

# Initial Findings from the Consultation on the Impact of Research Metrics on the

## Work of Academic Economists 2020

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### **Executive summary**

Drawing on a large-scale survey of 540 UK academic economists from a sample frame of 2,570 university faculty affiliated to over 100 UK Higher Education institutions in January/February 2020, this report explores the way faculty view the impact of research evaluation on their working practices. Academic economists work in a number of settings from independent economics departments, to business schools (sometimes clustered in dedicated economics departments but also in other departments), as well as in other social science departments. Their research is evaluated under different incentives and structures from publication in the 'Top-5' economics' journals, the Academic Journal Guide, or through bespoke departmental lists (sometimes within the same institution). And while economics submissions are typically evaluated by the Economics and Econometrics panel (Unit of Assessment 16), many economic submissions are submitted to different units of assessment as part of the Research Excellence Framework.

The initial findings from the report are:

- While there is considerable heterogeneity in use of evaluation tools such as journal lists and metrics employed by the departments, economists working in economics departments, business schools, and economics working in other areas of social science report they are used ubiquitously.
- While different lists are used in different environments, lists use is ubiquitous among UK academic economists.
- Institutions use Journal Impact Factors widely.
- Evaluation tools shape the way individual faculty publish, consider the work of their colleagues and represent their own accomplishments.
- There are marked differences in opinions as to the extent that rankings and the Research Excellence Framework are impacting upon scholarship, both positive and negative. The majority of respondents see them as both as valuable means to evaluating and recognising work while pervasively view that they are undermining interdisciplinary and valuing the vehicle where publication occurs over its scholarly impact.

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### Introduction

This report summarises the initial findings of a large-scale survey of academic economists in the UK and their views of research evaluation. The survey was intended to better understand the impact of research evaluation working practices of academic economists. The research seeks to enrich discussions about the impact and development of the research evaluation, of assessing research quality and the behaviour of scholars.

While there are a number of means applied to evaluate research, no specific tool exists in a vacuum. It is the most recent manifestation of a broader tendency to develop systems, tools and metrics to help gauge and assess research performance, or what might be called the 'ecosystem of assessment'. While the number of citations received by a publication is arguably the currency of the 'academic influence' of published research, albeit imperfectly, prior work has indicated that two evaluation methods are the two key drivers for researchers in the UK context - one at the institutional level where via publically funded 'research selectivity exercises', most recently known as the Research Excellence Framework (REF) – and the second at the individual and department level – journal rankings – are substantive.

Within the REF, research performance is assessed at the institutional level. So, in order to decide whether individual work is of sufficient 'quality' to be entered into the exercise, departments need to evaluate the quality of their own faculty, thus adopting 'mock REFs' or through 'arm's length' measures such as journal ranking or metrics. While many economists are highly aware of the REF's influences, often the most visible element of research evaluation exercises are the lists through which their individual outputs are perceived to be judged, and these reviews are also being accompanied by the use of journal metrics, such as Journal Impact Factors, or through the citations of outputs. Indeed, there is overlap within many Units of Assessment, including 'Economics and Econometrics', where citations have a direct role.<sup>1</sup>

There is limited understanding of the extent of the use of journal rankings outside business schools in the UK, however, anecdotally at least, is there is a perception that journal rankings have an important role in the departments where economists work and on their preparation for the REF. It is clear that in preparing their past REF submissions many institutions relied upon journal lists, such as the Academic Journal Guide, as a proxy for the sub-panel's likely assessment (Bryce et al., 2020; Walker et al., 2019a, 2019b). Lee (2013) also aligned journal rankings and earlier Research Assessment Exercises and there is evidence that ranking lists such as the "Top 5" are heavily valued in top UK departments, and especially in the US,

<sup>&</sup>lt;sup>1</sup> REF (2019/20), 'Panel criteria and working methods' points out that citation data will be made "available, and will make use of the data supplied by the REF team where it is considered appropriate as an additional piece of supplementary evidence to support the initial assessment of outputs." (page 51). <u>https://www.ref.ac.uk/media/1084/ref-2019\_02-panel-criteria-and-working-methods.pdf</u>

and they can make or break individual researchers' careers (Heckman and Moktan, 2020). Table 1 summarizes the key features of these two related systems (i.e. the REF and other journal rankings and metrics).

