumptions about the behavior of people, the social framework, and basic philosophical beliefs. I am convinced that the aim of a business ethicist should therefore not be to provide the only focus of the ethicists' time and muse on the discussion of normative assessments of global challenges but rather to use empirical methods to broaden the basis of normative judgements for all participants in the discourse.

Even if the fundamental beliefs of different business ethicists are completely different and there are gaps in questions, such as whether moral judgments have objective validity, whether empirical knowledge can be possible at all, or whether there is general non-recognition of objective descriptive business ethics, the contribution of descriptive business ethics will always provide arguments that can only improve the philosophical discourse qualitatively. The goal of improving the world will be the unifying element of all business ethicists. With this work, I have tried to contribute to the enrichment of the business ethicist's path. All four examples of the contribution of descriptive business ethics described above offer a wide range of future research opportunities to improve our understanding of human beings, their moral judgments, their actual behavior, and, finally, the conditions and social contexts of their actions.

I argue in this paper that descriptive business ethics contributes to business ethics with various methods and approaches. In describing the contribution of descriptive business ethics, I distinguished between the labeling of actions and distinction of concepts, the observation and measurement of moral judgements, actual moral behavior, and general economic methods. My argument is that we need a stronger consideration of the results of descriptive business ethics in normative judgements and the resulting recommendations to improve the legal and social framework conditions of human decisions. Our decisions must have a strong normative foundation and consideration for the given external conditions of our actions. This means not questioning the necessity and importance of a strong normative foundation but rather increasing the probability of fulfilling our normative goals. Helmut Schmidt, the fifth Chancellor of the Federal Republic of Germany, may have also shared this view on the basis of the following concluding words of his last speech in the German Bundestag:

> What we want to achieve, what we want to do, must be morally justified. The way in which we try to achieve the goal must be realistic, it must not be illusory. [...] The achievement of the moral goal requires pragmatic, rational political action, step by step. [...] **No enthusiasm should be greater than the sober passion for practical reason.**
>
> Helmut Schmidt, (Deutscher Bundestag, 1986, 17685, translation by the author)

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A Publications

A.1 Study 1: Economic Activities Under Uncertainty: The Difference Between Speculation, Investment and Gambling

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Economic Activities Under Uncertainty: The Difference Between Speculation, Investment and Gambling

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Abstract

In the ethical discourse about financial markets, the terms "investment", "speculation" and "gambling" often seem confusing and lack a clear distinction. The inconsistent use of this terminology has concrete consequences for the public perception. We attempt to establish a concept which draws a clear line between these activities and can serve as a baseline for discourse about how to assess investment, speculation and gambling on a normative level. We analyze existing literature and develop a conceptual framework to provide an overview of the differences between investment, speculation and gambling. We conclude that gambling differs structurally from investment and speculation in terms of the classic distinction between risk and uncertainty and the separation between consuming and non-consuming activities. Moreover, we arrive at the conclusion that investment and speculation share too many similarities to be separated in a consistent way.

Keywords: investment, speculation, gambling, uncertainty

1. Introduction

Are speculators thieves, and investors angels? Is gambling per se morally wrong? Why do we "invest" in our human capital but never use the verb "speculate" in connection with human capital? The normative assessment of investment, speculation and gambling has a rich tradition and dates back to antiquity. A majority of observers accept the communality of investment, speculation and gambling, and the fact that the outcome of these economic activities is unknown ex-ante, whereas the differences between investment, speculation and gambling remain disputed, controversial and often inconsistent. The insufficient clarity concerning the boundaries of these financial activities influences our perception: Academic papers and journalistic articles alike regard speculation and gambling as a moral problem, but often fail to provide consistent definitions of what they define as "speculation" (Sandel, 2013; Krugman, 2009). Journalists, NGOs and politicians label gamblers and speculators as "irresponsible", "uncaring renegades" or "locusts", whereas the term "investor" designates a prudent economic actor who adds a value to the social good. A brief look at Goethe's Faust, Dostoyevsky's "The Gambler" and Pushkin's "The Queen of Spades" reveals that this perception is not a novelty, but rather an old stereotype. When analyzing the historic perception of economic activities under uncertainty, we find that the contemporary discourse mainly focuses on financial markets. In this sense, the debate seems to fall short, as economic actions under uncertainty in fact encompass all sectors of the economy.

As public opinion and legislation depends on clear definitions, we concentrate on the task to disentangle investment, speculation and gambling. If scholars and ethicists aim to improve public discussion and provide findings in order to advance regulation, they need to provide clear definitions and dispose of distorted definitions (cf. Szado, 2011). Although, several scholars before us have concerned themselves with finding definitions for investment, speculation and gambling, we still lack an elaborated framework to define and to characterize financial activities. Therefore, the aim of this conceptual paper is to analyze how scholars differentiate between those concepts, highlight weaknesses of previous concepts, formulate our own approach and provide a consistent basis for normative assessment.

2. Historical Background

In the following part, we argue that the critique of profit maximization, based on the philosophy of the pre-modern era, the concept of a just price (cf. Luetge, 2015) and the rejection of gambling activities constitute the fundament of the widespread negative perception toward economic activities under uncertainty. Although we find the earliest distinction between investment, speculation and gambling in Joseph de Vegas' Confusions of Confusions in 1688, the genealogy of moral and immoral forms of financial activities dates back to Plato and Aristotle. In general, both philosophers had a critical perception of financial activities, as they regarded profit-maximization as detrimental to the *eudemonia* of the individual and the *polis* alike. In *The Republic*, Plato related profit-orientation with the lowest social class, which represents the domain of lust in human soul, and defined justice as fulfilment of the individual duty for the society. Plato regarded individual profit-maximization as harmful to society, as it alters the wealth and income distribution of the *polis* and distracts citizens from politics. Likewise, Aristotle argued that profit maximization is the wrong motivation for economic activities and distinguished between two forms of economic activities: *Oikonomike* and *chremastike* (Aristotle, 1920). Economic activities falling into the first category aim at satisfying basic needs, whereas economic activities fall into the category of *chremastike* aim at maximizing profits. Aristotle saw the latter in a bad light and discouraged them for the same reasons as Plato (Aristotle, 2009). In ancient Rome, which was under strong Platonic, Aristotelian and Stoic influence, a similarly strong attitude against risk and uncertainty prevailed (cf. Cato, 2014; Cicero, 1913).

Based on Marx's reflections on speculation, Vladimir Lenin later called on speculators to be shot, as he perceived speculation as a typical phenomenon of bourgeois capitalism leading to the expropriation of the working masses (Volkogonov, 1994).

Unlike criticism of profit-maximization, gambling was primarily discouraged as it causes moral corruption and to a lesser extent because of adverse social or political consequences. Moreover, the perception of gambling varied throughout cultures and ages. In ancient Rome, gambling was even commercialized and regulated by law. However, the assessment of gambling changed after the advent of the world religions. Muslim (cf. IbnTaymiah, 1994; Murphy & Smolarski, 2017) and Christian scholars heavily criticized the practice of gambling, as it distracts people from productive activities and worship to God. Augustine called gambling an invention of the devil, a view which shaped centuries and influenced even modern politicians such as George Washington (Lutzer, 2001).

Analyzing the traditional moral perception of economic activities under uncertainty, we find that the critique of speculation in financial markets originates from the rejection of profit-maximization and gambling as well as the concept of a just price. Accordingly, opponents of speculation argue that it fosters a culture of greed and that speculation distorts prices, which in turn causes negative consequences for the economy. The criticism of gambling mainly originates from a rejection of risk-taking and the fear that it morally corrupts individuals.

3. Time-Consistency of Categorization

As stated above, the categorization of investment, speculation and gambling often leads to the situation that we treat similar actions differently. One important factor in the classification of financial actions seems to be their success, which results in the paradoxical situation that the press and academia label successful trades as investments while calling significant losses gambling or speculation. Examples of headlines of this type include: "The City trader accused of fraudulently gambling away 1.4bn GBP of his bank's money" (Neate, 2012) or "Bankrupt builder imprisoned after gambling away 1.5m USD" (Radio NZ, 2018). If the actions of the economic actors had had a positive outcome, the headlines would have probably been different. In the event of a profit, the "City trader" and the "bankrupt builder" would probably have been called successful investors. Following our hypothesis that different categorizations result in different perception and actual policy implications, the process and durability of the categorization is of significant importance. Hence, we argue that the assessment of an economic action ought to be equal ex-ante and ex-post. This means that we suggest not to classify financial activities by criteria, which change over time, but to search for inherent differences instead, which do not depend on the settings of the action. Hence, the characteristics of gambling, speculation and investment need to be based on inherent and not on accidental properties (cf. Brennan & Jaworski, 2015).

Moreover, the classification of purchasing a share needs to be consistent before and after purchase, regardless of the success or failure of the decision. Based on our argumentation that the assessment of economic actions ought to be equal ex-ante and ex-post, we conclude that the differences between the categories must be embedded in a deeper structure, and be determined based on our ex-ante knowledge of the characteristics of an action. These characteristics will be discussed in the following sections.

4. Why Gambling is Different

The American psychologist John B. Watson (2012) claimed, "stock gambling is about the only thing that offers the same kind of thrill that big game hunting does and you can play the market right at your desk." We argue that neither the idea of gambling in stock markets nor the comparison of stock trading and big game hunting are helpful for the debate on financial markets, as gambling fundamentally differs from speculation and investment. In contrast to investment and speculation, gambling is a consuming activity and not subject to genuine uncertainty.

In our view, the main difference between gambling and other forms of economic activities lies in the separation of uncertainty and risk. In his famous treatise *Risk*, *Uncertainty and Profit*, Frank Knight (1921) distinguished between two types of uncertainty. The first type, which he calls "risk", describes the situation when we know the potential outcomes and even their odds in advance. This form of risk typically occurs when we roll the dice or use slot machines and other variations of random generators. The commonality between these activities is not only that we can determine the probabilities of each event ex-ante, but that we can even calculate expected values. In contrast to risk, however, genuine uncertainty describes the situation where the probabilities are unknown ex-ante. Accordingly, uncertainty occurs in complex systems where many actors interact over time, such as the stock market, and where the outcomes depend on many different factors. In this case, we neither know the probabilities for certain events, nor can we clearly delimit the range of possible outcomes. Likewise, the success of currency trading on the day prior to the Brexit vote also depended on an infinite number of factors and probabilities, which in sum could not be quantified appropriately ex-ante. Since it is impossible to quantify uncertainty prior to the purchase of shares or real estate, investment and speculation constitute economic activities without measurable risks. Accordingly, rolling the dice and staking money in property differ in terms of complexity, as the success of investment and speculation depends on more than one factor, whereas gambling purely depends on chance.

