

What's Worth Knowing?

Economists' Opinions about Economics

Peter Andre* Armin Falk**

September 21, 2021

Abstract: We document economists' opinions about what is worth knowing and ask (i) which research objectives economic research should embrace and (ii) which topics it should study. Almost 10,000 economic researchers from all fields and ranks of the profession participated in our global survey. Detailed bibliometric data show that our sample represents the population of economic researchers who publish in English. We report three main findings. First, economists' opinions are substantially heterogeneous. Second, most researchers are dissatisfied with economics' current research topics and objectives. Third, on average, respondents think that economic research should become more policy-relevant, multidisciplinary, risky and disruptive, and pursue more diverse topics. We also find that disagreement with the status quo is more prevalent among female scholars and associated with lower job satisfaction and higher stress levels. Taken together, the results suggest that economics as a field does not appreciate and work on what economists collectively prefer. (*JEL* A11, A14)

Contact: *Peter Andre, University of Bonn, p.andre@uni-bonn.de; **Armin Falk, briq and University of Bonn, armin.falk@briq-institute.org.

Acknowledgements: We thank all scholars who participated in the survey. We thank Roland Bénabou, Teodora Boneva, Felix Chopra, Stefano DellaVigna, Paul Heidhues, Leander Heldring, Alex Imas, David Kaldewey, Yucheng Liang, Stephanie Majerowicz, Franz Ostrizek, Christopher Roth, Ran Spiegler, Andreas Stegmann, Lasse Stötzer, Román Zárate, Florian Zimmermann, and many conference participants for helpful comments and discussions; Sofia Badini, Iana Gerina, Anna Lane, Tobias Reinheimer, and Youpeng Zhang for excellent research assistance; the IDSC of IZA for data services; and Markus Antony and the IZA service team for administrative support.

Funding: Funding by the Deutsche Forschungsgemeinschaft (DFG) through CRC TR 224 (Project A01) is gratefully acknowledged. Funded by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) under Germany's Excellence Strategy – EXC 2126/1– 390838866.

Ethics approval: The study was approved by the local ethics committee at the medical department of the University of Bonn. Approval date: April 11, 2020. Approval number: 119/20.

Pre-registration: The main research questions, the survey design, and the sampling approach were pre-registered via the Open Science Framework (www.doi.org/10.17605/OSF.IO/Q5GR2).

1 Introduction

Science and research matter. They shape how we think about ourselves, how we live together, and how we design policies. What researchers work on, which topics they choose, and how they resolve trade-offs between different research objectives therefore holds central societal importance. However, as famously argued by Max Weber (1919), the question about what is “interesting” and “worth knowing” cannot be answered scientifically. Instead, researchers have to rely on intuition and subjective, value-driven assessments and beliefs. This paper provides evidence on how economists evaluate the current state of the profession in this respect. How do economists assess important research objectives such as policy relevance, causal identification, the role of multidisciplinary, and the level of specialization? Does the distribution of actually-chosen research topics coincide with what economists believe to be desirable? Are the answers to these questions homogeneous or heterogeneous, and to what extent do economists’ preferences differ from the current practice in economics? In other words, are economists “happy” with the current research objectives and topics in their profession?

To answer these questions, we conduct a large global survey among almost 10,000 professional academic economists. Our survey focuses on two main sets of questions. The first is concerned with ten trade-offs between fundamental research objectives, including policy relevance vs. causal identification, pure vs. applied theory, quantity vs. quality, and the level of specialization. We ask respondents to indicate whether they believe that the current state of research in economics is “about right”, or whether they would prefer more or less of a specific research objective, respectively. The second set of questions relates to research topics in economics. Using the common JEL taxonomy, respondents indicate what their preferred distribution of topics would look like. We compare these shares with the actual distribution of topics. Finally, we investigate how potential dissatisfaction with the status quo relates to individual scholars’ well-being. For this purpose, we ask respondents to rate how satisfied they are with their job in general, with the topics they work on, how stressful they perceive their job to be, and whether they think of academia as being “overly competitive”.

Studying the views of the profession requires our sample to represent the full spectrum of economic researchers. To ensure this, we identified and invited all researchers who actively contribute to the international economics literature (published in English). Each author is matched with the bibliometric databases EconLit and Scopus to compile author-specific background data. We also gathered contact data of Ph.D. students at well-known graduate schools. In total, almost 10,000 scholars participated in our survey. Our sample is representative of the profession in terms of a wide range of observable characteristics, including gender, years since first publication, number of publica-

tions, centrality in the co-author network, number of Top Five publications, h-index, and main field.

Our three main findings can be summarized as follows. First, we document substantial heterogeneity in economists' preferences. This holds for both research topics as well as trade-offs concerning fundamental research objectives: Respondents assign largely varying importance to different JEL topics and support opposing views concerning research objectives.

Second, most respondents express dissatisfaction with the current state of economic research. Across the ten trade-offs under study, only 13% to 31% of respondents agree with the current practice in economics. On average, 79% of the respondents express a preference for deviating from the status quo. Likewise, economists on average prefer a distribution of research topics that markedly differs from the actual distribution of topics published in economics. Importantly, dissatisfaction does not simply reflect the views of unsuccessful or less experienced scholars. As we show in further analyses, discomfort with the field's current research objectives and topics is shared by its most distinguished and influential scholars, represented by economists with Top Five publications, editors of top journals, and referees for Top Five journals.

Third, despite the observed variation in preferences, a majority of economists actually agree on the direction of preferred change. In terms of research objectives, most economists express a preference for more policy-relevant, multidisciplinary, as well as risky and disruptive research. The shift towards increasing policy relevance is supported even if it comes at the cost of less causal identification, pure theory, basic research, and intrinsic interest. Economists also favor quality over quantity of publications and would prefer a lower level of specialization among researchers. For research topics, we document a preference for more diversity. For example, economists assign greater importance to currently less prominent topics such as *H Public Economics* or *N Economic History* and place less weight on the three most popular topics of *D Microeconomics*, *G Financial Economics*, and *L Industrial Organization*. We also show how individual characteristics relate to stated preferences. For instance, female authors place greater weight on policy relevance, while researchers mostly working in theory or methods value policy relevance less. Moreover, respondents strongly favor their own research topics.

Our results have various implications. First, the fact that economists display heterogeneous views about what constitutes "interesting" research objectives or topics reflects their pluralistic preferences. In fact, general agreement to the question "what is worth knowing?" is unlikely because one cannot *scientifically* provide such an answer. This was noted by Max Weber:

"Science further presupposes that what is yielded by scientific work is important in the sense that it is "worth being known." In this, obviously, are

contained all our problems. For this presupposition cannot be proved by scientific means. It can only be interpreted with reference to its ultimate meaning, which we must reject or accept according to our ultimate position towards life.” (Weber, 1919/1946)

Weber’s insight is empirically reflected in the observed heterogeneity of expressed preferences. We believe that it is an important insight to keep in mind when evaluating other researchers’ work, whether as seminar participants, referees, or editors. We should acknowledge diversity and pluralism and other scholars’ opinions and values. Our own views about “what is interesting” are valuable and irreplaceable, but also subjective.

Second, our findings about the systematic disagreement with economics’ current research objectives and topics suggest that as a field we do not appreciate and work on what we collectively prefer. This speaks empirically to the recently-raised criticism about the research and publication process in economics. For example, critics have argued that economics favors “hard” methods over relevant questions, worships “mathiness”, is too specialized, neglects critical topics of our times such as climate change or financial crises, and submits to a “tyranny” of top journals (e.g., Akerlof, 2020; Colander, 2011; Heckman and Moktan, 2020; Krugman, 2009; Osterloh and Frey, 2020; Oswald and Stern, 2019; Romer, 2015; Shiller and Shiller, 2011).

Third, turning to the individual scholars’ well-being, we find that dissent with economics’ research objectives and topics is associated with lower job satisfaction and higher stress levels. This could also have consequences for the diversity of scholars in economics (Bayer and Rouse, 2016; Buckles, 2019; Lundberg and Stearns, 2019; Lundberg, ed, 2020). In particular, female economists are not only less satisfied with their job and report more job-related stress, but they also more strongly disagree with economics’ current research objectives and topics. These results hold conditional on a large set of controls and suggest that the current under-representation of particular groups in economics could lead to an under-representation of their research preferences, rendering an academic career even less attractive to those who are disadvantaged. The findings thus suggest another reason why women are disadvantaged and remain under-represented in economics (Allgood et al., 2019; Avilova and Goldin, 2018; Card et al., 2020; Dupas et al., 2021; Lundberg, ed, 2020; Sarsons et al., 2021).

More generally, our study adds to past research on (economic) research. Economists closely monitor the status quo of research in their own discipline, its topics and methods, the peer-review and publication process, as well as citation trajectories of articles, scholars, and entire fields (e.g., Angrist et al., 2020; Bowles and Carlin, 2020; Card and DellaVigna, 2013, 2020; Card et al., 2020; Currie et al., 2020; Goldin and Katz, 2020; Hamermesh, 2018; Heckman and Moktan, 2020; Kleven, 2018). Existing survey studies have documented economists’ views on issues such as economic policy, reigning

paradigms in the discipline, open science practices, or mental health (e.g., Andre et al., 2021; Bolotnyy et al., forthcoming; Colander, 2005; Frey et al., 2010; Sapienza and Zingales, 2013; Swanson et al., 2020). By contrast, our project studies economists' opinions about the current research practice in economics. We focus on the field's research objectives and topics, which have received little attention in past research. Moreover, our study is the first to give a voice to and represent the views of such a large and diverse group of economists.

The choice of research questions, topics, and objectives is arguably among the most important choices that a researcher faces. It reflects both freedom and responsibility. We hope that the results of our study stimulate and inform a debate about this important question to make progress in finding out *what is worth knowing*.¹

The remainder of the paper is structured as follows. Section 2 presents the survey instrument, section 3 describes the sample and study population, section 4 describes the results, section 5 discusses the main findings, and section 6 concludes.

2 Survey

This study aims to document which research objectives and topics economists think should matter in economics and to compare their views with the current state of economic research. The survey is separated into two modules that are tailored to meet these objectives. Each respondent is randomly assigned to one module. The first module explores trade-offs between different research objectives, while the second focuses on research topics. Both modules contain several demographic questions, including career status, gender, nationality, and age. Both parts also include a block of questions on job satisfaction and stress. Below, we describe the main questions of each module in turn. Appendix A contains their wording.²

2.1 Research objectives

The research objectives module explores whether economists think that economic research should embrace different research objectives than it does today. The module comprises ten questions that contrast and trade-off commonly-discussed research objectives, such as policy relevance versus researchers' intrinsic interest or more versus

¹A final remark seems to be in order: It would be inconsistent to study what economists consider worth being known without addressing whether this very question is actually worth being asked. Fortunately, we can once again refer to the judgment of thousands of economists. We asked a randomly selected quarter of our respondents whether they think that it is interesting to study how and on which topics economists think they should work. Almost all, 88%, think it is.

²The full survey is available at <https://osf.io/xwbd/>.

less specialization. Of course, these trade-offs are sometimes more and sometimes less severe, but in many cases economics can have more of one research goal only at the expense of the other. Respondents indicate whether, compared to the current state of economic research, they think economics should place more weight on one objective versus the other. Panel A of table 1 provides an overview of all ten questions. The questions can roughly be categorized into four blocks.³

Block 1 revolves around the **policy relevance and public importance of research**. Specifically, we ask how the societal relevance of a research project should be traded-off against a researcher’s intrinsic interest and curiosity (question 1), against basic research (question 2), and against rigorous causal identification (question 3). The block also includes a question that asks whether economic theory should be “pure” and study general theoretical principles or “evidence-related” and focus on empirically observed, applied phenomena (question 4). The questions, thus, connect to the discussion about the role and importance of policy relevance in economic research. They also relate to George Akerlof’s recent critique that economics often prioritizes “hard” research methods, including causal identification and technically advanced pure theory, over important research questions (Akerlof, 2020).

Block 2 deals with the **scope and breadth of economic research** and asks whether individual researchers should be more or less specialized (question 5) and whether their research should be more or less multidisciplinary (question 6). Here, multidisciplinary means incorporating insights from other disciplines than economics in order to study economic questions. Both specialization and multidisciplinary have frequently been discussed in economics (e.g., Fourcade et al., 2015; Shiller and Shiller, 2011).

Block 3 investigates the conflict between **productive tradition and risky innovation** (Foster et al., 2015; Kuhn, 1962). Should economic research be more incremental and connect closely to the existing literature or more disruptive and propose new approaches (question 8)? Likewise, should economic research be less or more risky, where high risks projects have an uncertain impact, but may come with a higher expected impact (question 7)? The final question in this block investigates whether respondents prefer more papers of lower quality or fewer papers of higher quality (question 9).

Block 4 consists of a single question that relates to a longstanding debate about the **goal of theory in economics: prediction or explanation** (question 10). Is its goal to predict economic outcomes, irrespective of whether its theoretical assumptions and mechanism are empirically plausible (Friedman, 1953)? Or is its goal to understand and explain economic outcomes (Hausman, 2008)?

In each of the ten questions, respondents first read a brief description of the oppos-

³The order in which we present the questions here differs from their order in the survey, see appendix A.

ing research objectives. *Policy relevance*, for example, is described as “Research informs policy, with an impact on societal well-being.” *Basic research* is described as “Research deals with fundamental and basic phenomena, laying the ground for more applied research. It has no immediate policy relevance.” Then, participants indicate their view on a seven-point scale. Each scale is centered around the option “Current state is about right”. The other response options express dissatisfaction with the status quo and place increasing weight on one research objective versus the other. For instance, the question on *Basic research* versus *Policy relevance* has the response options “Much more”, “Moderately more”, and “Slightly more” policy relevance, “Current state is about right”, as well as “Slightly more”, “Moderately more”, and “Much more” basic research. The question on specialization comes with the response options “Much less”, “Moderately less”, and “Slightly less” specialization, “Current state is about right”, as well as “Slightly more”, “Moderately more”, and “Much more” specialization. We test whether participants’ assessments differ for the whole discipline of economics and their own field of expertise. Respondents are instructed to provide two answers: one for economics as a whole and one for their own primary JEL field.⁴

2.2 JEL topics

We ask the survey participants which share of papers should be written on which topic. Each respondent can allocate a total of 100 points between different research topics. The points represent all published research articles by economists in a given year so that each point corresponds to 1% of the total research output. Thus, respondents specify their preferred distribution of research topics in economics.

We use the Journal of Economic Literature’s (JEL) subject descriptors to categorize research topics in economics. These so-called JEL codes have three layers and separate economics into 19 primary topics (or fields, 1st layer) with a total of 130 sub-topics (2nd layer) and 845 subject codes (3rd layer). Here, our main focus is on the 19 primary topics whose labels mostly align with commonly used field names such as *Public Economics* or *Industrial Organization*. Panel B of table 1 lists all primary JEL topics. We ignore the residual JEL category *Y Miscellaneous categories* which is typically not assigned to research articles. In the survey, respondents can explore the sub-topics and subject codes of each JEL topic to familiarize themselves with its content. The JEL classification system provides a unique opportunity to study topic choice in economics because it covers the whole discipline of economics and it is known to most economic researchers. Moreover, its stringent classification criteria are used to categorize most

⁴Participants can assign themselves to one primary JEL field. The list of fields is slightly adjusted to separate *Theoretical Microeconomics* from *Empirical Microeconomics* and to distinguish the sub-fields of JEL category Z.

Table 1 Overview of research objective questions and JEL topics

Panel A: Research objective questions

Block 1: Policy relevance and public importance of research

- 1 Intrinsic interest vs. policy relevance
- 2 Basic research vs. policy relevance
- 3 Causal identification vs. importance
- 4 Pure theory vs. applied theory

Block 2: Scope and breadth of research

- 5 Less vs. more specialization
- 6 Less vs. more multidisciplinary

Block 3: Productive tradition or risky innovation

- 7 Less vs. more risky research
- 8 Incremental vs. disruptive research
- 9 Quantity vs. quality

Block 4: Goal of theory: prediction or explanation

- 10 Predictive theory vs. explanatory theory

Panel B: JEL topics

- A** General Economics and Teaching
- B** History of Economic Thought, Methodology, and Heterodox Approaches
- C** Mathematical and Quantitative Methods
- D** Microeconomics
- E** Macroeconomics and Monetary Economics
- F** International Economics
- G** Financial Economics
- H** Public Economics
- I** Health, Education, and Welfare
- J** Labor and Demographic Economics
- K** Law and Economics
- L** Industrial Organization
- M** Business Administration and Business Economics Marketing Accounting Personnel Economics
- N** Economic History
- O** Economic Development, Innovation, Technological Change, and Growth
- P** Economic Systems
- Q** Agricultural and Natural Resource Economics Environmental and Ecological Economics
- R** Urban, Rural, Regional, Real Estate, and Transportation Economics
- Z** Other Special Topics

Examples for JEL sub-topics: D6 Welfare Economics, D7 Analysis of Collective Decision Making

Examples for JEL subject codes: D61 Allocative Efficiency Cost–Benefit Analysis, D62 Externalities

Notes: Panel A summarizes the ten research objective questions. Panel B presents the primary topics of the JEL classification system of the EconLit database (source: www.aeaweb.org/econlit/jelCodes.php).

published research articles. This allows us to document the actual distribution of research topics in economics to which we can then compare the preferred distribution that we elicit in the survey.

3 Sample

Numerous researchers contribute to the economic literature and shape economic research objectives and topics. Here, our objective is to represent all strata of the economics profession and, hence, to give a voice to all active economic researchers, that is, all scholars who recently contributed to the international research exchange in economics. To meet this objective, we derive a large publication dataset that contains about 177,000 publications from the top 400 journals in economics, use these data to identify active contributors to the economic literature published in English, and invite all of them to the survey. This approach has three critical advantages: First, our study population is defined systematically in a data-driven way and encompasses all economic researchers who publish in English. Second, we are able to match detailed bibliometric background data to the survey responses. Third, we can use these data to quantify and control for selection into the sample. In particular, we can use post-stratification weights which ensure that our sample broadly represents the full spectrum of economic researchers. In this section, we describe how we compile the publication data (3.1) and identify the study population (3.2). We describe how we invite respondents and collect the survey data (3.3), and we characterize the sample of researchers that participated in the survey (3.4).

3.1 Publication data

We start from the publication database EconLit. It covers an extensive set of economic journals and, importantly, provides JEL codes for each published article which allows us to also study the actual distribution research topics in economics. The JEL codes are assigned in an independent and systematic review process by trained EconLit staff. This ensures maximal JEL code coverage and a consistent and systematic application of the classification criteria. We restrict our attention to published journal articles from 2009 to early December 2019, the time at which we downloaded the data. We exclude older articles because we are primarily interested in current economic research. We exclude working papers because their coverage is less systematic and JEL code information is often not available. We drop duplicate and non-research publications such as errata or memorials. Moreover, we only consider articles written in English, the lingua franca of economics and the language in which almost all high-impact research is published.

Appendix B documents the exact procedure.

EconLit, however, comes with two drawbacks: First, it does not contain information on articles' citations and, therefore, their scientific impact. Second, it includes more than 1,500 journals many of which have only a minuscule scientific impact or belong to neighboring fields such as business and management, statistics, or operations research. To circumvent these concerns, we concentrate on the 400 EconLit-indexed journals with the highest impact factor according to the Scopus 2018 Scimago Journal Ranking in the "Economics, Econometrics, and Finance" category. This restriction helps us to exclude journals that have hardly any influence on economic research at all and to zoom in on *economics* journals. Moreover, we are able to match 97.4% of these EconLit articles to Scopus's bibliometric database which includes information about article citations, journal rankings, and authors' background. We refine our final publication sample to the successfully matched articles, a total of 177,155 publications.

3.2 Study population

We use these publication data to identify the population of active English-publishing economic researchers. In a first step, we locate about 146,000 unique authors and gather further information about them.⁵ We observe how many economic articles they published between 2009 and 2019, with whom they co-authored, to which JEL codes their articles are assigned, and how often their work is cited (as of December 2019). We use the co-author information to derive a discipline-wide co-author network from which we can derive how central and connected each author is. Moreover, we complement our data with Scopus's author information, including the authors' h-index, their total number of publications (with journal information and citations), the year of their first publication, and their institutional affiliation (as indicated in their publications). Finally, we predict the gender of each author from their names, using an algorithm of the commercial company Gender API (see Santamaría and Mihaljević, 2018). Appendix section B.3 summarizes and describes all author covariates that will be used throughout the paper.

In a second step, we restrict the set of authors to *active economic* researchers. First, we exclude all scholars who did not publish an article in our publication data since 2015 (restriction 1). Second, we focus on scholars who publish at least 50% of their work in economics journals or have at least three articles in our sample (restriction 2). This step excludes researchers from neighboring fields who have little experience with the

⁵We use Scopus's unique author identifiers, that are assigned to each article, to construct the author-level database. Scopus derives these identifiers with the help of an algorithm that tends to produce duplicates, that is, different author IDs for the same author. Thus, we combine separate author entries with identical first names, last names, and institutions. Further, we manually disambiguate all authors who have the same first and last name as an author who participated in the survey.

economic literature. Next, we exclude authors from non-academic institutions that have a very small publication output (restriction 3).⁶ Those excluded are likely to be non-academic contributors or former academics who quit research. Finally, we consider only scholars for whom a valid email address can be found online (restriction 4).⁷ Posting an email address online is a criterion for being active in research, but is also a precondition for the study: Only these scholars can be contacted and invited to the survey.

The procedure identifies 53,779 active economic researchers. Table 2 summarizes their characteristics. 26% of the population are female and about 75% work in Europe or Northern America. The average year of the first publication is 2007, which means that, on average, authors are active for 13-14 years at the time of the survey. On average, the authors write 4.8 articles in our publication sample with 5.8 unique co-authors, covering all JEL topics. In total, the average author has about 17.1 publications of which 75.9% fall into Scopus's economics category if we also count publications before 2009 and outside the top 400 EconLit journals. How successful are the authors? 12.1% are affiliated with one of the 50 leading research institutions (Shanghai Ranking), 6.1% published in a Top Five⁸ journal since 2009, and the average h-index is 6.5.