	Research Excellence Framework (REF) 2020	Evaluation Tools (Journal Lists)
Consists of	A national research assessment organized by the UK government. The quality of research is assessed in terms of 'rigour, significance and originality' assessed by the peer review panels (public)	Publication in "Top 5" journals, The Academic Journal Guide (that includes the 'Top 5' as "Journals of Distinction") <sup>2</sup> , departmental journal lists, and 'other lists', Journal Impact Factors <sup>3</sup> and citations <sup>4</sup> (private)
Purpose	Rewards research performance with funding based on the quality of the publications (65%), research impact (20%) and research environment (15%)	Informs individuals' and decision- makers' about the value of different research outputs, influencing workload, hiring and probationary systems
Level of Assessment	By subject level (unit of assessment)	By individuals, journal level to proxy individual's output quality.
Timing Ranking	Once every six to seven years 1-4 rated outputs	Updated at varying times Hierarchical ranking 1-4 rated, and/or a 4* category

Table 1: Eva	luation of	Economic	Research	in the	UK
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*Note:* Further details relating to the REF 2020 are found at https://www.ref.ac.uk/.

The "Top 5" includes the *American Economic Review, Econometrica*, the *Journal of Political Economy*, the *Quarterly Journal of Economics* and *Review of Economic Studies*.<sup>2</sup> https://charteredabs.org/academic-journal-guide-2018/; <sup>3</sup> There are a number of Journal Impact Factors in common use: (i) The Web of Knowledge (WoK) Journal Citation Report (JCR) published by Clarivate; (ii) the SCImago Journal Rank (SJR); (iii) the Source Normalized Impact per Paper (SNIP); and (iv) the Impact Per Publication (IPP) published by Scopus.<sup>4</sup> Citations and aligns summary metrics, such as the H-index, are commonly available via working paper and publication listing (e.g. RePEc), individual accounts such Google Scholar, and increasingly through institutional access via Scopus and Clarivate.

Although the spread of formal research evaluation has generated considerable debate and discussion among the academic community, there are as yet few large empirical studies that try to gauge academics views of how research evaluation impacts their working practices. A key goal of our study is to provide evidence to inform these debates and to help better understand how the evaluation is used, perceived and what impact it has on the way academic economics perform their job role. We also consider perceptions of the evaluations against other parts of the ecosystem of assessment, such as the REF and Impact Factors.

#### Some initial findings

The survey suggests that the metrics are pervasively used across economics in a wide range of decisionmaking processes that govern the working lives of academics. Individual faculty also admitted they turned to journal lists in variety of their own work activities, as they shaped the way they published, considered the work of their colleagues, in hiring and promotion decisions, and in representing their own accomplishments.

It is clear from the survey that the Research Excellence Framework is unpopular, although it is more popular than journal rankings such as the "Top 5" and the Academic Journal Guide. A significant majority of academic economists feel that the list has a negative effect on their working practices, and has led to a shift in the way research is understood and managed in their departments.

Overall, it appears among academic economists both the REF and lists are used as instruments for organisations and individuals to target, reward and shape their research, but they are unpopular and typically perceived as an instrument of control fostering careerism over creativity. As such, these research evaluation tools act as 'lightening rods' drawing a range of pressures faced by academic economists in their working lives.

The following report is structured as follows. First, we report our research method and approach. Second, we look at academics' attitudes to evaluation measures and their perceptions of their impact on working practices. In this analysis, we compare the views of individuals working at different types of institutions. Third, we draw implications from these results for subsequent research, the research evaluation and management, and the design of research evaluation.

### Identifying and situating academic economists and academic macroeconomists in the UK

This research is based on data collected through a questionnaire administered to all academics working in economics departments, business schools and 'other departments' using departmental web pages. The initial list of departments was drawn from departments that are represented by the Conference of Heads of University Departments of Economics (CHUDE) of the Royal Economics Society. This includes 'standalone' departments as well as a number of business school departments. The second set of

individuals identified were working in business schools that did not have CHUDE representation (such as scholars in finance, organisational behaviour or strategy departments), but were included in the REF 2014. Research Papers in Economics (RePEc) was used to identify individuals who were working as academic economists outside business schools or 'standalone' economics departments, for example in departments aligned to area studies, agriculture, education, energy, politics and so on. Respondents' names and contact details were double checked on the web to ensure they were as accurate.