The separation between uncertainty and risk also has an implication for the division between consuming and non-consuming activities. This classification originates from Keynes, who classified all economic decisions as "consumption" or "investment" (Keynes, 1936). In order to prevent conflation with our own understanding of investment, we have decided to use the term "non-consuming activities" instead of "investment". While "consuming activities" refer to utility maximization, "non-consuming activities" relate to profit-maximization. Since there is no rationally expectable long-term benefit in gambling—at least for the gambler—many authors describe gambling as a form of consumption (cf. Emery, 1896). While gamblers seek entertainment, pleasure or "thrill", investors and speculators rationally aim at maximizing their profit by delaying consuming activities (cf. Watson, 2012). Arthur (2000) argued in a similar way and defined gambling as a consumer activity and investment as a producer activity. According to Borna and Lowry (1987), gambling cannot take place under the assumption of strictly rationally acting individuals as the outcome is pure chance and the players will usually lose on average against the provider of the game. In a nutshell, gambling only makes sense if you are gambling in order to enjoy your leisure time. The etymology of the term "gambling" in the Germanic languages (Middle English: *gamenen* = to play, German: *zocken* (West Yiddish: *skhoken* = to play)) and in the Romance languages (e.g., Spanish: *jugar juegos de azar*; Italian: *giocare d'azzardo*; French: *jouer à des jeux d'argent*) seems to confirm our view.

What does this imply for the usage of the term "gambling" in financial markets? The comparison of certain activities in financial markets with gambling implies that financial markets are a zero-sum game. However, this argumentation seems to the neglect the peculiarities of gambling, the classification of consuming and non-consuming activities as well as the conceptualization of uncertainty. In situations where risks can be quantified ex-ante such "as rolling the dice", it is impossible to maximize profits, as the outcomes are determined by chance and not by individual skills or knowledge. As shown above, expecting to become a millionaire by rolling the dice one million times is irrational. However, profit maximization is possible in the face of uncertainties, and can create positive externalities. Knight (1921) argued that real opportunities for profit and win-win situations can only arise in the face of genuine uncertainty, while Schumpeter (1942) has labelled uncertainty as a driver for the economy and called it a process of "creative destruction". Sinn (1986) even defines uncertainty as a production factor and concludes that well-organized hedging always increases productivity (cf. Nell, 1990). In the case of uncertainty, it is not only possible to maximize profit, but also to create positive externalities, such as inventions and innovations. In the case of gambling, however, there are no externalities inherent to gambling per se. Therefore, the comparison of financial markets is not an apt description of reality, as players in financial markets strive to make profit based on theoretical assumptions of future developments and create spill-overs for other market participants. Based on this argument, we conclude that oft-stated political claims such as "Stop Wall Street Gambling!" are misleading and not helpful for improving financial markets and decreasing systemic risks.

Finally, the conceptual differences between gambling and transactions on the financial markets also affect the question of how to limit financial markets. While regulations on gambling naturally focus on the gambler, the laws concerning financial markets refer to the common good.

5. Investment and Speculation

In the previous section, we dealt with the conceptual differences between gambling and other forms of economic activities. In the following section, we will examine the question of how to separate speculation from investment and whether a distinction between the two financial activities is at all possible. Therefore, we evaluated the literature, (e.g., Arthur, Williams, & Delfabbro, 2016; Allen, 1952; Angel & McCabe, 2009; Borna & Lowry, 1987; Holliday & Fuller, 1974; Williams, Volberg, Stevens, Williams, & Arthur, 2017), collected the most common distinguishing features and checked them for consistency.

However, before we come to the conceptual differences between investment and speculation, we will examine their communalities. The shared principle of speculation and investment is that people are staking money by delaying consuming activities in the hope of future gains. Linguistic evidence seems to back up our assumption that investment and speculation share more similarities between each other than gambling. In Chinese, Korean and Japanese for example, speculation (C: 投机 / K: 투기 / J: 投機) and investment (C: 投资 / K: 투자 / J: 投資) share the same initial character with the meaning to throw or stake, which hints at major similarities in the two concepts, whereas the words for gambling do not (C: 赌博 / K: 도박 / J: 賭博). Accordingly, speculation and investment alike refer to the staking of money in the hope of future gains. However, where should one draw the line between investment and speculation? The concepts of investment and speculation have to be understood as ideal types in the sense of Weber (1976), as there is no such thing as perfect investment or perfect speculation.

In the following paragraphs, we list several oft-recurring arguments as to how investment and speculation could be differentiated. The arguments are concerning the expected time frame of an economic activity, the risk exposure and expected rate of return, the costs and effort of the decision-making process, the amount and origin of the funds, the economic utility of the action, the type of the underlying asset and the interest in the underlying asset.

5.1 Expected Time Frame of an Economic Activity

The vast majority of literature agrees that investment and speculation differ over the projected timeframe (e.g., Bunia, 2013; Bogle, 2012; Granero et al., 2012; Krugman, 2009; Graham & Dodd, 1934; Graham, 2009; Angel & McCabe, 2009). The idea of separating speculation and investment by duration has even entered financial market legislation. In some countries (cf. German Income Tax Act §23), the tax rate on capital gains depends on a diminishing scale regarding the holding period of assets. According to this perception, preparing long-term business projects is of a different nature to arranging intraday trades. While investment is typically associated with a long-term horizon and a sophisticated preparation, many observers view speculation as a short-term action. Bunia (2013) characterizes investment as having a long-time horizon and a concentration on real values, whereas a speculator merely makes use of short-term "irreal" deviations in actual market equilibria to make profits. Arthur et al. (2016) claim that most forms of investment are held for at least a matter of months or even years, and that speculation has a varying time horizon depending on the type of activity. The same applies to the actors: Speculators are generally accused of only being interested in short-time profit, whereas investors are following long-term goals (e.g., Granero et al., 2012; Krugman, 2009; Graham & Dodd, 1934; Angel & McCabe, 2009).

Although we regard the period of holding an asset as an important question, we refute the traditional view that time is a criterion to be used to distinguish between speculation and investment. The first concern is that we lack objective criteria for drawing the line. How long do you have to hold an asset in order to become an investor? More than a second? A day? A week? Months? A year? Our second concern is that the period of holding an asset might depend on the asset itself or the way it is traded. Finding the right period to distinguish between investment and speculation seems to be arbitrary, as the action might depend on constraints which are not specific to investment or speculation per se, but depend on the asset, the business sector or on how the market is structured. However, these constraints are not inherent to speculation. Our third concern is that the expected time frame of an acquisition may change over time, and hence cannot be assessed objectively ex-ante. The shortcomings of the classical definition become evident when it comes to hedging: Is it speculation if a corporation in the energy sector which has acquired futures in crude oil in order to hedge price fluctuation with the intention of holding the position for several months, sells their futures after only one day due to unexpected profits? Does a fund which usually only holds position for five years or longer—and hence is commonly seen as an investor—become a speculator if it is hedging economic risk overnight, or is it both?

In such cases, the classic definitions of speculation and investment fail to capture the structure of the problem and might even create a wrong perception. Moreover, a solid distinction allowing the development of a normative basis of economic actions ought to be based on a more sophisticated concept and clear rules.

5.2 Risk Exposure and Expected Rate of Return

Another perseverative argument found in literature is that speculation and investment diverge in terms of risk exposure (e.g., Arthur et al., 2016; Shin, Choi, Ha, Choi, & Kim, 2015; Graham & Dodd, 1934; Graham, 2009). Traditionally, observers (Shin et al., 2015) associate speculation with a high risk and excessive profits, whilst perceiving investment as a financial activity with a low risk exposure.

Our first concern in differentiating between speculation and investment according to the risk exposure relates to the question of economic abstention. As Luhmann (1991) described, not deciding or explicitly deciding not to participate in economic actions bears huge risks as well. Luhmann's argument is a convincing one due to its practical relevance. Not investing money in times of inflation might have similar consequences to buying a share, which then declines in value. However, the costs of economic abstention appear to be hidden and economic abstention can impose high opportunity costs on individuals.

Our second argument concerns the separation between risk and uncertainty itself. In our view, the aforementioned argumentations of disentangling investment and uncertainty commit the same fallacy—the lack of separation between risk and uncertainty. Before, we delve deeper into our argument; we need to clarify the object of our observation, namely risk and uncertainty. Etymologically, "uncertainty" and "risk" are closely related and regularly confused. Many argue that the word "risk" can be derived from the ancient Greek word for "cliff". In Chinese, "risk" can be derived from the character for wind. Wind and cliffs represent danger and uncertainty, as sailors were often not able to foresee cliffs, due to poor visibility during a storm. From a historical and philosophical point of view, the ideas of risk and uncertainty were connoted to naval matters, which coined the understanding of uncertain economic activities (Cato, 2014). By the 20th century, the terms "uncertainty" and "risk" had become a major focus for economists. As stated above, according to Knight (1921), uncertainty and risk are two different concepts. While risk refers to uncertainty which is quantifiable such as rolling the dice, uncertainty proper describes the situation where we are not able to know the percentage and the odds ex-ante. Based on Knight's division between risk and uncertainty, we conclude that there is no such thing as genuine risk in financial markets. The movement of a share price depends on an infinite number of parameters which the shareholder ultimately may not be aware of and cannot influence. The same holds for the successful purchase of a company. As it is impossible to give a success ratio for a given case, we are not able to calculate the risks and hence cannot differentiate between high-risk and low-risk. The difference between "investment" and "speculation" therefore cannot depend on the exposure to risk, as both activities fall under the umbrella of "uncertainty". As risk cannot be defined ex-ante, classifying economic actions by different levels of risk is not appropriate, in our view.