Doctoral students A limitation of our author population is that it does not contain junior researchers such as Ph.D. students who did not yet have the opportunity to publish their work. To partially offset this restraint, we derive a separate database of doctoral students. Specifically, we identify doctoral students in an economics program at one of the top 400 institutions (ranked according to total citations in our publication sample). We exclude institutions for which we could not find a central directory of student email addresses and students who are already part of the author population. This results in a population of 9,441 students from 219 institutions. 30.8% are female and 96.7% come from Europe or Northern America (see appendix table C.1). Clearly, this group of students provides only a selected subset of Ph.D. students across the globe. Thus, we mainly use it to cross-verify the survey results among economic authors in a different

⁶We consider an institution as non-academic if it contributed less than 20 articles to our publication sample and its name does not contain a keyword such as “school”, “university”, “research”, or their counterparts in other languages. Authors who have at least three articles in our sample are exempted from this rule.

⁷We gather most email addresses using Amazon's crowd-working platform Mechanical Turk. Each email address is collected at least twice by independent crowd-workers. We cross-verify all addresses. Conflicting cases are manually checked by crowd-workers and cross-verified once more. In a few cases, we also rely on corresponding author information from publications. We find an email address for 80% of the scholars who satisfy the other restrictions. Restricting the population to scholars with email address leads only to minor differences in the characteristics of the population (see appendix table C.2). In later robustness analyses, we show that all results replicate with survey weights that match the characteristics of a population that also includes the scholars for whom no address could be found.

⁸We consider the following journals as “Top Five”: American Economic Review (but not Papers & Proceedings), The Quarterly Journal of Economics, Journal of Political Economy, Review of Economic Studies, and Econometrica. Publishing in these journals is commonly viewed as a primary indicator of academic success, although this practice has been strongly criticized (e.g., Heckman and Moktan, 2020).

Table 2 Characteristics of the study population and the sample

Variable	(1) Study population	(2) Unweighted sample	(3) Weighted sample
Gender, academic age			
Female	26.0%	23.1%	25.8%
Year of first publication (YYYY/MM)	2007/01	2006/01	2006/10
Number of papers			
Number of articles (in pub. sample)	4.8	5.6	4.9
Number of articles (overall)	17.1	18.3	16.2
Share of art. in econ. journals	75.9%	76.2%	76.8%
Co-author network (in pub. sample)			
Degree (number of unique co-authors)	5.8	6.5	5.7
Eigenvector centrality (index)	61.1%	65.6%	62.2%
Number of co-authors with Top Five pub.	0.5	0.8	0.5
Success			
Top 50 institution	12.1%	12.2%	12.5%
Publ. in Top Five Journal (in pub. sample)	6.1%	9.3%	6.1%
Num. of Top Five pub. (in pub. sample)	0.12	0.18	0.11
Average journal rank 1-400 (in pub. sample)	164.2	161.9	165.8
h-index	6.5	6.8	6.1
Continent			
Europe	40.4%	53.6%	40.5%
Northern America	33.9%	24.2%	33.9%
Asia	17.1%	13.4%	17.2%
Australia and New Zealand	4.3%	3.7%	3.3%
Latin America	2.7%	3.4%	3.3%
Africa	1.6%	1.7%	1.8%
Share of publications in JEL fields			
C Mathematical and Quantitative Methods	6.1%	6.3%	5.8%
D Microeconomics	13.1%	16.1%	13.5%
E Macroeconomics and Monetary Econ.	7.3%	7.4%	7.1%
F International Economics	4.4%	4.3%	4.2%
G Financial Economics	18.2%	11.3%	16.9%
H Public Economics	3.6%	4.3%	3.8%
J Labor and Demographic Economics	6.7%	9.8%	7.5%
L Industrial organization	8.3%	7.4%	8%
O Growth and Development Economics	8.5%	8.8%	9.2%
Q Agricultural and Environmental Econ.	7.1%	7.4%	7.4%
Other fields	16.6%	16.9%	16.6%
Sample size	53,779	7,794	7,794

Notes: Overview of covariates. Column 1: The eligible study population. Column 2: Respondents of the main sample, unweighted. Column 3: Weighted main sample (using post-stratification weights, see section 3.4). For a description of the covariates in the different rows see main text or appendix section B.3.

population.

3.3 Data collection

The survey was conducted online with the survey platform Qualtrics. We invited the full study population, 53,779 economic authors and 9,441 Ph.D. students, via email. The invitations were sent in random order from the 23rd of June 2020 to the 8th of July 2020.⁹ To encourage participation among those who did not complete the survey, we sent a first reminder two weeks later and a second reminder in September 2020. We closed the survey on October 8th and drop all respondents who did not complete the main questions of their survey module.

9,921 researchers participated, yielding an overall response rate of 15.6%. Of those, 8,156 come from the population of economic *authors* (response rate: 15.2%), and 1,765 come from the *student* population (response rate: 17.8%). The main analyses rely on the data of 7,794 economic *authors* who completed the full survey. This restriction reduces changes in the sample size across different analysis steps due to missing data. Most respondents spent 9 to 25 minutes (25% and 75% percentile) to complete the survey, with a median response duration of 12 minutes.

3.4 Sample characteristics

A unique feature of our study design is that we can observe and correct for selection into the sample on a diverse set of dimensions including gender, year of first publication (a proxy for “academic age”), continent of residence, publication success, research field, and position in the discipline-wide co-author network. This ensures that our main sample broadly represents the study population on a wide range of observable characteristics.

Column 2 of table 2 displays the characteristics of the unweighted main sample. By and large, it closely follows the characteristics of the study population. But we also observe evidence of selection into the sample. Participating researchers are on average slightly more experienced and successful than the average researcher in the study population. For instance, researchers in our sample have on average 0.8 more articles in our publication sample, 0.06 more Top Five publications, 0.7 more co-authors, and published their first publication 1 year earlier. Also, we observe slightly fewer female researchers in our sample (23% in the sample versus 26% in the population), more European researchers

⁹We also ran a small pilot invitation with 578 researchers on the 16th of July. Afterward, we introduced several small changes to the survey. 33 respondents saw the old survey version. We do not exclude their response data because the changes in the instructions were only minor.

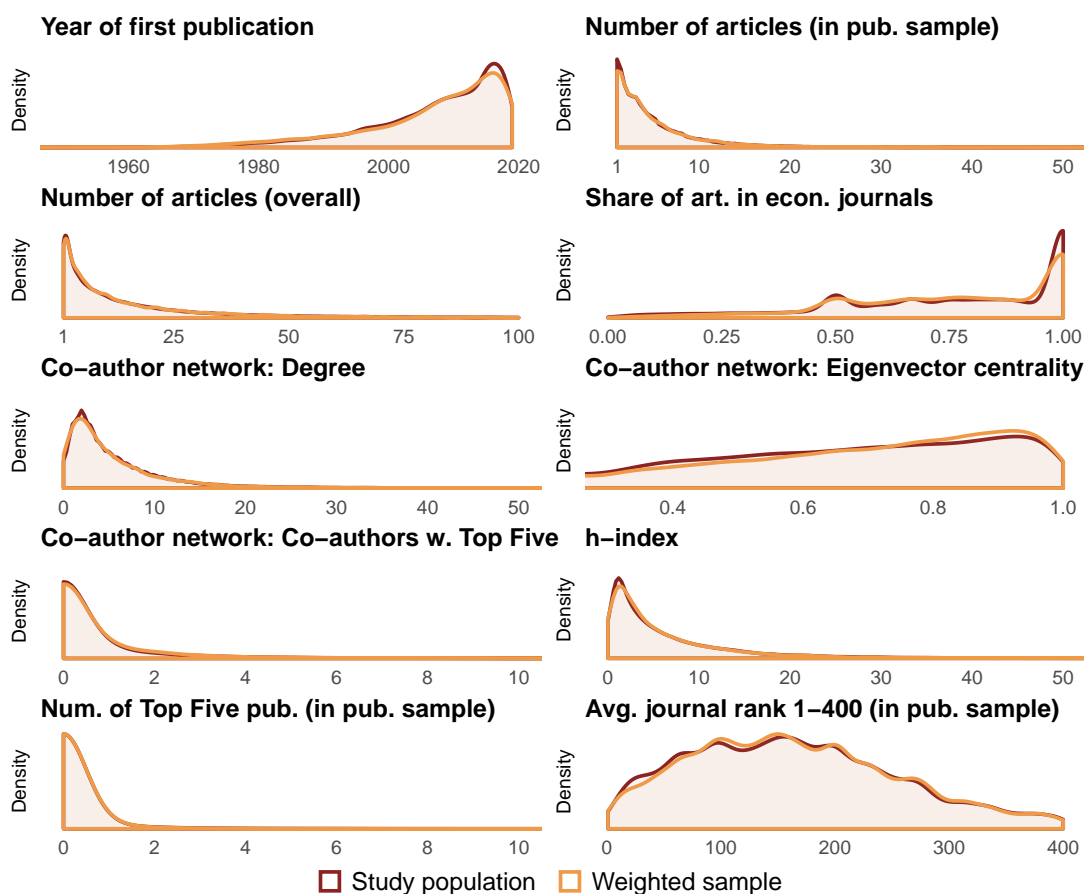


Figure 1 Population and sample distributions of covariates

Notes: Kernel density estimates for the distribution of covariates. Red: The eligible study population ($n = 53,779$). Yellow: The weighted main sample ($n = 7,794$). For a description of the covariates in the different sub-plots, see main text or appendix section B.3.

take part in the survey¹⁰, and the participants publish relatively more papers in the JEL field *D Microeconomics* and *J Labor Economics* but less in *G Financial Economics* than the study population.

We calculate post-stratification weights to correct for these observed imbalances. Specifically, we use a raking algorithm and target the marginal distributions of gender (2 groups), the year of first publication (quartiles), the number of papers in our publication sample (quartiles), the h-index (quartiles), region (Europe, Northern America, Asia, Other), and the main research field (6 groups). The algorithm assigns greater weight to observations from under-represented groups. We follow the guidelines of the American National Election Study Weighting System (Pasek et al., 2014). Appendix section C.1 provides further details.

Column 3 of table 2 shows the characteristics of the weighted sample. The statistics illustrate that the weighting corrects for both targeted and untargeted imbalances. Across

¹⁰The timing of the invitations, which were mostly sent between 2 PM and 9 PM CET, could have led to a higher response rate among Europe-based respondents.

all covariates, the remaining differences between the weighted sample and the population are minor. Of course, table 2 displays only average values for many covariates which could conceal important differences in the variables' underlying distributions. Yet, figure 1, which contrasts the distributions of all continuous covariates in the population and the weighted sample, dispels this concern. In fact, the distributions overlap almost completely, indicating that our sample broadly represents the full spectrum of economic researchers.

The demographic module of our survey allows us to further characterize our sample (see appendix figure C.1). About 90% of respondents engage in academic research (including 4.6% students). 8.5% describe themselves as “non-academic researcher”. 33.5% of the active academics are full professors, 28.2% have an associate professorship (or an equivalent position as reader or senior lecturer), and 22% are assistant professors (or lecturers). 88.9% of the respondents indicate that economics, econometrics, or finance is their primary academic discipline.

4 Results

In presenting our results, we first describe our findings with respect to research objectives before turning to the choice of topics. For both, objectives and topics, we discuss heterogeneity, aggregate outcomes, and determinants.

4.1 Research objectives

Heterogeneity of responses Figure 2 displays the distribution of responses to the ten research objective questions. The questions ask respondents to trade off two opposing research objectives and indicate whether they think economic research should place more weight on one objective versus the other. The results reveal that economists' opinions are vastly heterogeneous. Typically, both opposing research objectives as well as the neutral category (“Current state is about right”) attract significant support. For instance, 24% of the respondents advocate that intellectual, intrinsic interest should play a greater role in economic research relative to policy relevance than it does today, while 54% endorse the opposite view, and 22% are satisfied with the status quo (question 1). We observe heterogeneity not only in the direction but also in the magnitudes of the desired changes. For instance, 18% of economists believe that “slightly more”, 20% that “moderately more”, and 16% that “much more” policy relevance (*vis-à-vis* intrinsic interest) is needed. A similar picture emerges for most of the other questions.

Importantly, this dissent cannot simply be attributed to a generic inability of economic experts to agree on certain issues. For example, as we already noted in the introduc-

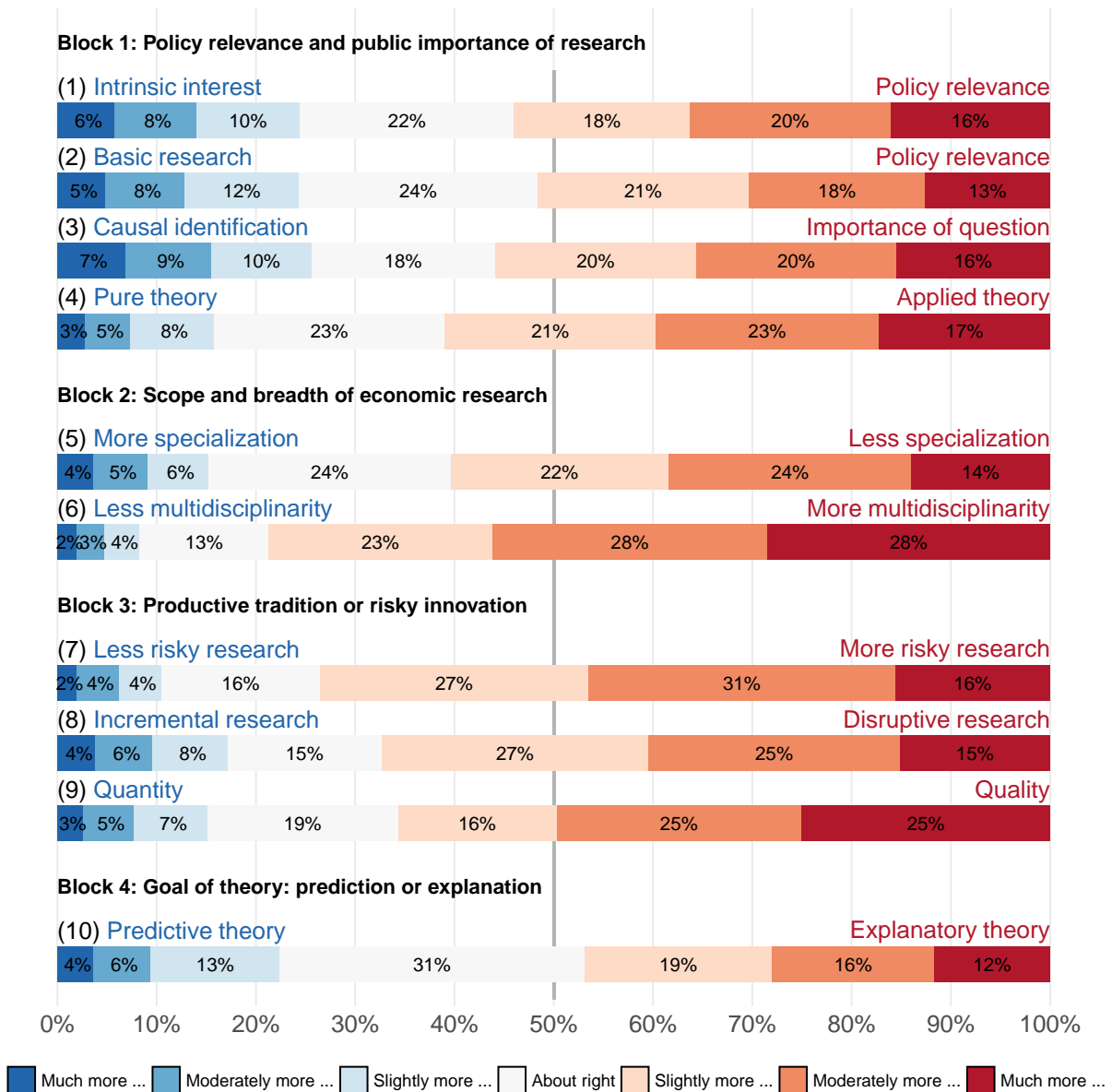


Figure 2 Distribution of survey responses to the research objective questions

Notes: Distribution of survey responses to the ten research objective questions (weighted sample). The overarching question is: “In comparison with how research in economics is currently conducted, how should economists conduct research?” The labels at the top left and top right of each distribution summarize which two research objectives a question contrasts. The legend displays the available response categories. The full wording of the questions is available in appendix A.

tion, a clear majority of economists (88.4%) support the purpose of this study and agree that studying how economists think economics should be conducted is interesting. Past research also shows that economists largely agree on factual issues such as the notion that higher government spending reduces unemployment or that carbon taxes are a more cost-effective environmental policy than mandatory car standards (Andre et al., 2021; Sapienza and Zingales, 2013). In other words, consensus among economic experts is possible, yet the question of which research objectives economics should pursue remains fundamentally disputed.

Aggregate results The aggregate results show that most economists express dissatisfaction with how research is currently conducted. Across the ten questions, only 13% to 31% (average: 20.6%) of respondents say that the current state of research is “about right”. The large majority of economists thus prefer a deviation from the status quo. Note that we observe this pronounced dissatisfaction despite the fact that the answer category in support of the status quo is framed relatively moderately. Agreement with this category does not imply that the status quo is viewed as “exactly” right but only “about” right, leaving room for modest disagreement.

Despite the observed heterogeneity, we find that most economists actually agree on the preferred direction of change. In fact, for most objectives, more than half of the respondents agree about the direction in which economics should deviate from the status quo. First, economists favor more policy relevant research. 54% of the experts advocate a shift towards more policy relevance relative to intrinsic interest (question 1). This share significantly differs from 50% ($p < 0.001$, t-test).¹¹ Likewise, 52% support a shift towards more policy relevance relative to basic research (question 2, $p = 0.062$). For empirical work, 56% of economists favor working on more important research questions even if this comes at the cost of less causal identification (question 3, $p < 0.001$). Moreover, for theoretical work, 61% would prefer more applied, evidence-related theory instead of pure theory (question 4, $p < 0.001$).

Second, more than half of the respondents express a preference for a greater scope and breadth of economic research: Research should be less specialized (question 5, $p < 0.001$) and more multidisciplinary (question 6, $p < 0.001$), implying that economics should incorporate more insights from other disciplines to study economic questions. In fact, multidisciplinary is the issue on which economists reach the most pronounced consensus, with almost 80% of respondents supporting a shift towards increasing multidisciplinary.

Third, a majority endorses a shift towards more risky innovation instead of incremental, traditional research. Respondents say that economic research should be more risky

¹¹See appendix table D.1. We also show that average responses significantly differ from the neutral category.

(question 7, $p < 0.001$), disruptive (question 8, $p < 0.001$) and place a stronger focus on quality versus quantity (question 9, $p < 0.001$).

The final question asks whether economic theory should place greater emphasis on predicting versus explaining outcomes (question 10). Here, the responses are more balanced. 47% of respondents indicate that they prefer a shift towards more explanation, 22% favor a shift towards more prediction, while 31% think that the status quo is about right, reflecting the largest fraction of neutral responses observed across all questions.

In short, the majority of economists agree on the direction of change. They favor a shift towards more policy-relevant and risky research with a broader scope and stronger multidisciplinary orientation.

We obtain virtually identical results with different weighting schemes: (i) weights that target a scholar population that also includes authors for whom no email address could be found, thus correcting for a potential differential availability of email contact data; (ii) identical weights for all authors; (iii) identical weights for all authors who say that economics is their primary academic discipline (89%); and finally (iv) identical weights that also include the full student sample (see appendix figure D.1; appendix section C.1 contains details on the weighting schemes). In particular, the responses of students largely mirror those of the authors (see also appendix figure D.2). Thus, there appears to be no divide between the current population of publishing scholars and its next generation.

Do economists prefer different research objectives for their own field of expertise? To answer this question, we elicit respondents' opinions not only for economics as a whole but also for their main field. Appendix figure D.3 compares the distribution of responses to both question types and documents largely identical results. Hence, economists express similar views about the state of the profession, irrespective of considering economics "as a whole" or their "own field", respectively. Appendix figure D.4 disaggregates the field-specific responses and reports similar trends in each individual field. There are only a few exceptions. For instance, economists who identify either Microeconomic Theory, Economic History, Mathematical Methods, or Economic Thought/Heterodox Economics as their main field place less emphasis on policy relevance.