The final population investigated consists of 13,048 university faculty affiliated to over 100 UK Higher Education institutions. This approach which aligns to the survey's deliberately broad definition of academic economists, i.e. that the individual was "Defined as either having a PhD in economics/ econometrics or closely related discipline, or conducting research/ teaching in economics or econometrics" was designed to ensure that it incorporated the population of academic economists in the UK, and we hoped to obtain a broad and deeper understanding of the area. It was also driven by an appreciation that business schools have become the academic home for increasing numbers of economists over time in the UK. In part, this reflects the development of business schools in the UK, which were often built 'ready-made' from existing economics departments. It also reflected business schools absorbing economics departments and a precipitous decline in the number of economics entries into the REF (Johnson and Reeve, 2017). By being able to identify and situate our respondents within the population of academic economists in the UK we hope to obtain a broad and deeper understanding of how research evaluation is being conducted and its effect on academics' working lives.

While the blanket coverage of the survey was necessary to enable broad participation, it was problematic because it did not enable us to identify the substantial minority of economists from non-economists working in business schools. We utilised publication data for the full sample using publication in economics outlets as an indicator of whether or not an individual was an economist. To do so, we searched Scopus for individuals who were present in the sample using an algorithm that matched the name, institution and the extent that published in output in journals included in the most recent Academic Journal Guide (AJG) published in 2018. Our choice of Scopus was based upon its substantive journals' coverage, but also with respect to other types of publication outlet. The AJG was used for two reasons. First, the AJG has the broadest coverage of business and management journals in general across 22 fields, and 336 Economics and Econometric journals (including more strictly statistical outlets). Including information on journals from other areas also enables to map potential areas. Second, we used the AJG, because, as we will illustrate later, it is extensively used by a large number of survey participants both in business schools and, to a less extent, economic departments and other areas where academic economists 'ply their trade'. The AJG has a limitation in that it explicitly locates journals within a single field. This is

problematic in that some areas have journals that use the Journal of Economic Literature (JEL) system and are vehicles for economists' publications located outside 'Economics and Econometrics'. The most conspicuous areas not included in the economics list are 'Finance' and 'Business History and Economic History', but aligned fields such as 'Innovation' and to a lesser extent 'Accounting' and the 'Social Sciences' also contain journals and aligned literature that economists contribute to.

To identify journals in those areas we drew upon earlier work that aligned journals to different JEL classification (Kelly and Brueste, 2011). We updated the information provided by that work also identifying new journals and journals that were not classified by their schema as they did not align to a specific subfield. To do so we examined the content of the journals over a five-year time horizon to ensure that it regularly incorporated economists' work. Doing so enabled us to identify 476 journals that were either directly classified as economics journals or aligned to economics in their content.

For the 13,048 academics that make up the population of UK academic economists we utilised web scraping using individuals' names, gender and institutions to disambiguate individuals. We then manually checked these data, using information from websites and other sources and were able to identify 8,870 individuals with publications recorded in the Scopus database. A large part of the differential between the sample frame and those identified reflected with publications in Scopus is due to the sample frame including also scholars who were focused on teaching roles, and thus do not typically publish. While the project did include teaching staff, not surprisingly, given the subject of the survey being on research evaluation, almost all participants were research active, and more than 97% had a PhD. After excluding these teaching focused faculty, we are left with 9% of the sample who do not have publications in the Scopus database. Of these about 5% are at lecturer rank, suggesting that they likely to predominantly be Early Careers Researchers who do not yet have work published.

Table 1 provides a summary of the publication data for the full sample of 8,870 scholars and encompasses 209,016 outputs of which 27.4% are in journals aligned to economics. We then utilise the publication data to estimate the number of outputs published by economists (those who publish more than 20% of their output in economics journals or in journals captured by the JEL journal list) enabling us to provide an estimated sample of 2,570 of the sample are economists. This amounts to 28.9% of the sample. We were then able capture the other outputs such as books and books series published by this group which together accounted for 13.1% of the total outputs highlighting the focus journal focus of the discipline. These proportions, while low, are considerable compared to the outputs that are submitted to the REF 2014 where books and book chapters accounted for 1.5% of the total submissions (authors calculation using REF 2014 submission data - <a href="https://results.ref.ac.uk/">https://results.ref.ac.uk/</a>).