5.3 Costs of the Decision Making

Another criterion to distinguish between investment and speculation is the time and effort dedicated to preparations for the investment or speculation decision. The topic relates to the rationale of separating investment and speculation by the role of luck and skills. Many argue (e.g., Tracey, 1932), that investment decisions do not depend on luck, but on the skills and foresight of the "prudent" investor, whereas speculators solely depend on luck and chance (Bogle, 2012). The role of chance also plays a role in other approaches, which compare speculation with mathematics (Bogle, 2012) and (Vogl, 2010). According to this view, investment is associated with analyzing fundamentals and developing an extensive strategy, whereas speculation is regarded as mere observation of price movements, technical charts and, in the end, luck. Consequently, Granero et al. (2012) posit that speculators generally do not carry out risk analysis, which minimizes the effort and time spent on the decision-making process.

However, we do not regard the costs of decision as an apt criterion for delineating investment and speculation. Similar to the chapter where we concentrated on the "expected time frame of an economic activity" and the "risk exposure and expected rate of return", we regard the preparation time not as something specific to speculation or investment, but rather a characteristic of the asset. Betting on commodity prices requires, for example, a huge amount of time, and individuals have to be knowledgeable about political, macroeconomic and structural surroundings. At the same time, purchasing houses in order to re-sell them at a later period requires that individuals gather object specific information. Hence, distinguishing between investment and speculation in terms of preparation time seems to be arbitrary, as the action might depend on constraints which are not specific to investment or speculation per se, but on the asset, business sector, design of the market and the individual who decides how much time he will dedicate to his decision. The same applies to the proportion of luck and skills. Although successful investment decisions depend on foresight and skills, the role of chance or luck should not be underestimated. The terms "chance" and "risk" have a close linkage, as "chance" relates to events which are not controllable by the actor. Keynes' statement, that businesspersons play a game of skill and chance, seems to be an apt description of reality. Betting on falling oil prices—commonly perceived as speculation—requires individuals to know the structure of the oil market and political surroundings. The same holds for buying a house, which is regarded by many as a form of investment. Nevertheless, best knowledge cannot prevent unexpected outcomes—as we can only minimize uncertainty by collecting information – but can never displace it entirely.

5.4 Amount and Origin of the Funds

Another distinction between investment and speculation is the amount and origin of capital dedicated to the action.

Borrowing funds to buy stocks or other assets is labelled speculative, while using one's own money is perceived as investment. In accordance with this view, an investor spreads his capital across various objects and avoids using a vulnerable amount of his available equity for his actions. Both concepts are two sides of the same coin, as they refer to the way the individual behaves in financial markets.

It is precisely on this point, where we raise our concerns, that we find the same difficulties as in the previous section. The question remains as to how to find the level of equity capital which serves as a threshold to separate speculation and investment. Moreover, the amount and origin of the funds is not a criterion specific to the action itself, but describes the circumstances under which the action is done. The same applies for the risk-diversification argument. The strategy of diversifying risks or hedging uncertainty more effectively, by buying different assets which do not depend on each other, is a prudent one. However, the distribution of resources is not a feature of the action but rather a mode of it. Consequently, an economic action may be "speculative" irrespective of the amount of money put into the speculation asset and of the way we arrange the assets, as both characteristics describe the way the action is done, but not the action itself. Nevertheless, the question of the amount and origin of the funds is important, and calls for an ethical assessment.

5.5 Economic Utility

In the following paragraph, we discuss whether it is possible to use economic utility or –as it is commonly called – "added value" as a tool to separate "speculation" from "investment". According to many experts (e.g., Borna & Lowry, 1987; Hazen, 2005; Holliday & Fuller, 1974; Wahl, 2008), speculation diverges from investment in that it does not create a benefit for society. Generally, we find two subtypes of argument: For some, it is due to the speculation, which does not create an added value (Wahl, 2008); for others it is economic uselessness which separates gambling from investing and stock-market speculation (e.g., Borna & Lowry, 1987; Hazen, 2005; Holliday & Fuller, 1974).

The distinction between socially-beneficial economic activities has a rich history and is often based on a negative historical perception of certain economic activities. However, before we reflect on the characteristics of speculation and investment in this regard, we ponder how to determine the economic utility of economic actions. The ideas of Adam Smith, Vilfredo Pareto, John Rawls and many other philosophers provide us with a plethora of tools to normatively assess economic actions. According to Rawls (1971), economic actions should prioritize the interests of the least privileged members of the society. Following Pareto, economic activities should not harm anyone, but should contribute to the wealth of at least one person. Hence, determining the economic utility of certain economic actions depends on the assessment tools chosen for ethical assessment, and come to different conclusions. Under these circumstances, the definition of speculation and investment naturally differs from author to author. The confusion created by using normative criteria for describing and defining economic actions seems to be one of the main reasons why there is no consensus on speculation. As a result, the blurring of the lines between the normative and descriptive levels constitutes the main shortcoming of using added value as a method for distinguishing between speculation and investment.

5.6 Type of the Underlying Asset

In literature, we often encounter the position that investment and speculation differ in the nature and type of the asset (e.g., Arthur, 2000; Arthur et al., 2016). Some regard the purchase and sale of real estate as "investment" and the trading of derivatives or the participation in controversial markets or "sin-stocks" as "speculation" (cf. Moura-Leite, Padgett, & Galan, 2014; Risi, 2018). Arthur et al. (2016), for example, posit the existence of "casino-type" products in stock markets.

Indeed, one is justified in asking what rationale lies behind the economic actions of an enterprise and which assets are being traded. However, the purchase of an asset can have completely different implications, depending on the actor, the market and the concrete situation. For some companies and individuals, hedging a currency position is important for economic survival, while for others it is a means of profit maximization. A good example is the situation prior to the Brexit vote, when many companies had to decide whether to buy or to sell British pounds. In this concrete scenario, the choice of the asset itself depended on a broad spectrum of factors, such as expectations about the future, interdependencies and preferences. The asset is not a criterion which refers to the action per se, and consequently not an inherent element of speculation. If we used the asset as the baseline for separating speculation and investment, this would say more about the asset than about the action. This understanding, however, does not get to the heart of the matter and contradicts our use of language too strongly.

Nevertheless, this does not mean that it is irrelevant whether hedge funds buy real estate or government bonds, as the unregulated acquisition of real estate by single market participants might indeed lead to a distortion of the market.

5.7 Interest in the Underlying Asset

Is the purchase of bottles of wine without the intention to drink them speculation? In the final section, we discuss the argument as to whether interest in the underlying asset is an apt criterion to distinguish between speculation and investment. According to many observers (Yeo, 2017; Bogle, 2012; Graham, 1958), speculation and investment diverge where it comes to the interest in the underlying asset. Prominent proponents of this view include Benjamin Graham, Warren Buffet and other representatives of value investing. Typically, they perceive investment as an action "where you look to the asset itself to determine your decision to lay out some money now, to get some more money back later on" (Yeo, 2017). In contrast, they regard speculation as an operation without any emotional relationship between buyer and asset, and accuse speculators of solely focusing on the price. The differentiation between intrinsic and extrinsic value, which we attribute to Aristotle, Kant and Marx, has influenced this perception. According to Aristotle, prices are extrinsic values, which change through sudden changes of demand and supply. This matters for defining speculation and investment, as speculators are believed to bet on the price while investors are mainly interested in the growth of the (intrinsic) value of a good.

However, we identify several shortcomings of this concept: Its first weakness is practicability. The intentions behind economic activities are difficult or even impossible to measure. Purchasing shares in a blue-chip company might indicate that the person is interested in possessing a part of this company. However, we could also explain his or her action as mere profit maximization. From an outsider's perspective, it is difficult to judge who is an investor and who is not, because disentangling the intention of maximizing profits and the wish to possess a specific asset appears to be impractical.

Alongside to the practicability argument, we have a theoretical concern, as the motivations behind economic actions may change over time. How can we classify an economic activity if the intention behind the purchase of a share is the wish to support a specific enterprise, but the motivation to sell is it later driven by profit maximization? The buyer of a house might firstly be interested in possessing the underlying asset, without having the explicit intention of selling it at a later point in time. Being offered twice the original price may tempt him to sell the house immediately. Likewise, an individual who acquired a large amount of blue chip-shares for emotional reasons, is naturally inclined to see the stock value of his shares rising. The main problem here is that the motive of profit maximization might gain importance after the purchase of the share, and that outside factors such as sudden price changes have an effect on the motivations of the individual. What does this tell us about the difference between speculation and investment? It tells us that intentions alter over time, as the decision-making process itself depends on relative prices and are unforeseeable ex-ante. The prevalence of unstable motivations, finally, violates the principle of time consistency, as the ex-ante and ex-post analysis could become unstuck.

With the third weakness, we intend to foreclose a link to the normative assessment of economic activities under uncertainty. The focus on motivation and "goodwill" suggests that the separation of investment and speculation is a deontological concept. Using a normative criterion, however, blurs the lines between investment and speculation. As observers need to judge the motivations of the acting individual, they might come to different conclusions and evaluate the same action differently. Moreover, a consequentialist would argue that the effect of an economic activity would not depend on the intentions the economic actors are following. In his or her view, the effect of an acquisition by an actor who is himself/herself interested in the underlying is exactly the same as an acquisition by an actor merely following the intention to profit from price movements. The problem is therefore that the divergence between speculation and investment depends on the eye of the beholder and is therefore subjective.

These shortcomings force us to the conclusion that a normative assessment should be based on more solid distinction, which hinges on objective criteria and not on a normative concept.

6. Is "Investment" Just a Euphemism?

Concluding our arguments above, we find that all the criteria we have examined appear not to be sufficient to draw a clear line between investment and speculation, but rather confuse the object of observation. But why do we propose to label economic activities under uncertainty as "speculation"?

We argue that the term "investment" has a relatively positive connotation, which suggest that the action is secure, foreseeable and controllable. However, investors face the same dilemma of not knowing the future, like speculators. Another reason is language. Historically, the word "speculation" originated from the Latin word *speculari*, and had the meaning of "a vague guess" and related to the future. In everyday language, we often refer to claims which seem doubtful as "pure speculation". Speculation however is different from knowledge, as knowledge relates to facts. The same holds for economic actions. Although we are knowledgeable about basic economic laws and have developed a great understanding of economics, we still struggle to predict even short-time developments. Why is this the case? Normally, laws in social science are based on the assumption of ceteris paribus. We are often analyzing actions under the condition that nothing else changes. This is of course an important precondition for elaborating models, but the main reason why practice and theory often fall apart. The application of these theories to economic decisions therefore comes up against many natural constraints. Betting on prices is in fact even more difficult, as we have many variables which influence the outcome. The value of a house might be determined by factors such as immigration, social stratification, political decisions and even climate change. One of these variables can suddenly change the entire situation. As a result, we cannot know what will happen in future but rather guess, sometimes based on experience, sometimes based on logics, but in the end, we do not know the results.