Predictors of responses Next, we ask whether economists' opinions are systematically related to their characteristics. The rich author data allow us to regress the survey responses on basic demographic characteristics (gender, age, tenure, region), indicators of academic success (affiliation with top 50 institution, Top Five publication, h-index), and the share of theory and methods projects a researcher works on. We also account for the research topics respondents work on: We include (but for the sake of brevity do not report) the researchers' share of publications in each primary JEL topic and their share of publications in economics journals (see appendix section B.3 for details about

Table 3 Predictors of preferred research objectives

	Response to research objective question (standardized)									
	Pol. relev. (vs. intrin. interest)	Pol. relev. (vs. basic research)	Importance (vs. causal ident.)	Applied theory (vs. pure)	Less specialization	More multidis- ciplinarity	More risky research	Disruptive research (vs. incremental)	Quality (vs. quantity)	Explanation (vs. prediction)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Demographics										
Female	0.106 (0.041)	0.076 (0.043)	0.065 (0.043)	0.072 (0.042)	0.018 (0.044)	0.167 (0.042)	0.004 (0.044)	0.112 (0.043)	0.034 (0.043)	0.047 (0.043)
Age (in 10y)	0.028 (0.019)	0.013 (0.019)	0.104 (0.020)	0.000 (0.019)	0.113 (0.019)	0.007 (0.019)	0.036 (0.020)	0.040 (0.019)	0.130 (0.018)	0.009 (0.020)
Tenured	0.044 (0.040)	0.029 (0.040)	0.040 (0.041)	0.038 (0.040)	0.039 (0.042)	0.033 (0.040)	0.048 (0.041)	0.051 (0.040)	0.055 (0.041)	0.046 (0.041)
Region (vs. NA/AUS/NZL)										
EUR	0.002 (0.040)	0.053 (0.041)	0.013 (0.041)	0.054 (0.039)	0.109 (0.041)	0.033 (0.040)	0.106 (0.041)	0.076 (0.042)	0.194 (0.040)	0.091 (0.041)
AF, AS, LA	0.221 (0.058)	0.101 (0.059)	0.195 (0.058)	0.165 (0.058)	0.284 (0.061)	0.132 (0.058)	0.339 (0.062)	0.234 (0.059)	0.101 (0.059)	0.030 (0.058)
Success										
Top 50 inst.	0.037 (0.053)	0.001 (0.052)	0.051 (0.057)	0.050 (0.050)	0.039 (0.054)	0.076 (0.052)	0.127 (0.055)	0.109 (0.054)	0.110 (0.059)	0.082 (0.056)
Top Five	0.210 (0.059)	0.200 (0.058)	0.100 (0.059)	0.158 (0.058)	0.116 (0.057)	0.182 (0.062)	0.001 (0.058)	0.001 (0.057)	0.240 (0.059)	0.090 (0.056)
h-index (in 10)	0.022 (0.033)	0.001 (0.034)	0.125 (0.034)	0.095 (0.030)	0.018 (0.032)	0.026 (0.034)	0.030 (0.033)	0.050 (0.030)	0.076 (0.034)	0.070 (0.033)
Project types (vs. empirics)										
Theory (in 10%)	0.049 (0.007)	0.047 (0.007)	0.008 (0.007)	0.079 (0.007)	0.004 (0.007)	0.009 (0.007)	0.005 (0.007)	0.006 (0.007)	0.011 (0.007)	0.018 (0.007)
Methods (in 10%)	0.030 (0.011)	0.032 (0.011)	0.046 (0.012)	0.030 (0.011)	0.032 (0.011)	0.024 (0.012)	0.053 (0.012)	0.031 (0.011)	0.010 (0.011)	0.003 (0.012)
JEL topic	×	×	×	×	×	×	×	×	×	×
Observations	3,887	3,880	3,871	3,874	3,888	3,891	3,880	3,880	3,882	3,856
R ²	0.060	0.048	0.037	0.079	0.062	0.055	0.050	0.034	0.052	0.036

19

Notes: Weighted OLS regressions, robust standard errors in parentheses. The dependent variables are the *standardized* survey responses to the research objective questions, as indicated by the column labels. The explanatory variables include various author characteristics. Age and h-index are divided by 10, theory and methods are divided by 10%. All regressions control for the share of publications in each primary JEL topic as well as the share of publications in economics journals. p-values are adjusted for multiple hypotheses correction across all coefficients reported in this table, using the Benjamini-Hochberg-procedure. Insignificant results are printed in gray to facilitate orientation. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Region abbreviations: NA – Northern America, AUS – Australia, NZL – New Zealand, EUR – Europe, AF – Africa, AS – Asia, LA – Latin America.

all covariates). We use the Benjamini-Hochberg procedure to correct all reported coefficients jointly for multiple hypotheses testing (Benjamini and Hochberg, 1995). Table 3 summarizes the results.¹²

Individual characteristics prove to be predictive of the views about research objectives. Most characteristics predict a consistent shift either towards or against the majority view (more policy relevance, broader scope, more risky innovation). For instance, female economists show on average greater support for policy relevance (question 1), multidisciplinary (question 6), and disruptive research (question 8), in line with the majority view. By contrast, economists in Africa, Asia, and Latin America show weaker support of policy relevance (question 1, 3, 4) and disruptive research (question 7, 8), opposite to the majority view. Economists who have published a Top Five paper also tend to place less weight on policy relevance and multidisciplinary but place more weight on quality. Likewise, theorists and methods researchers show a weaker preference for policy relevance, and the latter also tend to favor specialization and incremental research to a greater extent.

4.2 JEL topics

Aggregate results Figure 3 compares the distribution of JEL topics in our publication sample (in blue) with the average survey response (in red). The former shows which fraction of papers is published in each JEL topic, which is derived from our publication data from the top 400 EconLit-indexed journals from January 2009 to December 2019.¹³ It thus describes the state of economic research in the period before our survey was launched. We can directly compare it to the average survey responses, which show economists' average opinion on which share of papers should be written and published in each JEL topic.

Qualitatively, we observe a similar ordinal ranking of JEL topics in the publication data and the average survey responses, as manifested in a sizable rank-order correlation of 0.76 ($p < 0.001$). JEL topics that dominate the research output in economics (such as *D Micro*, *E Macro*, or *G Finance*) also receive large weights in the survey. JEL topics that play a relatively minor role in economics today (such as *A General & Teaching*, *K Law and Economics*, or *N History*) also receive small weights in the survey.

Quantitatively, however, we observe sizeable discrepancies between the two distributions. Respondents on average spread the weights across the nineteen JEL categories

¹²We obtain very similar results in ordered probit regressions and regressions with different weighting schemes. These analyses are available upon request.

¹³In practice, most papers are assigned to multiple JEL codes. We derive each paper's weight in topic j as the share of codes in j . For example, a paper with two codes in D and one code in L receives a weight of $\frac{2}{3}$ for D and a weight $\frac{1}{3}$ for L . In appendix D.2, we show that the analyses are robust to using three alternative aggregation procedures.

more uniformly. For instance, the average weight that respondents assign to the field with most publications – *G Finance* – is 9.8 percentage points smaller than its actual share of publications (see figure 4). Respondents also place a much lower weight on the second and third most prominent fields, *D Micro* and *L Industrial Organization*. By contrast, respondents on average think that more work should be published in JEL fields that see relatively few publications in practice. In short, economists on average place more weight on minor JEL topics and less weight on the most common JEL topics. In other words, they favor a more diverse and pluralistic distribution of topics in economic research.¹⁴

A potential concern is that the results are overly sensitive to how we aggregate the survey responses and derive the actual distribution of JEL topics. Therefore, we conduct five additional tests to address these concerns. First, we explore the sensitivity of the survey results to different weighting schemes and include the responses from the student sample. Second, we exclude possibly “careless” participants whose response behavior suggests that they might not have paid sufficient attention to the survey. For instance, we exclude respondents who assign a positive weight to only a few topics, spend only little time on the JEL topics question, or show a low standard deviation of preferred topic shares, which indicates a potential uniformity bias in responses. Third, we derive the actual distribution of JEL topics only from papers that were published by an author of our study population. Fourth, one may argue that our set of top 400 EconLit journals still contains many outlets with negligibly low impact on economic research. We therefore also derive the JEL topic distribution of the top 200 and top 100 journals. Finally, given that the period 2009-2019 might be considered too long to study the *current* topics of economic research, we also calculate the topic distribution for the 2015-2019 and 2018-2019 periods and explore its time trends. We replicate our main conclusions in all of these sensitivity analyses (see appendix figures D.6 and D.7 and the discussion in appendix D.2). In particular, we detect no sizeable time trends in the distribution of research topics over the last decade (see appendix figure D.8). Thus, even a time lag between starting and publishing research projects – which could in principle separate current topic preferences and published research output – is unlikely to explain the results. Again, we observe virtually identical results in the author and student sample (appendix figure D.9).

Relatedly, one may wonder how the survey responses compare to the topic distribution in Top Five journals. After all, these journals are considered “general interest journals” and aspire to publish the best economic research in all fields. Appendix figures D.10 and D.11 contrasts their topic distribution with the survey responses and the topic distribution in the top 400 journals. First of all, we notice that – compared to the full set

¹⁴Appendix section D.2 documents a similar phenomenon for the 130 JEL sub-topics.

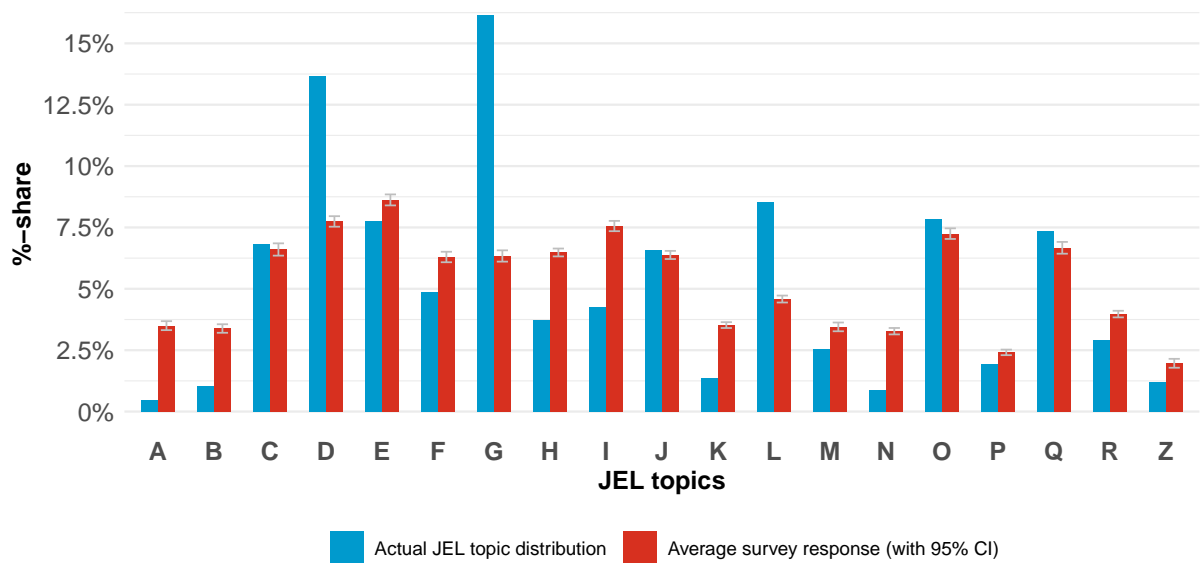


Figure 3 Comparison of JEL topic distributions in econ. journals with survey responses

Notes: Blue bars: Shares of JEL topics in our publication sample (EconLit publication data, top 400 journals, January 2009 - December 2019). Red bars: Weighted average survey responses with 95% confidence intervals.

JEL topics: A General Economics and Teaching, B Econ. Thought, Methodology, Heterodox, C Mathematical and Quantitative, D Microeconomics, E Macroeconomics and Monetary, F International, G Financial, H Public, I Health, Education, and Welfare, J Labor and Demographic, K Law and Economics, L Industrial Organization, M Business, Marketing, Personnel, N Economic History, O Development, Innovation, P Economic Systems, Q Agricultural and Environmental, R Urban, Z Cultural, Sports, Tourism.

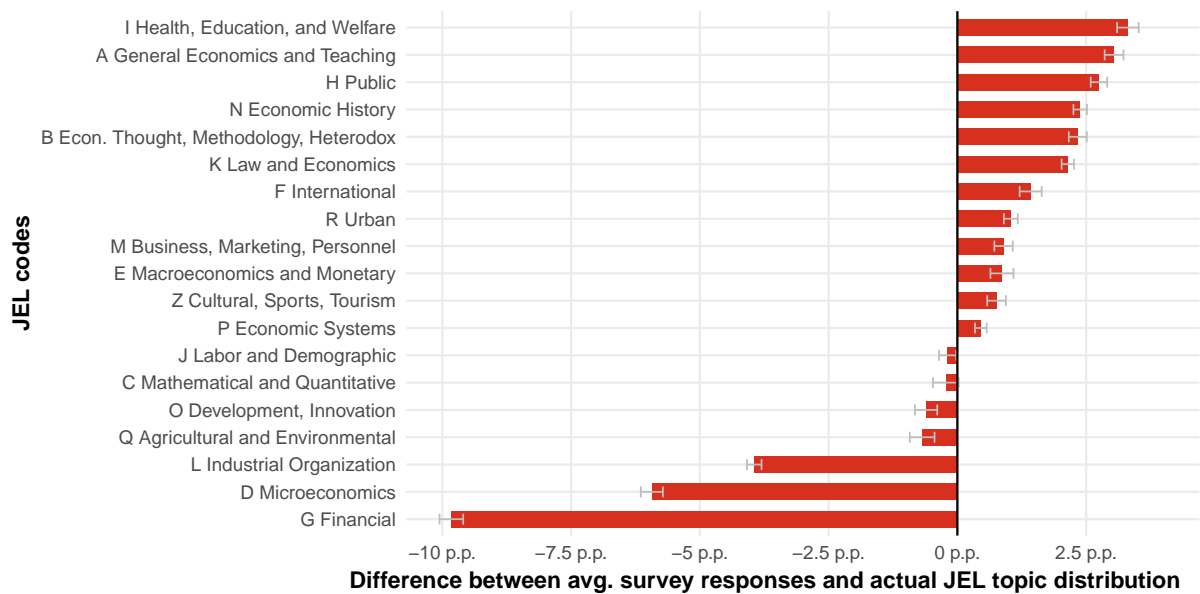


Figure 4 Differences between the avg. preferred and the actual JEL topic distribution

Notes: Differences between the red and blue bars from figure 3 with 95% confidence intervals.

of journals – Top Five journals publish more research in the fields *C Mathematical Methods*, *D Microeconomics*, and *J Labor and Demographic Economics*, but less research in the fields of *G Finance*, *O Development*, and *Q Environment and Agricultural Economics*. However, in comparison with economists’ average survey responses, we can still conclude that the average economist would prefer a more diverse distribution of research topics. In particular, economists assign a 20.3 percentage points lower weight to *D Microeconomics*, the JEL topic that by far dominates Top Five publications (see appendix figures D.10 and D.11). It is also noteworthy that economists assign a 4.6 percentage points higher weight to *Q Environmental and Agricultural Economics*, mirroring the recent critique that top economic research is rather silent about climate change (Oswald and Stern, 2019).

The JEL topics module also asked respondents how economic research should be distributed across three broad project types: projects that predominantly focus on theory (formal and informal), empirics, or methods (e.g., econometrics or computational techniques). On average, economists think that about 48% of research should be empirical, 28% theoretical, and 24% should focus on methods (see appendix figure D.12).

Heterogeneity The average results conceal considerable heterogeneity in the responses and opinions of economists. Indeed, the small confidence intervals in figure 3 can be attributed to the large sample size, rather than a small dispersion of responses. Appendix figure D.13 maps the distribution of responses for each JEL category. The shares assigned to most topics range from 0% to more than 10%.

Predictors of responses The documented heterogeneity in preferred research topics is systematically related to respondents’ characteristics. The strongest and most consistent predictor is the topic of the authors’ own publications. Respondents favor their own fields. They assign an about 1 percentage point stronger weight to a JEL topic if they have a 10 percentage point higher share of publications in this topic (see appendix table D.3). This corresponds to a weight increase of 0.19 standard deviations. Thus, a respondent who writes all publications on a single JEL topic would on average assign an about 10 percentage point (1.9 standard deviations) stronger weight to it.¹⁵

As before, we also explore a rich battery of other characteristics, including gender, age, region, and academic success. The most predictive characteristics are female gender, having published in a Top Five journal, and the share of one’s work in economic theory and methods. For instance, female scholars place comparatively less weight on *E Macro* and *N History*, but more weight on *I Health, Education, Welfare*, *J Labor*, and *Q Environmental/Agricultural*. We refer the interested reader to appendix table D.2, which summarizes the results.

¹⁵These results are robust to including controls and different weighting schemes (appendix table D.3).

5 Discussion

Investigating economists' opinions about economics in a large, representative survey, we document three main findings. First, economists' views about how economics should be done are vastly heterogeneous. Second, many economists express dissatisfaction with the current state of economic research. Third, despite the considerable heterogeneity in views, respondents on average agree on the preferred direction of change. They think that economic research should become (i) more policy-relevant, (ii) more multidisciplinary, (iii) more risky and disruptive, and (iv) pursue more diverse topics. In this section, we discuss these results.

The rich heterogeneity of opinions serves as a reminder that any statement about “right” or “interesting” research questions, objectives, and topics is inherently subjective. While there are often scientific criteria for what constitutes a good *answer*, there are no objective guidelines for what constitutes a good *question*. The problem of problem choice eludes a clear, objective, scientific solution (Weber, 1919).

The documented mismatch between economists' views and current research practices in economics reveals that economists' research preferences are currently not reflected in their discipline's research output. Explanations for this mismatch are likely to be multifaceted and may range from researchers' strategic motives and career concerns (Akerlof, 2020; Frey, 2009; Reif, 1961), academic fads, fashions, and bandwagon effects (Bramoullé and Saint-Paul, 2010; Sunstein, 2001), to a “tyranny” of top journals (Heckman and Moktan, 2020). An empirical distinction of these explanations is beyond the study's design and purpose. Instead, we discuss potential implications of this mismatch.

We first ask whether the presented “majority” opinion is in fact “relevant”. Science is not a democratic process and the majority opinion does not necessarily provide reliable guidance in academia. In practice, successful and highly reputed scholars typically have more influence on the discipline's research agendas, topics, and objectives (Azoulay et al., 2019; Bourdieu, 1975). Their research is more visible and – as editors or referees – their judgments critically shape the publication process. One could argue that their experienced assessments indeed weigh more strongly than those of junior colleagues or scholars with a shorter academic track record. Top economists might see less need for change and therefore promote and reinforce the current status quo as authors, research leaders, referees, and editors.

However, this argument is firmly rejected by the data: Top economists widely share the discipline's discomfort with its research objectives and topics. To investigate this, we identify influential economists using three complementary approaches. First, we focus on economists who have published at least one article in a Top Five journal within

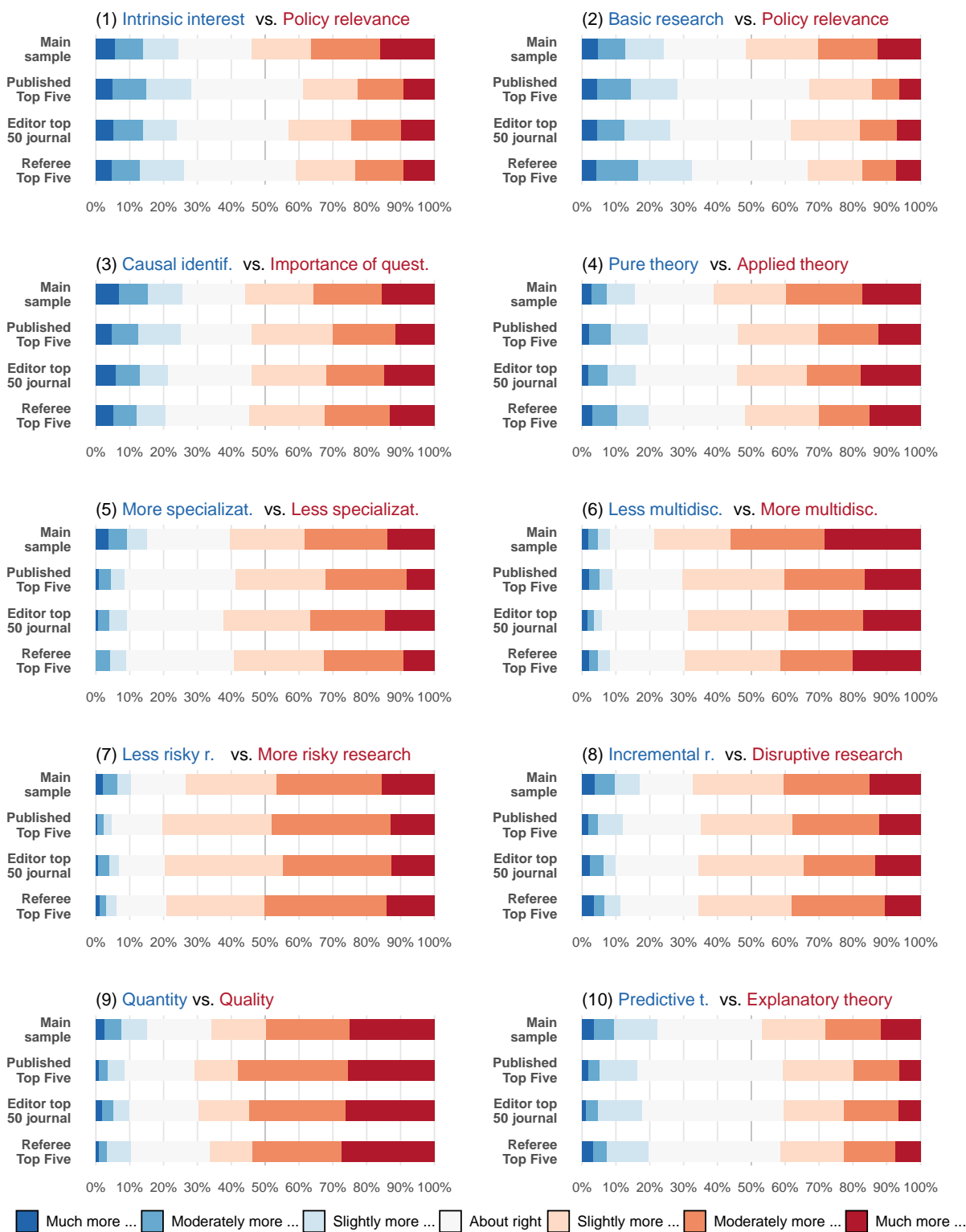


Figure 5 Top economists' responses to the research objective questions

Notes: Weighted distribution of survey responses to the ten research objective questions. The overarching question is: “In comparison with how research in economics is currently conducted, how should economists conduct research?” The results are displayed for the main sample and the (unweighted) subsets of authors with a Top Five publication (in our publication sample), editors at top 50 journals, and referees at Top Five journals.

our publication sample. Second, we locate editors and advisory board members at the top 50 EconLit-indexed economics journals between 2015 and 2020. Third, we identify scholars who have repeatedly refereed at Top Five journals between 2015 and 2020. Appendix section D.3 contains further details. 6.1% of our weighted sample (population: 6.1%) have published a Top Five paper, 3.2% have served as a member of an editorial or advisory board at a top 50 journal (population: 3.6%), and 6.1% have repeatedly reviewed papers for the Top Fives (population: 4.9%). Figure 5 presents the distribution of their preferred research objectives and compares it to the views of the full sample. Aside from somewhat weaker support of policy relevance vis-à-vis intrinsic interest and basic research, the views of top economists mirror those of the field at large. In particular, they favor a shift towards more important research questions (at the costs of causal identification), less specialization, more multidisciplinary, and more risky research. Appendix figure D.14 shows that their topic preferences are close to those of the full discipline as well.