		Participants	Participants	
	Publications	(Primary	(Secondary	
		expertise)	expertise)	
All fields (Number of outputs and participants)	209,016	540	504	
Economics (%)	27.4			
Sub-field				
General Economics and Teaching	0.03	0.36	1.73	
History of Economic Thought, Methodology, and				
Heterodox Approaches	2.04	1.07	1.73	
Mathematical and Quantitative Methods	7.84	5.71	7.86	
Microeconomics	5.21	8.69	5.59	
Macroeconomics and Monetary Economics	2.23	6.55	5.19	
International Economics	2.23	3.09	3.33	
Financial Economics	12.39	6.55	4.00	
Public Economics	2.13	2.14	4.26	
Health, Education and Welfare	1.76	4.17	4.26	
Labor and Demographic Economics	3.74	6.19	5.59	
Law and Economics	0.30	0.36	0.67	
Industrial Organization	5.10	3.69	3.73	
Business Administration and Business Economics,				
Marketing, Accounting, Personnel Economics	1.55	2.62	1.86	
Economic History	2.27	1.31	1.33	
Economic Development, Innovation, Technological				
Change, and Growth	5.74	4.76	6.66	
Economic Systems	1.57	0.12	0.80	
Agricultural and Natural Resource Economics,				
Environmental and Ecological Economics	3.70	3.69	1.60	
Urban, Rural, Regional, Real Estate and Transport	3.54	1.19	1.33	
Miscellaneous Categories	0.86	0.36	1.33	
Other Special Topics	0.05	1.67	4.13	
Total by Specialist	64.27			
General Journals				
"Top 5"	2.54			
Other General journal	16.90			
Policy journal	0.76			
General applied journal	2.54			
Total Journals	151.27			
Other outputs				
Books	5.60			
Book series	5.67			
Procedings	0.58			
Trade journal	1.14			
Other	0.13			
	100.00			

## Table 1. The distribution of publications and survey participants across fields

Sources: Scopus and individual survey data.

As well as providing information on the publications of the full sample of participants the table also illustrates the sub-discipline that individuals identified themselves as have primary expertise in. We compare this against the survey participants to get an initial feel for how representativeness of the sample. Given that about a third amount of output was published in 'general journals' or 'other outputs' we cannot exactly match but are suggestive in that the proportion of outputs and individuals in each sub-field is roughly similar for most areas. There are more individuals who identify themselves in core subject areas, particularly in 'Macroeconomics and Monetary Economics', and but also in 'Microeconomics'. The largest deviations between the number of outputs and participants is in 'Finance' although we also found that scholars in finance were less likely to publish in other outlets, such as books.

We take a second approach of looking at how well the survey group compare by looking at the gender and rank of economists in Table 2. It illustrates that in terms of both characteristics the survey participants map quite closely to the sample. In terms of gender, slightly more women took the survey, while it was also the case that marginally more Professors engaged and, not surprisingly, less of those in teaching roles.

	Sample Frame	Participants
Gender (Female)	26.4	28.1
Rank		
Lecturer/ Assistant Professor	27.3	26.0
Reader/ Associate Professor/ Senior Lecturer	28.8	27.9
Professor/ Chair	32.2	36.2
Senior Research Fellow/ Research Fellow / Senior		
Research Associate/ Research Associate	3.1	5.3
Senior Teaching Fellow/ Teaching Fellow / Senior		
Teaching Associate/ Teaching Associate	4.8	1.8
Other	3.7	2.7
N	2,570	540

Table 2. The Gender and Ranks of the Sample Frame compared to Survey Participants (%)

Sources: Websites and survey information.

The third set of information that we can compare against is to look at the departments that participants in the survey came from distinguishing between independent economics departments, business schools and economists in 'other' departments. Table 3 summarises that information. It shows that participation rates in independent economics departments and 'other' areas were lower than those by academic economists located in business schools who made up 37.6% of the sample frame but 48.4% of participants. It was also the case that there were less participants from 'Elite' economics departments that made up 24% of the sample frame 'independent economics departments', although this was driven in part by poor participation at a single institution. We then checked if those participating from 'Elite' departments differed from each other with respect to publication performance to ascertain whether those who

participated in the survey were similar along those dimensions. To do so we examined the 'academic impact', measured by life time citations, of the scholars who participants compares these against the sample frame and found these where within 5% of each other. We also compared the relative number of "Top 5" publications and found these were similar. Finally, we compared the sample frame and survey participants along the dimension of gender and rank, and these were also quite close (within 1-2%). These exercises suggest the survey participants being representative of 'elite' institutions.