7. Conclusion

Following a review of the historical background and the description of the importance of time-consistent categorizations, we dealt with the demarcation of gambling, investment and speculation. Based on our consideration, we derived following two conclusions:

The fundamental peculiarity of gambling is that it involves actions where uncertainty can be quantified ex-ante. The classic example is throwing a dice and betting on a certain number. Actions of this kind can be reduced to consumer decisions, as expecting long-term profit from dice games is irrational. In contrast, speculation and investment describe forms of actions under genuine uncertainty. This type of uncertainty is not quantifiable, since the number, selection and weight of the individual influencing variables are unknown ex-ante.

Our second observation is that the classical demarcation lines between investment and speculation fail to capture the basic logics of economic activities under uncertainty. A main reason for the lack of clarity between the two concepts is that the demarcation often refers to characteristics that are not inherent to the actions, such as the duration of the decision and preparation costs, but rather describe its circumstances. Another inconsistency is that the difference between risk and uncertainty is often drawn incorrectly. Many economic actions are labelled as high-risk, although uncertainty in these cases cannot be quantified mathematically. The last—and by far the most relevant—problem, is that many authors draw a distinction between speculation and investment which is based on normative considerations such as the idea of an underlying interest and added value to the economy. In these cases, the definition of speculation and investment naturally depends on the normative fundament of the observer. Therefore, a clear and commonly understood separation between investment and speculation appears to be missing.

As we were unable to separate investment and speculation, we come to the conclusion that all actors, whether on Wall Street or Main Street, are involved in economic activities under uncertainty. Putting money into stocks or not being involved in financial markets at all are both speculative actions. Acknowledging this fact is, in our view, a major precondition for tackling the ethics economic activities under uncertainty, as a consistent terminology is helpful for building the fundament of normative assessments.

Based upon our contribution, we detected further need for research. The implications of the ethical judgement of different economic activities are still unclear and we need more knowledge in terms of the impact of language on decisions in financial markets and in ethical judgements. Moreover, it would be relevant to uncover the patterns of defining commercial action as "investment" or speculation". How do individuals and non-professionals come to the conclusion that a particular action is "investment" or "speculation"? Is the individual classification scheme primarily based on political preferences, profession or other personal factors? In the future, the input generated by this type of research might also give a benefit to the debate on discourse theory and the use of language for dealing with economic activities in general. Interesting and relevant questions in this direction would include the influence of language on the economic discourse in general and might add to the research field of narrative economics.

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A.2 Study 2: The Downside of Moralizing Financial Markets: Anti-Semitic Stereotypes in German MTurkers

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The downside of moralizing financial markets: Anti-Semitic stereotypes in German MTurkers

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ABSTRACT

Society increasingly demands ethical motives from investors. Like other judgments, however, the moral evaluation of investments can be influenced by stereotypes. We investigate whether subjects' evaluation of investments as immoral violates the commonly accepted principle of moral impartiality—the view that moral evaluations of actions must not depend on the actor's arbitrary personal characteristics. Recently, the media discussed such a violation when criticizing an internal remark of a German financial regulator (BaFin), which stated that most short sellers of Wirecard stocks came from Israel was "striking". Through a between-subjects experiment, we find that young German MTurkers with generally centrist political attitudes display behavior consistent with an anti-Semitic stereotype: They are much more likely to evaluate the very same investment as immoral if it is made by an investor with a name perceived as Jewish. The triggering of this stereotype should prompt us to consider the moral evaluation of investors with caution.

1. Introduction

Since the financial crisis of 2008, the debate on the morality of economic activities in financial markets has gathered momentum. A perceived antagonism between "us" or "the people" and "financial sharks" or speculators dominates this discourse (Stoeger and Bischof, 2018). Against this background, an increasing demand for the ethical classification of investments may have unintended and undesired effects that are hardly discussed (see, e.g., the taxonomy debate by the European Commission, 2019). While the salience of moral values tends to foster cooperation within groups, it can aggravate conflicts between self-identified groups that have (or believe themselves to have) diverging moral values (Greene, 2014). Moreover, it has been suggested that moral evaluations of investments are not necessarily based on proper ethical reasoning, but are often rather opinionated (Schwartz, 2003; Anderson, 1996). This is supported by literature in behavioral ethics that documents the biases that influence our moral judgments more generally (Bazerman and Tenbrunsel, 2011).

In this article, we investigate whether an arbitrary characteristic of an investor (i.e., a Jewish or non-Jewish name) influences the moral evaluation of an investment itself. Put differently, we elicit whether the way people tend to evaluate financial activities is influenced by anti-Semitic stereotypes. Is the same investment more often evaluated as immoral if the investor happens to have a name that is perceived as Jewish? It is fundamental to modern ethical thought that moral rules be impartially applied (Jollimore, 2017; Frankena, 1973). The length of a prison term or a referee's decision should not depend on race, gender, religion, or sexual preference. The moral quality of the investment alone should determine another party's evaluation of the investor. Inversely, the abovementioned arbitrary characteristic of the investor should be irrelevant to the evaluation of the moral quality of the investment. We experimentally test to what degree German participants on Amazon Mechanical Turk ("MTurkers") adhere to this fundamental normative principle of moral impartiality when making practical value judgments about investment decisions.

To this end, we surveyed cultural connotations associated with certain fictitious names. We then tested with a different sample of participants whether these cultural connotations could systematically predict the moral evaluation of a given fictitious investment.

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2. Theoretical background

2.1. Moralization may aggravate out-group bias

It is well established that people favor their own social group over other groups (Tajfel et al., 1979). Identification with social groups helps us to overcome self-conceptual uncertainty, which makes us susceptible to group thinking (Hogg et al., 2007). Miron et al. (2011) show that membership in a group also affects how a given situation, such as a wage gap, is evaluated. Humans tend to draw boundaries around those worthy of moral consideration, called the *moral circle* (Singer, 1981). Laham (2009) shows that this moral circle is influenced by framing effects, which are also known to affect moral judgments (see also Petrinovich and O'Neill, 1996). Graham et al. (2009) study the importance of moral concepts for the self-image of liberals and conservatives. In their view, their observations help to explain the intractability of moral disagreements in the American culture war. Bilancini et al. (2020) demonstrate that people's preference for their own group over another group is particularly strong when group identities are centered on moral or religious preferences. Similarly, Sawaoka et al. (2014) conclude that moral judgments against members of the out-group are especially harsh when the out-group is stereotyped as immoral. The moralization of certain domains of action is therefore susceptible to triggering group thinking. This group thinking is aggravated if it is not only based on real differences in groups' moral attitudes, as may be the case with liberals and conservatives, but on alleged discrepancies between the in-group and out-group based on stereotypes.

Hilton and von Hippel (1996) define stereotypes as "beliefs about the characteristics, attributes, and behaviors of members of certain groups" (p. 240). Stereotypes help us reduce tedious differentiations when it comes to evaluating others. According to Fiske (2019), stereotypes evolved socially for functional reasons and date back to ancestral adaptations (see also Cottrell and Neuberg, 2005). The evolutionary role of stereotypes is to provide easily applicable generalizations about previously unseen social targets in an environment that is characterized by highly asymmetric information about whether such targets are cooperators (Martin et al., 2014). Experiments found that as information was passed down a chain of individuals, random associations spontaneously evolved into a simplified and categorically structured system of stereotypes (Martin et al., 2014). This evolutionary entrenchment explains why it is so difficult to get rid of stereotypes once established and to control their influence (Bargh, 1999; Freeman and Ambady, 2011; Macrae and Bodenhausen, 2000).

Research provides numerous examples of stereotypes having profound implications. Rosen and Jerdee (1976) already identify an age bias when talking about younger and older employees in the context of managerial problems. This induces stereotypes regarding older employees' physical, cognitive, and emotional characteristics and leads to discrimination against older workers. Lavy (2008) finds that gender biases in school tend to widen the female–male achievement gap. The size of the difference seems very sensitive to teachers' characteristics, suggesting that gender biases against students of a given gender are the result of teachers' behavior as opposed to students'. Quillian (2008) reviews literature that provides evidence for most people's implicit prejudices causing deeply held negative associations with minority groups that can lead to subtle discrimination without conscious awareness. Given the evidence on the aggravating influence of moral concepts on group thinking, it seems plausible that stereotypes concerning another group's deviant morality are particularly likely to widen the perceived gap between "us" and "them" (Greene, 2014).

2.2. "Immoral" investments and stereotypes

A universally accepted definition or common baseline for moral investments or investors is still missing. Creating a uniform taxonomy was therefore one of the biggest tasks of the high-level expert group on sustainable finance set up by the European Union (European Commission, 2019). Terms such as "sustainability", "green", "moral", and "immoral" are still not clearly defined in the context of financial markets, which could open the door to personal sentiments. The moral evaluation of activities in financial markets is sometimes determined by the type of investment or the underlying good (Max et al., 2020). The term *immoral investment* refers to investment strategies that stake money in disreputable goods or services—for example, tobacco, alcohol, or gambling. The corresponding stocks are then called "sin stocks" or "vice stocks" (Kim and Venkatachalem, 2011; Sparkes, 2001; Kinder and Domini, 1997). *Moral investing* (also referred to as "community investing" or "values-based investing") is vaguely defined as the "exercise of ethical and social criteria in the selection and management of investment portfolios" (USSIF, 2021; Cowton, 1989). Examples of ethical criteria identified are a company's efficient use of energy, its commitment to fair trade, or diversity at the management level (Hofmann and Kirchler, 2007; Mackenzie, 1998). Mackenzie (1998) classifies immoral funds as funds that do not use ethical reasoning. It seems clear that the domain of investment decisions has become increasingly moralized, although the precise nature of a moral investment remains highly ambiguous.

While there is substantial disagreement about the normative criteria by which the moral quality of investments should be assessed, the need for moral impartiality seems universally accepted. Being truly morally impartial, however, is behaviorally very difficult. We tend to be overconfident concerning our own moral conduct and are susceptible to out-group bias (Tappin and McKay, 2017). The ongoing moralization of investment decisions combined with the lack of a clear definition of moral investment would be less of a problem if investment contexts did not promote the ascription of diverging moralities to different groups. After all, one could argue that investors all share the primary intent of making profits. However, moralization can become problematic if the context of investment decisions is influenced by stereotypes.