Second, we discuss whether recent trends in economic research are likely to reduce the future mismatch between the current research practice in economics and economists' views. Economics is a constantly evolving discipline and the change that many economists desire might already be on its way. We start with the research topics and derive the JEL topic distribution for each year from 2009 to 2019. We detect no consistent trend that, when extrapolated to the future, would move the distribution of research topics closer to economists' preferences (appendix figure D.8). Thus, in terms of research topics, recent trends are unlikely to reduce the mismatch anytime soon.

Observing the development of research objectives is arguably more challenging, as objectives such as “policy relevance”, “quality”, or “disruptiveness” are difficult to quantify. Nonetheless, recent work assesses the evolution of multidisciplinary, applied theory, and causal identification. These studies observe that, over the last decade, economics has become more multidisciplinary (Angrist et al., 2020; Buyalskaya et al., 2021), theory has become less prevalent and more applied (Angrist et al., 2017; Backhouse and Cherrier, 2017; Hamermesh, 2013), and techniques of causal identification have become increasingly important (Currie et al., 2020).¹⁶ We do not observe whether the shift towards identification has come at the cost of less policy relevance and research questions of lower public relevance (Akerlof, 2020). However, the trends in multidisciplinary and applied theory have indeed brought the field closer to economists' pre-

¹⁶ Angrist et al. (2020) show that citations to other disciplines have increased in economics. Buyalskaya et al. (2021) observe that funding agencies, such as the NSF, have recognized the need to support interdisciplinary projects. Hamermesh (2013) and Angrist et al. (2017) document that less purely theoretical research is published in top journals, while Backhouse and Cherrier (2017) discuss that this development has been accompanied by a turn towards more applied theory. Currie et al. (2020) use text-mining methods to show that publications increasingly mention causal identification techniques such as field experiments or regression discontinuity designs.

ferred objectives. Thus, signs of progress are visible, but sustained change is needed to reduce the mismatch noticeably. For instance, multidisciplinary is still the research objective for which we document the highest degree of dissatisfaction today, with almost 80% supporting a continued shift towards more multidisciplinary research.

Next, we turn from discipline-wide metrics to the individual researcher and investigate whether the widespread disagreement with the status quo has implications for the well-being of individual scholars. Do researchers who disagree with the current research objectives and topics show lower job satisfaction? To shed light on this, the survey asks respondents to rate (i) how satisfied they are with their job in general, (ii) with the topics that they work on, (iii) how stressful they find their job, and (iv) whether they perceive academia as “overly competitive”. Table 4 regresses these standardized measures on a “satisfaction with economics” index score and a large set of demographic and bibliometric covariates. The index is a joint measure of economists’ satisfaction with their discipline’s research objectives and topics. We pool the samples from both survey modules to leverage maximal statistical power. The index is calculated as follows. In the research objectives module, the index measures how often and how strongly respondents agree with the status quo. We derive the sum of absolute deviations (in scale points) from the “about right” category and take its negative z-score. In the JEL topics module, the index measures how close the distribution that a respondent prefers is to the current topic distribution in economics. Here, we derive the sum of absolute deviations from the actual topic shares and take its negative z-score.

The results in table 4 show that a higher satisfaction with economics’ research objectives and topics is paralleled by higher job satisfaction and less job-related stress. For instance, a one standard deviation increase in satisfaction with economic research is associated with a 0.07 standard deviation increase in general job satisfaction and a 0.13 standard deviation reduction in perceiving academia as being overly competitive. These results hold conditional on a rich vector of control variables, are robust to using different weighting schemes, and can be replicated in each survey module separately (appendix section D.3). Hence, disagreeing with the current objectives and topics in economics is associated with a psychological and mental burden. As an aside, the results also reveal that tenured scholars report significantly higher job satisfaction, likewise economists who work for a leading research institution or have published in a Top Five journal.

The fact that researchers whose views and preferences align with the prevailing research practices are more satisfied could also have implications for the diversity of scholars in economics, in particular concerning gender (Avilova and Goldin, 2018; Bayer and Rouse, 2016; Buckles, 2019; Lundberg and Stearns, 2019; Lundberg, ed, 2020). Indeed, column 5 of table 4 reveals that satisfaction with economic research substantially varies across demographic groups. It is highest for tenured scholars and economists who

Table 4 Predictors of satisfaction

	Satisfaction (std.)				
	Own job (1)	Own topics (2)	Stress (3)	Overly competitive (4)	Satisfact. w/ econ. (5)
Satisfact. w/ econ.	0.072 (0.014)	0.034 (0.014)	0.040 (0.013)	0.127 (0.013)	
Female	0.072 (0.032)	0.027 (0.031)	0.216 (0.030)	0.230 (0.029)	0.072 (0.031)
Age (in 10y)	0.025 (0.014)	0.053 (0.013)	0.151 (0.013)	0.066 (0.013)	0.069 (0.014)
Tenured	0.153 (0.030)	0.034 (0.029)	0.026 (0.029)	0.075 (0.029)	0.068 (0.030)
Region: EUR	0.041 (0.031)	0.042 (0.030)	0.132 (0.030)	0.114 (0.030)	0.096 (0.030)
Region: AF, AS, LA	0.036 (0.042)	0.104 (0.041)	0.016 (0.039)	0.024 (0.040)	0.067 (0.042)
Top 50 inst.	0.089 (0.042)	0.080 (0.040)	0.041 (0.042)	0.010 (0.042)	0.016 (0.039)
Published Top Five	0.225 (0.042)	0.175 (0.043)	0.020 (0.045)	0.143 (0.047)	0.248 (0.043)
h-ind. (in 10)	0.113 (0.020)	0.107 (0.023)	0.068 (0.024)	0.051 (0.023)	0.010 (0.024)
Method ctrl.	×	×	×	×	×
Topic ctrl.	×	×	×	×	×
Module FE	×	×	×	×	×
Observations	7,489	7,493	7,487	7,493	7,497
R ²	0.046	0.037	0.076	0.065	0.048

Notes: Weighted OLS regressions, robust standard errors in parentheses. In each column, the dependent variable is a different, standardized survey measure of satisfaction: (1) job satisfaction, (2) satisfaction with own research topics, (3) job-related stress experiences, (4) perception of academia as overly competitive, and (5) the “satisfaction with economics” index score. Age and h-index are divided by 10. Method controls include the share of projects in theory and methods research respectively. Topic controls include the share of publications in each primary JEL topic as well as the share of publications in economics journals. p-values are adjusted for multiple hypotheses correction within the reported coefficients of each row, using the Benjamini-Hochberg-procedure. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

publish in Top Five journals.¹⁷ It is lower for older, European-based, and female scholars.¹⁸ Female economists are on average 0.07 standard deviations less satisfied with the current research objectives and topics in economics. One potential explanation is that under-represented groups such as women have comparatively less influence on the fields' research agendas so that their research preferences remain under-represented. In turn, disagreement with economics' practices could adversely affect who is willing to pursue an academic career. In this case, the under-representation of women would be self-reinforcing. Moreover, even conditional on satisfaction with economic research and a rich battery of controls, female economists show lower overall satisfaction. Their job satisfaction is 0.07 standard deviations lower, their reported stress is 0.2 standard deviations higher and they perceive academia as being overly competitive to a stronger extent. Taken together, these observations confirm the concern that economics is a male discipline (Dupas et al., 2021; Lundberg, ed, 2020; Wu, 2020). Male researchers outnumber women (3:1, see table 2), are more satisfied with their job, less stressed, and agree with the field's research objectives and topics to a stronger extent.

We conclude that there are good reasons to be concerned about the mismatch between economists' views and the reality of economic research. For one, there is broad and systematic support for a change in economics' research objectives and topics, even among the discipline's most distinguished scholars. Moreover, the disagreement is associated with lower job satisfaction and is larger among female economists which may have consequences for diversity in economics.

6 Conclusion

We document economists' opinions about fundamental research objectives and topics in economics. Almost 10,000 economic researchers from all fields and ranks of the profession participate in our global survey. Detailed bibliometric data allow us to compare our sample to the population of economic scholars who publish in English and post-stratification weights ensure that our sample represents this population.

Our results reveal a strong degree of heterogeneity in economists' views and preferences regarding research objectives and topics. Most researchers disagree with the current state of economic research, including many of the field's most successful scholars. Respondents think that economic research should become more policy-relevant, multidisciplinary, risky and disruptive, and pursue more diverse topics. We also find that

¹⁷We also find that editors at top 50 journals and referees at Top Five journals are more satisfied with the status quo (see appendix table D.4). However, as documented above, these effects do not offset the overall dissatisfaction among top economists.

¹⁸The results are robust to the use of different weighting schemes. We also find largely identical results if we estimate the regression separately for each survey module. For gender, the point estimates remain unchanged but lose significance due to the split sample size (see appendix table D.9).

dissent with economics' research objectives and topics is associated with lower job satisfaction and is higher among female economists.

Our results serve as a reminder that our views about research questions, objectives, or topics are valuable and irreplaceable, but also inherently subjective. They further suggest that as a field we currently do not appreciate and work on what we collectively prefer. Since the choice of research questions and research objectives is arguably among the most important choices that a researcher makes, we hope that our results will contribute to an inclusive and open-minded debate about "what's worth knowing".

References

- Akerlof, George A., "Sins of Omission and the Practice of Economics," *Journal of Economic Literature*, 2020, 58 (2), 405–418.
- Allgood, Sam, Lee Badgett, Amanda Bayer, Marianne Bertrand, Sandra E. Black, Nick Bloom, and Lisa D. Cook, "AEA Professional Climate Survey: Final Report," 2019.
- Andre, Peter, Carlo Pizzinelli, Christopher Roth, and Johannes Wohlfart, "Subjective Models of the Macroeconomy: Evidence From Experts and Representative Samples," *Working Paper*, 2021.
- Angrist, Josh, Pierre Azoulay, Glenn Ellison, Ryan Hill, and Susan Feng Lu, "Inside Job or Deep Impact? Extramural Citations and the Influence of Economic Scholarship," *Journal of Economic Literature*, 2020, 58 (1), 3–52.
- Angrist, Joshua, Pierre Azoulay, Glenn Ellison, Ryan Hill, and Susan Feng Lu, "Economic Research Evolves: Fields and Styles," *American Economic Review: Papers & Proceedings*, 2017, 107 (5), 293–297.
- Avilova, Tatyana and Claudia Goldin, "What Can UWE Do for Economics?," *AEA Papers and Proceedings*, 2018, 108, 186–190.
- Azoulay, Pierre, Christian Fons-Rosen, and Joshua S. Graff Zivin, "Does Science Advance One Funeral at a Time?," *American Economic Review*, 2019, 109 (8), 2889–2920.
- Backhouse, Roger E. and Béatrice Cherrier, "The Age of the Applied Economist: The Transformation of Economics since the 1970s," *History of Political Economy*, 2017, 49, 1–33.
- Bayer, Amanda and Cecilia Elena Rouse, "Diversity in the economics profession: A new attack on an old problem," *Journal of Economic Perspectives*, 2016, 30 (4), 221–242.
- Benjamini, Yoav and Yosef Hochberg, "Controlling the False Discovery Rate: A Practical and Powerful Approach to Multiple Testing," *Journal of the Royal Statistical Society. Series B (Methodological)*, 1995, 57 (1), 289–300.
- Bolotnyy, Valentin, Matthew Basilico, and Paul Barreira, "Graduate Student Mental Health: Lessons from American Economics Departments," *Journal of Economic Literature*, (forthcoming).
- Bourdieu, Pierre, "The specificity of the scientific field and the social conditions of the progress of reason," *Social Science Information*, 1975, 14 (6), 19–47.
- Bowles, Samuel and Wendy Carlin, "What Students Learn in Economics 101: Time for a Change," *Journal of Economic Literature*, 2020, 58 (1), 176–214.
- Bramoullé, Yann and Gilles Saint-Paul, "Research cycles," *Journal of Economic Theory*, 2010, 145 (5), 1890–1920.
- Buckles, Kasey, "Fixing the Leaky Pipeline: Strategies for Making Economics Work for Women at Every Stage," *Journal of Economic Perspectives*, 2019, 33 (1), 43–60.
- Buyalskaya, Anastasia, Marcos Gallo, and Colin F. Camerer, "The golden age of social science," *Proceedings of the National Academy of Sciences of the United States of America*, 2021, 118 (5), e2002923118.

- Card, David and Stefano DellaVigna**, “Nine Facts about Top Journals in Economics,” *Journal of Economic Literature*, 2013, 51 (1), 144–161.
- and —, “What do Editors Maximize? Evidence from Four Economics Journals,” *Review of Economics and Statistics*, 2020, 102 (1), 195–217.
- , —, **Patricia Funk, and Nagore Iriberry**, “Are Referees and Editors in Economics Gender Neutral?,” *The Quarterly Journal of Economics*, 2020, 135 (1), 269–327.
- Colander, David**, “The Making of an Economist Redux,” *Journal of Economic Perspectives*, 2005, 19 (1), 175–198.
- , “How Economists Got It Wrong: A Nuanced Account,” *Critical Review*, 2011, 23 (1-2), 1–27.
- Currie, Janet, Henrik Kleven, and Esmée Zwiers**, “Technology and Big Data Are Changing Economics: Mining Text to Track Methods,” *AEA Papers and Proceedings*, 2020, 110, 42–48.
- Dupas, Pascaline, Alicia Sasser Modestino, Muriel Niederle, Justin Wolfers, and The Seminar Dynamics Collective**, “Gender and the Dynamics of Economics Seminars,” *Working Paper*, 2021.
- Foster, Jacob G., Andrey Rzhetsky, and James A. Evans**, “Tradition and Innovation in Scientists’ Research Strategies,” *American Sociological Review*, 2015, 80 (5), 875–908.
- Fourcade, Marion, Etienne Ollion, and Yann Algan**, “The Superiority of Economists,” *Journal of Economic Perspectives*, 2015, 29 (1), 89–114.
- Frey, Bruno S.**, “Economists in the PITS?,” *International Review of Economics*, 2009, 56, 335–346.
- , **Silke Humbert, and Friedrich Schneider**, “What is economics? Attitudes and views of German economists,” *Journal of Economic Methodology*, 2010, 17 (3), 317–332.
- Friedman, Milton**, “The Methodology of Positive Economics,” in “Essays in Positive Economics,” Chicago: The University of Chicago Press, 1953.
- Goldin, Claudia and Lawrence F. Katz**, “The Incubator of Human Capital: The NBER and the Rise of the Human Capital Paradigm,” *Working Paper*, 2020.
- Hamermesh, Daniel S.**, “Six Decades of Top Economics Publishing: Who and How?,” *Journal of Economic Literature*, 2013, 51 (1), 162–172.
- , “Citations In Economics: Measurement, Uses, and Impacts,” *Journal of Economic Literature*, 2018, 56 (1), 115–156.
- Hausman, Daniel M.**, “Why look under the hood?,” in “The Philosophy of Economics: An Anthology,” 3 ed., Cambridge University Press, 2008.
- Heckman, James J. and Sidarth Moktan**, “Publishing and Promotion in Economics: The Tyranny of the Top Five,” *Journal of Economic Literature*, 2020, 58 (2), 419–470.
- Kleven, Henrik**, “Language Trends in Public Economics,” *Working Paper*, 2018.
- Krugman, Paul**, “How Did Economists Get It So Wrong?,” in “New York Times (09/06/2009)” 2009.

- Kuhn, Thomas S.**, *The Structure of Scientific Revolutions*, Chicago: University of Chicago Press, 1962.
- Lundberg, Shelly and Jenna Stearns**, “Women in Economics: Stalled Progress,” *Journal of Economic Perspectives*, 2019, 33 (1), 3–22.
- , ed., *Women in Economics*, London: CEPR Press, 2020.
- Osterloh, Margit and Bruno S. Frey**, “How to avoid borrowed plumes in academia,” *Research Policy*, 2020, 49 (1), 103831.
- Oswald, Andrew and Nicholas Stern**, “Why does the economics of climate change matter so much – and why has the engagement of economists been so weak?,” *Royal Economic Society Newsletter*, 2019, October.
- Pasek, Josh, Matthew Debell, and Jon A. Krosnick**, “Standardizing and Democratizing Survey Weights: The ANES Weighting System and anesrake,” *Working Paper*, 2014.
- Reif, F.**, “The Competitive World of the Pure Scientist,” *Science*, 1961, 134 (3494), 1957–1962.
- Romer, Paul M.**, “Mathiness in the Theory of Economic Growth,” *American Economic Review: Papers & Proceedings*, 2015, 105 (5), 89–93.
- Santamaría, Lucía and Helena Mihaljević**, “Comparison and benchmark of name-to-gender inference services,” *PeerJ Computer Science*, 2018, 2018 (7), 1–29.
- Sapienza, Paola and Luigi Zingales**, “Economic Experts versus Average Americans,” *American Economic Review*, 2013, 103 (3), 636–642.
- Sarsons, Heather, Klarita Gërxhani, Ernesto Reuben, and Arthur Schram**, “Gender Differences in Recognition for Group Work,” *Journal of Political Economy*, 2021, 129 (1), 101–147.
- Shiller, Robert J. and Virginia M. Shiller**, “Economists as Worldly Philosophers,” *American Economic Review: Papers & Proceedings*, 2011, 101 (3), 171–175.
- Sunstein, Cass R.**, “On Academic Fads and Fashions,” *Michigan Law Review*, 2001, 99 (6), 1251–1264.
- Swanson, Nicholas, Garret Christensen, Rebecca Littman, David Birke, Edward Miguel, Elizabeth Levy Paluck, and Zenan Wang**, “Research Transparency Is on the Rise in Economics,” *AEA Papers and Proceedings*, 2020, 110, 61–65.
- Weber, Max**, “Wissenschaft als Beruf,” in “Geistige Arbeit als Beruf,” München and Leipzig: Duncker & Humblot, 1919.
- , “Science as a Vocation,” in H. H. Gerth and C. W. Mills, eds., *From Max Weber: Essays in Sociology*, New York: Oxford University Press, 1946.
- Wu, Alice H.**, “Gender Bias in Rumors among Professionals: An Identity-Based Interpretation,” *Review of Economics and Statistics*, 2020, 102 (5), 867–880.

Appendices *(for online publication)*

Table of Contents

A	Instructions of main questions	35
A.1	Research objectives	35
A.2	JEL topics	39
B	Publication and author data	40
B.1	Derivation of the publication data	40
B.2	JEL code metrics	41
B.3	Author data: Covariates	41
C	Sample	45
C.1	Weighting procedure	45
C.2	Characteristics of the main sample	46
C.3	Characteristics of the student sample	46
C.4	Selection into invitation and selection into completion	46
D	Supplementary tables and figures	49
D.1	Research objectives	49
D.2	JEL topics	55
D.3	Discussion	68

A Instructions of main questions

This appendix provides extracts from the two main modules of the survey. The full survey is available at <https://osf.io/xwbdmf/>.

A.1 Research objectives

Introductory instructions for a respondent who selected the field D Empirical Microeconomics

How should economists do research?

In the first part of the survey, we would like you to think about how economics as a research field should do research these days.

Please note: This part is *not* about how *you* personally should do research nor about how the field *actually does* research. Instead, we would like you to take a normative perspective and indicate how economic researchers should do research in general.

Please state your normative view about the optimal approach to economic research. You will face ten questions that describe trade-offs between different research strategies or styles. Of course, these trade-offs are sometimes more and sometimes less severe, but in many cases economics can have more of one research style only at the expense of the other.

Your task is to indicate whether you think that the field's current way of doing research is appropriate or whether you think that the field should place more weight on one research style versus the other.

The overarching question is: **In comparison with how research in economics is currently conducted, how *should* economists conduct research?**

Please give separate responses for

1. your primary research field: **D Empirical Microeconomics** and
2. the discipline of economics as a whole.

Exemplary layout for research objective question “policy relevance vs. intrinsic interest”.

Policy relevance versus intrinsic/intellectual interest?

Policy relevance: Research informs policy, with an impact on societal well-being.

Intrinsic and intellectual interest: Research is intrinsically rewarding to the researcher who conducts the project due to his/her own curiosity and interest.

	Your primary JEL field*	Economics as a whole
Much more policy relevance	<input type="radio"/>	<input type="radio"/>
Moderately more policy relevance	<input type="radio"/>	<input type="radio"/>
Slightly more policy relevance	<input type="radio"/>	<input type="radio"/>
Current state is about right	<input type="radio"/>	<input type="radio"/>
Slightly more intrinsic/intellectual interest	<input type="radio"/>	<input type="radio"/>
Moderately more intrinsic/intellectual interest	<input type="radio"/>	<input type="radio"/>
Much more intrinsic/intellectual interest	<input type="radio"/>	<input type="radio"/>

*Your primary research field: D Empirical Microeconomics.

Response scale

Participants respond on a seven-point scale. Each scale is centered around the option “Current state is about right”. The other response options express dissatisfaction with the status quo and place increasing weight on one research objective versus the other. For instance, the question on *Basic research* versus *Policy relevance* has the response options “Much more”, “Moderately more”, and “Slightly more” policy relevance, “Current state is about right”, as well as “Slightly more”, “Moderately more”, and “Much more” basic research. The question on specialization comes with the response options “Much less”, “Moderately less”, and “Slightly less” specialization, “Current state is about right”, as well as “Slightly more”, “Moderately more”, and “Much more” specialization.

Wording of all research objective questions in original order

Less versus more specialization?

Specialization is defined as the extent to which each individual researcher focuses solely on one specific topic.

Less versus more risky research?

Some research projects are “safe bets” with a very foreseeable impact. Other research projects are of high risk with very uncertain impact. A higher risk may come with a higher expected impact.

More incremental versus more disruptive research?

Incremental: A research project that builds on and connects closely to the existing literature.

Disruptive: A research project that extends considerably beyond the existing literature and proposes new approaches.

Less versus more multidisciplinary research?

Multidisciplinary research incorporates insights from other disciplines than economics to study economic questions.

Quantity of papers versus quality of papers?

More papers of lower quality or fewer papers of higher quality?

Policy relevance versus intrinsic/intellectual interest?

Policy relevance: Research informs policy, with an impact on societal well-being.

Intrinsic and intellectual interest: Research is intrinsically rewarding to the researcher who conducts the project due to his/her own curiosity and interest.

Policy relevance versus basic research?

Policy relevance: Research informs policy, with an impact on societal well-being.

Basic research: Research deals with fundamental and basic phenomena, laying the ground for more applied research. It has no immediate policy relevance.