	Sample Frame	Participants
Independent economics department	46.6	40.3
'Elite' (Cambridge, Oxford, LSE,		
UCL, Warwick)	11.4	6.4
Business School (Economics		
aligned department)		33.9
Business School (Non-economics		
aligned department)		14.5
	37.6	48.4
'Other'	15.8	11.3
Ν	2,570	540

 Table 3. Departmental Split of the Sample Frame compared to Survey Participants (%)

Sources: As above.

Table 4 examines the extent to which journal lists are used within independent economic departments, Business Schools and 'other' departments where academic economists work. It shows that while there is considerable heterogeneity in the specific list that departments employ, the use of lists is pervasive. It is really only in departments where there is less use of some form of journal list, but lists are used by 80% of the departments where economists reside. Thus, while the REF has currency in policy terms, it the case that academic economists actually feel the sharp edge of increasing shifts to an audit culture through journal rankings more than through the REF.

	Independent economics department	Business School department	'Other' departments
Academic Journal Guide/ABS list	20.4	80.2	36.2
Publication in Top Five journal	32.5	4.4	5.2
Departmental journal list	36.3	5.7	29.3
Another journal list	5.7	4.7	10.3
None	5.1	5.0	19.0

Table 4: Journal list that is used most frequently in academic economist's departments

Note: Based on sample of 540 participants.

The most striking feature is the extensive use of the Academic Journal Guide that has a broad currency across Business Schools where it has been widely institutionalised. The most prevalent of these lists was produced (as the ABS list) by the now retitled (following Royal Charter) Chartered Association of Business Schools and renamed the Academic Journal Guide (AJG) in 2015. The AJG/ABS list has a number of links to the REF and began life as a list of all the journals from which three or more articles were submitted to the business and management panel of the RAE in 2001. Other journals were then added through comparison with lists from six UK business schools (Morris et al., 2010). The list, by explicitly consolidating UK institutional lists, reduced the relevance of institution-specific lists with Aston's 2008 list being one of the last formal lists of its type and was derived using both metrics and "expert opinion" of scholars representing sub-disciplines within business and management.

The AJG is also used in some standalone economics departments, but is more commonly used in 'other' departments. This may well reflect the broad coverage at list house across the social sciences as it incorporates fields beyond economics that align to the subject such as Area Studies, 'Public Health, Health Services and Primary Care' (captured in the Sector) where journals align to business and managements studies. Economic departments are the lowest users with only one fifth employing that list.

Economic departments are more likely to employ their own idiosyncratic departmental lists, or to focus on the publication in "Top 5" journal that was used by one third of survey participants. As was illustrated in situating the publications of the outputs, publishing in this set of journals is rare making up 2.5% of outputs. Recent work has highlighted the extensive pressure placed on faculty in the top economics departments in the US (Heckman and Moktan, 2020). It is apparent that even across a more heterogeneous group of departments a similar focus prevails albeit across a wider set of evaluation methods. The focus within Business Schools and other departments on the "Top 5" is considerably lower, although this may be an estimation in the business school case where many institutions place high value on 'elite' journals outside the 'Top 5', such as the 'elite' finance journals (Brooks, et al., 2020), or other more management focused outlets.

Table 5 shows what activities the participant consider lists are being used for. It provides direct evidence of the direct use of lists as proxies for entry into the REF with this being the case for 70% of independent economists and business school staff. The proportion is lower in 'other' departments at just below 50%. This suggests that any examination of how the REF influences academic economists should look at the wider assessment of eco-system of rankings as they have, to a greater or lesser degree depending on institutional structure, a symbiotic relationship. The other finding is that the use of lists as an 'arm's length' appraisal process is now endemic in hiring, promotion and, to a less extent appraisal. Given these structures are the core incentive structure underlying individual's careers, and in perpetuating underlying structures, these are significant numbers. Lists are also used for allocating resources, workload and internal funding particularly in business schools, but also elsewhere.