2.3. Anti-semitic stereotypes in investment contexts

One of the well-documented stereotypes that has had substantial historical influence in Europe is the cliché of the greedy and immoral Jewish moneylender. A concrete consequence of this was the systematic exclusion of the Jewish population through ghettoization in the Middle Ages (Duneier, 2016). Accusations against Jews as greedy, power-hungry, and dishonest have persisted over centuries, especially in Central Europe (Berinsky and Mendelberg, 2005; Ribbens, 2017). This stereotype has roots in all areas of social life in Europe, but it is particularly strong in connection to financial markets. Due to the explicit papal prohibition for Christians to take interest, and the biblical permission for Jews to take interest from strangers, the image of Jews working in the financial sector has been established in Europe since the Middle Ages (see Watt, 1992). Literary works by Shakespeare, Lessing, and Fassbinder further deepened this image of the "greedy Jew" in Europe. In 1922, Sombart wrote that a Jew was the perfect stock market speculator because he would be exclusively interested in profit but not in the social impact of the activity (Sombart, 1922).

Lockwood (2020) argues that the complexity and opacity of finance makes it difficult for people to apply their conventional narratives to make sense of power. Reactions to the dislocations that these systems may bring find targets among already marginalized groups. The opposition to financial power often draws on anti-Semitic narratives, as a historical perspective on populist reactions to financial innovation reveals. According to Lockwood (2020), finance has been and is still narrated through the lens of anti-Semitic prejudice along the political spectrum. This reaches from the American right's demonization of George Soros to the suspension of Jeremy Corbyn from the British Labour Party for failures to retract his assertion that the scale of anti-Semitism within Labour had been overstated by political opponents (see also Kuenssberg, 2020).

The atrocities committed against the Jewish population during the course of history have led to a public culture of remembrance and moral awareness within many modern democratic European societies. This is supposedly also true for modern German society, with its identity-defining dictum of "Never again!" Recently, this official presentation was countered by the leakage of an internal document of the German Federal Financial Supervisory Authority (BaFin) that described the fact that most short sellers in the case of Wirecard came from Israel as "striking" (Storbeck, 2021).

Against this background, we test for the broader existence of this traditional racial stereotype in the minds of politically centrist and well-educated young present-day Germans. Identifying such a prejudice would present a particularly worrisome violation of the principle of moral impartiality in the context of the moral evaluation of investment decisions.

3. Main study: Testing for anti-semitic stereotypes

3.1. Step 1: Perception of investors' names as Jewish

The main study was conducted in two steps. The aim of the first step was to identify names that would be classified as Jewish or non-Jewish. To achieve this, we presented each of our participants with six names and asked them to classify each name according to its cultural background. We picked three surnames from an etymological lexicon of German Jewish names and complemented them using first names from the Pentateuch. The full names were Benjamin Oppenheimer, Adam Scherbaum, and Noah Blumberg (Guggenheimer and Guggenheimer, 1996). We chose three more surnames from the list of the 50 most common surnames in Germany and complemented them with traditional German first names (DFD, 2016). The full names were Ludwig Huber, Peter Schmidt, and Michael Schneider.

In the study, we told participants that we were interested in their perceptions of the cultural backgrounds of several names. After giving informed consent, each participant was asked to assess the cultural background of all six names, which were presented in randomized orders. Specifically, the question was, "How Jewish do the following names sound to you?" Below each name, participants could adjust a slider on a scale that represented a continuum of 100 points. The poles of the scale were "Jewish" (score of 0) and "non-Jewish" (score of 100).

We had 50 MTurkers assess their perceptions of the six names. Our instructions were in German, and we restricted the study's scope to a German sample. Subjects received $3.00 for completing the questionnaire. The experiment was approved by the German Association for Experimental Economic Research (Institutional Review Board Certificate no. WyAyC4dC). The investigation was conducted according to the principles expressed in the Declaration of Helsinki. Written consent was obtained from the participants. Fig. 1 illustrates the average perception scores for the six names.

To check whether any given name was clearly perceived as either a Jewish or a non-Jewish name, we tested whether the average perception score of the name was significantly different from a score of 50, which constituted the middle of the scale. Average scores were significantly lower than 50 for the names Benjamin Oppenheimer (mean = 34.6, SD = 28.1, $p < 0.001$), Adam Scherbaum (mean = 29.2, SD = 29.6, $p < 0.001$), and Noah Blumberg (mean = 22.3, SD = 26.7, $p < 0.001$). This indicates that these three names were clearly perceived as Jewish names. Conversely, average scores were significantly higher than 50 for the names Ludwig Huber (mean = 72.7, SD = 30.4, $p < 0.001$), Peter Schmidt (mean = 81.6, SD = 25.2, $p < 0.001$), and Michael Schneider (mean = 81.8, SD = 24.3, $p < 0.001$). This indicates that these three names were clearly perceived as non-Jewish.

To test for pairwise differences between the names, we conducted paired-sample t-tests with Bonferroni correction. This revealed a significant difference between the average perception scores of any of the three names that were perceived as Jewish and the average perception scores of any of the three names perceived as non-Jewish ($p < 0.001$ for all nine pairwise comparisons). Pairwise comparisons among the three names that were perceived as Jewish revealed no significant differences in the perception scores of these names (Benjamin Oppenheimer vs. Adam Scherbaum, $p = 1$; Benjamin Oppenheimer vs. Noah Blumberg, $p = 0.36$; Adam Scherbaum vs. Noah Blumberg, $p = 1$). Analogously, no differences were found in the perception scores of the three names that were perceived as non-Jewish (Ludwig Huber vs. Peter Schmidt, $p = 0.52$; Ludwig Huber vs. Michael Schneider, $p = 0.68$; Peter Schmidt vs. Michael Schneider, $p = 1$).

3.2. Step 2: Moral evaluations of investors with Jewish and non-Jewish names

The aim of the main study was to measure the effect of the perception of an investor's name as Jewish or non-Jewish (as identified in Step 1) on the evaluation of a given investment as immoral. For this purpose, we used a between-subjects design that randomly assigned each participant a vignette (a hypothetical situation) about an investment decision (see Rossi and Anderson, 1982). The only factor that varied between participants was the name of the investor; everything else in the vignette remained constant.

The vignette read as follows:

NAME was born in Munich in 1974. The 45-year-old works as an associate in a Munich IT company in mid-level management. He has invested the money inherited from an aunt (around EUR 50,000), with which she had intended to finance his children's studies, in shares in German and American companies. NAME's selection of shares focused on automobile manufacturers, pharmaceutical companies, and commodity companies. He will observe the shares' performances on the smartphone and try to react to strong market movements.

Below the vignette, respondents were asked to indicate their agreement with the following statement: "He behaves morally badly".[1] Notice that our intention was not to disentangle why exactly subjects would evaluate the respective behavior to be morally bad, but mainly to identify a difference in the composite evaluations between the conditions with Jewish and with non-Jewish names. When assessing the statement, subjects could choose between 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), and 5 (strongly agree) on a Likert scale. After this, all respondents answered some demographic questions. Specifically, we asked questions about gender, age, political orientation, and general attitude toward the current economic system.

The focus of our analysis in Step 2 of our main study was on differences in the moral evaluations of the group of names

[1] The original statement in German was, "Er verhält sich moralisch verwerflich".

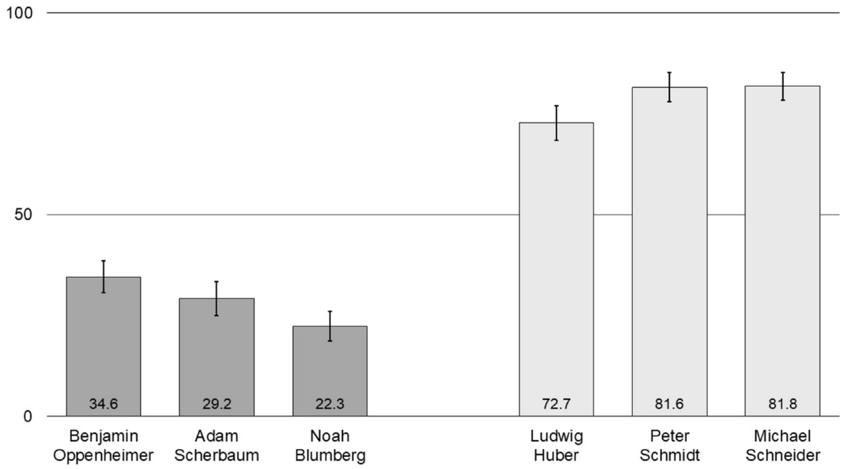

Fig. 1. Perception of investors' names as Jewish (score of 0) or non-Jewish (score of 100). Note: The bars represent the means of the participants' perception of the names as Jewish (score of 0) or non-Jewish (score of 100). The error bars represent one standard error of the mean.

perceived as Jewish and the group of names perceived as non-Jewish according to Step 1. Step 1 supported that variations in perceptions within the respective groups were negligible. We performed a power analysis with $\alpha = 0.05$ and 80% power. Based on pretests, we estimated the proportions of participants who would agree or strongly agree with the statement that the investment is morally bad to be 30% in the case of a name perceived as Jewish and 10% in the case of a name perceived as non-Jewish. With these parameters, we determined a sample size of 124 participants. We again conducted the experiment via Amazon Mechanical Turk. As in Study 1, our instructions were in German, and we restricted the study's scope to a German sample. Subjects also received $3.00 for completing the questionnaire.

Links assigned the participants randomly and with equal probability to one of the six vignettes, which differed only in the investor name used. We used the embedded randomizer of the SoSci survey software (Leiner, 2019) to apply independent random draws that assigned participants to one of the six treatments. The number of participants who read vignettes with names that had been perceived as Jewish and who read vignettes with names that had been perceived as non-Jewish was therefore not balanced. Ultimately, 69 respondents were assigned vignettes with names perceived as Jewish and 55 were assigned vignettes with names perceived as non-Jewish. At the beginning of the study, participants were asked to carefully read the description of a situation and then give us their assessment of it. They were also told that we would then ask them to provide some personal information.