For empirical work: Causal identification versus importance of research question

Identification: Research identifies the phenomenon of interest credibly and causally,

above and beyond establishing correlational patterns.

Importance: Research question is of general interest and/or has societal relevance.

For theoretical work: More pure theory versus more applied and evidence-related theory?

Pure theory: Studies general theoretical principles.

Applied and evidence-related theory: Studies an empirically-observed phenomenon theoretically. Organizes empirical evidence, matches its facts, and/or provides testable predictions.

For applied theoretical work: More emphasis on prediction versus explanation?

How should economists evaluate applied theoretical models?

More focus on *predicting* outcomes.

More focus on *explaining* outcomes (using plausible assumptions and plausible theoretical mechanisms).

A.2 JEL topics

Which topics should economists work on?

From our experience, this question will take you at the very least 1 minute to answer. It is the main question of this survey.

Please state your normative view about the optimal composition of research topics on which economists should be working.

For this matter, suppose you are endowed with **100 points, representing the total number of published research articles** produced by all economists in a given year. Hence, each point corresponds to 1% of the total research output.

Please allocate these 100 points between the nineteen research topic categories defined by the Journal of Economic Literature (JEL) classification system. The more points you allocate to a specific JEL category, the higher the published output concerning topics in this category should be.

For your convenience, you can click on each JEL code for further information on the JEL sub-categories.

Please allocate the 100 points across the categories on which you think economists should work and publish these days.

- | | |
|---|--------------------------------|
| ▶ A General Economics and Teaching | <input type="text" value="0"/> |
| ▶ B History of Economic Thought, Methodology, and Heterodox Approaches | <input type="text" value="0"/> |
| ▶ C Mathematical and Quantitative Methods | <input type="text" value="0"/> |
| ▶ D Microeconomics | <input type="text" value="0"/> |
| ▶ E Macroeconomics and Monetary Economics | <input type="text" value="0"/> |

List of JEL topics continues.

B Publication and author data

B.1 Derivation of the publication data

This section documents step by step how the publication database is derived. We start from the EconLit publication database which we downloaded on the 4th of December 2019. We consider all publications in the 400 EconLit-indexed journals with the highest impact factor according to Scopus's 2018 Scimago Journal Ranking in the "Economics, Econometrics, and Finance" category. We restrict our attention to publications since 2009. Additionally, we impose the following restrictions:

1. Articles have English full text.
2. Information on authors is available.
3. To ensure that only genuine research articles are included in the final sample:

We concentrate only on articles that are classified as journal articles by EconLit.

We delete articles that have been assigned to the JEL category Y which includes book reviews, memorials, or other ancillary content.

Moreover, we exclude publications that contain keywords such as "erratum", "reply to", or "memorial" that were chosen to identify the most common ancillary publications. The full list of keywords is available upon request.

Finally, we exclude all articles with titles that appear more than twice in the database – an indicator for multiple comments on another research article, editorials, or other repeated ancillary publications.

4. Non-duplicate articles.

To exclude duplicates, we keep only the first article with duplicated titles within each journal. If the title has no abstract information (an indicator for ancillary publications), we drop all within-journal duplicated titles.

5. Can be matched to a Scopus article.

97.4% of all articles that satisfy the above conditions can be matched to a Scopus article.¹⁹ The details of the matching algorithm are available upon request. The Scopus data were downloaded from Scopus API between December 5 and 12, 2019 via <http://api.elsevier.com> and <http://www.scopus.com>.

¹⁹A similar set of restrictions was applied to the Scopus data.

B.2 JEL code metrics

The EconLit data assign each article to one or (typically) more JEL codes. This section explains how we translate the three-digit JEL codes into primary JEL topics. We use four different metrics to describe the JEL topics of a paper. We use the *Weight* metric in our main specifications and run robustness checks with the three alternative metrics.

Example: Throughout this subsection, we consider an article with JEL Codes E21, E32, F34, and G51. Thus, the article has two codes in field E, one code in field F, and one code in field G.

Weight An article’s topic weight is the share of its JEL codes that belong to this topic. The above example article would be classified as E: 50%, F: 25%, G: 25%, all other fields: 0%. Each article has a total weight of 100%.

Indicator An article’s topic indicator is 1 if at least one JEL code belongs to the topic and zero otherwise. The above example article would be classified as E: 1, F: 1, G: 1, all other fields: 0.

Sum An article’s topic sum is the number of JEL codes that belong to the topic. The above example article would be classified as E: 2, F: 1, G: 1, all other fields: 0.

Primary An article’s primary topic is the JEL topic with the largest count of codes (see “Sum” above). This means that an article with a unique most frequent topic is fully (100%) assigned to this topic. If the maximum is not unique, which happens for about 3 out of 10 articles, we split the shares equally across the most frequent topics (e.g., 50%-50% if there are two most frequent topics). The above example article would be classified as E: 100%, all other fields: 0%.

Thus, the JEL code metrics differ in two respects: Whether they are sensitive to multiple JEL codes in a topic (*Weights*, *Sum* are, *Indicator* is not, *Primary* is an intermediate case) and whether each paper has the same total weight (this is only the case for *Weights* and *Primary*). In our main analysis, we use the *Weights* metric because we want to give equal total weight to each paper and view the occurrence of multiple JEL codes in one field as evidence that this topic is covered more extensively.

B.3 Author data: Covariates

This section summarizes and defines all author covariates that will be used throughout the paper.

Covariates derived from the publication data

Female The gender of an author is estimated from their first and last name, using the commercial Gender API algorithm (see Santamaría and Mihaljević, 2018). The author names are taken from the Scopus publication data. The algorithm produces missing values for 2.4% of the study population. *Female* is a binary indicator that takes the value 1 if a respondent's name is classified as female.

Year of first publication The Scopus author data contains the year of the author's first publication.

Number of articles (in sample) The number of articles in our publication sample that can be assigned to an author.

Number of articles (overall) The total number of journal publications that Scopus attributes to an author, capped at 200. This includes articles outside our publication sample, in particular articles that were published before 2009 or outside the top 400 EconLit-indexed journals.

Share of publications in economic journals The share of an author's journal publications (see "Number of articles (overall)") that are published in a journal of Scopus's "Economics, Econometrics, or Finance" category.

Co-author network The undirected, unweighted co-author network constructed from all co-author relationships observed in our publication sample. The network includes all authors, even those who are not part of the study population.

Degree (number of co-authors) The number of unique co-authors of an author in our publication sample.

Eigenvector centrality (index) An index of an author's eigenvector centrality in the co-author network. The index measures which share of authors has a lower eigenvector centrality. For instance, an index value of 70% means that the author's eigenvector centrality is larger than the centrality of 70% of all authors in the network.

Number of co-authors with Top Five publication The number of co-authors of the author who have published at least one article in a Top Five journal in our publication sample (also see "Published in Top Five Journal").

Top 50 institution A binary indicator that takes the value 1 if an author is affiliated with a top 50 research institution in economics. We derive the indicator from the Scopus author data which contain information about the institution with which the author was

affiliated in their last publications. We match the institution names to the Shanghai Academic Ranking of World Universities in Economics 2020.

h-index h-index, derived from the Scopus citation data of *all* publications of an author (as of December 2019, see “Number of articles (overall)”).

Published in Top Five Journal (in sample) A binary indicator that takes the value 1 if the author published at least one article in a Top Five journal within our publication sample. The Top Five journals are the American Economic Review, The Quarterly Journal of Economics, the Journal of Political Economy, the Review of Economic Studies, and Econometrica. Publications in the Papers & Proceedings of the American Economic Review are not counted as Top Five publication.

Number of Top Five publications (in sample) The number of Top Five publications (see above) that an author published within our publication sample.

Average journal rank 1-400 (in sample) The average journal rank of an author’s publications in our publication sample. The journal ranks range from 1-400. The journals are ranked according to the Scopus 2018 Scimago impact factor in the “Economics, Econometrics, and Finance” category. Higher ranked journals (numerically they have a lower rank) have a higher journal impact factor.

Continent The Scopus author data contain information about the institution with which the author was affiliated in their last publications, including the country of the institution, which is available for 99.5% of the authors in the study population. This allows us to deduce the last known continent of residence of a researcher.

Share of publications in JEL topics The average JEL topic weight of an author’s articles (see appendix section B.2).

Note: The author-average share of publications in a topic may differ from the paper-average share of publications in a topic. The author-average assigns equal weight to each author (irrespective of their number of publications), while the paper-average assigns equal weight to each paper. Therefore, we use author-averages only when we study heterogeneity in authors’ survey responses. In contrast, when we analyze the field-wide distribution of JEL topics, we use paper-averages.

Covariates in the Ph.D. student sample

For the population of Ph.D. students, we only have data on their gender (derived as above), their continent of residence (derived as above), and the rank of their institution. An institution’s rank is derived from the number of total citations that authors from the institution receive for articles that are in our publication sample.

Covariates derived from the survey data

Female We also measure the gender of respondents in the survey. We use this more accurate measure in the heterogeneity analysis of survey responses.

Age The age of respondents. Continuous.

Ph.D. student An binary indicator that takes the value 1 if the respondent says they are a (doctoral) student.

Tenured We ask respondents who are active in academic research whether they have tenure. *Tenured* is a binary indicator variable that takes the value 1 if the respondent says they have tenure.

Research type: theory/empirics/methods We ask respondents which fraction of their research is predominantly theoretical, predominantly empirical, and predominantly methods research.

C Sample

C.1 Weighting procedure

We follow Pasek et al. (2014) and use the R package `anesrake` to derive weights for the author sample. We target the following marginal distributions of the study population.

1. Gender: female versus male or missing (2 groups)
2. Year of first publication (quartiles)
3. Number of papers in our publication sample (quartiles)
4. h-index (quartiles)
5. Continent (Europe, Northern America, Asia, Other)
6. Main research field

The main research topic of an author is the JEL field in which they have the highest share of publications. We consider the following six groups: D Microeconomics, E Macroeconomics, G Financial Economics, J Labor Economics, Other, and Multiple. The group “Multiple” contains authors who have multiple JEL fields with a maximal share of publications (e.g. two fields with a share of 50% each).

87% of the weights are between 0.5 and 2. The minimal weight is 0.3, and the maximal weight is 3.59. This indicates that no extreme weights occur.

Alternative weighting schemes We use the following alternative weighting schemes in robustness checks throughout the paper.

Weighted, including no email The sample is weighted to represent the population of authors which also includes the scholars for whom no email address could be found but who satisfy the other eligibility criteria described in section 3.2 of the main text. We use the same weighting approach as outlined above.

Unweighted Identical weight (1) for all participating authors. This approach includes also the few respondents who started but did not complete the survey.

Unweighted, only economics Identical weight (1) for all participating authors who say that their primary academic discipline is economics, econometrics, or finance.

Unweighted, with Ph.D. Identical weight (1) for all participants, including participants from the Ph.D. student sample.

C.2 Characteristics of the main sample

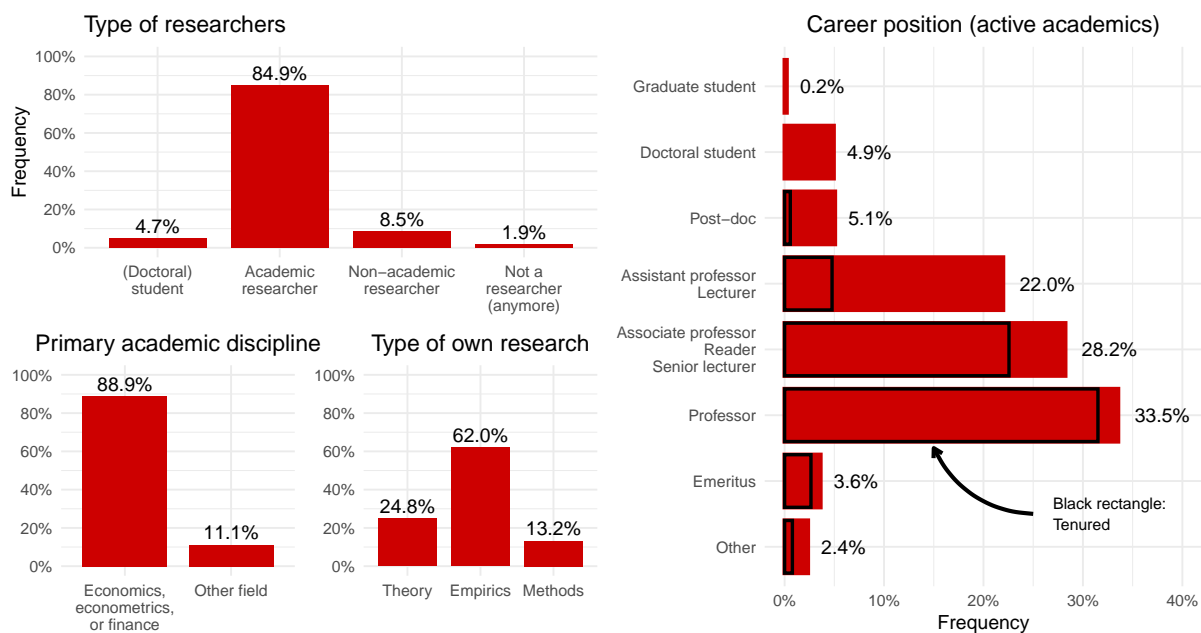


Figure C.1 Demographic characteristics of the weighted sample

Notes: Weighted survey responses.

C.3 Characteristics of the student sample

Table C.1 presents the distribution of demographic characteristics in the population of invited Ph.D. students and the sample of participating students. See appendix section B.3 for a description of the covariates.

Table C.1 Characteristics of the population and the sample of Ph.D. students

Variable	Population	Sample
Female	30.8%	28.8%
Region: Europe	34.2%	50.3%
Region: Northern America	62.5%	46.5%
Region: Asia	2.1%	2.5%
Region: Australia and New Zealand	1.2%	0.7%
Rank of institution	124.8	126.0
Sample size	9441	1765

C.4 Selection into invitation and selection into completion

Table C.2 summarizes and compares the characteristics of five different groups.

1. **Incl. no email:** The population of active economic researchers plus those for whom no email address could be found.
2. **Population:** The main study population.
3. **Participated:** The unweighted sample of participating authors, including those who do not complete the survey.
4. **Unweighted sample:** The unweighted main sample.
5. **Weighted sample:** The weighted main sample.

Columns 2, 4, and 5 equal columns 1 to 3 in table 2. Table C.2 reveals that there are only a few differences between the main study population (column 2) and the population which also includes authors without email data (column 1). It also shows that the differences between the sample of participating authors (column 3) and the sample of authors who complete the survey (column 4) are negligible.

Table C.2 Characteristics of economic researchers: From the email address collection to study completion

Variable	(1) Incl. no email	(2) Study population	(3) Partici- pated	(4) Unwgt. sample	(5) Weighted sample
Gender, academic age					
Female	27%	26%	23.3%	23.1%	25.8%
Year of first publication (YYYY/MM)	2008/01	2007/01	2006/01	2006/01	2006/1
Number of papers					
Number of articles (in pub. sample)	4.4	4.8	5.7	5.6	4.9
Number of articles (overall)	15.3	17.1	18.4	18.3	16.2
Share of art. in econ. journals	77.6%	75.9%	76%	76.2%	76.8%
Co-author network (in pub. sample)					
Degree (number of unique co-authors)	5.4	5.8	6.5	6.5	5.7
Eigenvector centrality (index)	59.3%	61.1%	65.6%	65.6%	62.2%
Number of co-authors with Top Five pub.	0.4	0.5	0.8	0.8	0.5
Success					
Top 50 institution	11.2%	12.1%	12.3%	12.2%	12.5%
Published in Top Five Journal (in pub. sample)	5.1%	6.1%	9.2%	9.3%	6.1%
Number of Top Five publications (in pub. sample)	0.10	0.12	0.17	0.18	0.11
Average journal rank 1-400 (in pub. sample)	170.8	164.2	161.6	161.9	165.8
h-index	5.8	6.5	6.8	6.8	6.1
Continent					
Europe	38.8%	40.4%	53.3%	53.6%	40.5%
Northern America	31.6%	33.9%	24.6%	24.2%	33.9%
Asia	20.6%	17.1%	13.4%	13.4%	17.2%
Australia and New Zealand	4.2%	4.3%	3.6%	3.7%	3.3%
Latin America	3%	2.7%	3.4%	3.4%	3.3%
Africa	1.9%	1.6%	1.7%	1.7%	1.8%
Share of publications in JEL fields					
C Mathematical and Quantitative Methods	6.1%	6.1%	6.4%	6.3%	5.8%
D Microeconomics	12.6%	13.1%	16%	16.1%	13.5%
E Macroeconomics and Monetary Economics	7.3%	7.3%	7.4%	7.4%	7.1%
F International Economics	4.4%	4.4%	4.3%	4.3%	4.2%
G Financial Economics	18.4%	18.2%	11.5%	11.3%	16.9%
H Public Economics	3.5%	3.6%	4.3%	4.3%	3.8%
J Labor and Demographic Economics	6.3%	6.7%	9.7%	9.8%	7.5%
L Industrial organization	8.4%	8.3%	7.4%	7.4%	8%
O Growth and Development Economics	9.1%	8.5%	8.8%	8.8%	9.2%
Q Agricultural and Environmental Economics	7.4%	7.1%	7.4%	7.4%	7.4%
Other fields	16.5%	16.6%	16.9%	16.9%	16.6%
Sample size	67,546	53,777	8,156	7,794	7,794

Notes: Overview of covariates. Column 1: The population of researchers before authors are excluded for whom no email address could be found. That is, all authors who satisfy restrictions 1 to 3 (see main text, section 3.2. Column 2: The eligible study population. Column 3: All respondents who participated in the survey, including those who did not complete it. Column 4: Respondents of the main sample, unweighted. Column 5: Weighted main sample. For a description of the covariates in the different rows see main text or appendix section B.3.

D Supplementary tables and figures

D.1 Research objectives

Aggregate results, statistical tests Table D.1 reports the majority shares of respondents who directionally agree on which research objective economics should place more weight on and tests whether these shares differ from 50%. It also reports the average response (in scale points) for each question and tests whether the means differ from the neutral “About right” category.

Aggregate results, robustness to different weighting schemes Figure D.1 shows that we obtain virtually identical results if we recalculate the distribution of survey responses with the different weighting schemes and sub-samples that are described in appendix section C.1.

Responses of Ph.D. students Figure D.2 compares the average responses in the main sample with the responses in the sample of Ph.D. students.

Field-specific responses Figure D.3 compares the distribution of responses for economics as a whole and the respondents’ own primary JEL field. It documents largely identical results. Appendix figure D.4 disaggregates the field-specific responses and diagnoses similar trends in almost all fields.

Table D.1 Majority shares and average responses to research objectives questions

(A) Share of respondents holding majority opinion, questions 1-5					
	Pol. relev. (vs. intrin. interest) (1)	Pol. relev. (vs. basic research) (2)	Importance (vs. causal ident.) (3)	Applied theory (vs. pure) (4)	Less specialization (5)
Fraction “more”	0.540 (0.009)	0.516 (0.009)	0.559 (0.009)	0.609 (0.009)	0.604 (0.009)
<i>p</i> : fraction=0.50	<0.001	0.062	<0.001	<0.001	<0.001
Observations	4,028	4,018	4,008	4,009	4,030
(B) Share of respondents holding majority opinion, questions 6-10					
	More multidisciplinary (1)	More risky research (2)	Disruptive research (vs. incremental) (3)	Quality (vs. quantity) (4)	Explanation (vs. prediction) (5)
Fraction “more”	0.787 (0.007)	0.735 (0.008)	0.674 (0.008)	0.657 (0.008)	0.469 (0.009)
<i>p</i> : fraction=0.50	<0.001	<0.001	<0.001	<0.001	<0.001
Observations	4,034	4,022	4,022	4,022	3,993
(C) Average response (in scale points -3 to 3, mid-point: 0), questions 1-5					
	Pol. relev. (vs. intrin. interest) (1)	Pol. relev. (vs. basic research) (2)	Importance (vs. causal ident.) (3)	Applied theory (vs. pure) (4)	Less specialization (5)
Mean response	0.621 (0.030)	0.526 (0.028)	0.591 (0.031)	0.920 (0.027)	0.848 (0.027)
<i>p</i> : mean=0	<0.001	<0.001	<0.001	<0.001	<0.001
Observations	4,028	4,018	4,008	4,009	4,030
(D) Average response (in scale points -3 to 3, mid-point: 0), Questions 6-10					
	More multidisciplinary (1)	More risky research (2)	Disruptive research (vs. incremental) (3)	Quality (vs. quantity) (4)	Explanation (vs. prediction) (5)
Mean response	1.484 (0.025)	1.170 (0.025)	0.923 (0.028)	1.150 (0.028)	0.512 (0.027)
<i>p</i> : mean=0	<0.001	<0.001	<0.001	<0.001	<0.001
Observations	4,034	4,022	4,022	4,022	3,993

Notes: Results are based on weighted OLS regressions on a constant (i.e. estimates of averages), robust standard errors in parentheses. The dependent variables are responses to the ten research objective questions. In panels (A) and (B), the independent variable is a binary indicator for endorsing the majority opinion summarized in the column titles (“Slightly more ...”, “Moderately more ...”, or “Much more ...” of the research objective stated in the column title). Estimates thus report the share of respondents who endorse the majority opinion. Panels (C) and (D) report the average response in scale points (scale ranges from -3 to 3, mid-point: 0). *p*-values are reported in the second row of each table and adjusted for multiple hypothesis testing within panels (A) and (B) (10 tests) as well as (C) and (D) (10 tests) respectively, using the Benjamini-Hochberg procedure. All tests are two-sided.



Figure D.1 Robustness of responses to the research objectives questions

Notes: Survey responses to the ten research objectives questions. Different weighting schemes and samples are employed. *Main*: Main weighted survey sample. The other weighting schemes are described in appendix section. C.1.