	0 0		
	Independent economics	School	'Other' departments
	department	department	-
To decide Research Excellence Framework (REF)			
submissions	72.5	74.7	49.1
In its appraisal system	63.6	77.9	53.3
In deciding on a case for promotion	79.7	84.4	74.6
To provide financial rewards for individual research			
performance	32.6	43.7	22.2
To determine workloads	17.9	30.4	24.1
To determine access to internal funding	16.7	37.5	13.2
To hire and recruit	83.2	89.2	71.7

Table 5: What are journal rankings being used for?

Note: See note related to prior table.

As departmental incentives are likely to play a key role in shaping not just institutions but also individual behaviours, we were also interested in how academics approached the use of lists themselves. Table 6 summarises which lists individuals use themselves. It is interesting in a number of respects. First, while there is a similar pattern, in some cases there are also differences. For example, comparing the tables suggests that almost twice as many economists use the AJG as their list most frequently as do those in 'other' departments. Economists are more likely to use their lists other than those provided idiosyncratic to their department, while those in other departments are more likely to use departmental lists. It is also striking that only a very small proportion do not use lists at all suggesting they have a substantive role in shaping individual decisions.

	Independent economics department	Business School department	'Other' departments
Academic Journal Guide/ABS list	37.7	73.3	41.2
Publication in Top Five journal	26.3	7.6	0.0
Departmental journal list	23.4	3.8	21.6
Another journal list	12.6	15.3	33.3
None	0.0	0.0	3.9

Table 6: Most frequently used ranking or metrics by individuals

Note: See note related to prior table.

Finally, we turn to the use of metrics, such as citations and Journal Impact Factors examining whether participants or their departments use journal metrics, such as Journal Impact factors or individual paper citations to evaluate their research. The question is also relevant to the REF in that the Economics and Econometrics panel, which evaluates entries within the unit of assessment where these are available. This applies also to work cross-referenced into the Economics and Econometrics panel the from other panels, particularly Business and Management where, as the REF guidance highlights, this is 'normally' the case.<sup>2</sup>

	Department or Individual use Metrics for Research Evaluation	Individual scholars (Google Scholar or RePEc)
Independent economics department	58.6	96.9
Business School department	61.1	96.5
'Other' department <sup>1</sup>	43.2	95.0

Table 7. Use of metrics by individuals and departments

Note: 1. As we use RePEc to identify economists in 'other' departments by definition all appear on that service. The figure relates to Google Scholars accounts.

Comparing to the use of journal lists, Table 8 examines responses to the question "Do you or your department use journal metrics, such as Journal Impact factors or individual paper citations to evaluate your research?" in column 1. It highlights the use of metrics as an evaluation tool is far less common particularly in 'other' departments. This was somewhat surprising, but perhaps underlines the dominance of lists as a one stop shop for many scholars, particularly in business schools, and perhaps because their preferred list the AJG evaluates journals based on Journal Impact Factors as well as on expert views.<sup>3</sup> As column 2 highlights, economists are well aware of their citation patterns being keen users of dissemination

<sup>&</sup>lt;sup>2</sup> Ibid, p.17.

<sup>&</sup>lt;sup>3</sup> See https://charteredabs.org/wp-content/uploads/2018/03/AJG2018-Methodology.pdf. p.4.

and citation providing web services. To put these data in context, data collected from the top 30 US departments by Hamermesh (2018) in 2014/15 identified 53% had Google Scholar (GS) accounts, but also that 97% of scholars who obtained their PhDs after 2005 had accounts, while 74% of economist from those departments RePEc accounts.

We then turn to examining what individuals are using the list they most frequently employ for in Table 8. There are considerable commonalities. And not surprisingly individuals use the list for many core activities that departments do, such as 'When framing or assessing a promotion case', 'In highlighting your accomplishments in an appraisal' or in their 'CVs'. The most common use of lists by scholars is in order to 'decide where submit their work'. And only a negligible fraction of faculty does not consider lists when deciding where to submit their work. It is also interesting how research evaluation reaches into other areas of academic economists' working lives, specifically in forming their identity and their views of others. There were however marked differences in the extent this was the case with individuals who use the "Top 5" as their list of choice being more likely than those using other lists to 'judge the research outputs of other academics' with over 70% doing so 'most of the time' or 'always'. Those using the T5 were also much more likely to use it when encouraging doctoral students or colleagues to read a specific paper suggesting a high degree of reinforced socialization. While there has been considerable work on UK business schools (Walker et al., 2019b; Cormac et al. 2020; Drivas and Kremmydas, 2020), and to a more limited extent on the T5 (Heckman and Moktan, 2020), it is significant to note that departmental journal lists exert marginally large impacts on key decision of scholars such as deciding where to submit work and in framing promotion cases. Regardless of the list used what is clear is that incentives matter and that they have a powerful impact on the work processes within the profession.