When presented vignettes with investors whose names had been perceived as Jewish, 34.8% (24/69) of participants either agreed or strongly agreed with the statement that the investor behaved morally badly. However, when presented vignettes with investors whose German name had been perceived as non-Jewish, only 14.5% (8/55) of participants agreed or strongly agreed with this claim. Conversely, 52.2% (36/69) of participants in the condition with Jewish German names disagreed or strongly disagreed with the statement, whereas 58.2% (32/55) of participants in the condition with non-Jewish German names did so. In the condition with Jewish German names, 11.6% (8/69) neither agreed nor disagreed, and 1.4% (1/69) abstained from making an assessment. In the condition with non-Jewish German names, 18.2% (10/55) neither agreed nor disagreed, and 9.1% (5/55) abstained from making an assessment. Participants' assessments by experimental condition are depicted in Fig. 2.

An analysis of our study population's demographics revealed that 80.6% were male. About 52% of participants were below 27 years of age, and a third were between 28 and 37. To make sure that our result was not driven by a sample with unusually extremist attitudes, we looked at our subjects' general political preferences. These were elicited by a question asking whom they would vote for if there were a federal election next Sunday. Of the 83% who stated a political preference, 14.6% stated that they would vote for a politically extreme party (the far-left party Die Linke or the far-right party Alternative für Deutschland). The proportion of extremist party voters was 13.6% in the condition with Jewish names and 15.9% in the condition with non-Jewish names ($p = 0.783$, Fisher's exact test). Of the 35.3% of participants in the condition with Jewish names who had strongly agreed with the statement that the investor was morally bad, only 12.5% (3/24) expressed a preference for an extremist political party. At the time when our main study was conducted, 21% of respondents had expressed in a representative survey that they would vote for one of the two extremist parties (Infratest dimap, 2020). This indicates that the observed difference was not driven by non-representative extremist political preferences of our sample, as participants tended to have more centrist political preferences than the overall population (see also Chandler et al., 2014).

Finally, to elicit whether our participants were particularly frustrated with the current economic system, we asked them whether they perceived it as just: 5.6% judged it as unjust, 23.4% as relatively unjust, 31.5% as neither unjust nor just, 33.9% as relatively just, and 4.0% as just. This distribution indicates that our sample was not generally frustrated with the current economic system.

Notice again that the central variable of interest in the main study was participants' agreement to the statement that the investment was immoral rather than their disagreement with this statement. We focused on agreement because an affirmative answer to the statement that the investor behaves "morally badly" is less ambiguous than its refusal. This is because disagreement with the statement could either be interpreted as the view that the described investment behavior is orthogonal to morality and has no ethical content at all or that it is even morally praiseworthy. Another source of ambiguity of disagreement might lie in some participants' wish to preserve their social image with the experimenters. This might be reflected in their unwillingness to condone a potentially immoral behavior that they actually find unproblematic. Accordingly, some participants who actually disagreed with the statement might have chosen a Solomon-like intermediate option.

To test the central research question of our main study, we thus focus on the proportion of participants who responded to the

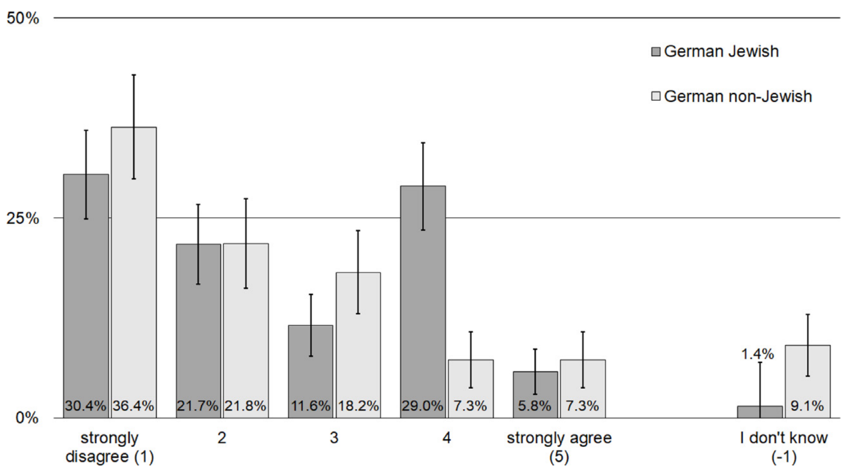

Fig. 2. Moral assessments of German Jewish and non-Jewish names. Note: The bars represent the proportions of participants with the respective assessment of the statement that the investor behaves morally badly. The error bars represent one standard error of the mean.

statement “He behaves morally badly” with either 4 (agree) or 5 (strongly agree). As stated above, we found that the proportion of participants who considered the investor immoral was more than twice as high if the name of the investor was perceived as Jewish than if it was perceived as non-Jewish. According to Fisher's exact test, this difference was statistically significant ($p = 0.013$).

Table 1 reports the results of a multivariate probit regression that models the binary outcome variable that captures agreement (4 or 5) to the statement that the investor behaves morally badly (1 = yes). The independent variables are the experimental condition of whether participants saw a name that had been perceived as Jewish (1 = yes) and the demographic control questions elicited at the end of the experiment. The regression confirmed that the effect of the treatment is robust to gender, age, political preference, and satisfaction with the current economic system and that none of these factors significantly influenced the investment's moral assessment.

4. Discussion of our main results

There are several non-mutually exclusive behavioral channels through which the Jewish-sounding name might have activated a stereotype of immorality in the financial market context. Below, we briefly discuss four of these potential channels. First, the subjects are anti-Semitic and associate Jews with immoral behavior in financial markets despite their factually marginal presence in the German financial sector since the 1940s. Haidt (2001) famously argues that moral judgment is the result of quick automatic evaluations and that moral reasoning is usually a post hoc construction. The above-cited description of Jews as greedy would therefore be an ethical rationalization of an emotional anti-Jewish intuition adapted to the financial market context. Slightly different, “better suited” rationalizations would likely be sought in other contexts, after the emotional reaction has already caused the irrevocable judgment. D'Acunto et al. (2019) provides evidence for a spillover of historical anti-Semitism into financial contexts. They show that people in German counties where historical anti-Semitism was higher in the Middle Ages and the Third Reich access financial services less frequently than other households do and are more likely to keep their money in cash form. The authors argued that historical ethnic tensions, paired with ethnic specialization, produce long-term discrimination against the economic activities in which the minorities happened to specialize (D'Acunto et al., 2019). Because this effect is not fully explained by present-day anti-Semitism, it could be an indirect and unconscious consequence of a prejudice that no longer exists in its pure form.

Second, the activation of the anti-Semitic stereotype might have been caused not by a connection of present-day Jews with immoral investment behavior, but by their association with a more general anti-finance rhetoric. Here, the causal link would work in the other direction, and a bias against finance would spill over to Jews, who are historically associated with the financial industry irrespective of their actual contemporary engagement in this industry. The psychological power of internalized anti-finance rhetoric was recently documented by D'Acunto (2019), who found that this rhetoric can be activated through salience and can influence people's beliefs about the return on investments, which might then shape their investment choices. Berggren and Nilsson (2020) argue explicitly in favor of this second channel. They assume that people might perceive Jews as particularly skillful at doing business at others' expense and that a greater reliance on markets can therefore increase anti-Semitism. From their findings, they conclude that the greater the economic freedom, the higher anti-Semitism, and the stronger the rule of law, the lower the anti-Semitism.

Third, Jewish-sounding names might have activated an out-group bias because most participants were not Jewish. Under this interpretation, the salience of any identity that is atypical for the participants would have triggered a bias that caused them to evaluate an investment by any sort of out-group as less ethical. In this sense, the bias would not be specific to the perception of the name as Jewish, but could also occur for any other out-group, whether in terms of ethnicity, social status or gender. D'Acunto (2020) provides evidence that activating this channel can also shape people's beliefs regarding risky decisions. This is confirmed by D'Acunto et al. (2020) who investigated cultural biases on a FinTech peer-to-peer lending platform and found that they are pervasive and economically damaging. Lenders face substantially higher default rates and lower returns on the loans issued to their in-group, and this effect is stronger for lenders residing in geographic areas where cultural biases are salient.

A final channel through which the Jewish-sounding names might have activated a stereotype is reduced familiarity with these names. Jewish-sounding names might have been perceived as very peculiar, whereas German non-Jewish names might have been perceived as very common. In this sense, participants might have reacted negatively not because these names sounded Jewish, but because they sounded unfamiliar. Garcia-Marques et al. (2004) state that the experience of familiarity is typically positive. They even found in experiments that subliminal associations

Table 1
Regression of names' perception as Jewish on moral assessment.

	Estimate	Std.error	Z value	PR(>|z|)
(Intercept)	0.475	0.782	0.607	0.544
Jewish	0.786	0.283	2.779	**0.005********
Female	0.202	0.334	0.605	0.545
Age	−0.270	0.178	−1.516	0.130
Christian dems	−0.052	0.485	−0.107	0.915
Social dems	0.309	0.472	0.656	0.512
Right party (AFD)	−5.525	238.275	−0.023	0.982
Free dems	−0.056	0.506	−0.111	0.912
Left party (linke)	−0.338	0.536	−0.631	0.528
Green party	−0.682	0.404	−1.687	0.092
Other parties	−0.398	0.610	−0.653	0.514
Satisfaction	−0.225	0.160	−1.403	0.161

Note: Gender is coded as a dummy variable (1 = female). Age is measured in life years. Political preferences are measured as dummy variables that capture intention to vote for the respective party in the next election (1 = yes). Satisfaction with the current economic system is measured on a scale ranging from 1 (unjust) to 5 (just). Significance Codes: *** 0.001, ** 0.01, * 0.05.

with positive affects led to false recognitions for familiarity and, thus, that the experience of positivity itself can signal familiarity (Garcia-Marques et al., 2004).

Although the former two channels involve instances of anti-Semitism, whether direct or more indirect, the latter pair involves the general rejection of foreigners of any kind. Below, we present the results of two control studies intended to test the explanation that the main result is driven primarily by a general aversion to foreigners. In the first control study, we controlled for the out-group bias. In the second, we shed light on the influence of familiarity cues.