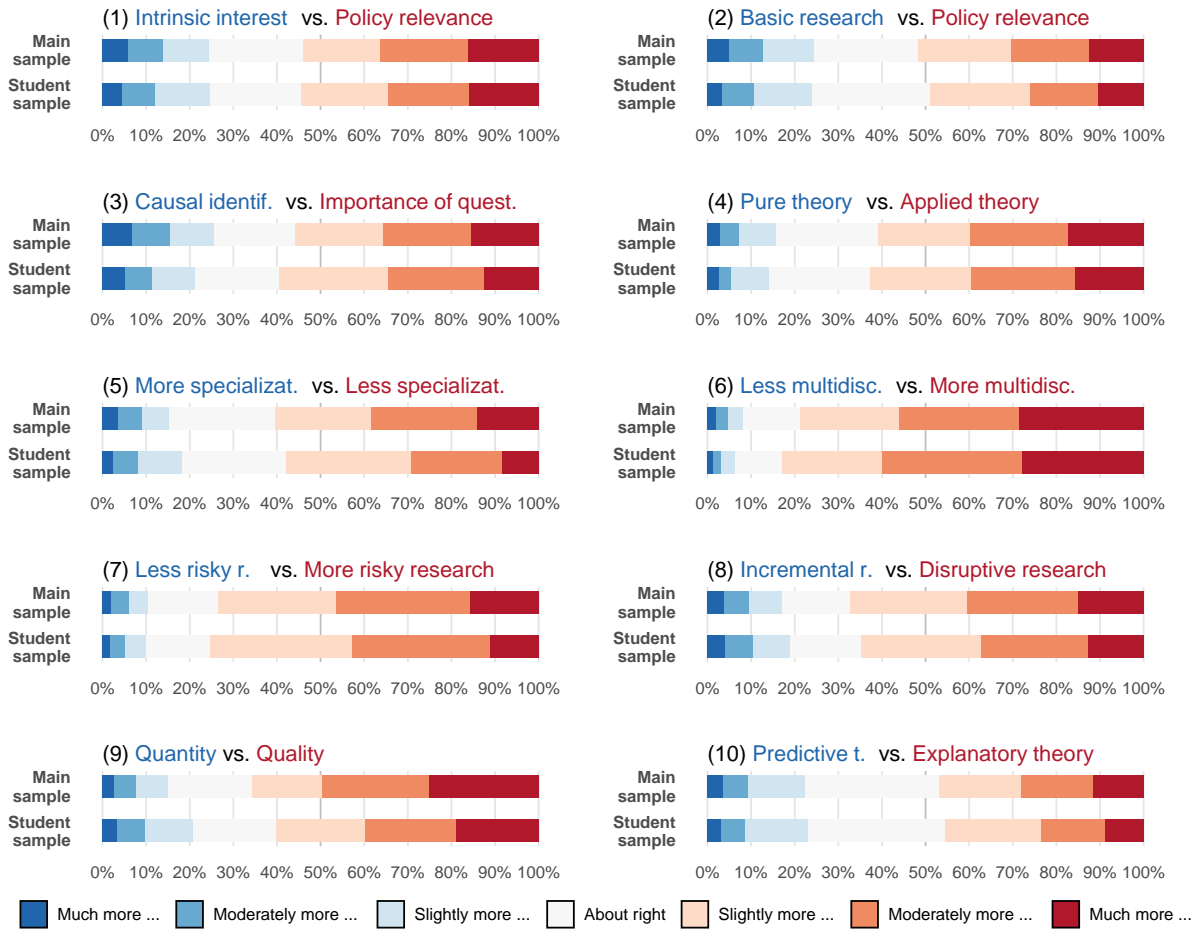


Figure D.2 Responses to the research objectives questions in the main sample and the Ph.D. student sample

Notes: Survey responses to the ten research objectives questions in the (weighted) main sample and the (unweighted) sample of Ph.D. students.



Figure D.3 Research objectives for (i) economics as a whole and (ii) one's own primary JEL field.

Notes: Weighted distribution of survey responses. The figure compares responses for (i) economics as a whole and (ii) one's own primary JEL field.

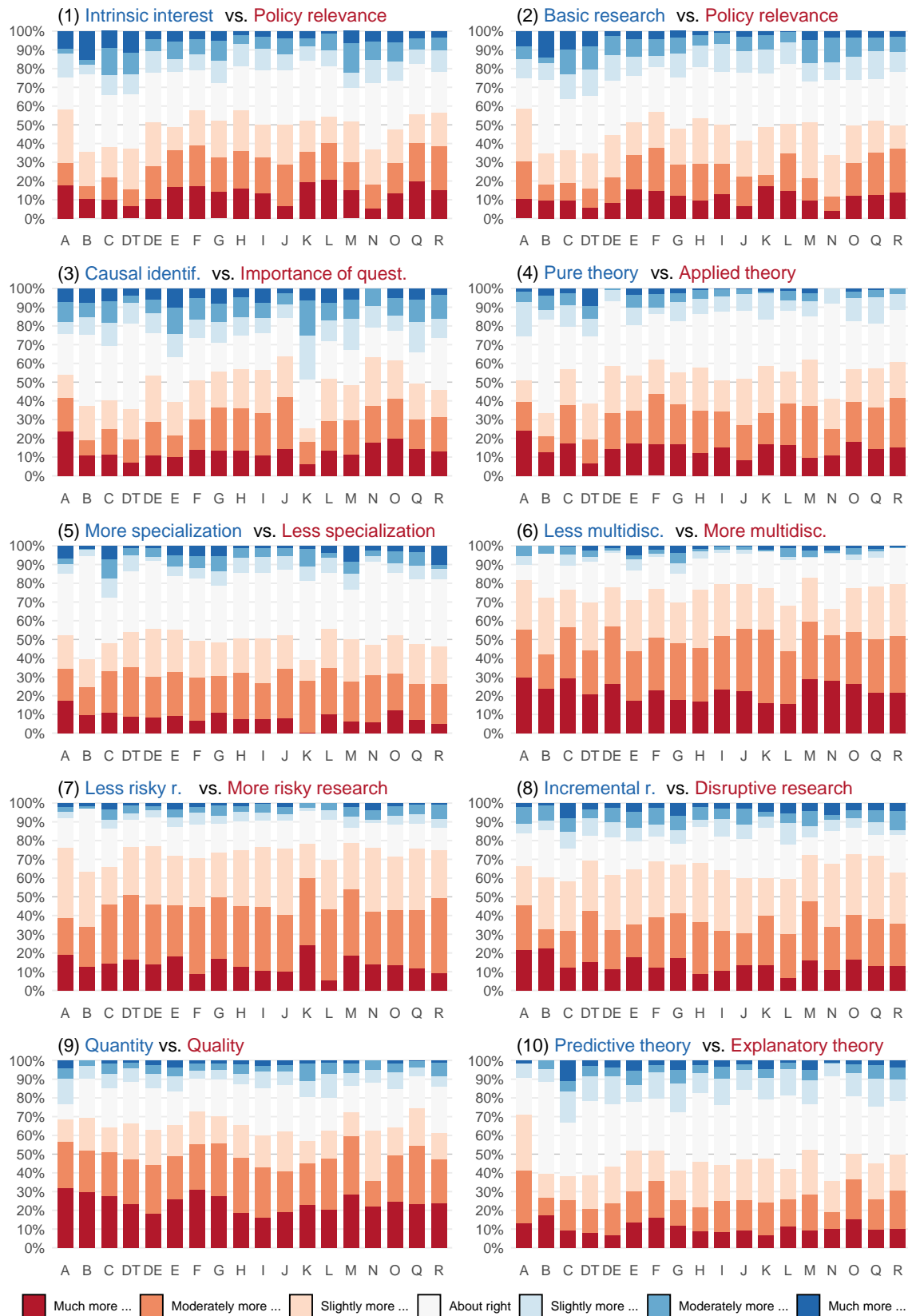


Figure D.4 Research objectives for each primary JEL field

Notes: Weighted distribution of survey responses. The figure compares the responses for respondents' own primary JEL fields. We distinguish between *DT* Theoretical Microeconomics (including Game Theory) and *DE* Empirical Microeconomics. JEL fields with less than 50 respondents are not shown (P, Z).

D.2 JEL topics

Sub-topics We ask the participants to reconsider three randomly selected topics to which they assigned positive weight and specify the importance of each of its sub-topics. For each JEL topic, respondents can allocate 100 points between its JEL sub-topics which represent published research articles within this field. Figure D.5 compares the distribution of JEL sub-topics in our publication data (blue bars) with the average survey responses (pink bars).²⁰ On average, respondents prefer a more uniform topic distribution than can be observed in practice.

We replicate this finding if we proportionally adjust the survey weights to the share a respondent gives to the base category (red bars). For instance, if a respondent assigns a share of 15% to JEL topic *D Microeconomics* and a share of 5% to *K Law and Economics*, we multiply his or her survey weight by 0.15 when we derive the average survey responses for D's sub-topics and by 0.05 when we derive the average survey response for K's sub-topics.

These results have to be taken with a grain of salt because only respondents who assigned a positive weight to a primary JEL topic were asked to specify weights for its sub-topics. Moreover, it seems possible that respondents' understanding of the detailed JEL sub-topics does not always align with the EconLit guidelines.

Robustness Figure D.6 and figure D.7 show that the conclusions from the comparison of the actual JEL topic distribution (blue bars) and average survey responses (red bars) can be replicated in several robustness checks. Specifically, we calculate the **actual JEL topic shares** in the following specifications:

Main: Main estimate as described in main text.

JEL: Indicator: Uses the *Indicator* metric to aggregate the publications' JEL topics (see B.2).

JEL: Sum: Uses the *Sum* metric to aggregate the publications' JEL topics (see B.2).

JEL: Primary: Uses the *Primary* metric to aggregate the publications' JEL topics (see B.2).

Top 200: Considers only publications in the set of top 200 journals.

Top 100: Considers only publications in the set of top 100 journals.

²⁰Among the respondents who assign a positive weight to a given JEL topic, those who assign positive weights to fewer other topics have a higher chance to be asked about its sub-topics. Their views would be overrepresented if we used our standard survey weights. Here, we therefore adjust these weights for the differential sampling probabilities.

Since 2015: Considers only publications since 2015.

Since 2018: Considers only publications since 2018.

Authors: Considers only publications by authors who are part of the author population, as specified in section 3.2 of the main text.

Moreover, we calculate the **average survey response for each JEL topic** for the following robustness specifications which are tailored to exclude possibly careless respondents:

Main: Main estimate as described in the main text.

Wgt. no email: Weighting scheme *Weighted, including no email*. See appendix section C.1 for details about the weighting schemes.

Unwgt.: Identical weight for all participating authors (weighting scheme: *Unweighted*).

Unwgt. econ: Identical weight for all participating authors who say that their primary academic discipline is economics, econometrics, or finance (weighting scheme: *Unweighted, only economics*).

Unwgt. w/ Ph.D.: Identical weight for all participants, including participants from the Ph.D. student sample (weighting scheme: *Unweighted, with Ph.D.*).

Robust 1: Excludes respondents who assign positive weight only to few JEL categories, namely the 25% respondents who assign a positive weight to the fewest JEL topics.

Robust 2: Excludes respondents who assign a very large weight to one category, namely the 25% respondents with the largest maximum assigned share.

Robust 3: Excludes respondents who frequently assign the same share to different categories, namely the 25% respondents with the most duplicate share values.

Robust 4: Excludes respondents who frequently “round” and assign multiples of 5 to the different JEL topics, namely the 25% respondents who use most rounded values.

Robust 5: Excludes respondents with a low response variation, namely the 25% respondents with the lowest standard deviation of JEL shares.

Robust 6: Excludes respondents with a low response duration for the JEL topics questions, namely the 25% respondents with the lowest response duration.

Time trends Figure D.8 shows the actual topic distribution in economics for each year from 2009 to 2019. The time trends are mostly so minuscule that the mismatch between research output and today’s topic preferences is unlikely to dissipate in the future. For JEL codes F, M, and O the mismatch even grew in recent years. For JEL codes I and L, the mismatch became slightly smaller, but it would still take them about a decade to fully disappear if past time trends prove to be persistent.

Responses of Ph.D. students Figure D.9 compares the average responses in the main sample with the responses in the sample of Ph.D. students.

Comparison to Top Five journals Figure D.10 compares the distribution of JEL topics in Top Five articles of our publication sample (in blue) with the average survey response (in red). The former shows which fraction of papers was published in each JEL topic in a Top Five journal from January 2009 to December 2019. The latter shows economists’ opinions on which share of papers should be written and published in each JEL topic. Figure D.11 plots the differences between both distribution (average survey response – actually observed share) for each JEL topic. Again, we can draw the conclusion that the average economist would prefer a more diverse distribution of research topics.

Project types Figure D.12 plots the average response to the question how economic research should be distributed across three broad project types: theory (formal and informal), empirics, and methods (e.g. econometrics or computational techniques).

Heterogeneity Figure D.13 plots kernel density estimates of the response distribution for each JEL topic and reveals the large heterogeneity of economists’ opinion about the importance of different JEL topics.

Predictors of responses We explore the heterogeneity of survey responses by regressing the responses on a rich set of variables that cover basic demographic characteristics (gender, age, tenure, region), academic success (affiliation with top 50 institution, Top Five publication, h-index), and the share of theory and methods projects a researcher is working on. We run a separate regression for each JEL topic. We also account for any effect the researchers’ own choice of research topics might have and include (but – for the sake of brevity – do not report) the share of publications in each primary JEL topic as well as the share of publications in economics journals (see appendix B.3 for details). We use the Benjamini-Hochberg procedure to correct all reported coefficients for multiple hypotheses testing. Table D.2 summarizes the results. To facilitate orientation, we report only the statistical significance of the coefficients. +++/--- indicates a p-value below 0.01, ++/-- a p-value below 0.05, and +/- a p-value below 0.10 for positive and negative coefficient respectively.

Bias for own research field Table D.3 shows that the topics of an author's publications strongly predict their perceived importance. We regress the weight assigned to a JEL topic on the share of an author's publications in the topic. This means we regress the weight assigned to D on the share of publications in D or the weight assigned to E on the share of publications in E). The dependent variable is the weight assigned to a JEL topic j by respondent i . The predictor is the share of own publications of respondent i in JEL topic j . The underlying data has a panel structure with about 3,600 respondents (dimension 1) and 19 JEL topics (dimension 2). All regressions include topic fixed effects. Respondent fixed effects are not necessary because each respondent's weights sum up to 1, that is, there are no level differences between respondents. We show that the results are robust to including controls (column 2) and different weighting schemes (column 3-5).

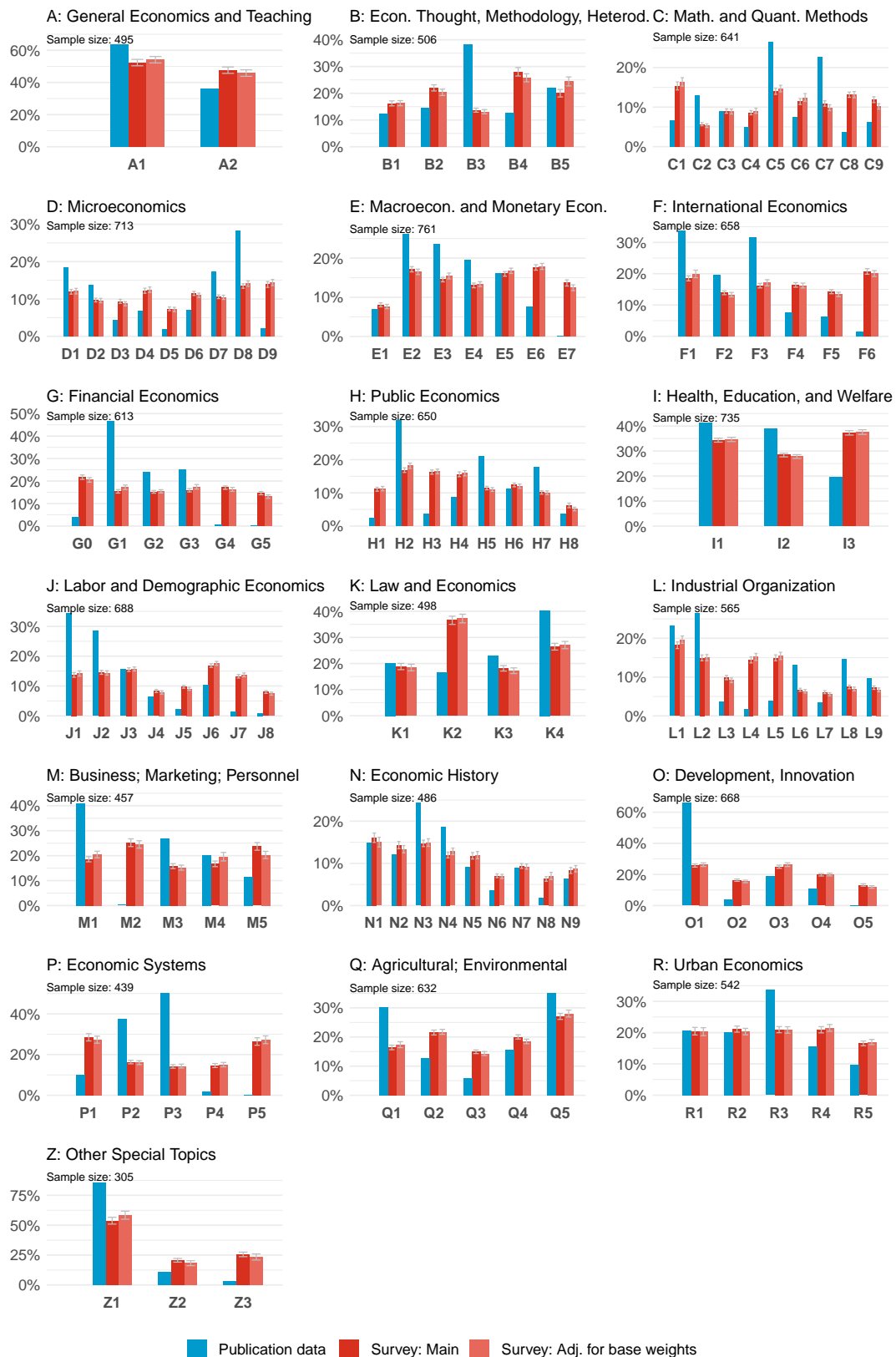


Figure D.5 Comparison of actual JEL topic distribution and average survey responses for JEL sub-topics

Notes: Blue bars: Share of JEL sub-topics in our publication data (EconLit publication data, top 400 journals, January 2009 - December 2019). Red bars: Weighted average survey response with 95% confidence interval. Orange bars: With weights adjusted for share assigned to main JEL-topic.

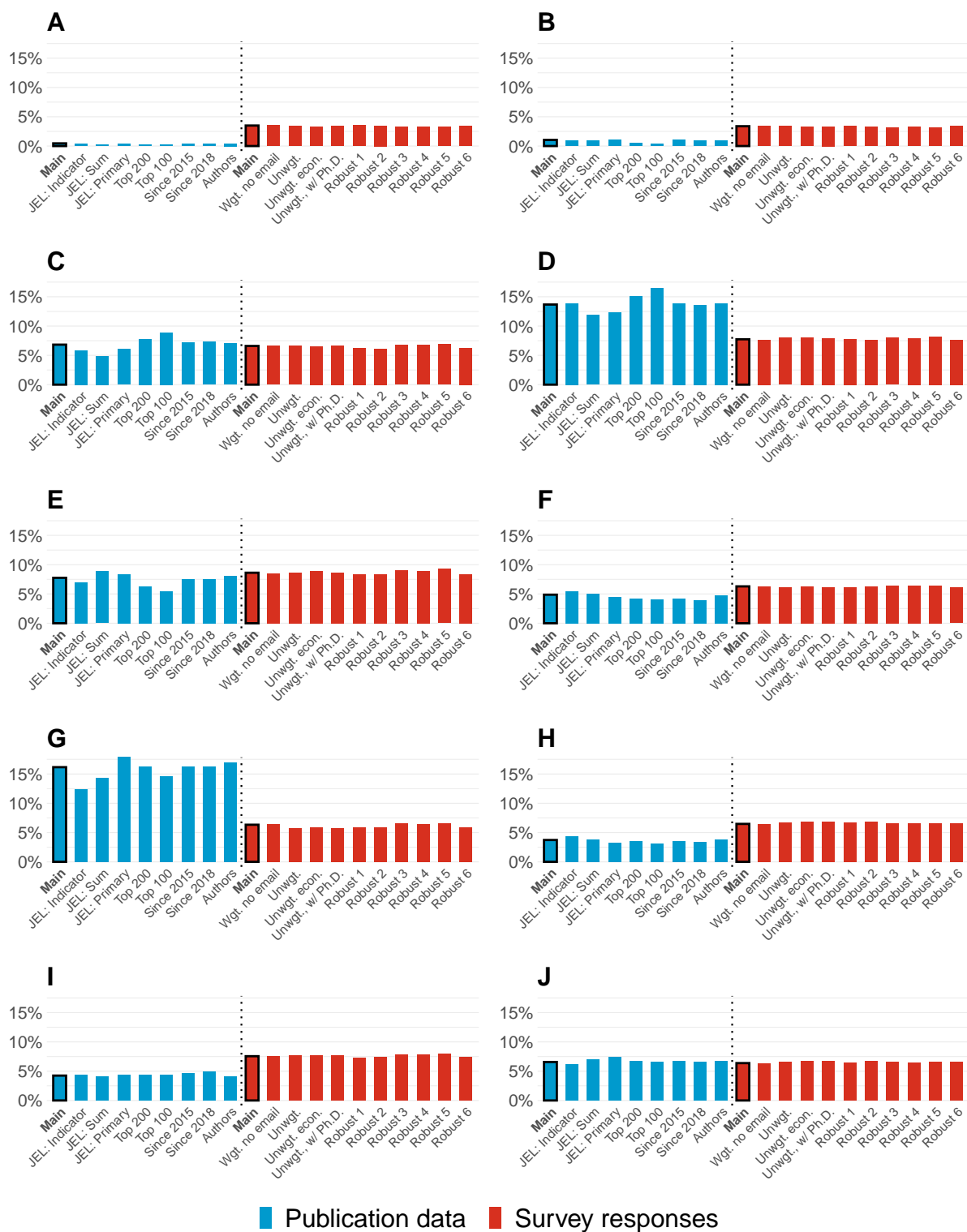


Figure D.6 Robustness of JEL topic distributions – part 1

Notes: Black border: Main estimates. Blue bars: Share of JEL topics in our publication data (Econ-Lit publication data, top 400 journals, January 2009 - December 2019). Red bars: Weighted average survey response with 95% confidence interval. Both distributions are calculated in different robustness specifications that are described in the discussion above.