## Table 8: Uses of lists by academic economists (relates to the list they use most frequently)

Academic Journal Guide				
	Never	Sometimes	Half the time	Most of the
				Time/Always
In deciding where to submit your paper	4.7	18.3	11.1	65.9
When framing or assessing a promotion case	9.1	15.5	10.6	64.8
In highlighting your accomplishments in an appraisal	10.7	13.3	8.9	67.2
In your CV	37.8	12.4	7.5	42.3
To judge the research outputs of other academics	8.7	26.5	17.8	46.9
When encouraging doctoral students or colleagues to read a specific paper	26.0	27.1	12.3	34.7
When discussing your research with your colleagues	25.5	31.4	16.1	27.0
"Top Five" journal				_,
	Never	Sometimes	Half the time	Most of the
				Time/Always
In deciding where to submit your paper	0.0	27.4	3.2	69.4
When framing or assessing a promotion case	9.1	18.2	12.7	60.0
In highlighting your accomplishments in an appraisal	8.3	20.0	6.7	65.0
In your CV	19.3	12.3	1.8	66.7
To judge the research outputs of other academics	1.6	12.9	14.5	71.0
When encouraging doctoral students or colleagues to read a specific paper	9.8	32.8	14.8	42.6
When discussing your research with your colleagues	13.3	35.0	11.7	40.0
Departmental Journal Lists				
	Never	Sometimes	Half the time	Most of the
				Time/Always
In deciding where to submit your paper	6.7	21.7	6.7	65.0
When framing or assessing a promotion case	10.5	14.0	3.5	71.9
In highlighting your accomplishments in an appraisal	11.9	22.0	5.1	61.0
In your CV	48.3	15.5	10.3	25.9
To judge the research outputs of other academics	15.0	21.7	13.3	50.0
When encouraging doctoral students or colleagues to read a specific paper	37.9	12.1	25.9	24.1
When discussing your research with your colleagues	42.4	20.3	18.6	18.6
Other Lists				
	Never	Sometimes	Half the time	Most of the
				Time/Always
In deciding where to submit your paper	2.4	24.7	7.1	65.9
When framing or assessing a promotion case	12.5	23.8	15.0	48.8
In highlighting your accomplishments in an appraisal	8.3	21.4	13.1	57.1
In your CV	41.5	9.8	7.3	41.5
To judge the research outputs of other academics	15.0	21.7	13.3	50.0
When encouraging doctoral students or colleagues to read a specific paper	37.9	12.1	25.9	24.1
When discussing your research with your colleagues	42.4	20.3	18.6	18.6

Note: See note relating to Table 4.

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Table 9 explores responses to a range of positive and negative statements about different lists. These statements were drawn from the literature on the journal lists (developed in Walker et al., 2019a and validated by Bryce et al., 2020). The positive statements highlight the role of the list in motivating quality of research by focusing on research in specific journals and for ensuring that research is rewarded. A majority of respondents, 58% also indicated that the list was useful in helping them judge the work of others, especially outside their own field. This implies that lists are utilised across a broad range of academics. On the negative side, the list is clearly seen to be associated with a suppression of creativity

associated to more research 'monoculture', to focus on journal outlets rather than targeting the journal most closely aligned to the topics worked. It is also seen to encourage researchers to engage in more narrow topics and shift their research away from topics they themselves find interesting. The majority also consider that lists suppress interdisciplinary research, and many consider that the wider impact beyond academia is also being undermined. Overall, the high averages for both positive and negative statements suggest a high degree of positivity as well as concern about the impact of list on academics' research efforts and environment.