5. Control study 1: Controlling for out-group bias

5.1. Step 1: perceptions of investors' names as British and Italian

To understand whether moral evaluations in our main study were driven by an anti-Semitic bias or a general out-group bias, we conducted a control study with British and Italian investor names. We compiled three names from the most common surnames in Britain (Kennett, 2012) and combined them with common British male first names (UK Office for National Statistics, 2014). The full names were Andrew Smith, Mark Jones, and David Taylor. We also compiled the most common family names in Italy (Caffarelli and Marcato, 2008) and combined them with common Italian male first names (Istat, 2018). The full names were Francesco Rossi, Alessandro Russo, and Leonardo Ferrari.

To ensure that these names were actually perceived as British or Italian and that the German names used in the main study were also unambiguously perceived as non-British and non-Italian, we tested for the cultural perception of all names used in the control study. Fifty-five MTurkers assessed their perceptions of the names on two consecutive screens. On one screen, they were shown the three British names along with the three German names that were used in the main study and asked, "How British do the following names sound to you?" The scale ranged from 0 (British) to 100 (non-British). On the other screen, they were shown the three Italian names and the three German names. Here, they were asked, "How Italian do the following three names sound to you?" and responded on a scale from 0 (Italian) to 100 (non-Italian). Whether subjects first saw the list of British and German names or the list of Italian and German names was randomized. The order of the names was also randomized on each screen. Our instructions were in German, and we restricted the study's scope to a German sample. Subjects received $3.00 for completing the questionnaire.

To check whether British names were clearly perceived as British and German names were clearly perceived as non-British, we tested whether the names' average perception score was significantly different from a score of 50. Average scores were significantly lower than 50 for the names Andrew Smith (mean = 9.2, SD = 16.3, $p < 0.001$), Mark Jones (mean = 13.3, SD = 16.5, $p < 0.001$), and David Taylor (mean = 11.8, SD = 18.6, $p < 0.001$). This indicates that these three names were clearly perceived as British names. Conversely, average scores were significantly higher than 50 for the names Ludwig Huber (mean = 87.1, SD = 23.1, $p < 0.001$), Peter Schmidt (mean = 90.8, SD = 14.8, $p < 0.001$), and Michael Schneider (mean = 88.9, SD = 19.2, $p < 0.001$). This indicates that these three names were clearly perceived as non-British names.

Paired sample t-tests with Bonferroni correction revealed a significant difference between the average perception scores for any of the three names perceived as British and the scores of those perceived as non-British ($p < 0.001$ for all nine pairwise comparisons). Pairwise comparisons among the three names perceived as British revealed no significant differences in perception scores (Andrew Smith vs. Mark Jones, $p = 0.58$; Andrew Smith vs. David Taylor, $p = 1$; Mark Jones vs. David Taylor, $p = 1$). Likewise, we found no differences in the perception scores of the three names perceived as non-British (Ludwig Huber vs. Peter Schmidt, $p = 0.93$; Ludwig Huber vs. Michael Schneider, $p = 1$; Peter Schmidt vs. Michael Schneider, $p = 1$).

To check whether the Italian names were clearly perceived as Italian and the German names were perceived as non-Italian, we compared each name's average perception score to 50. Scores were significantly lower than 50 for Francesco Rossi (mean = 7.3, SD = 17.0, $p < 0.001$), Alessandro Russo (mean = 10.4, SD = 17.0, $p < 0.001$), and Leonardo Ferrari (mean = 6.4, SD = 14.7, $p < 0.001$). They were significantly higher than 50 for Ludwig Huber (mean = 93.3, SD = 15.1, $p < 0.001$), Peter Schmidt (mean = 96.3, SD = 6.7, $p < 0.001$), and Michael Schneider (mean = 94.8, SD = 9.7, $p < 0.001$).

Paired sample t-tests with Bonferroni correction revealed a significant difference between the average perception score of any of the three names perceived as Italian and any those perceived as non-Italian ($p < 0.001$ for all nine pairwise comparisons). Pairwise comparisons among the three names that were perceived as Italian also revealed no significant differences in the perception scores of these names (Francesco Rossi vs. Alessandro Russo, $p = 1$; Francesco Rossi vs. Leonardo Ferrari, $p = 1$; Alessandro Russo vs. Leonardo Ferrari, $p = 0.54$). Finally, no differences were found in the perception scores of the three names perceived as non-Italian (Ludwig Huber vs. Peter Schmidt, $p = 0.56$; Ludwig Huber vs. Michael Schneider, $p = 1$; Peter Schmidt vs. Michael Schneider, $p = 1$).

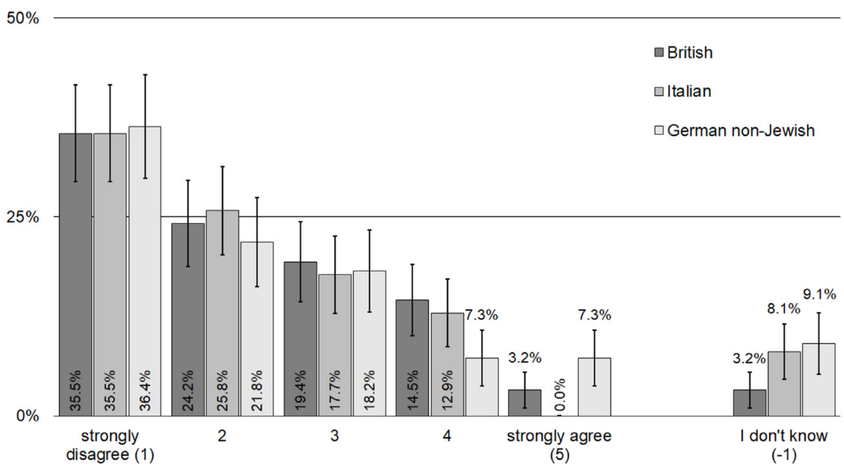

Fig. 3. Moral assessments of British, Italian and German non-Jewish names. Note: The bars represent the proportions of participants with the respective assessment of the statement that the investor behaves morally badly. The error bars represent one standard error of the mean.

5.2. Step 2: Moral evaluations of investors with British and non-British or Italian and non-Italian names

Similar to the main study, we then tested whether the moral evaluation of an investor whose name was perceived as British or Italian was different than that of an investor whose German name had been clearly perceived as non-British or non-Italian. Again, we had 124 German MTurkers morally evaluate the investment decision. Two groups of sixty-two participants were randomly assigned to the condition with British or Italian names. Fig. 3 depicts the participants' moral assessments of the investment by experimental condition.

When presented with an investor's name that had been perceived as British, 17.7% of participants agreed or strongly agreed that the investor behaved immorally. This proportion did not differ significantly from the 14.5% of participants who classified German investors whose names had clearly been perceived as non-British as immoral ($p = 0.803$, Fisher's exact test). When confronted with an investor's name that had been perceived as Italian, 12.9% of participants agreed or strongly agreed with the statement that the investor behaved immorally. Again, this proportion did not significantly differ from the 14.5% of participants who considered German investors whose names had been perceived as non-Italian to be immoral ($p = 0.796$, Fisher's exact test).

Table 2 reports the results of a multivariate probit regression that models the binary outcome variable that captures agreement (4 or 5) with the statement that the investor behaved immorally (1 = yes). The independent variables are the experimental condition of whether participants saw a name that had been perceived as British or non-British (1 = yes) or Italian or non-Italian (1 = yes) and the demographic control questions asked at the end of the experiment. The regression confirms that the condition had no significant effect any of the demographic control variables concerning the moral assessment of the investment decision.

Fig. 4 summarizes the results of our main study and our control study. The difference in the moral evaluations of investors that we identified for German Jewish and German non-Jewish names was observed for neither British nor Italian names when compared with German ones. Together, the results of both studies suggest that the moral aversion to the out-group identified in the main study reflects an anti-Semitic stereotype rather than a general out-group bias.

6. Control study 2: Controlling for familiarity cues

An alternative explanation introduced in the discussion of the main results was that the observed bias against investors perceived as Jewish could stem from the difference between familiar and unfamiliar cues. Participants might have found the German Jewish names relatively uncommon, and these therefore might have triggered unfamiliar cues, whereas the German non-Jewish, British, and Italian names triggered familiar cues. This might be the case if participants where simply more familiar with British and Italian names given Germany's small current Jewish population.

To test whether this was the case, we had another 50 MTurkers assess the familiarity of all twelve names used in the main study and the first control study. Names were presented to them in a randomized order on one screen, and they assessed them on a scale ranging from 0 (very unfamiliar) to 100 (very familiar). As in the other studies, our instructions were in German, and we restricted the study's scope to a German sample. Subjects received $3.00 for completing the questionnaire.

To check whether different degrees of name familiarity could account for the effect observed in the main study, we tested for differences in familiarity ratings between the four groups of names used in the main study and the first control study. If familiarity bias drove the bias observed in our main study, we should expect participants to perceive German Jewish names as less familiar than German non-Jewish names, but also less familiar than British and Italian names. This is because, as demonstrated in the first control study, British and Italian investors were assessed as equally moral compared to German non-Jewish investors.

Fig. 5 Depicts the mean familiarity ratings for all twelve names by experimental condition

Paired sample t-tests with Bonferroni correction revealed that the perceived familiarity of the German non-Jewish names tended to be higher than that of German Jewish, British, and Italian names. Sixteen of the 27 total pairwise comparisons (59.3%) between the three German non-Jewish names and the nine names from all other groups were significant at the 5% level. However, of the 18 pairwise comparisons between the German Jewish names and the British and Italian names, none was significant at the 5% level. This means that the Jewish names were not perceived as any less familiar than the British or the Italian names. Analogously, none of the nine pairwise comparisons between the three British and the three Italian names was significant.

An alternative way to test the familiarity explanation is to investigate differences in perceived familiarity within the group

Table 2
Regression of names' perception as British and Italian on moral assessment.

	Estimate	Std.error	Z value	PR(>|z|)
(Intercept)	−0.173	0.747	−0.232	0.817
British	0.038	0.305	0.126	0.900
Italian	−0.090	0.321	−0.279	0.780
Female	−0.333	0.413	−0.807	0.419
Age	−0.379	0.197	−1.922	0.055
Christian dems	0.676	0.476	1.422	0.155
Social dems	0.526	0.496	1.061	0.289
Right party (AFD)	−4.136	218.397	−0.019	0.985
Free dems	1.016	0.595	1.708	0.088
Left party (linke)	0.491	0.572	0.859	0.390
Green party	0.165	0.474	0.348	0.728
Other parties	0.524	0.582	0.900	0.368
Satisfaction	−0.085	0.143	−0.598	0.550

Note: Gender is coded as a dummy variable (1 = female). Age is measured in life years. Political preferences are measured as dummy variables that capture intention to vote for the respective party in the next election (1 = yes); satisfaction with the current economic system is measured on a scale ranging from 1 (unjust) to 5 (just). Significance Codes: *** 0.001, ** 0.01, * 0.05.