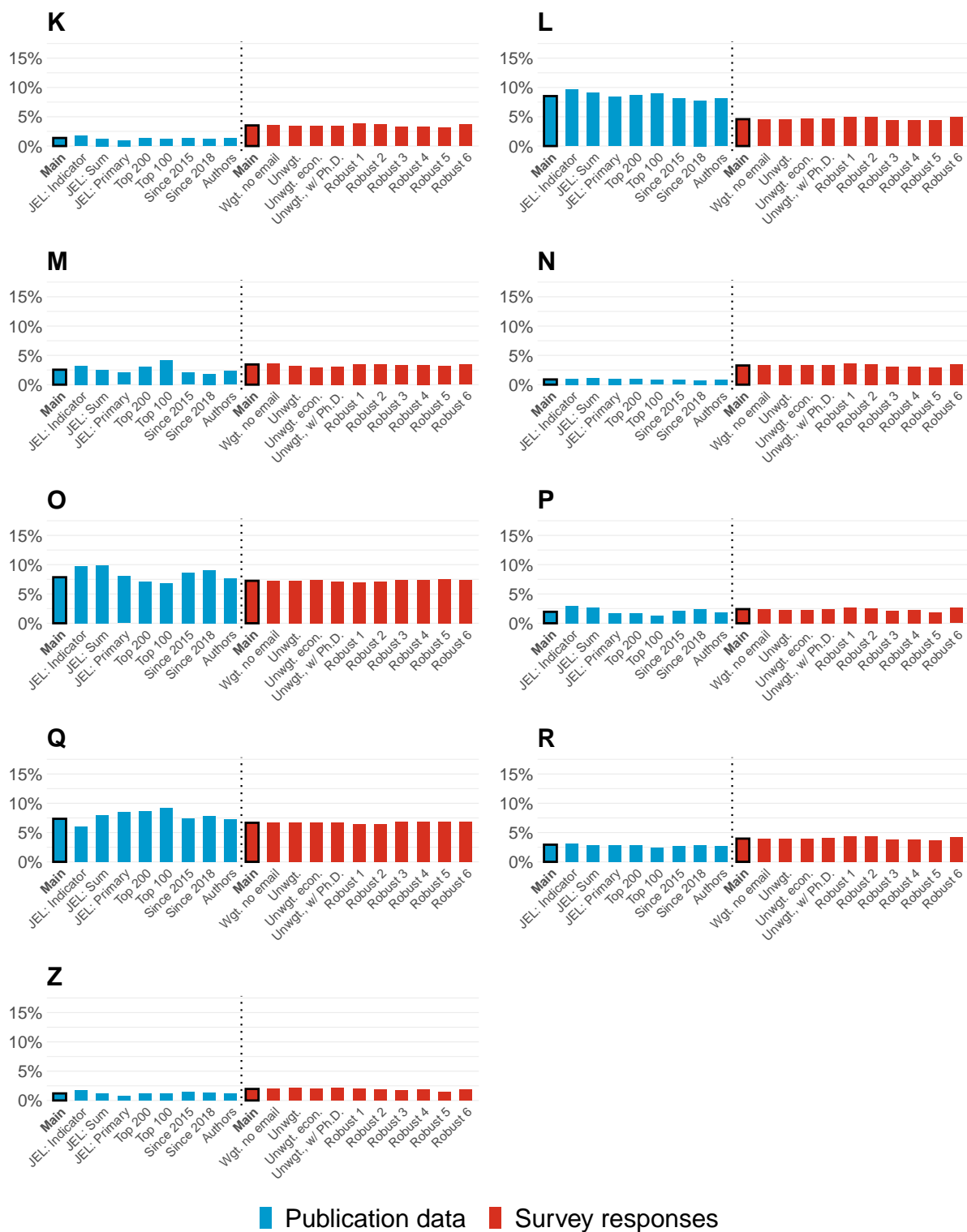


Figure D.7 Robustness of topic distributions – part 2

Notes: Black border: Main estimates. Blue bars: Share of JEL topics in our publication data (Econ-Lit publication data, top 400 journals, January 2009 - December 2019). Red bars: Weighted average survey response with 95% confidence interval. Both distributions are calculated in different robustness specifications that are described in the discussion above.

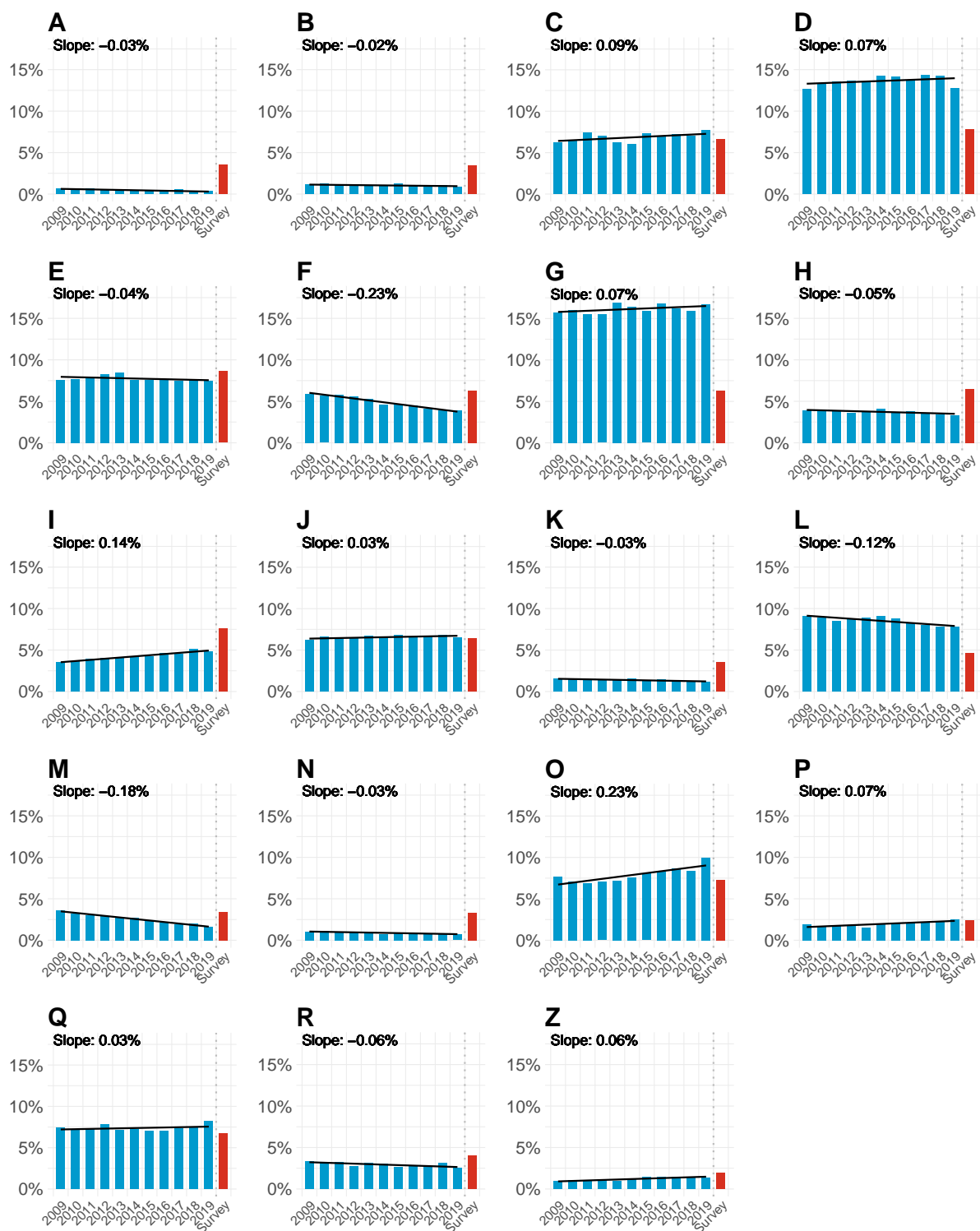


Figure D.8 Time trends in the topic distribution over the last decade

Notes: Blue bars: Share of JEL topics in our publication data (EconLit publication data, top 400 journals) for each year with linear time trend (slope reported). Red bars: Weighted average survey response.

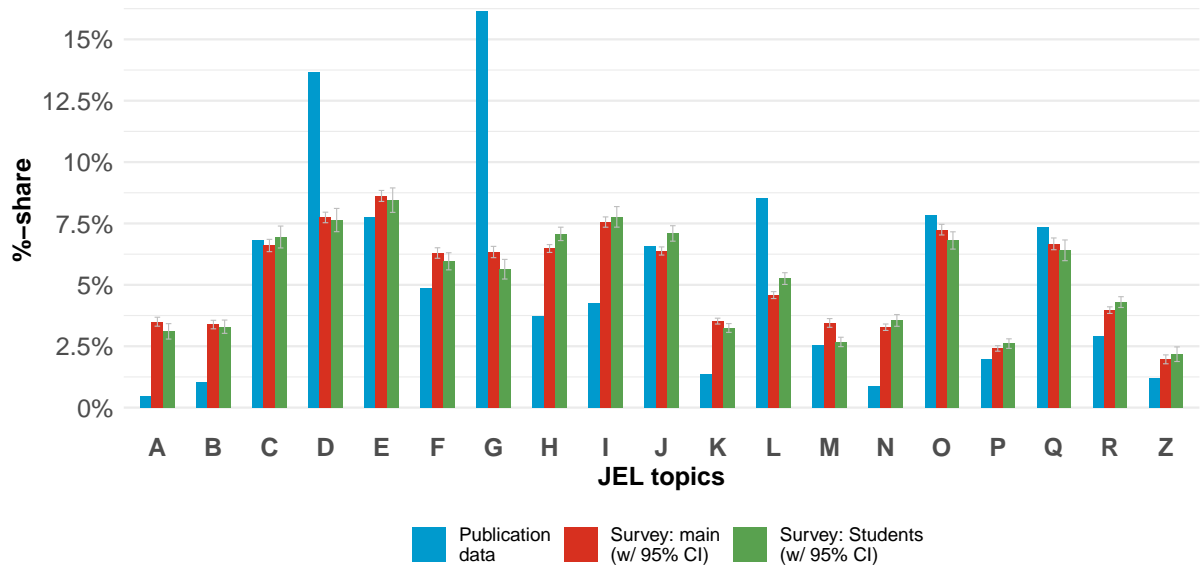


Figure D.9 Preferred JEL topics in the main sample and the Ph.D. student sample

Notes: Blue bars: Share of JEL topics in our publication data (EconLit publication data, top 400 journals). Red bars: Weighted average survey responses in the main sample with 95% confidence intervals. Green bars: (Unweighted) average survey responses in the sample of Ph.D. students with 95% confidence intervals.

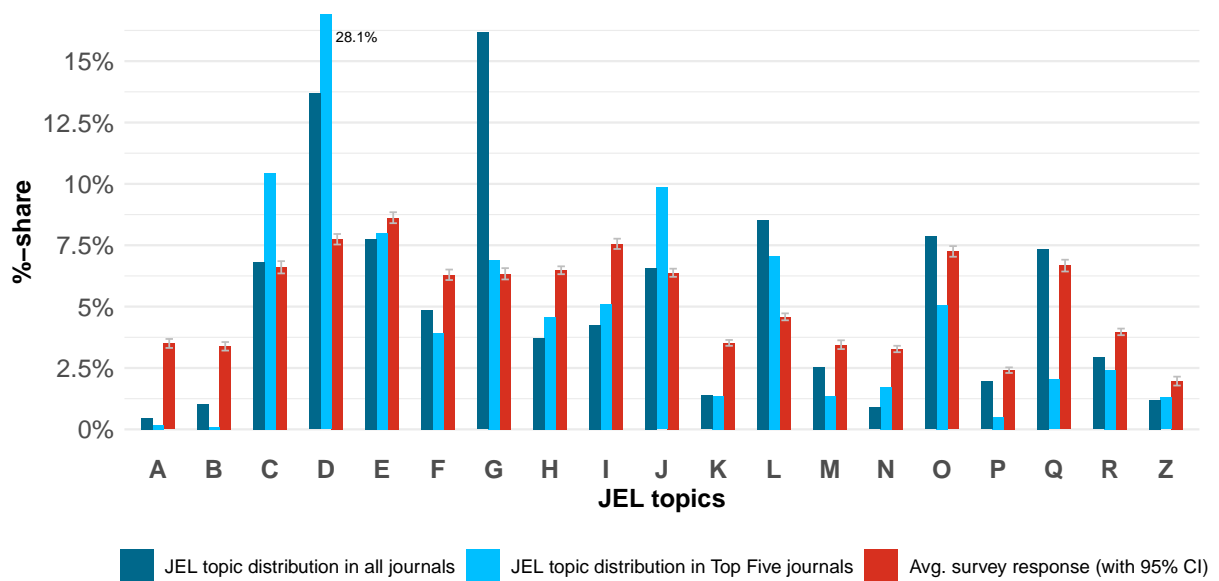


Figure D.10 Comparison of JEL topic distribution in Top Five journals with survey responses

Notes: Dark blue bars: Share of JEL topics in top 400 EconLit-indexed journals. Light blue bars: Share of JEL topics in Top Five articles. EconLit publication data, January 2009 - December 2019. Red bars: Weighted average survey response with 95% confidence interval.

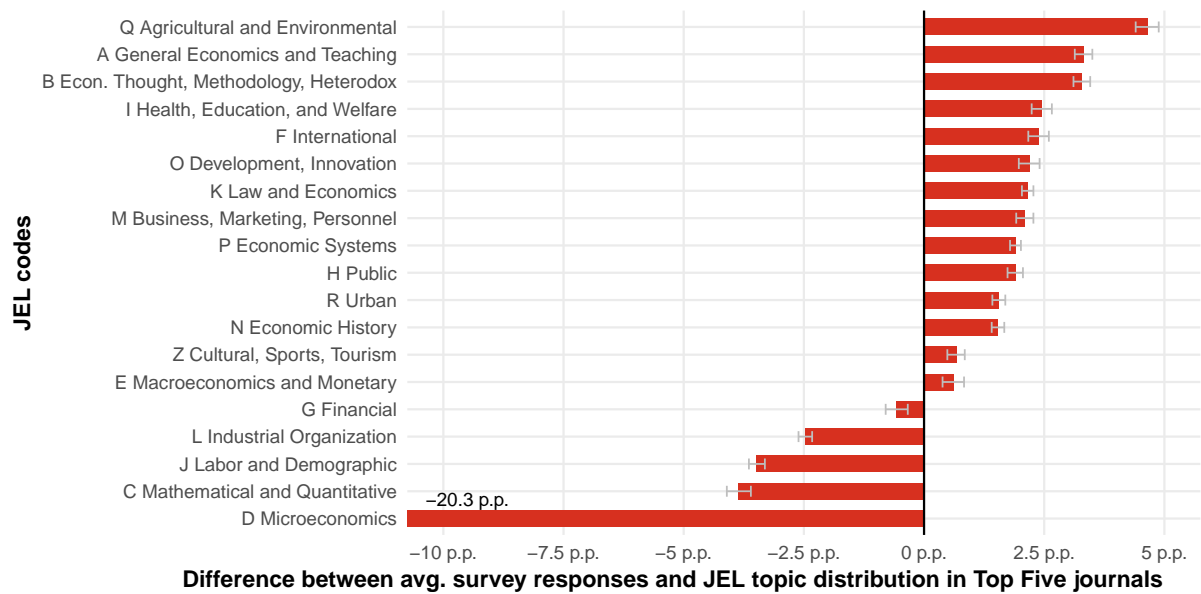


Figure D.11 Differences between the average preferred and the actual JEL topic distribution

Notes: Differences between red bars and blue bars from the above figure D.10 with 95% confidence intervals.

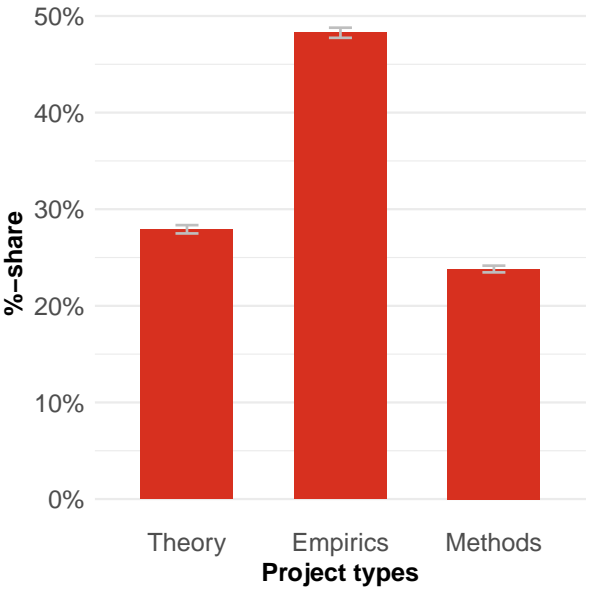


Figure D.12 Comparison of respondents’ preferred and actual distribution of project types

Notes: Weighted survey responses with 95% confidence intervals. Respondents were asked what share of economists’ work should be predominantly theoretical, empirical, or focus on methods. “Please allocate 100 percentage points to the following three options according to what you think economists should work and publish on these days.”

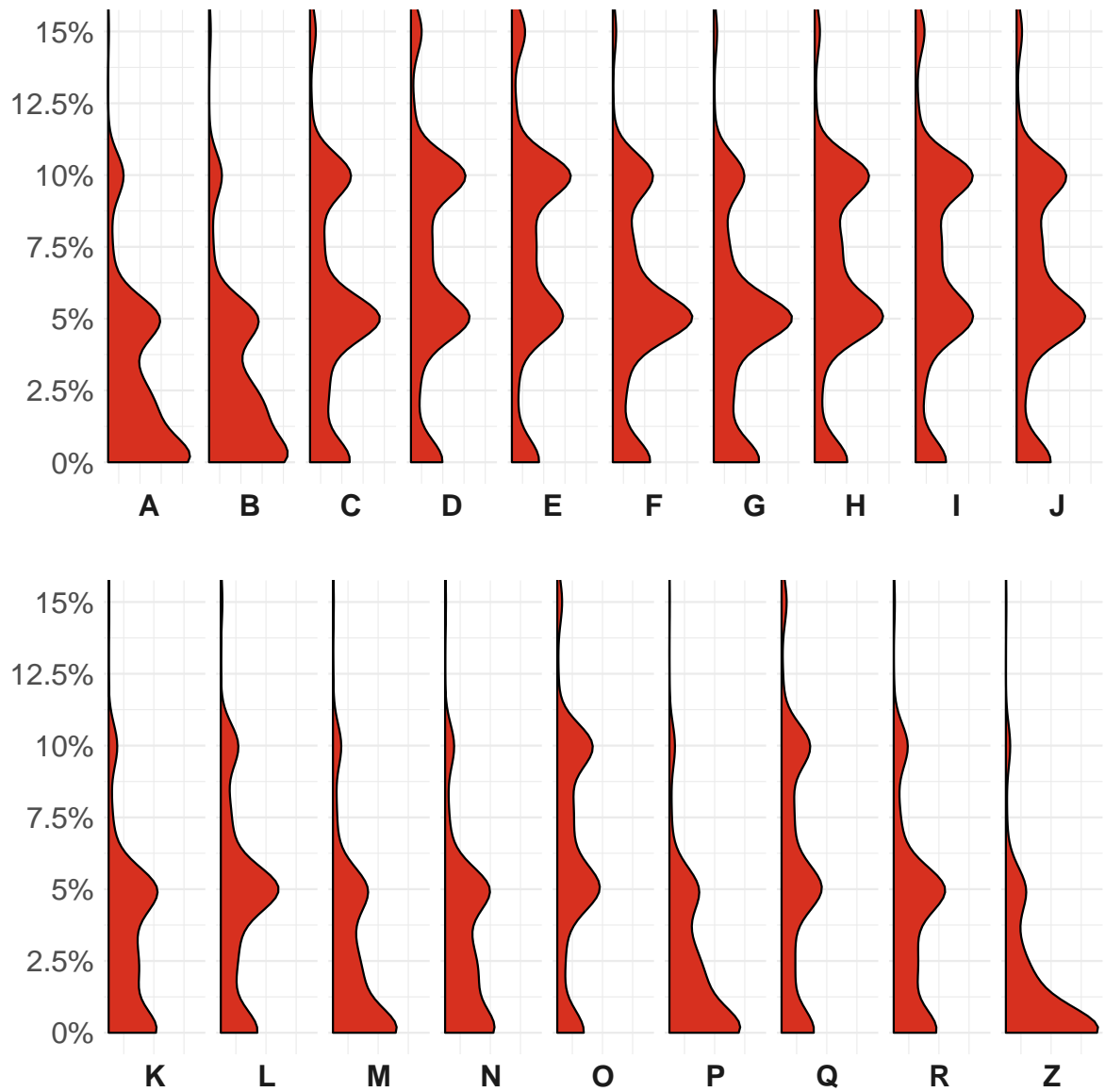


Figure D.13 Distribution of survey responses for each JEL topic

Notes: Weighted kernel density estimates, displayed from 0% to 15%.

Table D.2 Predictors of preferred JEL topics

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	A	B	C	D	E	F	G	H	I	J
Demographics										
Female	.	.	.	-	---	.	.	.	+++	++
Age	.	+	-
Tenured	+	.	.	.
Region (vs. NA/AUS/NZL)										
EUR
AF, AS, LA	+++	.	.	.
Success										
Top 50 institution
Published Top Five	---	---	.	.	++
h-index	--
Project types (vs. empirics)										
Theory	.	.	+	+++	++	.	.	--	--	---
Methods	.	.	+++	---	.	--

	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
	K	L	M	N	O	P	Q	R	Z
Demographics									
Female	.	-	.	---	+	.	+++	.	.
Age	.	-	--	.
Tenured	-	.	.
Region (vs. NA/AUS/NZL)									
EUR	-	--	+	.	.	.	+	.	.
AF, AS, LA	.	--	+++	-	.	.	-	.	.
Success									
Top 50 institution	--	---	.	.
Published Top Five	--	.	.	.
h-index	-	.	.	.
Project types (vs. empirics)									
Theory	.	++	-	.	.	.	-	.	.
Methods	---	---	.	--	-

Notes: Results from weighted OLS regressions with robust standard errors. The dependent variable is the share assigned to the respective JEL topic of each column. The rows contain the explanatory variables of the regressions. We also control for (but do not report) the share of publications in each primary JEL topic as well as the share of publications in economics journals. We use the Benjamini-Hochberg procedure to correct *all* reported coefficients jointly for multiple hypotheses testing. +++/- -- indicates a p-value below 0.01, ++/- - a p-value below 0.05, and +/- a p-value below 0.10 for positive and negative coefficient respectively. Non-significant results are represented by a dot.

