

# Methodological Appendix

## A1. Selection of Literature

To gain an overview of the landscape of relevant research and circumscribe the set of academic articles to be analysed, I have followed strategies of identification and selection.

### *Strategies of Identification*

To identify the key literature, I have searched for journal articles and academic books using two standard approaches. First, I have conducted a web search on the main search engines for scholarly literature (Google Scholar, Web of Science,...) entering combinations of “moral\*” with “behavioural economics”, “(laboratory/behavioural/economic/market) experiments”.<sup>1</sup> Second, I have manually browsed through academic journals focussing specifically on the “top five” in economics as well as journals specialized in the field of behavioural and experimental economics (e.g. Journal of Behavioural and Experimental Economics, Journal of Economic Behaviour and Organization, Experimental Economics). Once a first set of articles was pinned down, I continued to search forwards and backwards through the citation references, read the literature sections of empirical articles, and look for articles dedicated exclusively to literature review.

As my objective was not to get a complete overview of the body of literature but to analyse the most influential arguments in this field, my search stopped once it did not reveal articles that provided a new perspective or that were not regarded as central to the literature.

### *Strategies of Selection*

In the next step, I have selected relevant publications and excluded literature according to two criteria. First, an article or a book had to deal with the topic of morality in the context of markets and, second, it should be part of the field of behavioural economics (BE) or draw on the methodology of economic experiments.

Regarding the first criteria, I have included articles in which a pattern of behaviour or an outcome of an experiment was explicitly described or referred to as (im)moral or ethical. On top of that, I have kept articles in the final list that do not explicitly use a terminology related to morality, if there is a considerable body of literature describing the article’s findings as relevant to morality. For instance, many papers by Fehr and colleagues refrain from using terms like “morality” or “moral”, however, in the reception of their work, there are various references to “moral punishment”, “moral sentiments”, “moral benefits” (e.g., Levitt and List 2007; Zak 2011), even by the authors themselves (Gintis et al. 2005). Due to the focus on morality in market exchange, I have excluded economic experiments about fairness and distributive justice in the context of (state) redistribution.

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<sup>1</sup> If available, I have used filters to narrow the search to the “Economics” category or economic publication titles.

Regarding the second criteria, I have gathered information about a paper, its authors, and the journal to decide if it qualifies for my research purpose. For each paper, I have validated if it explicitly referred to its own approach as BE, highlighted its contribution to or its relevance for the field of BE, or used the relevant key words or JEL-classification codes (self-identification). In addition, I have verified if the article was frequently cited by other BE-studies (other-identification). A paper was also included if it reported the results of an experiment conducted according to economic methodology (Bardsley et al. 2009), even without carrying the label of BE. In addition, I have also included discussion or review papers that do not present the results of a specific experiment. To gather background information about the author, I have analysed his/her academic background, the fields of specialization as well as the list of publications and co-authors. Finally, I have distinguished between journals based on whether or not they are listed as part of the category “Economics” in the “Clarivate Journal Citation Reports”.

Using these three sources of information, I have decided for each paper if it can be classified as falling within the scope of BE or economic experimentation. Importantly, a paper did not need to fulfil all three criteria (paper, author, and journal) to be selected for further analysis. For instance, Falk and Szech (2013) was selected even though it was not published in an economic journal, but a general science outlet (Science). Nevertheless, its publication was followed by an extensive commentary by economists (Breyer and Weimann 2015; Luetge and Rusch 2013) and both authors have published related work in economic journals (Falk, Neuber, and Szech 2020). On the other hand, I have excluded various articles from scholars in moral philosophy, cognitive psychology, or other subfields of economics engaging with the BE literature and methodology, if their work did not find a significant reception within BE and/or if none of the authors had an affiliation with a (B)E institute.

### *Identifying Key Articles*

To get at an overview of the most influential strands in this literature, I have identified 20 key articles that most adequately represent a certain experimental approach and/or argument on markets and morality. The key articles were chosen according to metric indicators, such as the citation score or the journal impact factor. Next to metric scores, I have also asked if the contribution of an article differs sufficiently from other approaches and key articles to vindicate a more profound analysis. Thus, some articles listed as “secondary” may score high in terms of the traditional metrics, but were not included because their contribution is already captured by other key articles published by the same author(s) or other key articles working within the same paradigm.

## **A2. Analysis of Articles**

In analysing this literature, I have followed a two-step strategy distinguishing between the literature’s main arguments regarding markets and morality (first-order morality; moral “foreground”) and the literature’s assumptions underlying the integration of morality (second-order morality; moral “background”).