		Disagree/Strongly Disagree	Sometimes	Agree/Strongly Agree
Positive	Encourages academics to be more targeted in where they publish their			
1 Ostive	research	23.3	11.2	76.1
	Helps researchers to make judgments about the quality of research being	20.0	11.2	/0.1
	undertaken by a researcher in their field	26.5	19.5	54.0
	Helps researchers to make judgments about the quality of research being	20.0	19.0	0 110
	undertaken by a researcher outside their field	21.7	20.0	58.3
	Helps research efforts to get recognized	23.7	27.5	48.8
	Motivates academics to try to achieve higher research quality	19.6	20.6	59.8
Negative	Fosters a 'research monoculture'	16.1	19.4	64.5
	Promotes 'low risk' research	13.5	21.6	64.9
	Leads to 'technically well-executed but boring research	24.6	27.7	47.7
	Shifts research efforts away from debates that researchers would like to			
	contribute to	13.5	21.6	64.9
	Encourages researchers to focus on issues that are only of interest to other			
	academics rather than practitioners/policy-makers	25.6	20.1	48.8
	Encourages me to publish in 3* and 4* journals, even if they are not the			
	best outlets for my research	23.3	11.2	65.4
	Undermines pursuing interdisciplinary research	15.3	14.4	70.2

#### Table 9. Perceptions of the Journal Lists (%)

Note: Based on sample of 540 participants

We also examined participants' views of the REF drawing upon work examining different ways in which the national evaluation could may have impacted upon researchers. In Table 10 we found views differed markedly across rationales. The majority are not considering the REF had led to inconsistency of topics and methods across areas, nor that it had led to "technically well executed by boring research". It was the case that the substantive majority considered that the REF had led them to be more targeted in where they published their work. However, many also reported that they were more motivated to publish in outlets, often which were not the best vehicles for their research. It was also the case that the majority considered that interdisciplinary research was undermined by the REF. There is considerable work point to the considerable advantages of interdisciplinary research. And participants' views are in contrast with a desire from UK funding agencies and policy recommendations (Stern, 2016) to ensure that interdisciplinary work be supported.

The UK has been at the forefront of developments attempting to institutionalise researchers to conduct work that has both academic, economic and societal impact (Martin, 2011; RCUK, 2015).

However, Table 10 illustrates that a plurality of participants considered that the REF 'encourages (them) to focus on issues that are only of interest to other academics rather than practitioners/policy-makers' suggesting a degree of scepticism that the REF is supportive of that agenda.

	Disagree/Strongly Disagree	Sometimes	Agree/Strongly Agree
It fosters consistency of topics and methods across my area of expertise	37.1	34.1	28.8
It encourages me to be more targeted in where I publish my research	18.5	15.5	66.1
It shifts research efforts away from debates that researchers would like to contribute			
to	23.6	23.4	53.1
Undermines the pursuit of interdisciplinary research	21.2	18.3	60.5
It stimulates me to produce "technically well-executed, but boring research"	39.4	30.9	29.6
It encourages me to focus on issues that are only of interest to other academics			
rather than practitioners/policy-makers	31.5	22.0	46.5
It motivates me to publish in 3* and 4* journals, even if they are not the best outlets	21.4	15.7	62.8

## Table 10: Perceptions of the REF (%)

Note: See note related to prior table.

### **Some Implications**

At this early stage of the analysis, it is difficult to draw strong implications about the results of the survey. It is, however, clear that journal rankings are widely used by UK economists and the departments in which they work. Overall, there is a strong pattern of negative attitudes to journal rankings, although a significant share of the population finds the list a useful tool for their own research. While more positively viewed that rankings, it was also the case that there were indications that individuals had quite varied views of the REF. On the whole, the REF was not considered to have as relatively negative an impact as journal rankings, but there was a dissonance between the views of researchers and core tenants of the REF itself particularly regarding views on interdisciplinary and non-academic impact.

The factors driving these attitudes are liable to be diverse. Greater research is required in order to fully understand these attitudes and experiences. However, several tentative implications can be drawn at this stage:

In future research, we will explore in greater detail:

- The factors that shape perceptions of the REF, including the status of the institution, the field within economics is aligned to, and individual, as well as their personal background.
- Exploring differences between men and women in responses to the use research evaluation.
- Examining the relationship between stress and research assessment.

- The willingness of academics to trade-off between different journals of different 'rank'.
- How metrics shape person–organization fit and identity.

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