Table D.3 Bias for own research field

	%-weight assigned to JEL topic				
	(1)	(2)	(3)	(4)	(5)
Own share (%)	0.106 (0.004)	0.098 (0.004)	0.101 (0.004)	0.113 (0.003)	0.112 (0.004)
Topic FE	×	×	×	×	×
Controls	–	×	–	–	–
Weights	Main	Main	Incl. no email	Unwgt.	Unwgt., econ.
Observations	70,699	68,191	70,699	75,639	63,859
R ²	0.149	0.173	0.143	0.151	0.170

Notes: Weighted OLS regressions, with standard errors (clustered on respondent level) in parantheses. The dependent variable is the %-weight assigned to a JEL topic j by respondent i . The predictor is the %-share of own publications of respondent i in JEL topic j . All regressions include topic fixed effects. Respondent fixed effects are not necessary because each respondent's weights sum up to 1. Column 2 interacts additional control variables with the topic fixed effects, namely gender, age, a tenure dummy, region (EUR and AF, AS, LA), a top-50-institution dummy, a published-Top-Five dummy, h-index, the share of research in theory and methods respectively, and the share of publications in economics. Columns 3-5 use different weighting schemes. $*p < 0.10$, $**p < 0.05$, $***p < 0.01$.

D.3 Discussion

Top economists We derive the following indicators for influential and successful scholars.

Top Five: *Published Top Five* is a binary indicator that takes the value 1 if the author published at least one article in a Top Five journal within our publication sample (top 400 EconLit journals, 2009-2019, see main text section 3.1). The Top Five journals are the American Economic Review, The Quarterly Journal of Economics, the Journal of Political Economy, the Review of Economic Studies, and Econometrica. Publications in the Papers & Proceedings of the American Economic Review are not counted as Top Five publication.

The *Published a Top Five* indicator is also used in other heterogeneity analyses of the paper.

Editor: We compile a list of editors and advisory board members of the top 50 journals in economics from the years 2015-2020. We start from all EconLit-indexed journals and focus on the 50 outlets with the highest Scopus 2018 Scimago journal ranking. Most journals list their editors and board members in each printed issue. Since personnel turnovers are rare, we download the first issues of the years 2020, 2018, and 2016 and extract all available editor information. If an issue does not contain editor information, we check an earlier or older issue. Some journals do not announce their editors in print. Here, we derive information on their current editors and advisory board members from the journals' websites. In total, we find 2,818 editors and advisory board members.

Based on the names, we match the editor data to our author database and manually disambiguate all cases in which multiple matches are found. In total, 93.1% of all editors can be matched to a scholar in our author data. The *Top 50 editor* dummy takes value 1 for successful matches, i.e. recent or current editors or advisory board members at the top 50 journals in economics.

Referees: We compile a list of scholars who have repeatedly refereed at Top Five journals in the years 2015-2020. The American Economic Review, the Journal of Political Economy, and Econometrica publish a list of all referees yearly. The Quarterly Journal of Economics published a list of referees who reviewed four or more papers for 2018 and 2019, and the Review of Economic Studies published a list of recipients of an excellence in refereeing award in the years 2016 to 2019. We download these lists and extract the names of referees. We focus on referees that appear at least twice in the lists, that is, referees that review for at least two Top Five journals or in at least two years. In total, we find 4,229 Top Five referees.

Based on the names, we match the referee data to our author database. In total, 69.0% of all referees can be matched to a unique scholar in our author data. The *Top Five referee* dummy takes value 1 for successful matches, i.e. referees at Top Five journals.

Top economists' satisfaction with economics Figure D.14 shows that the topic preferences of top economists are very close to those of the full sample.

Table D.4 shows that, similar to economists with a Top Five publication, editors at top 50 journals and referees at Top Five journals are more satisfied with the status quo in economics. It regresses the “satisfaction with economics” index on the three different “top economist” indicators.

The results are robust to using different weighting schemes. Moreover, similar results are obtained for each survey module and with the following alternative explanatory variables:

Published articles in Top Five journal: Results are replicated with the number of Top Five publications.

Editors at top journals: Results are replicated with editors at top 25 journals (155 cases) and top 10 journals (58 cases).

Referees at Top Five journals: Results are replicated if we consider only referees that are mentioned at least five times in our list (i.e. referees with at least five different journal-year combinations).

Results of these analyses are available upon request.

Predictors of satisfaction – robustness Tables D.5 (satisfaction with own job), D.6 (satisfaction with own research topics), D.7 (stress), D.8 (academia overly competitive), and D.9 (satisfaction with economics) show that the analyses of satisfaction are robust to using different weighting schemes. Similar results are obtained for each survey module.

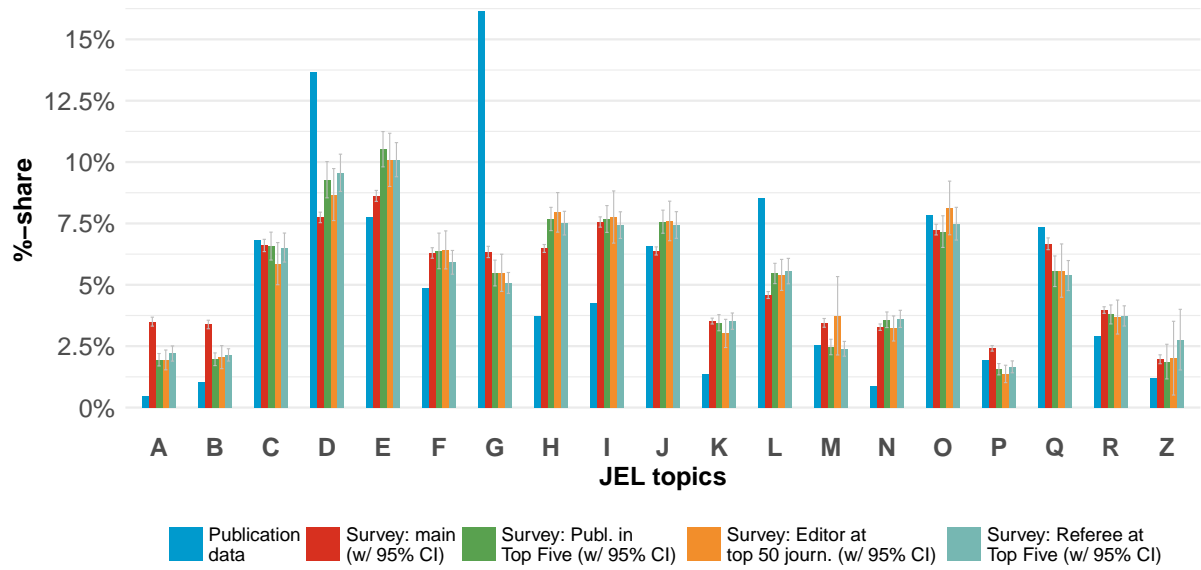


Figure D.14 Comparison of JEL topic distributions in economics journals with survey responses in main sample and among top economists

Notes: Blue bars: Shares of JEL topics in our publication sample (EconLit publication data, top 400 journals, January 2009 - December 2019). Red bars: Weighted average survey responses with 95% confidence intervals. Other bars: Unweighted average survey responses with 95% confidence intervals for different groups of top economists.

Table D.4 Top economists' satisfaction with economics

	Satisfaction with economics (std. index)			
	(1)	(2)	(3)	(4)
Top Five article	0.248 (0.043)			0.153 (0.047)
Top 50 editor		0.245 (0.061)		0.141 (0.063)
Top Five referee			0.253 (0.048)	0.167 (0.053)
Author backgr.	×	×	×	×
Method ctrl.	×	×	×	×
Topic controls	×	×	×	×
Module FE	×	×	×	×
Observations	7,497	7,497	7,497	7,497
R ²	0.048	0.046	0.048	0.050

Notes: Weighted OLS regressions, robust standard errors in parentheses. The dependent variable is the “satisfaction with economics” index score. Higher values indicate higher satisfaction. The explanatory variable varies across panel: an indicator for having published in a Top Five journal (in our publication sample), for editors at top 50 journals, or referees at Top Five journals. Author background controls include gender, age, an indicator for having tenure, region dummies, an indicator for being at a top 50 institution, and h-index. Method controls include the share of projects in theory and methods research respectively. Topic controls include the share of publications in each primary JEL topic as well as the share of publications in economics journals. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table D.5 Predictors of satisfaction with own job – robustness

Satisfaction with own job (std.)						
	(1)	(2)	(3)	(4)	(5)	(6)
Satisfact. w/ econ.	0.072 (0.014)	0.067 (0.014)	0.081 (0.012)	0.079 (0.013)	0.083 (0.019)	0.063 (0.020)
Female	0.072 (0.032)	0.071 (0.033)	0.084 (0.028)	0.079 (0.029)	0.063 (0.044)	0.078 (0.046)
Age (in 10y)	0.025 (0.014)	0.027 (0.014)	0.020 (0.012)	0.019 (0.013)	0.030 (0.019)	0.021 (0.020)
Tenured	0.153 (0.030)	0.159 (0.031)	0.140 (0.027)	0.144 (0.028)	0.154 (0.042)	0.152 (0.042)
Region: EUR	0.041 (0.031)	0.038 (0.033)	0.051 (0.028)	0.066 (0.030)	0.056 (0.042)	0.025 (0.046)
Region: AF, AS, LA	0.036 (0.042)	0.042 (0.043)	0.016 (0.037)	0.003 (0.040)	0.064 (0.058)	0.013 (0.060)
Top 50 inst.	0.089 (0.042)	0.090 (0.044)	0.092 (0.034)	0.077 (0.036)	0.155 (0.056)	0.018 (0.061)
Published Top Five	0.225 (0.042)	0.232 (0.043)	0.220 (0.037)	0.226 (0.038)	0.208 (0.060)	0.259 (0.058)
h-index (in 10)	0.113 (0.020)	0.111 (0.021)	0.112 (0.018)	0.113 (0.020)	0.090 (0.028)	0.135 (0.030)
Weights	Main	Wgt., no email	Unwgt.	Unwgt., only econ.	Only objectives	Only JEL
Method ctrl.	×	×	×	×	×	×
Topic ctrl.	×	×	×	×	×	×
Module FE	×	×	×	×	–	–
Observations	7,489	7,489	7,490	6,776	3,903	3,586
R ²	0.046	0.045	0.050	0.048	0.049	0.049

Notes: Weighted OLS regressions, robust standard errors in parentheses. The dependent variable is a standardized survey measure of job satisfaction (“All things considered, how satisfied or dissatisfied are you with your job in general?”). Higher values indicate higher satisfaction. Columns 1-4 employ different weighting schemes. Columns 5-6 estimate the regression for both survey modules separately. “Satisfact. w/ econ.” is the satisfaction with economics index score (standardized). Age and h-index are divided by 10. Method controls include the share of projects in theory and methods research respectively. Topic controls include the share of publications in each primary JEL topic as well as the share of publications in economics journals. p-values are adjusted for multiple hypotheses correction within the reported coefficients of each row, using the Benjamini-Hochberg procedure. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table D.6 Predictors of satisfaction with own research topics – robustness

	Satisfaction with own topics (std.)					
	(1)	(2)	(3)	(4)	(5)	(6)
Satisfact. w/ econ.	0.034 (0.014)	0.031 (0.015)	0.043 (0.013)	0.044 (0.014)	0.013 (0.017)	0.089 (0.023)
Female	0.027 (0.031)	0.022 (0.032)	0.026 (0.027)	0.027 (0.028)	0.027 (0.041)	0.023 (0.045)
Age (in 10y)	0.053 (0.013)	0.050 (0.014)	0.053 (0.012)	0.054 (0.013)	0.081 (0.017)	0.024 (0.020)
Tenured	0.034 (0.029)	0.040 (0.031)	0.038 (0.026)	0.038 (0.027)	0.028 (0.038)	0.043 (0.045)
Region: EUR	0.042 (0.030)	0.040 (0.031)	0.043 (0.027)	0.030 (0.029)	0.071 (0.039)	0.005 (0.046)
Region: AF, AS, LA	0.104 (0.041)	0.114 (0.043)	0.075 (0.037)	0.076 (0.039)	0.052 (0.053)	0.153 (0.062)
Top 50 inst.	0.080 (0.040)	0.090 (0.041)	0.043 (0.035)	0.030 (0.037)	0.107 (0.052)	0.038 (0.061)
Published Top Five	0.175 (0.043)	0.176 (0.043)	0.160 (0.039)	0.160 (0.040)	0.185 (0.060)	0.188 (0.062)
h-index (in 10)	0.107 (0.023)	0.109 (0.023)	0.106 (0.019)	0.099 (0.021)	0.061 (0.029)	0.148 (0.035)
Weights	Main	Wgt., no email	Unwgt.	Unwgt., only econ.	Only objectives	Only JEL
Method ctrl.	×	×	×	×	×	×
Topic ctrl.	×	×	×	×	×	×
Module FE	×	×	×	×	–	–
Observations	7,493	7,493	7,494	6,777	3,905	3,588
R ²	0.037	0.038	0.039	0.039	0.041	0.048

Notes: Weighted OLS regressions, robust standard errors in parentheses. The dependent variable is a standardized survey measure of satisfaction with one’s own research topics (“All things considered, how satisfied or dissatisfied are you with the topics on which you are working these days?”). Higher values indicate higher satisfaction. Columns 1-4 employ different weighting schemes. Columns 5-6 estimate the regression for both survey modules separately. “Satisfact. w/ econ.” is the satisfaction with economics index score (standardized). Age and h-index are divided by 10. Method controls include the share of projects in theory and methods research respectively. Topic controls include the share of publications in each primary JEL topic as well as the share of publications in economics journals. p-values are adjusted for multiple hypotheses correction within the reported coefficients of each row, using the Benjamini-Hochberg procedure. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table D.7 Predictors of stress – robustness

	Stress (std.)					
	(1)	(2)	(3)	(4)	(5)	(6)
Satisfact. w/ econ.	0.040 (0.013)	0.041 (0.014)	0.042 (0.012)	0.040 (0.013)	0.090 (0.018)	0.012 (0.019)
Female	0.216 (0.030)	0.214 (0.031)	0.211 (0.028)	0.208 (0.029)	0.251 (0.042)	0.174 (0.044)
Age (in 10y)	0.151 (0.013)	0.148 (0.013)	0.156 (0.012)	0.159 (0.013)	0.164 (0.018)	0.136 (0.019)
Tenured	0.026 (0.029)	0.026 (0.029)	0.026 (0.026)	0.014 (0.027)	0.031 (0.040)	0.021 (0.041)
Region: EUR	0.132 (0.030)	0.126 (0.030)	0.127 (0.027)	0.144 (0.029)	0.178 (0.041)	0.077 (0.043)
Region: AF, AS, LA	0.016 (0.039)	0.013 (0.040)	0.006 (0.037)	0.013 (0.039)	0.033 (0.057)	0.004 (0.054)
Top 50 inst.	0.041 (0.042)	0.054 (0.044)	0.001 (0.037)	0.018 (0.039)	0.023 (0.057)	0.100 (0.061)
Published Top Five	0.020 (0.045)	0.009 (0.046)	0.002 (0.041)	0.002 (0.042)	0.088 (0.064)	0.051 (0.064)
h-index (in 10)	0.068 (0.024)	0.067 (0.024)	0.055 (0.021)	0.056 (0.023)	0.080 (0.033)	0.061 (0.031)
Weights	Main	Wgt., no email	Unwgt.	Unwgt., only econ.	Only objectives	Only JEL
Method ctrl.	×	×	×	×	×	×
Topic ctrl.	×	×	×	×	×	×
Module FE	×	×	×	×	–	–
Observations	7,487	7,487	7,488	6,772	3,901	3,586
R ²	0.076	0.074	0.075	0.075	0.099	0.070

Notes: Weighted OLS regressions, robust standard errors in parentheses. The dependent variable is a standardized survey measure of job-related stress experiences (“In general, how stressful do you find your job?”). Higher values indicate higher stress. Columns 1-4 employ different weighting schemes. Columns 5-6 estimate the regression for both survey modules separately. “Satisfact. w/ econ.” is the satisfaction with economics index score (standardized). Age and h-index are divided by 10. Method controls include the share of projects in theory and methods research respectively. Topic controls include the share of publications in each primary JEL topic as well as the share of publications in economics journals. p-values are adjusted for multiple hypotheses correction within the reported coefficients of each row, using the Benjamini-Hochberg-procedure. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table D.8 Predictors of “Academia overly competitive” – robustness

	Agreement with “Academia overly competitive” (std.)					
	(1)	(2)	(3)	(4)	(5)	(6)
Satisfact. w/ econ.	0.127 (0.013)	0.123 (0.014)	0.130 (0.012)	0.127 (0.013)	0.177 (0.019)	0.070 (0.019)
Female	0.230 (0.029)	0.230 (0.030)	0.250 (0.026)	0.252 (0.028)	0.232 (0.041)	0.232 (0.042)
Age (in 10y)	0.066 (0.013)	0.058 (0.014)	0.072 (0.012)	0.068 (0.013)	0.061 (0.018)	0.075 (0.020)
Tenured	0.075 (0.029)	0.083 (0.030)	0.064 (0.026)	0.040 (0.027)	0.112 (0.040)	0.028 (0.042)
Region: EUR	0.114 (0.030)	0.112 (0.030)	0.116 (0.028)	0.112 (0.030)	0.080 (0.040)	0.146 (0.044)
Region: AF, AS, LA	0.024 (0.040)	0.030 (0.041)	0.017 (0.038)	0.025 (0.040)	0.084 (0.056)	0.044 (0.056)
Top 50 inst.	0.010 (0.042)	0.003 (0.043)	0.045 (0.037)	0.062 (0.039)	0.042 (0.056)	0.027 (0.061)
Published Top Five	0.143 (0.047)	0.135 (0.047)	0.184 (0.044)	0.183 (0.045)	0.108 (0.065)	0.171 (0.067)
h-index (in 10)	0.051 (0.023)	0.054 (0.024)	0.025 (0.021)	0.043 (0.023)	0.050 (0.032)	0.056 (0.033)
Weights	Main	Wgt., no email	Unwgt.	Unwgt., only econ.	Only objectives	Only JEL
Method ctrl.	×	×	×	×	×	×
Topic ctrl.	×	×	×	×	×	×
Module FE	×	×	×	×	–	–
Observations	7,493	7,493	7,494	6,778	3,905	3,588
R ²	0.065	0.062	0.063	0.063	0.082	0.060

Notes: Weighted OLS regressions, robust standard errors in parentheses. The dependent variable is a standardized survey measure of perceiving academia as overly competitive (“I would personally criticize academia for being overly competitive”). Higher values indicate larger agreement and hence lower satisfaction. Columns 1-4 employ different weighting schemes. Columns 5-6 estimate the regression for both survey modules separately. “Satisfaction econ.” is the satisfaction with economics index score (standardized). Age and h-index are divided by 10. Method controls include the share of projects in theory and methods research respectively. Topic controls include the share of publications in each primary JEL topic as well as the share of publications in economics journals. p-values are adjusted for multiple hypotheses correction within the reported coefficients of each row, using the Benjamini-Hochberg procedure. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table D.9 Predictors of satisfaction with economics – robustness

	Satisfaction with economics (std. index)					
	(1)	(2)	(3)	(4)	(5)	(6)
Female	0.072 (0.031)	0.069 (0.032)	0.068 (0.028)	0.055 (0.029)	0.081 (0.042)	0.070 (0.045)
Age (in 10y)	0.069 (0.014)	0.068 (0.015)	0.065 (0.013)	0.064 (0.014)	0.084 (0.021)	0.051 (0.020)
Tenured	0.068 (0.030)	0.060 (0.031)	0.066 (0.026)	0.061 (0.028)	0.067 (0.041)	0.070 (0.043)
Region: EUR	0.096 (0.030)	0.084 (0.031)	0.091 (0.027)	0.105 (0.028)	0.130 (0.042)	0.057 (0.043)
Region: AF, AS, LA	0.067 (0.042)	0.054 (0.043)	0.077 (0.038)	0.088 (0.040)	0.007 (0.059)	0.115 (0.058)
Top 50 inst.	0.016 (0.039)	0.013 (0.041)	0.018 (0.034)	0.030 (0.036)	0.012 (0.056)	0.045 (0.055)
Published Top Five	0.248 (0.043)	0.250 (0.043)	0.232 (0.038)	0.215 (0.039)	0.304 (0.063)	0.185 (0.057)
h-index (in 10)	0.010 (0.024)	0.011 (0.024)	0.002 (0.021)	0.003 (0.024)	0.006 (0.037)	0.022 (0.029)
Weights	Main	Wgt., no email	Unwgt.	Unwgt., only econ.	Only objectives	Only JEL
Method ctrl.	×	×	×	×	×	×
Topic ctrl.	×	×	×	×	×	×
Module FE	×	×	×	×	–	–
Observations	7,497	7,497	7,498	6,781	3,908	3,589
R ²	0.048	0.045	0.048	0.048	0.060	0.045

Notes: Weighted OLS regressions, robust standard errors in parentheses. The dependent variable is the “Satisfaction with economics” index score. Higher values indicate higher satisfaction. Columns 1-4 employ different weighting schemes. Columns 5-6 estimate the regression for both survey modules separately. Age and h-index are divided by 10. Method controls include the share of projects in theory and methods research respectively. Topic controls include the share of publications in each primary JEL topic as well as the share of publications in economics journals. p-values are adjusted for multiple hypotheses correction within the reported coefficients of each row, using the Benjamini-Hochberg-procedure. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.