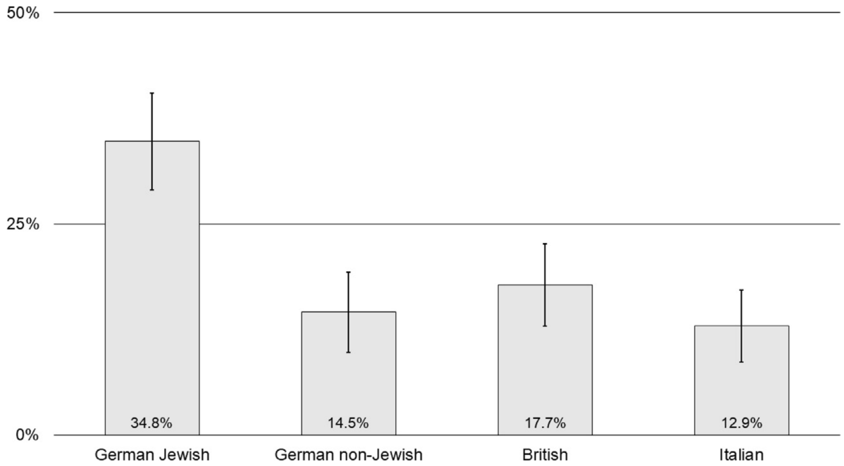

Fig. 4. Agreement with the statement "He behaves morally badly" by condition. Note: The bars represent the proportions of participants who either assessed the statement that the investor behaves morally badly with "I agree" or "I fully agree". The error bars represent one standard error of the mean.

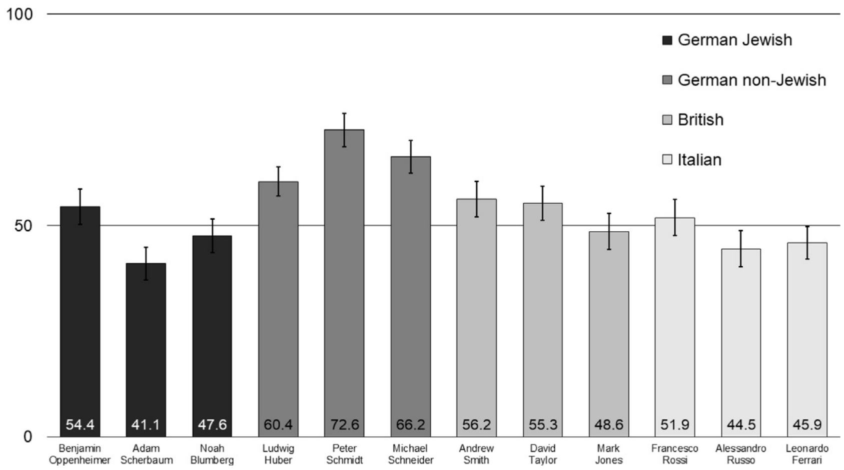

Fig. 5. Perception of investors' names as unfamiliar (score of 0) or familiar (score of 100). Note: The bars represent the means of the perception of the names as unfamiliar (score of 0) or familiar (score of 100). The error bars represent one standard error of the mean.

of German non-Jewish names and check for corresponding differences in ascribed immorality. Indeed, Ludwig Huber was on average perceived as significantly less familiar than Peter Schmidt (72.6 vs. 60.4, $p = 0.008$). However, Ludwig Huber was not considered immoral by significantly more participants than Peter Schmidt (11.1% vs. 6.3%, $p = 1$).

These findings suggest that the difference between familiar and unfamiliar cues does not account for the bias observed in the main study. Together with the results from the first control study, this indicates that the activation of a stereotype of immorality through Jewish-sounding names is driven by anti-Semitic prejudices rather than a general aversion to foreign investors per se.

7. Limitations of our research

The vignette used in the main study confronted participants with a sequence of behaviors that was sufficient to trigger an anti-Semitic bias when assessing the investments' morality. The investor invested money inherited from his aunt and, according to a certain interpretation, possibly violated his promise to set aside the money for his children's education. Moreover, he invested in several categories of shares and followed the market's movement closely. It seems unclear which of the described behaviors participants considered immoral. For instance, it is conceivable that an anti-Semitic prejudice led people to disapprove of violating promises with respect to money or of speculating on the stock market. In this context, it might be worth referring to a study by Guiso et al. (2009) who studied cultural biases in economic exchange. They report on the replicated finding that German managers ranked fellow Italian managers as least trustworthy compared to managers from other countries (while they ranked British managers second behind themselves). In our Control Study 1, however, Italian investors were not seen as more immoral than German managers by our German sample. This indicates that the anti-Semitic bias that we observe is less based on a generic sense of immorality and more on a specific association of Jewish names with immoral behavior in the domain of finance. Our results thus seem more consistent with respondents reacting to the fact that the investor is speculating in the stock market than with the fact that he is breaking the promise to the aunt. Our study, however, was not designed to test this channel explicitly. A deeper understanding of the psychological underpinnings of the respective stereotypes might help to improve understanding of the influence of anti-Semitic prejudice on financial markets. Therefore, it seems worthwhile to explicitly explore the specific mechanisms at work here in future research in more depth.

Furthermore, in contrast with the study by D'Acunto et al. (2020), decisions to assess the morality of the investment carried no monetary stakes for the participants. In our experiment, participants were truly impartial and received no penalty for a biased ethical evaluation of the investment. In this sense, it could be worthwhile to investigate the existence of the bias described here by using actual data on ethical investing. Variations of our experiment in the laboratory and in the field are important to check for the pervasiveness of the effect we observed.

8. Conclusion

The increasing moralization of financial markets might have problematic implications that receive little attention. Specifically, the vagueness of the concept of moral investments and the introduction of moral norms could trigger group thinking and induce stereotyping. Because the moral evaluation of investments has profound consequences for investors, it is important to understand whether such evaluations' underlying reasoning might be susceptible to biases. D'Acunto et al. (2019) have identified a stronger reluctance to use financial services in German counties with higher historical anti-Semitism that is not fully explained by present-day anti-Semitism. Our experimental results indicate the continued existence of a traditional racial stereotype in the given context of investment choices within a sample of German MTurkers. The moral evaluation of investments in our study clearly deviated from the generally accepted principle of impartiality. Specifically, the same investment was much more likely to be evaluated as immoral if the investor's name was perceived as Jewish. It should be noted that this tendency seems not to be driven by an out-group bias or by familiarity cues because the bias did not manifest with regard to names that were perceived as British and Italian and that were not perceived as more familiar than those of German Jewish investors.

The observed anti-Semitic prejudice, which emerged in a between-subjects design, presents an example of the fact that moral evaluations of investments can depend on investors' arbitrary personal characteristics. Importantly, this was the case even though the distinct majority of our participants expressed a centrist political attitude. Our results should increase our mindfulness regarding the moral evaluation of investments and the psychological mechanisms that underlie this reasoning. Moralism can have profoundly problematic societal consequences when it is driven by prejudices and biases. If the moral evaluation of investments is to lead to ethical improvements, we must be transparent about our criteria and clearly expose our often hidden and vague value judgments to critical examination by ourselves and others. As Lockwood (2020) argues, we should be specific about the agents in question if we intend to give an agentic explanation for financial outcomes and injustices that are usually the consequences of particular systems and structures. As he points out, this does not mean that we cannot criticize financial structures or certain financial activities' lack of transparency, but we should reflect on our use of language and metaphors. Because language and metaphors tend to become more extreme if feelings of morality are involved, an open and rational discourse on "moral" investments is essential. This discourse must be scientifically informed.

CRediT authorship contribution statement

Raphael Max: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Resources, Software, Validation, Visualization, Writing - original draft, Writing - review & editing. **Matthias Uhl:** Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Resources, Software, Validation, Visualization, Writing - original draft, Writing - review & editing.

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B Contributions to Publications

B.1 Study 1: Economic Activities under Uncertainty: The Difference between Speculation, Investment, and Gambling

Published in the *Journal of Management and Sustainability*, 2020, 10(1): 28-37, with Alexander Kriebitz and Christoph Lütge.

- I was responsible for the development of the research question.
- I was responsible for the literature review.
- As a corresponding author, I was responsible for the submission process and the coordination of the revision and resubmission process.
- The writing of the article was a joint effort by the team of authors.
- The revision was a joint effort by the team of authors.

Raphael Max	Alexander Kriebitz	Christoph Lütge
Lead author	Coauthor	Coauthor

B.2 Study 2: The Downside of Moralizing Financial Markets: Anti-Semitic Stereotypes in German MTurkers

Published in the *Journal of Behavioral and Experimental Finance*, 2021, 31: 100512, with Matthias Uhl.

- I was responsible for the development of the research question.
- I was responsible for the literature review.
- The team of authors developed the design of the experiment.
- I conducted the survey sessions and collected the data.
- The evaluation and discussion of the data were a joint effort by the team of authors.
- As a corresponding author, I was responsible for the submission process and the coordination of the revision and resubmission process.
- The writing of the article was a joint effort by the team of authors.
- The revision was a joint effort by the team of authors.

Matthias Uhl

Raphael Max	Matthias Uhl
Lead author	Coauthor

B.3 Study 3: Morally Lucky Investors: We find Profitable Investments More Moral Although We Think We Should Not

Under review in *Journal of Behavioral and Experimental Economics* (as of 05.11. 2021), with Matthias Uhl.

- I was responsible for the development of the research question.
- I was responsible for the literature review.
- The team of authors developed the design of the experiment.
- I conducted the survey sessions and collected the data.
- The evaluation and discussion of the data were a joint effort by the team of authors.
- As a corresponding author, I was responsible for the submission process and the coordination of the revision and resubmission process.
- The writing of the article was a joint effort by the team of authors.
- The revision was a joint effort by the team of authors.

Raphael Max	Matthias Uhl
Lead author	Coauthor

Due to the fact that this article was still in the review process of the *Journal of Behavioral and Experimental Economics* at the time of submission, the full paper is not attached to this dissertation and was only available to the reviewers as an attached copy.