For first-order morality, I have reviewed and systematically mapped the main arguments of this research body. In particular, a close reading of the articles focused on the following question: What do they say about the positive or negative effects of markets on morality? What is the (experimental) evidence they bring forth to support an argument? How do their claims relate to existing or classical positions in the debate?

For second-order morality, I have drawn on Abend's dimensions of the moral background (2014) and adapted them to my research objective. According to Abend, a moral background comprises various dimensions, defining – among other things – the repertoire of moral concepts accessible to social actors, the moral methods and arguments that are legitimate in a social group, the objects which are open to moral evaluation, and the grounds and reasons supporting moral claims and prescriptions.

To adapt this analytical scheme to my research purposes, I have picked out four main questions guiding my analysis:

- What qualifies as moral? What are the objects of moral evaluation? What objects cannot be morally evaluated? (Objects)
- In what contexts is morality analysed (and in which not)? What counts as a moral problem? (Context)
- What function does morality fulfil? On what grounds are certain things moral? (Grounding)
- What key concepts are used to argue that something is moral? In what terminology is morality expressed? (Key Concepts)

For my data – the corpus of economic articles dealing with morality –, the moral background is strongly interwoven with the theoretical precepts and methodological conventions of the scientific community. Thus, I have sought to analyse these questions, first, in the theoretical and conceptual premises guiding the integration of morality into an economic framework and, second, in the methodological conventions underlying the collection of data in the economic laboratory (for this I consult additional literature on economic methodology, e.g. Bardsley et al. 2009; Guala 2005; Roth 1995). Table A1 provides a coarse overview of the main findings.

**Table A1**

	<b>Theoretical Premises</b>	<b>Methodological Conventions</b>
<b>What qualifies as moral?</b>	Individual traits inferred from observed choice	Individual actions in a ‘neutral’ laboratory setting
<b>In what contexts is morality analysed?</b>	Situation in which markets (market exchange) do not produce efficient allocations	Decision scenarios designed as market-like settings
<b>What function does morality fulfil?</b>	Correct and prevent market failures or inefficiencies	Correct and prevent market failures or inefficiencies
<b>What key concepts are used?</b>	Individual rationality	Monetary Representation

### A3. List of Key Articles

- [K1] Alger, Ingela, and Jörgen W. Weibull. 2013. "Homo Moralis—Preference Evolution Under Incomplete Information and Assortative Matching." *Econometrica* 81(6):2269–2302.
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- [K8] Falk, Armin, and Nora Szech. 2013. "Morals and Markets." *Science* 340(6133):707–11.
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- [K14] Kirchler, Michael, Jürgen Huber, Matthias Stefan, and Matthias Sutter. 2016. "Market Design and Moral Behavior." *Management Science* 62(9):2615–25.
- [K15] Levitt, Steven D., and John A. List. 2007. "What Do Laboratory Experiments Measuring Social Preferences Reveal about the Real World?" *The Journal of Economic Perspectives* 21(2):153–74.
- [K16] Roth, Alvin E. 2007. "Repugnance as a Constraint on Markets." *Journal of Economic Perspectives* 21(3):37–58.
- [K17] Roth, Alvin E. 2018. "Marketplaces, Markets, and Market Design." *American Economic Review* 108(7):1609–58.
- [K18] Stringham, Edward Peter. 2011. "Embracing Morals in Economics: The Role of Internal Moral Constraints in a Market Economy." *Journal of Economic Behavior & Organization* 78(1):98–109.
- [K19] Sutter, Matthias, Jürgen Huber, Michael Kirchler, Matthias Stefan, and Markus Walzl. 2020. "Where to Look for the Morals in Markets?" *Experimental Economics* 23:30–52.
- [K20] Zak, Paul J. 2011. "Moral Markets." *Journal of Economic Behavior & Organization* 77(2):212–33.

#### A4. Secondary Articles

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- [S2] Bowles, Samuel. 2011. "Is Liberal Society a Parasite on Tradition?" *Philosophy & Public Affairs* 39(1):46-81.
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- [S9] Falk, Armin, Tobias Neuber, and Nora Szech. 2020. "Diffusion of Being Pivotal and Immoral Outcomes." *The Review of Economic Studies* 87(5):2205-29.
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- [S17] Hugh-Jones, David. 2016. "Honesty, Beliefs about Honesty, and Economic Growth in 15 Countries." *Journal of Economic Behavior and Organization* 127:99-114.
- [S18] Luetge, Christoph, and Hannes Rusch. 2013. "The Systematic Place of Morals in Markets." *Science* 341:714.
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*Organization 77(1):53–65.*

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